

Gern, Klaus-Jürgen; Möhle, Saskia

**Research Report**

## The impact of the COVID-19 pandemic on the global economy: Survey-based evidence from free zones

Kiel Policy Brief, No. 139

**Provided in Cooperation with:**

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

*Suggested Citation:* Gern, Klaus-Jürgen; Möhle, Saskia (2020) : The impact of the COVID-19 pandemic on the global economy: Survey-based evidence from free zones, Kiel Policy Brief, No. 139, Kiel Institute for the World Economy (IfW), Kiel

This Version is available at:

<https://hdl.handle.net/10419/216209>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# KIEL POLICY BRIEF

Klaus-Jürgen Gern, and Saskia Möhle

## The Impact of the COVID-19 Pandemic on the Global Economy —Survey-based Evidence from Free Zones



*No. 139 April 2020*

- In spring 2020, the world economy is severely affected by the COVID-19 pandemic. World trade is forecast to fall substantially in response to the measures implemented to contain the coronavirus, with a particularly strong impact likely on countries with a relatively large share of external trade in GDP such as Germany. A substantial share of global trade is generated by so-called Free Zones around the world.
- Against this backdrop, the Kiel Institute in cooperation with the World Free Zones Organization conducted a special survey at the end of March and in early April in order to uncover to what extent and by which channels the pandemic affects economic performance in Free Zones.
- According to the survey results, almost all Free Zones worldwide are already affected by the pandemic at least to some extent, and Free Zones expect limitations to activity to become worse in the coming months. While Free Zones in all world regions are affected, expectations are most pessimistic in Asia, followed by Latin America.
- COVID-19 affects Free Zones through different channels, including the domestic measures to contain the virus, the drop in global demand, supply chain disruptions and a deterioration in the financial environment. All channels are important, according to the survey, although to slightly differing degrees.
- In a regional perspective, the share of Free Zones reporting a significant loss of business due to the drop in global demand is particularly high in Asia and Latin America. Production problems due to supply chain disruptions are relatively more prominent in Asia and Africa and the Middle East, whereas a deterioration in the financial environment seems to be relatively most important as transmission channel in Latin America.

# OVERVIEW/ÜBERBLICK

- In spring 2020, the world economy is severely affected by the COVID-19 pandemic. World trade is forecast to fall substantially in response to the measures implemented to contain the coronavirus, with a particularly strong impact likely on countries with a relatively large share of external trade in GDP such as Germany. A substantial share of global trade is generated by so-called Free Zones around the world.
- Against this backdrop, the Kiel Institute in cooperation with the World Free Zones Organization conducted a special survey at the end of March and in early April in order to uncover to what extent and by which channels the pandemic affects economic performance in Free Zones.
- According to the survey results, almost all Free Zones worldwide are already affected by the pandemic at least to some extent, and Free Zones expect limitations to activity to become worse in the coming months. While Free Zones in all world regions are affected, expectations are most pessimistic in Asia, followed by Latin America.
- COVID-19 affects Free Zones through different channels, including the domestic measures to contain the virus, the drop in global demand, supply chain disruptions and a deterioration in the financial environment. All channels are important, according to the survey, although to slightly differing degrees.
- In a regional perspective, the share of Free Zones reporting a significant loss of business due to the drop in global demand is particularly high in Asia and Latin America. Production problems due to supply chain disruptions are relatively more prominent in Asia and Africa and the Middle East, whereas a deterioration in the financial environment seems to be relatively most important as transmission channel in Latin America.

**Keywords:** Corona crisis, world trade, Special Economic Zones, Free Zones, business survey

- Im Frühjahr 2020 steht die Weltwirtschaft unter dem Eindruck der COVID-19-Pandemie. Der Welthandel wird Prognosen zufolge als Folge der zur Eindämmung des Coronavirus ergriffenen Maßnahmen einbrechen, was nicht zuletzt in Ländern mit einem hohen Außenhandelsanteil wie Deutschland deutlich zu spüren sein wird. Einen erheblichen Beitrag zum Welthandel leisten inzwischen auch die vielen Sonderwirtschaftszonen, die in vielen Teilen der Welt entstanden sind.
- Vor diesem Hintergrund hat das IfW Kiel in Zusammenarbeit mit der World Free Zones Organization Ende März und Anfang April eine Umfrage unter Sonderwirtschaftszonen durchgeführt, um herauszufinden, in welchem Umfang und über welche Kanäle die wirtschaftliche Aktivität dort durch COVID-19 beeinträchtigt wird.

- Die Umfrage zeigt, dass die weit überwiegende Mehrzahl der Sonderwirtschaftszonen bereits spürbar betroffen ist und dass die Auswirkungen der Pandemie in den kommenden Monaten voraussichtlich noch zunehmen werden. Besonders besorgt sind demnach Sonderwirtschaftszonen in Asien und Lateinamerika.
- COVID-19 beeinträchtigt Sonderwirtschaftszonen über verschiedene Kanäle, insbesondere durch eigene Maßnahmen zur Verlangsamung der Epidemie, durch den weltweiten Nachfragerückgang, durch Störungen in den Wertschöpfungsketten und durch eine Verschlechterung der finanziellen Rahmenbedingungen. Es zeigt sich, dass alle diese Kanäle bedeutsam sind, wenngleich in etwas unterschiedlichem Maße.
- In einer regional disaggregierten Betrachtung ist der Anteil der Sonderwirtschaftszonen, die von einem deutlichen Rückgang der weltweiten Nachfrage betroffen sind, in Asien und Lateinamerika besonders groß. Stockungen der Produktion aufgrund von Problemen in den Zulieferketten spielen in Asien sowie in Afrika und im mittleren Osten eine besonders große Rolle, während die Verschlechterung der finanziellen Rahmenbedingungen vor allem in Lateinamerika überproportional oft als Produktionshemmnis genannt wird.

**Schlüsselwörter:** Coronakrise, Welthandel, Sonderwirtschaftszonen, Konjunkturumfrage

Klaus-Jürgen Gern  
Kiel Institute for the World Economy  
Kiellinie 66  
24105 Kiel / Germany  
Phone: +49 431 8814 262  
E-Mail: [klaus-juergen.gern@ifw-kiel.de](mailto:klaus-juergen.gern@ifw-kiel.de)



Saskia Mösle  
Kiel Institute for the World Economy  
Kiellinie 66  
24105 Kiel / Germany  
Phone: +49 431 8814 674  
E-Mail: [saskia.moesle@ifw-kiel.de](mailto:saskia.moesle@ifw-kiel.de)



# THE IMPACT OF THE COVID-19 PANDEMIC ON THE GLOBAL ECONOMY—SURVEY-BASED EVIDENCE FROM FREE ZONES

**Klaus-Jürgen Gern, and Saskia Möhle**

## 1 INTRODUCTION

In spring 2020, the world is severely affected by the COVID-19 pandemic. As the novel coronavirus has spread to more and more countries, measures designed to contain the disease are weighing on economic activity and are adding to the negative impact on growth from the steep decline of production in China, where the virus was first discovered. Initially, the virus progressed most in Asia and Europe where the probability of disruptions of production through interrupted value chains is particularly high. Measures range from social distancing regulation and quarantine of (potentially) infected individuals to shutdown of significant parts of the economy and curfews for the whole population. World trade is forecast to fall substantially due to measures designed to contain the coronavirus (WTO, 2020), with a particularly strong impact on countries with a relatively large share of external trade in GDP such as Germany. A substantial share of global trade is generated by so-called Free Zones around the world. This Policy Brief presents the results of a survey conducted at the end of March and in early April in cooperation with the World Free Zones Organization (World FZO) in order to uncover to what extent and by which channels the pandemic affects economic performance in Free Zones.

Free Zones, or Special Economic Zones, are geographically defined areas in which economic activities are subject to special rules that differ from those in the rest of the country. Usually, trade in Free Zones is not subject to customs duty and investors often enjoy tax breaks and other financial incentives. Activities conducted in Free Zones range from production and export processing (“Export Processing Zones”) to pure trade, storage and logistics services (“Free/Foreign Trade Zones”). According to the latest data provided by UNCTAD (2020), there are more than 5,000 Free Zones worldwide. They are particularly widespread in Asia, where they are regarded as an engine of the export-oriented growth in recent decades. However, there are also Free Zones in industrialized countries: in the US, for example, there are over 250 so-called Foreign Trade Zones. According to the OECD (2018), Free Zones around the globe are responsible for exports worth at least 3,500 billion dollars a year—the equivalent to around 20 percent of global merchandise trade.

World trade has been weak throughout 2019 already amid rising protectionism and is forecast to fall substantially due to measures designed to contain the coronavirus. According to the figures compiled by the Netherlands Bureau for Economic Policy Analysis (CPB), trade

of goods in volume terms declined by 0.4 percent in 2019 compared to 2018. World trade was sluggish against the backdrop of the trade conflict between the US and China, which led to a strong decline of trade between the world's two largest economies and impacted negatively on activity elsewhere, partly through increased policy uncertainty. January figures for global merchandise trade show a significant drop as COVID-19 started to impact on the Chinese economy. A steeper drop in the following months seems inevitable due to the decline in global demand and as a result of supply chain disruptions amid lockdown measures.

Consequences for German foreign trade will be severe. After China and the US, Germany is the third largest exporter worldwide. In February, when the COVID-19 crisis was mostly concentrated in China, German producers both faced a demand and a supply shock. According to official trade statistics for 2019, China is Germany's most important trading partner and delivers 10 percent of all intermediate inputs needed in the production process. Therefore, a drop in production and exports in China, as recorded due to the coronavirus crisis in January and February, has direct consequences for the German economy. In February, German exports to China fell by 8.9 percent compared to the previous year and imports dropped by 12 percent over the same time period. Since mid-March, the German government has also implemented rigorous measures to contain the spread of the disease, weighing on economic activity. However, even if lockdown measures are lifted in Germany, the recovery of the economy will also depend on the recovery of the world economy and global trade.

## 2 THE EFFECTS OF THE COVID-19 PANDEMIC ON FREE ZONES AROUND THE GLOBE

Free Zones are affected by the pandemic through various channels. First, economic activity in many countries has come to a halt due to measures taken by governments to contain the spread of the virus. These measures also affect Free Zones, especially since they are often engaged in sectors and activities where working from home is not an option. Second, health measures and high levels of uncertainty regarding the future development of the pandemic drag on consumption and investment. Recent estimates of UNCTAD (2020) based on earnings revisions of the largest multinational enterprises suggest that FDI could drop by as much as 30 to 40 percent on a global basis during 2020-2021. Third, production in Free Zones could be affected by supply chain disruption. For many goods, China lies at the heart of global value chains (GVCs) and is a major producer of intermediate inputs required for production in other countries. Due to the severe drop in industrial production and exports seen in January and February, raw materials and input goods are now missing for other stages of production. Even though there are some signs of recovery in China by now, the supply chain disruptions likely have amplified with the further spread of the pandemic. And fourth, the economic downturn could be reinforced by financial feedback loops, leading to liquidity problems in the corporate sector. In an apparent flight to safety international investors have already withdrawn a record

amount of 83 billion US dollars from emerging markets since the beginning of the coronavirus crisis, according to the IMF.<sup>1</sup>

Given their importance for global trade, economic activity in Free Zones can provide information on the state of the global economy. Therefore, the Kiel Institute, in collaboration with the World FZO, a nonprofit organization, conducted a survey on current and expected business sentiment in Free Zones.<sup>2</sup> The survey aimed at collecting first evidence on the impact of the coronavirus pandemic on economic activity in Free Zones. Representatives over 80 Free Zones in 41 countries responded.

The following three questions were asked between March 23, 2020, and April 3, 2020.

- 1. Is activity in your Free Zone currently affected by the economic impact of coronavirus pandemic?**
  - a. Not really
  - b. To some extent
  - c. Substantially
- 2. Do you expect activity in your Free Zone to be affected by the coronavirus pandemic in the coming months?**
  - a. Not really
  - b. To some extent
  - c. Substantially
- 3. By which channels is or will activity in your Free Zone likely be affected? (select all that apply)**
  - a. Limitations to activity due to measures to contain the virus
  - b. Loss of business due to drop in demand
  - c. Production problems due to supply chains
  - d. Deterioration in the financial environment

This Policy Brief presents the results of the survey. In addition to a global analysis, regionally disaggregated results are presented to gain a better understanding of the consequences for Free Zones, and possibly the broader economy, in different parts of the world.

## 2.1 RESULTS AT THE GLOBAL LEVEL

Most Free Zones worldwide are currently affected by the pandemic and expect limitations to activity to become worse in the coming months. Over 90 percent of Free Zones state that economic activity in their Free Zones is currently hampered by the spread of COVID-19 (Figure 1). While 60 percent of Free Zones report some limitations, over 30 percent report the impact

---

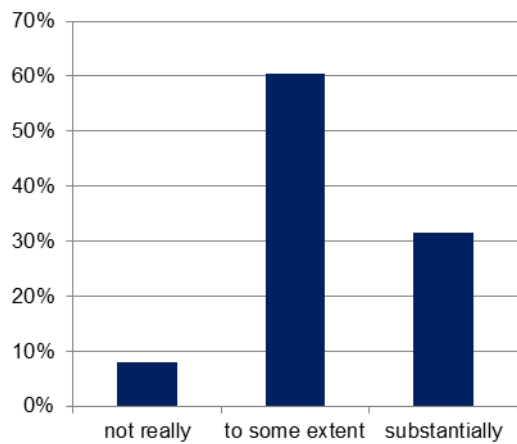
<sup>1</sup> See IMF Managing Director Kristalina Georgieva's statement following a G20 ministerial call on the coronavirus emergency (IMF, 2020).

<sup>2</sup> The survey was a special issue of the regular Free Zones World Economic Barometer (F-WEB), a quarterly, survey-based sentiment indicator launched in 2018, which is compiled by the Kiel Institute on behalf of the World FZO (Kiel Institute, 2020).

of the pandemic to be severe. Only 8 percent of respondents indicate that their Free Zone is currently not really affected. Over the next few months, the impact is expected to intensify. Almost 95 percent of the participants expect to be affected by the pandemic in the future (Figure 2). Compared with the current situation, fewer Free Zones (52 percent) expect moderate consequences, while more than 40 percent see substantial negative impacts in the coming months.

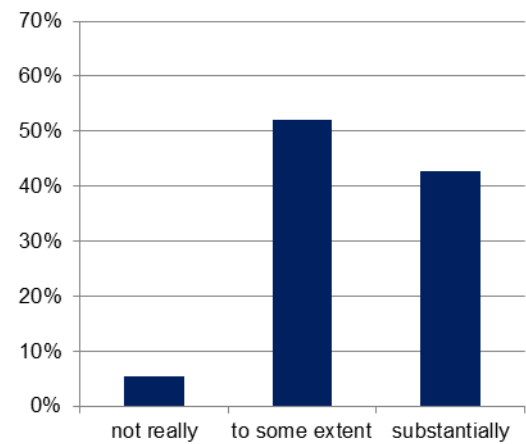
Free Zones are affected by the pandemic through various channels at the same time. Almost 85 percent of participating Free Zones report that activity in their Free Zone is or will be affected by measures to contain the spread of the disease (Figure 3). 68 percent report a

**Figure 1:**  
Current degree of limitations to activity due to COVID-19 pandemic



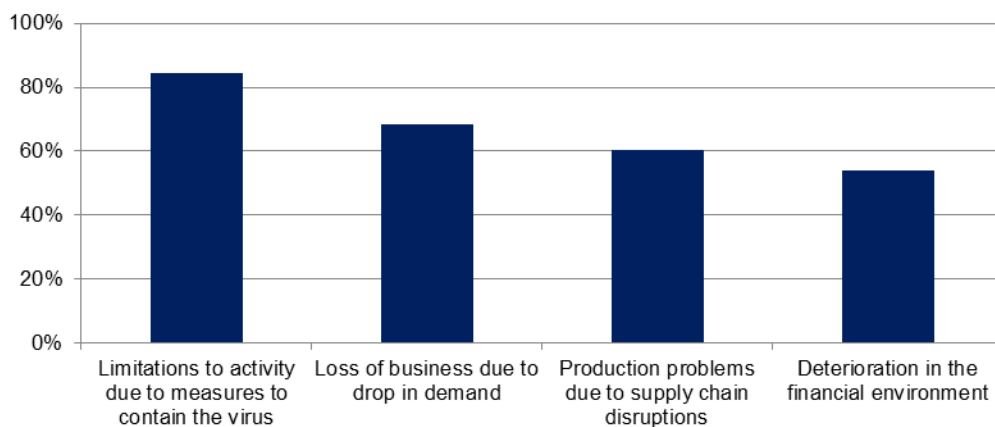
Source: Kiel Institute (2020).

**Figure 2:**  
Expected degree of limitations to activity due to COVID-19 pandemic



Source: Kiel Institute (2020).

**Figure 3:**  
Transmission channels for the negative effects of the COVID-19 pandemic



Source: Kiel Institute (2020).

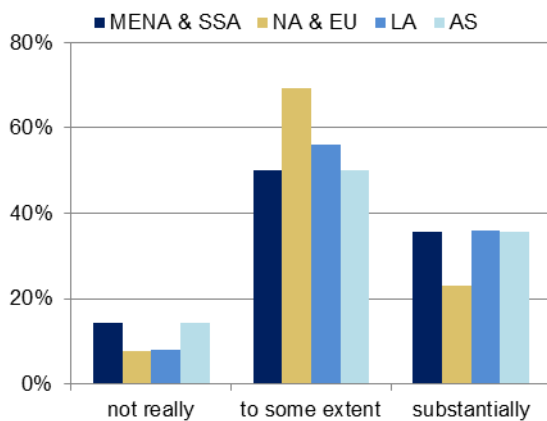


loss of business due to the global drop in demand while 60 percent report production problems due to disruptions of supply chains. Also a deterioration of the financial environment due to the COVID-19 crisis is affecting (or is expected to affect) a substantial share of Free Zones—54 percent. In sum, all transmission channels of economic effects seem to be relevant for Free Zones, although to a varying degree.

## 2.2 REGIONAL ANALYSIS

Free Zones in all world regions report to be currently affected to a similar extent (Figure 4). Only in North America and Europe, Free Zones are somewhat less affected compared with other world regions, according to the F-WEB special survey. Regional heterogeneity is somewhat larger when it comes to expectations over the coming months. While almost all Free Zones independent of their location expect negative impacts of the pandemic over the coming months, the degree of expected limitations to activity varies somewhat across regions (Figure 5). In Africa and the Middle East, roughly two out of three Free Zones expect to be affected to some extent, the rest expect substantial negative consequences. In comparison, in North America and Europe as well as in Latin America a smaller share of Free Zones expects to be affected to some extent (56 and 50 percent, respectively) and a larger share (40 and 46 percent, respectively) expects substantial consequences. However, in those regions and as in Africa and the Middle East, Free Zones expecting some effects still outnumber those expecting a severe impact. This is not the case in Asia where half of all responding Free Zones expect substantial consequences.

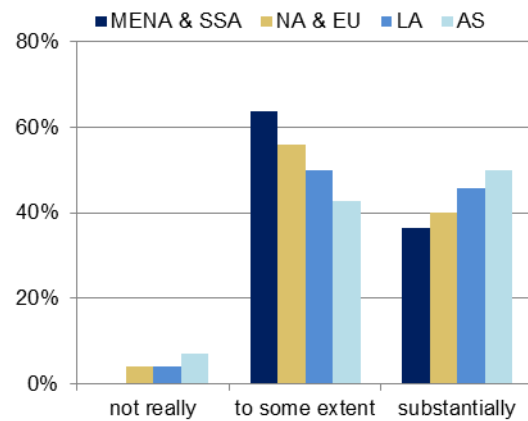
**Figure 4:**  
Current degree of limitations to activity due to COVID-19 pandemic by region



Note: Region acronyms: MENA (Middle East and North Africa), SSA (Sub-Saharan Africa), NA (North America), LA (Latin America and the Caribbean), EU (Europe), AS (Asia).

Source: Kiel Institute (2020).

**Figure 5:**  
Expected degree of limitations to activity due to COVID-19 pandemic by region



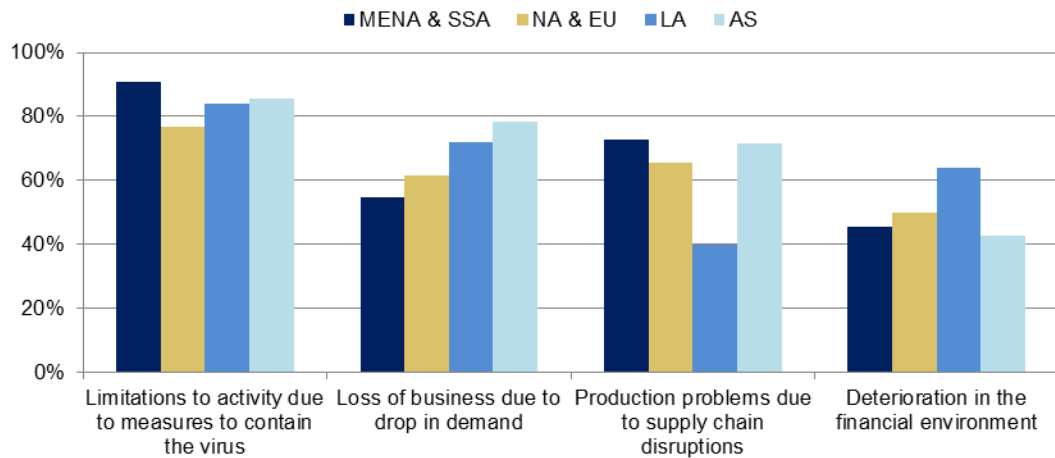
Note: Region acronyms: MENA (Middle East and North Africa), SSA (Sub-Saharan Africa), NA (North America), LA (Latin America and the Caribbean), EU (Europe), AS (Asia).

Source: Kiel Institute (2020).

Free Zones in all regions worldwide are similarly affected by measures to contain the virus. Across world regions, between 77 and 91 percent of Free Zones report production limitations due to measures to contain the virus. The share of Free Zones affected via this channel is highest in the Middle East and Africa and lowest in North America and Europe.

Depending on their region of location, Free Zones are affected by the pandemic to a different extent via the demand, supply and financial channels. Across regions, a majority of Free Zones reports to be affected via the demand channel (Figure 6). The share of Free Zones reporting a loss of business due to a drop in global demand is highest in Asia (79 percent), followed by Latin America (72 percent), North America and Europe (62 percent), and Africa and the Middle East (55 percent). In all regions but Latin America, Free Zones are affected to a similar extent via the supply and the financial channel. Thus, between 65 and 73 percent of Free Zones report to face production problems due to supply chain disruptions and between 43 and 50 percent report consequences due to the deterioration in the financial environment. Latin America, however, is the only region where the deterioration in the financial environment is regarded as a transmission mechanism by more Free Zones (64 percent) than supply chain disruptions (40 percent).

**Figure 6:**  
Transmission channels for the negative effects of the COVID-19 pandemic



Note: Region acronyms: MENA (Middle East and North Africa), SSA (Sub-Saharan Africa), NA (North America), LA (Latin America and the Caribbean), EU (Europe), AS (Asia).

Source: Kiel Institute (2020).

### 3 CONCLUSION

Global trade is likely to be hit hard by the current coronavirus pandemic due to a fall in global demand and potentially severe disruptions of global value chains caused by lockdown measures taken by governments in many countries in order to contain the virus. According to recent estimates, there are now over 5,000 SEZ in more than 140 countries worldwide

(UNCTAD, 2019) and they are responsible for at least 20 percent of global trade in goods (OECD, 2018). Capturing economic sentiment in Free Zones can therefore deliver some information on the general state of global economic activity and trade.

According to results of our special survey, Free Zones around the globe are severely hit by the COVID-19 pandemic. While most Free Zones worldwide already experience negative effects, expectations are that limitations to activity become even worse in the coming months. Measures to contain the spread of the disease are currently the main transmission channel of negative economic effects. However, a majority of Free Zones is also hit by the drop in demand, supply chain disruptions as well as the deterioration in the financial environment attributable to the COVID-19 crisis.

## REFERENCES

- IMF (International Monetary Fund) (2020). IMF Managing Director Kristalina Georgieva's Statement Following a G20 Ministerial Call on the Coronavirus Emergency. Press Release No. 20/98, 23 March 2020. Via Internet (7 April 2020): <<https://www.imf.org/en/News/Articles/2020/03/23/pr2098-imf-managing-director-statement-following-a-g20-ministerial-call-on-the-coronavirus-emergency>>.
- Kiel Institute (2020). Free Zone World Economic Barometer. Via Internet (10 April 2020): <<https://www.ifw-kiel.de/de/institut/research-center/prognosezentrum/projects/world-free-zones-economic-outlook/freezone-world-economic-barometer/>>.
- OECD (Organization for Economic Cooperation and Development) (2018). Trade in Counterfeit Goods and Free Trade Zone—Evidence from recent trends. OECD Publishing, Paris/EUIPO. Via Internet (8 April 2020): <<http://dx.doi.org/10.1787/9789264289550-en>>.
- UNCTAD (United Nations Conference on Trade and Development) (2019). World Investment Report 2019—Special Economic Zones. New York.
- UNCTAD (United Nations Conference on Trade and Development) (2020). Impact of the Covid-19 Pandemic on Global FDI and GVCs. Global Investment Trends Monitor No. 35 (Special Issue March 2020): Via Internet (8 April 2020): <[https://unctad.org/en/PublicationsLibrary/diaeiainf2020d3\\_en.pdf](https://unctad.org/en/PublicationsLibrary/diaeiainf2020d3_en.pdf)>.
- WTO (World Trade Organization) (2020). Trade set to plunge as COVID-19 pandemic upends global economy. Press Release, 8 April. Via Internet (10 April 2020): <[https://www.wto.org/english/news\\_e/pres20\\_e/pr855\\_e.htm](https://www.wto.org/english/news_e/pres20_e/pr855_e.htm)>.

# IMPRESSUM

**DR. KLAUS SCHRADER**  
Head of Area Special Topics  
Leiter Bereich Schwerpunktanalysen  
> [klaus.schrader@ifw-kiel.de](mailto:klaus.schrader@ifw-kiel.de)

**Publisher:**

Kiel Institute for the World Economy  
Kiellinie 66, 24105 Kiel, Germany  
Phone +49 (431) 8814-1  
Fax +49 (431) 8814-500

**Editorial Team:**

Dr. Klaus Schrader,  
Ilse Büxenstein-Gaspar, M.A.,  
Kerstin Stark.

The Kiel Institute for the World Economy is a foundation under public law of the State of Schleswig-Holstein, having legal capacity.

**Value Added Tax Id.-Number:**

DE 251899169

**Authorized Representative:**

Prof. Gabriel Felbermayr, Ph.D. (President)

**Cover Foto:**

© tioloco - iStockphoto

**Responsible Supervisory Authority:**

Ministry of Education, Science and Cultural  
Affairs of the Land Schleswig-Holstein



© 2020 The Kiel Institute for the World Economy.  
All rights reserved.

<https://www.ifw-kiel.de/de/publikationen/kiel-policy-briefs/>