

## BOX 1 Liechtenstein's economic recovery from the COVID-19 pandemic

The COVID-19 pandemic and the containment measures put in place were associated with a sharp decline of economic activity worldwide and resulted in the sharpest recession since World War II. Even though the world economy has experienced pronounced rebound effects in the second half of 2020, real global GDP featured the lowest annual growth rate since the beginning of the World Bank data series in 1961. The world economy

contracted by –3.6% in 2020, compared to a decrease of –1.7% in 2009, at the peak of the global financial crisis. The simultaneous occurrence of shocks both on the demand and the supply side is a specific feature of the COVID-19 crisis and distinguishes the recession 2020 from other historic recessions (see Brunhart, Gächter and Geiger 2020). Yet, the negative supply effects have turned out to be less pronounced compared to the demand side effects in the first wave of the pandemic, while supply shortages have dominated in the economic recovery phase.



**Figure B1.1**  
Real GDP  
(annual growth rates in percent)  
Sources: Office of Statistics,  
Liechtenstein Institute, SECO, OECD.

The decline of Liechtenstein's real GDP in 2020 was less severe than during the global financial crisis. The flash estimate of Liechtenstein's real GDP in 2020, based on latest data vintages, suggests a decline by –5.5% relative to the previous year (Brunhart and Geiger 2020), which is comparable to the recession in 1975 in the wake of the first oil shock (1975: –6.3%), while GDP growth was considerably more affected during the global financial crisis (GFC, 2009: –11.3%), as evident in Figure B1.1.

In contrast to other severe international recessions, Liechtenstein's COVID-19 related drop in economic activity was comparable to the macroeconomic shock in other countries. Real GDP growth volatility in Liechtenstein is very high compared to larger economies (more than twice as high as in the surrounding countries), as shown in Figure B1.1. The reasons for this structural difference to other (larger) countries are manifold, as explained in the Financial Stability Report 2019 (p. 19). Given this characteristic,



**Figure B1.2**  
Liechtenstein's real GDP  
(CHF million)  
Source: Liechtenstein Institute.  
Figures are seasonally and calendar adjusted.

it is surprising that Liechtenstein's GDP decline in 2020 was not more pronounced than in its larger neighboring countries or the OECD average. In a similar vein, the fact that the pandemic shock in Liechtenstein was significantly weaker than during the GFC in 2008/09 – this observation also holds for important aggregates other than GDP – is remarkable.

**Some important structural factors have contributed to the remarkable resilience of the economy during the pandemic.** One important factor why very small economies like Liechtenstein typically exhibit higher economic volatility is the small domestic market, i.e. domestic demand cannot act as a buffer against international shocks. During the current pandemic, however, this stabilizing feature of larger domestic markets could not take effect, because the pandemic has not only affected international trade, but also domestic demand through uncertainty on the one hand, and through strict containment measures on the other. As a result, even larger countries, which benefited from strong domestic demand in other recessions, experienced a dramatic drop in output. To put it differently, larger economies for once were hit by a recession in a way

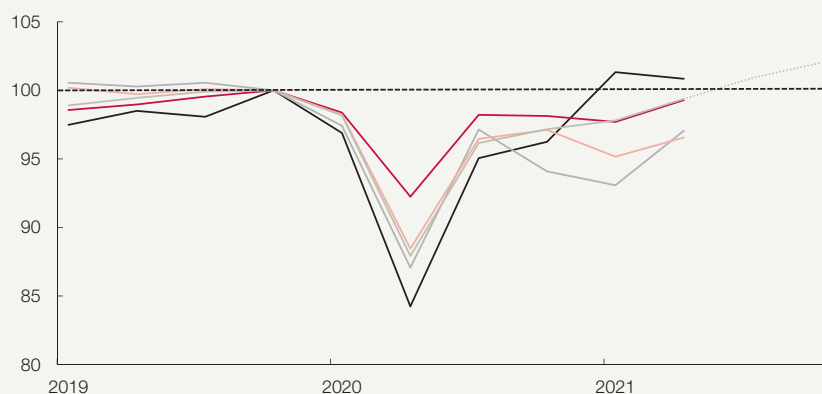
that smaller countries usually are. Furthermore, Liechtenstein's financial sector, with its high relevance for employment and GDP, has been very stable during the pandemic (in sharp contrast to the GFC in 2008/09). Finally, the sectors that were hit hardest by the containment measures, i.e. retail, hospitality, tourism or the cultural/entertainment sector, have a relatively low contribution to Liechtenstein's GDP in comparison to other countries.

**To obtain a detailed view on the dynamics of the pandemic, quarterly GDP figures have to be estimated for Liechtenstein.** Official GDP figures for Liechtenstein are currently available up to 2019, and only in annual and nominal form. Quarterly numbers as well as the most current annual GDP figures therefore have to be estimated. This is done by applying a temporal disaggregation method following a variant of Chow and Lin (1971), which estimates a regression relation between Liechtenstein's annual GDP and economic variables that are available on a sub-annual basis and highly correlated with annual GDP (for methodological explanations see Brunhart 2020). Using this regression relation, and by taking into account the annual aggregation constraint (quarters must sum up to the annual GDP

## BOX 1

— Liechtenstein  
— Switzerland  
— Austria  
— Germany  
— OECD

**Figure B1.3**  
*Real GDP (index, 2019 Q4 = 100)*  
Sources: Liechtenstein Institute, SECO, OECD.  
Figures are seasonally adjusted, 2021 Q3 and 2021 Q4 are OECD forecasts.



benchmark), the sub-annual GDP dynamic is being estimated for the years 1998 to 2019. The model also allows us to extrapolate quarterly numbers for the years 2020 and 2021, where the official annual GDP benchmark is not yet available. Annual real GDP along with the estimated quarterly figures are presented in Figure B1.2. The annual GDP of 2020 is estimated as a sum of the estimated quarterly figures of the same year.

**Liechtenstein experienced a strong economic recovery in the second half of 2020, which has continued so far in the first half of 2021.** A broad range of indicators, including export/import data, the business cycle indicator “KonSens”, other relevant economic indicators and the quarterly GDP estimates indicate a fast and broad recovery in Liechtenstein from the deep recession of the first two quarters of 2020 (with estimated quarterly seasonally-adjusted real GDP growth rates of  $-3.1\%$  and  $-13.1\%$ ). According to the GDP estimates, Liechtenstein has reached the pre-crisis level of the fourth quarter 2019 already in the first quarter of 2021, which is earlier than in the neighboring countries shown in Figure B1.3, as those countries still lack behind the pre-crisis level in mid-2021. The seasonally-adjusted real

GDP growth rates are estimated at  $+12.8\%$  (third quarter 2020, Q3-2020),  $+1.3\%$  (Q4-2020),  $+5.3\%$  (Q1-2021) and  $-0.5\%$  (Q2-2021). The supply side measures imposed by Liechtenstein’s government (particularly the short-time work scheme), the expansive monetary policy by the Swiss National Bank (SNB) and foreign fiscal policy supported the Liechtenstein economy in mitigating the pandemic induced shocks and enabling a quick recovery (see Brunhart and Geiger 2020). Furthermore, the stable labor market (see Box 2) and the export industry’s high sensitivity to the international business cycle (Geiger and Hasler 2021) are two further important driving factors behind Liechtenstein’s faster recovery.

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# FINANCIAL STABILITY REPORT 2021



**FMA**

Financial Market Authority  
Liechtenstein



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