



The impact of the Covid-19 pandemic on global and EU trade

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1. INTRODUCTION

This note outlines the results of an in-house analysis carried out by DG TRADE that estimates how the reduction in economic activity following the COVID19 outbreak has affected international trade. The increasing spread of the virus has caused a significant amount of governments to introduce measures that shut down businesses temporarily and have restricted travel and the movement of people. These measures will lead to sharp contractions in the level of output, household spending, investment and international trade. While there are a wealth of forecasts on GDP growth in 2020, there is a limited range of work done on trade projections for 2020, in particular for EU trade. The analysis outlined in this note is one of the few attempts at predicting the impact of the COVID19 outbreak on trade flows. In order to test the robustness of this analysis, results are compared to the latest WTO trade forecasts published on 8 April.

2. METHODOLOGY

The analysis estimates the impact on trade flows using predicted COVID19-related GDP shocks for 2020. The GDP impact is derived from the difference between projections of GDP estimated before and after the COVID19 outbreak. It then uses the computable general equilibrium (CGE) model MIRAGE¹ to estimate the effect that the changes in these macroeconomic forecasts will have on trade. The forecasting scenario is implemented by increasing the trade costs until the forecasted lower GDP levels are reached. The reduction in trade flows associated with this lower level of economic activity is interpreted as the impact of the COVID19 outbreak on trade. It is important to underline that these estimates are subject to a *high degree of uncertainty* given that the current crisis is an unprecedented situation with many unknown variables, including recovery time.

Since the outbreak of the epidemic in China, various institutions have forecasted the impact of the COVID19 on GDP, but the situation is volatile and many forecasts have quickly become outdated. Some of the more recent analyses only provide results at a global level, or for single regions or countries, and therefore could not be used for our trade projections. One set of consistent and comparable GDP forecasts issued before and after the COVID19 pandemic are from the Deutsche Bank Research group. The Deutsche Bank Research has a long and consolidated experience in providing macroeconomic analyses².

¹ Used for numerous in-house analyses feeding into external studies.

² For example in pandemic-related GDP forecasts like the 2003 SARS in Hong Kong and Canada.

One of their latest reports³ contains forecasts at a global level and results for some individual countries built under the following assumptions: i) a wider spread of the virus in Europe and in the US, plus containment measures in Italy and Spain; ii) a strong drop in the economic activity in China in January and February; iii) indications of severe stress in financial conditions and credit markets globally; and iv) indications of virus containment and a gradual return to normal activity in China and Asia towards the end of the first quarter of 2020.

We compare these GDP forecasts with their December 2019 forecast for 2020.⁴ This allows us to obtain estimates of the reduction in economic activity following the outbreak of COVID19. This comparison between GDP forecasts indicates GDP growth of -2.9% for the Euro Area, which is 4.1 percentage points below the pre-COVID19 estimate (+1.2%). For the US, post-COVID19 growth is forecasted to be -1%, and for China +4.5%. These forecasts are 3.3 and 1.7 percentage points below earlier forecasts. For the world in total, GDP growth is predicted to be still marginally positive (+0.7%), but 2.6 percentage points lower than the pre-COVID19 forecasts.

3. RESULTS

The in-house analysis performed by DG TRADE's Chief Economist team estimates a **9.7% decrease in global trade** for 2020. For the EU27, the predicted COVID19-related economic contraction results in a **reduction of 9.2% in extra-EU27 exports of goods and services, and an 8.8% decrease in extra-EU27 imports** in 2020. In absolute terms, compared to the latest available statistics, this amounts to a reduction of exports by about **285 billion EUR** and by **240 billion EUR** in extra-EU imports (goods and services combined). Exports of primary sectors (other than energy) and services trade⁵ turn out to be less strongly affected than manufacturing sectors, most of which see export contractions above 10%. In particular, transport equipment and electrical machinery turn out to be more strongly affected.

The WTO secretariat has also recently simulated the potential economic effects of the COVID19 pandemic on international trade, using a different methodological approach.⁶ They forecast that world merchandise trade could fall by between 13% and 32% in 2020, depending on assumptions about the length and severity of the COVID19 crisis. The WTO's normal approach employs consensus estimates for GDP (usually drawn from IMF, World Bank, and OECD) in various regions as inputs into the trade forecast model.

However, due to the lack of up to date GDP forecasts, the WTO secretariat generated their own, which are based on three possible scenarios (a V-shaped, U-shaped and L-shaped recovery) for world GDP, ranging from -4.8% to -11%. The GDP shocks associated to the trade declines are larger than those

³ Deutsche Bank Research (2020) "Impact of COVID-19 on the global economy Update 2: Severe recession" Economics Special Report, 18 March 2020.

⁴ Deutsche Bank Research (2019) "Deutsche Bank Research Outlook 2020 Fragile – handle with care" 20 December 2019.

⁵ It is important to note that the severity of the COVID19 crisis on services trade is most likely underestimated in our results, as most CGE models have a limited coverage of trade in services and several important modes of supply (notably mode 3) are only partly covered. For more details on the importance of different modes of supply for EU trade in services, see DG TRADE Chief Economist Note no. 3/2016 (https://trade.ec.europa.eu/doclib/docs/2016/december/tradoc_155119.pdf).

⁶ WTO (2020) Trade set to plunge as COVID-19 pandemic upends global economy, Press/855 Press Release, 08 April 2020. Available at: https://www.wto.org/english/news_e/pr855_e.htm

used in the DG TRADE model and may contribute to explaining the differences in the trade projections. The WTO projections show results at a regional level and estimate that, depending on the GDP scenarios, European exports will fall by between 12%-33% while imports will decrease by between 10%-25%.

4. NEXT STEPS

DG TRADE analysts will continue to monitor the economic impact of the COVID19 crisis on trade. Given the fast changing elements of the crisis and many recent updates of economic forecasts⁷, we will issue new trade projections in May. With predicted GDP losses becoming more significant, reductions in trade may also be more considerable.

⁷ IMF (2020) "World Economic Outlook, April 2020 -- The Great Lockdown" Available at: <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>