

# **How Effective Were Policy Measures in Supporting Bank Lending During the Covid-19 crisis?**

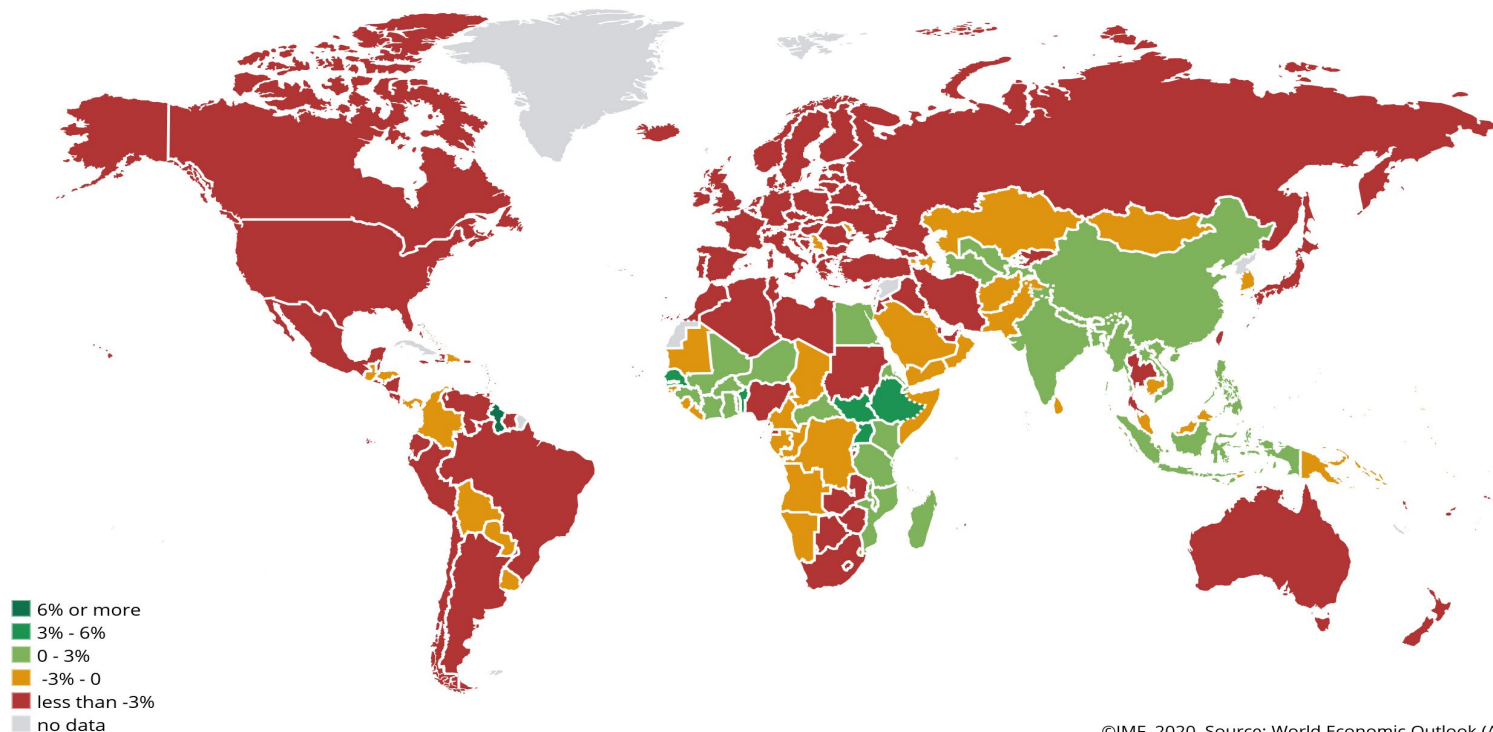
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Harvard Business School  
NBER & CPER

# It's a Health Shocks

# It's a Global Economic Shock

IMF DataMapper

Real GDP growth (Annual percent change, 2020)



©IMF, 2020, Source: World Economic Outlook (April 2020)

# Covid-19 Pandemic

## Global Shock

	Year over Year				Q4 over Q4 <sup>8</sup>			
	2018	2019	Projections		2018	2019	Projections	
			2020	2021			2020	2021
<b>World Output</b>	<b>3.6</b>	<b>2.9</b>	<b>-3.0</b>	<b>5.8</b>	<b>3.3</b>	<b>2.7</b>	<b>-1.4</b>	<b>4.9</b>
<b>Advanced Economies</b>	<b>2.2</b>	<b>1.7</b>	<b>-6.1</b>	<b>4.5</b>	<b>1.8</b>	<b>1.5</b>	<b>-5.2</b>	<b>4.4</b>
United States	2.9	2.3	-5.9	4.7	2.5	2.3	-5.4	4.9
Euro Area	1.9	1.2	-7.5	4.7	1.2	1.0	-5.9	3.6
Germany	1.5	0.6	-7.0	5.2	0.6	0.5	-5.2	3.6
France	1.7	1.3	-7.2	4.5	1.2	0.9	-5.0	2.7
Italy	0.8	0.3	-9.1	4.8	0.0	0.1	-7.2	3.9
Spain	2.4	2.0	-8.0	4.3	2.1	1.8	-7.0	3.7
Japan	0.3	0.7	-5.2	3.0	-0.2	-0.7	-3.2	3.4
United Kingdom	1.3	1.4	-6.5	4.0	1.4	1.1	-5.3	3.8
Canada	2.0	1.6	-6.2	4.2	1.8	1.5	-5.4	4.0
Other Advanced Economies <sup>2</sup>	2.6	1.7	-4.6	4.5	2.3	2.0	-4.6	5.5
<b>Emerging Market and Developing Economies</b>	<b>4.5</b>	<b>3.7</b>	<b>-1.0</b>	<b>6.6</b>	<b>4.5</b>	<b>3.7</b>	<b>1.6</b>	<b>5.2</b>
Emerging and Developing Asia	6.3	5.5	1.0	8.5	6.1	4.7	4.8	5.0
China	6.7	6.1	1.2	9.2	6.6	6.0	4.9	5.1
India <sup>3</sup>	6.1	4.2	1.9	7.4	5.8	2.0	7.4	4.0
ASEAN-5 <sup>4</sup>	5.3	4.8	-0.6	7.8	5.1	4.5	1.1	6.0
Emerging and Developing Europe	3.2	2.1	-5.2	4.2	...	...	...	...
Russia	2.5	1.3	-5.5	3.5	2.9	2.3	-6.5	5.4
Latin America and the Caribbean	1.1	0.1	-5.2	3.4	0.2	-0.1	-5.6	4.8
Brazil	1.3	1.1	-5.3	2.9	1.3	1.7	-5.8	3.6
Mexico	2.1	-0.1	-6.6	3.0	1.5	-0.4	-7.4	5.7
Middle East and Central Asia	1.8	1.2	-2.8	4.0	...	...	...	...
Saudi Arabia	2.4	0.3	-2.3	2.9	4.3	-0.3	-0.5	1.3
Sub-Saharan Africa	3.3	3.1	-1.6	4.1	...	...	...	...
Nigeria	1.9	2.2	-3.4	2.4	...	...	...	...
South Africa	0.8	0.2	-5.8	4.0	0.2	-0.6	-7.2	9.6

### Memorandum

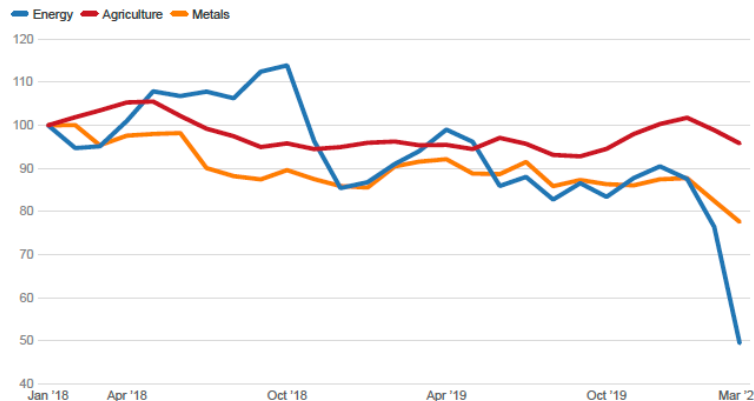
European Union <sup>5</sup>	1.7	-7.1	4.8
Low-Income Developing Countries	5.1	0.4	5.6
Middle East and North Africa	0.3	-3.3	4.2
World Growth Based on Market Exchange Rates	2.4	-4.2	5.4
<b>World Trade Volume (goods and services)</b>	<b>0.9</b>	<b>-11.0</b>	<b>8.4</b>
Imports			
Advanced Economies	1.5	-11.5	7.5
Emerging Market and Developing Economies	-0.8	-8.2	9.1
Exports			
Advanced Economies	1.2	-12.8	7.4
Emerging Market and Developing Economies	0.8	-9.6	11.0
<b>Commodity Prices (US dollars)</b>			
Oil <sup>6</sup>	-10.2	-42.0	6.3
Nonfuel (average based on world commodity import weights)	0.8	-1.1	-0.6
<b>Consumer Prices</b>			
Advanced Economies	1.4	0.5	1.5
Emerging Market and Developing Economies <sup>7</sup>	5.0	4.6	4.5
<b>London Interbank Offered Rate (percent)</b>			
On US Dollar Deposits (six month)	2.3	0.7	0.6
On Euro Deposits (three month)	-0.4	-0.4	-0.4
On Japanese Yen Deposits (six month)	0.0	-0.1	-0.1

# Global Shock: EMEs and Developing

- For emerging markets, the economics shocks associated to the Covid-19 pandemic hit before the health shock :
  - Disruption of global supply chains, collapse of trade, commodity prices, tourism, remittances foreign direct investment and overall capital flows.

**As the coronavirus pandemic worsened, commodity prices fell**

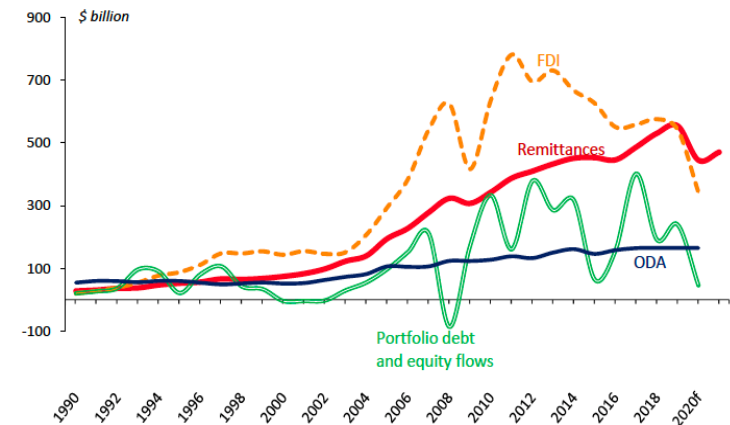
Index US\$ (Jan 2018 = 100)



Last observation is March 2020

Source: World Bank • [Embed this chart](#) • [Download image](#)

**Figure 1.4 Remittance Flows to Low- and Middle-Income Countries Expected to Decline in 2020**



# Unprecedented Policies

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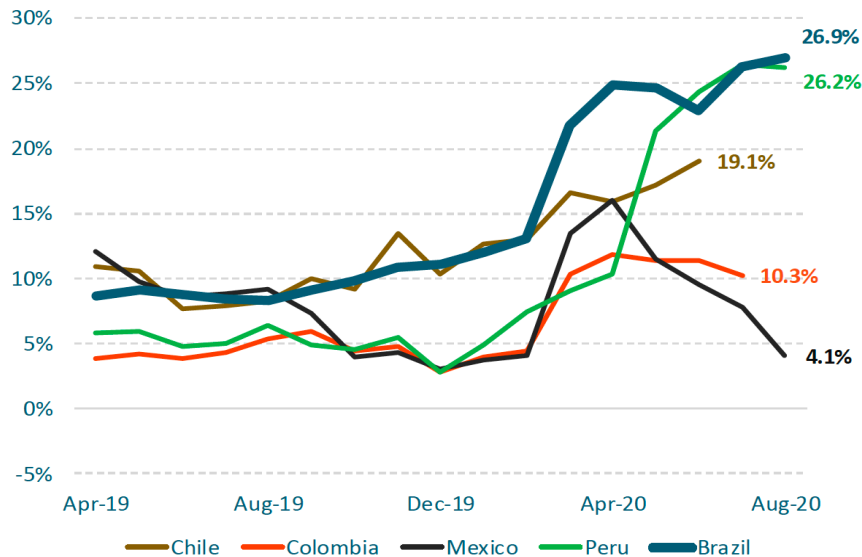
- Governments: Central, State, Local
  - Fiscal, Monetary, etc.
    - <https://www.federalreserve.gov>
    - <https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html>
    - <https://www.cbo.gov/publication/56335>
  - Policies trackers
    - <https://covidtracker.bsg.ox.ac.uk>
    - <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>
- Multilaterals: WB, IFC, IMF,
  - <https://www.worldbank.org/en/who-we-are/news/coronavirus-covid19>
  - [https://www.ifc.org/wps/wcm/connect/news\\_ext\\_content/ifc\\_external\\_corporate\\_site/news+and+events/covid-19](https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/covid-19)
  - <https://www.imf.org/en/Topics/imf-and-covid19>

# Credit growth to business

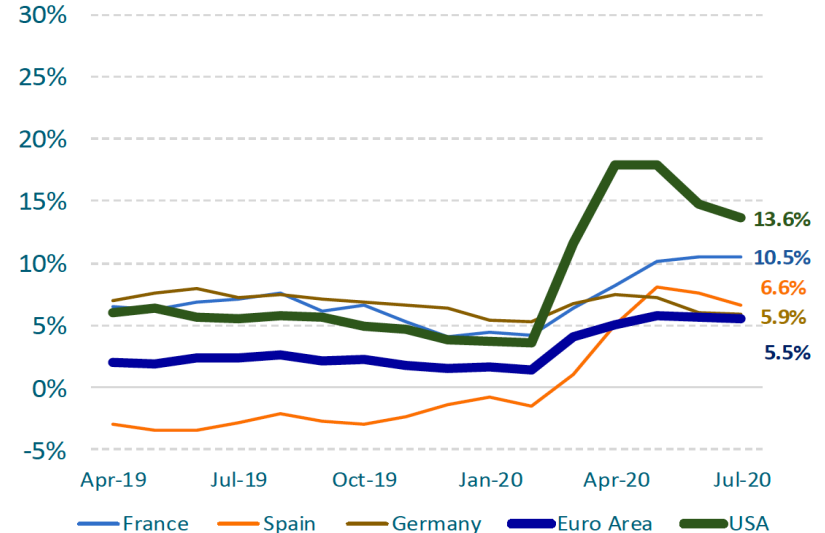
## Credit growth for business

## GLOBAL ECONOMY Impact on credit market

### EMEs (% Y/Y)



### AEs (% Y/Y)



# WEO, April 2021

**Table 1.1. Overview of the World Economic Outlook Projections (continued)**  
(Percent change, unless noted otherwise)

	Year over Year				Q4 over Q4 <sup>8</sup>			
	2020	2021	Projections		2020	2021	Projections	
			2022	2023			2022	2023
<b>World Output</b>	-3.1	6.1	3.6	3.6	-0.3	4.6	2.5	3.5
<b>Advanced Economies</b>	-4.5	5.2	3.3	2.4	-2.7	4.7	2.5	2.0
United States	-3.4	5.7	3.7	2.3	-2.3	5.6	2.8	1.7
Euro Area	-6.4	5.3	2.8	2.3	-4.3	4.6	1.8	2.3
Germany	-4.6	2.8	2.1	2.7	-2.9	1.8	2.4	2.5
France	-8.0	7.0	2.9	1.4	-4.3	5.4	0.9	1.5
Italy	-9.0	6.6	2.3	1.7	-6.1	6.2	0.5	2.2
Spain	-10.8	5.1	4.8	3.3	-8.8	5.5	2.3	4.0
Japan	-4.5	1.6	2.4	2.3	-0.8	0.4	3.5	0.8
United Kingdom	-9.3	7.4	3.7	1.2	-6.3	6.6	1.1	1.5
Canada	-5.2	4.6	3.9	2.8	-3.1	3.3	3.5	2.2
Other Advanced Economies <sup>2</sup>	-1.8	5.0	3.1	3.0	-0.4	4.5	2.5	2.8
<b>Emerging Market and Developing Economies</b>	-2.0	6.8	3.8	4.4	1.7	4.4	2.5	4.9
Emerging and Developing Asia	-0.8	7.3	5.4	5.6	3.7	4.2	4.4	5.8
China	2.2	8.1	4.4	5.1	6.4	3.5	4.8	4.7
India <sup>3</sup>	-6.6	8.9	8.2	6.9	1.5	5.6	2.7	9.0
ASEAN-5 <sup>4</sup>	-3.4	3.4	5.3	5.9	-2.5	4.5	5.1	5.3
Emerging and Developing Europe	-1.8	6.7	-2.9	1.3	0.0	6.3	-6.0	3.3
Russia	-2.7	4.7	-8.5	-2.3	-1.7	5.0	-14.1	3.3
Latin America and the Caribbean	-7.0	6.8	2.5	2.5	-3.2	3.8	1.6	2.5
Brazil	-3.9	4.6	0.8	1.4	-1.0	1.6	0.8	1.9
Mexico	-8.2	4.8	2.0	2.5	-4.4	1.1	3.3	1.9
Middle East and Central Asia	-2.9	5.7	4.6	3.7	...	...	...	...
Saudi Arabia	-4.1	3.2	7.6	3.6	-3.8	6.7	6.9	3.6
Sub-Saharan Africa	-1.7	4.5	3.8	4.0	...	...	...	...
Nigeria	-1.8	3.6	3.4	3.1	-0.2	2.4	2.1	2.3
South Africa	-6.4	4.9	1.9	1.4	-3.4	1.8	2.3	1.1

## Memorandum

World Growth Based on Market Exchange Rates	-3.5	5.8	3.5	3.1	-0.9	4.5	2.6	2.9
European Union	-5.9	5.4	2.9	2.5	-4.1	5.0	1.8	2.7
Middle East and North Africa	-3.3	5.8	5.0	3.6	...	...	...	...
Emerging Market and Middle-Income Economies	-2.2	7.0	3.8	4.3	1.8	4.5	2.4	4.9
Low-Income Developing Countries	0.2	4.0	4.6	5.4	...	...	...	...
<b>World Trade Volume (goods and services)</b>	<b>-7.9</b>	<b>10.1</b>	<b>5.0</b>	<b>4.4</b>	...	...	...	...
Imports								
Advanced Economies	-8.7	9.5	6.1	4.5	...	...	...	...
Emerging Market and Developing Economies	-7.9	11.8	3.9	4.8	...	...	...	...
Exports								
Advanced Economies	-9.1	8.6	5.0	4.7	...	...	...	...
Emerging Market and Developing Economies	-4.8	12.3	4.1	3.6	...	...	...	...
<b>Commodity Prices (US dollars)</b>								
Oil <sup>5</sup>	-32.7	67.3	54.7	-13.3	-27.6	79.2	28.6	-11.6
Nonfuel (average based on world commodity import weights)	6.8	26.8	11.4	-2.5	15.4	17.3	9.4	-2.5
<b>Consumer Prices</b>								
Advanced Economies <sup>6</sup>	0.7	3.1	5.7	2.5	0.4	4.9	4.8	2.2
Emerging Market and Developing Economies <sup>7</sup>	5.2	5.9	8.7	6.5	3.3	6.0	8.8	5.3

<sup>4</sup>Indonesia, Malaysia, Philippines, Thailand, Vietnam.

<sup>5</sup>Simple average of prices of UK Brent, Dubai Fateh, and West Texas Intermediate crude oil. The average price of oil in US dollars a barrel was \$69.07 in 2021; the assumed price, based on futures markets, is \$106.83 in 2022 and \$92.63 in 2023.

<sup>6</sup>The inflation rates for 2022 and 2023, respectively, are as follows: 5.3 percent and 2.3 percent for the euro area, 1.0 percent and 0.8 percent for Japan, and 7.7 percent and 2.9 percent for the United States.

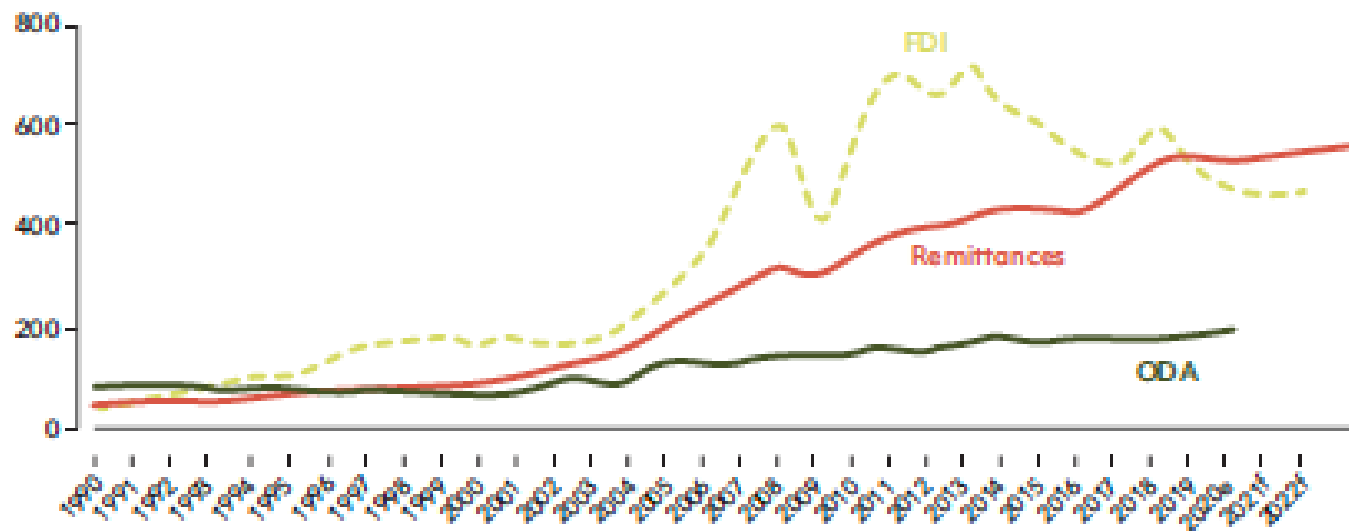
<sup>7</sup>Excludes Venezuela. See the country-specific note for Venezuela in the "Country Notes" section of the Statistical Appendix.

<sup>8</sup>For world output, the quarterly estimates and projections account for approximately 90 percent of annual world output at purchasing-power-parity weights. For Emerging Market and Developing Economies, the quarterly estimates and projections account for approximately 80 percent of annual emerging market and developing economies' output at purchasing-power-parity weights.

# Emerging Markets: Capital Flows

**Figure 1.1a** Remittances, Foreign Direct Investment, and Official Development Assistance Flows to Low- and Middle-Income Countries, 1990–2022

(\$ billion)



Sources: World Bank—KNOMAD staff estimates; World Development Indicators; International Monetary Fund (IMF) Balance of Payments Statistics. See appendix in the *Migration and Development Brief 32* for forecasting methods (World Bank 2020c).

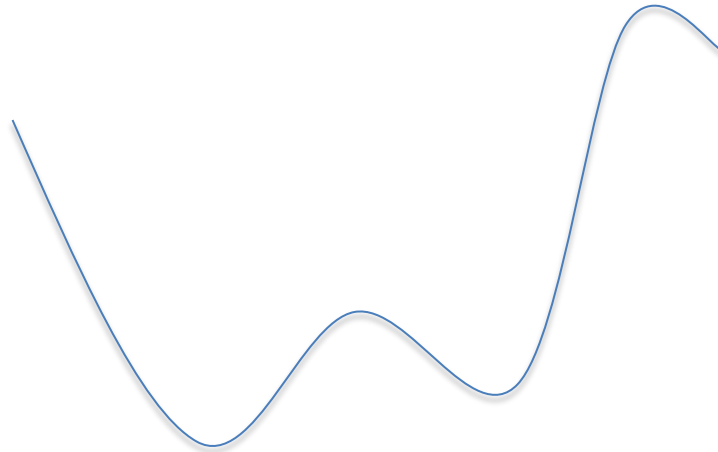
Note: FDI = foreign direct investment; ODA = official development assistance; e = estimate; f = forecast.



# Covid-19 Shutdown: Type of Recessions

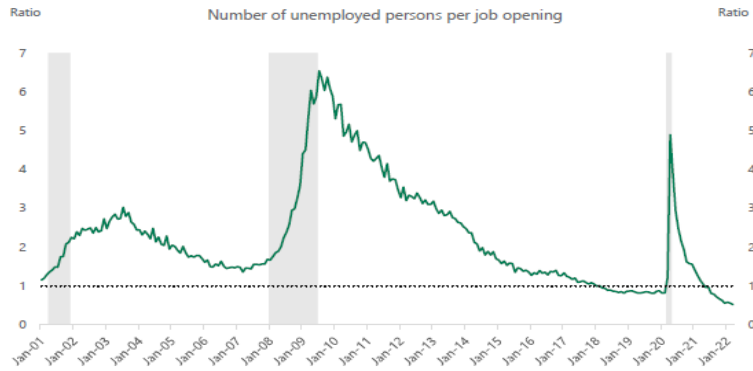
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# United States

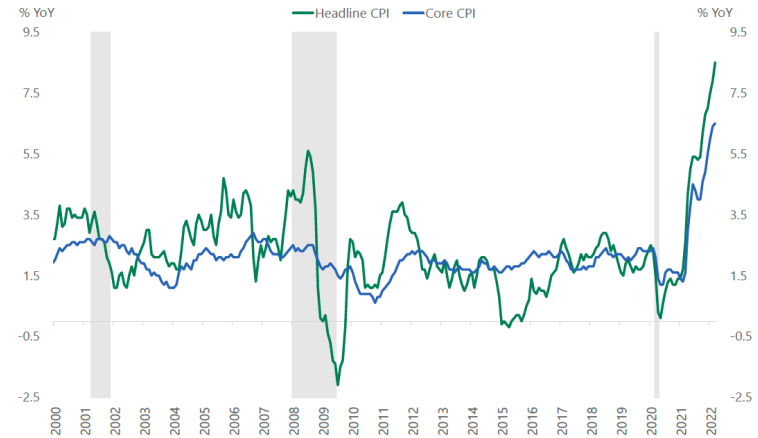
There are 11.5mn job openings and 6mn unemployed



Source: BLS, Haver Analytics, Apollo Chief Economist

APOLLO

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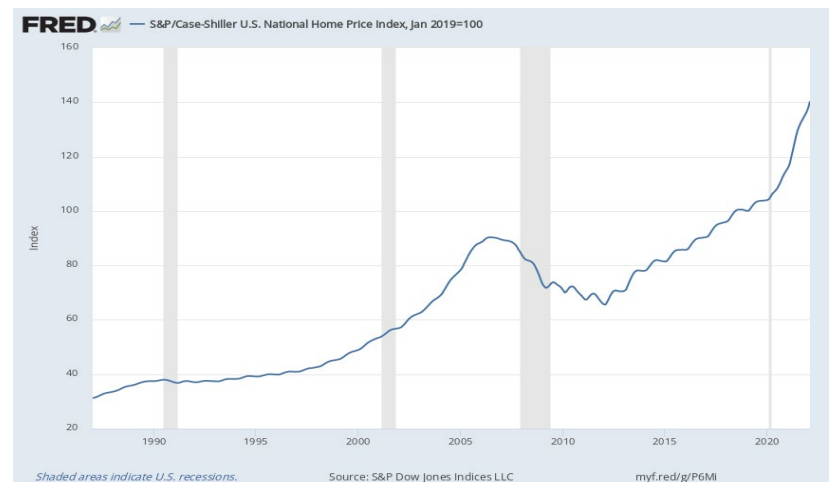
Source: BLS, Haver Analytics, Apollo Chief Economist



Shaded areas indicate U.S. recessions.

Source: NASDAQ OMX Group

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Shaded areas indicate U.S. recessions.

Source: S&P Dow Jones Indices LLC

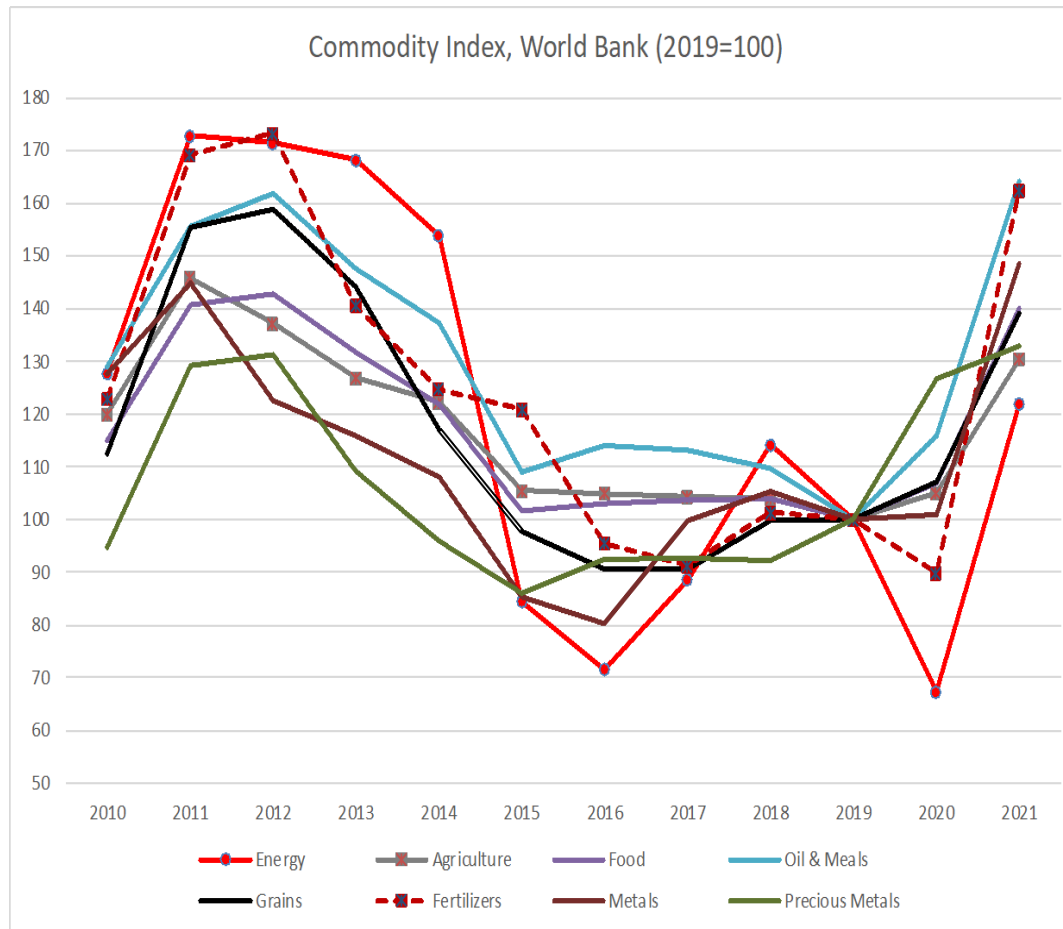
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# Time for Evaluations

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- Autor et al (2020): reduced-form analysis suggests PPP boosted employment by 2.3 million
  - Estimates range from 1.4 million to 3.2 million payroll jobs
  - Implies cost of PPP at **\$224K per job supported** (from \$162K to \$381K)
- Chetty, Friedman, Hendren, Stepner, and Opportunity Insights Team (2020)
  - PPP “had little impact on employment at small businesses”
- Granja, Makridis, Yannelis, and Zwick (2020)
  - Regional differences in PPP participation by financial institutions
  - No effect on economic outcomes of local geographic areas

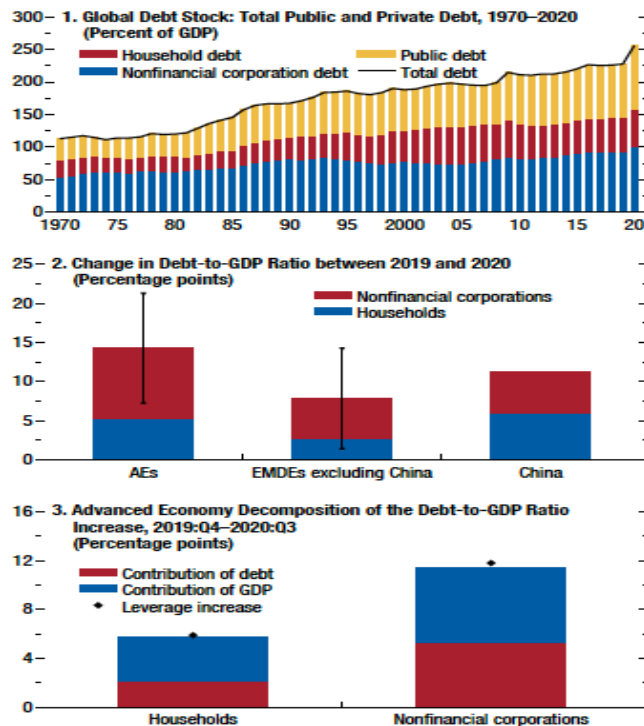
# Other Trends: Commodity Prices



# External Debt

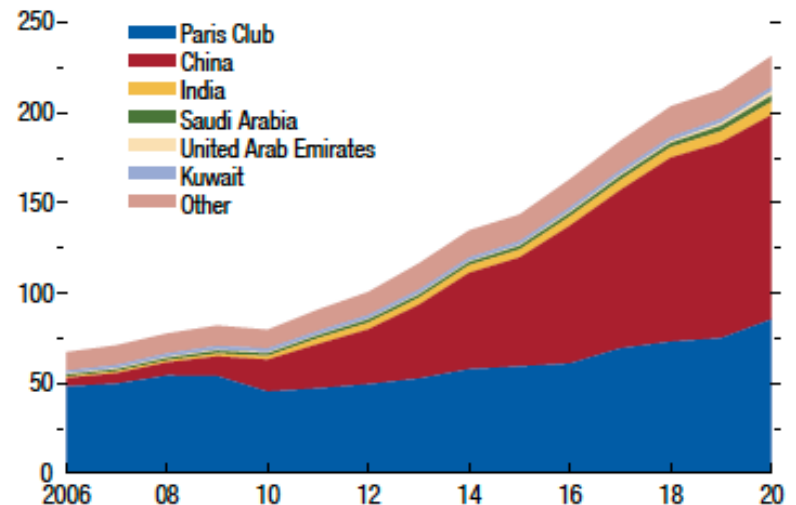
**Figure 2.1. Rapidly Mounting Private Debt**

Private debt increased as much as public debt in 2020. The largest increases took place in advanced economies, with large variations across countries.



Sources: Gaspar, Medas, and Perrelli (2021); IMF, Global Debt Database; and IMF staff calculations.

**Figure 1.23. Public External Debt, by Creditor**  
(Billions US dollars)

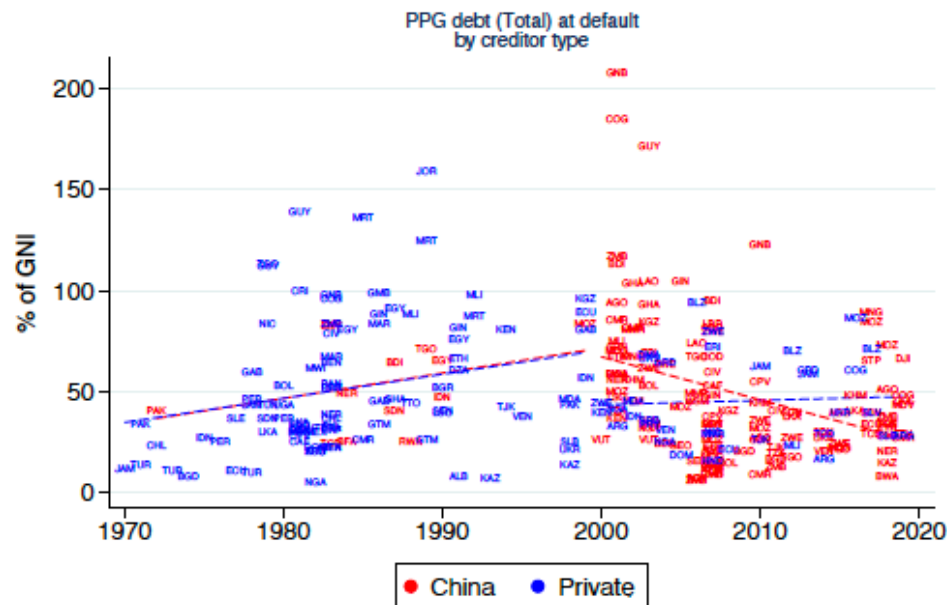


Source: World Bank, International Debt Statistics.

Note: The figure shows public and privately guaranteed debt of countries eligible for the Debt Service Suspension Initiative. In terms of International Organization for Standardization (ISO) country codes, the Paris Club is composed of AUS, AUT, BEL, BRA, CAN, CHE, DEU, DNK, ESP, FIN, FRA, GBR, IRL, ISR, ITA, JPN, KOR, NLD, NOR, RUS, SWE, USA.

# Defaulting

Figure 1: PUBLIC AND PUBLICLY GUARANTEED DEBT IN THE YEAR OF DEFAULT ENTRY OVER TIME.



Dotted lines represent averages over time for each creditor type.  
Derived from  $Y_i = 60 + 61 \cdot \text{year}_i$  for each default episode  $i$ .

Notes: Figure 1 displays the evolution of the total outstanding public and publicly guaranteed external debt expressed in percent of Gross National Income.

# Covid-19 Shutdown

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- It's a Global Health Shock
- Unprecedented fiscal, monetary, etc.
  - Local, state, national governments, multilaterals
    - **High leverage: individuals, firms, governments**
  - Implicit assumptions: capacity and space to spend;
    - Bias.... fighting the last crisis?
- Solution to a Health Shock: Testing, treatments, equipment, vaccines.
- Hysteresis: “on-line” world; precautionary savings
  - Are people and firms going to spend, if so, when?
  - What will stay, what will need investment?
- Save “every job, every firm” versus more targeted policies;
  - **Fiscal space to spend; capacity to spend it “well”?** Institutional limitations (we like to spend/”mano peluda”); bad spending delegitimizes
- “All it takes”; every 10 years (??)
  - Debt crisis 80s, Tequila, Asian, Russia, Brazil, Argentina, Sept 11, GFC, Covid-19, Invasion of Ukraine, Climate...

**THANKS**