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Foreword

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Switzerland were reviewed by the Committee on 30 January 2024. The draft report was then revised in light of the discussions and given final approval as the agreed report of the whole Committee on 22 February. The cut-off date for the information included in this report is 4 March 2024.

The Secretariat's draft report was prepared for the Committee by Urban Sila and Erik Frohm under the supervision of Mame Fatou Diagne.

Statistical research assistance was provided by Corinne Chanteloup and editorial support by Emily Derry, Robin Houng Lee and Jean-Rémi Bertrand.

The previous Survey of Switzerland was issued in January 2022.

Information about the latest as well as previous Surveys and more details about how Surveys are prepared is available at www.oecd.org/eco/surveys



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BASIC STATISTICS OF SWITZERLAND, 2022[1]

(Numbers in parentheses refer to the OECD average)[2]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	8.8		Population density per km²	222.0	(39.0)
Under 15 (%)	15.0	(17.2)	Life expectancy at birth (years, 2021)	83.9	(78.7)
Over 65 (%)	19.3	(18.0)	Men (2021)	81.9	(75.9)
International migrant stock (% of population, 2019)	29.9	(13.2)	Women (2021)	85.9	(81.7)
Latest 5-year average growth (%)	0.7	(0.4)	Latest general election	October 2023	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	819.1		Agriculture, forestry and fishing	0.6	(2.8)
In current prices (billion CHF)	781.6		Industry including construction	24.9	(28.3)
Latest 5-year average real growth (%)	1.9	(1.7)	Services	74.5	(68.8)
Per capita (thousand USD PPP)	84.7	(60.0)			
GENERAL GOVERNMENT Per cent of GDP					
Expenditure	33.0	(42.9)	Gross financial debt (OECD: 2021)	37.7	(106.4)
Revenue	34.2	(39.7)	Net financial debt (OECD: 2021)	-4.4	(67.8)
EXTERNAL ACCOUNTS					
Exchange rate (CHF per USD)	0.95		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	1.05		Chemicals and related products, n.e.s.	35.4	
In per cent of GDP			Commodities and transactions, n.e.s.	24.8	
Exports of goods and services	76.9	(33.4)	Miscellaneous manufactured articles	16.3	
Imports of goods and services	63.1	(34.8)	Main imports (% of total merchandise imports)		
Current account balance	9.9	(-0.9)	Commodities and transactions, n.e.s.	27.5	
Net international investment position	97.4		Chemicals and related products, n.e.s.	20.1	
			Machinery and transport equipment	16.9	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	63.8	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	4.3	(5.0)
Men	69.0	(65.4)	Youth (aged 15-24, %)	7.5	(10.9)
Women	58.7	(50.1)	Long-term unemployed (1 year and over, %)	1.7	(1.2)
Participation rate (aged 15 and over, %)	66.6	(60.9)	Tertiary educational attainment (aged 25-64, %)	44.7	(40.7)
Average hours worked per year	1,529	(1,752)	Gross domestic expenditure on R&D (% of GDP, 2019, OECD: 2020)	3.2	(2.9)
ENVIRONMENT					
Total primary energy supply per capita (toe)	2.6	(3.8)	CO_2 emissions from fuel combustion per capita (tonnes)	3.6	(7.8)
Renewables (%)	21.9	(12.0)	Water abstractions per capita (1 000 m³, 2021)	0.3	
Exposure to air pollution (more than 10 µg/m³ of PM 2.5, % of population, 2019)	48.5	(61.7)	Municipal waste per capita (tonnes, 2021, OECD: 2020)	0.7	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2020, OECD: latest available)	0.320	(0.316)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2020)	9.9	(11.8)	Reading	483	(476)
Median disposable household income (thousand USD PPP, 2020)	39.1	(26.6)	Mathematics	508	(472)
Public and private spending (% of GDP)			Science	503	(485)
Health care	11.3	(9.2)	Share of women in parliament (%)	41.5	(32.5)
Pensions (2019)	11.9	(9.5)	Net official development assistance (% of GNI, 2017)	0.5	(0.4)
Education (% of GNI, 2021)	4.4	(4.4)			

1. The year is indicated in parenthesis if it deviates from the year in the main title of this table.
2. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank.



Executive Summary

Economic growth has slowed

Switzerland has been resilient through the pandemic and the turmoil in energy markets that followed Russia's war of aggression against Ukraine. Nevertheless, the economy is facing uncertain prospects amid tightened financing conditions and slowing global growth.

Economic activity has slowed. Weak foreign demand, tighter financing conditions and heightened uncertainty weigh on the economy. Manufacturing production has stalled and prospects are subdued. Economic sentiment remains low.

Inflation has returned within the 0-2% target range, but inflation pressures remain. Import price inflation has retreated, but inflation of domestic goods and services remains elevated. Short-term inflation expectations remain at the upper side of the 0-2% range. The labour market is robust with the unemployment rate around 4% and vacancies at high levels. Real wages continue recording negative growth.

Real GDP growth is projected to remain below potential in 2024 before picking up in 2025. A tight monetary policy stance internationally as well as domestically will still weigh on global activity and on domestic demand. Inflation will rise temporarily above 2% over the course of 2024, pushed by expected rent and electricity price increases, before moderating towards the beginning of 2025. Domestic consumption growth will be subdued. The unemployment rate will increase slightly to 4.4% in 2025.

Table 1. GDP growth will remain subdued

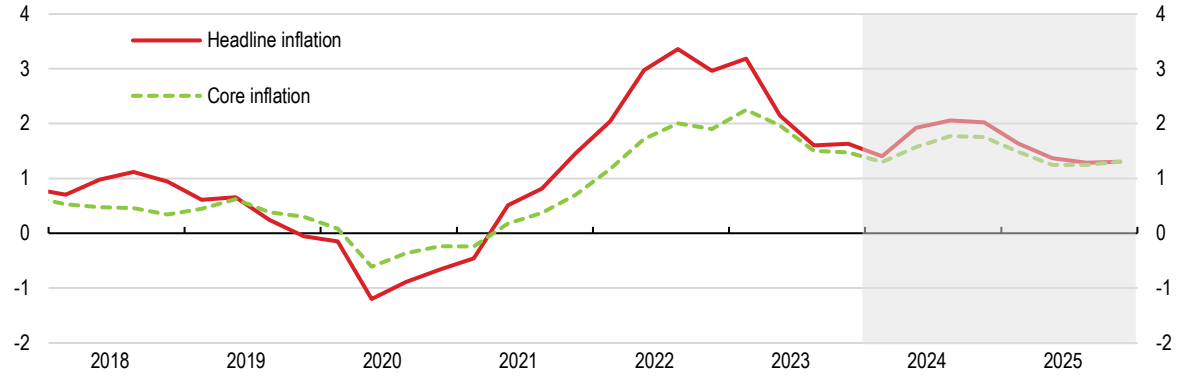
	2023	2024	2025
Real GDP growth, %	0.8	0.9	1.4
Unemployment rate	4.0	4.4	4.4
Consumer price index, %	2.1	1.9	1.4
Fiscal balance (% of GDP)	0.9	0.7	0.6

Source: OECD Economic Outlook database.

Uncertainty surrounding the outlook is high. Inflation might turn out more persistent than expected, requiring further monetary tightening, with risks surrounding household indebtedness, repricing of real estate and repercussions on financial stability. Energy shortages or renewed energy price spikes could further slow the economy. On the other hand, favourable resolution of geopolitical tensions could result in higher trade, revived confidence and higher growth and stability.

Figure 1. Inflation pressures remain

Consumer price index, y-o-y % changes



Source: OECD Economic Outlook database.

StatLink https://stat.link/rvdk38

Keeping monetary policy tight and countering risks to financial stability

Monetary policy has been appropriately tightened. However, inflation is expected to return temporarily above the 0-2% target and inflation expectations remain at the upper end of the target range. Elevated interest rates globally and weak activity heighten risks and vulnerability in the financial system.

Between June 2022 and June 2023, the Swiss National Bank (SNB) hiked the policy interest rate by 250 basis points, from -0.75% to 1.75%. To tighten monetary conditions, the SNB has been selling foreign exchange over recent quarters. As a welcome side effect, this has contributed to reducing the outsized balance sheet of the SNB.

The acquisition of Credit Suisse by UBS effectively safeguarded financial stability but raises new risks and challenges. UBS – already a global systemically important bank before the merger – has become even larger and it has been given a transition period until 2030 to meet the progressively higher capital requirements of the "too big to fail" (TBTF) regulations. The acquisition was made without making use of the existing TBTF resolution regime, raising questions on optimal regulation and supervision of large banks going forward.

The housing market has started showing signs of cooling, but vulnerabilities remain. Growth in prices of real estate has started abating after years of steep growth. Property is estimated to be overvalued by up to 40%. Large interest rate hikes or other shocks could result in steep price corrections, leading to deteriorated mortgage portfolios of banks.

Addressing pressures from rising public spending

Fiscal policy is facing hard choices, despite low public debt and a return to fiscal surpluses. Population ageing, the need to tackle climate change, an increase in defence spending and rising interest rates on public debt are all putting pressures on public finances. Reforms to rein in public spending and to increase public revenues are needed.

A broadly neutral fiscal stance is warranted to sustain the moderately growing economy. Automatic stabilisers should operate freely to cushion the growth slowdown. The decision to extend the amortisation period for reducing the "COVID debt" will avert overly tight fiscal policy over the coming years.

A substantial pension reform is overdue. Ageing is putting pressures on age-related costs (pension, healthcare and long-term care) and weighs on

employment and growth. A recent reform gradually raises the retirement age of women to 65 and secures higher revenues to the pension fund but this will only temporarily delay pressures. The ratio of retirees to employees is set to soar and pension replacement rates for the mandatory pension system are set to drop significantly over time. Under current policies, time spent in retirement will be longer. Adapting parameters of the pension system to rising longevity can slow the rise in expenditures.

Strengthening tax revenues can also help to safeguard fiscal sustainability while meeting growing spending needs. Switzerland relies more on direct taxation, notably personal income tax, than most other OECD countries. VAT revenues are among the lowest in the OECD and revenues from taxation of immovable property are also low.

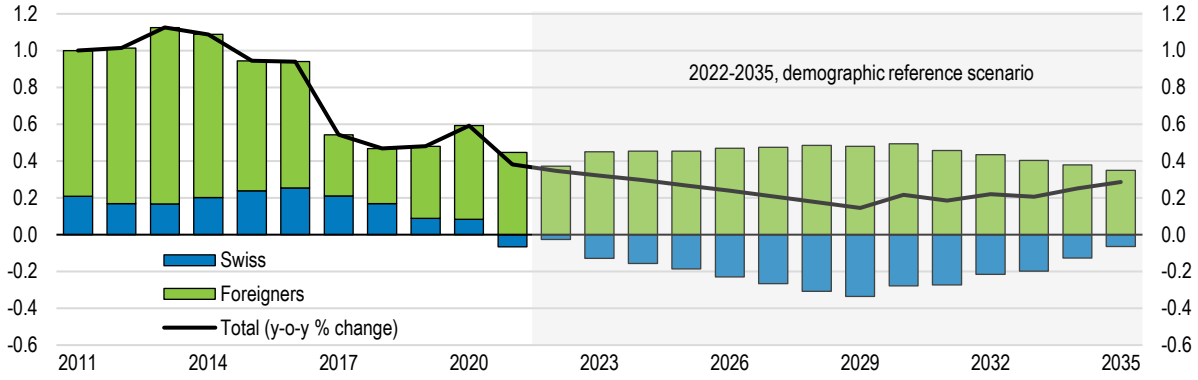
Tackling labour and skills shortages

The Swiss labour market boasts high employment rates and low unemployment. However, labour and skills shortages are rising and are increasingly becoming a structural issue. Rapid population ageing and a preference shift towards shorter working hours weigh on future economic growth. For some groups, such as mothers and older workers, there is potential to increase participation.

Bringing more mothers to work full time will help ease shortages and reduce the sizable gender income gap. A high labour participation rate of women masks a remarkably high incidence of part-time work, among mothers in particular. The interplay between the tax and benefit systems and high costs of childcare result in strong disincentives to work for second earners, notably mothers. Low supply of affordable childcare exacerbates the issue.

Figure 2. Labour force growth is set to slow

Contributions to population growth (20-64), % pts



Source: FSO, Population scenarios.

StatLink https://stat.link/mq3z8w

A range of disincentives and barriers contribute to early retirement and low uptake of work by older workers. After the age 65, the employment rate shows a steeper decline than in OECD peers. A significant share of workers retire before 60. Once unemployed, older workers find it more difficult to find a new job. Financial disincentives for employers also weigh on the employment of older workers, as rising pension contribution rates make employing older workers costly. Incentives within the pension system and more flexibility to combine retirement and work can encourage more workers to work longer.

Immigration is key for Switzerland's economy in terms of labour and skills. Over the past two decades, net migration has been persistently positive. The foreign-born population represents 30% of the total population, the second highest share in the OECD. Skilled immigrants from non-EU/EFTA countries will become increasingly important to counter declines in the domestic population. Active steps should be taken to maintain Switzerland as a top destination for global

talent. Better welcoming skilled migrants and easing the transition to permanent settlement can improve social and labour market integration and ease labour shortages.

Towards a decarbonised economy

Switzerland as an Alpine country is strongly impacted by climate change. Growth has decoupled from emissions and energy use, but emission reductions will have to accelerate markedly if Switzerland is to meet the net-zero target by 2050. The existing policy mix is comprehensive but needs strengthening to reach net zero.

Switzerland imposes high carbon prices in international comparison. However, the CO_2 levy and the mineral oil tax, fixed in nominal terms, are set to be eroded in real terms over time, which is not consistent with the need to accelerate emission reductions. Carbon prices are cost effective and efficient instruments to reduce emissions. A higher carbon tax or stronger incentives within an emission trading system could strengthen incentives to lower emissions in buildings, industry and road transport.

Comprehensive further electrification of the economy will be required to reach climate neutrality. Production of electricity will have to increase, requiring steep investment into renewables such as solar and wind, whose electricity output should rise 8-fold to 2035. The recently revised Energy Act has secured incentives for investment up to 2035 through pricing instruments and investment support. Reduced red tape and faster approval processes for building new capacity as well as upgrading the electricity grid can boost further the needed investment into renewables.

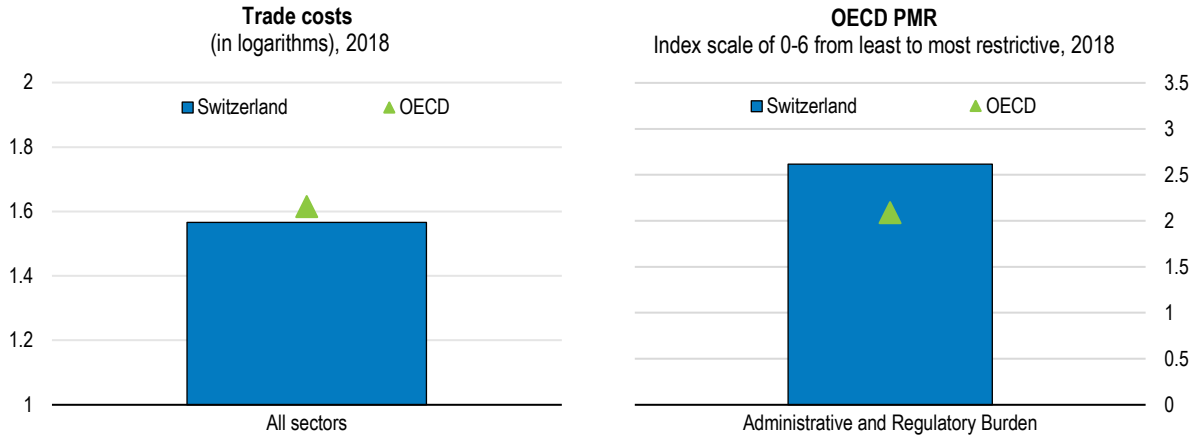
Boosting economic resilience and productivity

Geopolitical tensions and a global shift towards protectionism and large-scale industrial policy programmes pose challenges. Industrial policy programmes can be costly, are often ineffective and distort trade, undermining competitive markets. Switzerland should strengthen its resilience and productivity by staying committed to the rules-based trading system, strengthening ties with key trading partners and enhancing domestic competition.

Switzerland has shown remarkable strength during previous economic downturns. Its adaptable economy, effective macroeconomic stabilisation tools, and robust fiscal framework have led to shallower recessions, lower impact on household incomes and faster recoveries compared to OECD peers. A comprehensive risk planning and monitoring system, including essential-goods stockpiles to bridge supply disruptions, has proved robust during periods of severe shortages. Having the private sector at the centre-stage in such efforts facilitates adaptability and flexibility.

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Figure 3. Lower barriers can spur trade and domestic competition



Note: The trade costs are computed as averages across sectors and are expressed as ad-valorem equivalents. OECD is a simple average of OECD countries.
Source: WTO; OECD (2018), Product Market Regulation Database.

StatLink https://stat.link/ug05zw

Sustained trade and economic partnership with the EU remain key. The Switzerland-EU partnership is at risk of eroding. Negotiations on an encompassing "framework agreement" came to a standstill in 2021. Resuming negotiations is imperative to secure cooperation and ensure continued access to its key trading partner. Failing to find an adequate alternative would be harmful for Switzerland's external trade and competitiveness, with repercussions for productivity and resilience.

Reduced barriers to cross-border trade and a lower administrative burden can spur competition, productivity growth and raise resilience. There is room to strengthen trade facilitation measures and reduce costs of trade further. Border processes and procedures can be digitalised and thus become less onerous, lowering the cost of trade. Swiss businesses still face a high administrative burden. Less red tape would boost growth



Main findings	Key recommendations
Ensuring price and financial stability	
Inflation has retreated within the 0-2% target range. However, short-term inflation expectations remain at the top of the target band. Expected rent and electricity price increases will temporarily push inflation above 2% in 2024.	Keep a tight monetary policy stance until inflation is durably within the 0-2% band.
Credit Suisse was a global systemically important bank that met regulatory requirement, yet it destabilised quickly. Although the existing "too big to fail" framework was available, the solution was found outside the resolution regime.	Conduct an in-depth review of the Credit Suisse crisis event and propose measures to strengthen regulation and supervision of systemically important banks and the "too big to fail" framework.
Vulnerabilities on the residential real estate market persist. Large interest rate hikes or other shocks could result in steep price corrections, leading to deteriorated mortgage portfolios of banks.	Continue to closely monitor risks on the housing market and ensure that adequate buffers are maintained.
Addressing pressures from rising public spending	
Real GDP growth is projected to remain below potential in 2024 and gather pace in 2025. The unemployment rate will pick up slightly.	Pursue a broadly neutral fiscal stance over the short-term with automatic stabilisers operating freely.
Fiscal policy is facing hard choices to meet growing spending needs. Systematic spending reviews can help find fiscal savings. Strengthening tax revenues can also help to safeguard fiscal sustainability. Switzerland relies significantly more on direct taxation while revenues from VAT and from the recurrent tax on immovable property are low.	Conduct systematic reviews of spending and tax expenditures and strengthen tax revenues, including by raising revenues from VAT and the recurrent tax on immovable property.
Population is ageing rapidly. With the statutory retirement age at 65, time in retirement will rise steeply. Rising pension expenditures are putting pressures on fiscal sustainability and the adequacy of pension benefits.	Link future rises in the statutory retirement age to increases in life expectancy.
Tackling labour and skills shortages	
The gender income gap is high in Switzerland, in part due to high incidence of part-time employment. The tax and benefit systems and a high cost of childcare contribute to lower working hours and lower labour incomes for women.	Reduce disincentives to work for second earners, by moving from family-based to individual-based taxation or through tax adjustments and slower withdrawal of benefits. Keep expanding the supply of childcare and provide targeted measures (mean-tested fee reductions, childcare benefits or tax credits) to improve affordability.
More than a quarter of workers retire before reaching age 60. Employment also falls markedly at the statutory retirement age. From 2027 onwards, workers will be free to choose to retire between the age 63 and 70 and will be able to gradually reduce working hours while claiming a partial pension.	Introduce greater flexibility to combine retirement and work as planned and link the parameters of the flexible retirement system (earliest age of retirement, the conversion factor from accumulated pension entitlements to annual pension) to life expectancy.
Attracting skilled migrants from non-EU/EFTA will become increasingly important to boost working-age population and skills. In Switzerland, third-country migrants face lengthy and costly paths to permanent settlement and citizenship.	Streamline administrative processes for highly skilled migrants from non-EU/EFTA countries, including by relaxing permit rules and paths to naturalisation.
Some foreign nationals have low skills. They record significantly higher unemployment rate than natives and employment rates are markedly lower, especially for women.	Expand the supply and uptake of upskilling courses and improve recognition of foreign qualifications for non-EU/EFTA citizens. Expand temporary job-placement incentives paid to employers.

Towards a decarbonised economy	
Carbon prices are cost effective and efficient instruments to reduce emissions. Switzerland imposes high carbon prices in international comparison. However, the CO2 levy and the mineral oil tax are set to be eroded in real terms over time. Various exemptions reduce the efficiency of carbon pricing.	Strengthen effective carbon pricing, by raising the CO_2 levy after 2030 or by joining the EU ETS II for transport and buildings. Continue efforts to broaden the base of carbon taxation by reassessing exemptions.
Negotiated reduction commitments exempt firms from the CO2 levy if they commit to reduce emissions. The scheme is costly due to foregone carbon tax and monitoring.	Ensure that reduction targets and decarbonisation roadmaps within the negotiated reduction commitments are ambitious enough to exceed the 2040 target for industry.
Further electrification will be required to reach climate neutrality. This will require steep investment into renewables, such as solar and wind, whose electricity output (excluding hydropower) should rise 8-fold to 2035.	Continue improving the investment framework for renewables by speeding up planning and authorisation processes for building renewable power plants, as planned.
Switzerland benefits from high interconnection with its European neighbours, which allows mutually beneficial electricity trades. However, negotiations on an electricity agreement between Switzerland and the European Union have stalled since 2018.	Increase market and grid integration into the European Electricity System to guarantee security of supply and regional grid stability, by signing an Electricity Agreement with the EU.
Strengthening economic resilience and productivity within global value chains	
Switzerland has a comprehensive framework for monitoring and planning for various risks, as well as a large compulsory stockpiling system. Stockpiles of critical products can help bridge temporary shortages. However, stockpiling is costly, cannot cover for every contingency and can bring “moral hazard”.	Maintain the comprehensive framework for risk management and stockpiling that centres on the private sector’s responsibility to safeguard the stability of supply. Use the established private-public cooperation – through FONES – to handle severe supply disruptions and abstain from extending the compulsory stockpiles to non-essential goods.
Trade restrictions have risen globally and several countries have introduced large-scale industrial subsidies. Yet, open and well-functioning international markets with efficient supply chains are key for productivity and economic resilience. Industrial policy programmes can be costly, are often ineffective and distort trade.	Enhance economic integration with key trading partners and facilitate the diversification of supply chains, by extending and deepening free trade agreements. Refrain from introducing distortive industrial policies.
The partnership between Switzerland and the EU is at risk of eroding over time. Ensuring a continued stable economic relationship with the EU would secure access and competitive exposure to the most important trading partner, raising productivity and growth.	Resume negotiations with the EU to safeguard access to the single market and ensure continued economic partnership.
Switzerland lags OECD best performers on trade facilitation measures, especially on fees and charges, automation and external co-operation. Simplifying and accelerating customs clearance of goods can help lower costs for companies and alleviate bottlenecks.	Revise the Customs Act to simplify and digitalise processes concerning the collection of fees and controls of goods crossing the border.
The administrative burden is higher than on average in the OECD despite small improvements since 2018, with detrimental effects on productivity.	Implement the Corporate Relief Act to reduce the administrative burden on companies. Expand the government one-stop shop (EasyGov.swiss) by integrating cantonal governments’ services.
State involvement in the economy is among the highest in the OECD, particularly in network sectors (telecommunications and energy).	Reduce public ownership and keep reducing the competitive distortions due to public ownership.

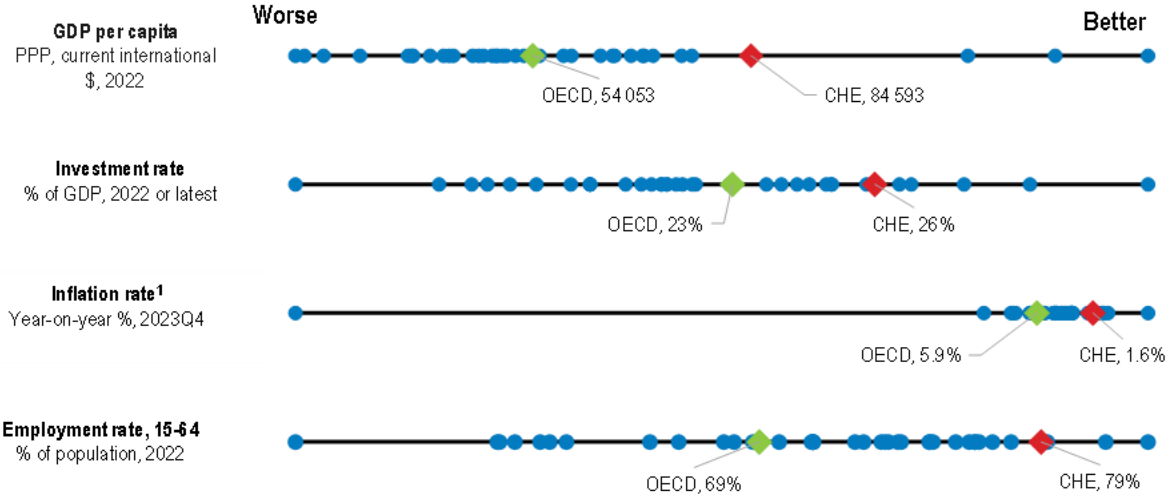
1 Ensuring resilient and sustainable growth

Switzerland has been resilient through the COVID-19 crisis, the recent geopolitical turmoil following Russia's war of aggression against Ukraine and reverberations in energy markets. Economic activity and incomes have held up well and inflation rose less than in most economies (Figure 1.1), underpinned by a well-diversified economy, lower reliance on fossil fuels and robust macroeconomic policies. Yet, the economy is facing uncertain prospects and challenges remain.

Activity and trade have weakened. Past monetary tightening to fight inflation – domestically and internationally – is cooling foreign demand, with an adverse impact on manufacturing activity and investment. High uncertainty around the persistence of core inflation, future volatility of energy prices and geopolitical tensions weigh on economic prospects and make policy more challenging. Rising interest rates globally also heighten risks and vulnerability in the financial system. In early 2023, Credit Suisse – a global systemically important bank – had to be rescued through a state-facilitated takeover by UBS, with ample liquidity assistance, partially backed by a federal default guarantee. This highlights the need for sustained vigilance and continuous revisions to regulation of systemically important financial institutions.

Switzerland is one of the OECD top performers with very high GDP per capita and a strong labour market. Unemployment is low while labour utilisation and job security are high, attracting a highly skilled workforce (Figure 1.1 and Figure 1.2). Going forward, to sustain high standards of living, policy will need to tackle headwinds from population ageing, slowing productivity growth and challenges related to the green and digital transitions.

Figure 1.1. Economic outcomes

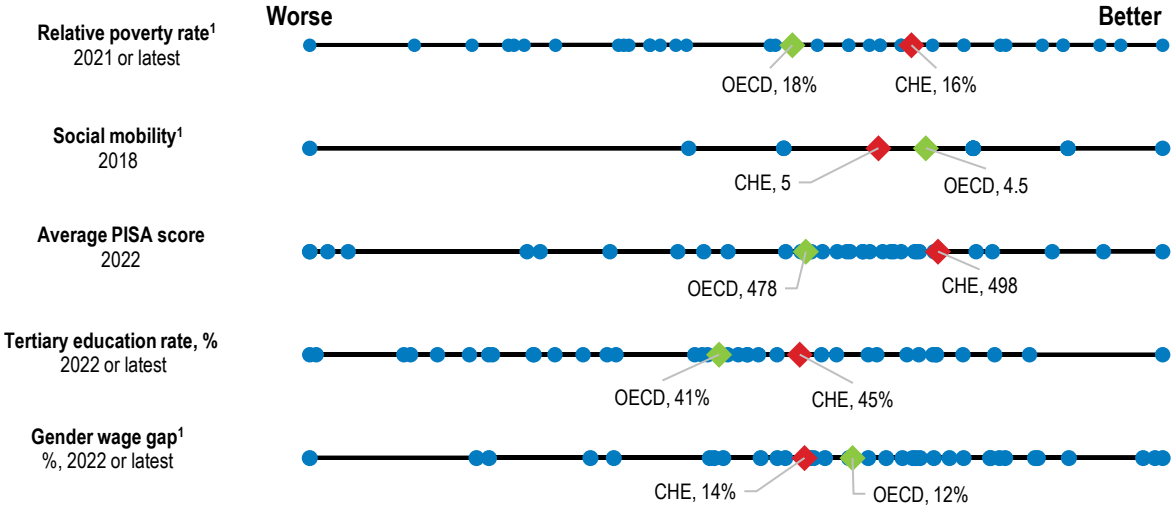


1. Indicator reversed so that the right side of the scale corresponds to a better outcome.
Source: OECD National Accounts database; OECD consumer price indices complete database; OECD labour market statistics database; and OECD calculations.

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Fiscal policy is facing hard choices in the medium term. Despite low public debt and a return to fiscal surpluses, pressures are growing. Population ageing raises costs related to pensions, health care and long-term care. Spending needs to tackle climate change are rising. Defence needs and interest rates on public debt are also putting pressures on public spending. To abide by the debt brake rule, Switzerland will either have to undertake structural reform to cut spending or significantly raise public revenues.

Figure 1.2. Inclusiveness indicators



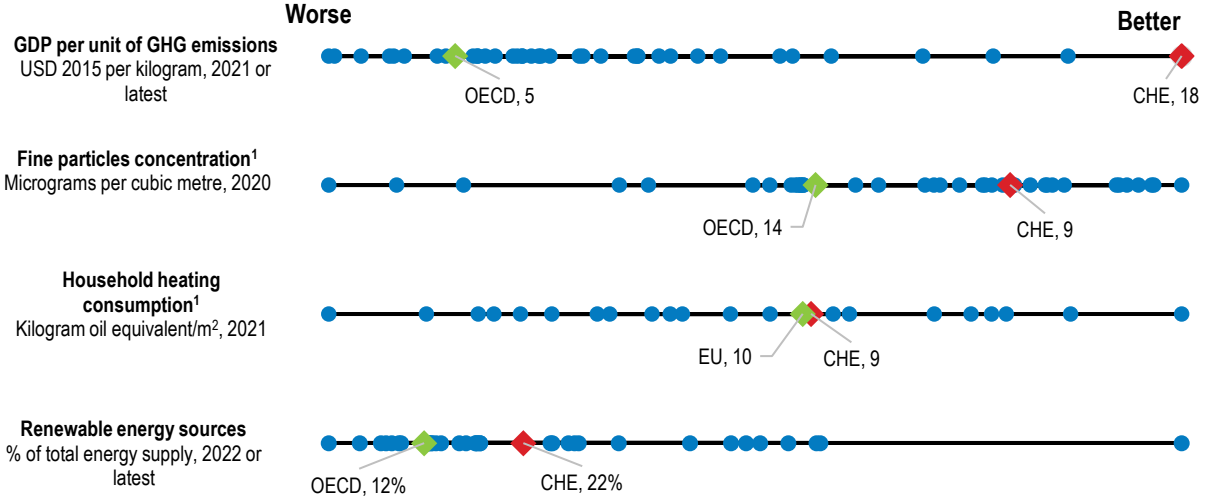
1. Indicator reversed so that the right side of the scale corresponds to a better outcome.
Note: Relative poverty rate is the rate after taxes and transfers with poverty line at 60% median household income. Social mobility indicator is the expected number of generations for the children of a family at the bottom 10% if the income distribution to reach average income. Average PISA score is the average scores of math, science and reading.
Source: OECD income distribution database; OECD (2018), A Broken Social Elevator? How to Promote Social Mobility, OECD Publishing, Paris; OECD PISA database; OECD education at a glance database; OECD Employment Statistics; and OECD calculations.

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Higher labour force participation can bring higher and more equitable growth. Labour and skills shortages are rising and are increasingly becoming a structural issue. Rapid population ageing and a preference shift towards shorter working hours weighs on future economic growth. Yet, some groups, such as mothers and older workers remain underutilised. The interplay between the tax and benefit systems and high costs of childcare result in disincentives to work for second earners, notably mothers. Bringing more mothers to work full time will help reduce the sizable gender income gap. Lengthening working lives will raise incomes in old age and counter pressures in the pension system. Greater employment of skilled foreign workers can counter declines in the domestic labour force and ease labour shortages.

Switzerland, as the rest of the world, faces looming environmental challenges. High levels of consumption driven by the high standard of living result in high levels of emissions and resource use. In addition, Switzerland is warming twice as fast as the global mean due to its Alpine topography. The Swiss economy has successfully decoupled economic growth from emissions and achieved higher energy efficiency (Figure 1.3). Yet, emissions will have to go down at a much faster pace going forward, notably in transport and buildings sectors, if Switzerland is to meet the net-zero target by 2050.

Figure 1.3. Sustainability indicators

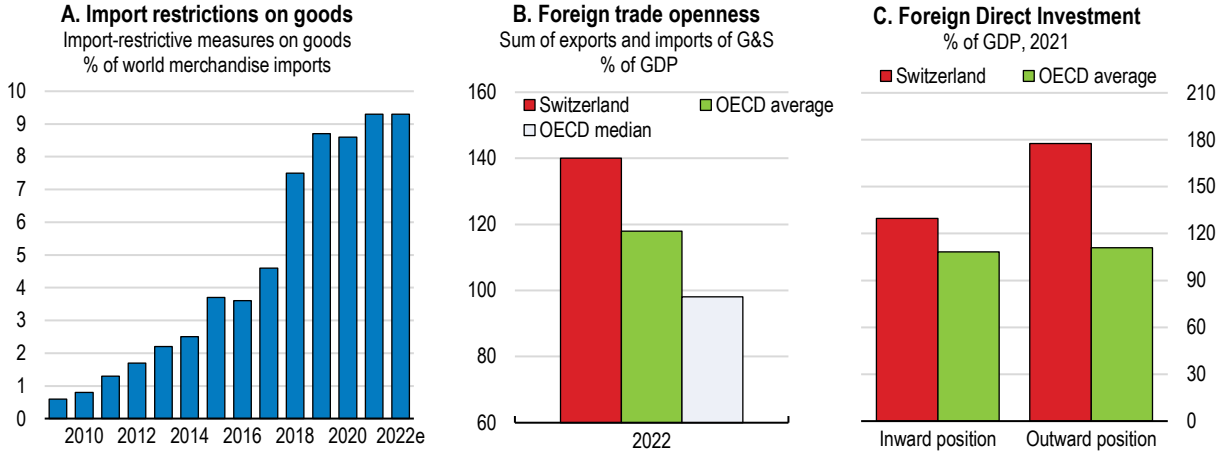


1. Indicator reversed so that the right side of the scale corresponds to a better outcome.
Note: GDP per unit of GHG emissions is the production-based CO2 productivity. Fine particles concentration is mean population exposure to PM2.5. Household energy consumption per capita is energy consumption per m² of households for space heating scaled to EU average climate.
Source: OECD green growth indicators database; Odyssee-mure; and OECD calculations.

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A rise in geopolitical tensions and a global shift towards protectionism pose challenges for Switzerland. It is a highly internationalised economy whose success has been underpinned by high openness to trade and cross-border flows of capital and labour (Figure 1.4). Continued access to foreign markets is crucial to maintain competitiveness, productivity and growth, while addressing supply chain vulnerabilities and risks. Moreover, open competition in the domestic market and an improved business environment will further increase the resilience of the Swiss private sector and reinforce Switzerland's position as a global hub for business, investment and research.

Figure 1.4. A global shift towards more protectionism poses challenges for Switzerland's open economy



Note: For panel A, the chart denotes the cumulative trade coverage of restrictions on goods estimated by the WTO Secretariat, based on information available in the TMDB on import measures recorded since 2009 and considered to have a trade-restrictive effect. The estimates include import measures for which HS (Harmonised Commodity Description and Coding System) codes were available. The figures do not include trade remedy measures. The import values were sourced by the UN Comtrade database.
Source: WTO November 2022 Report; Economic Outlook database; OECD International Direct Investment Statistics database.

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Against this background, the main messages of this Survey are:

- Monetary policy should remain tight until inflation and inflation expectations remain durably within the 0-2% target band. Continued close monitoring of risks and vulnerabilities in the financial sector and working to improve regulation and supervision of systemically important banks will safeguard financial stability. A broadly neutral fiscal stance is warranted in the short-term, with automatic stabilisers operating freely, to sustain the economy during the slowdown. However, long-term fiscal sustainability pressures call for structural reform to counter rising cost of ageing and tackle climate change and strengthened tax revenues.
- High labour market participation will raise growth and make it more inclusive. Longer working lives and lower barriers for mothers to work full time will help in this regard.
- Environmental policies need to strengthen to achieve sustainable growth. Stronger incentives and speedier approval processes can help accelerate emission reductions, notably in the transportation and building sectors, and facilitate further electrification of the economy.
- Deepening ties with existing trading partners, notably the EU, and extending the network of free trade agreements can bring about more resilient supply chains, while sustaining access to export markets and exposure to valuable competitive pressures. Reduced barriers to cross-border trade and a lower administrative burden within the internal market can spur competition and productivity growth.

Box 1.1. Recent reforms

In the recent past Switzerland has progressed in several reform areas that were previously discussed in OECD Economic Surveys:

Pensions: Two recent reforms (one effective from 2020 and one from 2024) raised slightly revenues to the first pillar pension fund by earmarking increased VAT tax and raising the federal government's contributions. In addition, the retirement age of women is to be gradually equalised with that of men at 65 (by 2027).

Climate: A Climate Protection Act (effective from 1st January 2025) was passed in September 2022 and confirmed by referendum in June 2023, embedding in national law the net zero target for 2050 and defining the 2030-2050 emission reduction paths (overall and sector-level). The law has also committed additional public support to green heating systems in buildings and investment by companies in green technologies.

Corporate income tax: Switzerland has adopted the OECD-initiated global minimum 15% corporate tax on multinational companies. The implementation of the tax (as a supplementary federal tax) and the distribution among the federal government and cantons was confirmed in a referendum in 2023 and will be effective as of January 1st, 2024.

Trade: Switzerland unilaterally eliminated import tariffs on all industrial products, effective from January 2024. The removal of tariffs on industrial goods covers a range of consumer goods as well as some raw materials and unfinished products that enter Switzerland for further processing. It does not include agricultural or fishing products.

2 Macroeconomic developments and policy challenges

Urban Sila

The economy is facing uncertain prospects. Activity and trade have weakened. Monetary policy has tightened appropriately but uncertainty around the persistence of inflation remains. Rising interest rates globally also heighten risks and vulnerability in the financial system, highlighting the need for sustained vigilance. Fiscal policy is facing hard choices to meet growing spending needs due to heightened geopolitical tensions, ageing, and the green transition. Structural reform will be needed to slow increases in expenditure and/or strengthen tax revenues.

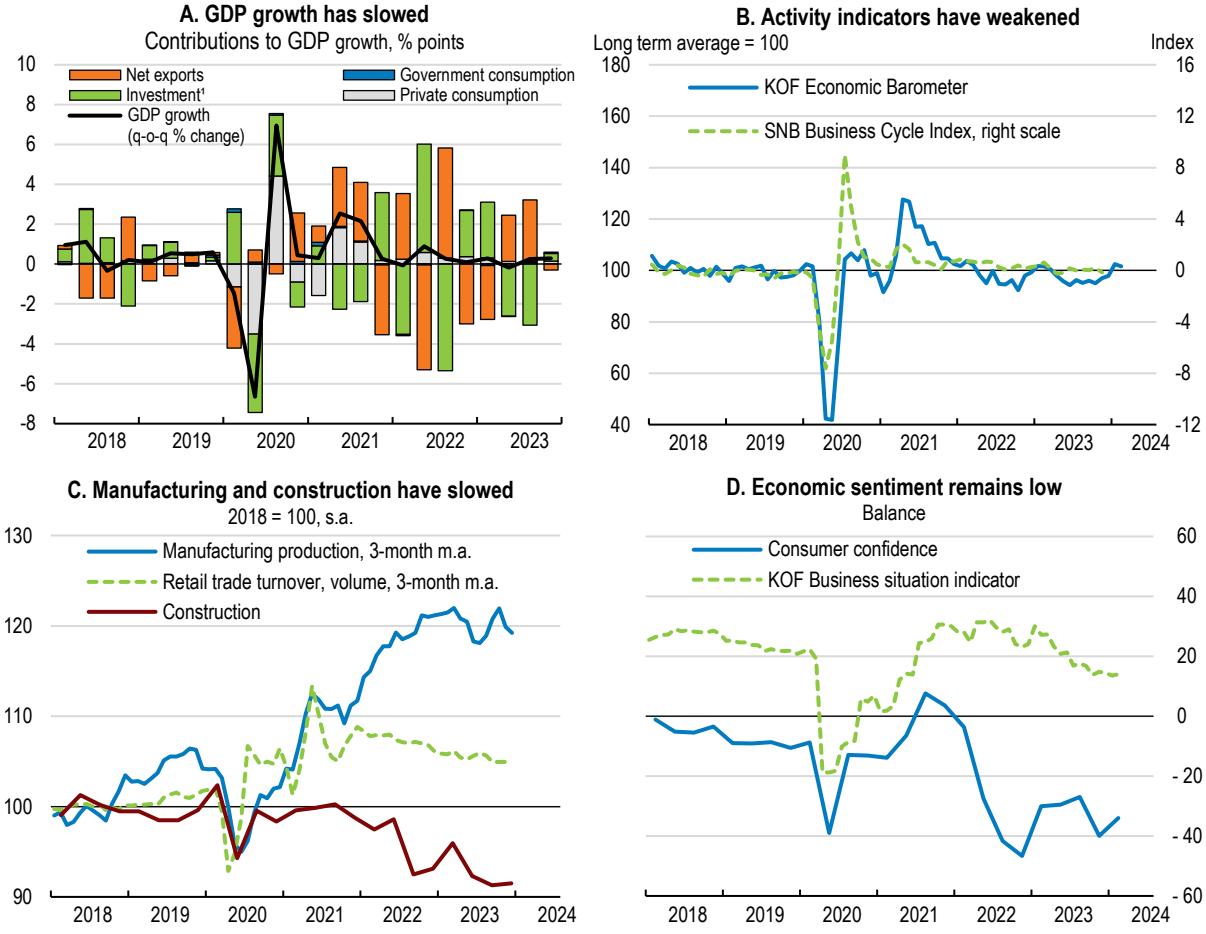
The economy has slowed amid slower global growth

Economic activity has slowed over the past year. Weak foreign demand, adverse impact of inflation on domestic purchasing power and tightened financing conditions weigh on activity. The KOF economic barometer and the SNB's business cycle indicator point to a loss of momentum in the economy (Figure 2.1). Manufacturing production has stalled and prospects are subdued, due to slowing demand in trading partners. Weak exports and muted prospects hamper investment in equipment and construction. Growth in household consumption remains solid, supporting growth in services, despite consumer confidence remaining low (Figure 2.1).

The labour market has been robust, notwithstanding some recent weakening. Employment growth has been strong and broad-based across economic sectors during 2023. The ILO unemployment rate stood at 3.9% in the second quarter of 2023, the lowest level in 15 years, before inching up in the third quarter (Figure 2.2). The number of job vacancies remains elevated. The job market remains tight, despite some recent easing (Figure 2.2), and companies continue reporting difficulties in recruiting personnel (SNB, 2023a and 2023b).

Consumer price inflation has retreated but inflationary pressures remain. Headline inflation returned to within the 0-2% target range in June of 2023, after peaking at 3.5% in August 2022 (Figure 2.3). The decline largely reflected lower prices (year-on-year) of imported oil products and decreasing inflation of other imported products. On the other hand, consumer price inflation of domestic goods, services and housing rents has remained above - or close to - two percent. Core inflation has also retreated (Figure 2.3). Despite growth in nominal wages, real wages have continued to fall. Short-term inflation expectations rose above the 0-2% range. In the fourth quarter of 2023 companies still expected inflation to stay at 1.8%, close to the upper end of the target range. In contrast, longer-term expectations have remained within the 0-2% range of price stability (SNB, 2023a, 2023b).

Figure 2.1. The Swiss economy has slowed over the past year

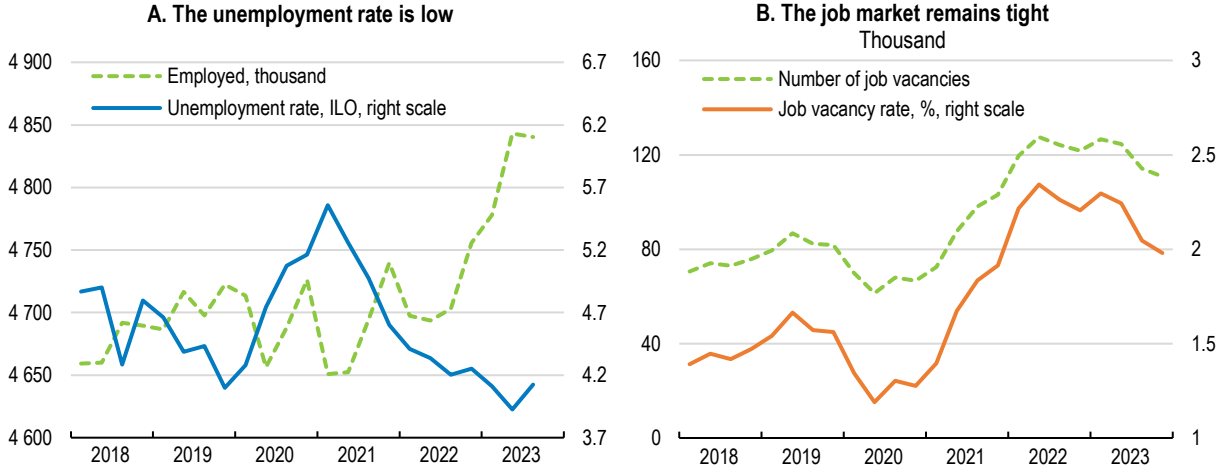


1. Including stock building.

Source: KOF; SNB; FSO; SECO; OECD Economic Outlook database.

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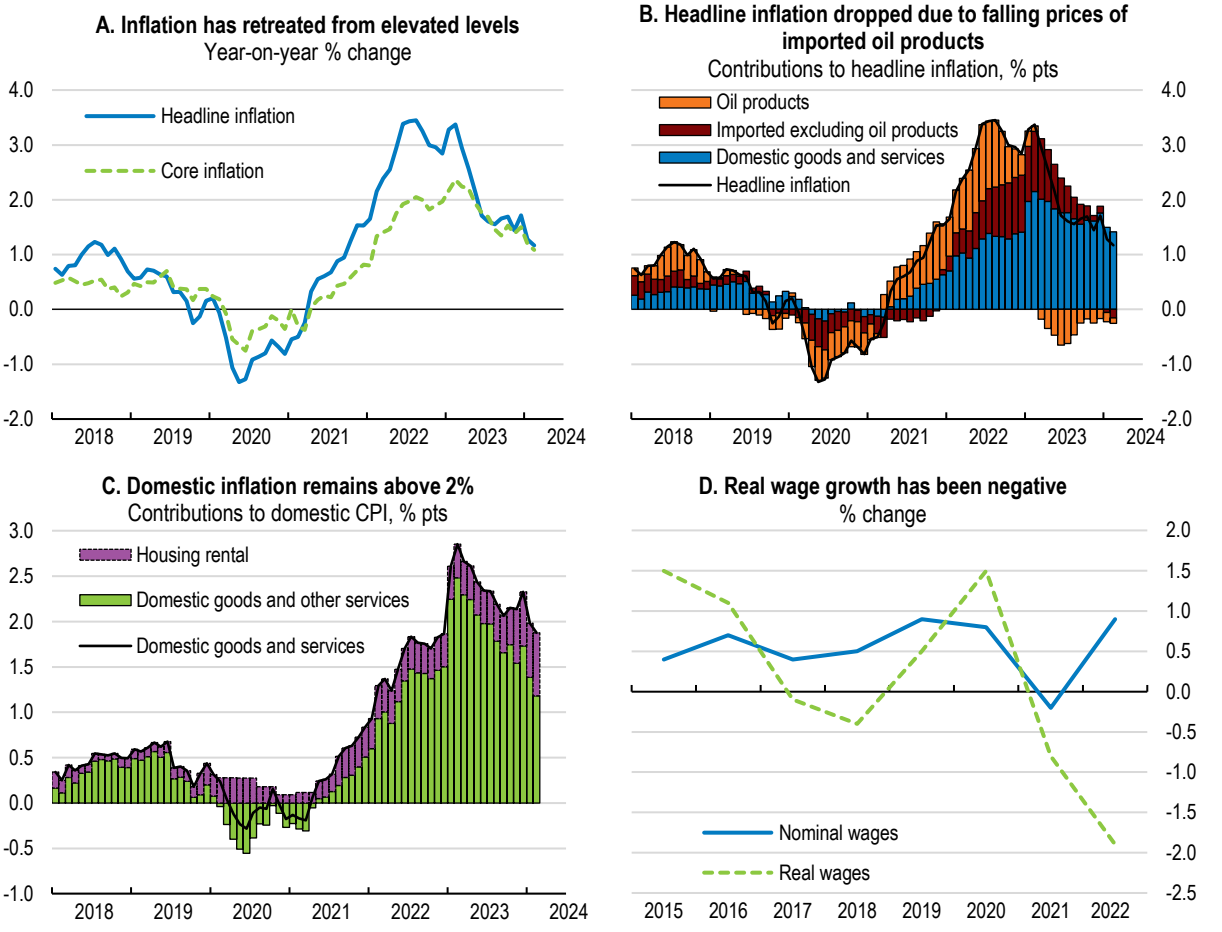
Figure 2.2. The labour market has been robust



Source: OECD Labour Force Statistics database; SECO ; FSO, Job Statistics.

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Figure 2.3. Consumer price inflation has retreated but inflation pressures remain



Source: FSO.

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GDP will grow only modestly

Real GDP growth is projected to remain below potential in 2024, reflecting the impact of tighter monetary policy on global economic activity and domestic demand. The economy is projected to grow by 0.9% in 2024 and 1.4% in 2025 (Table 2.1). In 2024, Switzerland's GDP will be boosted by international sports events, indicating an even weaker underlying growth momentum. Rent increases linked to the rising mortgage reference rate, rising VAT rates and increases in electricity prices in the domestic retail market in 2024 will push inflation higher. Consumer price inflation is projected to temporarily go above 2% over the course of 2024, before moderating again in early 2025. Higher inflation will slow domestic consumption growth. Given modest growth going forward, the unemployment rate will increase slightly. Real wage growth will turn positive in 2025.

Uncertainty surrounding the outlook is high. Risks in relation to energy supply and prices remain, notably for the 2023/24 winter. Energy shortages could push energy prices up again, further dampening purchasing power and slowing the economy. There is also uncertainty around the persistence of inflation and the impact of tighter global monetary policy on global growth. Further monetary tightening worldwide or in Switzerland, if needed, could heighten the risks surrounding high indebtedness and repricing of real estate, with repercussions on the financial sector. On the other hand, favourable resolution of geopolitical tensions would result in higher trade, revived confidence and higher growth and stability.

Table 2.1. Macroeconomic indicators and projections

Annual percentage change, volume (2015 prices)

	2020 Current prices (billion CHF)	2021	2022	Estimates and projections 2023	2024	2025
Gross domestic product (GDP)	**695.8**	**5.4**	**2.7**	**0.8**	**0.9**	**1.4**
Private consumption	361.3	1.8	4.2	2.1	0.9	1.1
Government consumption	84.5	3.3	-0.8	-0.5	0.9	0.8
Gross fixed capital formation	187.9	2.8	1.2	-2.0	-2.9	0.7
Housing	21.7	-1.9	-2.3	-2.4	-3.0	0.7
Business	142.8	4.5	2.2	-1.9	-2.9	0.7
Government	23.4	-3.1	-2.6	-2.2	-2.0	0.9
Final domestic demand	633.7	2.3	2.6	0.6	-0.2	0.9
Stockbuilding[1]	18.4	-2.1	-0.6	0.5	-1.3	0.0
Total domestic demand	652.1	0.0	1.8	1.0	-1.7	1.0
Exports of goods and services	445.9	13.6	6.3	2.7	2.9	3.5
Imports of goods and services	402.2	5.6	6.0	3.7	-0.2	3.3
Net exports[1]	43.7	5.4	0.9	-0.2	2.3	0.6
Other indicators (growth rates, unless specified)						
GDP (sport events adjusted)	704.4	5.1	2.5	1.3	0.5	1.8
Potential GDP	. .	1.5	1.5	1.4	1.3	1.2
Output gap[2]	. .	0.0	1.2	0.5	0.2	0.4
Employment	. .	-0.2	0.6	2.8	0.6	0.4
Unemployment rate (% of labour force)	. .	5.1	4.3	4.0	4.4	4.4
GDP deflator	. .	1.2	2.5	1.0	1.6	1.5
Consumer price index	. .	0.6	2.8	2.1	1.9	1.4
Core consumer price index[3]	. .	0.3	1.7	1.8	1.6	1.3
Household saving ratio, net (% of disposable income)	. .	20.5	19.3	19.3	19.4	19.3
Current account balance (% of GDP)	. .	6.9	9.4	7.6	6.7	7.4
General government financial balance (% of GDP)	. .	-0.3	1.2	0.9	0.7	0.6
Underlying government primary financial balance[2]	. .	-0.3	0.8	0.8	0.7	0.6
General government gross debt (% of GDP)	. .	41.5	37.7	36.8	36.3	35.8
General government net debt (% of GDP)	. .	-20.3	-4.4	-5.2	-5.8	-6.3
Three-month money market rate, average	. .	-0.7	-0.1	1.5	1.5	0.9
Ten-year government bond yield, average	. .	-0.2	0.8	1.0	0.9	1.1

1. Contribution to changes in real GDP.
2. Percentage of potential GDP.
3. Consumer price index excluding food and energy.
Source: OECD Economic Outlook database.

Table 2.2. Events that could lead to major changes in the outlook

Shock	Possible impact
Global energy and food crisis	An intensification of energy and food supply disruptions would push inflation up and cause a contraction in global trade, leading to a recession.
Further heightening of geopolitical tensions	Geopolitical instability would increase uncertainty and weaken both domestic and external demand, slowing growth.
Global trade tensions may deteriorate further, with an extension of export restrictions	Further fragmentation of global supply chains and barriers to trade would weigh on growth and contribute to inflationary pressures.
Sudden steep rises in interest rates and major house price correction	A large correction in housing prices could expose vulnerabilities in the financial system, causing a crisis in the financial sector that could feed back to the real economy. In addition, sudden rises in interest rates would sharply increase debt-servicing costs for highly leveraged households and investors, raising the risk of defaults.

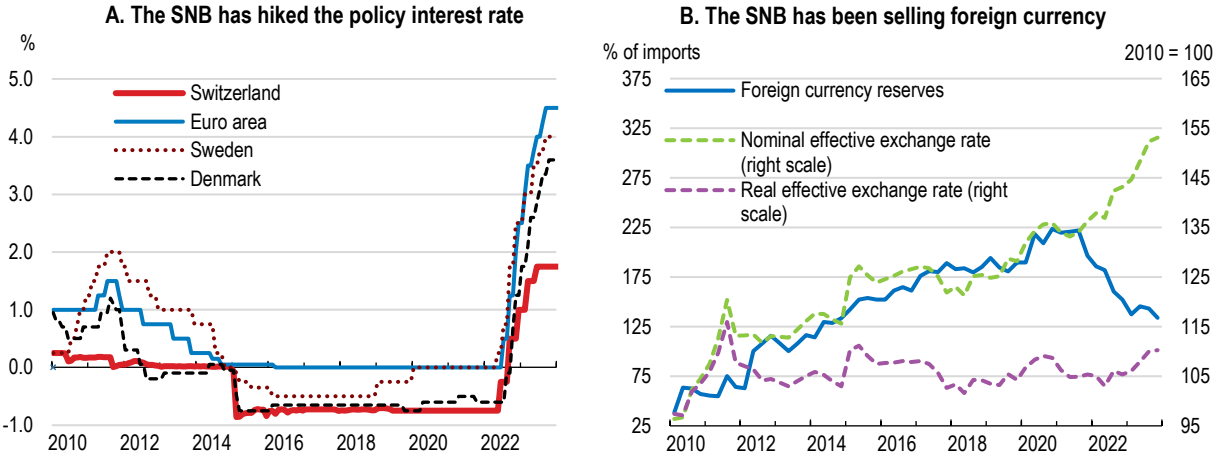
Monetary policy should remain tight

Between June 2022 and June 2023, the Swiss National Bank (SNB) hiked the policy interest rate by 250 basis points, from -0.75% to 1.75% (Figure 2.4), exiting the negative interest environment after seven years. To steer the money market rate close to the policy rate, the SNB has undertaken steps to absorb liquidity – via repo transactions and the issuance of SNB Bills – and adjusted its policy of tiering sight deposits. Bank sight deposits held at the SNB are remunerated at the SNB policy rate only up to a certain threshold, and for the rest banks are now remunerated at a 0.5 percentage point discount. With such tiered remuneration the SNB facilitates trading of sight deposits in the money market and ensures interest rates stay close to the policy rate.

The monetary policy stance should remain tight until inflation is durably within the 0-2% band. Monetary policy should continue to closely follow inflation and economic developments in Switzerland and abroad. Under current conditions, inflation is still expected to return temporarily above the target band over 2024 due to expected rent and VAT increases, as well as rises in electricity prices. Volatile energy prices could trigger new pressures on import prices.

The SNB has remained active in the foreign exchange market. To ensure appropriate monetary conditions, foreign exchange interventions by the SNB over recent quarters focused mostly on selling foreign currency (Figure 2.4), contributing to the monetary policy tightening. As a welcome side effect, this has contributed to reducing the large balance sheet of the SNB.

Figure 2.4. Monetary policy has been tightened



Source: SNB, ECB, Sveriges Riksbank, Danmarks Nationalbank; OECD Economic Outlook.

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The still large size of the SNB's balance sheet raises risks and challenges, as changes in valuations can bring about very large losses or profits. This in turn can affect the SNB's equity and raises uncertainty about profit distribution. The SNB's balance sheet rose steeply after 2010, reaching 140% of GDP in 2020, before declining to 105% in the second quarter of 2023, still high in international comparison (Figure 2.5). In 2022, after several years of large profits, the SNB posted a loss of CHF 132 billion (17% of GDP), largely due to valuation changes of foreign currency positions (SNB, 2023c), precluding a profit distribution in 2023. In 2023, the SNB reported another loss in the order of CHF 3.2 billion, precluding profit distribution in 2024. Most notably, there is to be no transfer to the federal budget or the cantons. However, recent large losses are not expected to disturb effective policymaking by the SNB in safeguarding price and financial stability (Zeng and Li, 2023).

Box 2.1. The SNB's investment strategy

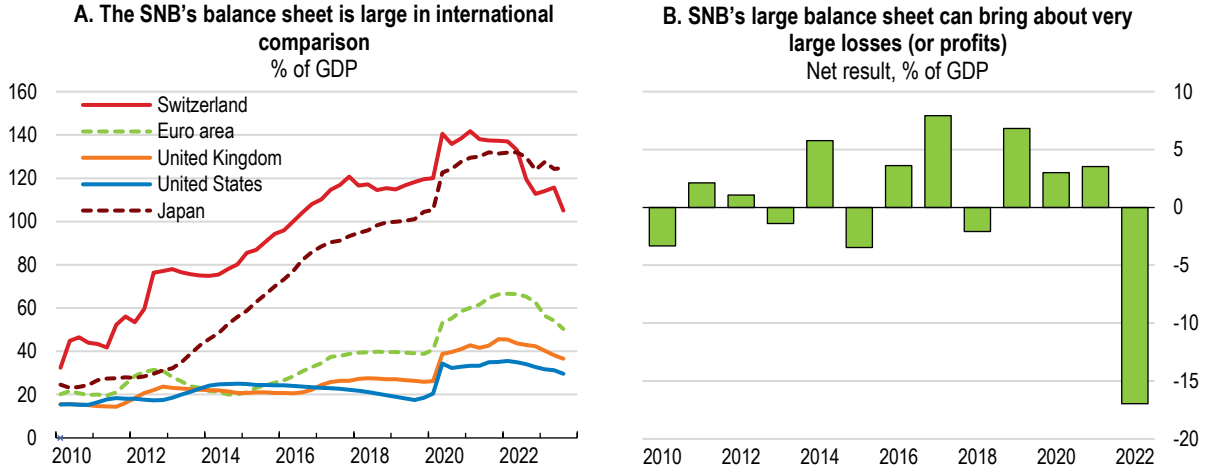
In applying its investment policy, the SNB has two main objectives. The first is to ensure that its balance sheet can be used for monetary policy purposes at any time. This means that the SNB must be able to expand or shrink the balance sheet as necessary to maintain appropriate monetary conditions. The second objective is to preserve the value of currency reserves in the long term.

The SNB's balance sheet amounts to more than 100% of Swiss GDP and the assets consist mostly of investments in foreign currencies (91%), gold (6%) and, to a lesser extent, financial assets in Swiss francs (1%) and other assets (2%). Most foreign currency holdings are in USD or EUR.

The bond portfolio had an average duration of 4.4 years at the end of 2022 and mainly comprises government bonds. Investments are broadly diversified in each market across maturities, so that large volumes can be either bought or sold with a minimal impact on prices. Swiss franc bonds are passively managed and primarily contains bonds issued by the Confederation, cantons, municipalities and foreign borrowers, as well as the Swiss Pfandbriefe. The average duration of the portfolio was 7.6 years in 2022. Equities are managed passively based on a benchmark, consisting largely of equity indices in mainly advanced economies.

Source: SNB (2022).

Figure 2.5. The large size of the SNB's balance sheet raises risks and challenges



Source: OECD Economic Outlook database; Board of Governors of the Federal Reserve System; ECB; Bank of Japan; Bank of England; SNB and OECD calculations.

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The SNB has taken steps to strengthen the resilience of its balance sheet. It has limited profit distributions and revised its provisioning for currency reserves to help maintain adequate capital. It has also strengthened communication by transparently communicating about its investment strategy and potential volatility in profits. The SNB should continue reviewing its investment strategy and maintain adequate safeguards to dampen risks arising from its large balance sheet.

Countering risks to financial stability

Ensuring sufficient buffers and adequate supervision in the banking sector

Steep rises in interest rates, a weakening economy and overall uncertainty heighten risks and vulnerability in the financial system. The exit from the negative interest rate environment and rising interest rates generally boost net interest income of banks. However, steep interest rate increases can trigger substantial repricing of assets, causing losses for investors and financial institutions. In addition, the weakening economy impacts the viability of businesses and worsens the loan portfolios of financial institutions. The SNB's stress scenario analysis (done in 2023 only for domestically focused banks, as comprehensive analysis was not yet possible for the combined UBS/Credit Suisse bank) suggests that capital buffers should ensure adequate resilience overall of domestically focused banks' (SNB, 2023d). Adequate capital buffers and effective risk management need to be maintained to counter the risks.

The state-facilitated acquisition of Credit Suisse by UBS, announced in March 2023, effectively stabilised the growing crisis within Credit Suisse and tamed risks of spill-overs, thus safeguarding financial stability, but it raises new risks and challenges. The holders of wiped-out AT1 securities and a group of Credit Suisse shareholders have filed lawsuits against the Swiss authorities, which might lead to costly litigation and uncertain outcomes. The restructuring of Credit Suisse's business will entail sizable job losses. UBS announced 3 000 jobs would be cut in Switzerland alone, but it is likely that currently tight labour market will absorb much of this workforce. With the two largest banks now being combined, questions of competition arise. UBS operates and competes in the global market for financial services, but domestically, the new combined bank will have roughly 25% market share in domestic deposits and loans (SNB, 2023d). The Swiss Competition Authority is reviewing the takeover and submitted its first report to the Swiss Financial Market Supervisory Authority (FINMA) in September 2023.

UBS – already a global systemically important bank before the merger – has thus become even larger and according to the "too big to fail" (TBTF) regulations, it must meet even stricter regulatory requirements. FINMA has granted UBS a transitory period from end-2025 to the beginning of 2030 at the latest, to comply with the capital requirements that reflect the increase in its size and domestic market share. During the integration and restructuring process, the authorities should continue with close supervision and monitoring of the merged bank.

The acquisition was carried out without making use of the existing TBTF resolution regime, raising questions on optimal regulation and supervision of large banks going forward: How could a global systemically important bank that met regulatory requirements destabilise so rapidly and when, how and on what legal basis can a supervisor intervene in a bank that meets the quantitative regulatory requirements? Important lessons should be drawn from this case to strengthen regulation in Switzerland as well as internationally. The Federal Council is undertaking a review of the TBTF framework, with the final report and conclusions to be published in spring 2024. A parliamentary inquiry commission will investigate the management and responsibilities of the authorities in the management of the takeover.

Box 2.2. The takeover of Credit Suisse by UBS

In March 2023, the authorities – Federal Council, FINMA and the SNB – facilitated a take-over of ailing Credit Suisse by UBS. After years of risk management issues, inadequate internal controls, financial losses, top management overhauls and restructuring attempts, the failure of two otherwise unrelated US banks in March 2023 triggered severe pressure on Credit Suisse. While Credit Suisse met the regulatory capital and liquidity requirements, it became increasingly likely that it would not be able to stabilise by itself. The package of measures announced on 19 March 2023, centring around the acquisition by UBS and ample liquidity support, rapidly stabilised the situation and prevented further spill-overs to the Swiss and global financial system.

In addition to the existing liquidity-shortage financing facility (LSFF) and emergency liquidity assistance (ELA), two new instruments – additional emergency liquidity assistance (ELA+) and a liquidity assistance loan secured by a federal default guarantee (public liquidity backstop) – were introduced under emergency law to provide ample liquidity assistance. In addition, the federal government provided UBS with a second-tranche loss protection guarantee of up to CHF 9 billion (available only after a UBS first loss tranche of CHF 5 billion) for a specific portfolio of difficult-to-assess Credit Suisse assets. The acquisition was expedited under emergency law and speedy approval of the transaction, without Credit Suisse and UBS shareholders voting on it. The public intervention triggered a full (CHF 15 billion) write-down of Credit Suisse's Additional Tier 1 (AT1) securities, while Credit Suisse shareholders benefited from the purchase price of UBS for Credit Suisse shares.

The take-over was formally completed in June 2023. UBS announced significant downsizing of previous Credit Suisse business, most notably a reduction of its investment banking business. In August 2023, UBS announced that it terminated the CHF 9 billion loss-protection guarantee it received from the Federal government. Moreover, the liquidity assistance under the additional emergency liquidity assistance (ELA+) and the public liquidity backstop has been repaid in full.

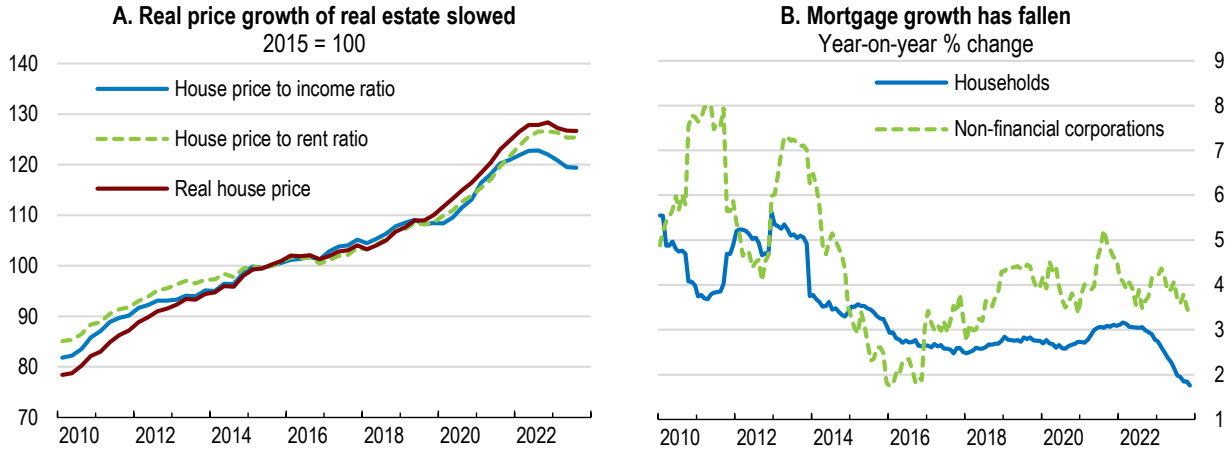
The SNB reported some preliminary observations and lessons learnt in its 2023 Financial Stability Report (SNB, 2023d). In the report, the SNB highlighted the need for a review of the TBTF framework to facilitate early intervention. In times of stress, focus on regulatory metrics such as capital and liquidity ratios proved to be too narrow. Moreover, Credit Suisse was confronted with deposit outflows which were more severe than assumed under the liquidity regulations. The SNB called for the need for banks to cancel the interest payments on AT1 instruments when incurring losses and be able to write down AT1-securities earlier to absorb losses and increase the chance of revival. In addition, banks should have higher liquidity buffers and a higher level of assets on balance sheets that can be pledged to the SNB as collateral to obtain emergency liquidity assistance. The Federal Department of Finance, in collaboration with FINMA and the SNB, is conducting a more in-depth investigation into the Credit Suisse crisis which will also be delivered to Swiss parliamentarians in spring 2024.

FINMA likewise issued a report on the Credit Suisse crisis in December 2023 (FINMA, 2023a). In the report FINMA notes that it took "far-reaching and invasive" measures to rectify the deficiencies in Credit Suisse's corporate governance and risk management before the crisis in early 2023. FINMA assesses that in intensifying its supervisory and enforcement activities at Credit Suisse, it reached the limits of its legal options and it therefore calls for a stronger legal basis for intervention. More specifically, it calls for instruments such as the Senior Managers Regime (clear allocation of responsibilities, violations attributable to individuals, and the need for awareness on the part of top management of biggest risks), the power to impose fines, and more stringent rules regarding corporate governance. FINMA also indicated that it was ready to strengthen its supervisory practice and would step up its review of stabilisation measures, which would be welcome.

Monitoring vulnerabilities in the housing market

The housing market has started to show signs of cooling, after years of steep growth in real estate prices (Figure 2.6). In real terms, residential real estate price growth has declined in the owner-occupied segment and turned negative in the investment property segment (SNB, 2023d and 2023b). Mortgage growth has fallen, too. Past rises of interest rates will still take time to be fully reflected in market dynamics and mortgage growth will likely slow further. According to various indicators and model-based estimates of the SNB, taking into account the state of the economy, interest rates, incomes and rents, current apartment prices imply overvaluation of Swiss real estate of up to 40% (SNB, 2023d). Demographic factors and supply constraints have contributed to this.

Figure 2.6. The housing market has started to cool



Source: OECD, Analytical House Price Indicators database; SNB.

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Vulnerabilities in the residential real estate market persist, despite some cooling. Given stretched valuations, large interest rate hikes or other shocks could result in steep price corrections, leading to deteriorated mortgage portfolios of banks. In addition, the proportion of loans with a repricing maturity of less than six months (the time before the interest rate on a mortgage is reset) has been on the rise. Vulnerabilities are particularly acute in the residential investment property segment, where commercial investors are more likely to default on their debt than owner-occupiers. In this segment, in 2022, a significant share of new loans (15%) was characterised by both a short repricing maturity and high loan-to-income ratio (above 20), making them particularly vulnerable to rising interest rates (SNB, 2023d).

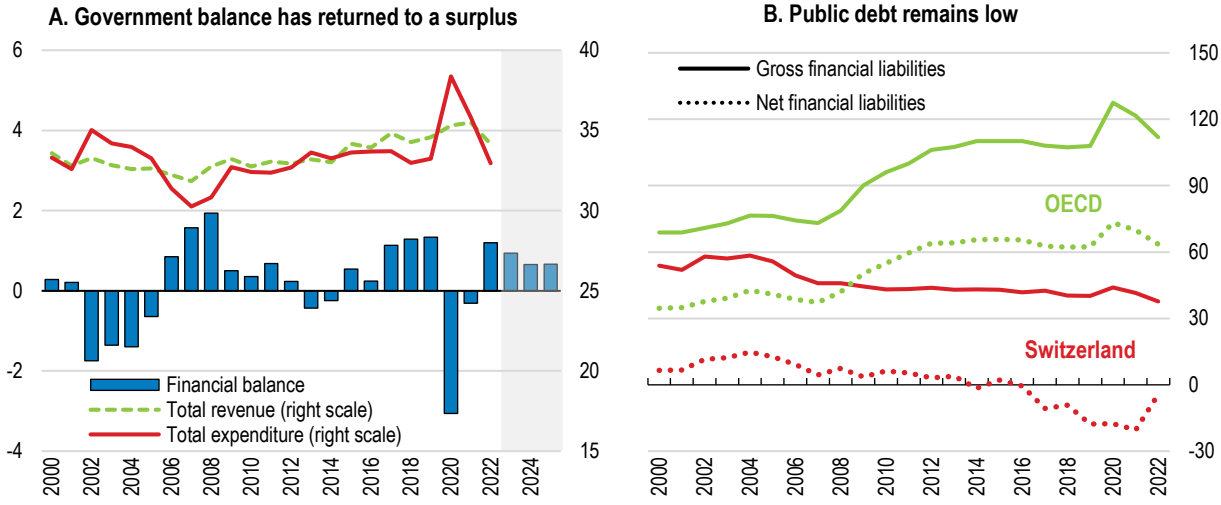
Close monitoring of risks stemming from the housing market and adequate buffers should be maintained. The sectoral countercyclical capital buffer (CCyB) was reactivated in September 2022 at 2.5% of risk-weighted exposures secured by residential property in Switzerland, a welcome step that will help ensure the banking sector's resilience (the CCyB stance is proposed by the SNB – after consulting with FINMA – and then the Federal Council makes the decision). Earlier, with effect from January 1st, 2020, the Swiss Bankers Association tightened self-regulation for mortgage loans on the investment property market, by requiring higher down-payments and faster mortgage repayment. Switzerland would however benefit from a broader toolkit of macroprudential measures that consider affordability, for instance debt-to-income and debt-service-to-income limits on mortgage loans. As recommended in previous Surveys (OECD 2017, 2019, 2022a), the framework for setting macroprudential rules should be strengthened, with the authorities given clear and strong mandates to propose and calibrate the tools. Currently, the rules are set in agreement with the Swiss Bankers Association, which may impact timeliness and stringency (IMF, 2019).

A broadly neutral fiscal stance is warranted

After extraordinary measures during the COVID-19 crisis and two years of fiscal deficits, the general government recorded a surplus of 1.2% of GDP in 2022 (Figure 2.7). Despite weakening GDP growth, another general-government surplus is expected for 2023, while the federal government ran a deficit. Although the federal government had to write off expected profit sharing from the SNB (0.25% of GDP) due to balance sheet losses, the rescue mechanism for the electricity industry (0.5% of GDP) was not needed (Federal Council, 2023a). In addition, in August 2023, UBS announced that it terminated the loss-protection guarantee it received from the Federal government in the amount of CHF 9 billion (1.1% of GDP) upon the take-over of Credit Suisse. The guarantee did not represent an immediate financial burden to the federal budget, but its termination eliminates contingency risks to government finances.

Figure 2.7. Government balance has returned to a surplus and the fiscal position is robust

General government, % of GDP



Source: OECD Economic Outlook database.

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Public finances remain robust with ample fiscal buffers. Gross general government debt at 37% of GDP in 2022 is low in international comparison (Figure 2.7). The public debt ratio has remained stable at around 40-45% of GDP for the past 15 years, in contrast to many other OECD economies. This has been achieved within the framework of the federal debt brake rule (along with cantonal fiscal rules) that aims to use fiscal policy as a stabilisation tool over the economic cycle (while allowing for extraordinary needs) as well as to pursue fiscal sustainability by keeping nominal debt stable (i.e., a declining debt-to-GDP ratio).

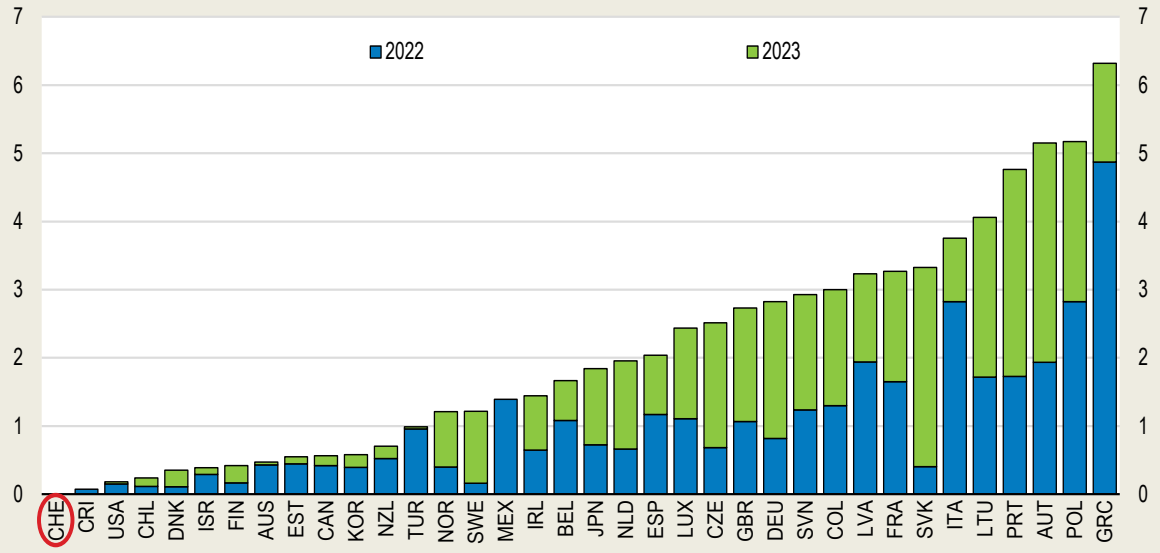
Box 2.3. Switzerland refrained from discretionary support measures during the energy crisis

Russia's aggression against Ukraine led to steep rises in energy and commodity prices, as well as severe supply disruptions in energy markets. Absent domestic natural gas production, and with gas accounting for 16% of energy consumption (IEA, 2020), Switzerland was affected by the shock. However, the authorities refrained from introducing the support measures to households and companies that were common among other European countries (Figure 2.8).

Dominance of renewable power in electricity production, a relatively small share of energy in households' total consumption, the strength of the Swiss franc and regulation of the retail market helped reduce the adverse impact of rising energy prices in Switzerland. Existing contingency plans for energy shortages (including recommendations to reduce natural gas and electricity use) also helped the authorities to effectively address the situation, although the cause of the disruption turned out to be very different from what had been envisaged in past risk assessments (FONES, 2021).

Figure 2.8: No new government support measures during the energy crisis

Energy support measures, % of GDP



Notes: Support measures are taken in gross terms, i.e., not accounting for the effect of possible accompanying energy-related revenue increasing measures, such as windfall profit taxes on energy companies. Where government plans have been announced but not legislated, they are incorporated if it is deemed clear that they will be implemented in a shape close to that announced. Gross fiscal costs reflect a combination of official estimates and assumptions on how energy prices and energy consumption may evolve when the support measures are in place. Costs are estimates for both 2022 and 2023, naturally subject to greater uncertainty in the current year. Measures corresponding to categories "Credit and equity support" and "Other" have been excluded. When a given measure spans more than one year, its total fiscal costs are assumed to be uniformly spread across months. For measures with no officially announced end-date, an expiry date is assumed and the fraction of the gross fiscal costs that pertains to 2022-23 has been retained.
Source: Castle, et al. (2023).

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A broadly neutral fiscal stance is appropriate over 2024 and 2025 given the moderately growing economy. This translates into low general government surpluses over this period. Automatic stabilisers are strong in Switzerland and have historically been successful in dampening the effects of adverse shocks on the Swiss economy (see Chapter 5). The stabilisers mainly consist of direct government taxes (on income, profits and wealth), accounting for roughly 70% of total tax revenues, that adjust in response to economic fluctuations without the need for discretionary policy decisions, as well as an increase in various social benefits. The automatic stabilisers should operate freely to cushion the growth slowdown and a slight uptick

in unemployment. However, fiscal policy should not get in the way of monetary policy in driving down inflation and inflation expectations. The decision to extend the amortisation period (the prescribed time within the debt brake rule during which extraordinary deficit needs to be compensated through the ordinary budget) for reducing the "COVID debt" from 6 years to 12 years is welcome and will avert overly tight fiscal policy over the coming years.

Box 2.4. The debt brake rule

The debt brake rule is a central element of the Swiss fiscal framework at the federal level. It subjects the Confederation's fiscal policy to a binding rule. Its principles were accepted by popular vote in December 2001 and its core provisions are enshrined in the Federal Constitution (article 126). Details are set out in the Financial Budget Act.

The debt brake is designed to ensure that fiscal policy remains sustainable over the long term by aiming to keep nominal debt stable (i.e. a declining debt-to-GDP ratio). The rule also considers the economic cycle to help smooth growth fluctuations. It is a structural deficit rule that limits expenditures to the amount of structural (i.e. cyclically adjusted) revenues. Thus, the debt brake does not require budgets to be balanced on an annual basis, but only over an economic cycle. Within this mechanism, total federal government expenditures are kept relatively independent from the cycle whereas tax revenues act as automatic stabilizers. Actual deviations from the limit set by the rule result in a credit or debit to the so-called "compensation account". Deficits in this account must be considered when setting the new expenditures ceiling for the following year and eliminated in the subsequent years. Moreover, in principle, positive balances from underspending can only be used to reduce debt.

In extraordinary circumstances (such as severe recessions, pandemics or natural disasters), the expenditures ceiling can be raised by a qualified majority of both chambers of parliament, whereby a binding rule also applies for the extraordinary budget. Extraordinary receipts and expenditures are recorded on an amortisation account and any deficits on the amortisation account due to extraordinary expenditures must be covered over the course of six years by means of surpluses in the ordinary budget. In special situations, the parliament has the power to extend the six-year deadline.

Source: OECD (2022a).

Growing spending needs call for reviewing expenditures and strengthening revenues

Switzerland needs to find a way of addressing its growing spending needs. Spending needs for climate change adaptation and to meet greenhouse gas reduction commitments are growing. The need for spending on defence has risen. Interest rates on new public debt are going up. In the longer term, public spending faces significant pressures due to population ageing (see below). Accordingly, Switzerland needs to curb growth in public spending or find new sources of public revenue to abide by the debt brake rule and safeguard fiscal sustainability.

The government estimates that from 2025 to the end of 2027, the equivalent of 0.9% of GDP in savings will have to be found in the federal budget to observe the debt brake rule (Federal Council, 2023b). Spending for Ukrainian refugees, which was previously (2022-2024) recorded as extraordinary are included in this figure.

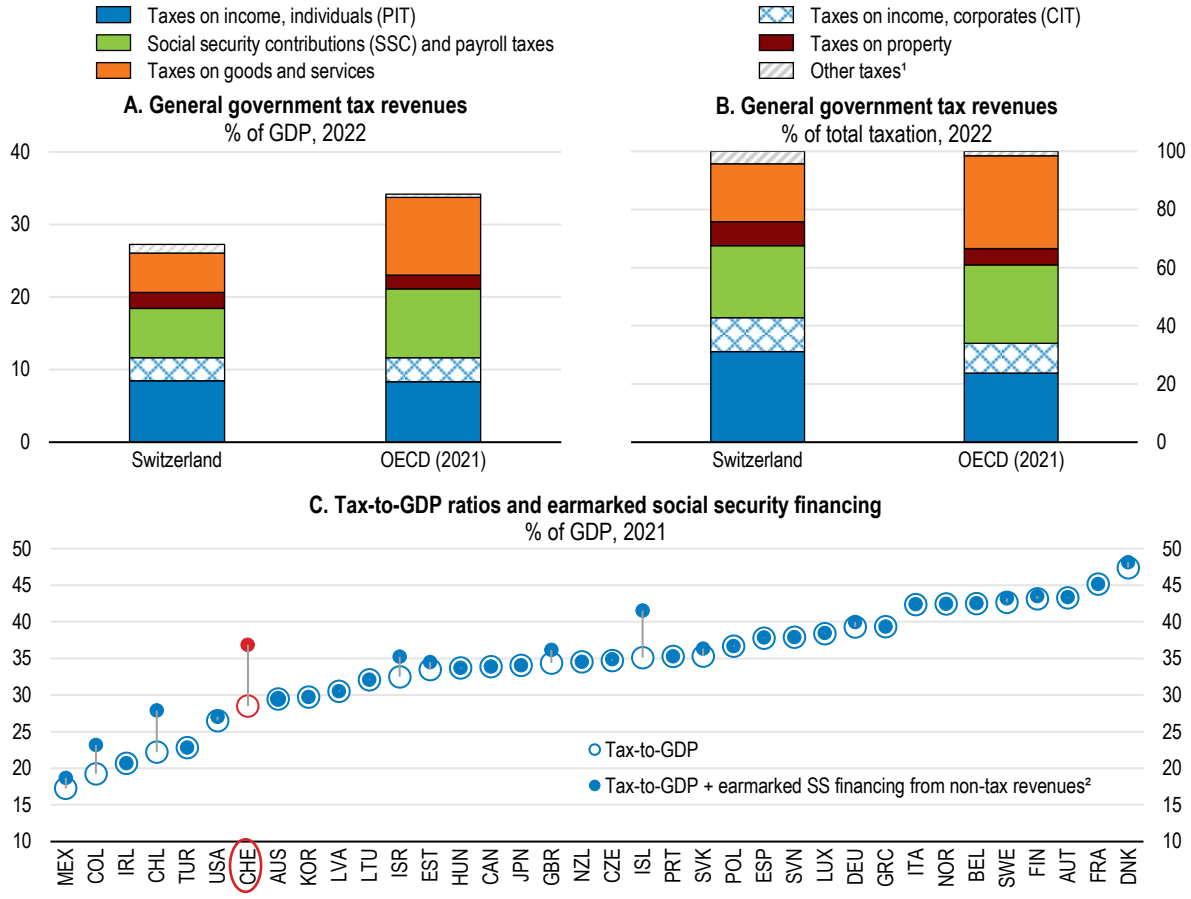
In early 2023, the Federal Council announced a set of measures to cut spending and improve revenue of the Federal budget. These include among others, slowing growth in army spending, waiving the contribution for Horizon Europe in favour of transitional measures until agreement is found with the EU, reducing contributions to the railway infrastructure funds and linear cuts to other expenditures. At the same

time, the federal contribution to unemployment insurance is to be reduced (in view of accumulating surpluses of the unemployment insurance), the cantonal share of direct federal tax to be reduced (in favour of the federal government) and taxes on imported electric vehicles to be introduced starting in 2024. Some of these measures need to be passed by parliament. The overall effort is commendable, and some measures might raise efficiency (the cut to railway funds). However, other measures will not necessarily have an impact on the general government finances as they distribute between the levels of government. Moreover, the cut to Horizon Europe is expected to be only temporary. More structural measures are therefore needed in the medium to long term.

Relying on spending reviews as part of the budgeting process can help to realise fiscal savings. Switzerland has a tradition of carefully evaluating the economic rationale and the cost and benefits of introducing new policies. However, tools to systematically and regularly review existing expenditures are lacking. Several OECD countries have benefitted from regular spending reviews that helped to identify savings or expenditure reallocation measures or to improve effectiveness within programmes and policies. In Denmark, spending reviews have been undertaken for more than 20 years. They are led by the Ministry of Finance and inform budget negotiations and decisions on multi-annual budget agreements. In Ireland, spending reviews – integrated with the annual budget process – aim to improve the allocation of public expenditure across all areas of government, by systematically assessing the efficiency and effectiveness. In Norway, recommendations from the final spending review report have a direct effect on the budget process. In the UK, spending reviews are the main mechanism through which departmental budgets are set. Having a strong spending review framework that builds on OECD Best Practices for Spending Reviews (Tryggvadottir, 2022) can make the administration better equipped to face emerging fiscal pressures and enable it to better respond to changing government priorities.

Strengthening tax revenues can also help to conform with the debt brake rule while meeting growing spending needs related to defence, ageing and climate change. As discussed in the last Survey (OECD, 2022a), Switzerland's tax revenues as a share of GDP are relatively low (Figure 2.9), although when including also the financing of health care costs through compulsory private insurance, the burden on households is markedly higher (Figure 2.9, panel C). Tax revenues are titled towards direct taxation (personal income tax, corporate income tax and social security contributions). The standard VAT rate is 8.1% and the GDP share of VAT revenues is among the lowest in the OECD. Broadening the base of the VAT, improving compliance (as planned) and increasing the standard VAT rate (in addition to the 0.4 percentage point hike to help finance the first pension pillar), could raise revenues. There is also room to increase revenues from real estate taxation, notably the recurrent tax on immovable property which is low in international comparison. Lowering disincentives to work for second earners, for example by moving from family- to individual-based taxation (more on this below), could raise labour participation and hence tax revenues. Switzerland has adopted the OECD-initiated global minimum 15% corporate tax on multinational companies, effective from 1 January 2024 onwards. However, the exact impact on tax revenues in Switzerland is uncertain, depending on behavioural responses of companies and policy steps of cantons.

Figure 2.9. Tax revenues are titled towards direct taxation



1. Includes unallocable between personal and corporate income tax.
2. Earmarked financing of social security financing from non-tax revenues includes voluntary contributions to government and compulsory contributions to the private sector.

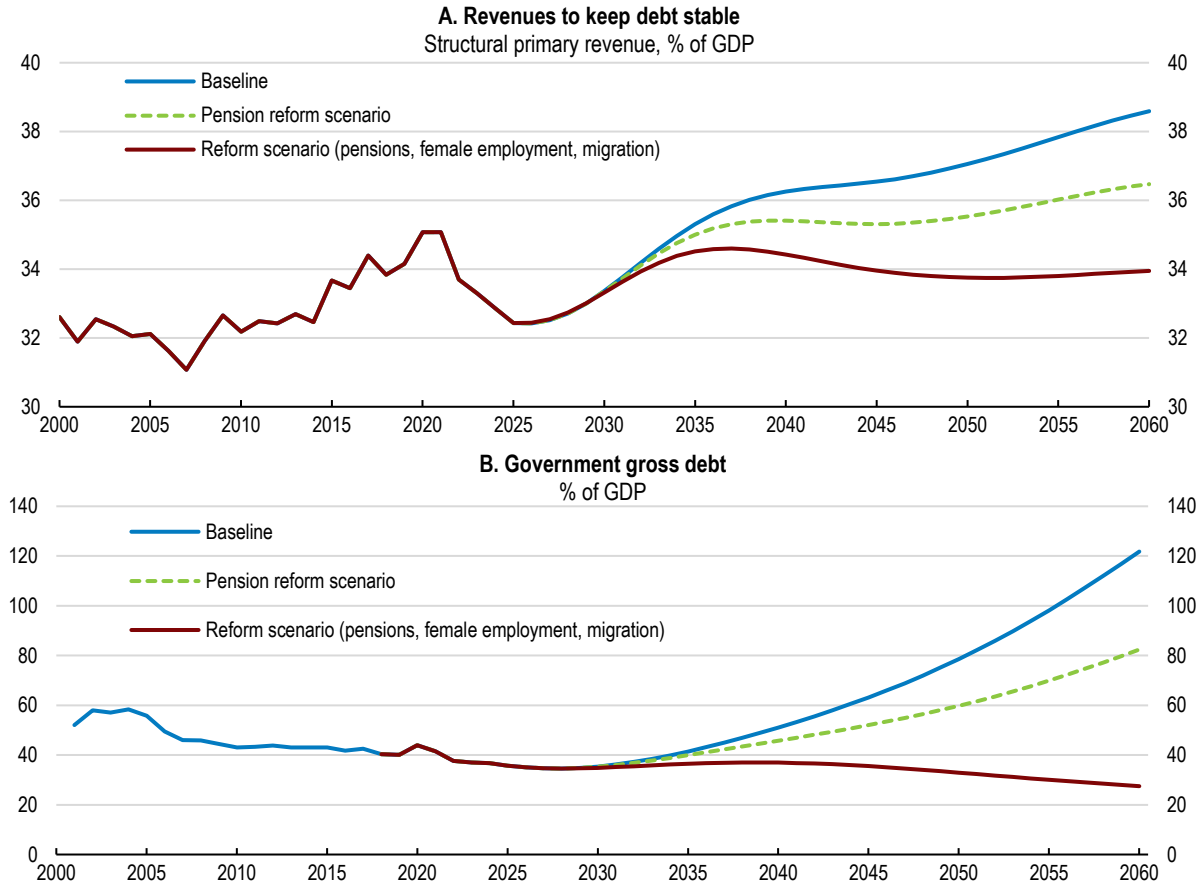
Source: OECD Revenue Statistics database; OECD (2023), Revenue Statistics 2023.

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Addressing the long-term sustainability of pensions

Switzerland faces looming fiscal pressures, despite internationally low public debt and a positive net asset position. Although projections far into the future are subject to significant uncertainty, long-term scenarios based on Guillemette and Turner (2021) suggest that to hold the debt-to-GDP ratio steady at current levels, without policy changes, fiscal pressure would increase by close to 6% percentage points of GDP by 2060 while maintaining current public service standards and benefits (Figure 2.10). National projections by the Federal Department of Finance (FDF 2021) indicate lower fiscal pressures. A major source of pressures comes from population ageing that raises costs related to pensions, healthcare and long-term care (Figure 2.12). To safeguard fiscal sustainability, Switzerland must either significantly raise public revenues, e.g., taxes, undertake structural reform to limit increases in ageing costs or seriously cut other primary spending. An ambitious reform package combining labour market reforms to raise employment rates with reforms to the pension system to lengthen working lives and keep the effective retirement age rising could help cut the projected increase in fiscal pressure (see also Chapter 3). Labour market reforms to increase employment rates of women and attract more migrant workers to counter declines in domestic workforce would put public debt on a sustainable path (Figure 2.10).

Figure 2.10. Ageing creates fiscal pressures



Note: The projections are illustrative and differ substantially from the latest national projections (FDF, 2021). The OECD Long-term model considers demographics but also the Baumol effect – i.e., the tendency for the relative price of services to increase over time. It is also assumed that other primary expenditures (other than health and pensions) are affected by ageing. The assumption is that governments would seek to provide a constant level of services in real per capita terms. This translates into higher fiscal pressure when the employment / population ratio falls. This component adds about 2 pp of GDP by 2060 (see Box 1.1 and Figure 1.13 in Guillemette and Turner, 2021). In addition, the scenarios assume that public pensions will grow at ½ the pace of wages, in line with the current Swiss law. The simulations use population projections of the United Nations. Panel A shows the required increase in public revenues to keep debt-to-GDP ratio steady amid rising costs due to ageing. Panel B assumes that rising ageing costs are financed with deficits (applied on a zero structural primary balance scenario). In both cases, pension reform entails the following: The retirement age gradually rises to 67 in 2034, and by two thirds of the expected gain in life expectancy thereafter. The reform scenario entails the pension reform, the female prime-age (25-54) employment rate converging with that of men by 2050 and net immigration rising from 45 000 annually to 75 000 by 2030.
Source: OECD Long-term Economic Model, OECD calculations.

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Box 2.5. The pension system

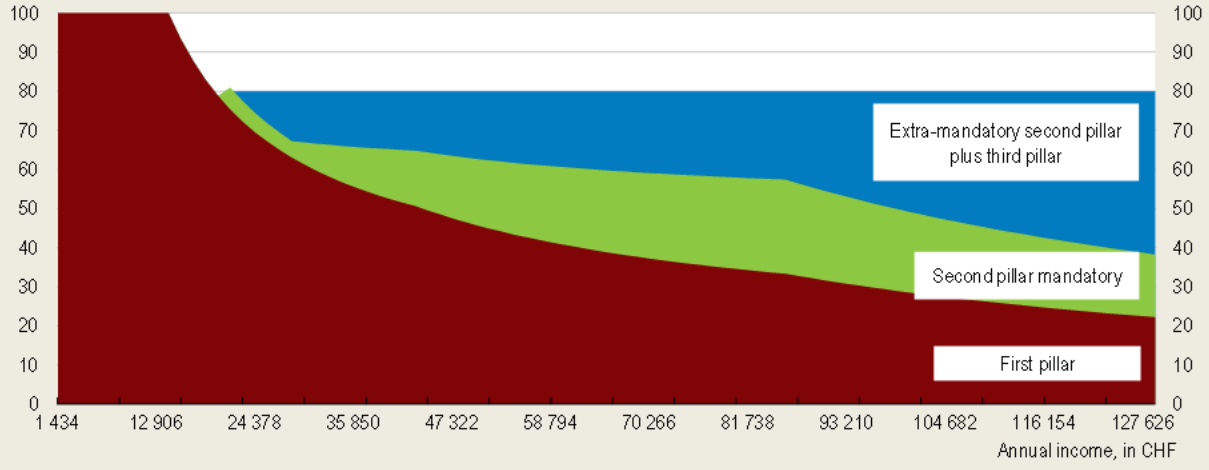
The Swiss pension system is organised around three pillars, to mitigate individual and public finance risks. The first two pillars together amount to at least 60% of the beneficiary's last income. As income rises, the share of the second and third-pillar in total pensions rises and the share of the first pillar falls (see Figure 2.11).

The first pillar is a public pay-as-you-go system, which is the main source of income for low-income earners. The contribution rate is the same for all employees at 8.7% of gross earnings (half of it being paid by employers). Pension benefits depend on the number of contribution years, the average salary over the career and some potential bonuses. To get a full pension, a worker should contribute every year from age 20. Each missing year implies a penalty of 1/44th. In addition, a couple cannot receive more than 150% of the maximum benefit. There are bonuses to compensate for years taking care of children and relatives.

The second pillar is an occupational scheme and many firms choose to provide a voluntary component. The second pillar grew out of employer initiatives that began in the 19th century and became mandatory in 1985. It is mostly akin to a defined-contribution scheme. Most pension funds are private. Consolidation within the sector reduced their number from around 3 600 in 1985 to about 1 500 in 2018 and increased their average size. The scheme complements the replacement rate from the first pillar for a large share of the population.

The third pillar offers tax incentives to contribute to pension savings managed by banks and insurance companies. The scheme provides incentives with a maximum contribution of CHF 7 056 per year for those having a second pillar plan or up to 20% of income (maximum CHF 35 280) per year for others (mainly self-employed). Contributions in the voluntary plans can be deducted from personal income tax. Earnings (interest and surpluses) are exempt from income tax.

Figure 2.11. Replacement rate across the income distribution

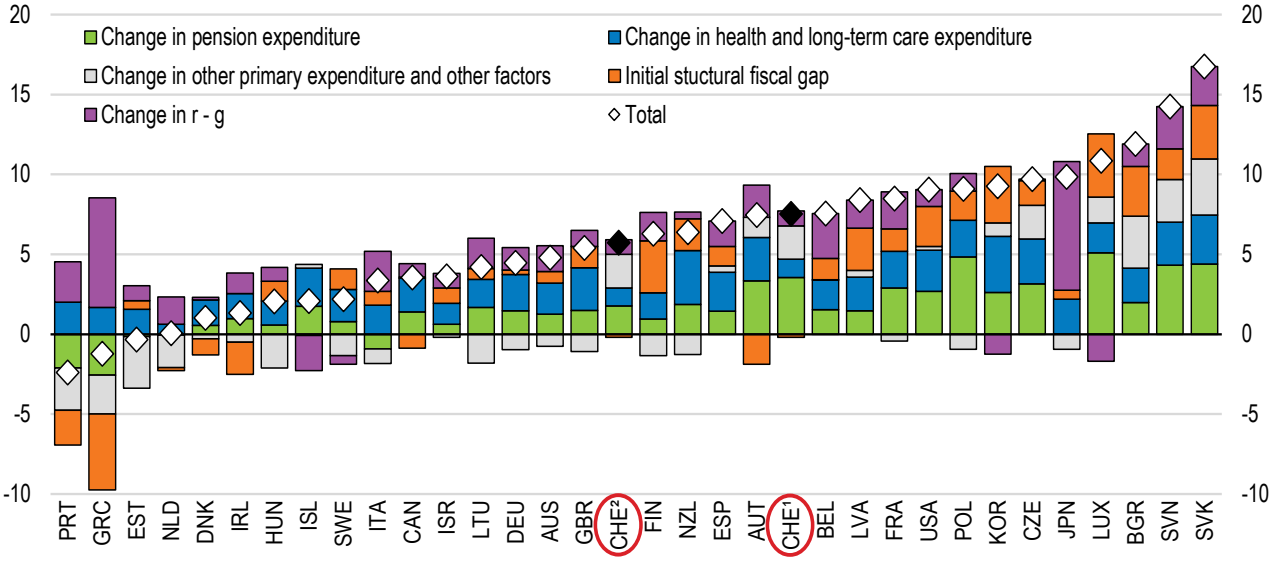


Replacement rate, %
Source: Federal Social Insurance Office.

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Figure 2.12. Population ageing raises costs related to pensions, health-care and long-term care

Change in fiscal pressure to keep public debt ratio at current level in the baseline scenario, between 2024 and 2060, % pts of potential GDP

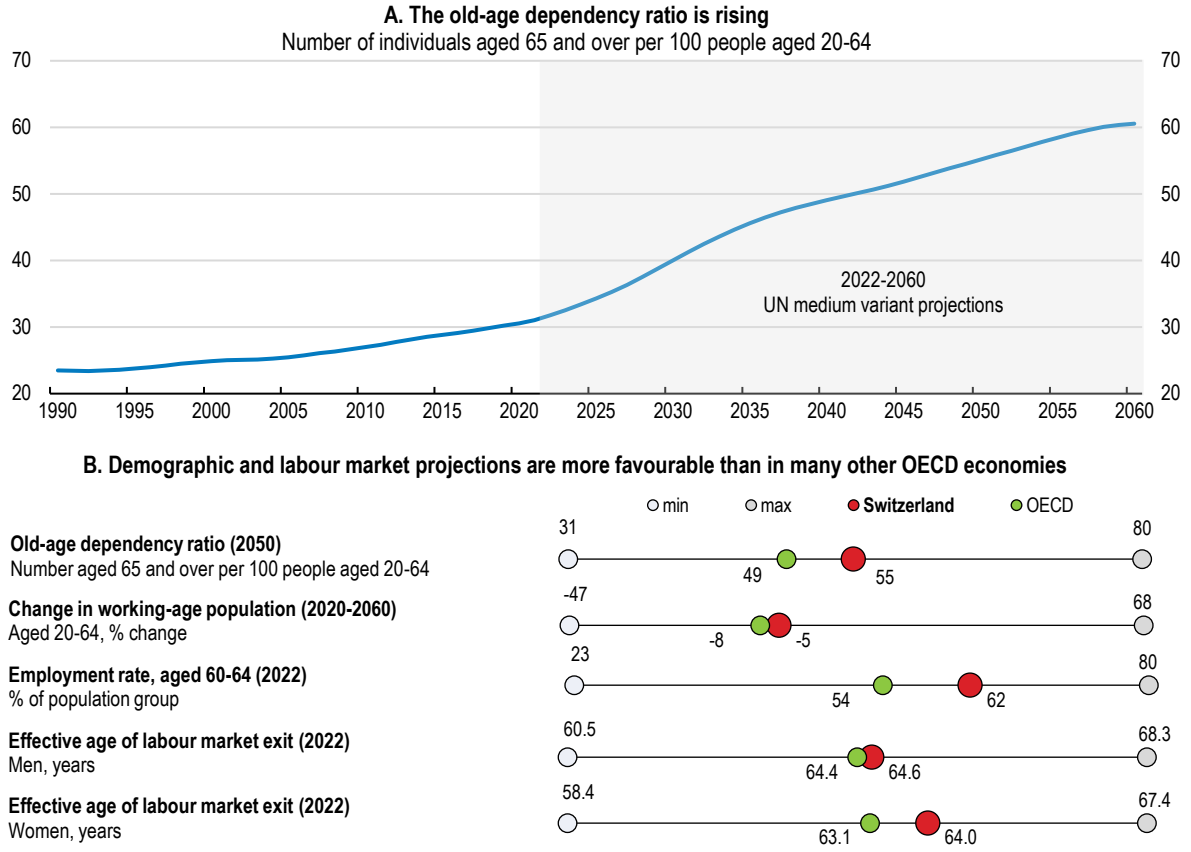


1. Shows cost of pensions under the standard assumption by Guillemette and Turner (2021) of a constant benefit ratio, i.e., public pensions will grow in step with wages.
2. Shows cost of pensions under the assumption that public pensions in Switzerland will grow at ½ the pace of wages, in line with the current Swiss law and consistent with the Figure 2.10 above.
Source: OECD Long-Term Model.

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The population is ageing rapidly and the old-age dependency ratio is rising (Figure 2.13). The number of people aged 80 or over will more than double by 2045. Demographic and labour market projections are more favourable for Switzerland than many other OECD economies thanks to high employment rates and a slower projected decline in the working age population (Figure 2.13). However, these are subject to uncertainty and rely on sufficient net immigration of workers (OECD, 2021a). Furthermore, while the effective age of retirement is slightly above the OECD average, high longevity leads to high remaining life expectancy at labour market exit (Figure 2.14). With the statutory age of retirement currently fixed at 65 and life expectancy at 65 projected to increase by four years for both men and women by 2060 (OECD, 2021b), more and more time will be spent in retirement, raising pension expenditures.

Figure 2.13. Population ageing impacts the labour market



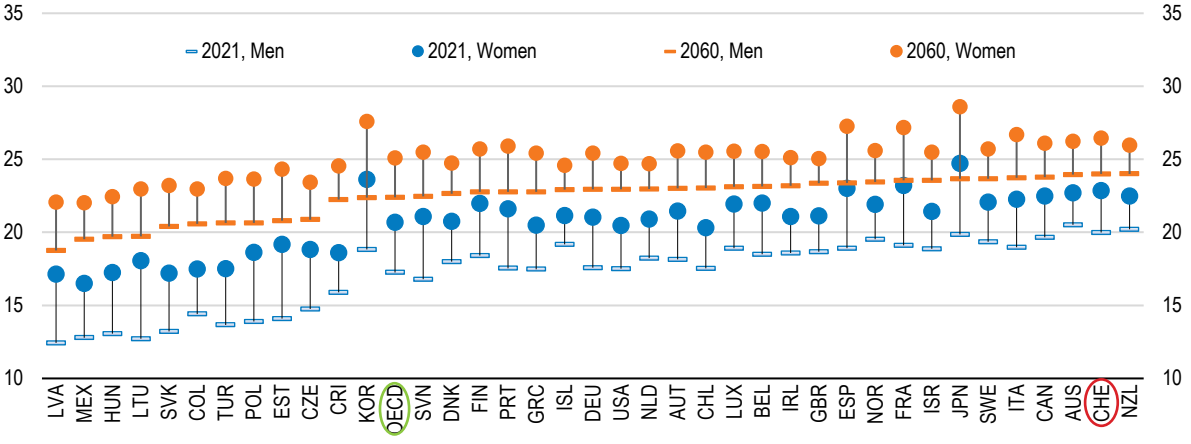
Note: The UN medium variant of demographic projections for Switzerland is more pessimistic than national projections by the Federal Statistical Office (FSO). According to the FSO's reference scenario, the old-age-dependency ratio increases from 31% in 2020 to 50% in 2060 (FDF, 2021).

Source: United Nations (2022), World Population Prospects: The 2022 Revision, Online Edition; OECD Labour Force Statistics; OECD (2023), Pensions at a Glance 2023: OECD and G20 Indicators.

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Figure 2.14. Time spent in retirement is long and set to lengthen further

Remaining life expectancy at age 65



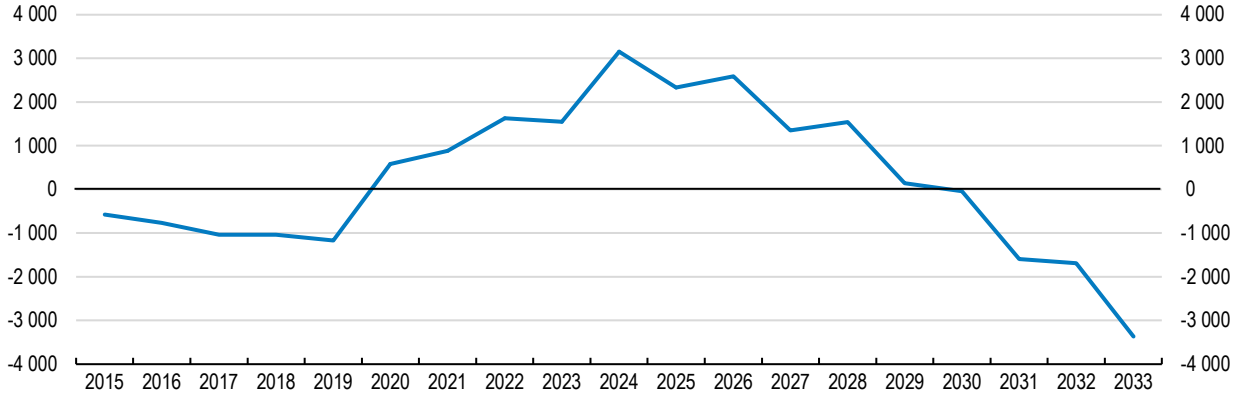
Source: United Nations (2022), World Population Prospects: The 2022 Revision, Online Edition.

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Population ageing and a lack of bold reform threaten the sustainability of the Swiss pension system and the adequacy of benefits. After years of attempting reform and rejections in referenda, two recent reforms (one effective from 2020 and one from 2024) only temporarily ease pressures. The reforms raise social security contributions by 0.3 percentage points, earmark additional revenues to the first pillar from a 0.4 percentage point increase in the standard VAT rate, and raise the federal government's contribution from 19.6% to 20.2% of total expenses. In addition, the retirement age of women will be gradually equalised with that of men at 65 (by 2027). Yet, the first pillar's funding still faces serious pressures. The compensation fund managing first pillar assets and liabilities ran rising deficits (excluding investment returns) between 2014 and 2019 (FSIO, 2022 and 2023a) until the recent boost to revenues, but spending pressures are set to continue growing. According to projections by the Federal Social Insurance Office (FSIO, 2023b), the fund (balance excluding investment returns) will return to deficit in 2030 (Figure 2.15). Further measures are therefore needed.

Figure 2.15. Recent reform has only temporarily eased financing pressures on the 1st pillar

Old-age and survivor's insurance, balance excluding investment income, CHF million (2022 prices)



Source: Federal Social Insurance Office.

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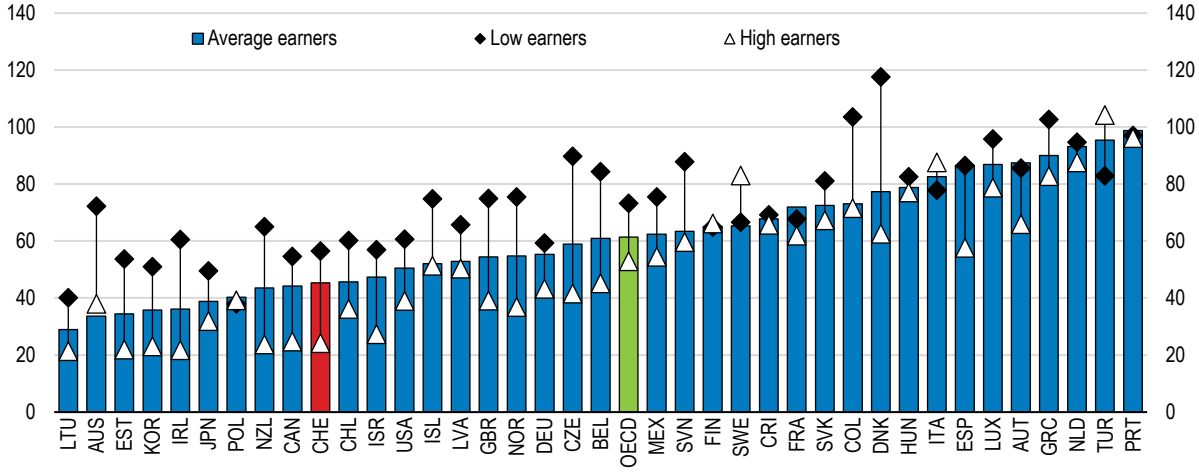
According to the OECD's Pension Model, future beneficiaries will face low replacement rates from the mandatory pension system (the first pillar and the mandatory part of the second pillar) (Figure 2.16). Mandatory pensions are indexed to the average of wage growth and price inflation. Net income of a person entering the labour market aged 22 in 2022 and working a full career at average earnings will more than halve at the moment of retirement if not supplemented with benefits from the voluntary employer pension schemes (OECD, 2023, 2021a and 2021b). However, fewer than one in ten people belong to a compulsory-only scheme. While the role of mandatory pensions is to provide adequate living standards in old age, Swiss retirees have low incomes compared to the rest of the population (Figure 2.17). The old-age relative income poverty rate is above the OECD average. At the same time, the median net wealth of households with at least one retired person is six times higher than for the active population. Yet, 18% of households with retirees have no or negative net wealth (Wanner, 2023). With falling replacement rates, the income in old age of those who will not save enough in voluntary schemes, will worsen.

Raising the statutory retirement age and linking it to increases in life expectancy, as well as improving incentives to work beyond that age are key reforms that would raise revenues, ease spending pressures and help sustain growth. This would also help increase replacement rates in the mandatory second pillar. Other OECD countries such as Denmark, Italy and the Netherlands for example, have already instituted reforms to lift the statutory retirement age and subsequently link it to life expectancy. In the Netherlands, the retirement age is automatically increased by two-thirds of the increase in life expectancy, roughly keeping constant the ratio of years spent in retirement compared to years in the labour market.

The mandatory part of the second pillar faces pressures from unsustainable minimum conversion rates (the rate at which capital is converted into an annual pension benefit). The framework for the second pillar is set with the aim of achieving target replacement rates of 60 percent together with the first pillar, whereby a minimum return on assets (currently at 1 percent) along with a fixed conversion rate (currently 6.8 percent) are set by law. The conversion rate remained unchanged between 2004 and 2023 despite rising life expectancy and a long period of low investment returns. At 6.8% it was well above an actuarially fair rate, which in 2020 was estimated at 4.5-5% (Helvetia, 2020).

Figure 2.16. Beneficiaries will face low replacement rates from mandatory pension schemes

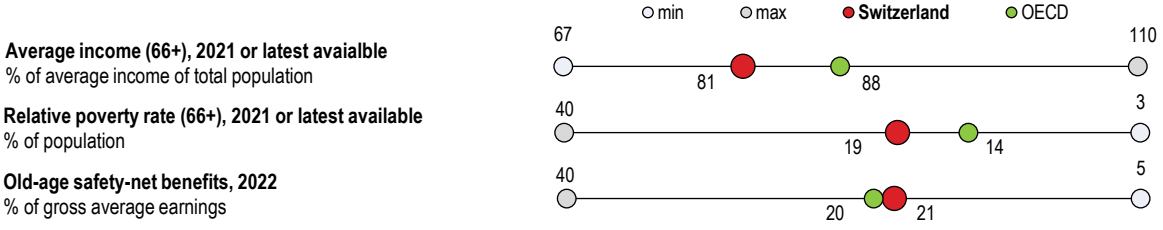
Future net pension replacement rates, men, %



Note: The values of all pension system parameters reflect the situation in 2022 and onwards. The OECD calculations show the pension benefits of a worker who enters the system that year at age 22 – that worker is thus born in 2000 – and retires after a full career.
Source: OECD (2023), Pensions at a Glance 2023.

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Figure 2.17. Older Swiss people have low incomes compared to the rest of the population



Source: OECD Income Distribution Database (IDD); OECD (2023), Pensions at a Glance 2023: OECD and G20 Indicators.

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At the end of 2022, the coverage ratio (assets to liabilities) stood on average at 107% for private pension funds, but 16% of funds had coverage ratios below 100% (OPSC, 2023a). Among public pension funds that benefit from government guarantees, 94% had a coverage ratio below 100% (OPSC, 2023b). To meet steep financial obligations amid low returns, over a period of ten years, pension funds lowered returns accruing to current contributors, resulting in significant intergenerational transfers (OPSC, 2023b). Many funds lowered effective conversion rates by lowering conversion rates from the voluntary part of the second pillar. Such measures and the recent rise in interest rates have eased pressures on funds' finances, but funds that rely mostly on the mandatory scheme still face difficulties in meeting obligations.

In March 2023, Parliament passed a reform to reduce the conversion rate from 6.8% to 6%, together with some measures to cushion the transition and protect low-income workers from the resulting drop in pensions. This can in part ease financial pressures further, but the bill is expected to be subject to referendum. Lowering the minimum conversion rate and making it a more flexible parameter (not set by law as it is now) is crucial to safeguard the sustainability of the second pillar. The earliest age to enter retirement in the second pillar (currently 58 years) could be revised up in line with the first pillar retirement age (63), and subsequently linked to life expectancy. Contributions to the second pillar only begin at age 25, even though the employment rate is already 70% for the 20-24 age group. Lengthening the contribution period – lowering the starting age below 25 (currently set by law) and extending it beyond 65 – would help maintain adequate benefits while improving the sustainability of the pension system.

Box 2.6. Potential impact of reforms

Structural reforms can boost economic growth and incomes. Table 2.3 quantifies the impact on growth of some of the reforms recommended in this Survey (quantification is not feasible for all of them) based on the OECD long-term model and OECD estimates of relationships between reforms and total factor productivity, capital deepening and the employment (Égert, 2017). The estimates are illustrative and to be interpreted with caution.

The analysis suggests that if Switzerland implemented the selected set of reforms proposed in this Economic survey, per capita income could increase by about 3% in 10 years and up to 12% in 25 years. Improving the business environment boosts multifactor productivity as well as labour participation, with the strongest impact on GDP per capita. Other reforms boost labour market participation. Attracting foreign workers has a slightly negative effect on the GDP per capita in the short term as it simultaneously boosts population. However, the impact on the GDP per capita builds up over time due to assumed higher employment rates of migrants.

Table 2.3. Potential impact of structural reforms on GDP per capita

	10 years	25 years
Reform the pension system	0.6%	3.1%
Boost female labour participation	0.4%	2.0%
Attract foreign workers	-0.5%	0.6%
Improve the business environment (less state involvement, lower barriers to trade and investment).	1.7%	6.1%
Boost active labour market policies.	0.9%	1.6%
Package of reforms	**3.1%**	**13.4%**

Note: Simulations based on the OECD Economics Department Long-term Model. A no policy change scenario is used as the baseline. The following changes in policy/outcomes are assumed. The pension reform entails the following: The retirement age gradually rises to 67 in 2034, and by two thirds of the expected gain in life expectancy thereafter. A boost to female labour participation assumes the female prime-age (25-54) employment rate converging with that of men by 2050. Boost to employment of foreign workers assumes net immigration rising from 45 000 annually to 75 000 by 2030 and staying at that level thereafter. The Product Market Regulation (PMR) components where Switzerland underperforms are brought to the OECD average (reduced state ownership in the economy, less regulation in network sectors and lower barriers to trade and investment). Active labour market policies are boosted to reach the average of top five performers in the OECD (as % of GDP per capita per unemployed person).
Source: OECD Long-term Model and OECD calculations.

The estimates in Table 2.4 quantify the direct fiscal impact of selected recommendations included in the Survey, and do not seek to incorporate dynamic effects. The estimates are illustrative.

Table 2.4. Illustrative annual direct fiscal impact of selected recommended reforms in 25 years

Reform	Fiscal impact (savings (+)/ costs (-)) (% of GDP)
Expenditures	
Reform the pension system (includes dynamic effects)	+1.5% (by 2049)
Expanding the supply of affordable childcare	-0.4%
Attract foreign workers	Negligible
Improve the business environment (less state involvement, lower barriers to trade and investment)	Negligible
Boost active labour market policies - expanding upskilling courses and improving recognition of foreign qualifications for migrants	-0.2%
Fiscal cost of investment to reach net zero	-0.2%-0%
Growth in primary expenditure after pension and labour reform by 2049 (includes dynamic effects)	-0.9%
Total expenditures	*-0.2%-0%*
Revenues	
Reform of taxes/benefits to boost female employment	Revenue neutral
Strengthen tax revenues, including by raising revenues from VAT and the recurrent tax on immovable property.	0%-0.2%
Total fiscal impact of revenue and spending related measures	***0%***

Note: The fiscal dividend of the pension reform is computed by taking a difference between the required increase in government revenues to keep the debt-to-GDP ratio stable in "baseline" and "pension reform" scenarios. See also Figure 2.10. Based on simulations of the OECD Economics Department Long-term Model. Reform of taxes/benefits to boost female employment refers to the introduction of individual-based taxation or adjustments to taxes/ benefits that provide better incentives to work for second earners. The estimated illustrative fiscal cost of investment to reach net zero by 2050 looks at various estimates of such costs (Federal Council, 2021; SBA, 2020, Panos et al., 2023, and WWF CHE, 2022) and applies a 13% share for public investment (an average over 1990-2021). The growth in primary expenditure after pension and labour reform is estimated as the difference between revenues to keep debt stable between 2024 and 2049. The estimated need for additional tax revenues implies an unchanged level of public expenditures as a share of GDP.
Source: OECD calculations.

Table 2.5. Past recommendations on fiscal sustainability

Recommendations in previous Surveys	Action taken
Limit mortgage interest deductibility in personal income tax and broaden the capital gains tax base.	No action taken.
Consider reforming the design of the net wealth tax to make it more progressive, limit debt deductibility and improve coordination across cantons.	No action taken.

Fighting corruption and money laundering

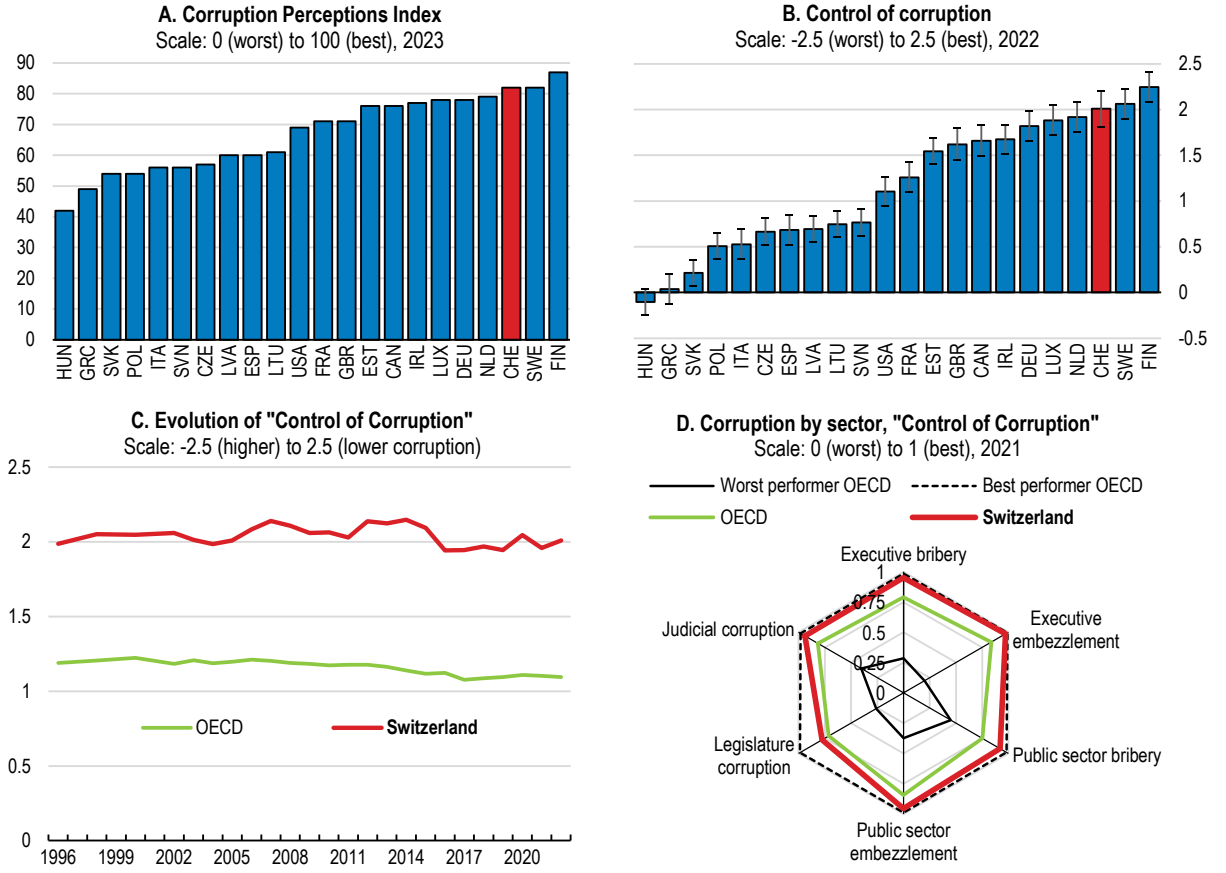
Switzerland consistently scores among the best-performing OECD member countries, next to Finland and Sweden, on control and perceived risks of corruption in the public sector (Figure 2.18). It scores above the OECD average in all sectors for control of corruption and is on par with best performers in judicial corruption, executive bribery, executive embezzlement and public sector embezzlement. In its Corruption Perceptions Index for 2023, Transparency international ranked Switzerland 6th out of 180 countries. Efforts continue to strengthen further Switzerland's approach to public integrity and corruption prevention across all branches of government through the Anti-Corruption Strategy 2021-24 (Federal Council, 2020), also

with the aim to maintain the reputation of Switzerland as the world-renowned business centre with high integrity.

In its fourth evaluation round, the Council of Europe anti-corruption body, the Group of States against Corruption (GRECO) listed twelve recommendations to Switzerland to prevent corruption and improve public integrity in respect of members of parliament, judges and prosecutors (Council of Europe, 2017). Five years later, GRECO (Council of Europe, 2023) concluded that there was limited progress in the overall implementation of the recommendations. Switzerland has still only implemented satisfactorily or dealt in a satisfactory manner with five of the twelve recommendations contained in the Fourth Round Evaluation Report.

With respect to members of parliament, progress since the 2021 compliance report (Council of Europe, 2021) has been limited. It is welcome that the staff of Members of Parliament must now take a mandatory online ethics course and MPs must certify electronically that their declarations of interest are up to date, but further steps are needed to progress in implementing the recommendations. GRECO notes that MPs still do not have a dedicated body to advise on issues relating to integrity and do not receive any training in this area, their declarations of interest still do not contain quantitative data or information on their liabilities, and they are still not monitored by the Parliamentary Services.

Figure 2.18. Switzerland performs well in control of corruption



Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Project, V-Dem Dataset v12.

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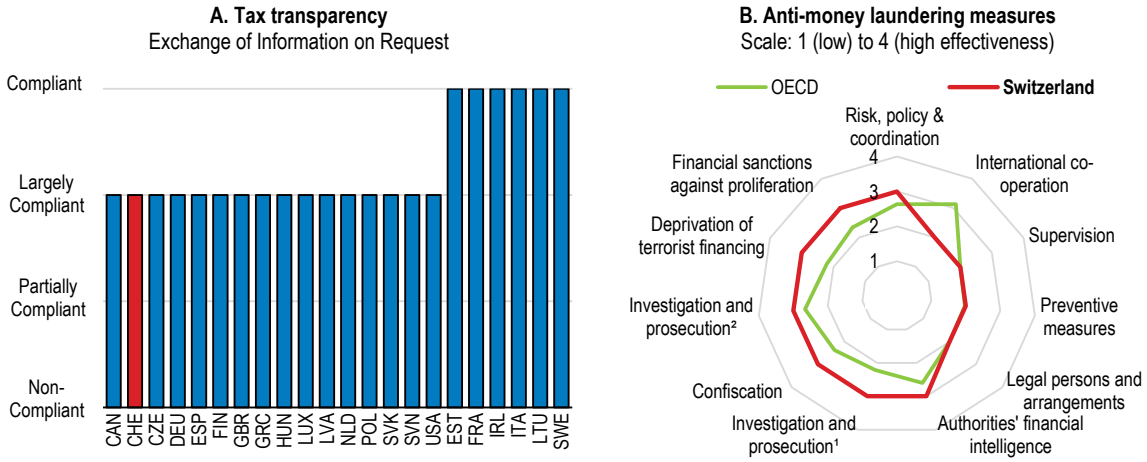
With respect to judges, GRECO finds the additional measures taken to implement the recommendations more encouraging. The Federal Assembly's Judicial Committee is currently working on a regulation that would contribute to making the pre-selection of judges more transparent and a draft legal basis is being prepared to create an advisory committee specialising in pre-selection to make the process more objective. The Federal Patent Court has adopted and published a code of conduct, while the Federal Administrative Court has set up a working group to develop a draft code of conduct to supplement the existing ethical charter with concrete examples and/or explanatory comments. However, federal judges still pay part of their salary to political parties that supported their election, against GRECO's recommendations. Also, no measures have been taken to introduce formal sanctions for less serious violations – that do not merit removal from office – for judges who commit a breach of their official duties.

A prominent international position, high export orientation and focus on global finance expose Switzerland to a relatively high risk of foreign bribery and money laundering. Switzerland has one of the world's highest ratios of multinationals to inhabitants and many operate in sectors that are highly prone to foreign bribery including pharmaceuticals and trade in raw materials such as agricultural products, stone and metals, and energy products. Moreover, the international status of Switzerland's financial sector and focus on wealth management make the sector prone to greater risk of use for criminal purposes, particularly through money laundering, including the laundering of foreign bribery (OECD, 2018).

FINMA's Risk Monitor (FINMA, 2022 and 2023b) identifies money laundering as one of the principal risks to the Swiss financial sector and linked it to a growing number of customers of the Swiss asset management industry that come from emerging markets. Financial flows associated with corruption and embezzlement can involve not just affluent private clients but also state or quasi-state organisations and sovereign wealth funds. Complex and opaque structures reduce transparency and raise risks further. Moreover, risks in the crypto area are becoming increasingly apparent, whereby the threats of money laundering and the financing of terrorism are heightened due to the potential for greater anonymity along with the speed and cross-border nature of transactions. The Financial Action Task Force (FATF), an independent inter-governmental body that promotes policies to protect the global financial system against money laundering, terrorist financing and the financing of proliferation of weapons of mass destruction, produces regular evaluations of its member countries policies and practices. In its October 2023 report on Switzerland, FATF recognised Switzerland's progress in addressing most of the technical compliance shortcomings identified in its Mutual Evaluation Report (MER) from 2016 on anti-money laundering and counter-terrorist financing. FATF changed Switzerland's rating from partially compliant to largely compliant on these issues.

Indicators also show that Switzerland's anti-money laundering measures are quite effective in most aspects (Figure 2.19). According to the OECD Working Group on Bribery in International Business Transactions (OECD WG), Switzerland, through the continued action of the Office of the Attorney General, continues to play an important and active role in enforcing foreign bribery (OECD, 2018 and 2020, 2022b). Based on the number and significance of commenced and concluded investigations, Transparency International (2022) categorised Switzerland and the United States as countries with active foreign bribery enforcement (as opposed to moderate, limited or no enforcement).

Figure 2.19. Anti-money laundering measures are effective in most aspects



Note: Panel A summarises the overall assessment on the exchange of information in practice from peer reviews by the Global Forum on Transparency and Exchange of Information for Tax Purposes. Peer reviews assess member jurisdictions' ability to ensure the transparency of their legal entities and arrangements and to co-operate with other tax administrations in accordance with the internationally agreed standard. The figure shows results from the ongoing second round when available, otherwise first round results are displayed. Panel B shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. "Investigation and prosecution¹" refers to money laundering. "Investigation and prosecution²" refers to terrorist financing.

Source: OECD Secretariat's own calculation based on the materials from the Global Forum on Transparency and Exchange of Information for Tax Purposes; and OECD, Financial Action Task Force (FATF).

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However, the OECD WG, in its recent assessments (OECD 2020 and 2022b), noted the absence of legislative reforms in two key areas where Switzerland received explicit recommendations: (i) appropriate regulatory framework to compensate and protect private sector employees (whistleblowers) who report suspicions of foreign bribery from any discriminatory or disciplinary action; ii) the increase in the maximum level of fines against companies convicted of foreign bribery to make them effective, proportionate and dissuasive (this amount is currently set at CHF 5 million, which is very low compared to the amounts at stake in foreign bribery).

Table 2.6. Recommendations

MAIN FINDINGS	RECOMMENDATIONS
Ensuring price and financial stability	
Inflation has retreated within the target 0-2% range. However, short-term inflation expectations remain at the top of the target band. Expected rent and electricity price increases will temporarily push inflation above 2% in 2024.	**Keep a tight monetary policy stance until inflation is durably within the 0-2% band.**
The large size of the SNB balance sheet raises risks and challenges, as changes in valuation can bring about large losses (or profits).	The SNB should continue reviewing its investment strategy and maintain adequate safeguards to dampen risks arising from its large balance sheet.
The acquisition of Credit Suisse by UBS effectively safeguarded financial stability, but it raises new risks and challenges. UBS – already a global systemically important bank before the merger – has become even larger and according to the "too big to fail" (TBTF) regulations, it must meet even stricter regulatory requirements.	Continue close supervision and monitoring of the merged bank during the integration and restructuring process.
Credit Suisse was a global systemically important bank that met regulatory requirement, yet it destabilised quickly. Although the existing "too big to fail" framework was available, the solution was found outside the resolution regime.	**Conduct an in-depth review of the Credit Suisse crisis event and propose measures to strengthen regulation and supervision of systemically important banks and the "too big to fail" framework.**
Vulnerabilities on the residential real estate market persist. Large interest rate hikes or other shocks could result in steep price corrections, leading to deteriorated mortgage portfolios of banks.	**Continue to closely monitor risks on the housing market and ensure that adequate buffers are maintained.** Consider a broader toolkit of macroprudential measures that would take account of affordability (e.g., debt-to-income and debt-service-to-income limits on mortgage loans). Give the authorities clear and strong mandates to propose and calibrate macroprudential tools.
Addressing pressures from rising public spending	
Real GDP growth is projected to remain below potential in 2023 and gather pace in 2024. The unemployment rate will pick up slightly.	**Pursue a broadly neutral fiscal stance over the short term with automatic stabilisers operating freely.**
Fiscal policy is facing hard choices to meet growing spending needs. Systematic spending reviews can help find fiscal savings. Strengthening tax revenues can also help to safeguard fiscal sustainability. Switzerland relies significantly more on direct taxation while revenues from VAT and from the recurrent tax on immovable property are low.	**Conduct systematic reviews of spending and tax expenditures and strengthen tax revenues, including by raising revenues from VAT and the recurrent tax on immovable property.**
Population is ageing rapidly. With the statutory retirement age at 65, time in retirement will rise steeply. Rising pension expenditures are putting pressures on fiscal sustainability and the adequacy of pension benefits.	**Link future rises in the statutory retirement age to increases in life expectancy.**
The conversion rate (at 6.8%) in the second pillar is set by law and has been unchanged since 2004 despite rising life expectancy and a long period of low investment returns. To meet financial obligations, pension funds had to reduce returns to current contributors, resulting in substantial redistribution within the second pillar from younger to older workers and retirees. Pension funds face financial pressures and many have coverage ratios below 100%.	Lower (as planned) the parameter used to calculate annuities ("minimum conversion rate") and make it a more flexible technical parameter set by ordinance. Subsequently link it to life expectancy. Raise the earliest age to enter retirement in the second pillar (currently at 58 years) in line with the first pillar retirement age (63). Lengthen the contribution period – lowering the starting age below 25 (currently set by law) and extend it beyond 65.
Fighting corruption and money laundering	
The prominent international position, high export orientation and focus on global finance expose Switzerland to a relatively high risk of foreign bribery and money laundering. A large number of multinationals operate in sectors highly prone to foreign bribery including pharmaceuticals and trade in raw materials. In the private sector, whistleblowers continue to expose themselves to criminal proceedings after reporting cases involving corruption and foreign bribery.	Strengthen protection for whistleblowers in the private sector. Increase the statutory maximum fine for companies in foreign bribery cases to ensure that sanctions are effective, proportionate and dissuasive.

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3 Tackling labour and skills shortages

Urban Sila

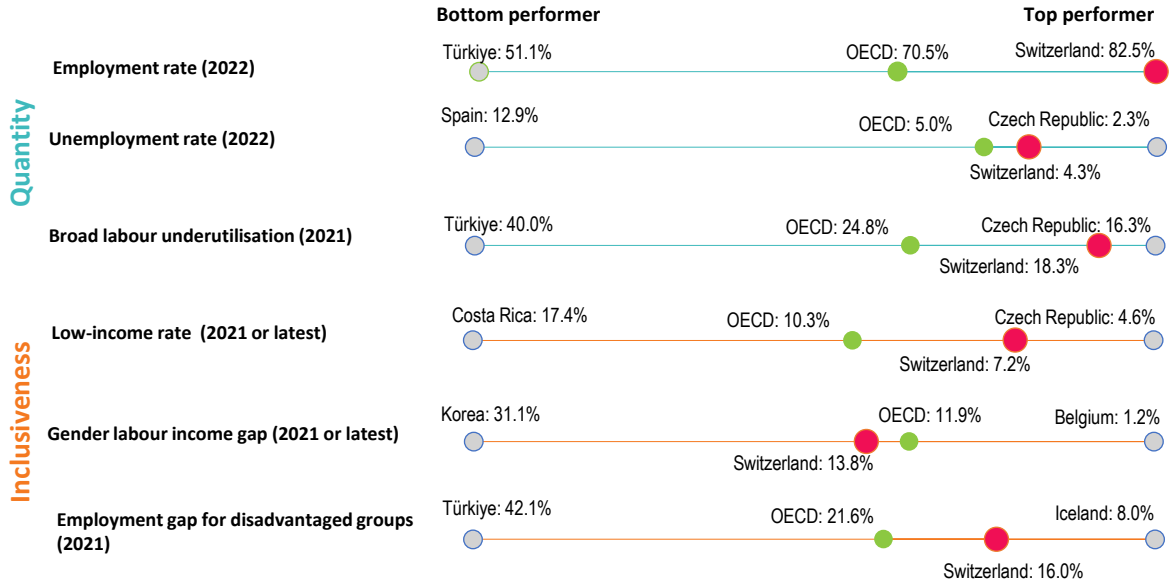
The Swiss labour market is strong with high employment rates, high job security, and attractive jobs. However, labour and skills shortages have risen and are likely to become a structural feature of the labour market due to the ageing population. To counter labour and skills shortages, labour participation could be boosted further, by lengthening working lives and by bringing more mothers to work full time. Maintaining attractiveness for skilled foreign workers can also counter declines in the domestic labour force.

Labour shortages are set to become a structural concern

The Swiss labour market is very strong in most respects (Figure 3.1). The employment rate is high and the unemployment rate has remained comparatively low even in times of crisis (Figure 3.2). Correspondingly, job security is high. The Swiss labour market offers well-paid jobs, and there is a relatively high level of inclusion, with low poverty rate among the employed. However, the gender labour income gap remains persistently high, significantly above the OECD average.

Figure 3.1. The Swiss labour market is very strong in most respects

Dashboard of the labour market according to the OECD Jobs Strategy



Note: Employment rate: share of working-age population (20 to 64) in employment (%). Unemployment rate: share of persons in the labour force (15+) in unemployment (%). Broad labour underutilisation: share of inactive, unemployed or involuntary part-timers (15 to 64) in the population (%), excluding youth (15 to 29) in education and not in employment. Low-income rate: share of working-age persons living with less than 50% of median equivalised household disposable income. Gender labour income gap: difference between median annual earnings of men and women divided by median earnings of men (%). Employment gap for disadvantaged groups: average employment gap between prime-age male workers and five disadvantaged groups (women with children, young people not in education or full-time training, workers aged between 55 and 64, foreign-born people aged 15 to 64 years, people below upper secondary education aged 25 to 64 years.), as a percentage of the employment rate for prime-age male workers. OECD is a weighted average for employment and unemployment indicators and an unweighted average for the remaining indicators.

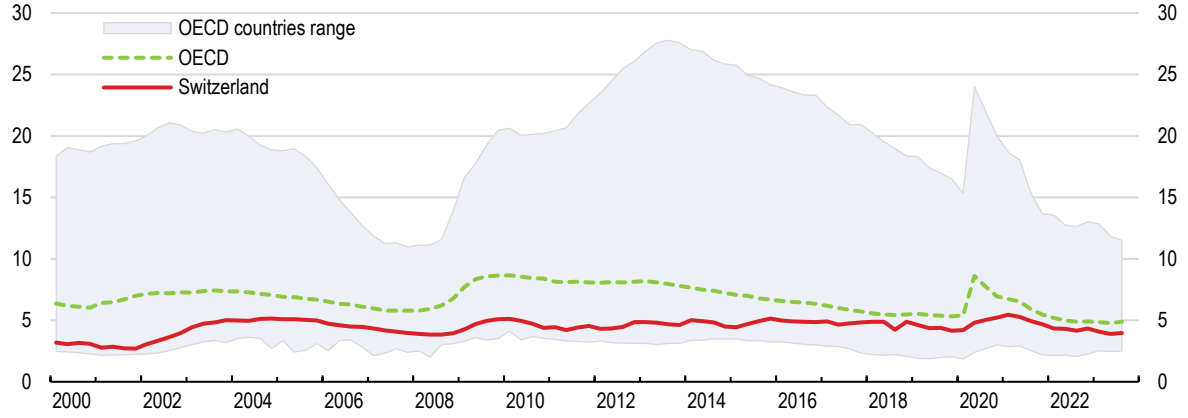
Source: OECD calculations based on OECD Economic Outlook database, OECD Family database, OECD Employment database, OECD Income and Distribution database, OECD International Migration database.

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Labour and skills shortages have risen and are likely to become a structural feature of the labour market. Since the pandemic, employers in all sectors have increasingly reported difficulties in recruiting qualified workers and identified staff shortages as a risk to growth (Figure 3.3). Total employment has risen, underpinned by rising labour force participation of women, and resumed high net immigration. Yet, despite this rapid growth, the labour market has tightened (Figure 3.4). Furthermore, population ageing and a recent trend of declining working hours of prime-aged men suggest that labour force growth will slow down further, making labour shortages a structural concern (Figure 3.4). Companies increasingly view labour shortages as more than a short-term challenge and are trying to make themselves more attractive as employers. They are also stepping up investment in automation and IT infrastructure (SNB, 2023).

Figure 3.2. The unemployment rate has remained comparatively low even in times of crisis

Unemployment rate, national definitions, % of the labour force

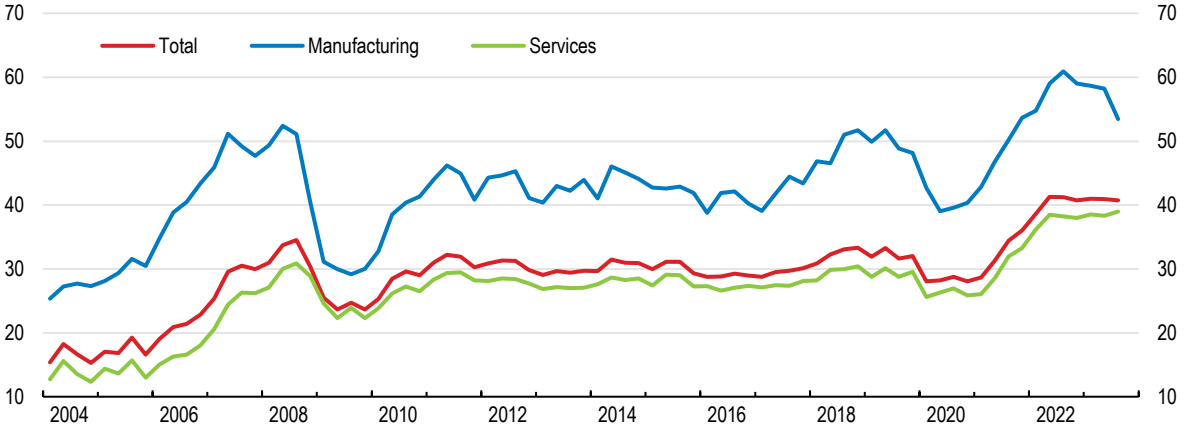


Source: OECD Economic Outlook database.

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Figure 3.3. Employers increasingly report difficulties in recruiting qualified workers

Qualified personnel found with difficulty or not found at all, share of companies actively recruiting, in %

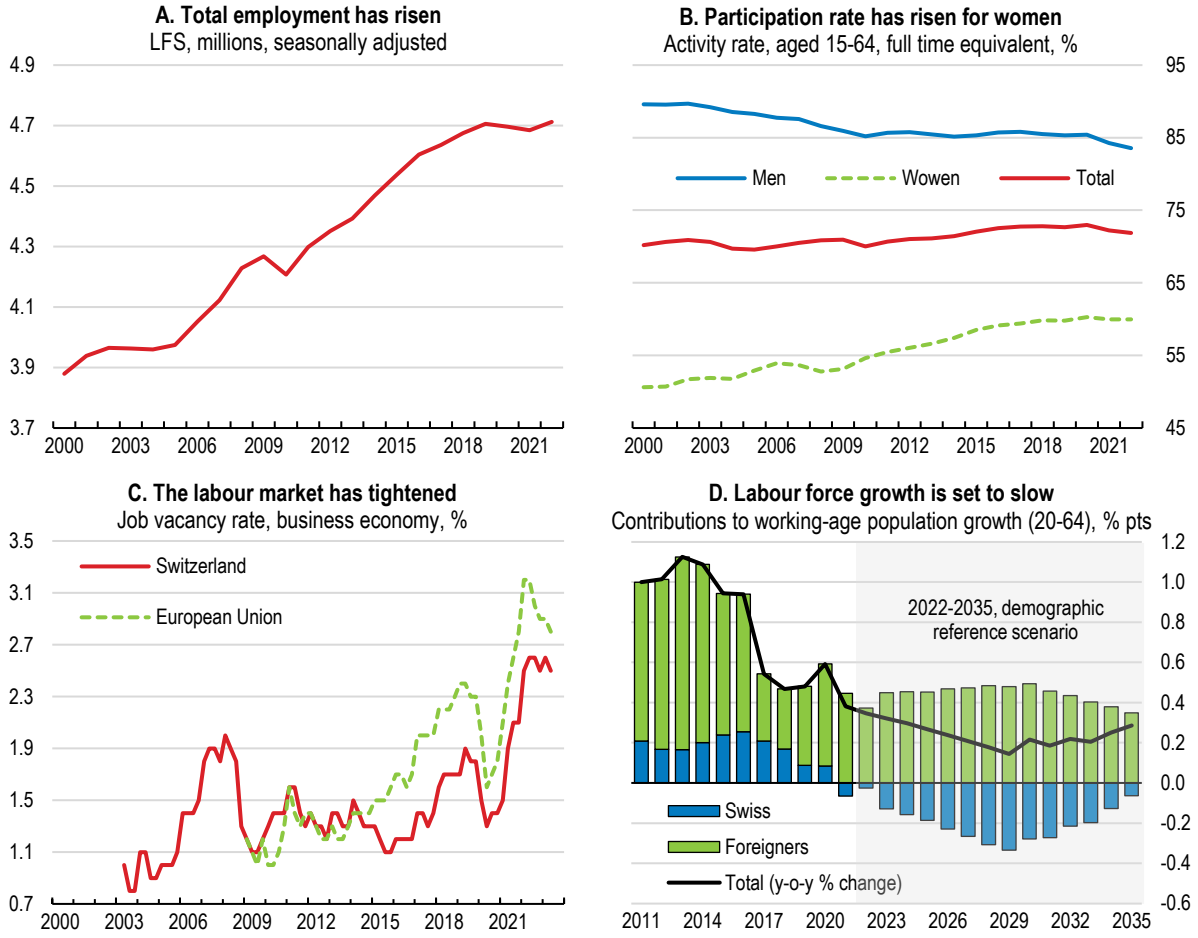


Source: Federal Statistical Office, Job statistics (JOBSTAT).

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To counter labour and skills shortages, labour participation could be boosted further, by lengthening working lives and by bringing more mothers to work full time. Lengthening working lives will raise incomes in old age and counter pressures in the pension system. Encouraging mothers work more hours will help reduce the sizable gender income gap. Moreover, maintaining attractiveness for skilled foreign labour can counter declines in the domestic labour force.

Figure 3.4. Labour shortages are likely to become a structural feature of the labour market



Note: The job vacancy rate (JVR) is the number of job vacancies expresses as a percentage of the sum of the number of occupied posts and the number of job vacancies.

Source: OECD Short-term labour force statistics; FSO, Swiss Labour Force Survey (SLFS); Eurostat; FSO, Population scenarios.

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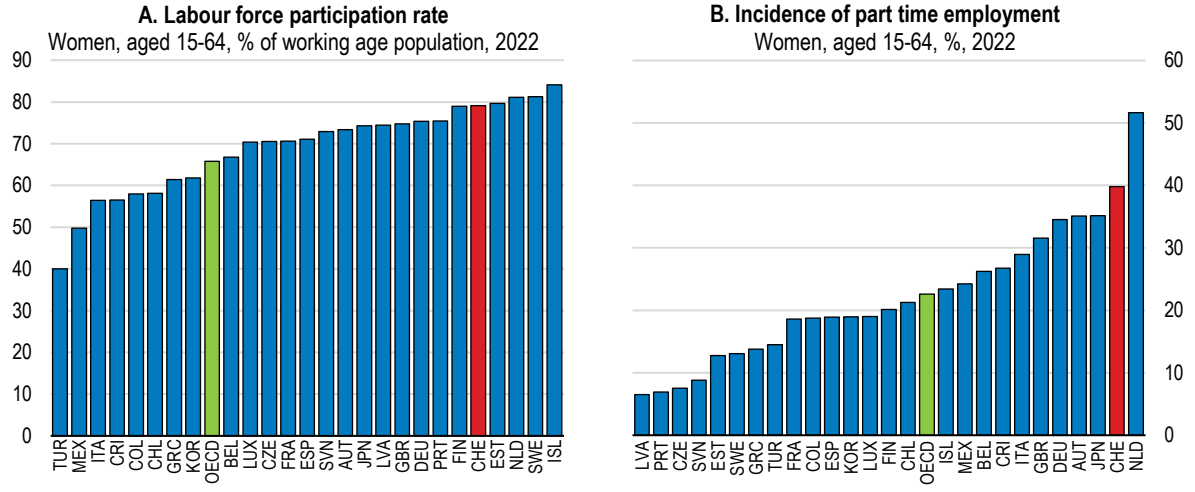
Raising the activity rate of women

The labour market participation rate of women is high overall, but this masks one of the highest incidences of part-time work across the OECD (Figure 3.5). Consequently, the gender gap in full-time equivalent employment rates is very high (Figure 3.6). Part-time work is common for all women, but for mothers in particular. Eight out of ten mothers with a partner whose youngest child is under 12 years old work part time (FSO, 2023). Inequalities and the lower activity rate of women also have a long-term impact on women's careers and pensions. On the one hand, the possibility of part-time work is conducive to the participation of women in the labour market who might otherwise stay inactive. On the other hand, part-time jobs offer less favourable employment conditions in terms of social security, access to continuing education and career progression. Moreover, women on average receive 50% lower benefits from the second pension pillar (occupational pensions) compared to men (Federal Council, 2021a). Higher activity rates of women would raise equity, support incomes and ease labour shortages.

Incentives within the tax-benefit system and the high cost of childcare discourage mothers from working full time. The OECD Tax-Benefit model combines federal and the canton of Zürich tax-benefit policies to simulate the interplay of policies across types of families and labour market situations. According to the model, in Zürich, the gross childcare fees are the highest in the OECD. The out-of-pocket cost of childcare,

after deducting the benefits designed to reduce gross childcare fees, is also very high for many families (Figure 3.7). For a couple with two young children earning the average wage, the net childcare cost represented 35% of average earnings, well above the OECD average of 13%. While greater financial help is available to those with lower earnings or single parents (Figure 3.7), for some, the effective taxation of going to work (considering the cost of childcare, taxes and withdrawal of certain benefits) creates a strong disincentive to enter work (Figure 3.8). For instance, for a family with two young children using childcare facilities where both parents earn average earnings, the cost for a second earner to move from unemployment to full-time employment (earning the average wage) represents 79% of the wage, versus 51% on average in OECD countries. Personal income taxes also play a role. In Switzerland, the tax is progressive and based on the household (either unmarried individuals or married couples) as a taxing unit, which tends to increase the marginal personal income tax of second earners, reducing incentives to work.

Figure 3.5. The high participation rate of women masks one of the highest incidences of part-time work

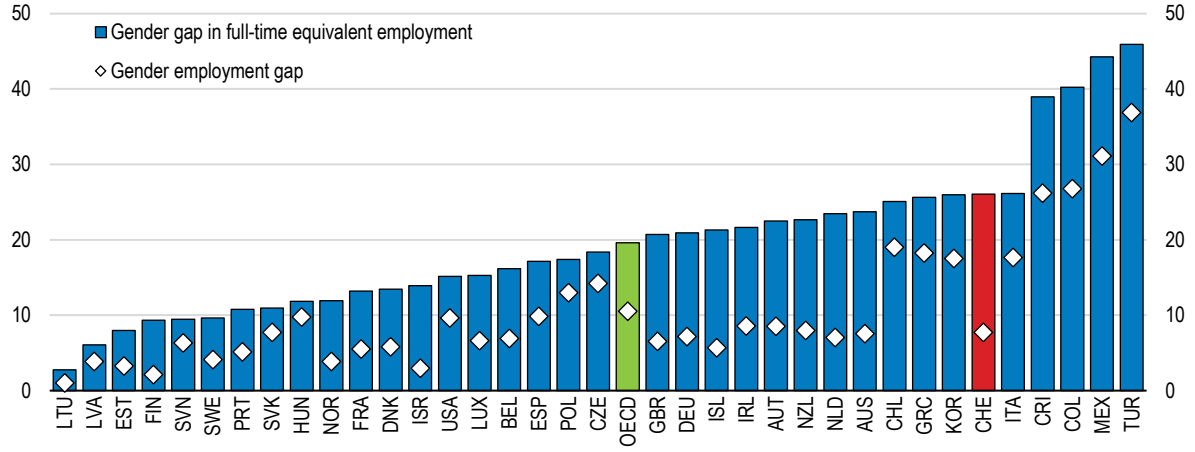


Note: Part-time employment is based on a common 30-usual-hour cut-off in the main job.
Source: OECD Labour Force Statistics.

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Figure 3.6. The gender gap in full-time equivalent employment is among the highest in the OECD

Gender difference (men minus women) in the employment rate and the full-time equivalent employment rate, 15-64 year olds, % pts, 2021

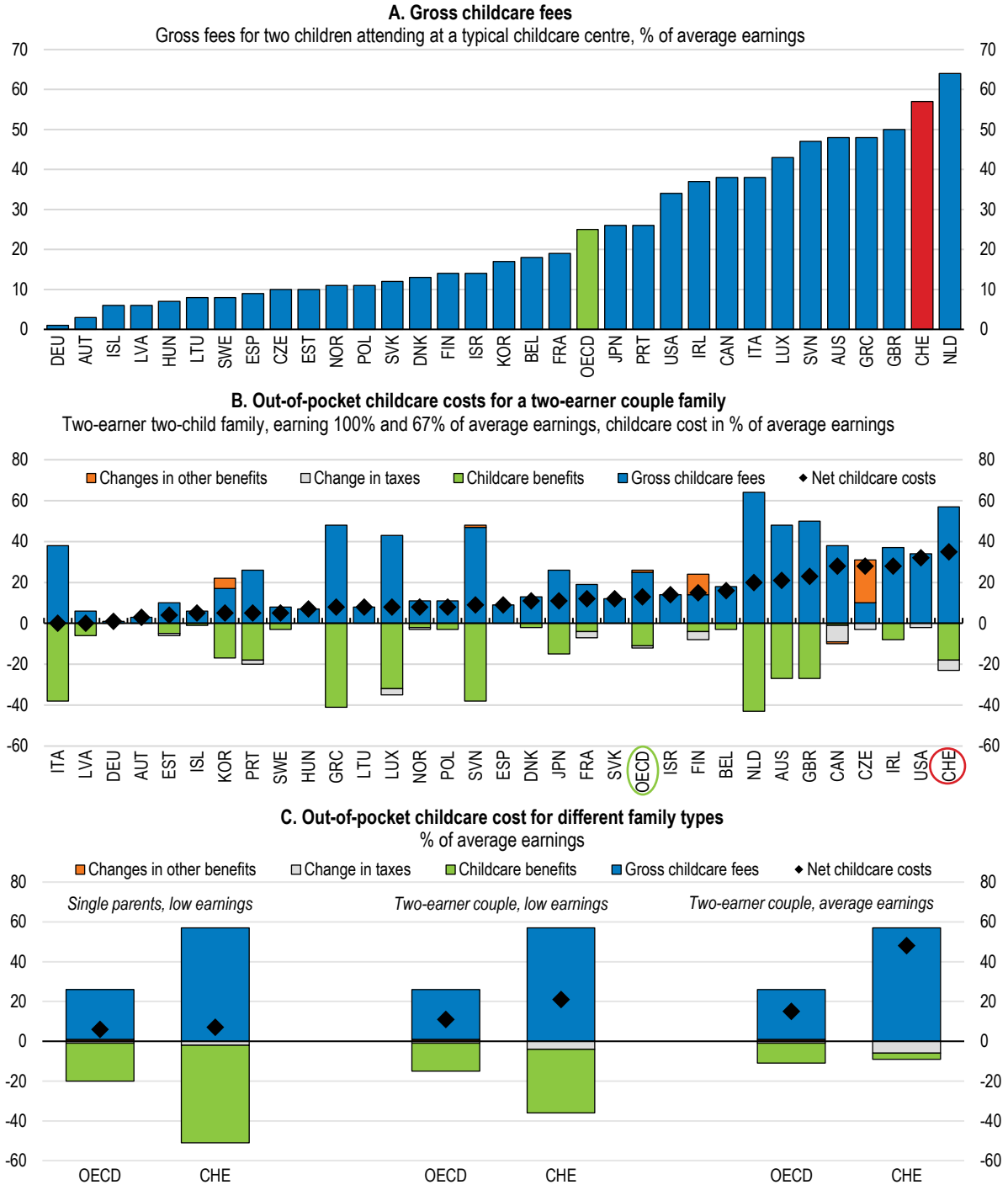


Source: OECD Family Database, https://www.oecd.org/els/family/database.htm

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Figure 3.7. The cost of childcare is very high

For two children (age 2 and 3) in full-time care



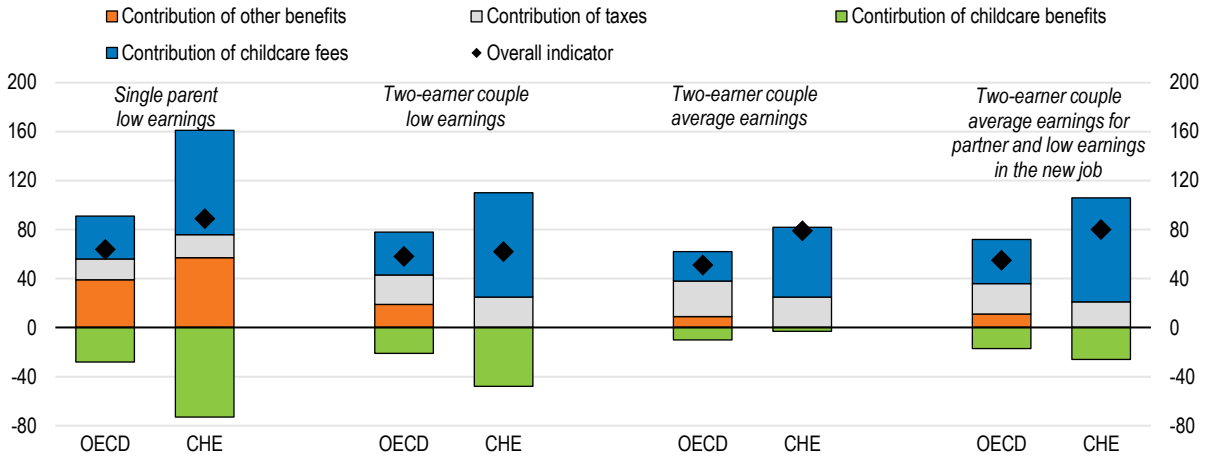
Note: 'Full-time' care is defined as care for at least 40 hours per week. Net childcare costs are equal to gross fees less childcare benefits/rebates and tax reductions, plus any resulting changes in other taxes and benefits following the use of childcare. For panel B, data reflect the costs of full-time care in a typical childcare centre for a two-earner two-child couple family, where both parents are in full-time employment and the children are aged 2 and 3. Gross earnings for the two earners in the family are set equal to 100% of average earnings for the first earner, and 67% of average earnings for the second earner. For panel C, low earnings refer to 67% of average earnings. Data refer to 2022 or latest available year.

Source: OECD Tax and Benefit Model.

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Figure 3.8. The cost of childcare, taxes and withdrawal of benefits create disincentives for employment

Participation Tax Rate (PTR) for parents claiming unemployment benefits and using childcare services, %, 2022



Note: The Participation Tax Rate (PTR) indicator measures the financial disincentives to participate in the labour market for a jobseeker claiming unemployment benefits. It calculates the proportion of earnings that are lost to either higher taxes, lower benefits and net childcare costs when a parent with young children takes up full-time employment and uses full-time centre-based childcare. Higher values mean higher financial disincentives. Low earnings refer to 67% of average earnings. Children are aged two and three. The unemployment duration is 36 months.
Source: OECD Tax and Benefit Model.

StatLink https://stat.link/0oy6b5

Various policies aim to reduce high childcare costs, but support measures are not well-targeted. Only 20% of children aged 0-2 years from lower-income households attend childcare compared to 60% from higher-income households (Figure 3.9). This indicates that households weigh the childcare cost against earning opportunities and policies have not succeeded in helping to overtake this barrier.

There are several ways of improving affordability of childcare. In Scandinavian countries such as Sweden or Denmark, government support for Early Childhood Education and Care (ECEC) is substantial and out-of-pocket expenses small. Comprehensive ECEC coverage aid labour market participation of parents - in particular women - across the income distribution yet involve large fiscal costs. In Sweden, parents have the right to enrol their children at preschool from the year the child turns one until the year it turns six (when mandatory school starts). Pre-schools are largely funded through municipal budgets, with parent's paying small out-of-pocket fees that are income-dependent but are capped at a maximum of SEK 1 688 (roughly CHF 139) per month per child. The ECEC account for 14.1% of municipal budgets (Ekonomifakta. 2022).

In 2024, the federal personal income tax system allows for a tax deduction (amount deducted from taxable income) for childcare fees charged by a third-party of up to CHF 25 500 (more than double the amount in 2022) and a tax deduction of CHF 6 700 per child irrespective of declared childcare costs (along with a tax credit of CHF 259 per child), but, with more than 40% of Swiss families not paying federal income taxes, this provision has little impact on childcare affordability for low income households. Families also receive cash benefits (family allowances). Amounts vary across cantons but a nationwide legal minimum is set at CHF 200 per child per month. Cantons can complement these benefits by additional allowances or fee subsidies and there is a large heterogeneity of cantonal policies in this regard. The proportion of childcare costs covered by parents varies widely across cantons (OECD 2021a).

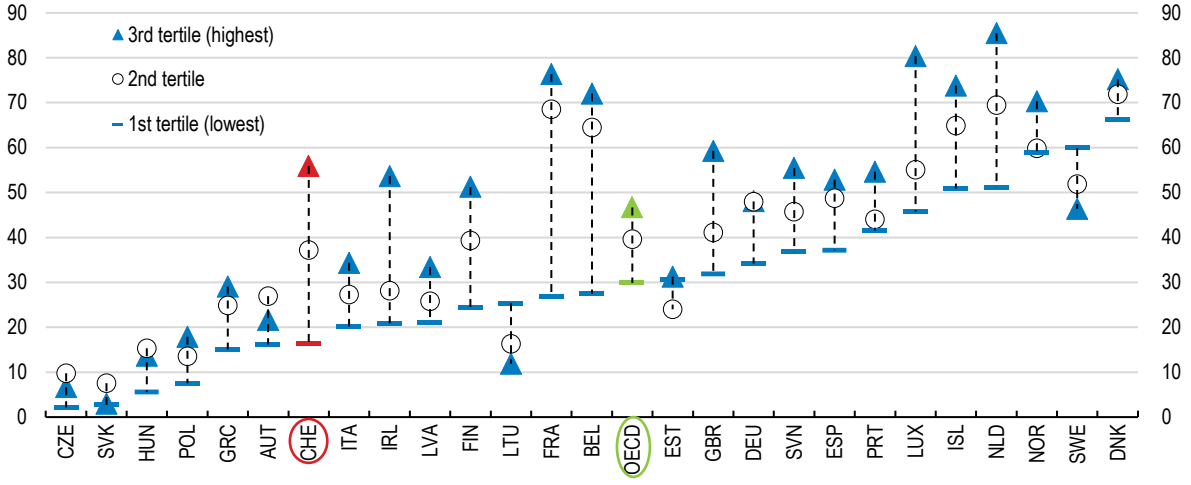
Providing fee reductions, childcare benefits or tax credits at the federal level rather than tax deductions would help increase childcare affordability without providing more generous support to better-off families. Targeting could be improved further by introducing income-tests on childcare benefits and fee reductions at the federal level (OECD 2020). These transfers would need to be carefully designed and decrease with income only gradually to avoid creating large changes in marginal effective tax rates at thresholds and

causing work disincentives. With cantons responsible for the design of the personal income tax at the subnational level, adjustments are needed at both federal and cantonal levels to ensure coherence of the taxation system.

Reforming taxation to improve work incentives for second earners is another avenue to boost female full-time labour participation, as recommended in previous OECD Economic Surveys (OECD 2017, 2022a). Following a Parliament request, the Federal Council is currently preparing a reform to move to individual taxation both at the federal and the cantonal level. For example, Estonia switched from a household-based to an individual-based personal income tax system, and Luxembourg introduced the option for individual income taxation (OECD, 2023a). Reducing the second earner's marginal effective tax rate could also be achieved under the current, family-based, setting, for instance, by providing a larger tax deduction (or allowance) for the second earner.

Figure 3.9. There is a large gap in the use of childcare between low- and high-income households

Participation rates in early childhood education and care, 0- to 2-year-olds, by equivalised disposable income tercile, %, 2020 or latest available year



Source: OECD Family Database, https://www.oecd.org/els/family/database.htm

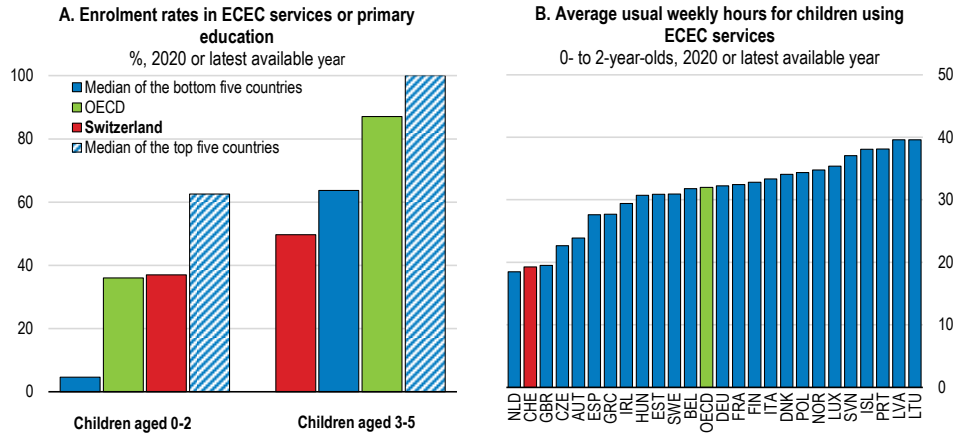
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Increasing the supply of affordable childcare is essential and could be seen as a first step towards encouraging more mothers to work full time and strengthen their connection to the labour market. The relatively low use of childcare in Switzerland is linked to its elevated cost, high incidence of part-time work and limited supply of childcare facilities. The participation rate of 3-5 year old children in early childhood education and care (ECEC) is very low in Switzerland. Pre-primary education for children aged 4 to 6 is compulsory, and its provision is almost fully public. Whereas all children aged 4 to 6 are granted 15 hours of free access to ECEC per week and almost all 5-year-olds are enrolled in public pre-primary education (kindergartens), provision for children under 4 is more limited (OECD, 2021a). The participation rate of 0-2-year-old children is close to the OECD average, but the number of hours they spend in childcare is very low (Figure 3.10), 19 hours per week compared to an OECD average of 32 hours, mirroring the high prevalence of part-time work by mothers. Childcare is under the purview of cantons and municipalities, but privately established, run and financed childcare prevail for children under 4. Public spending on childcare services is low (Figure 3.11).

Increasing the supply of childcare remains a government priority as stipulated in the 2030 Gender Equality Strategy (Federal Council, 2021b). In 2003, the federal government set up a dedicated program to expand childcare provision that has been extended to end in 2024 and is estimated to have helped create about 72 000 new childcare places by end-2022 (OFAS, 2023). A parliamentary initiative in 2021 called for a

larger role of the federal government, a more long-lasting financial support to parents and improvements in childcare services (CSEC-N, 2021). These efforts should continue.

Figure 3.10. The use of childcare is low



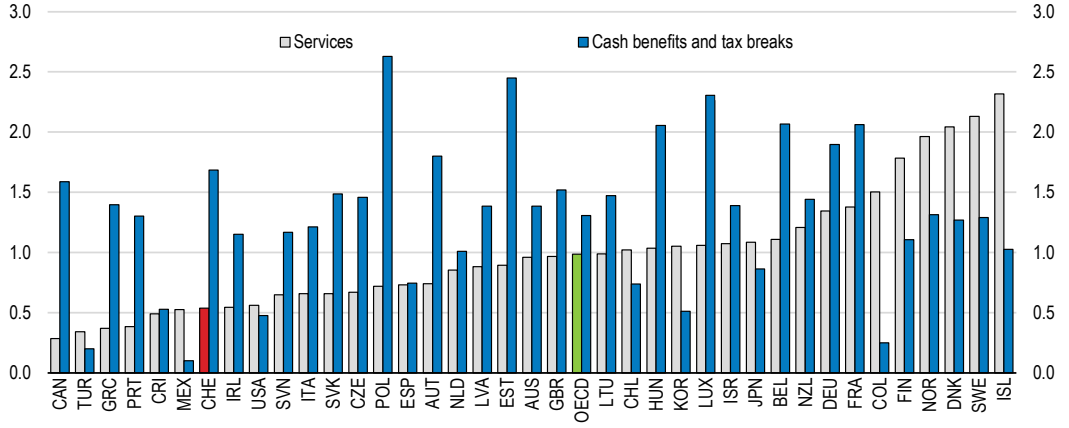
Note: For panel A, data for children aged 0-2 generally include children enrolled in early childhood education services (ISCED 2011 level 0) and other registered ECEC (early childhood education and care) services. Data for children 3-5 include children enrolled in early childhood education and care (ISCED 2011 level 0) and primary education (ISCED 2011 level 1).
Source: OECD Family Database, https://www.oecd.org/els/family/database.htm

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It is also important to ensure quality of childcare. Provision of early childhood education and care is quite fragmented in Switzerland. Different types of providers are available (both centre-based and family-based) raising challenges with respect to ensuring consistency in quality. For centre-based and home-based childcare settings for children under four, regulations on professional development and working conditions are mostly lacking. High ECEC staff turnover is partly related to poor working conditions (OECD, 2021a). The government has developed a unified curriculum from birth to four years that helps set the basis for quality control but monitoring of its implementation is lacking (OECD 2021a). The authorities should ensure effective coordination and monitoring to safeguard quality across different providers, ensuring that children benefit from equal learning and development opportunities.

Figure 3.11. Public spending on childcare services is low

Public expenditure on family benefits by type of expenditure, % of GDP, 2019



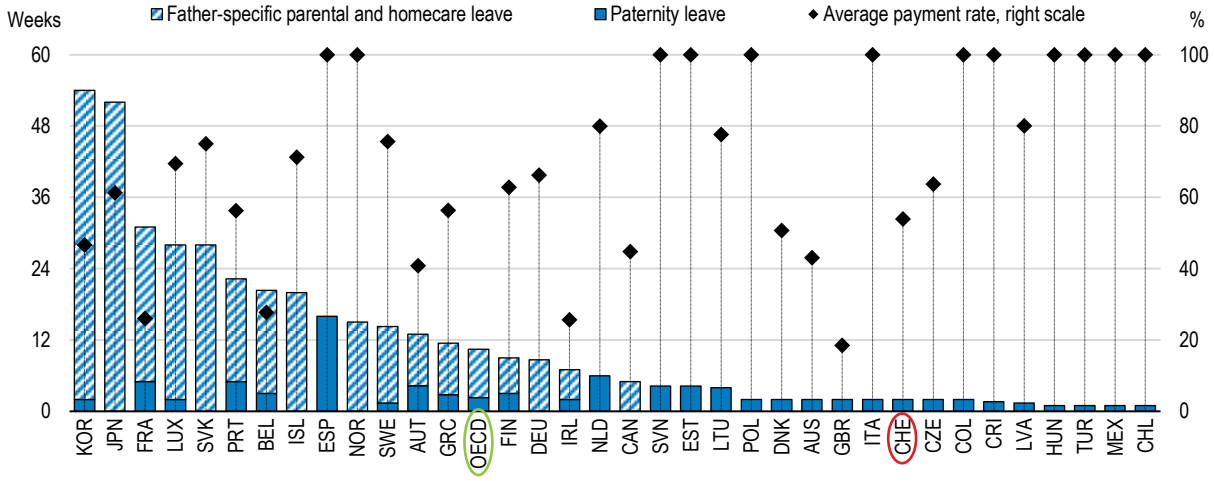
Source: OECD Family Database, https://www.oecd.org/els/family/database.htm

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Longer paternity and parental leave reserved for fathers would help reduce gender stereotypes and raise labour market activity of mothers. Paternity leave of two weeks was introduced quite recently, in 2021. While a step in the right direction, total paternity and parental leave specific to fathers together remain eight weeks shorter than in the OECD on average (Figure 3.12). The average replacement rate is also comparatively low, lowering incentives for families to take up the benefit. Data from the Federal Social Insurance Office show that in 2022, 69 users of paid paternity leave were recorded per 100 live births. This is above average across the 18 OECD countries with available data, where 57 users were recorded per 100 live births, but significantly behind Luxembourg, the Netherlands and Slovenia, with more than 90 users/recipients per 100 live births (OECD, 2022b). Several OECD countries - Luxembourg, Sweden, Norway and Iceland - have reserved parts of parental leave for fathers, of between 12 and 26 weeks at replacement rates (for average earners) ranging from 73% to 96% (OECD, 2021b). In these countries, sufficiently generous replacement rates together with the loss of the leave entitlement for the couple if not taken by the father provide strong incentives for fathers to stay at home for a longer period. Evidence shows that increase in earmarked leave for fathers can lead to shorter maternal leave and an increase in mothers' earnings for up to eight years after birth (Druedhal et al., 2019). It can also increase the likelihood for women to work full-time (Patnaik, 2019). Fathers' leave-taking is also linked to their higher involvement in unpaid work within their family, both for childcare and regular housework, with an effect that persists well beyond the years of actual leave-taking (Tamm, 2019; Knoester et al., 2019).

Figure 3.12. Parental leave specific to fathers is short and the replacement rate relatively low

Length of paid paternity leave and paid parental and home care leave reserved for fathers and average payment rate, 2022



Source: OECD Family database, http://www.oecd.org/social/family/database.htm

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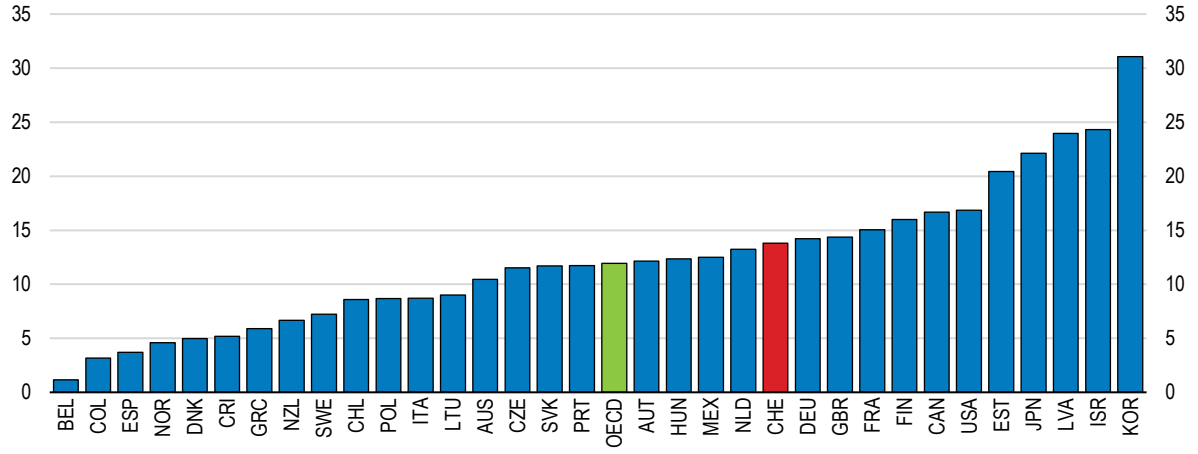
Swiss women get paid less than men even for similar jobs. On average, full-time employed women earn 15% less than men (Figure 3.13). According to the Federal Statistical Office estimates, about 48% of the gender pay gap cannot be explained by factors such as professional status, years of services, sector of activity or level of education (FSO, 2022a). Earning higher wages, equal to those of men, would create better incentives for women to work longer hours.

Reducing the gender pay gap is one of the top priorities of the 2030 Gender Equality Strategy (Federal Council, 2021b). A law from 2018 requires companies with at least 100 employees to conduct regular gender pay audits and inform employees and shareholders of the results. However, the FSO reports the largest unexplained wage difference in small enterprises (FSO, 2022a). Launched by the federal government in 2020, Logib Module 2 webtool – internationally recognised as good practice – enables all

employers, including small companies, to carry out a gender equal pay analysis and learn whether they comply with the requirement of equal pay between women and men. The 2030 Gender Equality Strategy introduced an examination and control of equal pay in small and medium-sized companies that enter bidding for public contracts or receive public subsidies. These efforts should be continued if effective.

Figure 3.13. Full-time employed women get paid less than men

Gender gap in median earnings of full-time employees, %, 2021 or latest available year



Note: The gender wage gap is calculated as the difference between the median earnings of men and of women relative to the median earnings of men.
Source: OECD Employment Database, http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm

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Increasing labour market participation of older workers

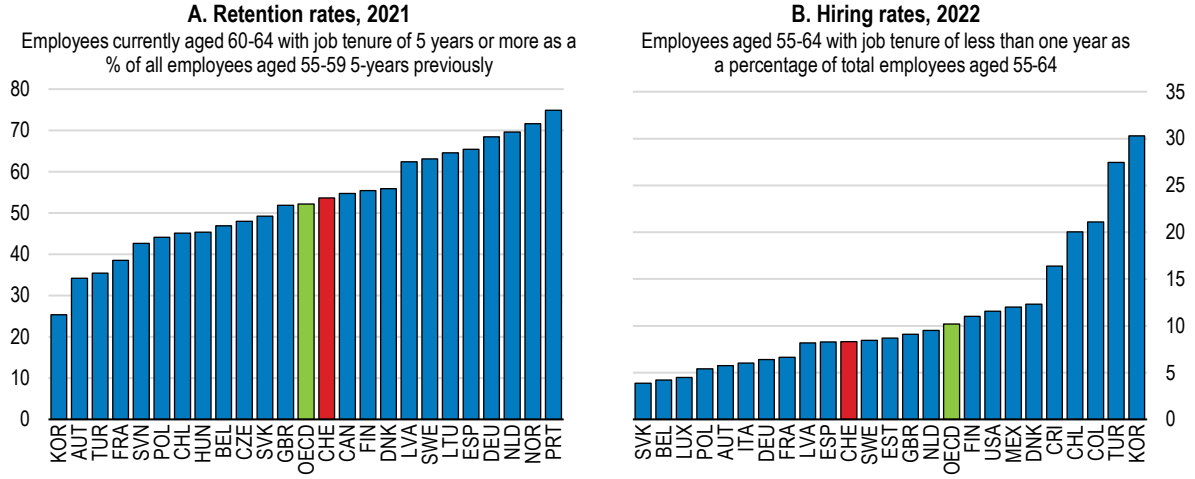
Reform could help bring more older workers to work, raising incomes, easing labour shortages and improving sustainability of the mandatory pension system. According to the OECD Scoreboard on Older Workers, the education level of older workers (55-65) is higher and they participate in training more often than in most other OECD economies. The retention rate for older workers is around the OECD average. Yet, the rate of hiring older workers is relatively low (Figure 3.14). The unemployment rate for older workers is slightly lower than for prime-age workers. But once unemployed, older workers find it more difficult than prime-age workers to reintegrate into the labour market (SECO 2019 and 2021; OECD, 2022a). The risk of long-term unemployment is therefore significantly higher for older workers (Figure 3.15).

To support older workers' re-employment, the authorities launched a reform package that includes additional spending on activation policies for older workers. The measures include additional funding to cantons to enable them to better support hard-to-place jobseekers, especially seniors, with more individualised measures such as counselling, coaching or mentoring. While in Switzerland people are not granted access to activation policies funded by the unemployment insurance for two years after the expiration of their unemployment benefit entitlements, an exceptional access to training has been granted for jobseekers aged over 50. However, while welcome, these programmes are only temporary and set to end in 2024. Their efficiency should be assessed with a view to expanding those that bring positive results.

In 2021, a reform introduced transition benefits up to retirement for individuals aged 60 or over who have exhausted their unemployment benefits. These benefits are means- and asset-tested and have certain eligibility criteria (at least 20 years of contributions to the pension scheme of which at least five years after the age of 50). Still, as discussed in previous OECD Surveys (OECD, 2019a and 2022a) the scheme risks reducing incentives for eligible people to undertake training and to search for work before reaching the age

of 60. Such effects have been observed in Finland (OECD, 2018) and Poland (Gałecka-Burdziak and Góra, 2017). As suggested in the last Survey (OECD, 2022a) supplementing eligibility conditions with requirements to participate in community services or continue looking for a job would mitigate this risk.

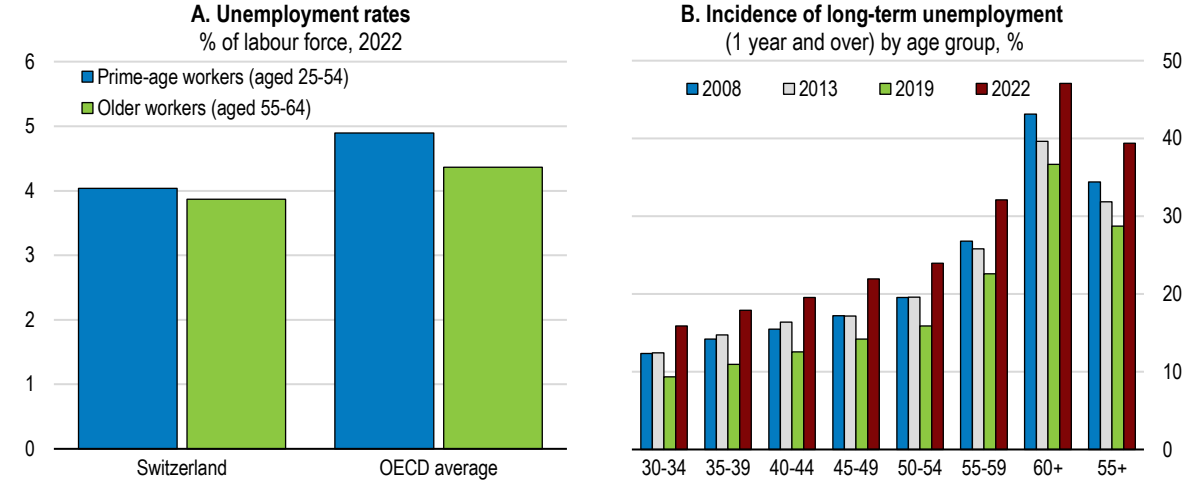
Figure 3.14. There is room to strengthen labour demand for older workers



Note: OECD is an unweighted average of OECD member countries shown.
Source: OECD calculations based on OECD Job tenure database.

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Figure 3.15. Once unemployed, older workers find it more difficult to reintegrate into the labour market



Source: OECD Labour Force Statistics; OECD calculations based on SECO.

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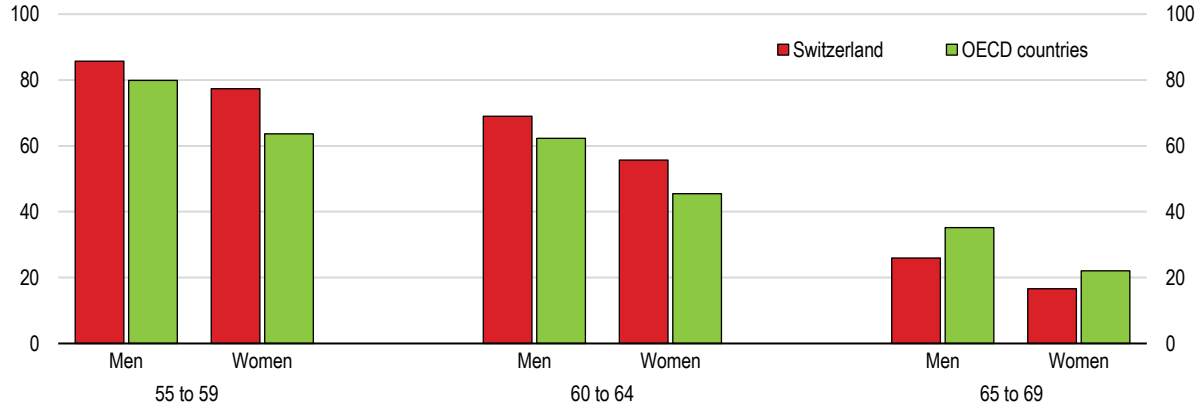
Financial disincentives for employers also weigh on the employment of older workers. Compared to other OECD countries, wages rise more with seniority, raising the risk that older workers' wages grow above their productivity. According to the OECD Scoreboard on Older Workers, full-time gross earnings of older workers (55-64) in Switzerland are 13% above earnings of prime age workers, compared to 6% in the OECD on average. Furthermore, minimum contributions to the second-pillar pension funds rise with age, with employers paying at least half of contributions. Currently, the contribution rate represents 7% of the insured salary for the 25-34 age group, 10% between 35 and 44, 15% between 45 and 54 and 18% for older workers, creating disincentives to hire older workers. Flattening the contribution rates would be one

way to improve the employability of older workers. As envisaged in the current reform of the second pillar, only two different contribution rates could be maintained, at 9% for workers aged 25-44 and at 14% for older workers, which would lead to a significant decline in the contribution rate for workers above 55. An alternative way to achieve this goal would be to adjust employers' contribution to a flat rate so that only employees' contributions increase with age.

Lengthening working lives can also be achieved through incentives within the pension system and the flexibility to combine retirement and work. Early retirement in the first pillar is possible from the age of 63. Still, 23% of the 55-64 old were out of the labour force in 2020 (SECO, 2021), and more than a quarter of workers retire before reaching age 60 (OECD, 2019b). Employment also falls significantly after the statutory retirement age. Whereas Switzerland records high employment rates overall, after age 65, the employment rate shows a steep decline to below the OECD average (Figure 3.16).

Figure 3.16. Employment rates fall steeply after 65

Employment rate, % of respective population, 2022



Source: OECD Employment and Labour Market Statistics database.

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A recent reform brings additional flexibility to combine work and pension benefits. From 2027 onwards, workers will be free to choose to retire between the age 63 and 70. In addition, they will be able to gradually reduce working hours while claiming a partial pension. As opposed to the current situation, contributions paid beyond age 65 will count towards pensions rights. The reduction or increase in pension benefits for early or deferred retirement, respectively, will be done in actuarially neutral way, but will differ for low incomes. The conversion factors will be set by the Federal Council before the system comes in effect, given life expectancy at the time.

Greater flexibility to combine work and pension is welcome. However, given that early retirement is already quite common, removing penalties may further encourage earlier retirement. The age band for retirement – between 63 and 70 years of age – could have a higher upper limit (75 in Norway and no limit in Sweden) and the earliest age of retirement, together with the conversion factor, should evolve with life expectancy. In Norway, each cohort gets a different life-expectancy conversion rate, based on remaining life expectancy, determined when the cohort reaches 61 years of age (OECD, 2021c).

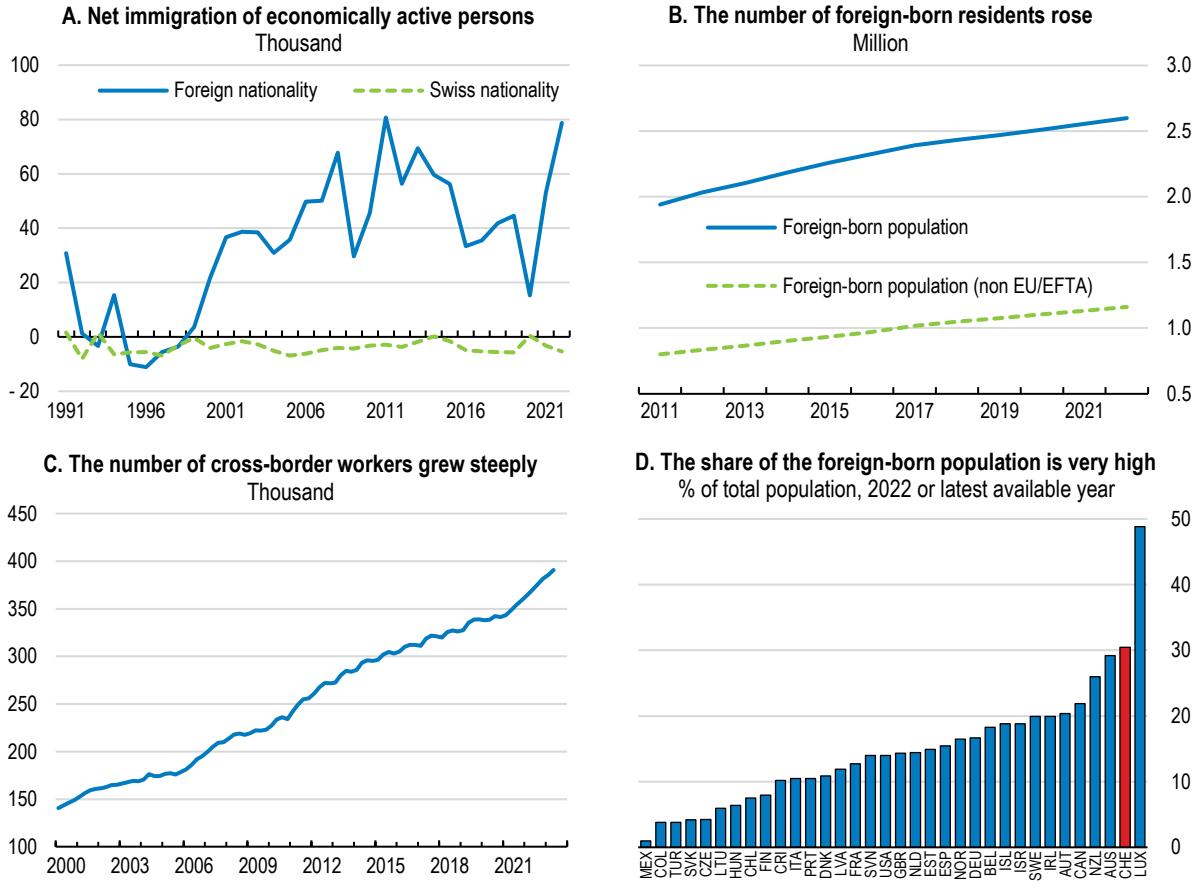
To raise employment in old age, both retirees and employers need to be aware of and embrace available flexibility. International practice shows that options for flexible retirement – on the time of retirement and on combining pension benefits and work – must come with renewed efforts to foster financial literacy and transparency (OECD, 2019b). Beneficiaries need transparent and reliable information on the benefits that they can expect to receive under different scenarios concerning when and how they retire (completely or partially). In addition, older workers need flexibility to be able to review and adapt their choices as their employment prospects, health situation or family circumstances change before or after retirement. Enough

flexibility is also needed on the side of employers, who need to have programmes for gradual exit from employment in place (OECD, 2019b).

Continuing to attract and retain skilled foreign workers

Immigration has been key for Switzerland's economy in terms of labour, skills and demography. Over the past two decades, Switzerland has experienced a large influx of foreign workers. Net immigration has been highly positive, with the net inflow of more than 40 000 foreign nationals per year over the last two decades (Figure 3.17). The number of residents with migration background (foreign-born) rose by 37% between 2011 and 2022, compared to 10% for the total population. The number of cross-border workers has more than doubled since 2000. In 2021, the foreign-born population represented 30% the total population (Figure 3.17), second in the OECD, behind Luxembourg.

Figure 3.17. Immigration has been key for Switzerland's economy



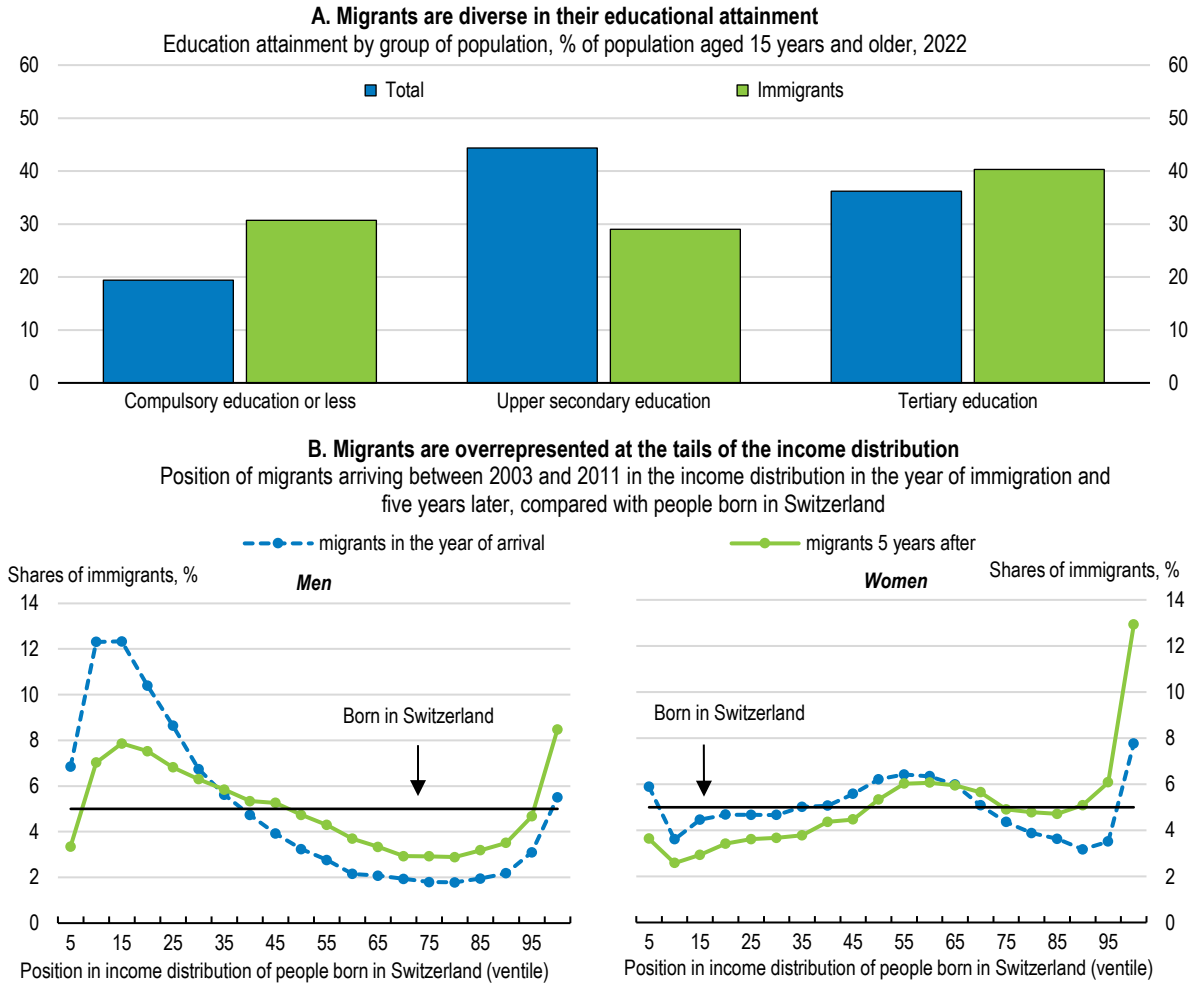
Source: FSO, Labour Market Accounts (LMA); Eurostat; FSO, Cross-border Commuters Statistics (CCS); OECD International Migration Database; OECD Population Statistics.

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Migrants form a population that is very diverse not only in their geographical origins but also in terms of their socio-economic characteristics and backgrounds. This diversity has grown further in recent decades (FSO, 2020). Since 2002, Switzerland is part of the agreement on the free movement of persons with the EU/EFTA, and roughly 2/3 of migrants come from this area, with those born in Italy, Germany, Portugal and France most represented. The rest come from all over the world, in largest numbers from Türkiye, former Yugoslavia, Brazil, the United States and Sri Lanka (OECD, 2022a). Migrants are diverse also in terms of educational attainment. They are much more likely than natives to have only completed mandatory

education but also more likely to have a tertiary education degree (Figure 3.18). There are many immigrants with low skills and low incomes. On the other hand, there is a significant group of highly qualified and highly mobile professionals earning high incomes (Figure 3.18). An increasing number of immigrants are to be found among highly qualified managers (FSO, 2020).

Figure 3.18. Migrants form a diverse population



Note for panel B: The study group comprises migrants aged between 25 and 55 who arrived in Switzerland between 2003 and 2011 and who stayed in the country for at least five years and earned an income from gainful employment every year. The control group consists of people born in Switzerland aged between 25 and 55 who also earned labour income in at least five consecutive years. The lines with dots show the proportion of migrants found in each income ventile of people born in Switzerland. The blue lines show the distribution of migrant men and women in the year of arrival in Switzerland; the green lines show the distribution five years after immigration. If the income distributions of migrants and people born in Switzerland were identical, these lines would be horizontal at 5% (i.e., 5% of migrants would fall in every income ventile of people born in Switzerland)

Source: FSO, Swiss Labour Force Survey (SLFS); Federal Statistical Office (FSO), University of Neuchâtel (UNINE), University of Fribourg (UNIFR), A Panorama of Swiss Society 2020: Migration - Integration - Participation.

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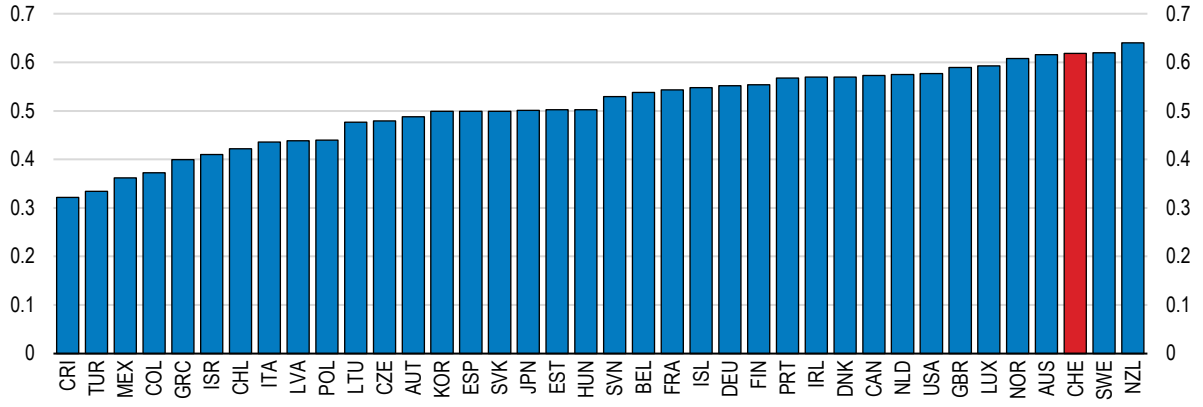
Switzerland remained among the top five most attractive OECD countries for highly skilled migrants in 2023 (Figure 3.19), thanks to high standard of living and an attractive tax and benefit system (OECD, 2023b; Tuccio, 2019). A strong labour market, high productivity and high wages have been able to attract and absorb many skilled workers from abroad.

Active steps should be taken to maintain attractiveness, including by ensuring favourable migration policies for highly skilled migrants from non-EU/EFTA countries. These migrants have proven an important source

of skilled workforce in recent years (FSO, 2020). Moreover, given fast ageing in Switzerland and EU countries, third-country nationals will increasingly become the key source to boost the working-age population. The global competition for talents continues, reinforced by widely experienced labour shortages. Countries are finding new ways to attract highly educated migrants and remote workers (OECD, 2022a). By continuing to set itself as an attractive long-term destination for skilled third-country migrants, Switzerland could sustainably boost productivity and growth, while helping to ease labour shortages and ageing pressures.

Figure 3.19. Switzerland remains among the most attractive countries for global talent

Attractiveness of OECD countries for potential migrants, highly skilled workers



Note: The OECD Indicator of Talent Attractiveness measures the relative attractiveness of countries from a multidimensional perspective, considering both the migration policy framework and other factors that affect the ability to attract and retain international talent. Values from 0 (lower attractiveness) to 1 (higher attractiveness). The ranking is based on default equal weights across dimensions and does not include the health system performance dimension.
Source: OECD Indicators of Talent Attractiveness (ITA), https://www.oecd.org/migration/talent-attractiveness/.

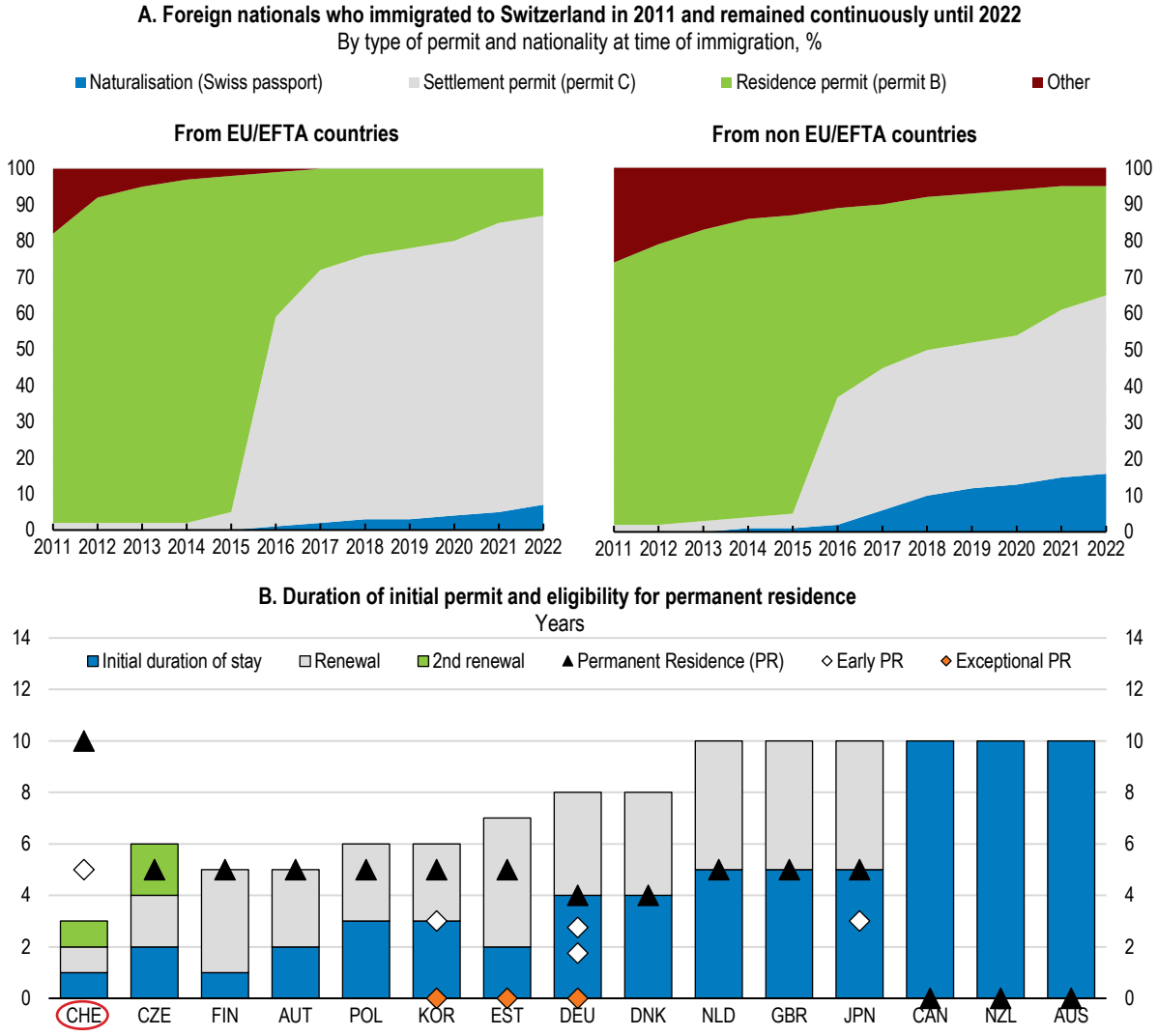
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Economic migration from non-EU/EFTA countries remains subject to strict quotas, currently at 8 500 per year, unchanged since 2019. Moreover, third-country nationals are allowed to migrate for work in Switzerland only in senior management positions, as specialists or other qualified personnel (university degree or special training and several years of professional experience). To employ a third-country national, Swiss employers need to prove that no equivalent worker form the EU/EFTA area is available for the job and that qualifications and salary requirements are met (not worse than for domestic workers). Once a working permit is secured from relevant cantonal authorities the job can be started. Depending on the job contract either a short-term (less than a year) residence permit (L) or residence permit (B) is issued. The residence permit (B) can include restrictions such as having to work in a specific job or live in the canton which granted the permit. Family members also have the right to work without being subject to quotas, preference for nationals or qualifications requirements, however, such employment is limited by the validity of the original permit. The residence permit (B) for non-EU/EFTA migrants is valid for one year, after which it can be renewed. After five to ten years, a settlement permit (C) can be issued, subject to specific conditions (in particular knowledge of one of the national languages).

Permit rules and paths to full integration for skilled non-EU/EFTA migrants need to be attractive enough. According to the data by the Federal Statistical Office (FSO, 2022b) on foreign nationals who stayed continuously in Switzerland for ten years, there is markedly faster transition from residence permit B to the settlement permit C for EU/EFTA migrants than for third-country nationals (Figure 3.20, panel A). Migrants face more lengthy, complicated and costly paths to permanent residence in Switzerland than in most OECD countries (Figure 3.20, panel B). Yet, permanent residence or naturalisation can have important implications for immigrants' social integration and labour market outcomes. A number of OECD countries

have taken steps to encourage more migrants to pursue citizenship, notably Germany, the United States and Estonia (OECD, 2022a). Furthermore, in Switzerland, the acquisition and use of land and real estate by non-EU/EFTA migrants without permanent residence (settlement permit C) - as well as for EU migrants without principal residence (also known as effective or de facto residence) in Switzerland - is highly restricted (OECD, 2022d, FSO, 2020).

Figure 3.20. Non-EU/EFTA migrants face lengthy paths to permanent settlement and citizenship



Note for panel A: Other category includes people with short-term residence permit (permit L) and in asylum process (permits N and F).
Source: FSO, Longitudinal demographic statistics (DVS); OECD/European Commission (2023), Indicators of Immigrant Integration 2023: Settling In, OECD Publishing, Paris, https://doi.org/10.1787/1d5020a6-en.

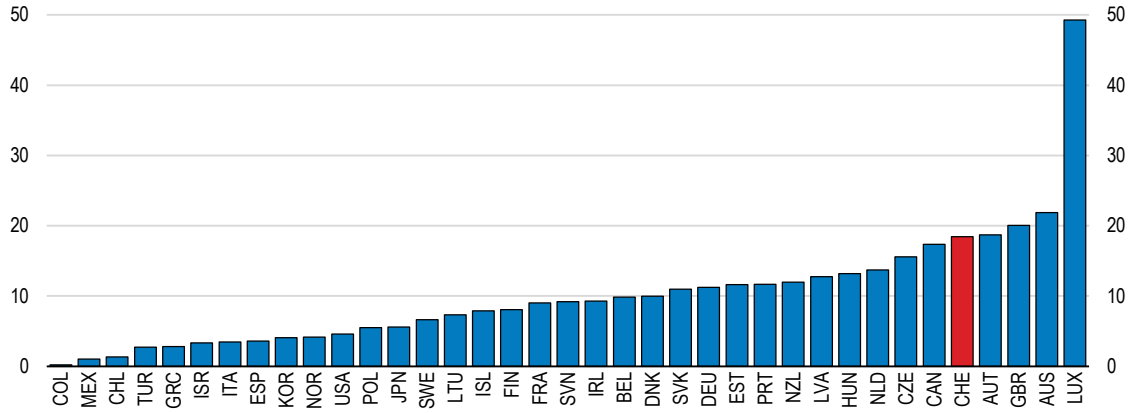
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International students from third countries could also be better retained after graduation. Switzerland is an attractive destination for international students. Close to 20% of tertiary students come from abroad, 35% of them from non-EU countries (Figure 3.21). According to Economiesuisse, the Swiss Business Federation, only 10-15% of these students remain in the country after their studies. Evidence shows that international students are three times more likely than domestic students to study natural sciences, mathematics and statistics (OECD, 2022c), where there is large and rising demand for skills. However, Swiss university graduates from non-EU countries have only 6 months to find a job after completing their studies to be allowed to stay in Switzerland. This is short in international comparison (Figure 3.22). In other

OECD countries, the time that graduates can remain in the country upon graduation to look for a job is typically between 12 and 24 months, and in Australia, Canada, New Zealand, and the United Kingdom even 3 years. The Swiss parliament currently considers facilitating the stay and access to the labour market for third-country nationals with Swiss university degrees in areas with a proven shortage of skilled workers.

Figure 3.21. Switzerland attracts a high number of international students

International students, % of total, 2021

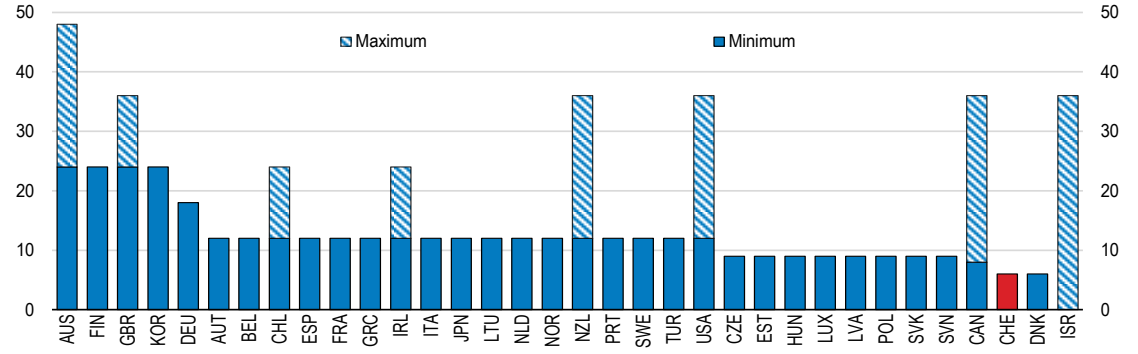


Source: OECD Education at a Glance database.

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Figure 3.22. Swiss university graduates from non-EU countries have a short time to find a job after graduating

Minimum and maximum duration of stay, typically, to search for a job following graduation, in months, 2022



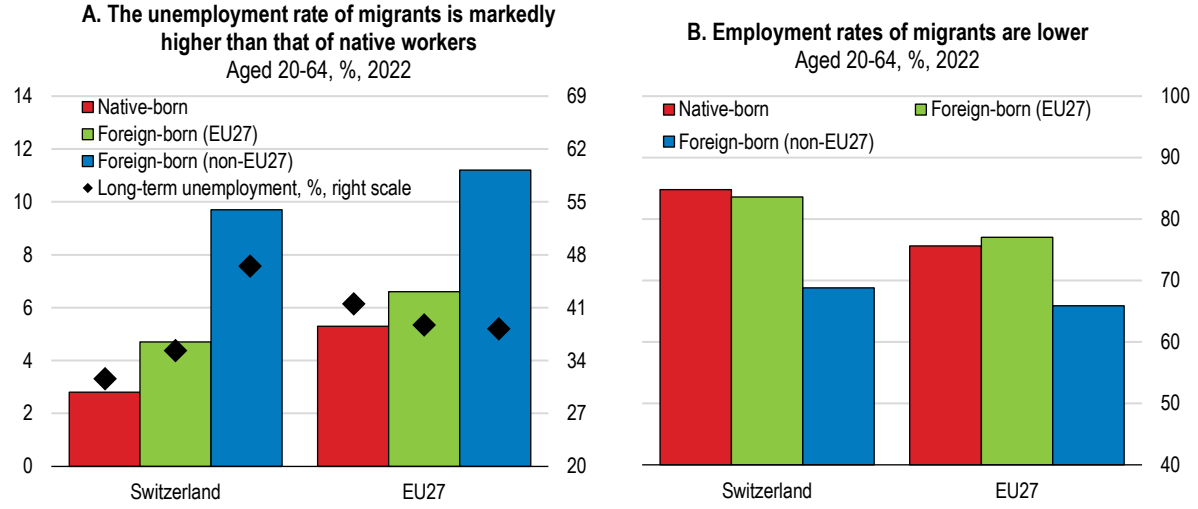
Note: AUS: Graduate Work stream, usually up to 18 months (increased to 24 months as a COVID concession); Post-Study Work stream two years for bachelor's and up to four years for PhD graduates. GBR: two years for bachelor's and master's, three years for PhD. NZL: one to three years depending on level and duration of prior programme. CAN: equal to the prior duration of studies. USA: refers to post-completion Optional Practical Training (OPT), can be extended by additional 24 months for graduates in STEM subjects. IRL: Graduates with an award at Level 8 or above can apply for 12 months, those with Level 9 or above can renew for additional 12 months. EST: 270 days. ISR: only for graduates in High Tech related fields of study. Spain is planning to increase the postgraduate extension to two years.
Source: OECD (2022), International Migration Outlook 2022.

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There is also room to boost employment of existing migrants with poor labour market performance. Foreign-born from non-EU/EFTA countries record significantly higher unemployment rates than natives, 9.7% versus 2.8% in 2022 (Figure 3.23). While migrants' labour market integration improves significantly over time and that their employment rates and wages improve (Figure 3.18, panel B), the employment rate nevertheless stays below those of natives, most notably for non-EU/EFTA migrants (Figure 3.23).

Moreover, migrant women are more likely than men to have moved for family reasons, and their labour market participation rates remains markedly lower (FSO, 2020).

Figure 3.23. Immigrants tend to have worse labour market outcomes than natives



Note: For panel A, diamonds show the share of long-term unemployment (12 months or more) as a percentage of the total unemployment for each category.
Source: Eurostat.

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Upskilling low-skilled immigrants is one way to help migrants find jobs or gain new skills and become more employable. As discussed in previous Surveys (OECD, 2022a; 2019a and 2017) expanding the supply and uptake of high-quality language training at all ages, adult education, bridging courses, work placements and improved recognition of foreign qualifications for non-EU/EFTA citizens would help them to maximise the use of their skills. For instance, cantons offer pre-VET programmes to young immigrants (up to age 23) or refugees (up to age 35), to help them acquire needed core competencies, including language skills, before enrolling in VET programmes. Authorities should consider extending it to a larger group of migrants by raising the age limit for access. Employment services could provide more substantial up-skilling measures better geared towards prior learning of migrants. In addition, temporary job-placement incentives paid to employers can also play a role, to overcome information asymmetry with respect to the prior qualifications of migrants and giving them a chance to demonstrate and improve their skills during the benefit period (Duell et al., 2010, OECD, 2022a). Targeted measures to expand affordable childcare and measures to reduce disincentives for second earners will also help bring more migrant mothers to work.

Table 3.1. Past recommendations on boosting labour participation

Recommendations in previous Surveys	Action taken
Foster geographical mobility by adjusting the tenancy law to reduce restrictions on rent increases, accompanied with targeted housing allowances.	No action taken.
Increase the effectiveness of pathways between vocational and general streams by increasing the academic component of the vocational curriculum and vice-versa.	The ongoing revision of the vocational baccalaureate ensures eligibility to study at universities of applied sciences. In higher vocational education and training (tertiary level), the federal government introduced subject-oriented funding for preparatory courses for federal examinations in 2018

Table 3.2. Recommendations

MAIN FINDINGS	RECOMMENDATIONS
Raising the activity rate of women	
The gender income gap is high in Switzerland, in part due to high incidence of part-time employment. The tax and benefit systems and a high cost of childcare contribute to lower working hours and lower labour incomes for women.	**Reduce disincentives to work for second earners, by moving from family-based to individual-based taxation or through tax adjustments and slower withdrawal of benefits.** **Keep expanding the supply of childcare and provide targeted measures (mean-tested fee reductions, childcare benefits or tax credits) to improve affordability**. Ensure effective coordination and monitoring of quality control across different childcare providers. Expand paternity leave with a statutory parental leave system including entitlement reserved to fathers.
Women get paid less than men for similar jobs. Close to half of the gender pay gap cannot be explained by factors such as professional status, years of services, sector of activity or level of education.	Continue efforts to extend the examination and control of equal pay to small and medium-sized enterprises.
Increasing labour market participation of older workers	
Once unemployed, older workers have more difficulties than prime age workers to find a job. Seniority wages and rising pension contribution rates create financial disincentives for firms to hire older workers.	Flatten the age-related progressivity in pension fund second-pillar contribution rates as planned. Assess and, if effective, scale-up pilot activation programmes for older workers.
More than a quarter of workers retire before reaching age 60. Employment also falls markedly at the statutory retirement age. From 2027 onwards, workers will be free to choose to retire between the age 63 and 70 and will be able to gradually reduce working hours while claiming a partial pension.	**Introduce greater flexibility to combine retirement and work as planned and link the parameters of the flexible retirement system (earliest age of retirement, the conversion factor from accumulated pension entitlements to annual pension) to life expectancy.** Help workers make sound retirement choices, by expanding information and education campaigns on retirement-age choice.
Attracting and retaining skilled foreign workers	
Attracting skilled migrants from non-EU/EFTA will become increasingly important to boost working-age population and skills. In Switzerland, third-country migrants face lengthy and costly paths to permanent settlement and citizenship.	**Streamline administrative processes for highly skilled migrants from non-EU/EFTA countries, including by relaxing permit rules and paths to naturalisation.**
Switzerland is an attractive destination for international students, but Swiss university graduates from non-EU countries have only 6 months to find a job after completing their studies to be allowed to stay in Switzerland, which is short in international comparison.	Extend the amount of time Swiss university graduates from non-EU countries have to find a job upon graduation from 6 months to 24 months.
Some foreign nationals have low skills. They record significantly higher unemployment rate than natives and employment rates are markedly lower, especially for women.	**Expand the supply and uptake of upskilling courses and improve recognition of foreign qualifications for non-EU/EFTA citizens.** **Expand temporary job-placement incentives paid to employers.**

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4 Towards a decarbonised economy

Urban Sila

Erik Frohm

Switzerland as an Alpine country is strongly impacted by climate change. Growth has decoupled from emissions and energy use, but emission reductions will have to accelerate markedly if Switzerland is to meet the net-zero target by 2050. The existing comprehensive policy mix including pricing, regulation and incentives/subsidies needs to be strengthened to reach net zero.

Emission reductions must accelerate

Switzerland is one of the top OECD performers in terms of greenhouse gas (GHG) emissions per unit of GDP and energy supply per unit of GDP (Figure 4.1). Over the past two decades, Switzerland has successfully decoupled economic growth from domestic GHG emissions and energy use. GHG emissions have been declining, despite a more than 40% rise in real GDP since 2000. The economy's low carbon intensity stems from high shares of renewable energy resources – mainly hydropower – and nuclear energy in the energy mix (to be gradually phased out) as well as an economy dominated by services (OECD, 2017 and 2020). Fossil fuels account for less than half of the total primary energy supply, well below the OECD share of 78% (Ritchie, 2023).

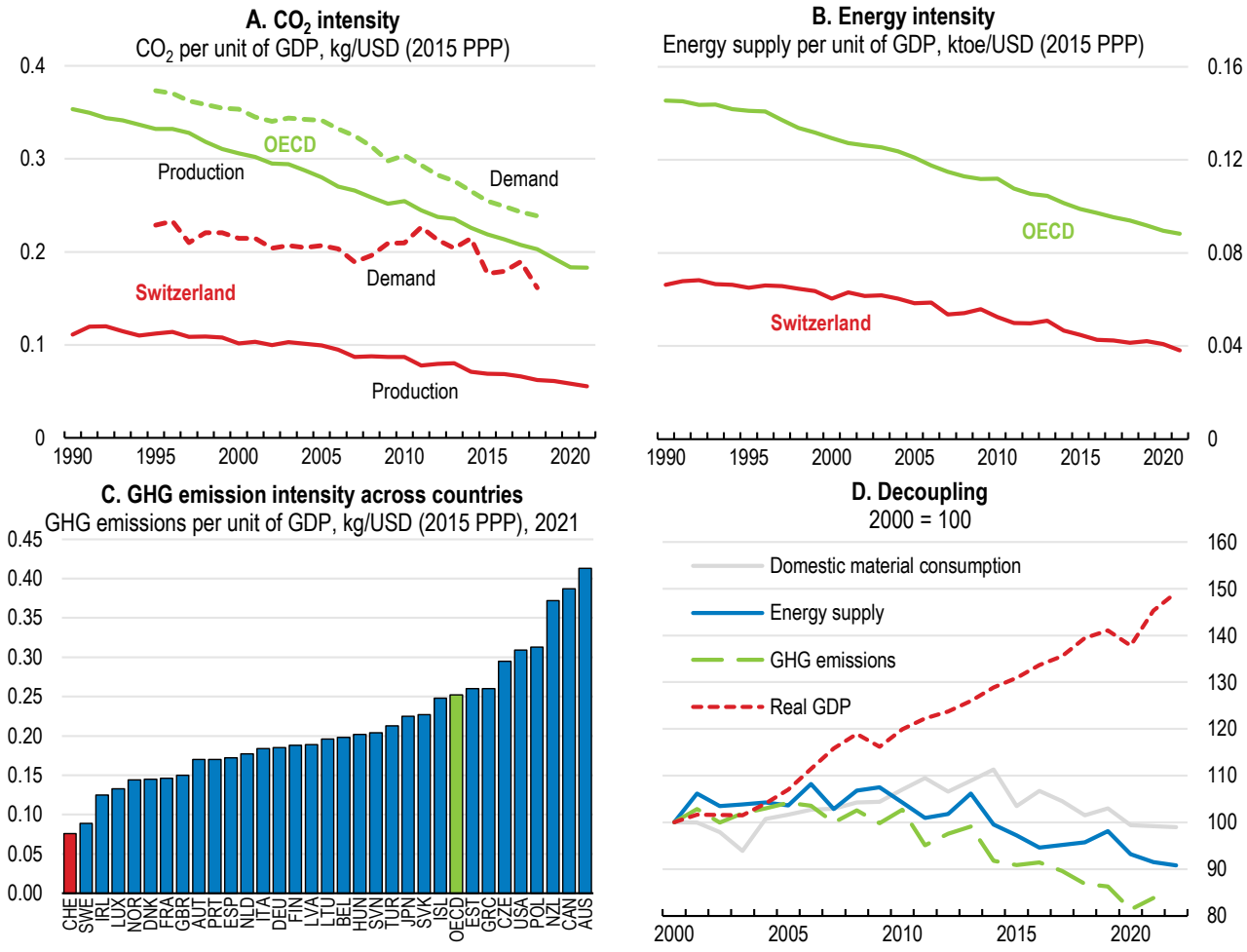
Nevertheless, environmental pressures are significant, due to a high standard of living and correspondingly high consumption and resource use. Demand- (consumption-) based indicators point to higher environmental pressures and slower progress in tackling environmental challenges than production-based indicators (Figure 4.1, panel A).

As an Alpine country, Switzerland is impacted by climate change more strongly than many other OECD countries. For instance, annual mean temperatures have risen by at least 2 °C since monitoring began in 1864, twice as much as the global mean (Federal Council, 2018 and 2022). The snowline is expected to rise, while winter snow reserves and glacier volumes will decline further, with implications for tourism, water management and agriculture (Eriksen and Hauri, 2021).

The Federal Council set the net-zero greenhouse gas emissions target by 2050 and adopted an ambitious "Long-Term Climate Strategy for Switzerland". The strategy set out climate policy guidelines and established strategic targets for key sectors. In addition, under the Paris Agreement, Switzerland has committed to reducing greenhouse gas emissions by 50% by 2030 (compared to 1990), and by an average of at least 35 % over 2021–2030, with emission reductions through projects abroad and accountable carbon sinks (forest and wood) considered. In 2050, according to the long-term Strategy, some hard-to-avoid GHGs will still be emitted (from cement production, waste combustion and agriculture), but will need to be offset by natural and technological removal or through emissions-reducing measures abroad (Federal Council, 2021). Due to the low emission intensity of the energy sector, Switzerland has the largest potential for emission reductions in the transport (30% of all emissions) and buildings (26%) sectors (Figure 4.2). The long-term climate strategy envisages 100% emission reductions in the two sectors by 2050. However, further emission reductions in industry and agriculture will also be necessary.

Switzerland narrowly missed its *national* emission target for 2020 (to be achieved entirely through domestic measures), despite a milder winter and reduced emissions due to the COVID-19 pandemic. Emissions were reduced by 19.6% compared to 1990 instead of 20% as targeted. In 2021, total emissions increased back to the 2010 trend. For 2020, only the industry sector met its reduction target, while emissions in the buildings and transport sectors exceeded the target (FOEN, 2022a). On the other hand, Switzerland successfully met its *international* target under the Kyoto protocol for an average reduction by 15.8% over 2013–2020, thanks to emission compensation projects abroad. Switzerland's 2030 and 2050 emission reduction targets are aligned with its international commitment under the Paris Agreement.

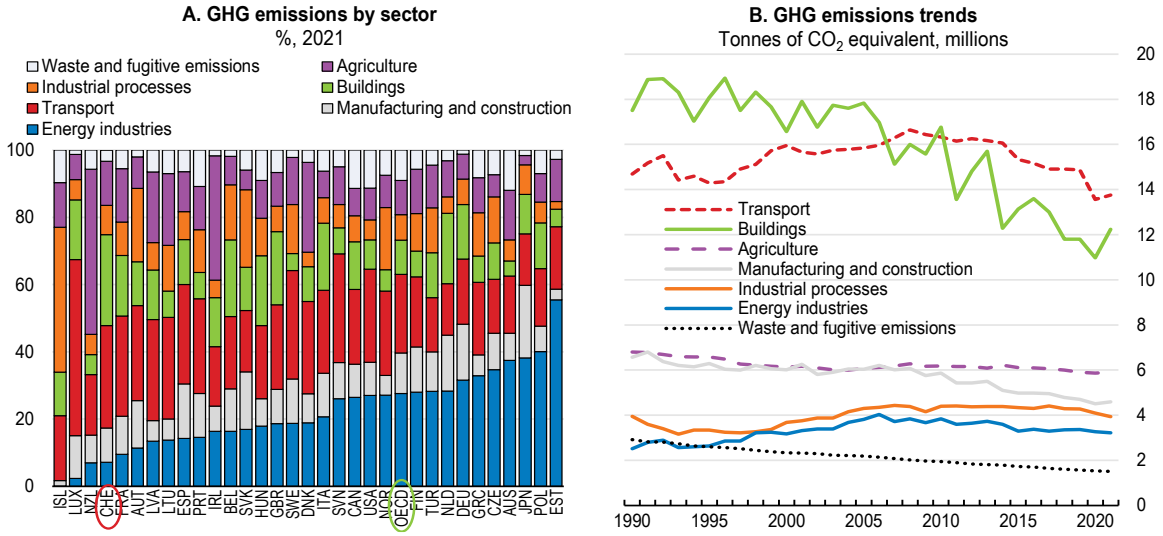
Figure 4.1. Switzerland performs well in terms of emissions and energy efficiency



Source: Green Growth Indicators, OECD Environment Statistics (database); IEA World Energy Statistics and Balances (database); Greenhouse gas emissions, OECD Environment Statistics (database); Material Resources, OECD Environment Statistics (database); OECD Economic Outlook database.

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Figure 4.2. The largest potential for emission reductions is in the transport and buildings sectors



Note: Energy industries include electricity and heat production, petroleum refining and manufacturing of solid fuels.
Source: Greenhouse gas emissions, OECD Environment Statistics (database).

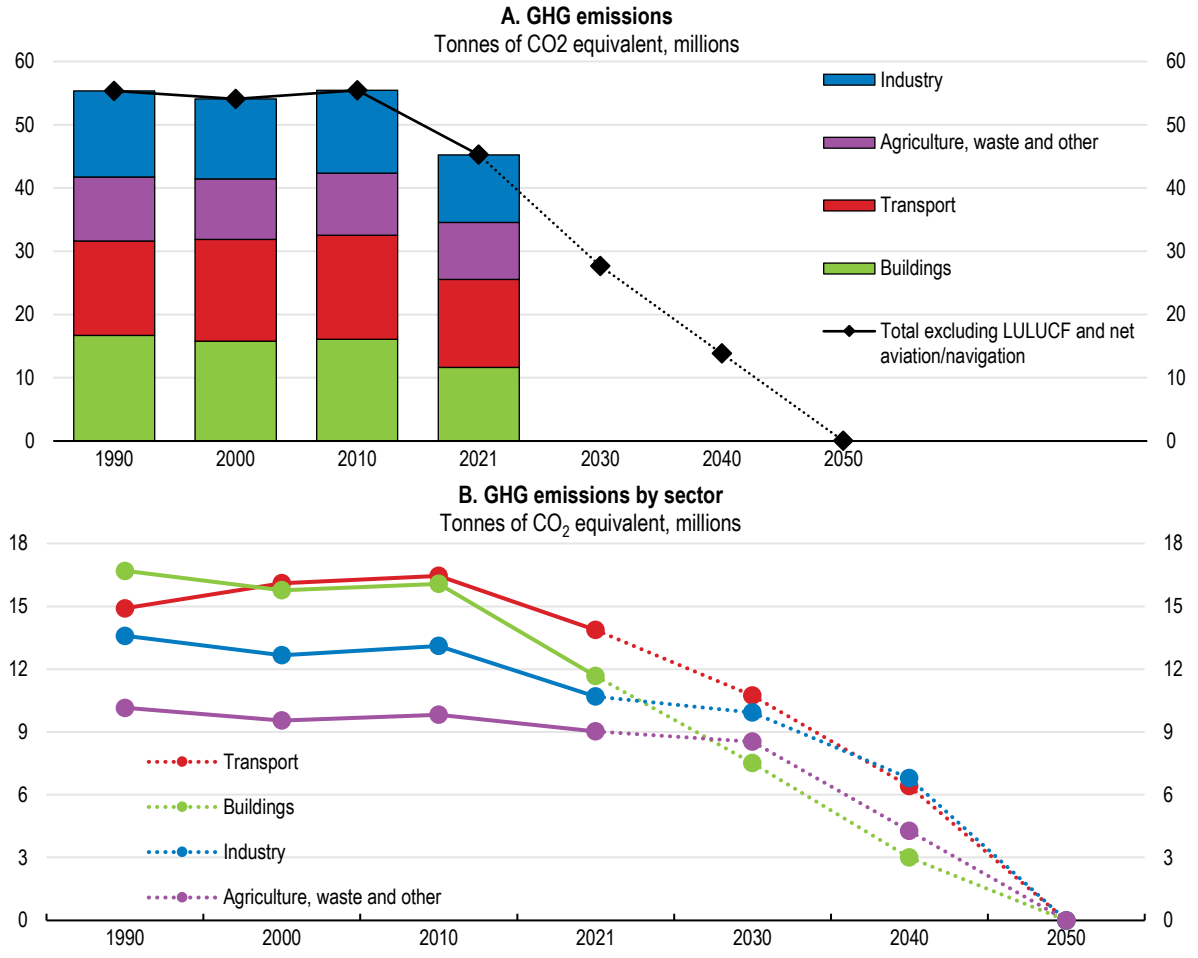
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A Climate Protection Act (effective from 1st January 2025) was passed in September 2022 and confirmed by the referendum of June 2023, embedding in national law the net zero target for 2050 and defining the 2030-2050 emission reduction paths (overall and sector-level). The law has also committed CHF 2 billion over 10 years to support the transition to green heating systems in buildings and CHF 1.2 billion to enterprises to invest in green technologies. The passing of the law and subsequent approval by a popular vote has boosted policy certainty, which will help the capital investments that are needed to achieve future climate targets.

Measures to achieve targets rely on the CO_2 Act, which details cross-sector and sector-specific policies. An ambitious revision of the CO_2 Act (with the aim of achieving emission reductions targets over the period 2021–2030) that would have further increased the carbon tax and introduced a levy on air tickets was rejected at a referendum in 2021. Since then, Switzerland had to reassess the mix of policy measures to achieve its targets and the policy focus has shifted from further tax increases to incentives, including subsidies. After the 2021 referendum, emissions reduction efforts relied on an emergency extension of the pre-existing CO_2 Act, valid through 2024. Beyond that date, for the 2025-2030 period, measures will have to be defined in the currently debated "third" CO_2 Act (proposed by the Federal Council in September 2022), which is also set to fix in national law international commitments for emission reductions up to 2030 (cutting emissions by 50% to 2030, among others).

Switzerland will need to accelerate emission reductions if it is to meet its targets (Figure 4.3). For this, additional and more ambitious policy measures (in future CO_2 Acts) will be needed. A comprehensive policy mix including pricing, regulation and incentives/subsidies will be needed to reach net zero. Policy scenarios by the Federal Office for the Environment from 2022 (FOEN, 2022b), show that under the scenario "with additional measures" – that includes implemented, adopted and planned policies and measures – Switzerland would miss its reduction target in 2030. Similarly, Dolphin (2023) estimates that under a similar "with additional measures" scenario that also includes the measures of the currently proposed third CO_2 Act, total domestic emissions would only be reduced by 34% by 2030. The overall 50% target can be met through emission reductions abroad to which Switzerland has committed through numerous bilateral agreements (the proposed CO_2 Act implies that 2/3 of emission reductions need to happen domestically). However, beyond 2030 and to reach the 2040 targets, additional measures will need to be put in place.

Figure 4.3. Emissions reductions will need to accelerate to reach targets



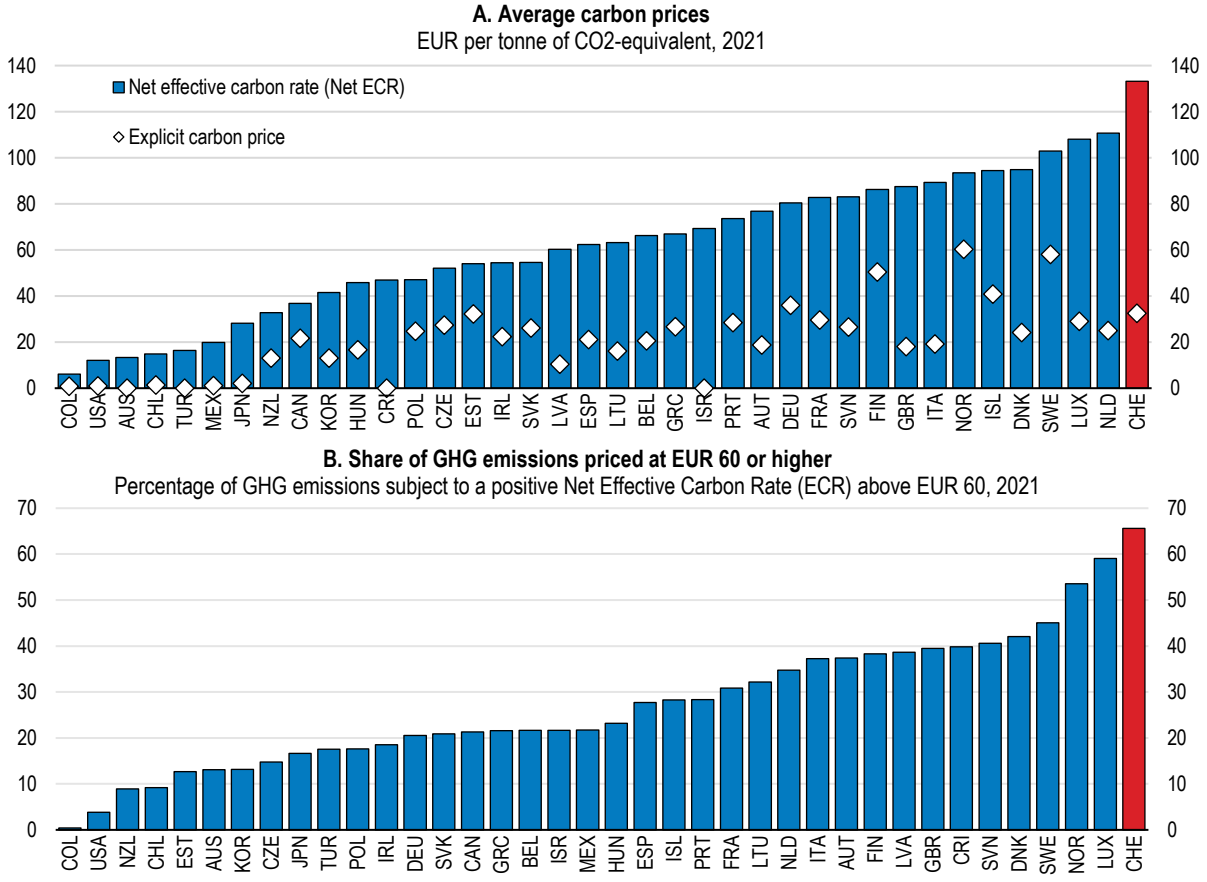
Source: Federal Office for the Environment (FOEN), 2023

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Strengthening carbon pricing instruments

Switzerland prices its CO_2 emissions at high rates (Figure 4.4) and has the highest effective carbon rates among OECD countries (OECD, 2021 and 2022a). A high effective carbon price provides a strong incentive for lower-emissions technology development. The OECD (2021 and 2022a) estimates that in effective terms Switzerland taxes about 65% of its emissions from energy use at EUR 60 or higher per tonne of CO_2, a midpoint estimate of the carbon cost in 2020. In 2021, explicit carbon prices in Switzerland consisted of emissions trading system (ETS) permit prices and carbon taxes, which covered about 41% of greenhouse gas (GHG) emissions in CO_2 equivalents (OECD, 2022b). In addition, Switzerland imposes high effective tax rates on road fuels through the fuel excise tax (Figure 4.5), but the tax level is not tied to the emission-intensity of the fuels and revenues are not earmarked for environmental purposes.

Figure 4.4. Switzerland prices its CO_2 emissions at high rates

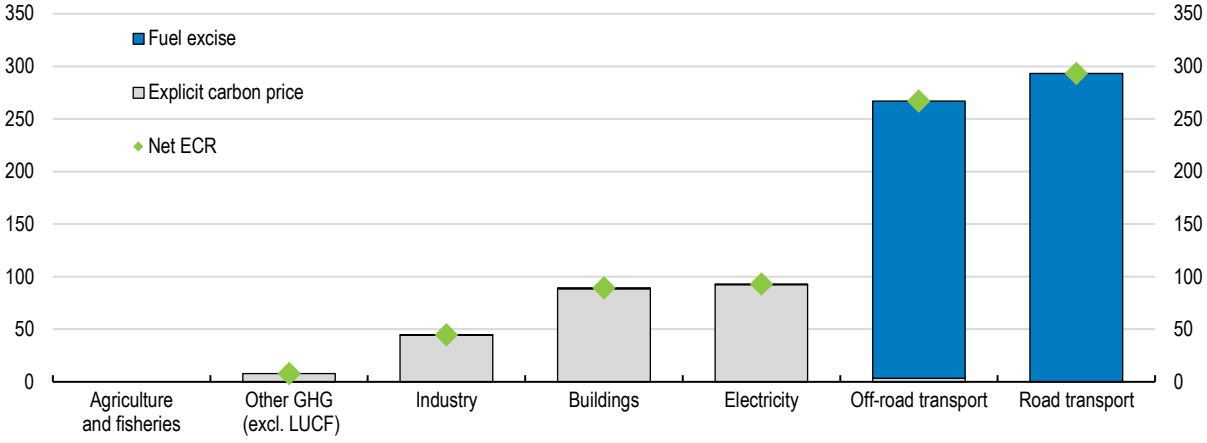


Source: OECD (2022), Pricing Greenhouse Gas Emissions: Turning Climate Targets into Climate Action, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris.

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Figure 4.5. Effective carbon rates differ across sectors

Effective Carbon Rates (ECR) by sector, EUR per tonne of CO_2-eq, 2021



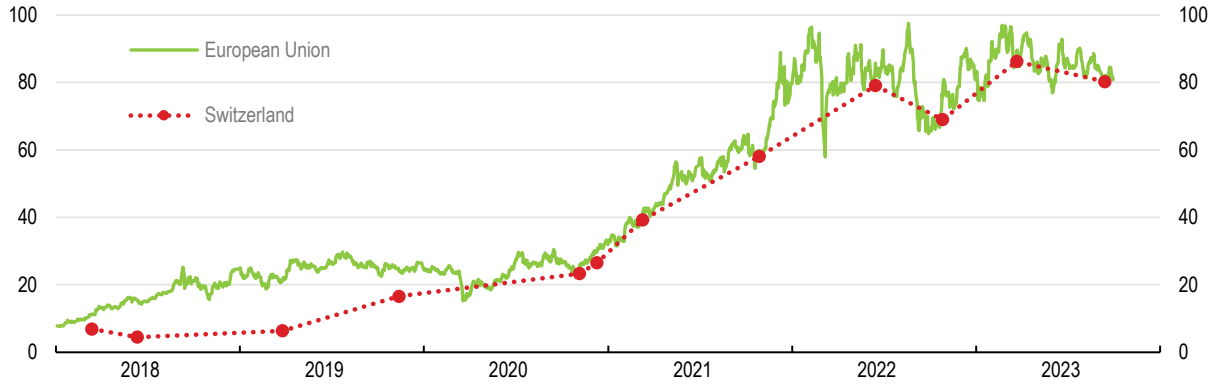
Source: OECD (2022), Pricing Greenhouse Gas Emissions: Turning Climate Targets into Climate Action, OECD Series on Carbon Pricing and Energy Taxation, OECD Publishing, Paris, https://doi.org/10.1787/e9778969-en.

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Switzerland introduced its emissions trading scheme in 2008 to give companies the opportunity to operate under the same rules as their international competitors – especially in industries with substantial emissions resulting from the use of heating and process fuels as well as from cement production. Since January 2020, Switzerland's emissions trading scheme has been linked to the EU's Emissions Trading System (EU ETS), and the emission allowance price has since converged with the EU levels (Figure 4.6). The linking with the EU ETS implied harmonization of rules for allocation of free emission allowances and required identical sectoral coverage. The ETS covers emissions from large emitters in industry, power and internal aviation (intra-EU, EEA and the UK area).

Figure 4.6. The emission allowance price has converged with EU levels

Emission Trading System (ETS) allowance prices, Euro per ton



Source: International Carbon Action Partnership (ICAP), The Allowance Price Explorer, https://icapcarbonaction.com/en/ets-prices

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Switzerland can strengthen incentives for decarbonisation within the emission trading system in step with the planned strengthening of the EU ETS under the Fit-for-55 package. Failure to harmonise rules will disadvantage Swiss exporters trading with the EU. More ambitious emission-reduction targets will be set, implying higher annual reductions of the cap. Free allocation of emission allowances to aviation will be phased out by 2026. Free emission allowances will also be phased out for selected carbon-intensive sectors over a nine-year period (from 2026 to 2034). For these sectors, to ease rising costs and avoid carbon leakage the EU envisages a carbon border adjustment mechanism (CBAM), starting in 2026. CBAM will impose a charge on the emissions embodied in carbon-intensive EU imports, based on their carbon content. The importer will be charged the EU ETS price, deducting any carbon price effectively paid in the country of origin. In June 2023, the Federal Council recommended that for now Switzerland refrain from introducing a CBAM.

The Swiss CO_2 levy – an explicit carbon tax – on heating and process fuels is another important pillar of Swiss climate policy. It stands at CHF 120 per tonne of CO_2 (roughly EUR 125). The revised CO_2 Act had envisaged an increase to CHF 210 per tonne of CO_2, but after the rejection of the revised CO_2 Act at the referendum in 2021, these plans were scrapped. No further increases are foreseen for this tax until 2024 and the currently proposed third CO_2 Act, for the period after 2024, also keeps it at the current level.

Carbon prices are cost-effective and efficient instruments to reduce emissions and further efforts could be made to strengthen the CO_2 levy. Fixed at CHF 120, the CO_2 levy is set to be eroded in real terms over time. A 2% annual inflation over 10 years would imply close to 20% erosion in real terms, which would be inconsistent with the need to accelerate emissions reductions. Moreover, surveys of various expert groups (Pahle et al., 2022) indicate that expectations about the EU ETS allowance price (carbon price within the EU ETS) range between EUR 130-160 in 2030 (CHF 125-155 at current currency values). In the Energy Perspectives 2050+ scenarios, the Swiss Federal Office of Energy considers a price of CHF 50 in 2030

and CHF 153/t CO_2 in 2035. On the ground of efficiency and consistency of carbon pricing across sectors, there is rationale to increase the CO_2 levy further after 2030.

Revenues from the CO_2 levy are redistributed to the population and towards green investment. In 2022, the CO_2 levy resulted in an annual revenue of roughly CHF 1.2 billion (0.16% of GDP). Two thirds of the revenue is redistributed directly to the population and the economy. Roughly one third of this goes to the population, redistributed uniformly to all residents of Switzerland (each person receives the same amount). The rest goes to companies, based on paid wages. The remaining third of the revenue (max. CHF 450 million) from the CO_2 levy is used by the Confederation and the cantons to support energy-efficient renovations and renewable heating energy through the buildings programme. Another CHF 25 million annually are allocated to the technology fund for the promotion of innovative companies. The proposed third CO_2 Act envisages to earmark a larger part (at most half instead of at most one third) of the revenues for measures in the buildings sector and innovation. This will help accelerate emission reductions in the buildings sector and boost green innovation further.

Public support for increasing environmental taxes is low. The rejection of the ambitious revised CO_2 Act at a referendum in 2021 being a case in point. The authorities could consider raising the CO_2 levy after 2030 while reconsidering the redistribution of the revenues from the CO_2 levy to tackle acceptability concerns. For example, instead of the existing uniform redistribution, the part of the redistribution that goes to the population and the economy could target lower income households that are more affected by rising emission prices. Furthermore, strengthened communication about the goals of the CO_2 levy, the redistribution and the available subsidies and their benefits could dampen the opposition to carbon prices. This could help signal the country's commitment to achieve a fair transition toward net zero and increase the acceptability of climate policies.

Exemptions from the CO_2 levy reduce the efficiency of the tool. GHG-intensive SMEs (not under the ETS) can be exempted – on competitiveness grounds – if they commit to implement measures towards uninterrupted emission reductions (negotiated reduction commitment). Between 2022 and 2024, GHG emissions must be reduced by two per cent per year within the scheme, compared to 2021 levels, but smaller companies that emit less than 1500 tonnes of CO_2e per year are exempt from this predetermined emission reduction path. They are instead subject instead to individualised targets.

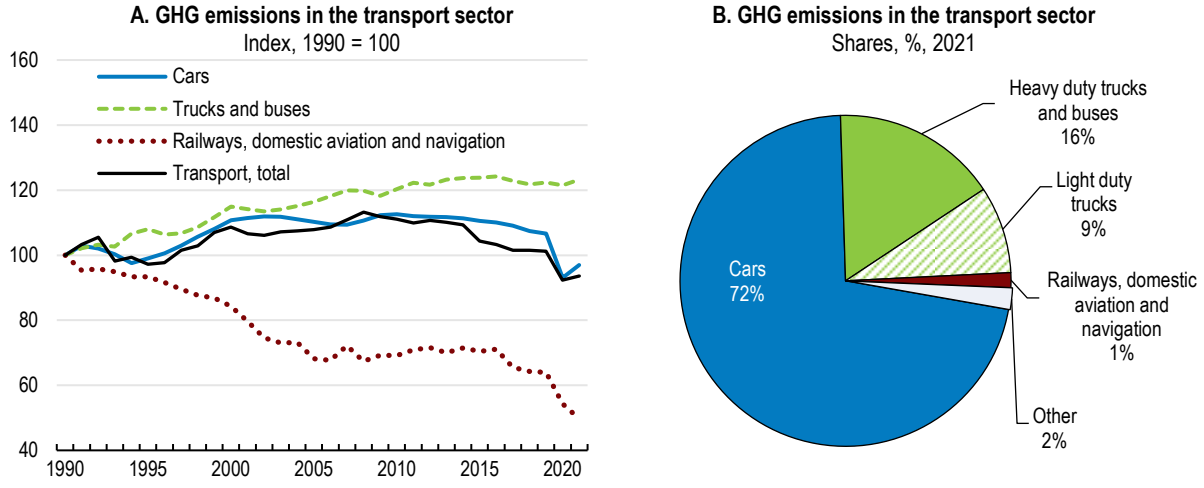
While emissions have been effectively reduced for companies under the scheme (negotiated reduction commitment), abatement has not been superior to what it has been in companies subject to the CO_2 levy or within the ETS. In addition, the scheme comes with a high societal cost due to foregone carbon tax revenues, the subsidies for companies that overreached targets (now extinct) and monitoring (Hintermann and Zarkovic, 2021 and 2020; SFOE, 2016). Yet, the Federal Council aims to extend and strengthen the scheme beyond 2024, as proposed in the draft third CO_2 Act. The new scheme will be available in all sectors and all companies – without exception – will have to commit to a decarbonisation roadmap. The scheme is planned to expire in 2040. Given the higher cost of the scheme compared to market-based mechanisms, the authorities should ensure that reduction targets and decarbonisation roadmaps are ambitious enough to exceed the 2040 target for industry (50% reduction on 1990).

Accelerating emission reductions in road transportation

The road transport sector will have to significantly accelerate the pace of emission reductions. Cars remain a major emitter (Figure 4.7). Compared to 1990, total emissions have only been reduced by 7%, missing the 1990-2020 target of a 10% reduction. Increased emission performance of road vehicles has been offset by rising road transportation. Between 2010 and 2020, emissions from the road sector decreased on average by 1.8% per year, but this pace will need to more than double to meet the 2040 target (-57% compared to 1990).

The authorities, via the proposed third CO_2 Act, plan to further tighten emission regulations on vehicles, in line with EU regulations. The proposal also envisages to further strengthen the obligation for motor fuel importers to compensate for part of CO_2 emissions from imported fuels by emission-reducing projects and by the obligation to put biofuels on the market. The resulting costs incurred by motor fuel importers can be passed onto the price of fuel for consumers, subject to a cap of 5 cents per litre for each obligation. Financial support is planned towards the extension of charging infrastructure for electric vehicles and the conversion of diesel-powered public buses to more emission efficient vehicles. The target of ensuring that 15% of new passenger car registrations are fully electric or plug-in hybrids by 2022 was already exceeded in 2021. By the end of 2025, this target is raised to 50% of new registrations (Federal Council, 2022). The authorities also plan to scrap mineral oil tax reliefs for public transport from 2025 onwards, which would be a step in the right direction. This opportunity should be taken to also scrap exemptions to the mineral oil tax for users in the agriculture and forestry sector that distort environmental incentives.

Figure 4.7. Cars and other road transportation remain major emitters



Note: Emissions from international aviation and navigation are excluded.
Source: Federal Office for the Environment (FOEN).

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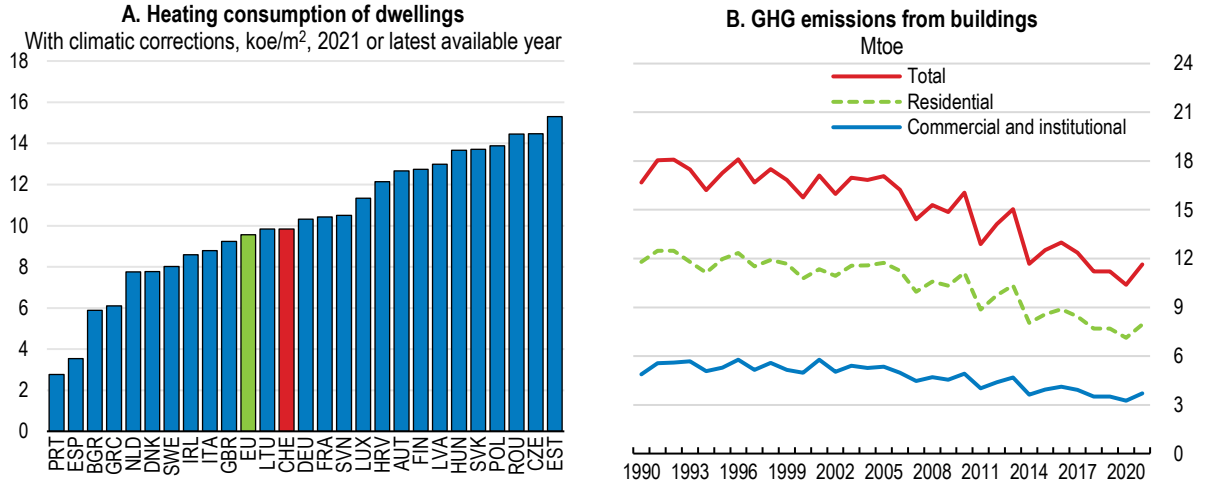
The mineral oil tax, while providing for high effective taxation of carbon in international comparison, has not risen in real terms over time. Also, the societal cost of road fuels is elevated due to impacts on climate, pollution, congestion, the need for infrastructure maintenance, etc., and the tax is estimated to be insufficient to cover the cost (Dolphin, 2023; Parry et al., 2021). Introducing a carbon price component within the mineral oil tax could efficiently raise incentives for emission reductions in the road sector. Alternatively, Switzerland could consider taking part in the planned new emission trading system of the EU for road fuel distribution and buildings (the EU ETS II). The new EU ETS II is to be established from 2025 and, as a cap-and-trade system, it will incorporate tightening caps on emissions with increasing price incentives. Revenue gathered from auctioned allowances could be used for further green investment as well as targeted redistribution, as planned in the EU Social Climate Fund or to reduce distortive taxes.

Accelerating emission reductions in the buildings sector

Heating consumption (climate-adjusted) per square meter of residential housing is above the EU average (Figure 4.8). Despite significant emission reductions since 1990, the sector missed its national target in 2020. According to the Federal Statistical Office (FSO, 2023), in 2022, two thirds of households and 57% of buildings were still heated by fossil fuels (oil and gas). 19% of buildings were heated via heat pumps, a quadrupling since 2000. The pace of emission reductions needs to rise from 4.3% per year over the 2010-

2020 period, to 6% per year to reach the 2040 target of 82% reduction from 1990. Reductions so far have been achieved mostly through installation of low (or zero) emission heating systems in new constructions. Now, focus will need to shift towards renovation of the existing building stock such as replacement of fossil fuel-based heating systems and improved insulation, which will likely be more costly.

Figure 4.8. There is room to reduce emissions for housing



Source: ODYSEE-MURE; Federal Office for the Environment (FOEN).

StatLink https://stat.link/pfombd

The National buildings refurbishment programme provides subsidies to make buildings more energy efficient. It is implemented by the cantons and financed from the partial redistribution of the CO_2 levy (one third of total revenue) and cantonal funds. According to the proposed third CO_2 Act, the programme is planned to be strengthened by earmarking up to 50% of the CO_2 levy revenues to the programme. In addition, the recently passed Climate protection Act has added another CHF 200 million per year for ten years for replacing fossil fuel-based heating systems with green alternatives in buildings. These policy steps will help make the housing stock more energy efficient. Besides, given that the CO_2 levy will decline in real terms over time (see above), the authorities should consider raising the CO_2 levy further in the future, or – as for the road transport sector – consider joining the new EU ETS II for the transport and building sector.

Building codes of the cantons are other instruments that regulate energy consumption standards for new and existing buildings. The Conference of Cantonal Energy Directors aims to harmonise building codes throughout Switzerland. However, these need to be implemented through cantonal energy acts, and as of 2023, only 19 (of 26) cantons have enacted them. The revised CO_2 Act had aimed at introducing federal CO_2 standards per square meter of heated surface, but this Act was then rejected at a referendum in 2021.

The cantons plan to continue strengthening energy-efficiency regulation in buildings, but efforts should be more uniform across the country. Some cantons have already completely banned the installation and replacement of fossil heating systems while others lag behind (FOEN, 2022b). Impact analysis has shown that regulations have had an important impact on emission reductions beyond the overall subsidies and the CO_2 levy. Replacement of fossil fuel heating systems with renewable energy sources has been markedly faster in cantons with regulations in place, compared to cantons without regulations, and the pace of emission reductions has roughly doubled (FOEN, 2023).

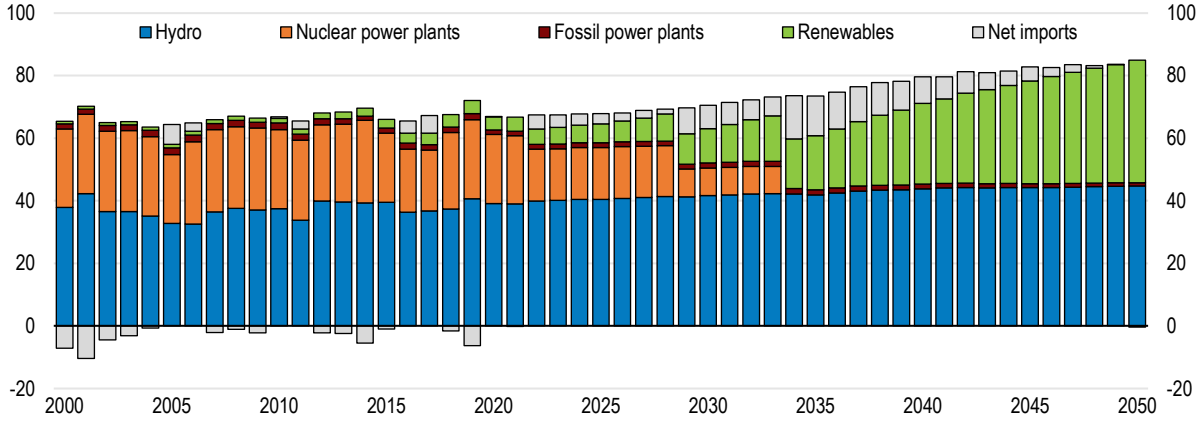
Ensuring climate-neutral power generation and electrification

Switzerland relies almost exclusively on fossil-free sources of energy for power generation. Domestically, electricity is mainly produced using hydropower and nuclear power that together account for 90% of electricity production. In the summer, Switzerland exports surplus electricity, while it imports about the same amount over the peak-demand winter months.

The energy transition will require further electrification of the Swiss economy, notably in transport and residential heating. Electrification means replacing technologies or processes that use fossil fuels, like internal combustion engines and gas boilers, with electrically-powered equivalents, such as electric vehicles or heat pumps. Electricity demand and hence annual production of electricity is set to rise by close to 30% by 2050 (Figure 4.9) according to scenario analysis by the Federal Office of Energy (SFOE, 2023). NEA (2022) reports an increase in projected demand for electricity of close to 50% by 2050. Switzerland is currently not a highly electrified country. In 2022, about a quarter of its energy consumption stemmed from electricity. As a comparison, in highly electrified countries such as Norway almost half the energy is consumed in the form of electricity (NEA, 2022).

Figure 4.9. Annual production of electricity is set to rise

Electricity production by technologies, net-zero emissions basis scenario, TWh



Note: Lifetime for nuclear power plants is set at 50 years.
Source: Federal Office for the Environment (FOEN), Energy perspectives 2050+.

StatLink https://stat.link/pk6dtm

The Energy Strategy 2050 stipulates the goal of climate-neutral energy supply by 2050.This will be achieved through improved energy efficiency, an increased share of renewables and a gradual phase out of nuclear energy, while ensuring a high level of security of supply. Moreover, triggered by Russia's war in Ukraine, in 2022, Switzerland undertook several short-term measures to address possible gas and electricity shortages. The authorities procured an energy reserve in the form of water withheld in reservoirs (hydro reserve), reserve (gas) power plants and passed emergency measures, valid until 2025, to speed up the development of utility-scale solar PV plants in Alpine areas.

The revised Energy Act – still subject to a possible referendum – prescribes that electricity production from renewables, excluding hydropower, should increase from 4 400 GWh in 2020 to 35 000 GWh in 2035, an 8-fold increase. The network surcharge of 2.3 centimes per kWh paid by all electricity consumers (amounting to ca. CHF 1.5 billion per year) helps finance needed investment for the energy transition. Investments in renewables are incentivised by floating market premia and investment aids that finance 20%-60% of the total investment costs of renewable projects. With the revised Energy Act, the financing and investment aids are ensured until 2035. The authorities also plan to speed up planning and authorisation procedures for power plants of national interest and shorten appeal procedures. Continued

financing and faster approval processes will provide additional incentives and improve the business climate for the needed investment into renewables.

Greater electrification and higher reliance on renewables also require investment to upgrade and expand the capacity of the electricity grid. Switzerland's grid is in need of renovation (SFOE, 2018). Structural congestion already exists in the transmission grid. Consequently, power plants are regularly instructed to limit their production (Swissgrid, 2023a). Furthermore, the power grid will need to be adjusted to a greater number of decentralised energy suppliers. The Federal Office of Energy estimates that under the goal of climate neutrality, about CHF 75 billion (10% of GDP) will be needed to maintain and restructure the electricity grid (SFOE, 2022). The costs of the grid will thereby rise, leading to higher prices of electricity.

Lengthy approval and authorisation procedures and the lack of transparency hamper the urgent and necessary adaptation of the network infrastructure (Swissgrid, 2023b). According to Swissgrid – the transmission grid operator – the period from the start of a project to the commissioning of the relevant line is currently around 15 years, but often gets delayed up to 30 years (Swissgrid, 2023a). Such delays are inconsistent with current needs and targets. As part of the Energy Strategy 2050 and the Electricity Network Strategy, the authorities plan to further optimise licencing procedures for transmission line projects, clarifying criteria for further grid development and for using either overhead lines or underground cables, and to improve overall acceptance of transmission line projects. Implementing such measures is necessary for Switzerland to successfully ramp up its electrification and needed adjustments to the power grid.

Following the nuclear reactor disaster of Fukushima in 2011, the Swiss authorities decided on a progressive withdrawal from nuclear energy. No licences will be given for new nuclear power plants. However, the exact phase-out date has not been determined and existing plants can continue if deemed safe. In their current policy plans, the authorities assume a technical lifetime of the newest reactors of 50 years. This would imply that in 2034 the last reactor would stop operating. Operators are currently assessing lifetime extensions of 10 years up to 2044. Such a phasing out of one third of electricity production will trigger the need for steep and costly ramping up of new renewable power generation. The Nuclear Energy Agency (NEA, 2022) analysed various scenarios for future electricity production in Switzerland and concluded that prolonging the life of two existing nuclear reactors up to 2050 – while investing to fulfil all safety concerns – and covering remaining electricity needs from renewables would be the least costly scenario to reach climate neutrality.

It is also important for Switzerland to keep its high interconnection with its European neighbours to secure a stable grid operation, strengthen security of supply and allow for a high level of mutually beneficial electricity trading. However, negotiations on an electricity agreement between Switzerland and the European Union have suffered a major setback since 2018. While EU electricity market integration is advancing, Switzerland is being increasingly excluded. In its recent review, IEA (2023) concludes that market integration with the European Union would improve the efficiency and co-ordination of transmission flows and contribute to security of supply in Switzerland as well as in EU member countries. Switzerland should align its electricity market regulations with those in the European Union, including on full market opening, to prepare for the signing of an electricity agreement with the EU.

Adapting to climate change

Climate change is impacting Switzerland. The five warmest years since 1864 were all recorded after 2010 (FOEN, 2020). Alpine glaciers have lost over 60 percent of their volume since 1850 (MeteoSwiss, 2023). Heavy precipitation events have also become more intense and more frequent. A warmer climate results in drier vegetation during the summer months, increasing the risk, frequency, and intensity of uncontrollable forest fires which in turn disrupt lives and livelihoods through associated economic impacts and the health consequences of heat and smoke particles that can travel far and wide (OECD, 2023). Swiss regions with significant tourism (such as the Alps) are especially vulnerable. Less snowfall increases

the need for artificial snowmaking, putting pressure on energy and water systems (Francois et al., 2023). Additional risks arise from deteriorating slope stability leading to landslides, debris flows and rockfalls. Biodiversity will also be affected by climate change, particularly at higher altitudes (Kato et al., 2021).

Climate change may present some opportunities for energy production in winter, reductions in snow damage, income from summer tourism, and possibly from agriculture, albeit with greater variability. Yet estimates of the welfare effects of climate change (health, buildings, infrastructure, energy, water, agriculture, tourism and spill-overs to other sectors) are largely negative, at -0.4% to -1.4% of household consumption (Vöhringer et al., 2019). Existing studies likely underestimate the actual costs of climate change, as indirect effects on biodiversity and health are difficult to quantify using available data.

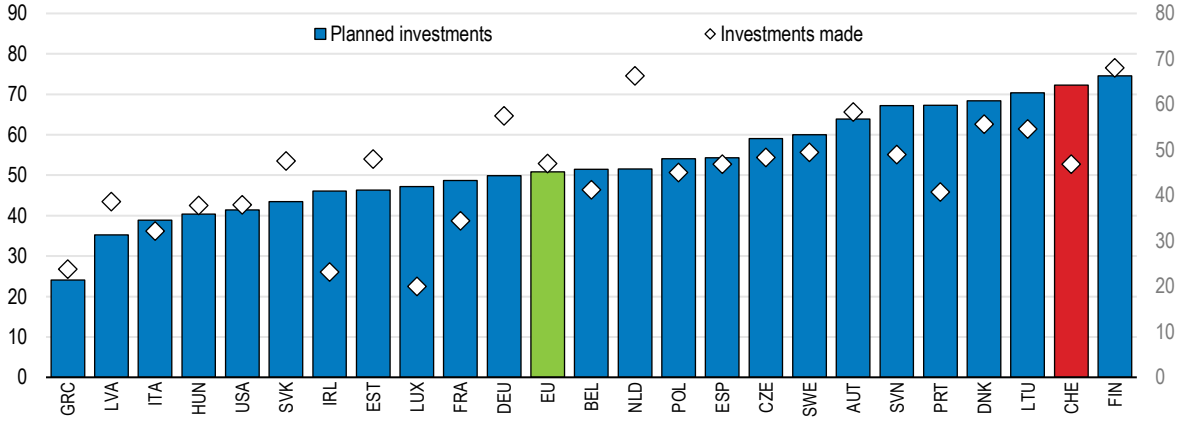
The Federal Council adopted a strategy for adaptation to climate change in 2012 (FOEN, 2012). The strategy sets out the goals and principles for adaptation, identifies the areas for action in nine sectors (water management, management of natural hazards, soil protection, agriculture, forestry, energy, tourism, biodiversity management, health (human and animal), and housing) and describes the cross-sectoral challenges. The updated 2020-2025 action plan identifies rising energy demand for cooling and lower hydropower generation in the summer as key challenges, to be addressed by the Swiss Federal Office of Energy (SFOE). To counter higher risks around hydropower capacity in the summer period, a further boost to renewable energies such as sun or wind is planned.

Swiss companies are also adapting to climate change to strengthen resilience. Nearly one fifth of the Swiss companies surveyed in 2023 perceive themselves to be majorly exposed to climate-related risk (Seiler, 2023). More than half of Swiss companies have already invested to mitigate the adverse effects of weather events or to cut carbon emissions in the last year. This trajectory is set to gain momentum, as almost three quarters of all companies are planning such investment in the next three years, a higher share than in most EU countries (Figure 4.10).

Switzerland should continue mitigating the build-up of heat, increasing the capacity to absorb rainwater and planning for lower snow levels in the Alps. Adaptation at a cantonal level should reduce specific risks and impacts of climate change. For example, the cantonal authorities in Ticino, in cooperation with the Swiss Federal Institute for Forest, Snow, and Landscape Research WSL, developed the concept “Forest Fire 2020” to reduce the risk of forest fires as well as their consequences (Eriksen and Hautir, 2021). Cooperation at the international level is also important in the fields of civil protection, disaster management, and environmental protection aid capacities to cope with the already unavoidable consequences of climate change.

Figure 4.10. Many Swiss companies plan investments towards climate mitigation and adaptation

Many firms are planning climate investments, % of firms



Source: KOF Economic Bulletin; European Investment Bank Investment Survey (EIBIS).

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Table 4.1. Past recommendations on reaching environmental and climate objectives

Recommendations in previous Surveys	Action taken
Prepare a federal waste prevention strategy including indicative targets for municipal waste reduction.	In April 2022, the Federal Council approved an action plan with the aim of halving food waste by 2030, relative to 2017 levels. In 2023 the private sector founded an industry organization for the collections of plastics and beverage cartons.
Continue increasing transparency in relation to climate compatibility of financial portfolios. Strengthen the disclosure of climate-related risks for large companies and the financial sector.	In June 2022, the Federal Council launched the voluntary Climate Scores, a set of climate indicators that Switzerland considers best practice regarding climate transparency that will help investors better asses the climate alignment of financial products. The Climate Scores were updated by the Federal Council in December 2023, adding additional - optional - questions on the climate-related goals of the portfolio and compulsory information on exposures to renewable energies. The revisions will apply from January 1, 2025. The ordinance adopted by the Federal Council on November 23, 2022 and in force since January 2024 makes the Task Force on Climate-related Financial Disclosures (TCFD) mandatory for larger companies (currently 500+ FTEs and either CHF 20 million + balance sheet or revenues of CHF 40 million+; in the last two years). The ordinance includes disclosing transition plans, requires setting quantitative targets on direct and indirect carbon emissions, and relies on a “comply or explain” approach.

Table 4.2. Recommendations

MAIN FINDINGS	RECOMMENDATIONS
Carbon prices are cost effective and efficient instruments to reduce emissions. Switzerland imposes high carbon prices in international comparison. However, the CO2 levy and the mineral oil tax are set to be eroded in real terms over time. Various exemptions reduce the efficiency of carbon pricing.	**Strengthen effective carbon pricing, by raising the CO2 levy after 2030 or by joining the EU ETS II for transport and buildings.** **Continue efforts to broaden the base of carbon taxation by reassessing exemptions.**
Public support for carbon prices seems low. Currently, two thirds of the revenue from the CO2 levy is redistributed to the population and the economy, whereby the part that goes to the population is redistributed uniformly to all residents of Switzerland.	Earmark a larger part of the CO_2 levy revenues to support energy efficiency through the Buildings Programme and to support innovation. Consider a more progressive redistribution of the revenues from the CO_2 levy to address acceptability concerns.
Negotiated reduction commitments exempt firms from the CO2 levy if they commit to reduce emissions. The scheme is costly due to foregone carbon tax and monitoring.	**Ensure that reduction targets and decarbonisation roadmaps within the negotiated reduction commitments are ambitious enough to exceed the 2040 target for industry.**
Various exemptions reduce the efficiency and effectiveness of carbon pricing.	Eliminate the mineral oil tax exemption for public transport and agriculture.
Emissions per square meter of residential housing (climate-adjusted) are above the EU average and the pace of emission reductions needs to rise. Strict building codes contributes to emission reductions. However, building codes have not been enacted uniformly across cantons.	Ensure a more uniform strengthening of building codes across cantons.
Further electrification will be required to reach climate neutrality. This will require steep investment into renewables, such as solar and wind, whose electricity output (excluding hydropower) should rise 8-fold to 2035. The recently revised Energy Act has secured incentives for investment up to 2035 through floating market premia and investment support.	**Continue improving the investment framework for renewables by speeding up planning and authorisation processes for building renewable power plants, as planned.**
Greater electrification and higher reliance on renewables will require investment to upgrade, expand and restructure the electricity grid. Switzerland's grid is already congested. Lengthy approval and authorisation procedures and the lack of transparency hamper the urgent and necessary adaptation of the network infrastructure.	Streamline licencing procedures for transmission line projects and clarify criteria for further grid development.
Switzerland benefits from high interconnection with its European neighbours, which allows mutually beneficial electricity trades. However, negotiations on an electricity agreement between Switzerland and the European Union have stalled since 2018.	**Increase market and grid integration into the European Electricity System to guarantee security of supply and regional grid stability, by signing an Electricity Agreement with the EU.**
A warmer climate and increased frequency and intensity of extreme weather events raise the risk of natural disasters and impact biodiversity. This adversely affects health, infrastructure and housing and economic sectors such as tourism and agriculture.	Implement the Strategy for adaptation to climate change, including by addressing energy challenges in the summer.

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5 Strengthening economic resilience within global value chains

Erik Frohm

Switzerland has shown remarkable strength during past economic downturns. A comprehensive risk planning and monitoring system, as well as essential-goods stockpiles has effectively bridged temporary supply disruptions. Yet, rising geopolitical tensions and a global shift towards protectionism pose significant challenges for the Swiss economy. To raise its resilience and productivity, Switzerland should refrain from relying on distortive industrial policies or trade restrictions, and rather continue to commit to international trade and cooperation, strengthen ties with key trading partners and enhance domestic competition. Resuming negotiations with the EU is key to safeguard access to the single market and deepen the economic partnership. Reducing trade barriers and lowering the administrative burden could reduce trade costs, which would allow companies to diversify supply chains while raising productivity.

Adapting to a changing global economic landscape

Escalating geopolitical tensions and recent crises, such as the COVID-19 pandemic and Russia's war of aggression against Ukraine, have put economic resilience (namely, society's ability to function and recover from crises without lasting damages, as well as a country's capacity to adapt to structural changes) at the top of the policy agenda. As a country that relies heavily on global markets to sustain its high living standards, Switzerland can be particularly affected by changes in the global economic landscape or disruptions in complex global value chains (GVCs). Adverse shocks can rapidly propagate through trade and financial linkages, underscoring the imperative to detect and address risks and dependencies. Systemically building economic resilience can dampen the adverse effects of crises on the domestic economy, help protect vulnerable households, ensure a rapid economic recovery and raise long-term growth (OECD, 2021a).

Waning global support for economic openness poses sizable risks. While key indicators of global openness remain at elevated levels (Goldberg and Reed, 2023; Franco-Bedoya, 2023; Di Sano, Gunnella and Lebastard, 2023), eroding trust in the international community has given rise to protectionist sentiments that are starting to be reflected in global trade (WTO, 2023). Global uncertainty surged over the 2010s and in the 2020s, fuelled by specific events like Brexit, the US-China dispute in 2018, the COVID-19 pandemic and most recently Russia's war against Ukraine. The share of global imports covered by trade-restrictive measures have also risen significantly since the Global Financial Crisis (GFC) from covering less than 1% of imports in 2009 to over 9% in 2022 (Figure 5.1, panel A). Protectionist pressures increased through the COVID-19 crisis and led to severe bottlenecks in supply chains (Figure 5.1, panel B), initially affecting medical and protective equipment and subsequently impacting other intermediate inputs as economies worldwide reopened (Frohm et al., 2021; Attinasi et al., 2021). Furthermore, Russia's war against Ukraine has severely limited the availability of natural gas in Europe, thus raising concerns about the future energy supply and raising awareness of potential vulnerabilities and risks in other energy and commodity markets. As a result, companies see geopolitical tensions and deglobalisation as key risks in the medium term (Oxford Economics, 2023)

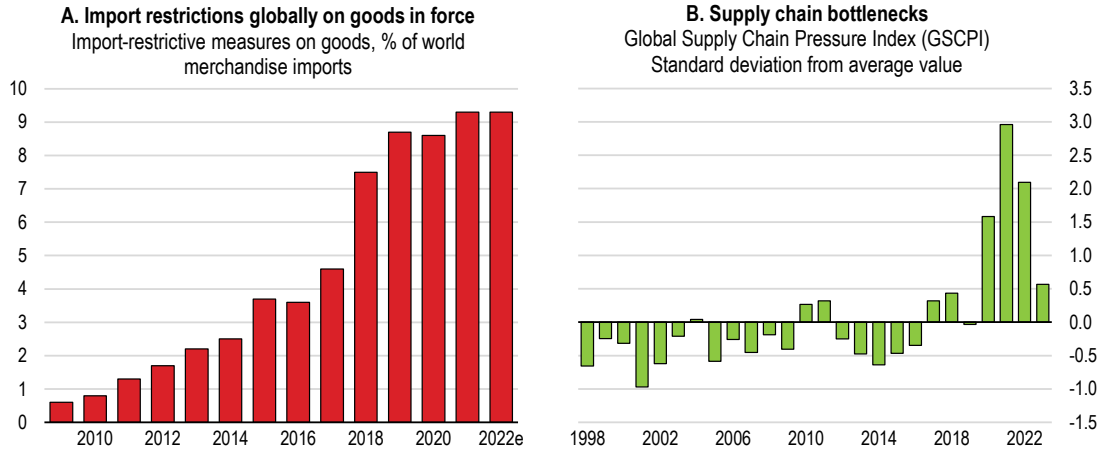
Eroded trust in the international community, successive crises that uncovered potentially excessive dependencies and concerns for national security, have intensified calls for reshoring of production and active industrial policies, particularly among the world's largest economic blocks. Direct policy support has been stepped up for the transition towards achieving net zero greenhouse gas emissions in the United States through the Inflation Reduction Act (IRA) and in the EU through the Green Deal Industrial Plan. Other recent examples include attempts to develop a domestic semiconductor industry in the United States (The White House, 2022) and the European Union (European Commission, 2023a) while China has adopted a so-called dual circulation strategy to become self-sufficient (Herrero-García, 2021). Overall, the number of subsidies that distort trade and competition have risen throughout the 2010s (Global Trade Alert, 2023).

Switzerland needs to adapt to the evolving global economic landscape and the actions of its trading partners. This entails a comprehensive review of its international position and framework conditions, the identification of trade dependencies, policies to bridge temporary disruptions and a heightened focus on enhancing economic integration with strategic trading partners and lowering trade costs.

While the source of disruptions might vary (financial, pandemic or war), their economic consequences are often transmitted via international linkages. The stability and resilience of supply chains are thus key in shaping the societal consequences of economic disruptions. Yet, investing in resilience comes with costs as well as benefits, and decision makers must carefully weigh the trade-offs. The next section analyses Switzerland's openness towards the rest of the world, as well as the economy's performance during the last two global crises. The following section reviews the country's policies to address supply chain disruptions in the shorter term and discusses effective ways of anticipating vulnerabilities and tools to

bridge supply shortages. The last section analyses policies that foster the resilience of GVCs in the longer term and boost productivity.

Figure 5.1. Protectionism and supply disruptions have been rising



Notes: for panel A, the chart denotes the cumulative trade coverage of restrictions on goods estimated by the WTO Secretariat, based on information available in the TMDB on import measures recorded since 2009 and considered to have a trade-restrictive effect. The estimates include import measures for which HS codes were available. The figures do not include trade remedy measures. The import values were sourced by the UN Comtrade database.

Sources: Federal Reserve Bank of New York, Global Supply Chain Pressure Index, https://www.newyorkfed.org/research/gscpi.html; WTO November 2022 Report.

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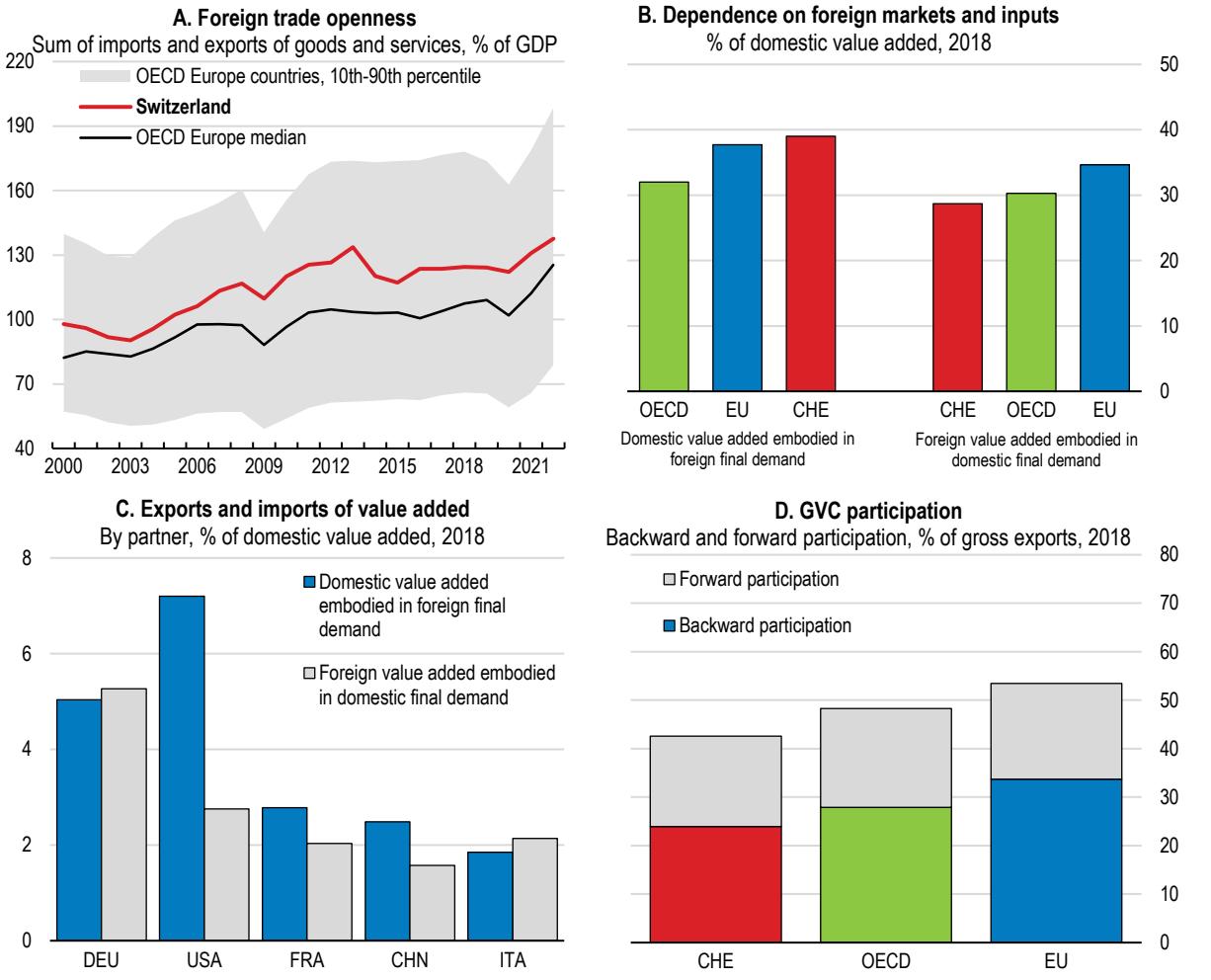
Switzerland's high living standards are underpinned by a highly open economy

Switzerland records some of the highest per capita incomes in the OECD, reinforced by a dynamic market-based economy, highly skilled workforce and prudent macroeconomic policies. Much of this success is driven by its position in global markets. Vast amounts of goods, services, labour, capital and knowledge cross Swiss borders, resulting in very high levels of productivity. As protectionism rises, a high degree of openness may expose Switzerland to disruptions in complex GVCs that can reinforce logistical, economic and policy risks (Crowe and Rawdanowicz, 2023). A sector-specific shock in one part of the world can potentially propagate quickly through supplier networks and disrupt economic activity (Acemoglu et al., 2012; Acemoglu, 2016; Frohm and Gunnella, 2021).

Openness to trade, capital and migration is high

Switzerland is markedly more open to trade than the OECD Europe median. Alongside the rest of the world, Switzerland has experienced a significant increase in the trade of goods and services in earlier decades. Swiss exports and imports rose from 76% of GDP in 1995 to 134% in 2013, and stood at 138% in 2022 (Figure 5.2, panel A). Global trade growth was fuelled by advancements in transport and communication technologies, alongside considerable trade liberalisation efforts (Gunnella et al., 2021; Franco-Bedoya and Frohm, 2022). Trade slowed in the early 2010s, due to sluggish global investment growth, rebalancing of growth in emerging market economies and a partial unwinding of GVCs (Haugh et al., 2016). It is too early to tell whether the trade growth since the pandemic represents a return to earlier trends, or simply reflects the post-pandemic surge in global demand. With a high trade share, Switzerland relies heavily on foreign demand and imports to sustain its economy (Figure 5.2, panel B). The largest linkages are with neighbouring countries in Europe, Germany, France and Italy but also the United States and China (Figure 5.2, panel C).

Figure 5.2. Switzerland is highly open to global markets



Notes: OECD is a simple average across OECD countries and EU is a simple average across OECD EU member countries. Backward participation is measured by foreign value-added share of gross exports. Forward participation is measured by domestic value-added share of foreign final demand.
Sources: OECD National Accounts database; OECD TiVA database – 2021 edition.

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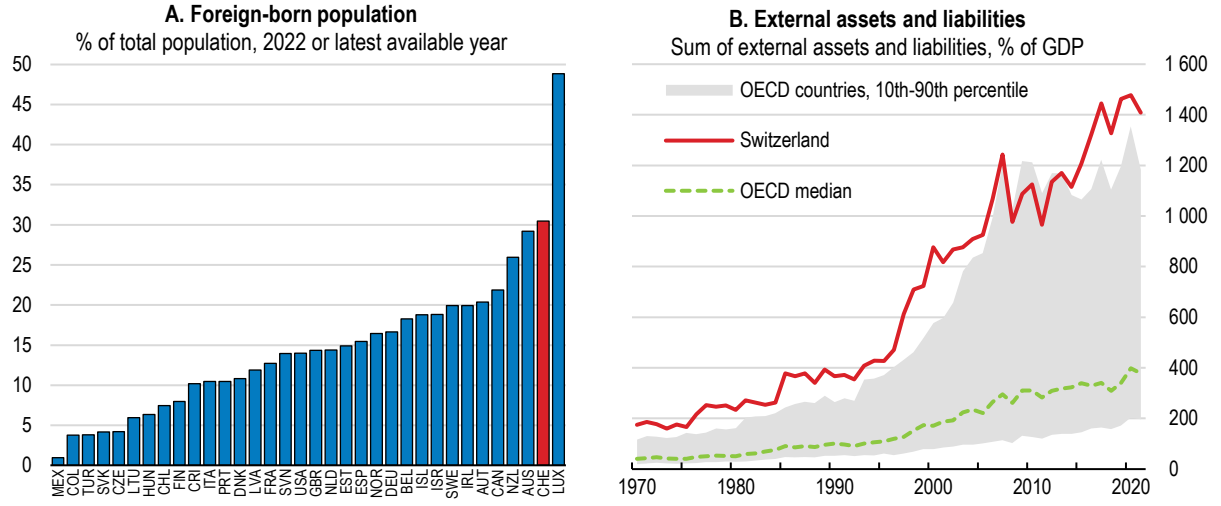
Foreign direct investment (FDI) plays a substantial role in the Swiss economy, with inward and outward FDI stocks representing 125% and 175% of Swiss GDP, respectively. Intellectual property protection, a favourable tax environment, and a highly skilled workforce have attracted multinational companies, leading to the establishment of regional or global headquarters in the country. This has stimulated GVC participation (Figure 5.2, panel D). Swiss companies have also invested in production, distribution and research facilities abroad (SECO, 2023a). In the manufacturing sector, the chemicals and pharmaceuticals industries contribute 50% to total goods exports and account for 10% of GDP, whereas other manufacturing sectors, including machinery, watches and precision instruments account for an additional 11% of GDP. In services, financial services and insurance account for 25% of services exports and 10% of GDP, among the highest in the OECD.

The openness of the Swiss economy extends beyond goods, services and FDI flows. Approximately one in three persons in Switzerland aged 15 or over are foreign born, one of the highest proportions in the OECD (Figure 5.3, panel A). Although immigrants are more likely than the native-born to have only completed mandatory education, foreign-born people that arrived in Switzerland after the age of 15 are also more likely to hold a tertiary degree than natives (OECD, 2023a). High skills are particularly needed

in Switzerland, where only a low share of work is in low-skilled occupations (OECD, 2022a). As such, Switzerland boasts one of the highest shares of foreigners that work in professional jobs (largely STEM-fields) in the OECD (OECD, 2023b). Nearly one-third of the employees in the information and communication technology (ICT) sector are foreign workers (SECO, 2022a) and about 40% of researchers are born in another country. The high share of immigrants has been instrumental in addressing labour and skills shortages, including in the healthcare sector, facilitated by the agreement on free movement of persons between the EU and Switzerland.

Close to a quarter of global cross-border assets are managed in Switzerland, making it one of the world's leading international financial centres. As such, external assets and liabilities reach more than 1400% of GDP (Figure 5.3, panel B), markedly higher than most OECD countries. The country is a leader in transaction financing, a key international location for insurance and reinsurance companies and hosts some of the world's largest commodity trading companies. The large financial sector exposes Switzerland to global financial risks, as was highlighted in March 2023 when the authorities facilitated a take-over of Credit Suisse by UBS (see the first chapter).

Figure 5.3. The movement of people and capital is very high



Sources: Milesi-Ferretti, Gian Maria, 2022, "The External Wealth of Nations Database," The Brookings Institution (based on Lane, Philip R. and Gian Maria Milesi-Ferretti, 2018, "The External Wealth of Nations Revisited: International Financial Integration in the Aftermath of the Global Financial Crisis," IMF Economic Review 66, 189-222.); OECD International Migration Database.

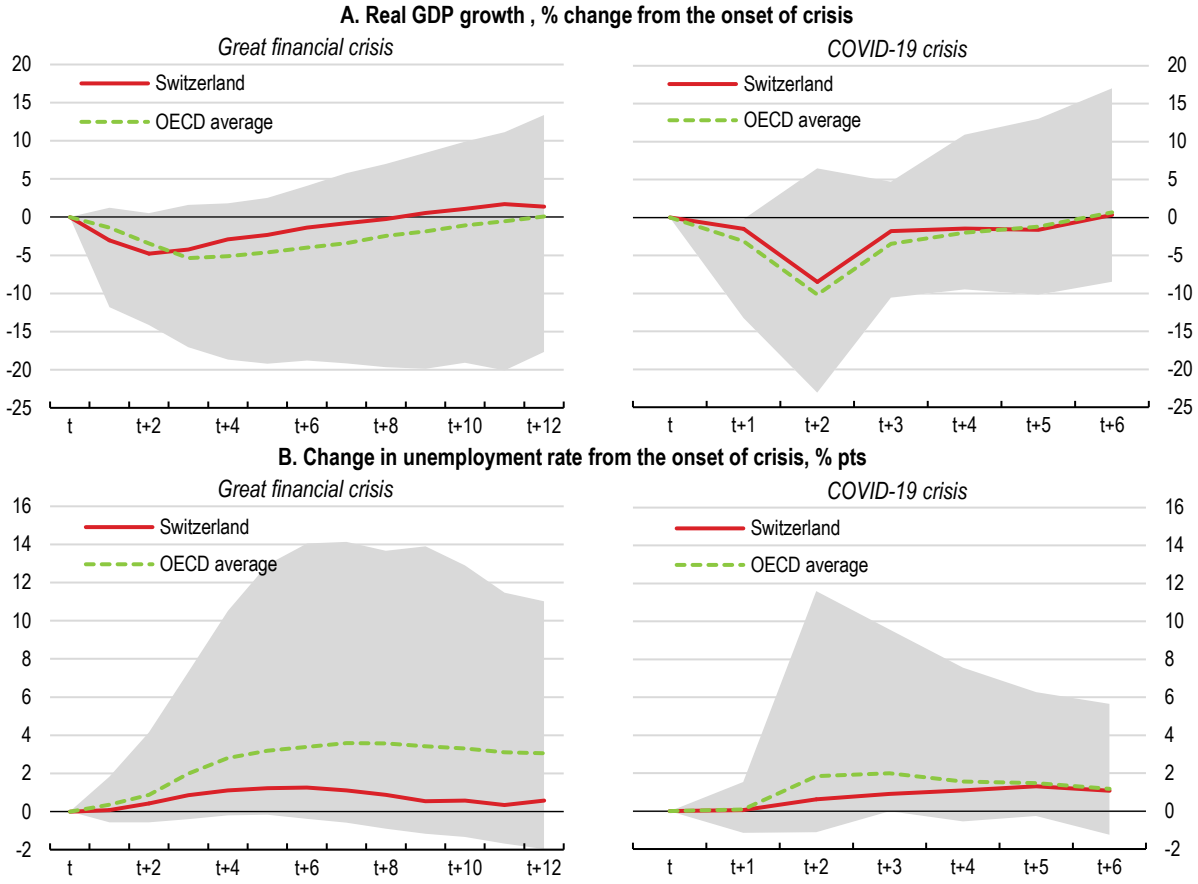
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Switzerland has weathered recent global shocks relatively well

Switzerland has exhibited resilience during past economic crises, despite its high dependence on foreign trade, GVCs and integration in the global financial sector. Following Russia's war of aggression against Ukraine, Swiss manufacturing activity receded amid weaker global trade. Energy prices affecting households rose by 23% and 94% for companies in 2022, the largest annual increase in recorded history, pushing inflation above the Swiss National Bank's (SNB) target band in February 2022. While Switzerland experienced higher inflation, price pressures were significantly less than in other OECD countries, and inflation returned to below 2% in the summer of 2023 (see the first chapter).

In past crises (the 2008/2009 Global Financial Crisis (GFC) and the 2020 COVID-19 pandemic), Switzerland fared better in terms of GDP and unemployment than most other OECD economies. Labour market developments followed a similar trajectory, with Switzerland experiencing lower increases in unemployment than the OECD average during the GFC (Figure 5.4).

Figure 5.4. Switzerland has managed to perform relatively well during the past two crises



Note: Gray areas represent the range of performance across OECD countries. OECD average is an unweighted average of OECD countries.
Source: OECD calculations based on OECD Economic Outlook database.

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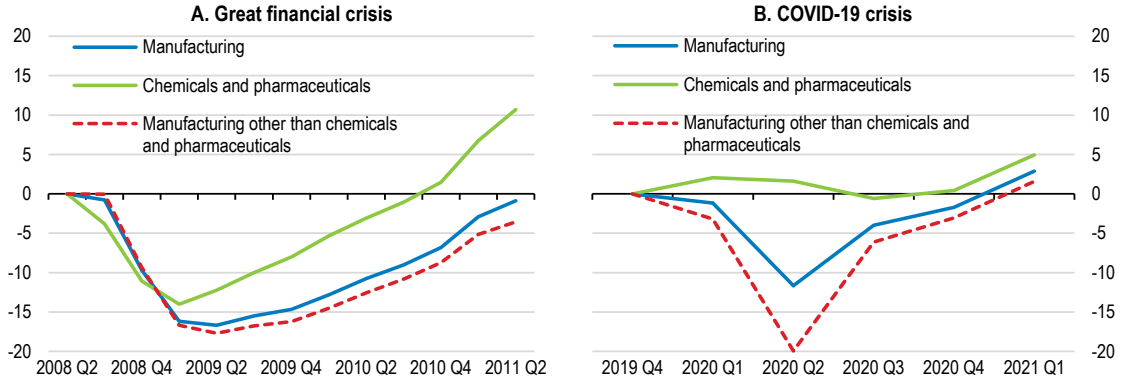
However, resilience to shocks at the aggregate level can obscure disparities across regions, sectors, and individuals. Unemployment rose more in the south-western part of the country, and more for lower skilled individuals during the GFC. The COVID-19 pandemic widened economic and health inequalities, disproportionately affecting low-income households (KOF Swiss Economic Institute, 2021). Additionally, foreign-born workers faced a more pronounced increase in their already higher unemployment rate compared to Swiss-born workers. Hijzen and Salvatori (2022) emphasised that women experienced more frequent reductions in working hours compared to men. They also noted a greater utilisation of short-term work schemes among low- to middle-skilled workers and a higher likelihood of job loss for low-skilled workers and those on temporary contracts. These findings indicate that the crisis had a particularly severe impact at the lower end of the wage distribution, underlining the need for temporary and targeted support measures for the most vulnerable people. The Swiss government has implemented numerous extraordinary measures to support vulnerable people, including broader access to short-time work compensation, extended unemployment benefits and the establishment of a special coronavirus income replacement scheme (Felder et al., 2023).

The GFC and the COVID-19 pandemic were very different in nature and had different impacts on the economy. The GFC primarily impacted aggregate demand, with bank failures and global financial sector disruptions severely weakening the real economy. In contrast, the pandemic caused international travel restrictions, global lockdowns, and a suspension of economic activity to contain the virus's spread. As such, the two crises hit some specific sectors very strongly (the financial sector during the GFC and the hospitality sectors during COVID-19), as well as the cyclically sensitive manufacturing sector. Some of

Switzerland's more favourable performance during large downturns in foreign demand is due to its specialisation in advanced manufacturing that is less sensitive to changes in the global economic landscape. For example, the pharmaceutical industry's performance has helped dampen the impact of shocks to foreign demand on Swiss manufacturing (OECD, 2009). This was the case both during the Great Recession and the COVID-19 pandemic (Figure 5.5).

Figure 5.5. Pharmaceuticals manufacturing in Switzerland is less sensitive to cyclical conditions

Real value added, % change from the onset of the crisis

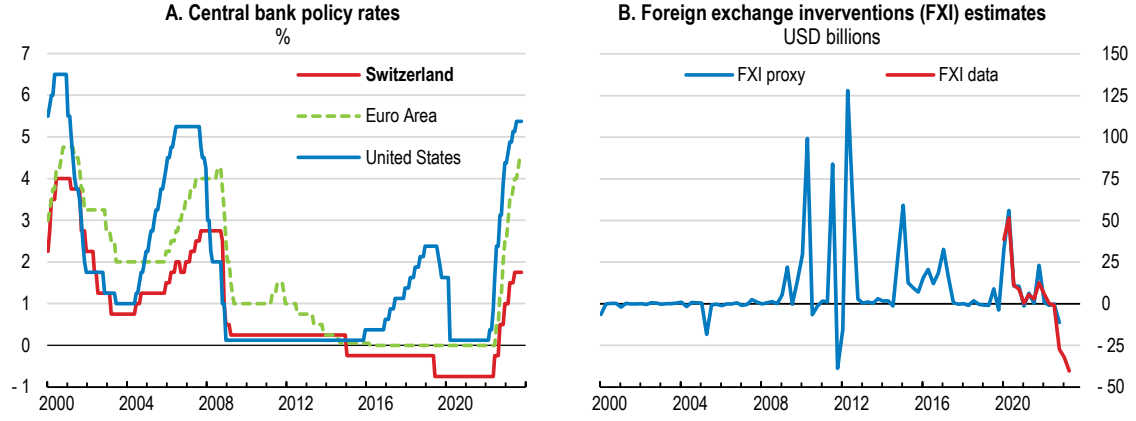


Source: Swiss National Bank (SNB) data portal.

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The SNB, the Federal government and the cantons have successfully deployed macroeconomic stabilisation tools to counteract the adverse effects of past crises. The SNB has responded swiftly to changing economic conditions through its policy rate (Figure 5.6, panel A). As a "safe haven" in times of global instability, Switzerland often experiences substantial inflows of foreign currency, leading to upward pressure on the value of the Swiss franc. Consequently, the SNB has resorted to foreign exchange interventions to prevent undue monetary tightening during a time of crisis. Estimates (Adler et al., 2021) suggest that interventions were large in the period after the GFC, which helped prevent further Swiss franc appreciation (Figure 5.6, panel B). Similarly, the SNB sold Swiss francs at the onset of the COVID-19 crisis and reverted to selling foreign currencies in 2022 to ensure that the value of the Swiss Franc did not exacerbate existing inflationary pressures.

Figure 5.6. Monetary policy has adjusted quickly and flexibly to sharp downturns



Sources: OECD Economic Outlook database; Adler, Gustavo, Kyun Suk Chang, Rui C. Mano, and Yuting Shao. 2021. "Foreign Exchange Intervention: A Dataset of Public Data and Proxies," IMF Working Paper Series 21/47, International Monetary Fund, Washington D.C.

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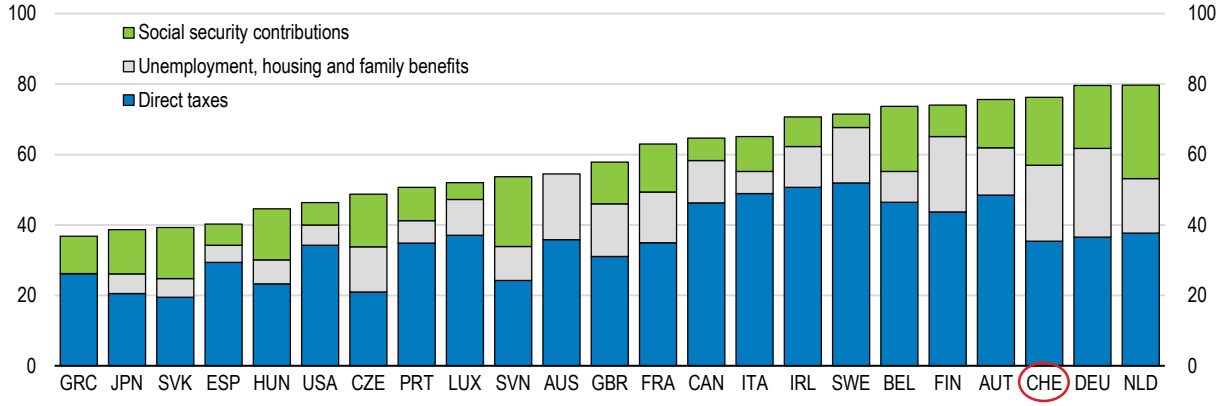
Switzerland has strong automatic fiscal stabilisers and a Short-Time Work Compensation (STWC) scheme that has been instrumental in dampening the adverse consequences of economic downturns on employment (see Box 5.1). Approximately 70-80% of Swiss household disposable income is effectively buffered by automatic changes in government spending and revenues when market income falls Figure 5.7), among the highest level in the OECD (Maravalle and Rawdanowicz, 2020b). The automatic stabilisers consist mainly of direct government taxes (on income, profits and wealth), accounting for roughly 70% of total tax revenues, that adjust in response to economic fluctuations without the need for discretionary policy decisions, as well as an increase in various social benefits. Switzerland's unemployment benefits maintain more than 80% of the net market income when people become unemployed, among the highest in the OECD (Maravalle and Rawdanowicz, 2020a).

Strong automatic stabilisers are advantageous as they are temporary and do not impact the structural fiscal balance, thereby reducing the risk of pro-cyclical fiscal measures. However, automatic stabilisers might not be enough to mitigate the adverse effects of a very severe economic downturn (Maravalle and Rawdanowicz, 2020a). Switzerland's ability to deploy substantial discretionary support measures during economic crises has been bolstered by its substantial fiscal buffers and low debt levels. For example, the Swiss authorities extended several discretionary support measures during the COVID-19 pandemic, including federal government credit guarantees for SMEs, loans, guarantees or grants to companies that were closed more than 40 days due to mandates – or that saw their sales drop by 40% or more. Additional sector-specific support to industries particularly affected by COVID-19 was also provided. Many cantons extended additional support to companies in the hardest hit sectors (OECD, 2022a). These policies played a crucial role in restoring confidence and avoiding lasting adverse effects on jobs and incomes from the crisis. Yet, discretionary policies come with risks and may delay the necessary adjustment among households and companies. Such support should be provided only in severe circumstances and be temporary and targeted to those most in need. In this context, the Federal Council decided against extending extraordinary support to households and companies during the energy crisis triggered by Russia's war of aggression against Ukraine (see Box 2.2 in the first chapter).

The government's capacity to deploy extraordinary measures as crises arose has been guaranteed by responsible fiscal policies in normal times and modest debt levels that allow for increased spending. In this context, the Swiss fiscal framework ensures adequate fiscal buffers are built and is flexible to deal with extraordinary circumstances (OECD, 2022a; Brändle and Elsener, 2023). The framework should be safeguarded to guarantee space to handle future crises.

Figure 5.7. Automatic stabilisation of shocks to household disposable income

Share of an income shock offset by automatic stabilisers



Source: (Maravalle and Rawdanowicz, 2020b).

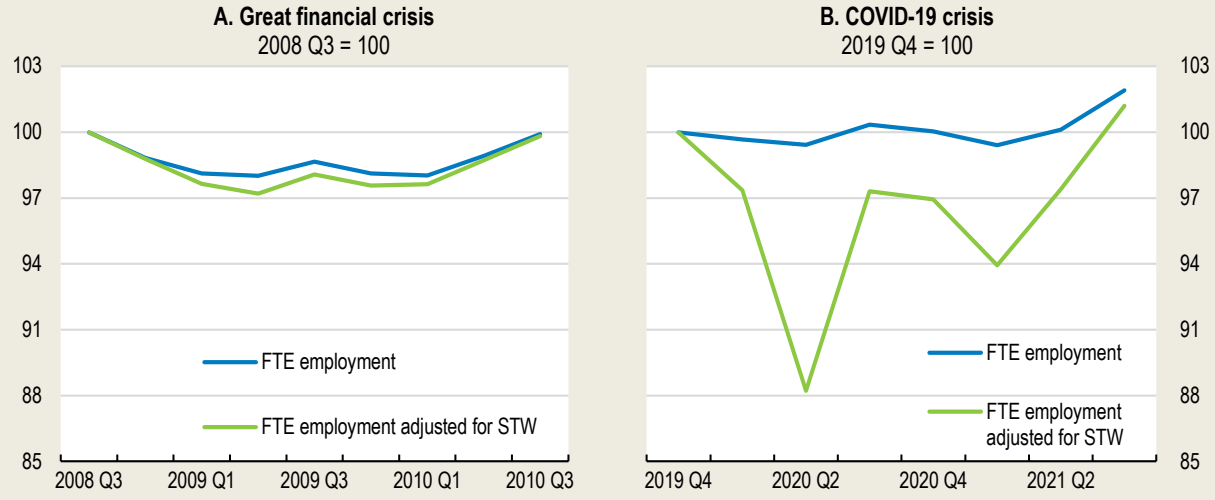
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Box 5.1. The short time work compensation schemes protect employment during severe crises

The short time working compensation (STWC) scheme is the main instrument for bridging loss of work due to crises in Switzerland. Unemployment insurance (through which the scheme is administrated and funded) temporarily covers 80% of the loss of earnings attributable to the reduction in hours worked, capped at CHF 196 per day. In 2020, CHF 20.2 billion of additional funding was transferred to the unemployment insurance fund to cover the associated expenditures, of which CHF 10.8 billion (1.5% of GDP) was used. Companies experiencing a temporary downturn in activity could request it through the cantonal employment office. In March 2020, the application process was shortened and simplified, and the "waiting period" (period of two or three days per month during which an employer had to cover the full cost of employees on STWC) was abolished. The coverage of the STWC was also extended to types of employees not eligible within the usual legal framework: those with fixed-term employment contracts, temporary workers and apprentices). In addition, for low-income workers (earning less than CHF 3470 per month), the generosity of the compensation was raised in December 2020 to represent 100% of the loss of salaries (from 80%) (OECD, 2022a).

The STWC allows companies facing temporary reductions in demand to adjust employee working hours. During the GFC, full-time equivalent (FTE) employment fell by roughly 2%, while it would have fallen by roughly 2.8% in the absence of the STWC (Figure 5.8). However, the STWC was used substantially more during the COVID-19 crisis and safeguarded employment. FTE-employment dropped by only 0.6% but would have fallen by 11.8% in the absence of STWC (Figure 5.8). The STWC effectiveness was further enhanced during COVID-19 through simplified administrative processes and increased compensation for low-income workers (Hijzen and Salvatori, 2022).

Figure 5.8. Short time work compensation schemes have been used during past crises



Sources: SECO; FSO, Job Statistics; OECD calculations.

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Active labour market policies (ALMPs) play a vital role in matching job seekers with emerging opportunities. Switzerland invests significantly in ALMPs and training, although there is room for increased allocation in line with OECD best performers in this regard. The decentralised nature of activation policies, with cantons managing public employment services, allows for local responsiveness. However, greater adoption of targeted measures for specific groups of jobseekers across cantons can yield more positive outcomes in terms of job placements (OECD, 2022a). Furthermore, Switzerland can benefit from clearer placement strategies within cantons, particularly as regions lacking such strategies tend to underperform (The Federal Council, 2016a$_a$). Effective coordination, evaluation, and adaptation of ALMPs at both the federal and cantonal levels are crucial to support workforce transitions effectively. The new "Strategy Public Employment Services 2030" adopted in June 2023 is a step in the right direction. The strategy outlines 12 objectives, including further developing targeted placement services, training, contact with employers and job seekers, as well as integrated digital solutions to improve matching and reduce the administrative burden. The strategy should be implemented as planned to improve the effectiveness of public employment services.

Overall, macroeconomic stabilisation policies have been deployed successfully to dampen the adverse effects of sharp downturns and have supported economic recoveries in Switzerland. However, other crisis management tools can be needed to safeguard the functioning of society in the event of temporary disruptions in GVCs. A case in point is the COVID-19 pandemic when supply bottlenecks reduced production (Frohm et al., 2021; Attinasi et al., 2021) and limited trade in necessary personal protective equipment. These disruptions threatened governments capability in limiting the spread of the virus. Resilience to temporary supply disruptions can be achieved through good private and public sector risk management practices, risk assessments and preventive measures. However, there are important trade-offs between resilience and efficiency. Increasing resilience may require private investments into larger inventories to ensure operations in the case of adverse shocks. Such investments come with costs that need to be borne by the company or the consumer. Furthermore, government spending on emergency stocks can cause moral hazard, whereby private companies underinvest in their own resilience as the public sector takes a larger role. These trade-offs need to be carefully balanced to optimise resilience and efficiency. In the medium to longer term, policy can facilitate companies' diversification of supply chains through deeper international integration, lower barriers to trade, higher investment into research and development (R&D) and by fostering domestic competition.

Addressing supply disruptions

A successful strategy to mitigate risks related to supply disruptions must address problems before they occur, as well as when they materialise. Developing scenarios and contingency plans to deal with vulnerabilities, utilising monitoring systems to detect problems ahead of time and preparing to buffer shocks as they arise are key components of a comprehensive framework to increase supply resilience (OECD, 2021b). Mitigating risk also involves identifying policy settings and mechanisms that can be put in place to enhance preparedness and help with the absorption of the impact of acute disruptions. Encouraging some redundancy or spare capacity in production in areas of critical importance for the absorption of shocks is another example. Yet, efforts to strengthen resilience must be carefully balanced with their fiscal costs and potential adverse impact on the functioning of markets. As countries work to address resilience, trust in governance structures, and institutions are critical for public acceptance and adherence to necessary measures.

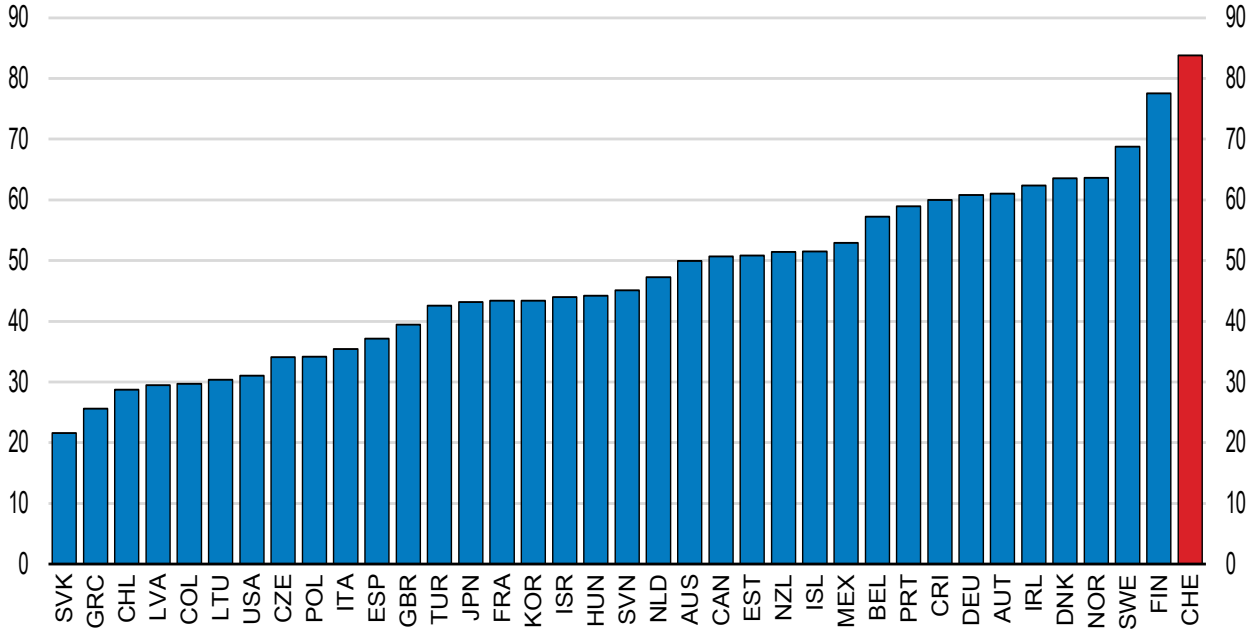
Switzerland has developed an advanced crisis preparedness strategy to deal with temporary disruptions to the economic supply, which is rooted in its experiences of food shortages, civil unrest, and significant state intervention during the First and Second World Wars (see Box 5.2). Article 102 of the Swiss Constitution enshrines the government's obligation to ensure the economic supply during times of severe distress or crisis and this responsibility is implemented via the National Economic Supply Act (NESA).

Through effective public-private cooperation, regular risk assessments and the monitoring of supply chains, coupled with substantial stockpiles of essential goods, Switzerland is well-equipped to overcome temporary disruptions in essential goods supply chains. Outside extraordinary events that prevent the functioning of economy, such as wars, pandemics or very significant disruptions, the guiding principle in Switzerland is that the private sector bears responsibility for supplying its citizens with goods and services.

A high degree of institutional trust help ensure compliance with public policies in Switzerland (Figure 5.9), especially in times of disruptions to society (OECD, 2021c). This aids collaboration between authorities and the private sector and helps in deploying measures to address emerging problems. In many countries, the COVID-19 crisis challenged the relationship between citizens and their governments in unprecedented ways (OECD, 2021a) and Switzerland experienced its share of protests and vocal opposition to official measures to counter the pandemic. Yet, Switzerland continues to enjoy very high levels of trust on the back of a stable and consensus-seeking political system (Szvircsev Tresch et al., 2023). For example, the Swiss people voted in favour of an extension of the COVID-19 law in a June 2021 referendum and voted to expand income support, increase testing, and introduce a COVID-19 certificate in a November 2021 referendum. A further extension of the COVID-19 law was passed via referendum in June 2023. This extension allows the government to swiftly deploy restrictive measures if new variants of COVID-19 occur by, for example, reactivating COVID-certificates and the SwissCovid app to curb the spread (The Federal Council, 2023a).

Figure 5.9. The public's trust in the government is the highest in the OECD

Trust in government, % of all survey respondents, 2022 or latest available year



Notes: "Trust in government" refers to the share of people who report having confidence in the national government. The data shown reflect the share of respondents answering "yes" (the other response categories being "no", and "don't know") to the survey question: "In this country, do you have confidence in… national government?
Source: OECD Government at a Glance database.

StatLink https://stat.link/2qd13n

Box 5.2. Crisis preparedness has been elevated since the two World Wars

Switzerland relies heavily on imports for various goods and services. During the First World War, the country faced severe shortages of essential goods when neighbouring nations redirected their economies towards the war effort and imposed trade restrictions. To address the sudden halt in imports, particularly of foodstuff, the Swiss authorities established the Federal Food Office, which was responsible for rationing, supply, and procurement tasks. During the Second World War, the Federal Council used extensive powers to intervene in the economy and ensure the availability of essential goods.

Switzerland enacted several laws to secure its economic supply during the second half of the 20th century. For instance, the 1953 Navigation Act empowered the Confederation to acquire Swiss deep-sea vessels, while the 1955 Federal Act on Economic Provisions mandated compulsory stockpiling for the private sector. Following the fall of the Berlin Wall in 1989, the focus shifted from war-related events to addressing supply shortages caused by complex supply processes, environmental crises, epidemics, and trade conflicts.

In 2016, the Federal Assembly revised the National Economic Supply Act (NESA), assigning the Federal Office for the National Economic Supply (FONES) the responsibility of conducting regular risk assessments and preparing strategies to manage adverse events, including overseeing and monitoring private sector stockpiles (FONES, 2021b). Furthermore, Switzerland also has a well-developed National Risk Assessment process, coordinated by the FOCP (FOCP, 2021).

The Swiss Federal government has also actively encouraged individuals to build up their own emergency provisions. The “Kluger Rat – Notvorrat!” campaign, which has been running for the past 50 years through various media channels, advises people to maintain stocks of essential items to last at least a week (FOCP, 2021). Furthermore, Switzerland hosts over 370 000 shelters (essentially bunkers) that can cover the whole Swiss population in the case of armed conflict or natural disasters. The cantons and municipalities must plan and regularly update the allocation of the public to shelter places.

Sources: (Réservesuisse, 2023), (FONES, 2021a).

Anticipating supply disruptions

The Swiss Federal Office of National Economic Supply (FONES) plays a key role in identifying and evaluating potential risks that could disrupt the country’s economic supply of essential goods and services (Box 5.3). FONES is tasked with taking precautionary measures to address risks, which can include political tensions abroad, environmental changes, infrastructure failures, strikes or boycotts, and pandemics. These preparations align broadly with the *OECD Recommendation on the Governance of Critical Risks* (see Box 5.4).

FONES is also responsible for coordinating with other federal agencies, including the armed forces - the Federal Office for Defence Procurement (armasuisse) - and the Federal Office of Civil Protection (FOCP) as well as for disseminating information to the population. Key risk assessments and plans for shortages are consolidated in the Swiss *National Economic Supply* and *Risks to the National Economic Supply* reports, released every four years and annually respectively. These reports outline measures that the government can implement in case of disruptions, as was the case during the recent energy crisis (see Box 2.2 in the second chapter of this survey). From 2024, the two reports will be merged into one and released annually. The FOCP is responsible for ensuring the functioning of critical infrastructures, together with the operators of the infrastructure, supervisory and regulatory authorities and the cantons, that are instrumental to ensure the flow of goods, services, communication, energy and people. The armed forces

and other governmental institutions involved in state security follow principles set out in the Principles of the Swiss Federal Council for the Armament Policy of the Federal Department of Defence, Civil Protection and Sport (DDPS). It outlines the main features of the collaboration between the armed forces and the private sector, and describes how access to crucial knowledge is to be facilitated in times of tension concerning security policy or armed conflict. The policy also states which principles are applied when collaborating with other countries and international organisations. Furthermore, armasuisse has developed an armaments strategy. The strategy focuses on securing modern, operational systems and related competences, as well as strengthening an innovative and efficient security-relevant technological and industrial base (STIB).

Box 5.3. The Swiss Federal Office for Economic Supply (FONES)

In Switzerland, FONES is responsible for ensuring the nation's economic supply in the event of severe shortages that the economy cannot by itself counteract. Private-public sector cooperation lies at the heart of FONES's organisational structure. It is led by a delegate from the private sector and staffed by experts from both the private and public sectors, totalling around 250 individuals. This collaboration ensures a deep understanding and expertise of the economy's inner workings, enabling a swift response in the event of severe shortages.

FONES is divided into six sections: energy, foodstuff, therapeutic products, logistics, ICT, and industry. Experts in each field are responsible for planning and implementing measures to ensure supply within their respective sections. Their tasks are broadly categorized into two phases: prevention and intervention. During the prevention phase, the focus is on enhancing the resilience of private supply processes to curtail the need for government intervention. For instance, the organisation promotes dialogue among stakeholders to alleviate potential shortages. Simultaneously, measures are put in place for the intervention phase. The degree of intervention varies based on the severity of the shortages.

For example, at the outset of the COVID-19 pandemic, FONES together with the Federal Office of Public Health (FOPH) were informed by public hospitals of a shortage of certain essential medicines. After the first wave of COVID-19 in 2020, the FOPH and FONES monitored the pandemic situation and developed a catalogue of 50 active ingredients that were relevant to fight COVID-19. The list of products in inventories was under strict monitoring and updated on a weekly basis. Hospitals were also asked to deliver a weekly report on their inventories. Although the federal government assumed the lead in distribution, the pharmaceutical industry remained responsible for procuring the products. The industry was also granted a return guarantee for any additional supplies that exceeded the usual level of demand and were not sold, allowing the country to bridge shortages while limiting waste.

Box 5.4. The OECD Recommendation on the Governance of Critical Risks

The OECD Recommendation on the Governance of Critical Risks recognises the escalating damages that occur due to extreme events and for economies that are dependent on GVCs. The Recommendation proposes actions that governments can take at all levels of government, in collaboration with the private sector and with each other, to better assess, prevent, respond to and recover from the effects of extreme events, as well as take measures to build resilience to rebound from unanticipated events.

- Identification and assessment of risks takes interlinkages and knock on effects into account. This helps set priorities and inform allocation of resources.
- More investment in risk prevention and mitigation such as investments in protective infrastructure, but also non-structural policies such as land use planning.
- Flexible capacities for preparedness, response and recovery help manage unanticipated and novel types of crises.
- Good risk governance via transparent and accountable risk management systems that learn continuously and systematically from experience and research.

Source: OECD (2014).

Identifying vulnerabilities through good monitoring systems

Detailed monitoring of supply chain vulnerabilities is an integral part of effective crisis management (OECD, 2021a). Private companies normally have enough incentives to reduce risks of costly disruptions to their production. Prolonged delays in the delivery of inputs makes production and sales difficult which can lead to financial and/or reputational losses. Moreover, supply chain resilience when competitors struggle with resuming operation can help a company gain market share and earn extra profits. However, while the private sector bears the responsibility for identifying and addressing vulnerabilities that may threaten their individual operations, they can overlook the broader consequences of their actions on the overall economy and society (Acemoglu et al., 2012). In such cases, there might be scope for the government to monitor risks and disseminating information to the private sector actors to help them prevent supply chain issues from becoming systemic.

Different sources of data can be utilised to detect vulnerabilities and each have their own advantages and limitations. Timely private sector data can be used to track developments close to real time and global input-output tables provide an understanding of sectoral interlinkages across the global economy, whereas harmonised international trade statistics give a detailed view of vulnerabilities at the product level. However, private sector data often lack harmonised statistical classifications, making it difficult to reconcile with official sources and the construction and release of global input-output tables requires strong assumptions, large amounts of data and often takes several years, even though new statistical techniques may pave the way for updating GVC indicators before official data is available (Knutsson et al., 2023). Product-level trade data only capture direct trading relationships and do not consider the fact that much of modern trade takes place in GVCs. A good monitoring system of vulnerabilities in supply chains should draw on all types of available data, bearing in mind their strengths and weaknesses and share information with private and public sector actors about emerging problems.

Private sector data help monitoring bottlenecks in near real-time

Pressing problems have incentivised private actors to produce innovative data, as was highlighted during the COVID-19 pandemic (OECD, 2021d). In Switzerland, the website drugshortage.ch monitors the supply situation for prescription drugs for example. On the website, users can analyse data on delivery bottlenecks

since autumn 2015. Only prescription medicines and over-the-counter drugs that are officially approved in Switzerland are listed in the database and it does not cover data on contract manufacturing or imported products. Since late summer 2022, the number of products in shortage has increased rapidly, highlighting the sharp increase in medical product shortages (see the next sub-section). Since 2016, the Federal Council also tracks official data on medical goods shortages. The latest report published in May 2023 registered a record number of shortages.

Timely data on medical supply bottlenecks serves as a good example of how the private sector can contribute to the monitoring of specific supply chains. To stimulate discussions with the private and public sector internationally, Switzerland organized an OECD conference on medical supply chains in 2023 to discuss the relevance and availability of data for efficient and targeted policy making (see also later in this section). The Swiss authorities should encourage private actors to maintain and further develop such systems and consider cooperating to ensure harmonised definitions and quality checks. One way to ascertain continuing production of data can be by setting up trusted data intermediary platforms, or appropriate contractual provisions.

Global input-output tables outline sectors' exposure to supply disruptions

To capture dependencies in GVCs, Schwellnus et al. (2023) constructs a new indicator of foreign input reliance (FIR), based on Baldwin and Freeman (2022) and the OECD's Trade in Value Added (TiVA) database. The FIR broadly captures a sector's exposure to foreign supply disruptions and considers the degree of exposure and the complexity of the value chain (i.e., they consider both direct trade and trade through second and higher order trading partners). According to the FIR, Swiss companies rely less on foreign inputs than the OECD average across most sectors (Figure 5.11, panel A).

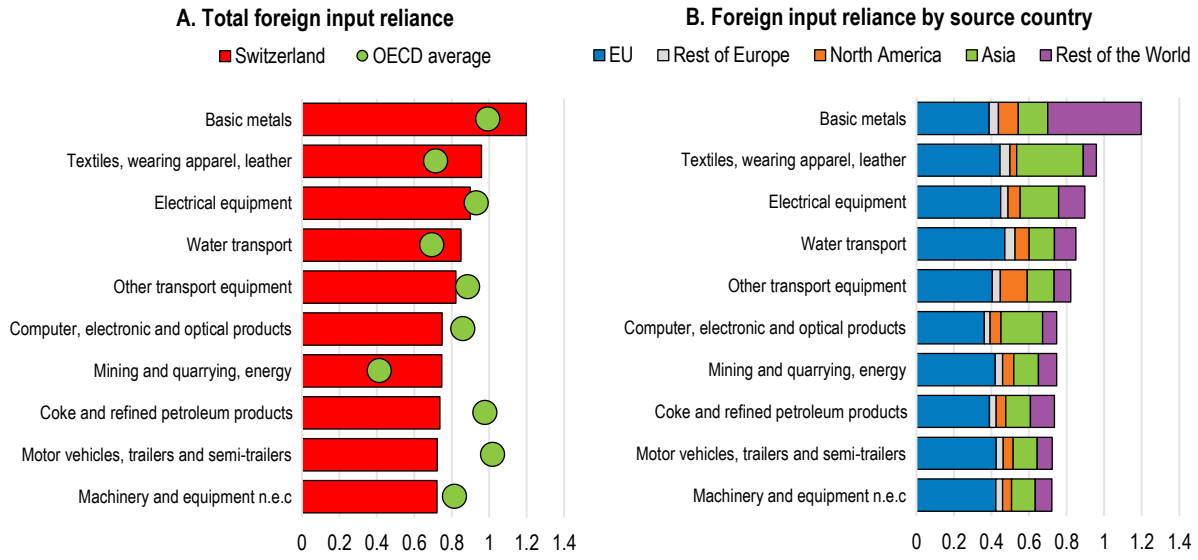
The top sectors are manufacturing of basic metals, manufacture of textiles, apparels, and leather and related products, manufacture of electronic, electrical and optical equipment, water transport and the manufacture of other transport equipment. Inputs are mainly sourced from suppliers within the EU (54% of the total). Asian countries account for 17% on average, 10% are from North America, 8% from the rest of Europe and 11% from the rest of the world (see Figure 5.10, panel B).

Product-level data provides a detailed view of trade dependencies

The Swiss State Secretariat for Economic Affairs (SECO) has developed a method to monitor import dependencies at highly disaggregated product levels (Lukaszuk and Ferreira, Forthcoming), inspired by the European Commission's Supply-Chain Alert Notification (SCAN) system (European Commission, 2021). Applying SECO's methodology on data from CEPII's BACI database for the most recent year before the crisis (2019) and tracking products that are still at risk of disruptions two years after (by 2021) provides a list of about 60 country-product combinations. Figure 5.11, panel A shows the top 10 products in terms of import values and the countries contributing to them in Figure 5.11, panel B. The products range from foodstuff or plants, as well as high-tech data processing machines, mainly sourced from China, and to a less extent from EU countries.

Figure 5.10. Reliance on foreign inputs is generally lower than the OECD average

Percent, 2018

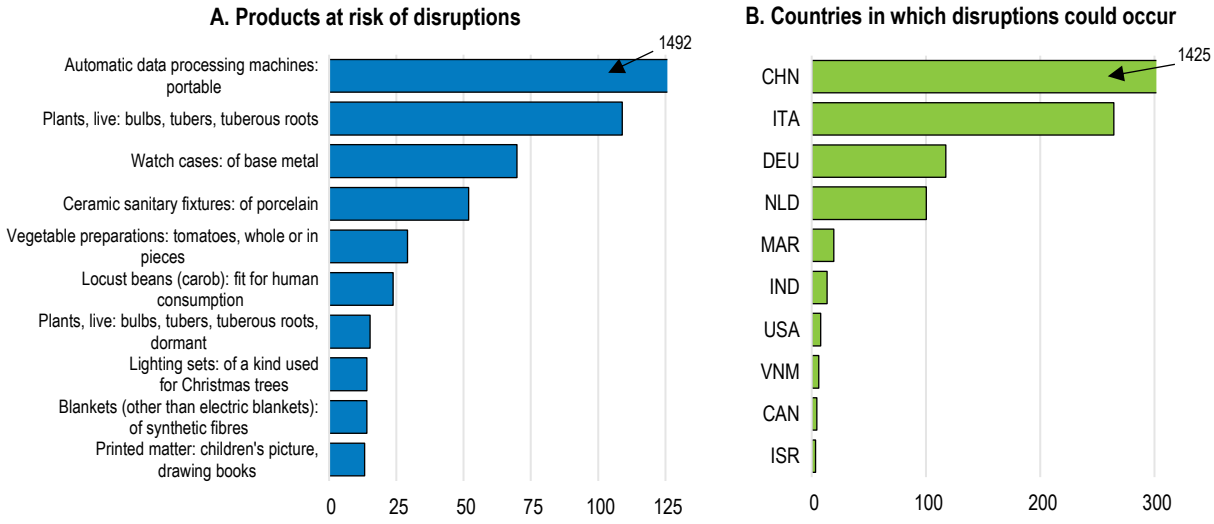


Source: Global value chain dependencies under the magnifying glass, OECD Science, Technology and Industry Policy Papers, March 2023 No.142.

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Figure 5.11. Swiss product-level dependencies mainly come from China

Current USD, millions, 2021



Sources: CEPII and OECD calculations.

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Overall, Switzerland relies on several public and private data sources, as well as the private sector experts in FONES to monitor the supply situation and to identify risks. The use of private sector expertise guarantees detailed knowledge about sectors and products and facilitates contacts with companies that might be affected. Furthermore, FONES gathers company-specific information and merges it with market data and public statistics to create reports, dashboards and alert systems for centralised monitoring. This system should be continuously maintained to ensure that risk monitoring is up to date.

Bridging supply shortages through inventory management

Stockpiles of critical intermediate inputs and final products can help bridge a temporary shortage and dampen their adverse consequences (Crowe and Rawdanowicz, 2023). For example, natural gas storage facilities helped European economies cope with the risk of supply disruptions following Russia's invasion of Ukraine (Bruegel, 2023). The stockpiling of medical devices and products facilitated the Swiss authorities fight against COVID-19 (OECD, 2023c). Several countries hold "buffer stocks" to influence commodity prices or to ensure availability in times of severe distress. Member states (including Switzerland) of the International Energy Agency (IEA) are committed to keep oil reserves to last at least 90 days of net imports (IEA, 2023).

The COVID-19 crisis raised interest in stockpiling a broader set of intermediate inputs and final goods for emergencies, both in the public sector and among companies (Alicke, Barriball and Trautwein, 2021). Since 2020, the United States has raised funding for the Strategic National Stockpile (SNS) from USD 727 million to 909 USD million (The Council of Foreign Relations, 2023). The European Union created "rescEU" in 2019, an EU-funded strategic stockpile of, among other things, medical items such as antidotes, antibiotics, vaccines and specific equipment (for example gas masks and protection suits) (European Commission, 2019). The stockpile has recently been expanded and now holds medical stockpiles worth around EUR 546 million (European Commission, 2023b). Finland, another small and open economy, holds large stocks of essential goods through its National Emergency Supply Agency (NESA) (see Box 5.5 and NESA, 2023).

Box 5.5. The National Emergency Supply Agency in Finland

Finland operates a national stockpiling system of essential goods through its National Emergency Supply Agency (NESA), which operates under the Ministry of Economic Affairs and Employment. Two Acts regulate its activities: The *Act on the Measures Necessary to Secure Security of Supply (1390/1992)* and the *Government Decree on the National Emergency Supply (1048/2018).*

NESA is tasked with planning and operative measures related to developing and maintaining security of supply. In cooperation with other authorities and the private sector, NESA's primary objective is to safeguard the functioning of critical infrastructure, production and services so that they can meet the most vital basic needs of the population, economy and national defence.

Several tools are available to the authority, such as stockpiling of essential goods and medical equipment, or laws and regulations that require operators to ensure the continuity of their critical processes amid disruptions and emergencies. Emergency stockpiles of for example medical equipment and fuels are held by relevant companies but are mandated by NESA. Currently, the balance position of the National Emergency Supply Fund is EUR 2 billion, with most of the amount tied up in stockpiles.

Source: https://www.huoltovarmuuskeskus.fi/en/

However, it can be difficult to stockpile for every specific event, as was highlighted during the COVID-19 crisis and inventories will still be exhausted by a severe or prolonged disruption (Feinnman, 2021). Maintaining stockpiles or excess capacity can be costly, lead to waste and create inefficiencies. Another risk is that the existence of compulsory stocks may create "moral hazard" – that companies and households hold less inventories than they otherwise would – leaving overall economic resilience unchanged while increasing the burden for the public sector. A successful stockpiling strategy needs to address such concerns to effectively support the economy during a disruption without unwarranted burden on the private and public sector.

In Switzerland, roughly 300 companies are required to hold separate stocks of products deemed critical for the functioning of society (see Box 5.5). An advantage of the system is that it relies on the management and logistics of private companies, thus ensuring cost efficiency. The compulsory stocks consist of

essential goods such as foodstuff, energy sources, therapeutical products and industrial goods. The Federal Council can – at its discretion – also sign voluntary stock agreements with companies for essential goods that are either in relatively low demand or have few suppliers, like raw material for yeast production, blood bag systems, plastic granules and uranium fuel elements. Currently, the voluntary stocks make up about 2% of the total stockpile. The items included in the system and their quantities are designed to cover a large disruption in various supply chains and to cover demand for roughly three months of the year, depending on the product. The market value of the stockpile is CHF 3.8 billion, which is roughly 20% higher than that of Finland in per capita terms.

The list of stockpiled items and their quantity is continuously reviewed by FONES together with federal and cantonal governments as well as companies. Moreover, the Federal Council has proposed to expand Federal guarantees from CHF 540 million to CHF 750 million over the next ten years, to finance the build-up of new reserves (The Federal Council, 2023b). Although heightened trade tensions may call for larger inventories, the current stockpiles can already maintain the country's demand for three to four months in case of a "full stop" in imports. To ensure that the private sector maintains its responsibility for ensuring safe and resilient supply chains, the list of items in compulsory stockpiles should remain focussed on essential goods and not be expanded to cover longer disruptions.

Since 2015, the release of compulsory stockpiles largely concerns pharmaceuticals (and especially anti-infectives). Even if one excludes the COVID-19 pandemic, the release of medical products has taken place more than a hundred times. The regular release of medical products from the compulsory stockpile reflects persistent problems in the global pharmaceutical supply chain (OECD, 2023c). This may motivate larger inventories than before, to better prepare for disruptions. Yet, the frequent disbursements could also signal that actors on the market are not holding enough inventories themselves, in particular regarding anti-infectives.

Problems in the medical supply chains have long been known. To improve their functioning, the Swiss authorities have conducted a series of analyses and prepared policy proposals (FOPH, 2022). Still, the problems remain. The authorities should thus continue to review, evaluate and implement appropriate recommendations included in (FOPH, 2022), to alleviate shortages and improve the functioning of the market. In this respect, it is key to collaborate and coordinate internationally with main trading partners, as well as improve monitoring and define roles of stakeholders. In this respect, Switzerland is strongly involved in fostering a dialogue within the OECD's Trade Committee among government and private sector representatives on the resilience of medical supply chains.

Improving market access by simplifying authorisation procedures and by easing the imports of medicinal products that are already authorised in countries with equivalent standards could help ease shortages. In the case of a severe disruption, imports of medical products that are not already approved in Switzerland could be considered. This is already possible following legislative changes in January 2019. However, these provisions could be used more frequently and expanded to handle emerging shortages. Lastly, to be efficient and effective, the Swiss stockpiling strategy for pharmaceuticals should be planned and coordinated with trading partners (OECD, 2023c).

While the government can help bridge temporary disruptions, the overarching principle in Switzerland is that individual companies are responsible for building resilience of supply chains, as they are best positioned to decide the acceptable level of risk and how to organise themselves to reduce vulnerabilities. Indeed, Swiss companies have been able to deal with supply disruptions during the COVID-19 crisis by increasing inventories to make their production less susceptible to bottlenecks (SNB, 2023). Additionally, three out of four Swiss industrial companies indicated their intent to adapt supply chains due to the bottlenecks. One third of those companies mainly sought diversification among global suppliers, with a focus on increased purchases from European and Swiss sources, while reducing reliance on Asian counterparts (Föllmi, 2023). Furthermore, some Swiss companies that buy critical inputs from China have reduced their sourcing recently, largely by increasing purchases from the rest of Europe, and to a lesser

extent by increasing own production in Europe or adapting production processes (Eichenauer and Domjahn, 2023).

Box 5.6. Switzerland stockpiles essential goods and materials

In Switzerland, private companies are mandated to hold stocks of essential goods and critical inputs. The list of products included in the stockpiling system is proposed by private sector experts and approved by the Federal Council. The organisation of the stockpiling of the listed products is supervised by FONES and implemented by the private sector. However, the federal government is not the owner of the compulsory stock; it remains the property of the companies (decentralised stockpiling). If the economy can no longer meet the demand for vital goods due to a shortage, the stock can be released by order of the federal government.

Once a company is mandated to hold compulsory stocks, FONES signs an agreement with the company, which is then ordered to join an industry-level stockpiling organisation that is supervised by FONES: (Réservesuisse (Foodstuff), Agricura (Fertilisers), CARBURA (Liquid fuels), Provisiogas (Naturalgas) and Helvecura (Therapeutic products). The five stockpiling organisations are in turn responsible for supervising the individual companies and to manage the “guarantee funds”. These funds are financed via levies on imports, which finance the stockpiling system and are used to reimburse companies for expenses related to storage, capital and administrative costs, as well as price losses related to the stocking of goods. The Swiss authorities also guarantee bank loans (worth around CHF 540 million) that can be used to finance compulsory or voluntary stocks. These loans face the interest rates of the Swiss Average Rate Overnight (SARON) or 0% if the SARON is negative. The costs of the whole stockpiling system are estimated to be in the range 12-14 CHF per person and year (FONES, 2023).

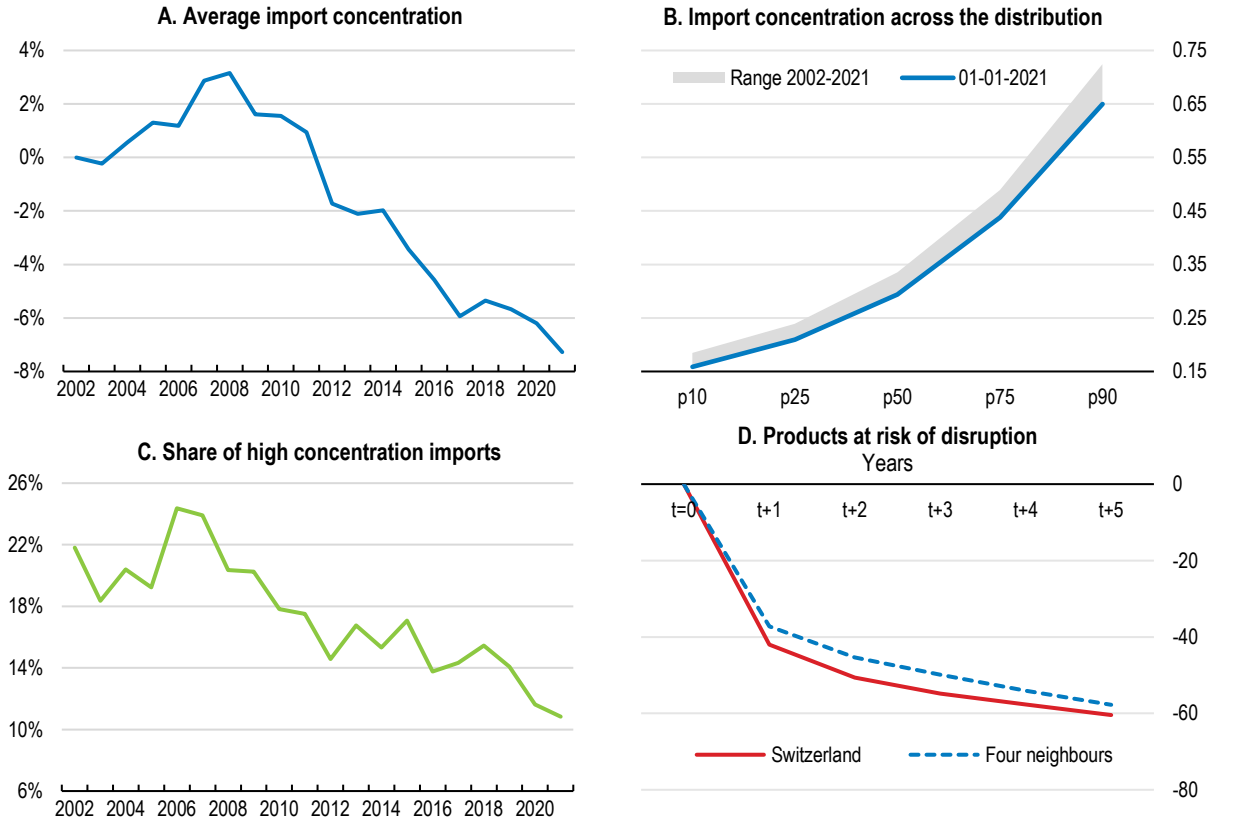
The list of items and prescribed quantities (in terms of demand coverage) has changed since the early 1990s. The coverage of the compulsory stocks has declined substantially – for some products like sugar, rice and cooking oils from 10-12 months to 3-4 months of demand – reflecting the increased integration of the global economy and better developed commodity markets. Currently, most essential products in the system are expected to fully cover demand for the Swiss population for roughly one quarter of the year.

Compulsory stocks are only to be released in times of severe shortages. The situation is first analysed by FONES private sector experts, who may request the Federal Department of Economic Affairs, Education and Research (EAER) to order a release of the stocks. If warranted, the EAER may then order the release and FONES amends the compulsory stock agreements accordingly. Measures typically relate to the release of various fuel oils in connection to freight disruptions, or problems in the supply of medical products.

Furthermore, the average level of import concentration in Switzerland, as measured by the Herfindahl-Hirschman Index (HHI) of Swiss imports, has fallen by 7% since 2002 (Figure 5.12, panel A) and has decreased for both low and high concentration products (Figure 5.12, panel B). Products with high concentration (measured by an import HHI over 0.4, an analytical threshold used by the European Commission (2021), now represent a significantly lower share of total imports than in the early 2000s (Figure 5.12, panel C). The share of products imported to Switzerland that may be more at risk of supply disruptions (products with an import HHI above 0.4, imports are higher than exports and where the global export HHI is above 0.4) tends to be reduced by roughly 50% percent after two years (Figure 5.12, panel D) (Lukaszuk and Ferreira, Forthcoming). After five years, the number of products at risk of disruption have fallen by another 10 percentage points on average. This underscores companies’ adeptness at reducing dependencies, by diversifying their suppliers, substituting production processes or adopting technological innovation.

Requests by companies for FONES to release compulsory stocks are frequently denied by the authorities, on grounds that the disruptions are not deemed critical enough at a national level and may distort competition and the functioning of markets. Nonetheless, there are concerns that companies may be increasingly expecting government support in times of crisis, diminishing the private sector's incentives to implement adequate risk management practices. For example, close to half of all the companies surveyed in 2023 expect the government to support them financially in the event of a crisis (Credit Suisse, 2023). Switzerland should maintain its current guiding principles whereby it is up to the private sector to safeguard the stability of supply, while continuing its private-public cooperation to handle severe and temporary disruptions. Maintaining a conservative view of when compulsory stocks are released will help ensure private sector accountability and public acceptability and continue to minimise moral hazard.

Figure 5.12. Swiss companies have effectively resolved risky dependencies



Notes: Panel A shows the average HHI for Swiss imports over time, indexed to 0 in 2002. Panel B shows the import HHI in 2021 compared to earlier periods over the distribution of the HHI. Panel C shows the share of imports of products that are highly concentrated (above HHI 0.4). Panel D shows the time evolution of products that are at risk of disruption (defined by Lukaszuk and Ferreria (Forthcoming) as import HHI >0.4, global export HHI > 0.4 and imports>exports). The y-axis shows the % change from the first year the products passed the filter and are considered at risk of disruption.

Sources: CEPII and OECD calculations.

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Increasing resilience through deeper trade integration

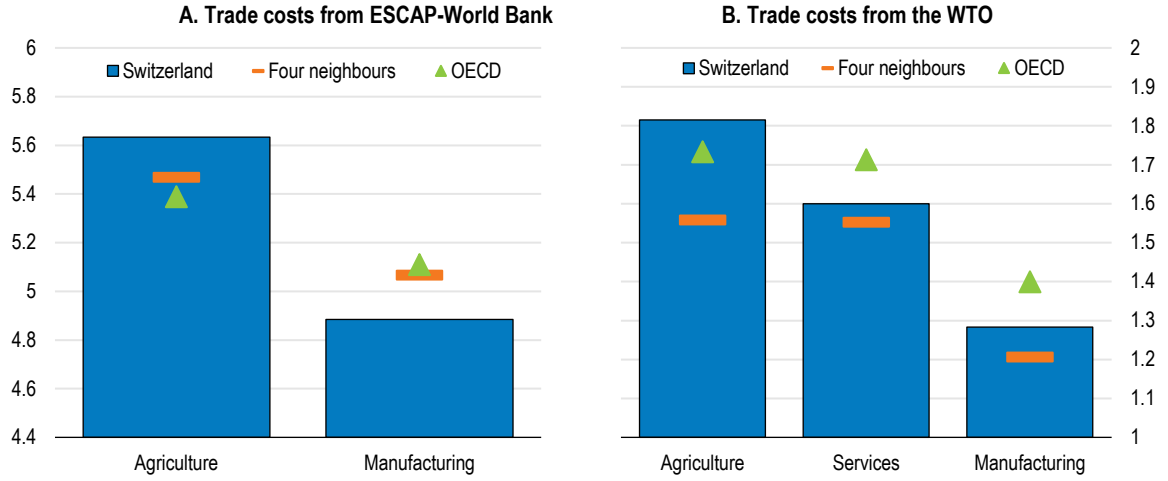
Stable, transparent and predictable trade and investment regimes reduce uncertainty and trade costs. These conditions empower companies to build long-term relationships, efficiently adjust their supply chains while retaining their access to foreign markets, thereby fostering flexibility if the need for change in production or supply arises. Although greater integration in the global economy can heighten a company's exposure to adverse foreign shocks through the supply chain (Frohm and Gunnella, 2021), limiting

participation also comes at a cost. Recent studies emphasise that in the event that trade tensions would result in a "block divided" global landscape, the welfare cost could range from 1-12% (Cerdeiro et al., 2021; Góes and Bekkert, 2022; Attinasi, Boeckelmann and Meunier, 2023). Furthermore, studies underscore that countries have more volatile GDP when trade is more restricted and conversely less volatile GDP when trade is more open (Arriola et al., 2020; OECD, 2021e; IMF, 2022).

Lower trade costs would enhance Swiss companies' ability to discover new ways of increasing the resilience of their supply chains in a cost-effective manner. This is because open trade makes markets "thicker", by expanding the number of possible suppliers and buyers, helping companies to deal with supply-related risks if – and when – they occur (IMF, 2022). Effective trade costs represent all factors constraining international trade versus domestic trade and can be calculated in different ways (Arvis et al., 2016; Rubínová and Sebti, 2021). Yet depending on method and assumptions, the level of trade costs varies across sources. According to the UN/World Bank ESCAP database, agricultural trade costs are higher in Switzerland than its four neighbours (Austria, Germany, France and Italy and the OECD average, while lower in manufacturing (Figure 5.13, panel A). According to the WTO's Trade Cost Database, which has a more granular sectoral dimension and also includes services, effective trade costs are lower in Switzerland than the OECD average in manufacturing and services, yet higher than in the four neighbouring countries (Austria, Germany, France and Italy), see Figure 5.13, panel B. While there is uncertainty on the level of trade costs, there appear to be scope to reduce them in particular in agricultural and services trade.

Lower trade costs could be achieved by signing new free trade agreements, and deepening existing ones, by improving at-the-border regulations and procedures, as well as further investments into digital infrastructure. Besides the longer-term welfare gains widely documented in the literature (Bernard et al., 2012; Melitz and Trefler, 2012; Bloom, Draca and Van Reenen, 2016; Feenstra and Weinstein, 2017), new estimates show that lower trade costs would also boost economic activity in the short term, with more pronounced effects in sectors that are more integrated in GVCs, see (Box 5.6) and (Frohm, Forthcoming).

Figure 5.13. There is scope to reduce effective trade costs



Notes: The effective trade costs are estimates of the costs involved with international trade relative to domestic activity. Panel A shows trade costs derived from ESCAP-World Bank for agriculture and manufacturing, averaged across destination economies in 2021. Panel B shows trade cost estimates from the WTO, average across ISIC Rev. 4 sub-sectors in 2018. The trade costs are expressed as ad-valorem equivalents, in logarithms. This is the additional cost (in %) that is associated with trade between countries relative to within countries. These costs involve transport and travel costs, information and transaction costs, ICT connectedness, trade policy and regulatory differences, governance quality and other factors like geography. Rubínová and Sebti (2021) shows that transport and travel costs, trade policy and regulatory differences and information and communication technology is especially important for the variation in trade costs. Four neighbours refer to Austria, Germany, France and Italy. OECD is a simple average of OECD countries.
Sources: ESCAP and the WTO.

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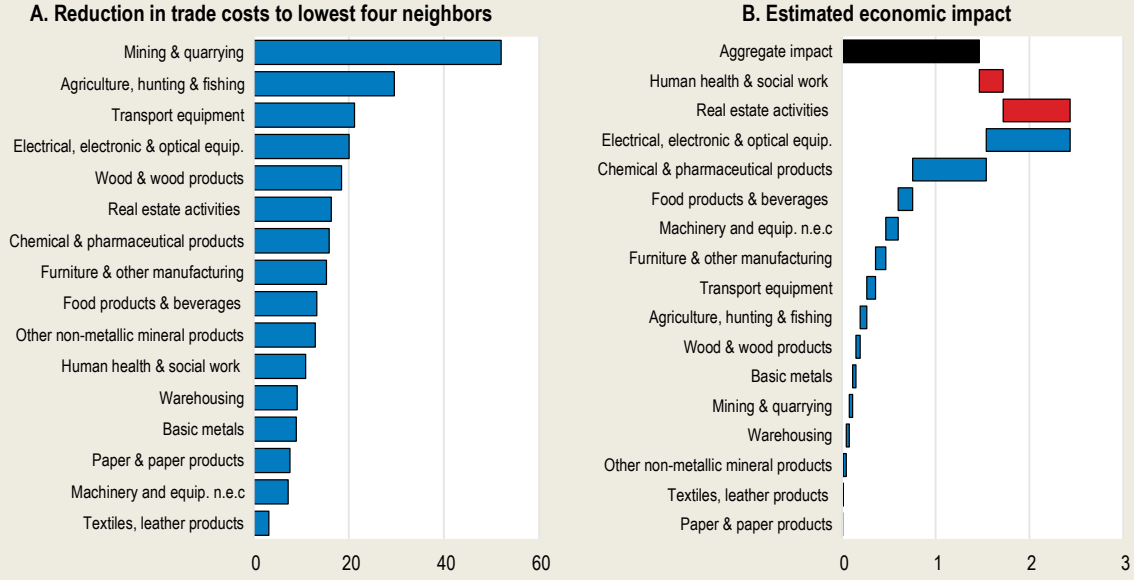
Box 5.7. Lower effective trade costs would yield significant economic gains

Lowering trade costs can generate substantial economic gains by improving access to final markets and intermediate inputs. Frohm (Forthcoming) estimates that a decrease in sectoral trade costs is associated with higher economic activity, but the impact is heterogeneous across sectors and depend on their participation in GVCs and trade in intermediate inputs (Taylor et al., 2023). This box provides illustrative estimates of the economic impact of Switzerland lowering its trade costs towards the sector with the lowest trade costs in its four neighbouring countries (Austria, Germany, France and Italy). The scenario includes trade cost reductions of 73%, based on Rubínová and Sebti, (2021), considering that some costs are driven by geographics.

Three factors shape the estimated impact on real value added: 1) Sectors' participation in GVCs, 2) their share in Swiss real value added and 3) their current trade cost relative to the benchmark. The illustrative scenarios assume that trade costs are reduced by 16% on average, ranging from 52% in mining and quarrying to 3% in textiles and wearing apparel (Figure 5.14, panel A). The estimated aggregate impact of lowering trade costs towards the frontier in each sector, amounts to an increase 1.5% in real value added, driven primarily by increased value added in electrical, electronic and optical equipment as well as chemical and pharmaceutical industries (Figure 5.14, panel B). Some of the estimated economic gains are hampered by lower activity in services sectors like real estate and human, health and social work.

Figure 5.14. Lower trade costs could boost Swiss economic activity

Trade cost reduction (in %) and estimated impact on real value added (in %)



Notes: The figures utilise estimates and data (Frohm, Forthcoming). It assumes that all sectors lower their current trade costs to the benchmark (equivalent to the figures in panel A). Only trade costs that are not related to geographical factors, based on estimates from Rubínová and Sebti, (2021), are assumed to be lowered. This corresponds to reducing trade costs by 73% compared to benchmark sectors in the four countries bordering Switzerland (Austria, Germany, France and Italy). Panel B shows the contribution by sector to the estimated aggregate impact.
Source: (Frohm, Forthcoming).

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The results are only illustrative and subject to several caveats. First, it is assumed that the association between trade costs and real value added is linear and the same irrespective of policies used to lower trade costs. Second, there may be non-linear threshold effects in the relationship between trade costs and economic activity. Third and finally, GVC participation and the contribution of sectors to national real value added could change over time, which would alter the estimated effect.

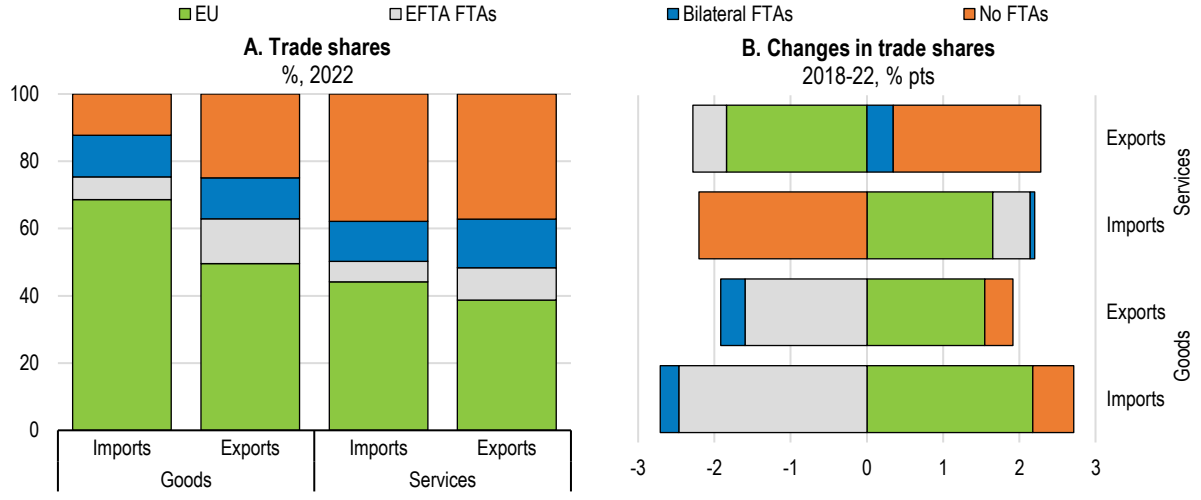
Deepening and expanding free trade agreements

To reinforce supply chains, limit risks and support open trade, Switzerland should deepen its international cooperation with key trading partners. In July 2022, many OECD and non-OECD countries united to address supply disruptions through the Supply Chain Ministerial Forum. Based on the Joint Statement, the signatories will work together to alleviate short-term disruptions and bottlenecks in transport and logistics, as well as address the long-term challenges of supply and value chain resilience in line with regulatory frameworks and the participants' international commitments. Switzerland's adoption of the Joint Statement in May 2023 signals its commitment to international cooperation. The government should continue to work for open trade in international fora.

Signing new free trade agreements (FTAs), deepening existing ones and reducing remaining tariffs would offer Switzerland's economy further flexibility in adjusting to future disturbances by allowing companies to diversify suppliers. The geographical composition of trade has changed in recent years, as Swiss companies have diversified imports across countries and regions. Since 2010, the import shares from North America, Central and South America, Asia, Africa and Oceania have increased.

Most Swiss exports and imports already flow within FTAs (Figure 5.15). Nonetheless, there is scope to increase the usage of the existing FTAs by improving administrative procedures and providing more information about them (Box 5.7). Clearly structured and understandable information in a centralised location can help increase the use of FTAs and reduce the effort that companies need to use them. Moreover, making it easier for companies to comply with preferential rules of origin could facilitate the use of FTAs for imports (EY, 2022). Furthermore, existing and new FTAs could be amended to include provisions on security of supply and maintaining trade open when there is a crisis. An example is the Australia-Japan FTA, where the parties commit to co-operate and not to introduce measures that would reduce supply of energy and minerals in the partner economy in the event of a shortage (Department for Foreign Affairs and Trade, 2015).

Figure 5.15. The EU is Switzerland's largest trading partner



Notes: Partners included in EFTA for services are approximated with imports/exports to Norway, Canada, Mexico, South Africa, Israel, North Africa, Gulf Arabian countries, Hong Kong, Türkiye, and Singapore.
Sources: OECD calculations based on Federal Office of Customs and Border Security (FOCBS) and SNB data portal.

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Switzerland's largest trading partner is the EU (seeFigure 5.15) and most of the gains from trade are derived from trade with the members states (Hepenstrick, 2016). The bilateral relationship with the EU is currently governed by roughly 120 treaties that have been signed over the years. Switzerland is a member

of the border-free Schengen Area, is closely integrated with the EU in areas such as transport, research, higher education (through participation in EU-programmes) and enjoys access to the single market in different sectors. While efforts to conclude a more encompassing "framework agreement" came to a standstill in May 2021 when the Federal Council officially ended negotiations, a draft mandate for negotiations with the EU on a new broad package was finalized in December 2023. Switzerland should pursue efforts to stabilise relations with the EU and further increase economic integration. An erosion of the Switzerland-EU partnership would raise uncertainty, be harmful for Switzerland's external trade and competitiveness and decrease its economic resilience.

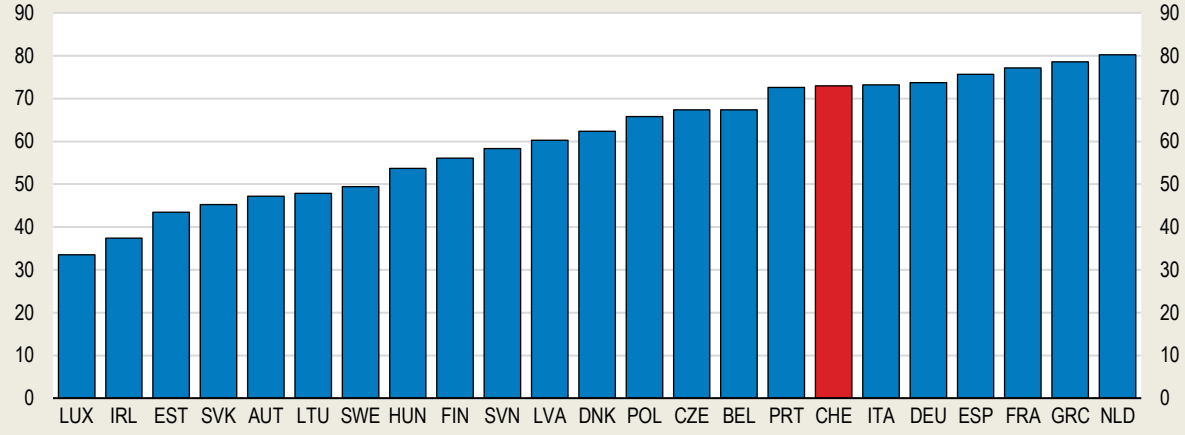
Box 5.8. The use of Switzerland's free trade agreements

In addition to the free trade agreement (FTA) with the European Union (EU) and the European Free Trade Association (EFTA) Convention, Switzerland has a network of 33 FTAs signed with 43 partners. The FTAs are usually negotiated and concluded together with the EFTA-partners – Norway, Iceland and Liechtenstein. Yet, Switzerland has the possibility to also conclude bilateral agreements, as it has with the Faroe Islands (in 1994), Japan (in 2009), China (in 2014) and the United Kingdom (in 2021).

The FTAs are well used by Swiss companies, with a usage rate of 73% for imports (SECO, 2023b). The usage rate is better than for the EU average yet lagging behind the best performing countries (Figure 5.16). There are several reasons why companies may choose not to use an FTA, depending on the products that are traded and their preferential rules of origin. For certain products that are produced in highly fragmented international value chains, it is sometimes difficult for companies to fulfil the preferential origin rules. Furthermore, companies must document the manufacturing process and, if necessary, adapt it to achieve preferential origin (SECO, 2022b). Companies may therefore decide against the use of FTAs if the costs of these adjustments exceed the potential benefits. Generally, tariff savings through FTAs allow Swiss companies to offer their products at lower prices on final markets (SECO, 2022b).

Figure 5.16. There is scope to increase the use of FTAs, primarily for imports

Preference Utilisation Rate, on imports, 2021, %



Note: The preference utilisation rate (usage rate) indicates the value of trade that takes place under preferences as a share of the total value of trade that is preference eligible in an FTA.
Sources: European Commission and SECO.

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The United States is the second most important trading partner of Switzerland, yet progress on an FTA has stalled. An FTA would eliminate remaining tariffs and provide legal certainty to Swiss and US companies operating in both countries. It could generate additional cost savings, and boost trade and productivity. Since 2021, Switzerland has a bilateral FTA with the United Kingdom, encompassing primarily

goods trade, including provisions on preferential tariffs, non-tariff measures including sanitary and phytosanitary measures and government procurement. Moreover, the two countries concluded a Services Mobility Agreement in 2020, allowing for temporary work permits, and a Mutual Recognition Agreement (MRA) in 2022, allowing a set of goods to be sold in both countries but only being subject to regulation in one of the jurisdictions. Despite these advancements, there is scope to deepen integration, notably in services and digital trade, investment flows and intellectual property rights. In February 2023, the Federal Council approved a negotiating mandate to enhance the bilateral trade agreement with the United Kingdom. Additionally, Switzerland should continue to work together with its partners in the European Free Trade Association (EFTA) to deepen its existing free trade agreements and pursue new ones, including finalising the ongoing negotiations with Latin American countries in MERCOSUR, India and Thailand.

In January 2024, Switzerland unilaterally eliminated all tariffs of industrial goods. This decision was made by the Federal Council in February 2022, after an amendment to the Customs Tariff Act was passed by Parliament in October 2021. Beside reducing import costs, companies are expected to face less administrative costs for importing industrial goods, with welfare gains estimated at CHF 860 million (SECO, 2023c). The Federal government plans to monitor the effects of the policy change, by assessing whether cost advantages accrued by companies are passed on to consumers (Meyer, Mergele and Lehmann, 2023).

The unilateral elimination of industrial tariffs is a welcome step, yet there is room to further reduce barriers to trade, particularly in agriculture. Switzerland has reduced some of its government backing to the agricultural sector in recent years but support to producers remains at around 50% of gross farm receipts compared to 19% for the European Union and almost three times the OECD average (OECD, 2022c). As recommended in the past (OECD,2017, 2019 and 2022a), less direct support and more import competition would raise agriculture productivity and lower prices. Continuing efforts to decouple income support from farm output would also decrease pressure on the environment and strengthen competitiveness and resilience in the sector (OECD, 2022c).

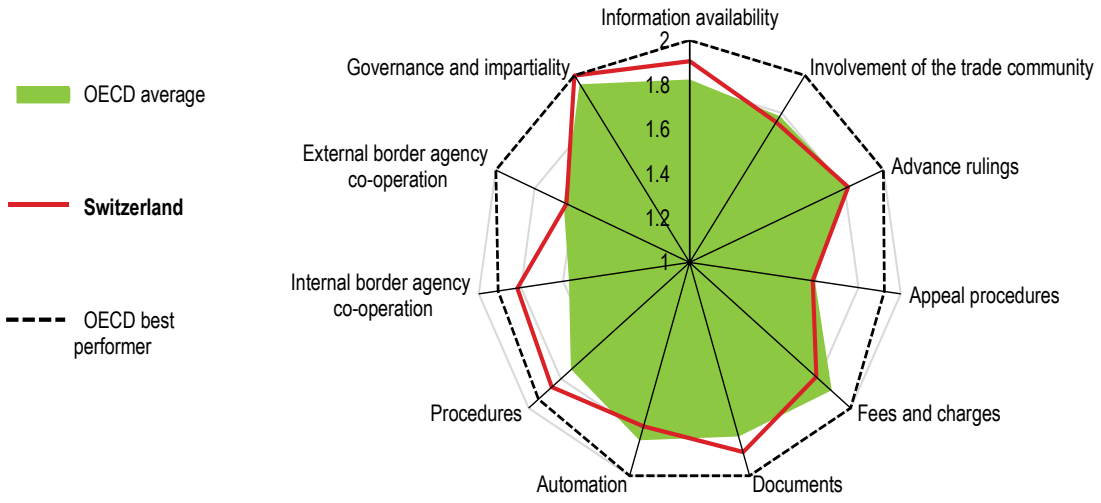
Improving trade facilitation and reducing barriers to trade and capital flows

Behind and at-the-border regulation, the quality of infrastructure and digital connectedness can act as barriers or enablers of trade (Moïsé, Orliac and Minor, 2011; Novy, 2013; Ohnsorge and Quaglietti, 2023). Some of these factors are captured by OECD's Trade Facilitation Indicators, where Switzerland fares better than the OECD average but lags best performers (Figure 5.17). In particular, fees and charges, automation of process and external border agency co-operation is worse than the OECD average. Increasing information availability and procedures relating to pre-arrival processing of imports would help. For example, the way in which information is made available are likely to have an incidence on trade costs. Access to import/export requirements and the relevant administrative forms from a distance, without the need to physically visit government agencies' offices, reduce the time and cost of obtaining information. While both small and large companies tend to benefit from improvements in the overall trade facilitation environment, small companies tend to benefit more (López González and Sorescu, 2019). Improving trade facilitation can thus help SMEs internationalise further and enable them to diversify supply chains. Simplifying and accelerating customs clearance of goods, by further digitalising processes, can help lower costs for companies.

The Swiss authorities are currently working on a complete revision of the Customs Act to simplify and standardise processes concerning the controls of goods and collection of fees. Reforms will focus on the successful modernisation and digitalisation of custom procedures. The revision is currently discussed in the Swiss Parliament. As such, the details of the changes to the draft legislation are yet to be determined. In this context, it is imperative that any revised legislation goes in the direction of reducing the administrative burden.

Figure 5.17. There is scope to improve trade facilitation measures

OECD Trade Facilitation Indicators, from 0 to 2 (best performance), 2022



Source: OECD (2022), Trade Facilitation Indicators.

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Switzerland is restricting services trade more than other OECD countries (Figure 5.18) and has only made moderate progress over the past decade. Despite some liberalisation efforts, restrictions on movement of people remain for independent services suppliers, constituting a cross-sectoral barrier to services trade. Quotas and labour market tests are applied for workers seeking to provide services in the country on a temporary basis, contractual services suppliers or independent services suppliers. Procedures to register a company are also relatively burdensome.

As mentioned in the first chapter of this Survey, as well as in previous surveys (OECD, 2017, 2019 and 2022a), easing immigration requirements from non-EU countries would help ensure Switzerland access to high-skills workers and lower barriers to services providers (Siegenthaler, 2023). The complete removal of immigration restrictions of EU workers in 2004 was controversial, yet their removal did not cause unemployment nor depress wages (SECO, 2023d). Furthermore, evidence shows that the removal of restrictions on cross-border workers (CBW) positively affected Swiss companies and workers: the reform is found to have increased wages of highly educated native workers by around 5% and led to substantial gains in labour productivity (Beerli et al., 2021), especially for companies that reported to labour shortages prior to the reform. The policy change is also found to have increased patent applications, product innovations and an increase in the net entry of establishments (Beerli et al., 2021). Further liberalising migration could strengthen innovation and productivity, and thereby increase the resilience of the Swiss economy.

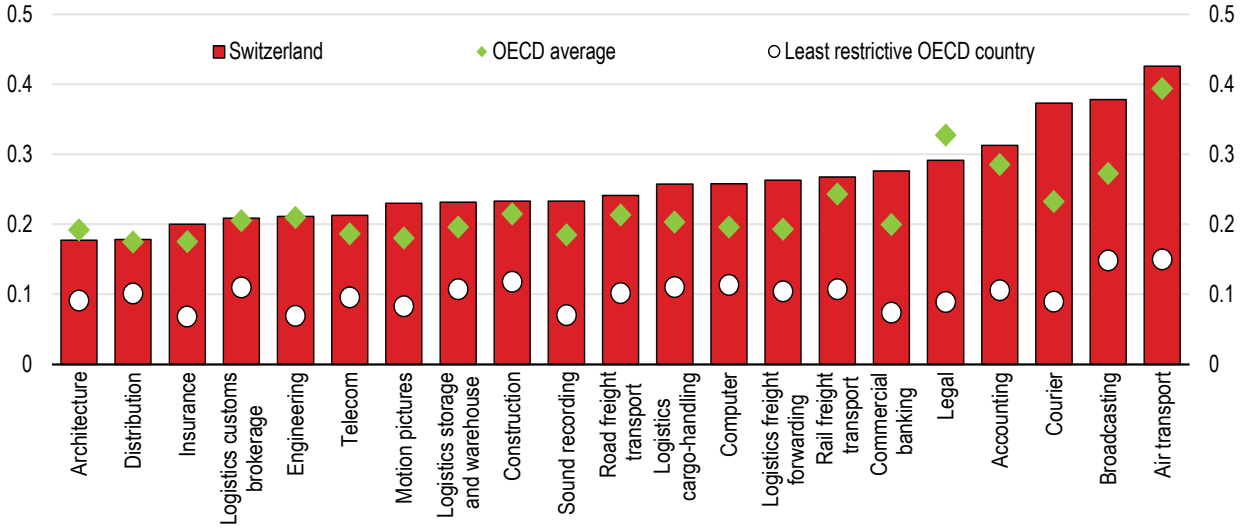
The 2021 reform on the Federal Law on Public Procurement represents an important step in the direction of greater harmonization between federal and cantonal legislation, as well as a modernised policy regime on public procurement. The reform introduced a new channel for the Swiss Contracting Authority to allow foreign providers to participate in tenders for procurement outside the scope of international treaties. While this widens the potential participation from foreign actors, the measure may be weakened by reducing the scope to challenge the Authority's decisions only to instances where reciprocal conditions are demonstrated for Swiss tenderers.

Switzerland also requires that at least one of the board members in corporations must be resident in the country. Furthermore, the government retains ownership in some sectors, with at least one major state-owned enterprise in commercial banking, broadcasting, courier services, logistics cargo handling and

storage and warehouse at rail facilities, rail freight transport and telecommunication services (OECD, 2022a). Effective interventions should be geared towards minimising barriers that increase costs for services providers, weaken the gains from digital transformation and undermine competitiveness.

Figure 5.18. Barriers restrict trade in services

From 0 to 1 (most restrictive), 2022



Source: OECD STRI Regulatory database.

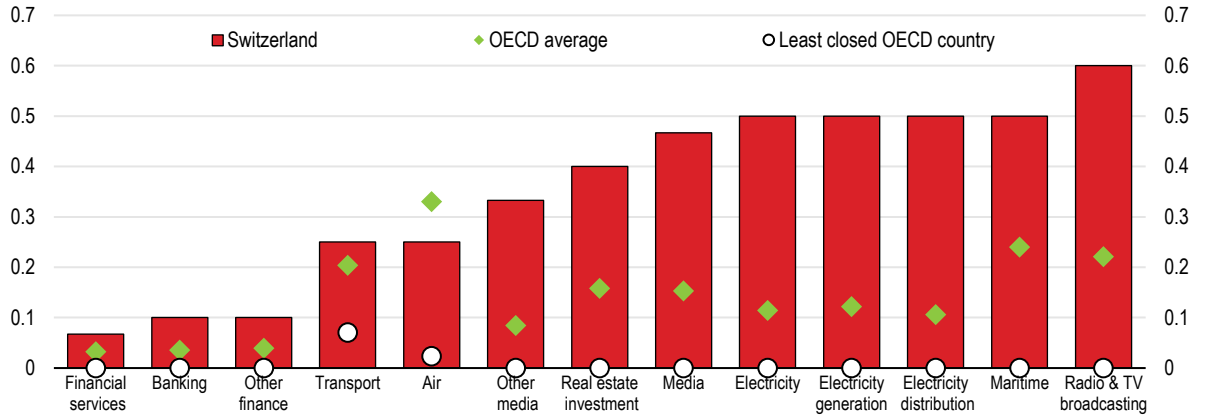
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Openness to foreign direct investments (FDI) is at the core of Switzerland's integration in the global economy. It has allowed capital, knowledge and ideas to flow, contributing to innovation and productivity (OECD, 2019; Karpaty, 2023). Barriers to FDI and/or higher investor uncertainty may reduce the scope for positive knowledge transfers, therefore hampering resilience. Switzerland imposes constraints on inward FDI, mainly through equity restrictions. This is reflected in the OECD FDI Regulatory Restrictiveness Indicator, which is higher than the OECD average, notably in broadcasting, electricity, media, maritime shipping and real estate (Figure 5.19).

In 2020, under the initiative "Protection of the Swiss economy through investment control" the Swiss Parliament tasked the government to draw up a legal framework for further controlling FDI. However, a public consultation in September 2022 revealed significant scepticism about the proposal, as it would reduce Switzerland's attractiveness as a business location. The Federal Council drafted an Investment Audit Act in December 2023, which will be limited to investments that are most critical to national security. It is important that new legislation on FDI remains narrow in scope and carefully balances the need for economic efficiency and national security needs. Misplaced impediments can curtail investments, dampen productivity growth, and ultimately undermine resilience.

Figure 5.19. Restrictions on foreign direct investment are high in some sectors

From 0 to 1 (most restrictive), 2020



Source: OECD FDI Regulatory Restrictiveness Index database.

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Refraining from distortive industrial policies while sustaining innovative capacity

Industrial policies aimed at bolstering specific domestic industries have regained popularity among policymakers globally, in areas ranging from green technologies to semiconductor production (see Box 5.8). While countries may use support measures to further strategic targets (Criscuolo et al., 2022; Juhász, Lane and Rodrik, 2023), they carry inherent risks that could potentially undermine rather than fortify economic resilience (Irwin, 2023). Selecting companies and sectors by governments can lead to market distortions, inefficient resource allocation, waste of public resources and capture by special interests, ultimately eroding support for open trade and inviting retaliatory actions globally (Posen, 2023). In addition, it is very difficult in practice to design industrial policies in a way that dissuades retaliation in the form of trade protectionism, ensures low costs and delivers tangible benefits.

New industrial policies in other countries create new challenges and opportunities for small open economies like Switzerland. Some companies competing with subsidised foreign entities can lose competitiveness, whereas other entities could gain directly and indirectly from some of the industrial policies of its trading partners. For example, the Swiss-based semiconductor company ST Microelectronics has received a EUR 600 million loan from the European Investment Bank to finance research and development (R&D) and new innovative production lines in Europe (ST Microelectronics, 2022). Innovations in digitalisation, green and other technologies will also benefit Swiss companies and consumers in the form of more sustainable, efficient and less expensive inputs and final products.

Switzerland should avoid devising distortive industrial policies and trade restrictions. Participation in a costly and ineffective subsidy race could result in overcapacity and ultimately undermine support for open trade, fuel protectionism and impair international co-operation. In addition, the fiscal cost might be unduly high, with uncertain benefits. Switzerland's success in having achieved a resilient economy, characterised by high living standards, is underpinned by openness to trade, favourable framework conditions, a reliance on private markets and trusted institutions. This approach should be upheld to allow companies to deal with the resilience of supply chains, by maintaining high spending on R&D and improving regulation to sustain Switzerland's high level of attractiveness and competitiveness (IMD, 2023), without unduly increased state influence or costly public support.

Box 5.9. Recent industrial policy initiatives in the EU and the United States

Several OECD economies have recently proposed or launched new industrial policy initiatives, justified by the desire to ensure effective green and digital transitions, coupled with some place-based objectives related to employment. This box presents key industrial policies in Switzerland's two main trading partners: the EU and the United States.

The European Union

The **European Chips Act** came into force in September 2023 and aims to foster semiconductor production in the European Union to achieve a global market share of 20% in 2030. Measures include derogations to state aid rules for key facilities, reallocation of EUR 3.3 billion (0.02 % of GDP) from existing EU funds to relevant projects and adding EUR 2.9 billion. The European Commission intends to mobilise EUR 43 billion (0.3% of GDP) in public and private funds through the Act, with EUR 11 billion coming from repurposing existing funds.

The **Net-Zero Industry Act (NZIA)** and the **Critical Raw Materials Act (CRM)** were proposed in March 2023. The NZIA seeks to scale up the manufacturing of green technologies in Europe (solar, wind, battery/storage and carbon capture and storage technologies) to 40% of the EU needs by 2030. The CRM aims to develop a European value chain of key inputs for the green and digital transitions. Measures include the acceleration of permits and administrative procedures, facilitating the co-ordination of private funding, increasing public subsidies, changing public procurement rules to include sustainability and resilience criteria, or the creation of regulatory sandboxes to support innovation. The proposals do not allocate new EU-level funding, but countries are allowed to provide more support to cleantech production or investment projects, and to provide matching aid, i.e., the amount of support the beneficiary could receive for an equivalent investment in an alternative location.

The United States

The **Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act** passed in August 2022 aims to improve competitiveness, innovation, and national security in the semiconductor sector. The Act provides around USD 53 billion (0.2% of GDP) over five years for investment tax credits, R&D funding and development for education and skills. It introduces a 25% tax credit for building and equipping the plants initiated before 2027. It also significantly increases authorised spending for federal science and technology research and development programmes, administered by multiple federal agencies (amounting to around USD 174 billion through fiscal year 2027, equivalent to 0.7% of 2022 GDP).

The **Inflation Reduction Act (IRA)** supports climate mitigation with several measures, including production and investment tax credits for clean energy manufacturing facilities. Incentives are up to five times higher for projects that satisfy specific wage and apprenticeship criteria and are also higher for projects that use specific domestically produced materials (including steel). The IRA also provides tax credits up to USD 7 500 for the purchase of a new electric or hydrogen vehicle. Tax credits are granted also for carbon capture and sequestration, nuclear power production, in energy efficiency improvements of private homes, clean and transportation and industrial fuels.

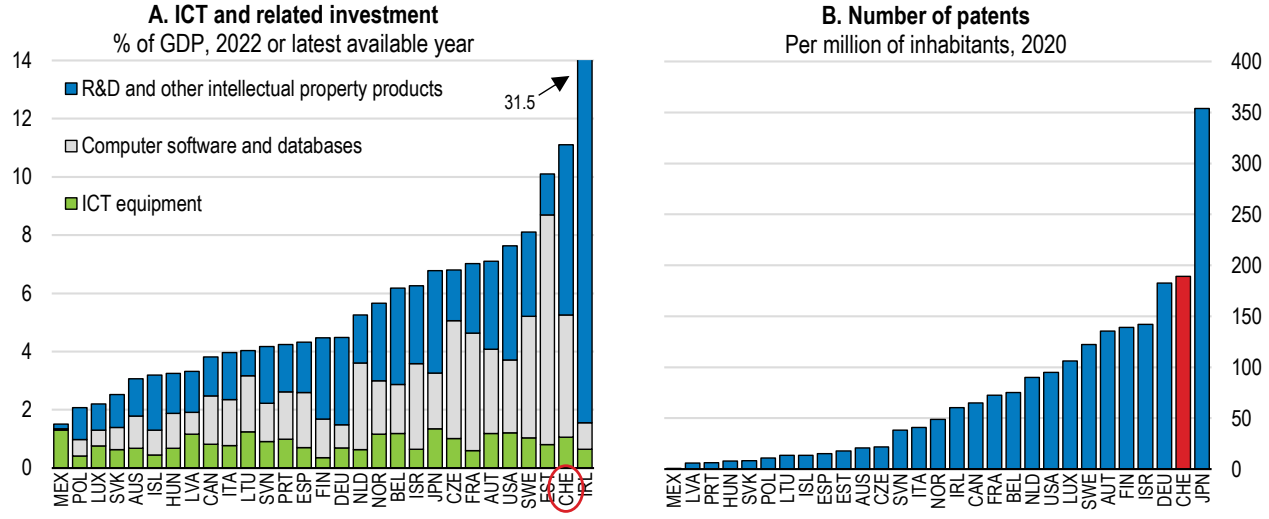
Source: Millot and Rawdanowicz (Forthcoming)

Switzerland remains an OECD leader in the production of high-quality research (Figure 5.20). Innovations allow companies to change their production process, for example by making it possible to substitute currently rare inputs for those that are more abundant. New technologies can also allow companies to better detect and monitor risks in their supply chain, For example, multinational companies are increasingly

expecting to use generative artificial intelligence to manage supply chains, including pricing, negotiating contracts, customer relations and tracking intermediate inputs (Freightos, 2023).

Switzerland's good performance on innovation is driven by a high share of new doctoral students and international scientific collaboration, as well as public-private cooperation (European Commission, 2023c). Another factor is the prominence of a limited number of multinational enterprises that perform a significant share of R&D (The Federal Council, 2016b). At the same time, R&D spending among SMEs is among the highest as a share of GDP (Figure 5.21). Yet, the *2017 Economic Survey* showed that the productivity gap between top performing companies and others has widened since the 2000s, a trend that seems to have continued in recent years (OECD, 2023d). Furthermore, the share of companies undertaking R&D and innovation activities has narrowed over time, with leading companies investing more (OECD, 2017). Insufficient positive spillovers from leading to lagging companies can create persistent productivity differentials and make smaller companies less resilient to shocks.

Figure 5.20. Switzerland is a leader in R&D and ICT-related investments



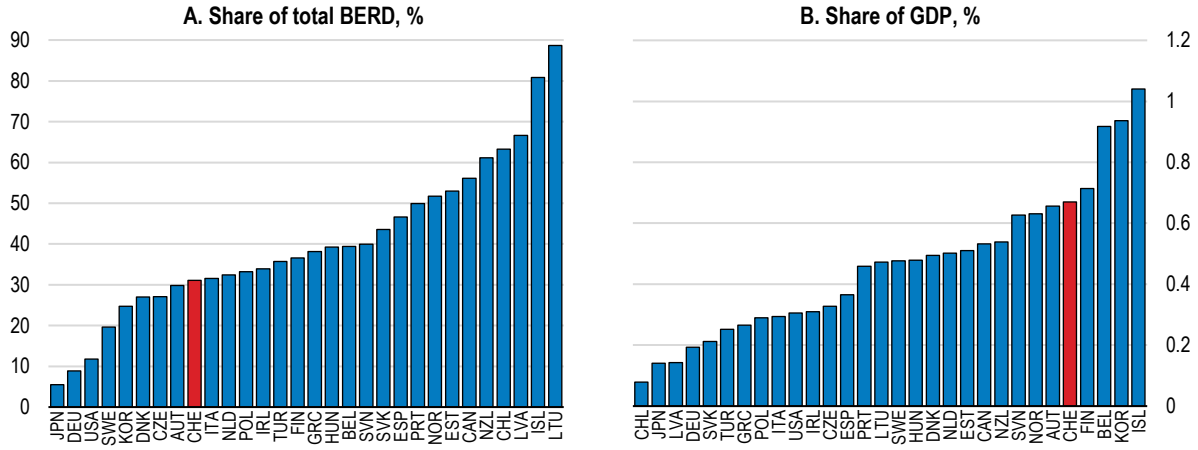
Note: Patent data refer to IP5 patent families (inventions patented in the five top IP offices) according to the inventor's residence.
Sources: OECD National Accounts database; Eurostat database; OECD Patent Database.

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Promoting the wider diffusion of new technologies and knowledge would help to realise the potential of technological change. Switzerland is well-situated to benefit from advances in new technologies, with high internet access and digital skills (OECD, 2017; OECD, 2022b). The "Digital Switzerland Strategy" provides a good starting point for the digital transformation by providing a framework for government policy. The 2023 update of the strategy focuses on digitalisation in the health care sector and designing laws so that they encourage digitalisation instead of inhibiting it, as well as examining digital vulnerabilities and how they can be reduced. While it is imperative to ensure the cyber security of companies and people, it is important not to put undue restrictions on the flow of goods, services or capital that hamper competition.

Figure 5.21. SME Business R&D could be boosted

SME's R&D expenditure, 2020 or latest available year



Source: OECD Research and Development Statistics.

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Although venture capital support for innovation is high in Switzerland, there is less late-stage funding than in leading countries (OECD, 2023e). To narrow the innovation gap between small and large companies, the government provides tax incentives and grants. Federal public financing for R&D largely goes through the Swiss National Science Foundation (for basic research) and Innosuisse, supporting applied research through entrepreneurship, start-ups and R&D projects. The projects supported by Innosuisse can have low internal returns but potentially high positive externalities. Indeed, funding to businesses from Innosuisse tend to have high market implementation and feasibility risks, and slightly less than a third of companies see their innovations as strongly or very disruptive (Hulfeld, Spescha and Wörter, 2023). The authorities should maintain funding for cutting-edge research with a particular focus on small companies, as innovations will help companies improve their production methods, enhance monitoring systems and strengthen supply chains.

In 2020, Switzerland reformed its corporate taxes which provided a stable ground for supporting companies' innovative activity. The reform introduced an intellectual property (IP) regime that cantons must implement and allowed for optional cantonal R&D tax allowances. The IP regime provides for a 90% exemption of qualifying IP income from cantonal taxation. The rate of exemption varies by canton and is subject to mandatory general limitation rules of tax relief that cap the amount of relief firms can obtain from the use of tax instruments at the cantonal level. This cap also varies by canton. Additionally, for those cantons that choose to introduce it, up to 150% of the commercially justified R&D expenses incurred may be deemed deductible.

However, incentives based on income-based measures such as IP regimes generally reward existing patents rather than risky investment in R&D with uncertain benefits further in the future. Income-based tax incentives to R&D and innovation such as an IP regime are shown to affect the cost of capital for R&D activities less than expenditure-based tax incentives (González Cabral, A., et al, 2023). Therefore, income-based tax incentives tend to benefit mainly large companies (Appelt et al, 2023), instead of small start-ups that are likely loss-making (Appelt et al., 2016). Although the tax reform should stimulate investment in R&D and innovative activities, it remains to be seen how the reform has worked in practice. A reform-evaluation has been demanded by the National Council. It is key that the evaluation also considers the impact on SMEs.

Improving regulation to strengthen competition

Good regulatory conditions and strong competition is associated with economic flexibility and higher economic resilience (Sondermann, 2018). Switzerland performs slightly better than the OECD average in the OECD's Product Market Regulation (PMR) indicators (Figure 5.22), but fares worse than best OECD performers. In more detail, the administrative and regulatory burden is higher than among the OECD average and lowering it would help boost productivity (Sorbe et al., 2019). In particular, the costs to open a limited liability company are higher, the procedures more complicated and the amount of required minimum capital is also comparatively high. Resolving commercial disputes takes longer than on average in the OECD and is more costly to businesses. The process for obtaining construction permits is also relatively slow and cumbersome (OECD, 2022a).

Less red tape would boost dynamism and increase flexibility in the Swiss economy. The Corporate Relief Act was passed in September 2023 and contains various targeted measures, by ensuring that new regulations are designed to be efficient and, especially for small and medium-sized enterprises, administratively lean. Companies' regulatory costs are also to be considered and incorporated into the decision-making process of the Federal Council and Parliament. Furthermore, existing regulations are to be specifically reviewed through sectoral studies, with a view to streamlining them (The Federal Council, 2022). Such legislation could help reduce unnecessary barriers to companies' entry and growth, increase competition and thus strengthen resilience at the same time as costs and prices are lowered.

The one-stop platform EasyGov has eased the administrative burden in Switzerland since its inception in 2017, both by expanding the scope and number of government services provided, as recommended in (OECD, 2022a). As of 2023, the platform had 130 000 users and 90 000 registered companies, constituting around 15% of all companies in Switzerland. Surveys show that nearly half of these companies are highly satisfied with the service. The economic benefits accruing to companies are estimated at CHF 8 million annually (SECO, 2022c). The authorities should maintain this positive momentum and continue expanding EasyGov and encourage its further use and wider adoption. The Corporate Relief Act includes a new obligation for federal and cantonal authorities that enforce federal law to offer their services for companies via the one-stop platform EasyGov. This is a welcome step and could speed up the expansion of the platform.

Competition in Switzerland is still hampered by cantonal borders (Competition Commission, 2022), despite continuous improvements. Reinforcing access to markets nationwide is crucial to generate economies of scale and competitive pressures. The Internal Market Act states that all businesses or professions that can successfully operate in one canton must be allowed to operate in all other cantons. This market access does not exist in all areas, as the example of the notarial profession demonstrates, and some cantons impose "protection charges" (to protect business secrets) in connection with invitations to public tenders (Competition Commission, 2022).

The merger control framework remains more permissive than in the EU and reform efforts have been stalled. As recommended in past *Economic Surveys* (OECD, 2017, 2019 and 2022d), harmonisation with the European Union's merger control system would be beneficial, by facilitating interventions against anticompetitive mergers and simplifying the examination of cross-border mergers with EU companies. Steps in line with these recommendations have been taken recently. In May 2023, the Federal Council adopted the dispatch on a partial revision to the current Cartel Act. In particular, the revision will modernise the merger control framework from the qualified market dominance test to the "significant impediment of effective competition" (SIEC) test of market dominance, which focuses on the changes to effective competition in a market following a merger rather than narrowly on the absolute level of market power. The revised legislation will need approval by Parliament and is not expected to come into force before 2024.

The introduction of mechanisms enabling private action against competition distortions, common in other OECD countries such as Australia, Korea and the United Kingdom (OECD, 2016a), would present a robust

deterrent to the abuse of advantageous positions. The current proposal of the revised Cartel Act plans to extend the right to sue to all parties affected by unlawful restrictions of competition - especially consumers and the public sector (e. g. public clients). Under current law, only companies have the right to do so. In the area of cartel law, it is also crucial that Parliament - in the current revision of the Cartel Act – does not weaken the existing, effective instruments of the Competition Commission to combat anti-competitive agreements between companies.

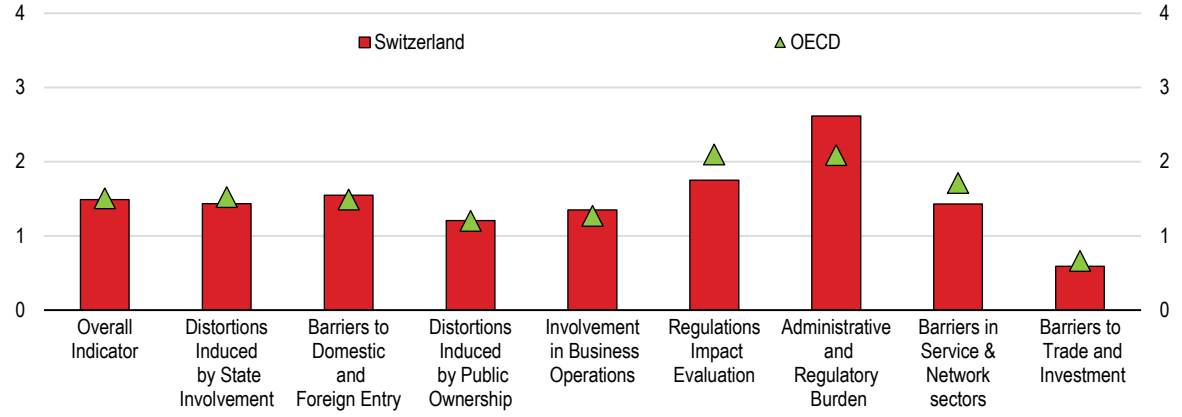
State involvement in the economy can weaken competitive pressures, obscure market signals and the presence of state-owned enterprises (SOEs) in private markets can give them unfair advantages. For example, government guarantees can result in easier access to funding and lower financing costs, and monopoly rents from regulated activities can be used to cross-subsidise the competitive part of business operations (OECD, 2016b). According to the 2018 PMR indicators, state-involvement is among the highest in the OECD, particularly in network sectors (telecommunications and energy). Services that are typically provided by private companies in many OECD countries such as the distribution of mail and packages, banks and financial services, transport and media, are largely provided by companies belonging to the Swiss Confederation, cantons or municipalities. For example, the telecommunications provider Swisscom, is majority-owned by the Swiss state, as well as most cantonal banks and energy producing or providing companies.

Switzerland has embraced several OECD guidelines concerning the corporate governance of its SOEs already (OECD, 2022a). Nonetheless, ensuring regulatory and competitive neutrality is an ongoing task, as markets and technology are constantly evolving. Regulatory agencies and competition authorities should continue to prevent market distortions and ensure full and impartial implementation of all relevant laws and regulations.

At the cantonal level, SOEs may distort competition even more than at the federal level. Competition dynamics at the cantonal level demand careful consideration, with the complexity of separating ownership, management, regulatory oversight, and market monitoring roles warranting attention (The Federal Council, 2017). Several cantonal SOEs have politicians sitting on supervisory boards and there are others directly controlled by the government. Moreover, some regulations, notably in the hospital sector, favour public enterprises and cross-subsidisation cannot be ruled out. As recommended in (OECD, 2022a), bringing the standards of corporate governance, transparency and regulatory and competitive neutrality for cantonal SOEs to the same level as for federal SOEs would further improve competition and reduce risks from implicit public guarantees.

Figure 5.22. There is room to lower the administrative and regulatory burden further

OECD Indicators of Product Market Regulation (PMR), index scale of 0-6 from least to most restrictive



Source: OECD (2018), Product Market Regulation Database

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Table of recommendations

Main findings	Recommendations
Bridging acute shortages through private-public cooperation	
Switzerland has a comprehensive framework for monitoring and planning for various risks, as well as a large compulsory stockpiling system. **Stockpiles of critical products can help bridge temporary shortages. However, stockpiling is costly, cannot cover for every contingency and can bring "moral hazard".**	**Maintain the comprehensive framework for risk management and stockpiling that centres on the private sector's responsibility to safeguard the stability of supply.** **Use the established private-public cooperation – through FONES – to handle severe supply disruptions and abstain from extending the compulsory stockpiles to non-essential goods.**
Shortages of pharmaceuticals have increased markedly in recent years and become persistent, resulting in a frequent release of compulsory stocks over the past five years.	Create sustainable solutions for shortages of pharmaceutical products by continuing to collaborate internationally and improve market access by simplifying authorisation procedures.
Maintaining high integration in global markets to facilitate stability and growth	
Trade restrictions have risen globally and several countries have introduced large-scale industrial subsidies. Yet, open and well-functioning international markets with efficient supply chains are key for productivity and economic resilience. Industrial policy programmes can be costly, are often ineffective and distort trade.	**Enhance economic integration with key trading partners and facilitate the diversification of supply chains, by extending and deepening free trade agreements.** **Refrain from introducing distortive industrial policies.**
Switzerland's FTAs are often used by Swiss exporters and importers. However, companies find the use of FTAs complex, and the proof of preferential rules of origin is often seen as too stringent.	Provide more information on how companies can utilise existing FTAs and use preferential rules of origin.
The partnership between Switzerland and the EU is at risk of eroding over time. Ensuring a continued stable economic relationship with the EU would secure access and competitive exposure to the most important trading partner, raising productivity and growth.	**Resume negotiations with the EU to safeguard access to the single market and ensure continued economic partnership.**
Barriers to trade in services are higher in Switzerland than in most other OECD countries. Agriculture is heavily shielded from foreign competition and it receives high direct support payments. Switzerland also imposes constraints on inward foreign direct investments (FDI) through equity restrictions. New foreign ownership regulation is planned, motivated by national security concerns.	Lower restrictions on trade in goods and services, notably in agriculture. Remove the barriers to FDI where applicable and keep them low.
Switzerland lags OECD best performers on trade facilitation measures, especially on fees and charges, automation and external co-operation. Simplifying and accelerating customs clearance of goods can help lower costs for companies and alleviate bottlenecks.	**Revise the Customs Act to simplify and digitalise processes concerning the collection of fees and controls of goods crossing the border.**
Improving business regulation and increasing competition	
Competition in the domestic market is still hampered by cantonal borders. The merger control framework remains too permissive and civil action against cartels is rare due to the lack of legal standing for injured parties other than companies.	Fully implement the Internal Market Act to ensure equal access to markets in all cantons. Harmonise the merger control framework with that of the EU and strengthen the civil law on cartels.
The administrative burden is higher than on average in the OECD despite improvements since 2018, with detrimental effects on productivity.	**Implement the Corporate Relief Act to reduce the administrative burden on companies.** **Expand the government one-stop shop (EasyGov.swiss) by integrating cantonal governments' services.**
State involvement in the economy is among the highest in the OECD, particularly in network sectors (telecommunications and energy).	**Reduce public ownership and keep reducing the competitive distortions due to public ownership.** Bring the standards of corporate governance, transparency and regulatory and competitive neutrality for cantonal state-owned enterprises (SOEs) to the same level as for federal SOEs.

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