BOX 1

The implications of the Covid-19 pandemic for the Liechtenstein economy

The Covid-19 pandemic has hit the world economy as well as Liechtenstein very hard, both from the demand and the supply side. The pandemic and also the measures to contain the spread of the virus, in particular the shutdown of the economy from March to May 2020, have induced a series of shocks, which have affected the demand but also the supply side, i.e. the production of goods and services. A simultaneous occurrence of shocks on the demand and the supply side is a specific feature of the Corona Crisis and distinguishes the current recession from other historic economic crises such as the oil crisis in the 1970s or the global financial crisis in 2008/09.[1]

It appears that the negative supply effects have been less pronounced compared to demand side effects. The international production chains have remained fairly intact and a broad shortage of the labor supply in Liechtenstein – more than half of the labor force are daily commuters from abroad – could be prevented. By contrast, low external demand remains a strong burden for the export-oriented country.

Available sub-annual business cycle data in Liechtenstein, such as export figures or the KonSens business cycle index, indicate that the economic trough was reached in the second quarter of 2020. As outlined in Brunhart et al. (2020), the business cycle amplitude of economic activity in Liechtenstein has been high in international comparison during previous decades. The pronounced international trade orientation, the high industrial share in total gross value added (47% in 2017) and the strong focus on investment and intermediate goods are associated with a higher sensitivity to international shocks. Compared to other countries, for instance Switzerland, growth rates are thus usually considerably higher in booms and lower in recessions. In the financial crisis year 2009, Liechtenstein's annual real GPD decreased by –11%, compared to –2.2% in Switzerland. Considering this large difference in previous recessions and the Swiss GDP predictions for the entire year 2020 (SECO 2020, KOF 2020) of around –5%, one might expect negative real GDP growth rates of well below –20% in Liechtenstein. However, Liechtenstein's business cycle data based on the first two quarters in 2020 indicate that this expectation is likely to be too pessimistic.

To evaluate the real GDP contraction in the wake of Covid-19 in an international comparison, quarterly real GDP figures (adjusted for seasonal and calendar effects) for Liechtenstein are estimated for the first two quarters of 2020.[2] Official GDP figures for Liechtenstein are currently available up to 2018, and only in annual and nominal form. Current GDP figures thus have to be estimated. This is done by applying a temporal disaggregation method in the tradition of Chow and Lin (1971), which links Liechtenstein's annual GDP figures with economic variables that are available on a sub-annual basis and highly correlated with annual GDP. Using this regression relation, and under the annual aggregation constraint (quarters must sum up to the annual GDP benchmark), the sub-annual GDP dynamic is being estimated for the years 1998 to 2018. The model also allows for an extrapolation for the years without official annual GDP data. Figure B1.1 shows estimated quarterly GDP together with realized GDP from 1998

1 *See Brunhart, Gächter and Geiger (2020) for a discussion of macroeconomic implications of Covid-19 for Liechtenstein.*

2 *This box and the included GDP estimations build on Brunhart (2020).*

BOX 1

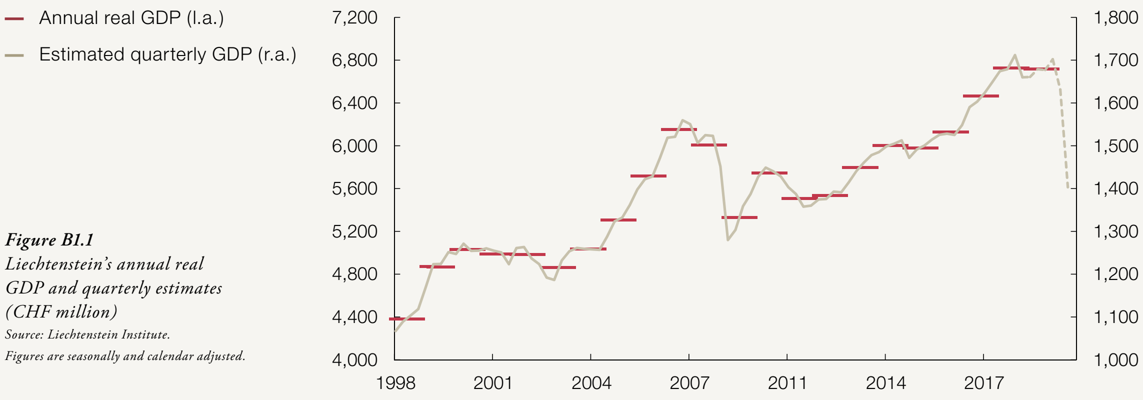

Figure B1.1
Liechtenstein's annual real GDP and quarterly estimates (CHF million)
Source: Liechtenstein Institute.
Figures are seasonally and calendar adjusted.

to 2018. Real GDP numbers for 2019 and the first two quarters of 2020 are estimated.

The model predicts approximately zero real GDP growth for the year 2019, followed by quarterly real GDP growth of –4% and –14% in the first two quarters of 2020, respectively (seasonally and calendar adjusted). Figure B1.2 illustrates that Liechtenstein's current real GDP drop is deeper compared to most larger economies, as expected. However, in the context of the Corona Crisis, the drop in output appears to be only slightly larger on average, and even smaller than in some of the listed countries. Notably, Liechtenstein's decline in real GDP growth in the first two quarters of 2020 is of similar magnitude compared to the global financial crisis. In the fourth quarter of 2008, real GDP dropped by –5%, and by –12% the first quarter 2009. By contrast, the current real GDP decline in all other countries shown in Figure B1.2 was considerably larger than during the global financial crisis. In some countries, the current downturn was more than three times larger than in 2008/09 and marks the deepest international recession of the post-war area. Thus, the overreaction of Liechtenstein's (negative) GDP growth rates compared to larger nations in the first half of 2020 was much lower than it is usually the case.

It appears that domestic demand in larger countries did not play the stabilizing role it usually does during recessions. One of the reasons why Liechtenstein, as well as other very small states, exhibits higher economic volatility, is that domestic demand cannot act as a buffer against international shocks. During the current pandemic, however, the usually stabilizing feature of larger domestic markets could not take effect, because the Covid-19 pandemic does not only affect international trade, but also domestic demand through uncertainty directly caused by the pandemic or by the containment measures. As a result, larger countries, which were stabilized through domestic demand in other recessions, also experience a dramatic drop in output. Another reason which has prevented Liechtenstein from even larger losses in output so far in contrast to the global financial crisis is that the financial sector, which also plays a very important role in Liechtenstein besides the industrial sector, is much less affected this time.

Even though international forecasts expect a pronounced business cycle recovery in the second half of 2020, it is expected that pre-crisis GDP levels will not be achieved before 2022 in most economies (KOF 2020, OECD 2020). The shape of the economic recovery (L-, U- or V-shape) will heavily

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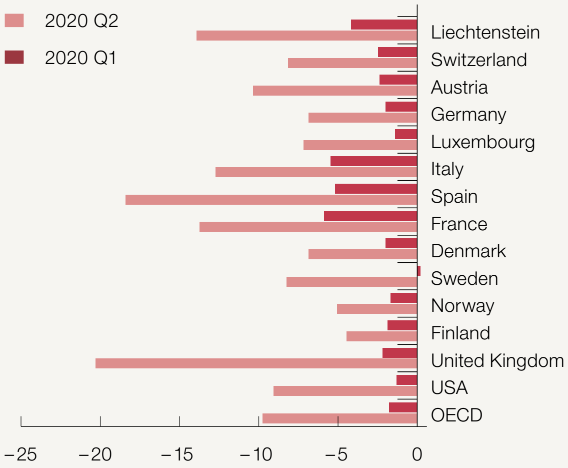

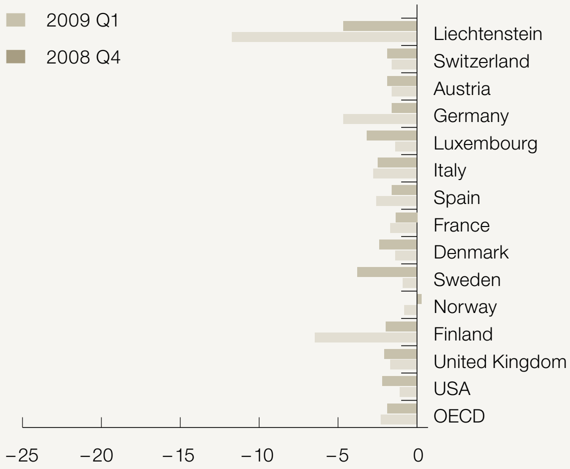

Figure B1.2
Real GDP growth during the global financial crisis and Covid-19 (quarterly changes in percent)
Source: Liechtenstein Institute, Eurostat, OECD. Figures are seasonally adjusted.

depend on the future pattern of the national and international spread and containment of Covid-19 (Dorn et al. 2020). Whether the unusual case of similar affectedness of Liechtenstein compared to other larger countries also holds for the entire year 2020 will mainly depend on international demand, especially for investment and intermediate goods.

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