Economic cycle and economic consequences of the global SARS-CoV-2 pandemic in the Czech Republic

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Motivation

- Examine the influence of a global pandemic on the scale of SARS-CoV-2
- Identify the direct and indirect economic effects of the pandemic business cycle, its specifics, and probable longterm impact
- Ambition offer new findings for contemporary theory on business cycles at the theoretical level



Objectives

- Analyze and discuss the economic impacts of the spread of the SARS-CoV-2 pandemic in the Czech Republic
- Define key phenomena occurring within the pandemic crisis, which are tied into economic theory on business cycles



Data and research methodology

- Systematic research in academic literature review (economic theory on business cycles)
- Synthesis of the available statistical data (Czech Statistical Office and the Czech National Bank)



Development of a pandemic

- The first three cases of infection in the Czech Republic were confirmed on March 1, 2020. The World Health Organization classified the SARS-CoV-2 epidemic as a pandemic on March 11, 2020. The next day, the Czech government decided to announce a state of emergency. On the basis of this mandate government:
 - limited the free movement of people across the territory of the Czech Republic
 - limited international ground transportation
 - closed the national borders
 - closed all schools, restaurants, theaters, sports facilities, and most stores and services
- This "nationwide quarantine" lasted a total of 66 days and was rescinded on May 18, 2020. Overall, the adopted measures affected nearly two fifths of the Czech economy.

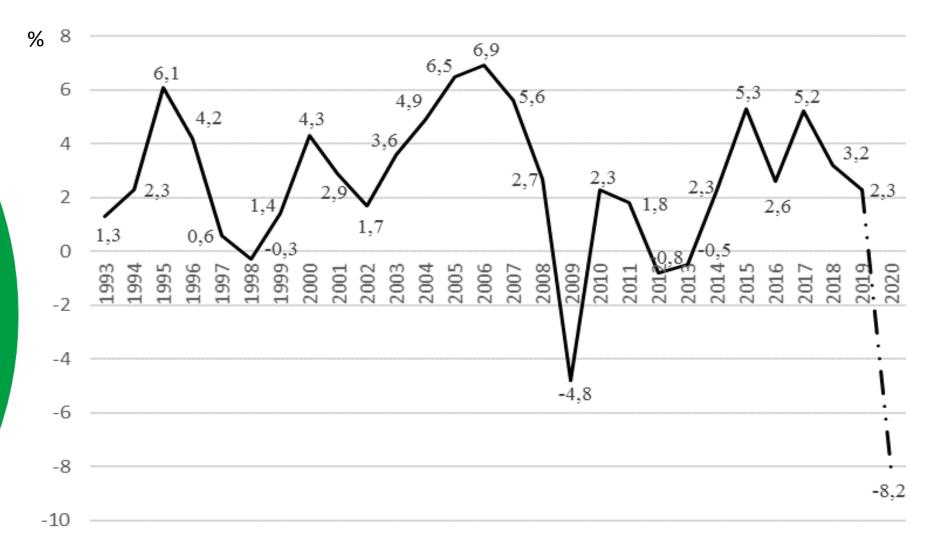
Government measures

- During the course of the state of emergency, the Czech government passed a number of laws
 - extended time off work for dependents
 - aid to independent contractors
 - postponed electronic evidence of sales
 - increased the deficit of the national budget (CZK 500 bn. in comparison with the original approved deficit of CZK 40 bn.
- In April, these mostly concerned programs to support companies and entrepreneurs. By degrees, the following were enacted:
 - a compensatory bonus for independent contractors the Antivirus shorttime working program (based on the German Kurzarbeit program, it compensates employers for employee wages)
 - retroactive application of tax losses (loss carryback)
 - the Covid Praha I and II loan and guarantee programs
 - different types of relief (rent, loan, and payment deferral)

Czech economy before pandemic

- The Czech economy's productivity clearly grew most intensively during the period after the Czech Republic's entry into the European Union, i.e., in 2005 and 2006.
- The steepest drop was recorded in 2009 in conjunction with the impact of the global financial and economic crisis.
- The Czech economy achieved a high growth rate after the economy's subsequent revival in 2015 and 2017. This was the result of an exceptionally positive boom situation during a business cycle peak, which, however, was already linked to the economy overheating to above its potential (the estimate for the Czech Republic's potential output is currently hovering around 3%).
- This situation already indicated a future drop in economic performance as a result of low labor productivity, lagging scientific and innovation processes, and a deepening imbalance on the sub-markets, primarily the labor market.
- However, unemployment continued to decrease, and the number of available jobs even topped the number of job seekers in 2018.
- Before the arrival of the SARS-CoV-2 pandemic, the Czech economy was slowing down and everything was indicating that economic growth would reach a stopping point even without the onset of the coronavirus pandemic. At the end of 2019, the official estimate for the economy's development for 2020 was a mere 2%.

GDP growth



Note: the CNB's current estimate concerning the sudden drop in the Czech economy for 2020 is marked in the graph by a dotted line

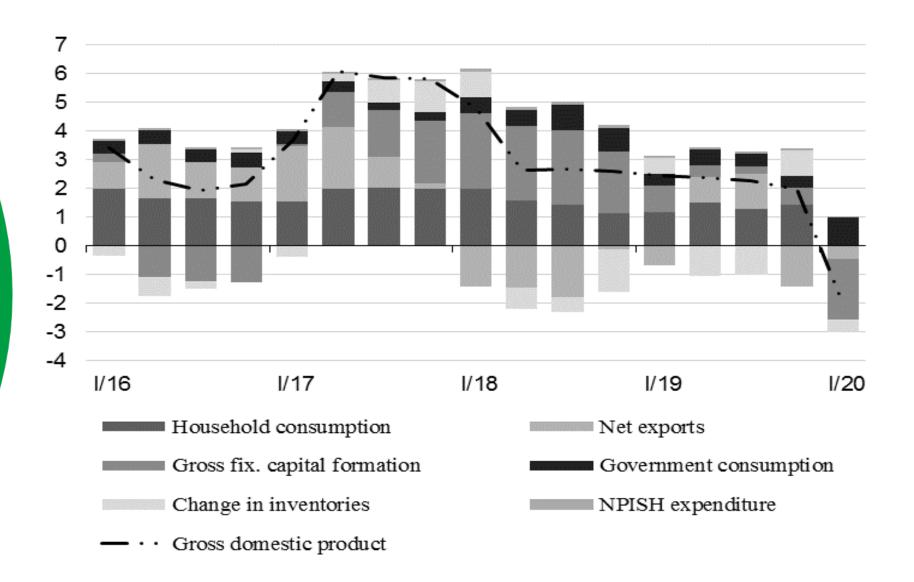
Czech economy after pandemic (1/2)

- The Czech economy is currently located acutely below its potential output, which recorded a steep decline as the consequence of certain companies – even entire sectors – shutting down and the decrease in work productivity
- The previous potential output has changed into a year-on-year decline of -2% as a result of the coronavirus pandemic and its related measures
- In the second quarter, the Czech economy saw a year-on-year loss of more than one tenth of its output, which is the most striking drop in history
- In the second quarter, mainly a drop in net exports, household consumption, and investment dragged the economy down
- A year-on-year decrease has already distinctly appeared in capital-intensive sectors (industrial production dropped by -11.9% and construction by -11.5%)
- After seasonal cleaning, the share of unemployed individuals increased in June to 3.9%, which represents an increase of 1 percentage point since the eruption of the pandemic in March. Increase was recorded for the general level of unemployment, which reached 2.6% in July

Czech economy after pandemic (2/2)

- The immediate consequence of the March events was an expected drop in aggregate demand (the expenditure component of GDP), mainly concerning household consumption, gross fixed capital formation, and an increase in gross value added for non-financial corporations.
- The downturn in the Czech economy was dampened in 2020 Q1 by increased government consumption and a decrease in the negative contribution of net exports.
- The direct impact on gross value added primarily appeared in the period of the first quarter as a decrease in services (trade, tourism, shipping, and hospitality) and industry.
- Concerning the labor market, the impact of the March coronavirus pandemic situation could be seen only slightly i. Employment dropped by 0.5%, mainly in the areas of market services and industry. The general unemployment level remained nearn most of the indicators its historic minimum (2%). The number of available jobs continued to remain high.
- Wage dynamics was also positive in the first quarter. Wage growth held around 5% in market and non-market sectors. The growth rate for nominal unit labor costs increased slightly.

Gross domestic product



Key Macroeconomic Indicators (1/2)

Macroeconomic Indicator/Quarter of the year 2020	I/2020	II/2020
GDP (CZK bn, constant p. of 2010, seas. adjusted)	1281.6	1156.7
GDP (%, year on year, real terms, seas. adjusted)	-2	-10.7
Household consumption (%, year on year, real terms, seas. adjusted)	0.1	-8.0
Government consumption (%, year on year, real terms, seas. adjusted)	5.0	5.6
Gross fixed capital formation (%, year on year, real terms, seas. adjusted)	-8.1	-21.4
Exports of goods and services (%, year on year, real terms, seas. adjusted)	-2.2	-28.1
Imports of goods and services (%, year on year, real terms, seas. adjusted)	-1.7	-23.5
Net exports (CZK bn, constant p. of 2010, seas. adjusted)	67.9	22.9

Key Macroeconomic Indicators (2/2)

Macroeconomic Indicator/Quarter of the year 2020	I/2020	II/2020
Aggregate labor productivity (%, year on year)	-1.5	-11.1
Inflation rate (%, end of period)	3.1	3.1
Consumer Price Index (%, year on year, average)	3.6	3.4
Average monthly wage (%, year on year, real terms)	1.4	-3.7
ILO general unemployment rate (%, average, age 15-64)	2.0	2.4
Current account / GDP (%, nominal terms)	5.5	-1.1
Direct investment (CZK bn, current prices)	-0.6	-21.0
CZK/EUR (average)	25.6	27.1
2W repo rate (%, end of period, CNB forecast = average)	1.00	0.25

Economic expectations (1/2)

- Government measures are short-term fiscal tools that are not a solution on their own, even though they are effective. Moreover, the bureaucratic redistribution of public resources to aid the Czech economy is subject to the most varied special interests and is visibly increasing in pre-electoral populism.
- Over the long term, we can expect other negative results from the liquidation of part of the economy, with nonproductive economic activity that should have been abandoned a long time ago being revealed and companies that had been just barely surviving going bankrupt.
- Regarding the ongoing and currently deteriorating pandemic situation, it is also possible to predict a negative impact on prosperous and promising companies, primarily small and mid-sized companies (these are 58% of the economy in the Czech Republic).
- Company bankruptcy and increasing unemployment will most likely be significantly sectoral in nature, so that the crisis will have paradoxically strengthened certain sectors (primarily IT firms, companies manufacturing protective equipment, pharmaceutical firms, retail companies with online shops, etc.)
- Regarding the nature of the Czech economy (as a small, significantly open economy that primarily relies heavily on the automotive industry), international demand is mostly considered the key risk to further development.

Economic expectations (2/2)

- The CNB's prognosis calculates that as economies gradually open, foreign demand would revive with domestic economic activity following in turn, and potential output's growth rate could be restored in 2021.
- The negative gaps in output could also be closed in 2022, when the year-on-year growth rate of real output should reach a value of 3%.
- Restarting the economy will also depend on renewing the trust of domestic companies and households.
- Where inflation is concerned, an increase in the price of groceries is mostly expected (mainly in conjunction with more expensive shipping and insufficient seasonal agricultural workers) as well as, conversely, a decrease in the price of services (with regards to the expected long-term slow down of international tourism.). At the same time, a drop in fuel prices linked to a decline in the price of oil would support a trend towards lowering inflation.
- As for the future, the disruption in government finances and the huge debt for future generations would appear to be a fundamental problem. There will be an exceptionally high volume of fiscal stabilization measures this year (the preliminary estimate is 2% of nominal GDP).

Conclusions

- The strengthening of international economic ties and growing globalization is the cause of the synchronization of individual economies.
- Currently, the Czech economy is in the recessive phase of the ongoing pandemic business cycle. However, the political cycle running alongside it codetermines how this will play out.
- It cannot be said with certainty how effective the exceptional government measures will be, nor how long or how great the consequences of this crisis of the Czech economy will be.
- The problem caused by the pandemic crisis will be long-term, and it is certain that the future will divide the world into before and after the coronavirus crisis.
- We are of the opinion that the coronavirus crisis will hasten the digital world's integration with the real world, robotization, and further expansion of smart technology.



Thank you for your attention

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