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# The economic impact of COVID

*Understanding the economic impact of COVID  
in 6 countries*

September 2021

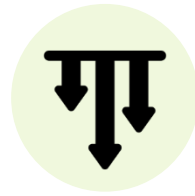
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# The impact of COVID on the economy is unprecedented, disparate over countries and highly specific, but was it avoidable?



## Impact of COVID is unprecedented

COVID has the most impact on GDP-development in comparison to other impactful events (e.g., World War II, financial crisis)



## Impact of COVID is disparate

For some countries COVID had nearly no economic impact at all, for other countries the impact is over 200% of the current GDP



## Impact of COVID is highly specific

Certain categories (e.g., Tourism) were hit hard by COVID and are still recovering, other categories were barely impacted



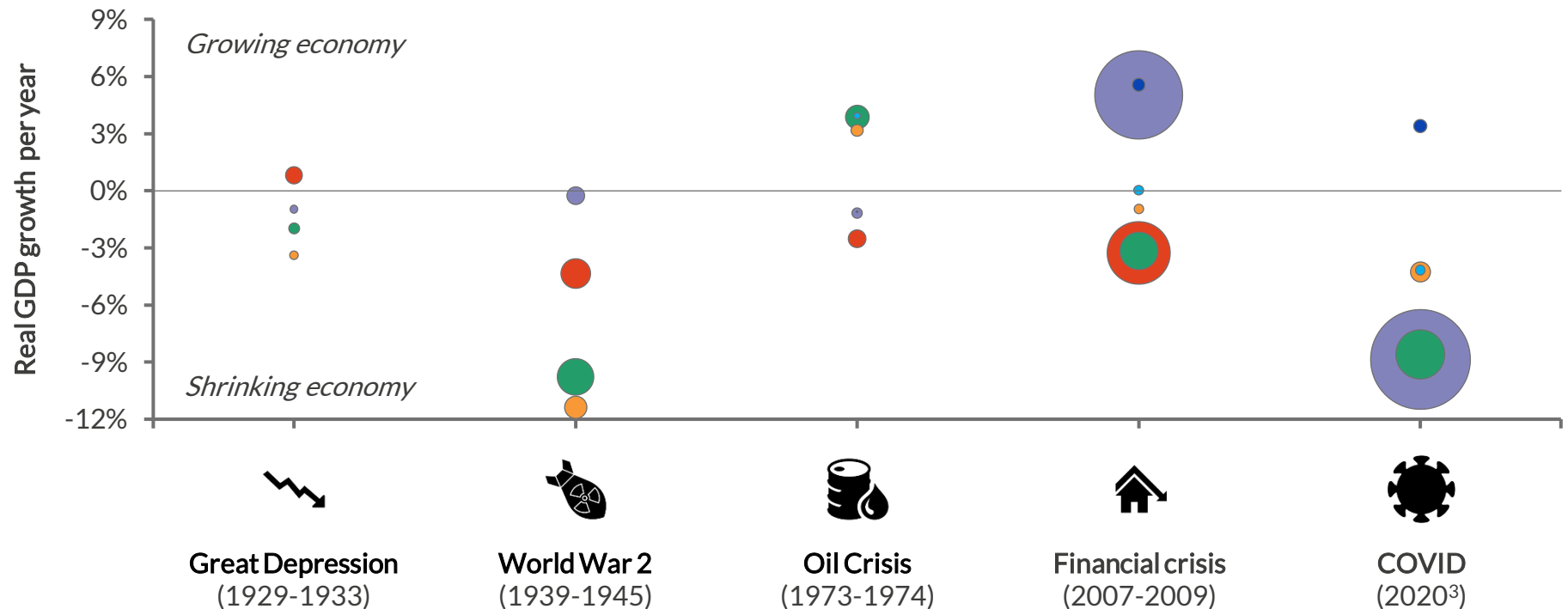
What can we learn from last year (from both COVID and economic damage) to mitigate the impact of COVID on societies?

# The impact of COVID on GDP development is unprecedented when comparing it to other impactful previous events

## Comparison of impactful events on GDP development<sup>1</sup>

[Average yearly real GDP growth per capita in %; circle size reflects total GDP impact in billions of 2011\$]

● Ethiopia<sup>2</sup> ● India ● Israel<sup>2</sup> ● Italy ● Japan ● Netherlands



1) All used GDP is in 2011\$

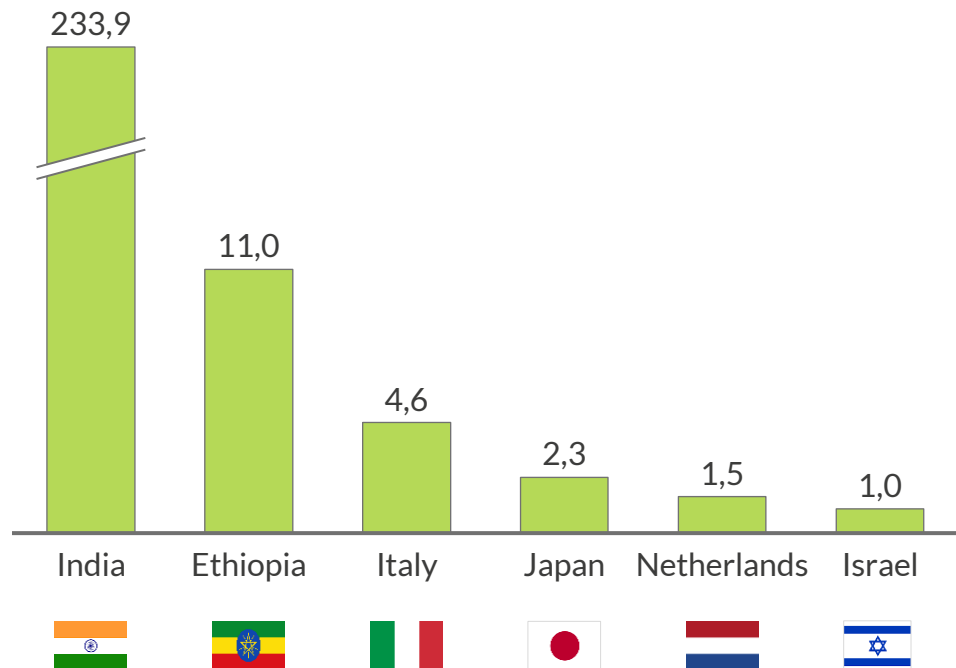
2) No data available before 1950

3) 2019 and 2020 data extrapolated based on World Bank growth figures

Source: Maddison Project Database, version 2020. Bolt, Jutta and Jan Luiten van Zanden (2020), The World Bank, analysis Gupta Strategists

# Impact of COVID on education is unprecedented, school closures resulted in lost education years

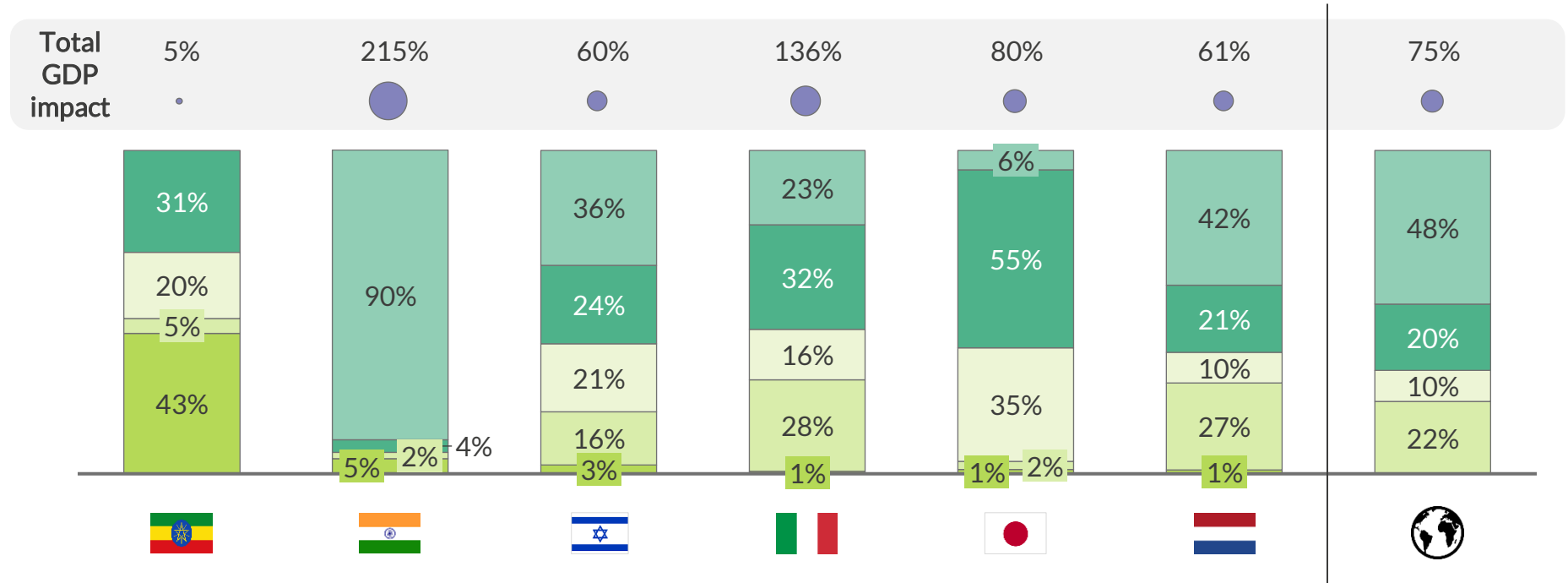
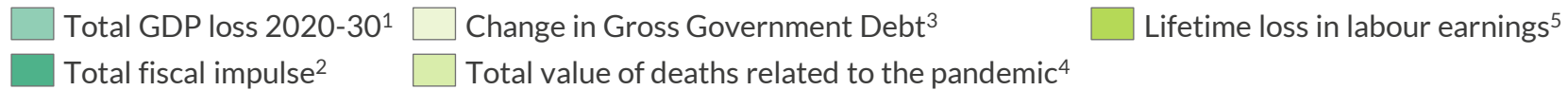
Number of educational years lost  
[School years per country in million]



- In all six countries combined, 341 million children and adolescents are impacted though school closures<sup>1</sup>. Although policies in countries are different, in each country school have been (partly) closed 11 to 60 weeks in 2020 and 2021 combined
- This translates into 251 million educational years lots in the six countries combined, which is a truly exceptional scale. We cannot think of any event in terms of education with a similar impact
- The loss in education years can also be monetized which makes the economic loss long term even greater

# The economic cost of COVID is disparate over countries as for some it is close to zero while for others it is enormous

## Estimation of the economic cost of COVID [% as a part of GDP in 2020]

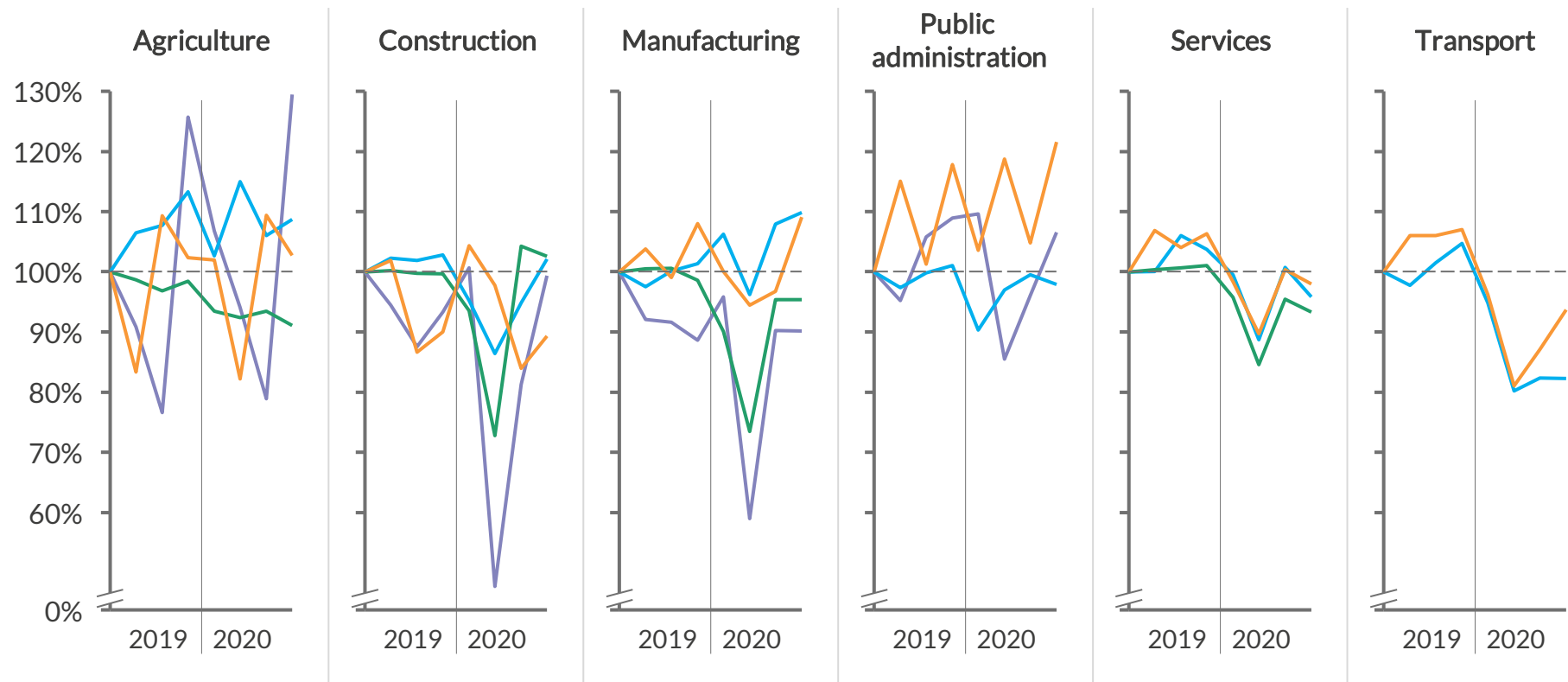


Sources: 1) IMF WEO Apr-2021 & IMF WEO Oct-2019 corrected for 2019 GDP from Apr-2021 outlook, inflation rate is country specific; 2) IMF Fiscal Monitor Apr-2021, combination of a) above the line measures are additional spending or foregone revenues; b) under the line measures are equity injections, loans, asset purchase or debt assumptions; 3) Reserve banks of respective countries; 4) COVID deaths via worldometers.info; Statistical value of a life via Viscusi & Masterman (2017), "Income Elasticities and Global Values of a Statistical Life"; 5) Based on World Bank - Education Global Practice (2020), "Lost Wages - The COVID-19 Cost of School Closures", analyses Gupta Strategists

# The impact of COVID is highly specific as some categories were hit hard while other categories were barely affected

Development of GDP per category<sup>1</sup>  
[Index where 2019Q1 = 100%]

— India — Israel — Italy — Netherlands

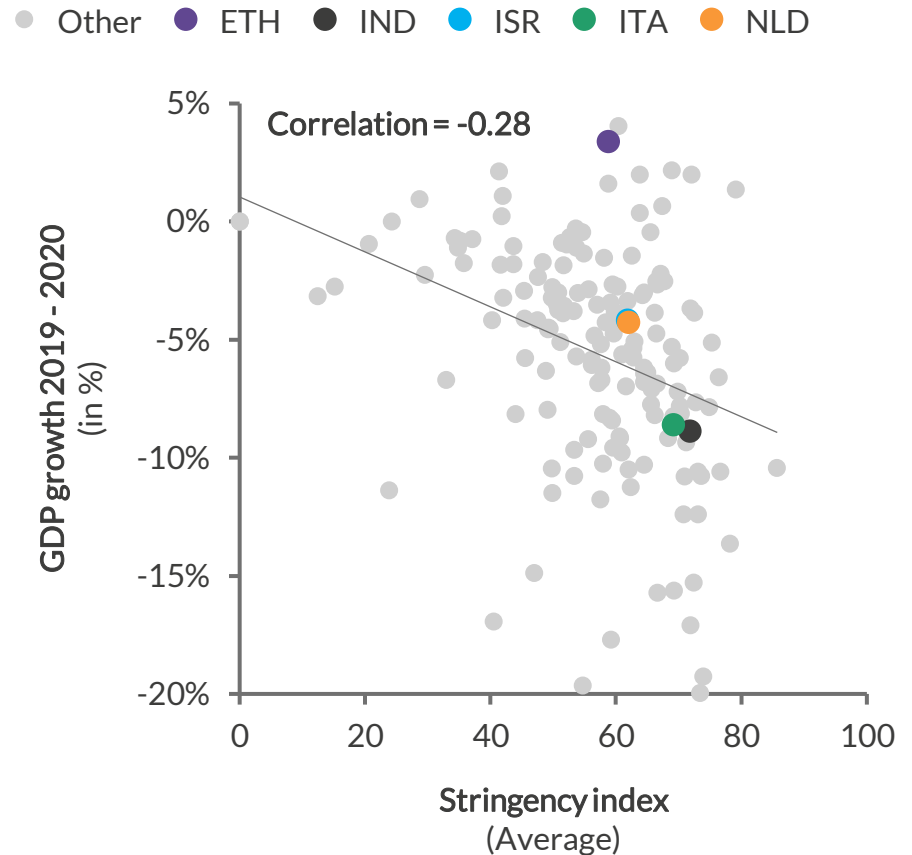
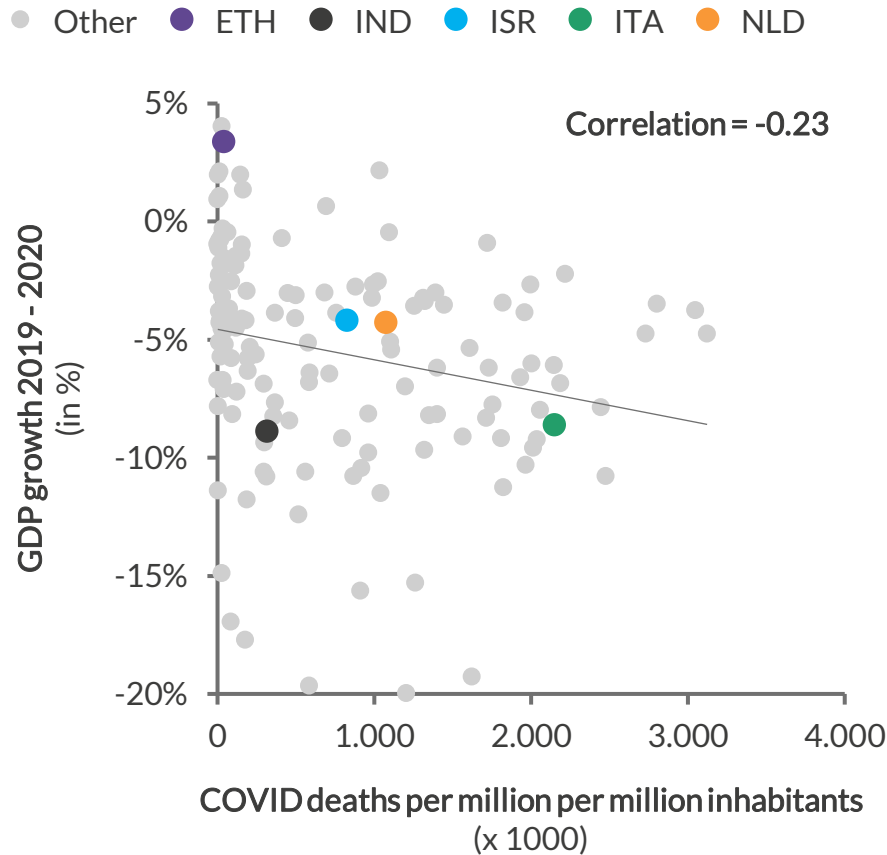


# GDP growth is poorly related to COVID deaths or the stringency of the lockdown, so was it avoidable?

FOR DISCUSSION

Correlation between GDP growth and COVID deaths<sup>1</sup>  
[GDP growth in % from 2019 to 2020; deaths per million]

Correlation between GDP growth and Stringency index<sup>1,2</sup>  
[GDP growth in % from 2019 to 2020; average index]



1) Only for countries for which all data is available and corrected for outliers (Macao, Libya and Guyana)  
2) A composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest)  
Source: WorldBank, OurWorldInData, analysis Gupta Strategists

# Deepdives

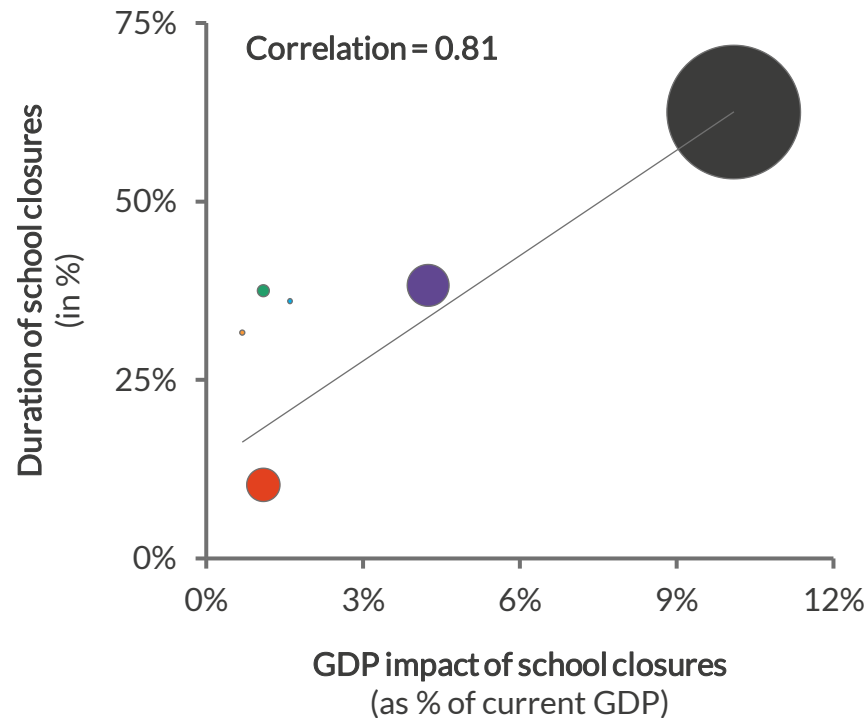
- Deepdive on school closings
- Deepdive on tourism
- Deepdive on consumer spending
- Deepdive on construction



# Impact of school closures on the GDP of a country is the result of the duration of school closings and the access to distance learning

Impact of school closures due to COVID lockdowns on GDP [y-axis: school closures in % of period in scope<sup>1</sup>; x-axis: impact of school closures on GDP in %<sup>2</sup>; size of the ball reflects number of students affected by lockdowns]

● Ethiopia ● India ● Israel ● Italy ● Japan ● Netherlands



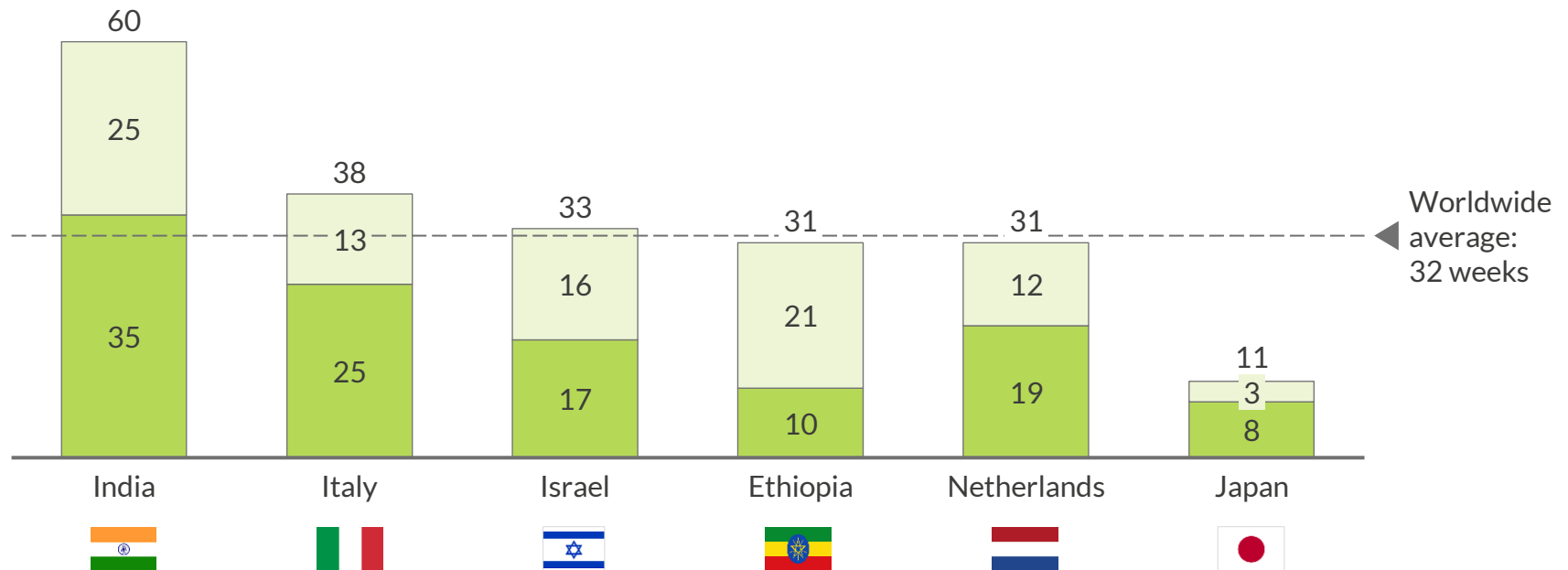
- COVID-lockdowns caused schools to close. Poorer access to education has an impact on the future income of students as a year of extra schooling leads to a higher future income and thereby increases the GDP of a country.
- The impact of these school closures is the outcome of the number of weeks schools were closed and the extent to which it was possible for children to attend school remotely.
- The impact of school closings in India is relatively high as many students were affected by lockdowns and the duration of school lockdowns was long.
- Despite that in Japan quite some students did not have good access to distance learning, the impact is low due to the short duration of school closures.
- Impact of school closures is relatively low in European countries as access to distance learning is widely available.

1) School closures is the combined period of full and partial closing during March 2020 and June 2021. Full closure counts for 100%, partial closing counts for 50%  
2) Impact on GDP is based on World Bank policy research paper 9246: "Lost Wages – The COVID-19 Cost of School Closures" by Psacharopoulos et al. (2020). It is the present value of (mean earnings per capita × adjustment for school closing × rate of return of one year of schooling) × number of students × percentage of students without access to distance learning opportunities × number of working years) where present value is determined by a discount rate equal to the expected inflation for the coming years  
Sources: Unicef, World Bank, OECD, EUROSTAT, analysis Gupta Strategists

# Schools were (partially) closed in most countries for more than six months; Japan and India are clear outliers

Overview of (partial) school closures due to lockdown measures  
[Duration in weeks, 2020 & 2021]

Duration of PARTIAL closures  
Duration of FULL closures

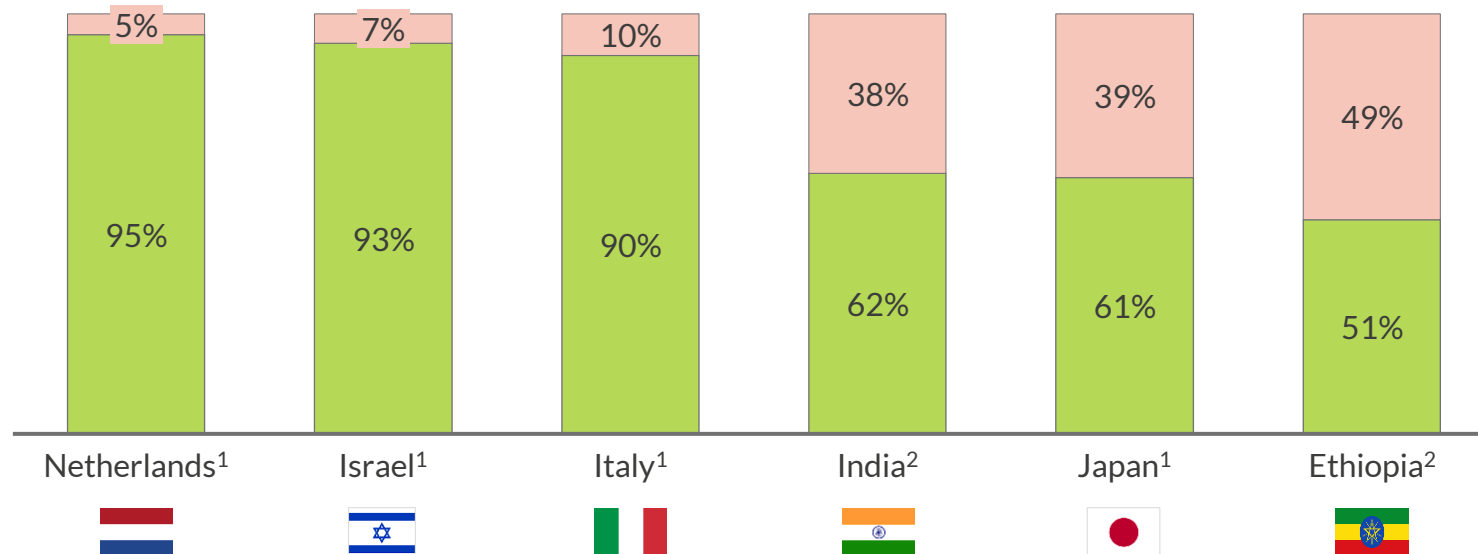


# Impact of school closures differ amongst the countries as distance learning is not always widely available

## Overview of distance learning possibilities

[% of students with access to distance learning possibilities]

Without access to distance learning  
With access to distance learning



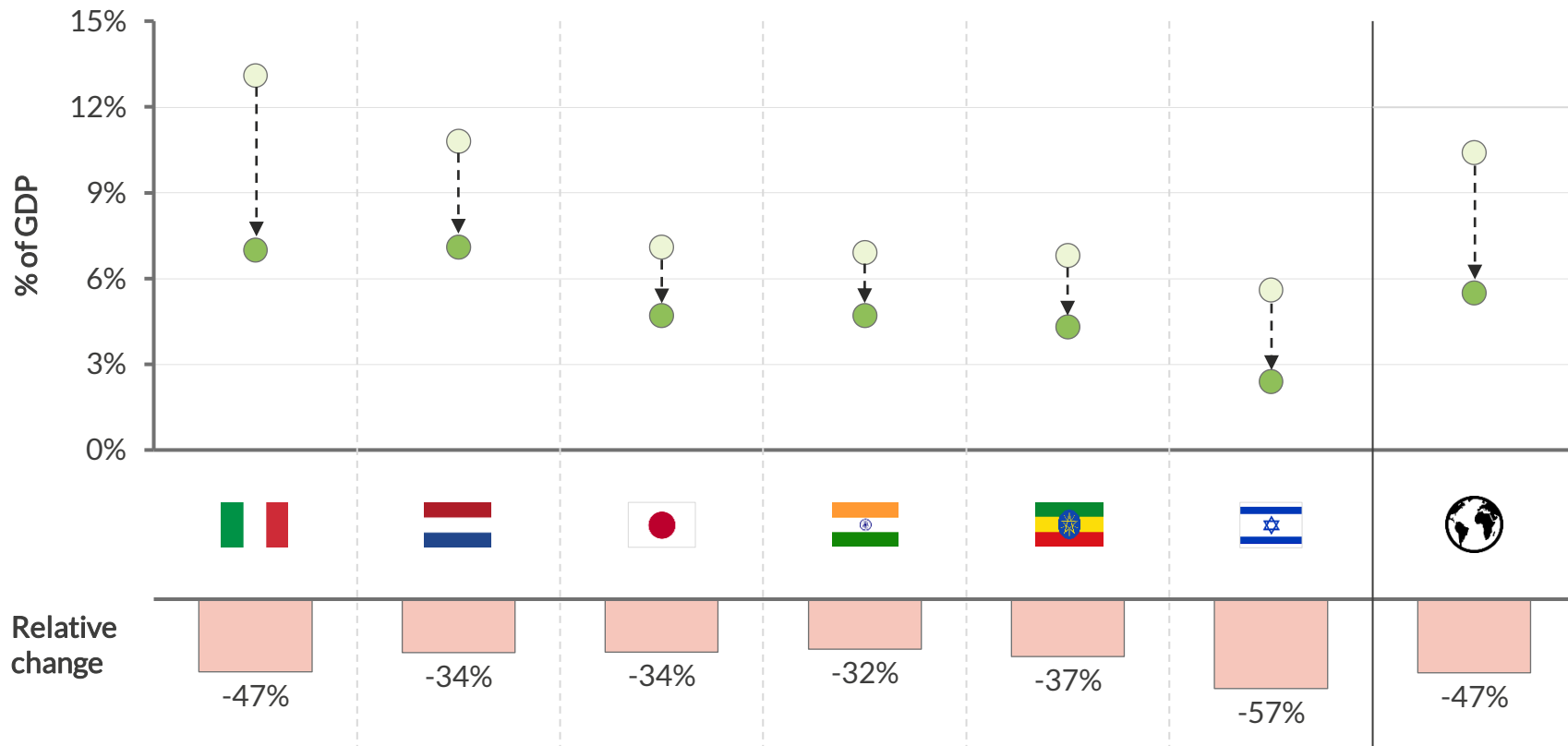
# Deepdives

- Deepdive on school closings
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# The Travel & Tourism sector was hit hard by COVID

Total contribution of Travel & Tourism to GDP<sup>1</sup>  
 [% of GDP, 2019 vs. 2020]

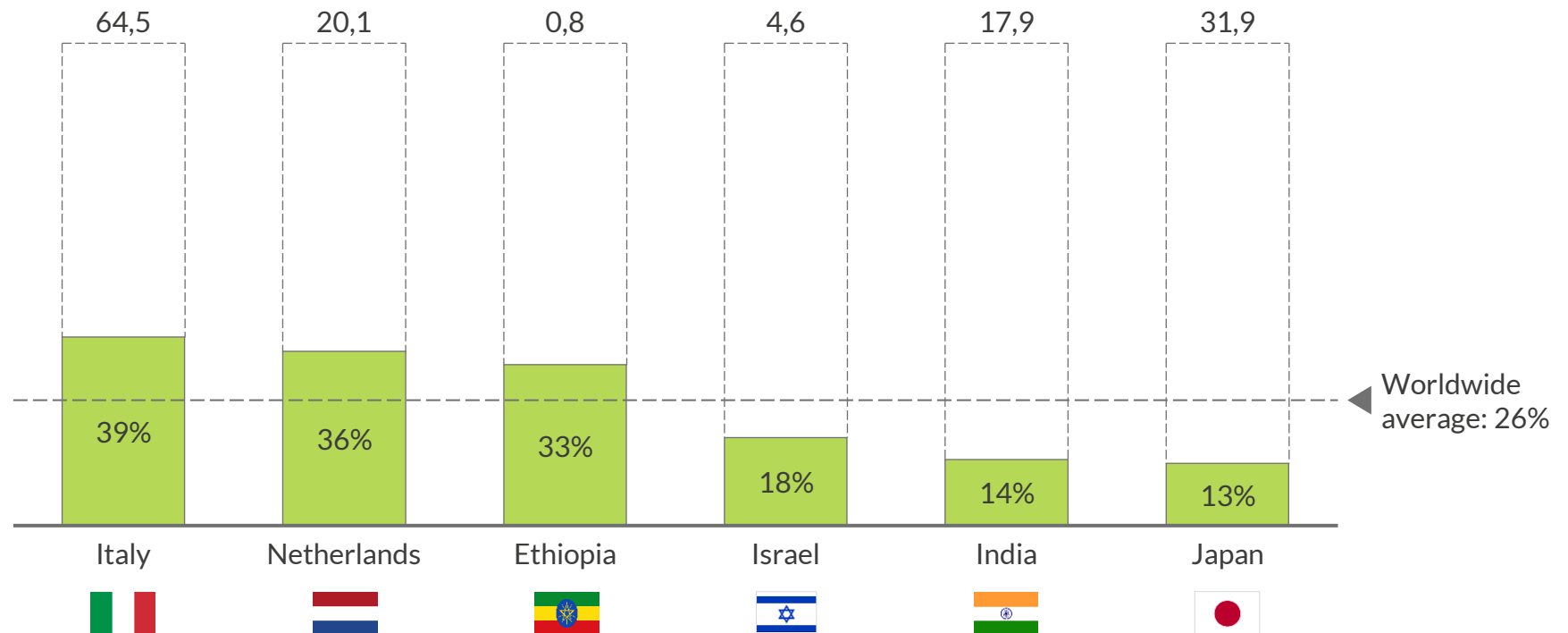
○ 2019  
 ● 2020



# The number of international arrivals dropped substantially in 2020 as compared to the year before

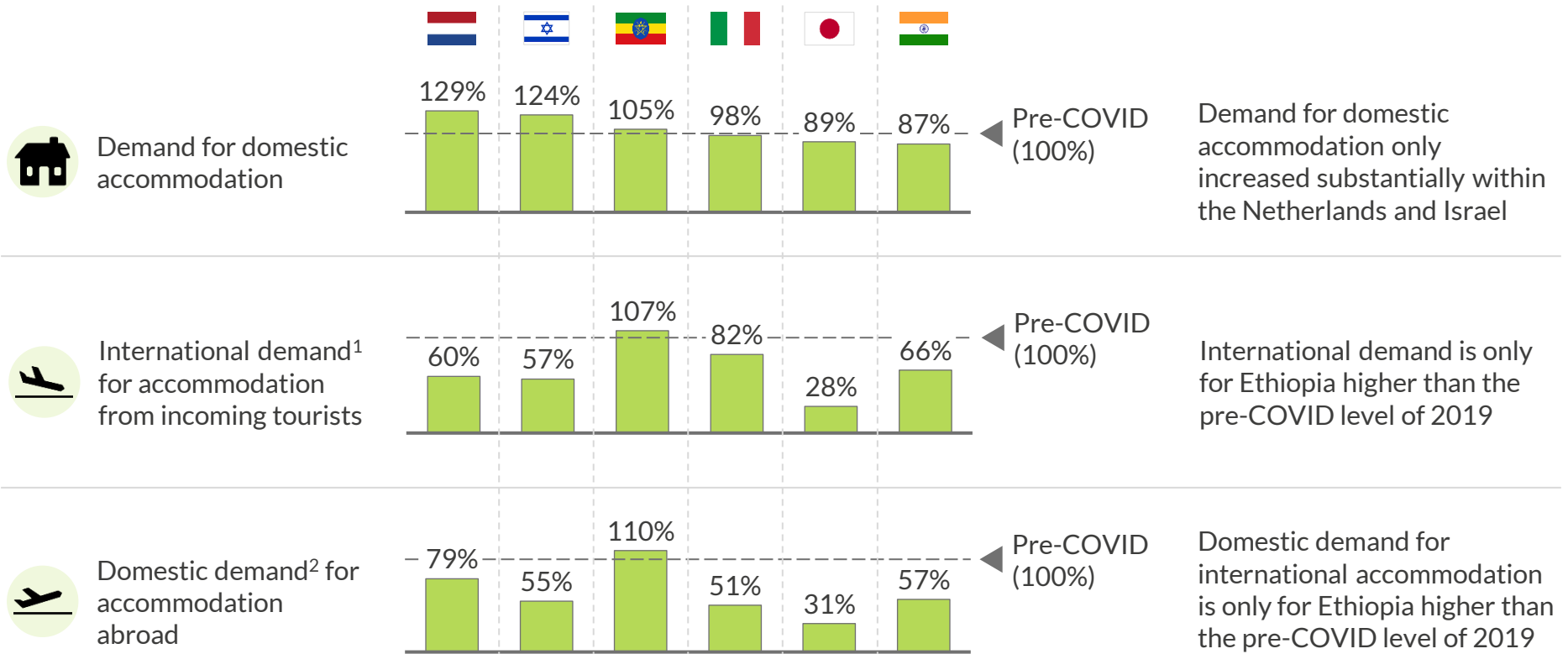
## Difference in international tourism

[Number of tourist arrivals in 2020 as a % of 2019, number of tourist arrivals of 2019 in millions]



# The travel demand for accommodation is only for Ethiopia higher than pre-COVID; for the other countries the demand stays behind

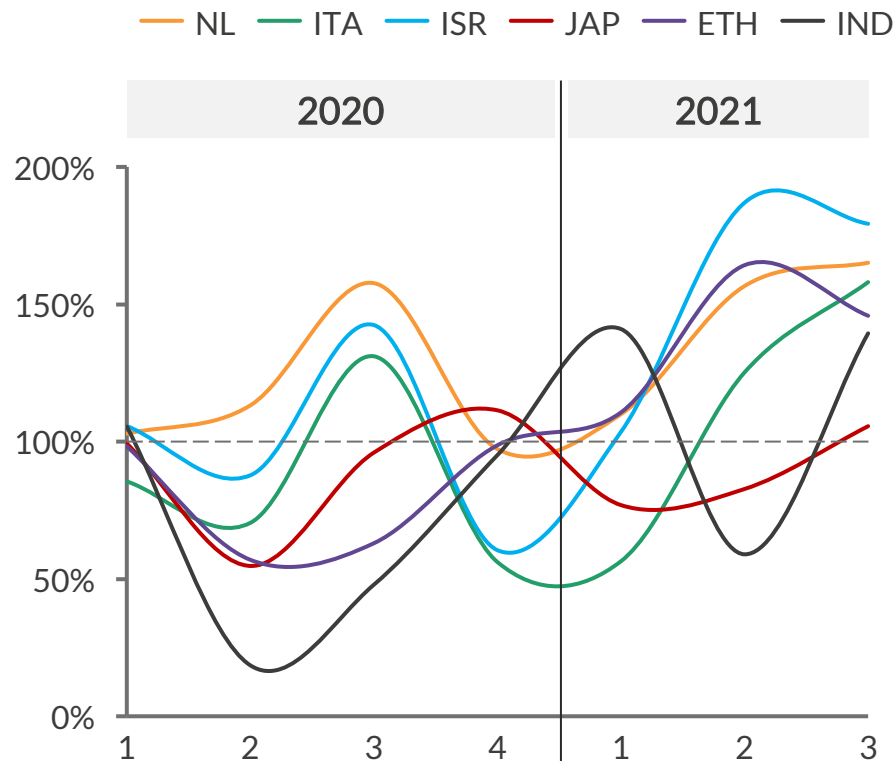
Travel demand for accommodation for local market, incoming tourists and outgoing tourists  
[2020 and 2021 combined, 100% is equal to demand from 2019]



# Lockdowns and travel restrictions increased the domestic travel demand for local accommodation

## Demand for domestic accommodation

[2020 and 2021, corresponding quarter in 2019 is equal to 100%]

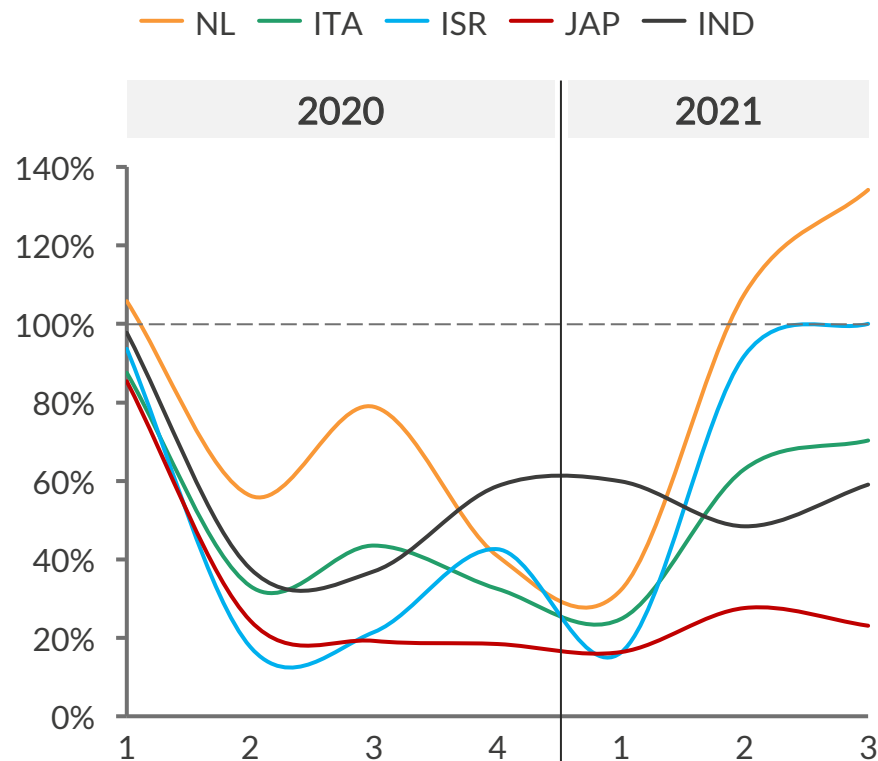


- The lockdowns and travel restrictions that were put in place by many countries had a positive effect on the domestic travel demand for local accommodation.
- In all six countries the demand for local accommodation is higher than the pre-COVID level.
- Higher demand for local accommodation was also noticeable during summer 2020 where the effect was the highest for the European countries.
- Drop in domestic demand in India was the strongest, but recovery until the beginning of 2021 was remarkable.



# The demand for accommodation abroad dropped fiercely and is currently only for NL and Israel back at pre-COVID levels

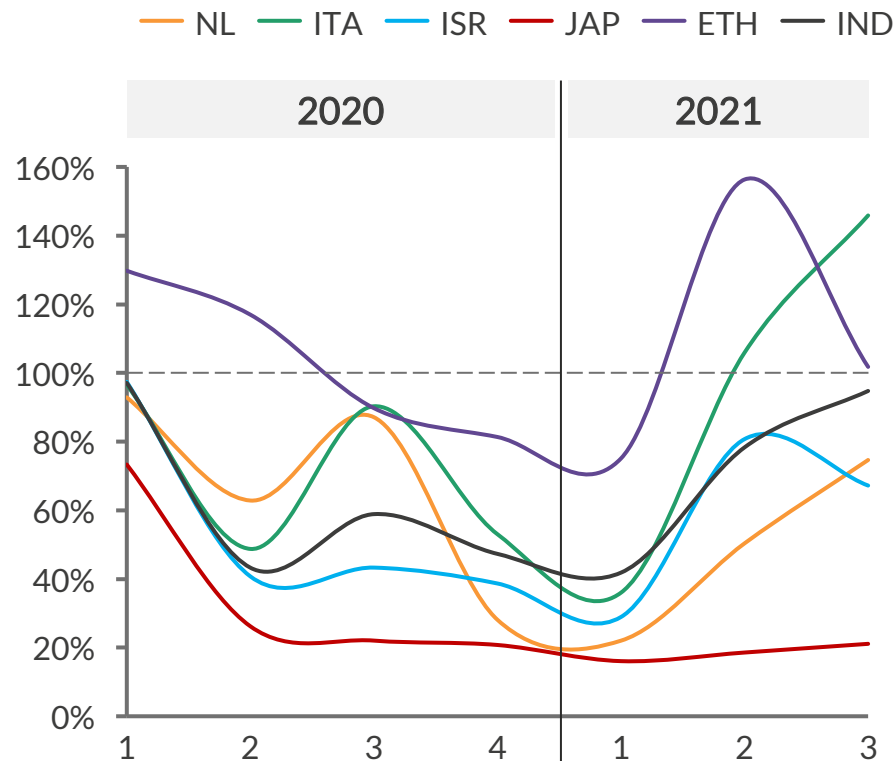
Domestic demand for accommodation abroad<sup>1</sup>  
[2020 and 2021, corresponding quarter in 2019 is equal to 100%]



- The demand for accommodation abroad dropped substantially in 2020 as the pandemic started.
- During summer 2020 we see an increase in accommodation demand in European countries, but demand is much lower than previous year.
- As vaccinations entered the market the demand for accommodation abroad increased enormously for some countries:
  - In NL, the demand is higher than in 2019
  - In Israel, the demand is back at 2019-levels
- However, for other countries the demand for international tourism is way behind 2019.

# After a drop when the pandemic started, the interest of tourists for travel accommodation abroad is rising again

International demand for accommodation from incoming tourists  
[2020 and 2021, corresponding quarter in 2019 is equal to 100%]



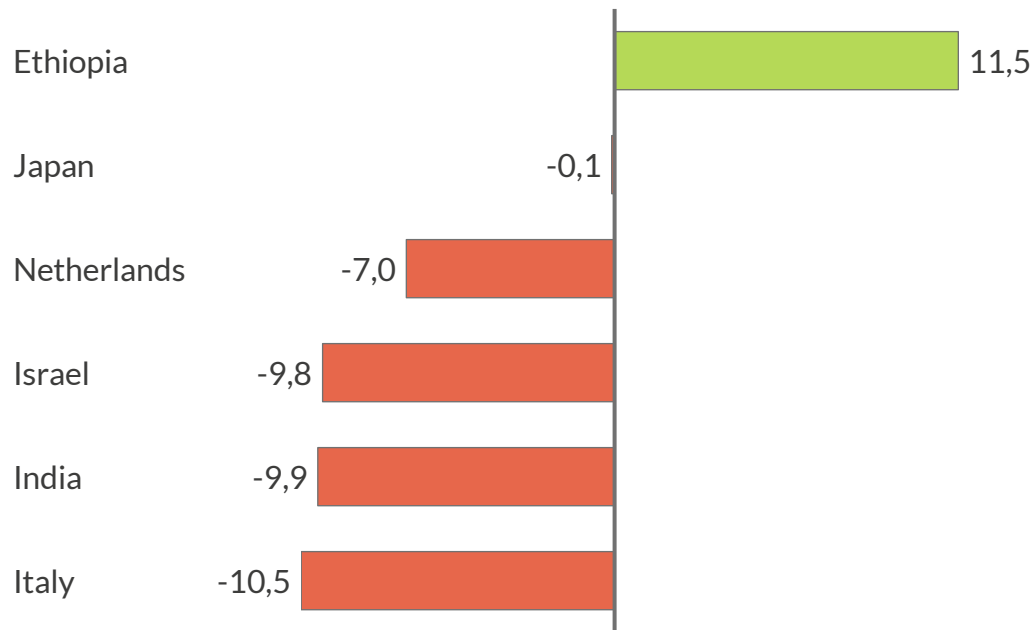
- Demand from international tourist for accommodation dropped as the pandemic started.
- During summer 2020 a small increase in demand was noticeable, but level of interest was still far behind the pre-COVID level.
- As vaccinations became more widespread the demand for accommodation from international tourists started to increase.
- Currently, Italy is popular by international tourists and the level of interest is higher than before.
- The interest from international tourists in Japan dropped when the pandemic started and remained low ever since (likely due to strict regulations for entering the country).

# Deepdives

- Deepdive on school closings
- Deepdive on tourism
- **Deepdive on consumer spending**
- Deepdive on construction

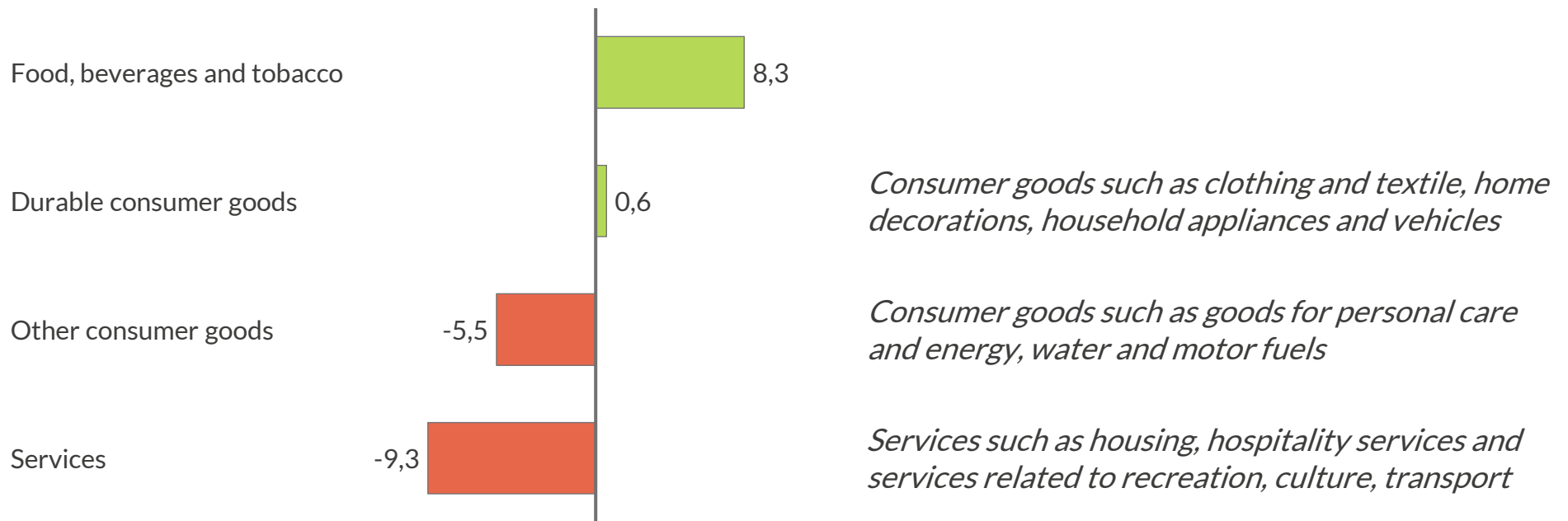
# Household consumption increased in Ehtiopia, was similar in Japan and dropped substantially for the other countries

Household consumption<sup>1</sup> per capita in 2020 compared with 2019  
[% difference]



# Due to COVID, Dutch households spent more on food and beverages and much less on services

Household consumption in 2020 compared with 2019 in the Netherlands  
[% difference]



# Categories for durable consumer goods vary largely: more was spent on electrical devices and home furnishings, less on clothing and shoes

Household consumption on durable goods in 2020 compared with 2019 in the Netherlands  
[% difference]



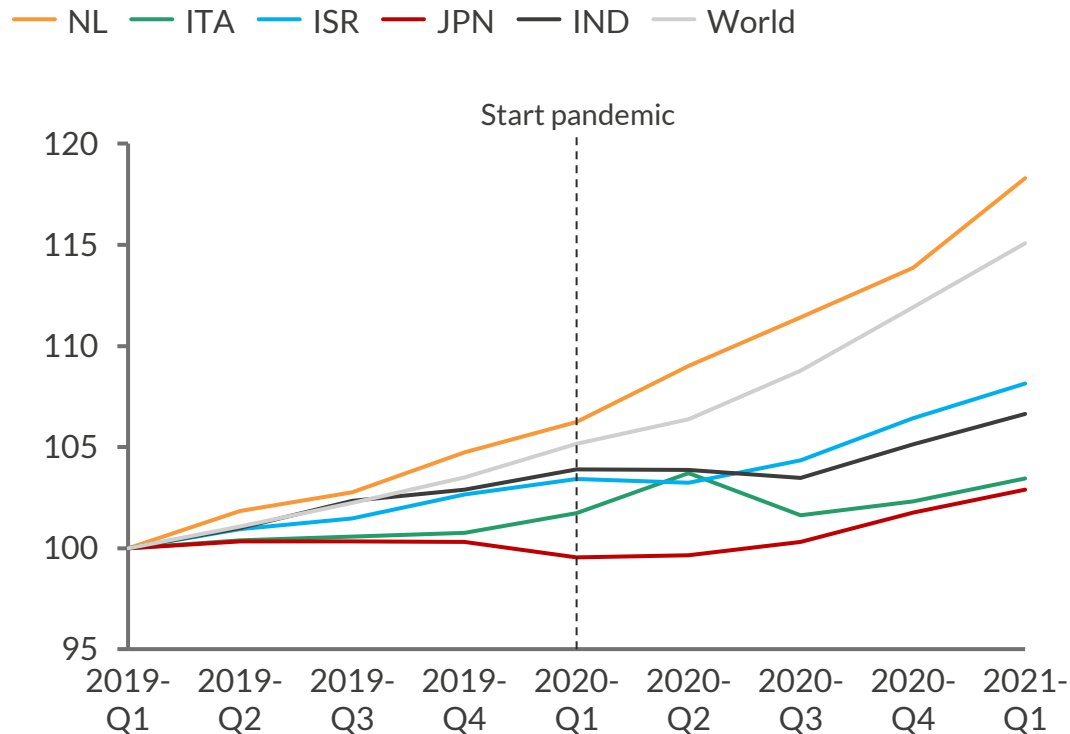
# Deepdives

- Deepdive on school closings
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- **Deepdive on construction**

# House prices have continued to rise since the COVID pandemic

## Housing prices per country<sup>1</sup>

[Nominal housing prices, 2019-Q1 = 100]



- Houses have been getting more expensive since after the financial crisis, but the growth since corona accelerated.
- According to experts, this is due to government measures and lockdowns, which means that people have more money left and can therefore offer more for a house.
- Buyers are also becoming pickier, because they want a suitable workplace in their home to enable them to work from home.