The Effects of the Coronavirus Pandemic in Emerging Market and Developing Economies: An Optimistic Preliminary Account

Pinelopi Koujianou Goldberg and Tristan Reed

Discussion by Şebnem Kalemli-Özcan

IMF and University of Maryland

Brookings Papers on Economic Activity Conference, June 25, 2020

Overview

The Key Message of Goldberg and Reed (2020):

As of June 22, 2020, emerging markets and developing countries (EMDE) have fared relatively well:

- On the public health front: Low number of deaths——explained by having more young people and less obese people

- On the economic front:
  - Short-run effects are limited, economic recovery underway
  - Medium, Long-run effects can be devastating due to containment policies, indirect effects on education and health
- **High uncertainty:** Authors caution that paper's conclusions can be reversed if infections and deaths accelerate in EMDE

My Comments

1. Is "deaths per million" metric enough to evaluate the short-run public health impact?

2. What else might explain low deaths in EMDEs?

3. Nature of COVID shock and alternative ways to evaluate economic impact (drawing lessons from history)

A Cautious View from an Optimist.
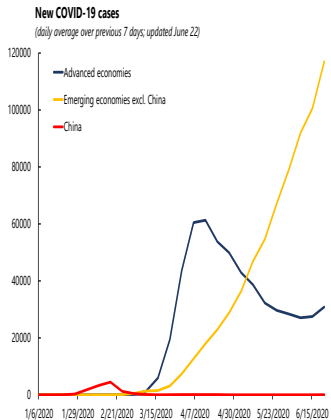
What we have learned since February 2020:

- We are always behind and COVID is ahead.
- Hope for the best and prepare for the worst

Relevant Metrics: Deaths vs. Cases

# New cases are increasing at a fast rate in EMDE
Data from John Hopkins University

June 22 Update

New COVID-19 cases
(daily average over previous 7 days; updated June 22)

Legend: Advanced economies; Emerging economies excl. China; China

FT, Martin Wolf, June 9

Covid-19 is now taking off in emerging and developing countries

Daily new Covid-19 cases (000s)

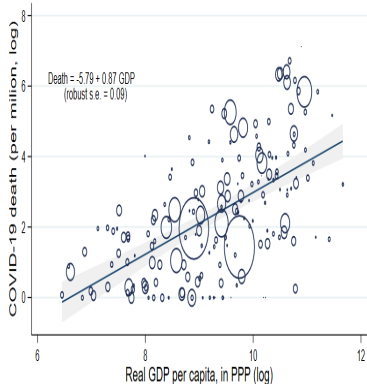Legend: China — Advanced economies — Emerging/developing excl. China
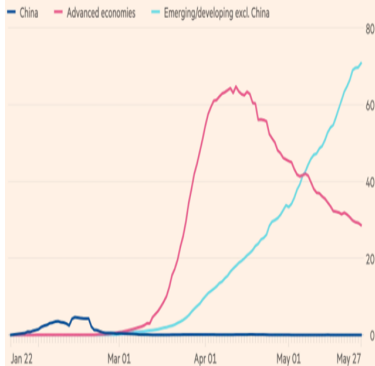
Why Do Rich Countries Have More Deaths?

Countries vs. Regions
Chen, Igan, Pierri, Presbitero, 2020

Rich Countries have MORE Deaths
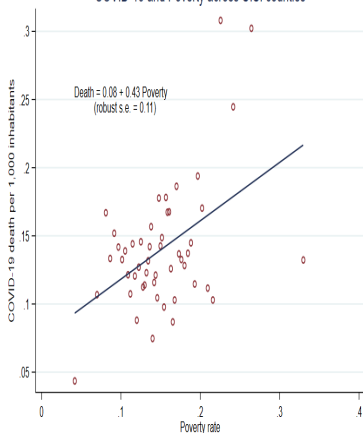
COVID-19 and income across countries

Death = -5.79 + 0.87 GDP
(robust s.e. = 0.09)

COVID-19 death (per milion, log)

Real GDP per capita, in PPP (log)

95% confidence interval ——— Linear fit

Rich Counties have FEWER Deaths

COVID-19 and Poverty across U.S. counties

Death = 0.08 + 0.43 Poverty
(robust s.e. = 0.11)

COVID-19 death per 1,000 inhabitants

Poverty rate

Notes: binned plot with state fixed effects
Source: Census (Small Area Income and Poverty Estimates) and Johns Hopkins University (CSSE)

What does GDP a proxy for?

- **Paper's Headline:** Older population and high obesity rates render GDP insignificant

- Any X that is positively correlated with GDP and has a positive β creates an $\uparrow$ omitted variable bias

- **Usual suspect:** Delay in policy action/arrival of disease is correlated with GDP but cannot explain away the role of demographics and health

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- **Other suspects:** Paper's robustness shows a group of testing/tracing variables can explain the positive relation between GDP and deaths

- Paper's Interpretation: Better testing capacity in EMDE

- Alternative Interpretation I: Misreporting (more testing, more **reported** deaths)

- Alternative Interpretation II: Better contact tracing due to **lower institutional quality relative to AE**

Testing/Tracing Results Revisited

Dep. Variable	Deaths (1)	Deaths (2)	Deaths (3)
Ln (GDP per capita)	0.56**	0.35**	0.29
	(0.23)	(0.17)	(0.19)
Days since First Death	0.46***	0.45***	0.38*
	(0.10)	(0.08)	(0.23)
Ln (COVID tests/1000)	0.35*	0.67***	0.73***
	(0.20)	(0.14)	(0.15)
Test Ratio		0.05***	0.05***
		(0.01)	(0.01)
Contact Tracing Index			-0.48**
			(0.20)
R^2	0.50	0.62	0.67

Nature of the COVID Shock and Economic Impact

COVID Shock is Multitude of Shocks for EMDE

- Health shock
- Supply shock
- Demand shock
- Capital inflow and exchange rate shock
- Commodity price shock — **paper's focus**

Real-time macroeconomic data is slow in coming but crisis is large and novel, requiring fast and out-of-the-box policy response

In the absence of second quarter GDP and BOP capital flows data:
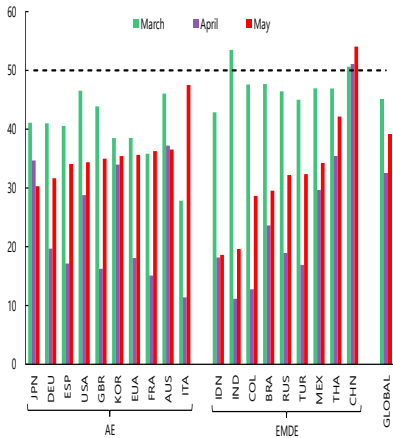
- Inference from almost real-time data
- Model based estimates

Production Contracts both in EMDE and AE

PMI survey from IHS Markit

Manufacturing

PMI: Manufacturing - Output
(index; >50 = expansion; sa)

Services

PMI: Services - Business activity
(index; >50 = expansion; sa)
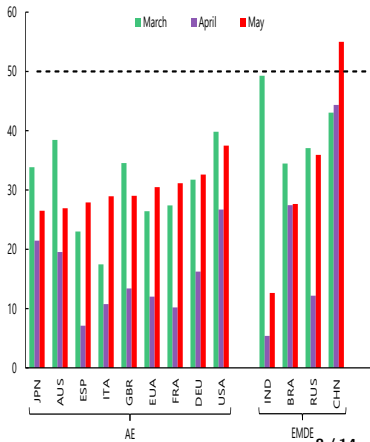
Latest WEO, June 24, 2020

- Compared to April WEO, IMF is projecting a deeper recession in 2020 and slower recovery in 2021—No country is spared

- Global growth decline is -4.9% in 2020

- For EMDE -3%, excluding China, -5%

- Gopinath, June 24, 2020: The cumulative hit to GDP growth over 2020-21 for EMDE is expected to exceed that in AE (w/o China)

- High degree of uncertainty remains, countries should be agile with their policies and adopt to changing environment

Capital Flows and External Financing: Important for EMDE outcomes

- High frequency data is available only for portfolio equity (-100bn) and portfolio debt flows (-30bn)

- Portfolio equity is not an important asset class for EMDE in their overall external borrowing; portfolio debt mainly involves sovereigns borrowing

- The authors uses alternative net capital flows from IIF on 12 EMs, but this data is <u>estimated</u> based on current account (trade balance plus reserves)

- We know that gross capital flows (especially banking) is what matters for EMDEs financial stability

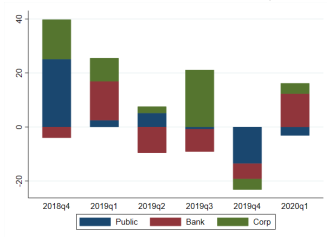# EMDE Capital Flows Response to Risk-Off Shocks

Avdjiev, Hardy, Kalemli-Ozcan, Serven (2020). 34 EMDE.

- When banks and corporates lose flows, real troubles start
- This did not happen yet; only sovereigns lost capital flows
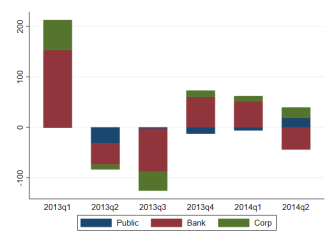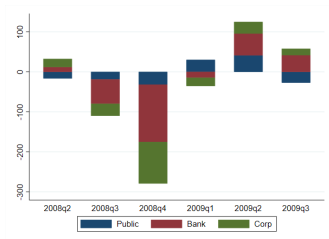
Global Financial Crisis

Taper Tantrum

COVID-19 Crisis

Medium/Long Run Effects and Lockdown Policies

- Large EMDE will recover when their local demand recovers and that depends on lockdown policies

- Recovery of local demand and effects of lockdown policies in EMDE depends on: infections, foreign demand, international I-O linkages and external finance

- In the absence of real time data, use model-based estimates

An Epi+Macro Model for EM

Cakmakli, Demiralp, Kalemli-Ozcan, Yesiltas, Yildirim, **April 2020**

- Partial lockdown losses are higher (11% of GDP) relative to full lockdown (5.8% of GDP)

- Full lockdown recovers both domestic and external demand faster

- External demand effects local demand via international I-O links and external finance/capital flows

Policy Options

- All policies should be on the table

- EMDE should be able to capitalize on international capital markets via search-for-yield motive of AE investors
    - Historical evidence shows that MP/low r in AE is an important driver of positive spillovers/capital inflows to EMDE (Kalemli-Ozcan, 2019 Jackson Hole Symposium)

    - **EMDE heterogeneity in attracting capital flows:** strong institutions and policy credibility are the key

    - QE-type policies in EMDE should be transparent and well-communicated in order not to hamper policy credibility.

Conclusion

- Heroic effort to evaluate health and economic impact of COVID on EMDE for such a large and uncertain shock

- Global epicenter is moving to South; if deaths remain low, this will be a big success for EMDE and provide valuable lessons

- Known unknowns—still many uncertainties in terms of which factors make people more vulnerable and how epidemiology is linked to economic outcomes

Appendix

Capital Flows and Spreads

- In the absence of capital flows data one can look at spreads
- Hard currency spreads came down as default risk came down—-consistent with portfolio bond outflows
- The relevant spread for the EMDE external borrowing is the UIP premium: excess returns offered to foreign investors in order to borrow in international markets—peaked at different times
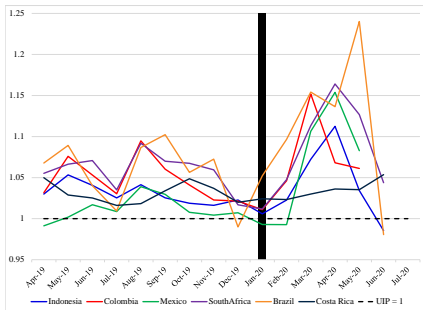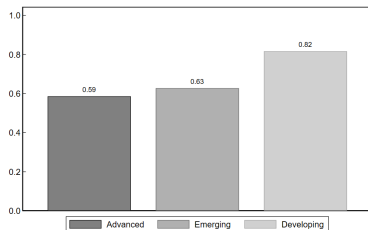
Avdjiev, Hardy, Kalemli-Ozcan, Serven (2020)—85 countries.

- More than 50% in debt for EM, more than 70% for DE
- Share of loans is over 60% (EM) and 80% (DE) in debt
- Banks are main private borrower in EM and Sovereigns in DE
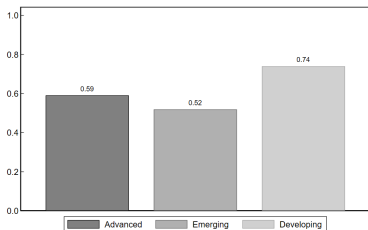
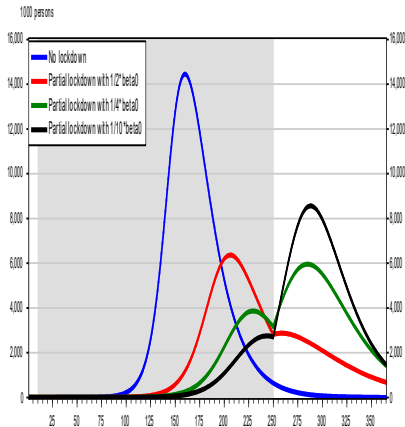**Share of Debt in External Finance**
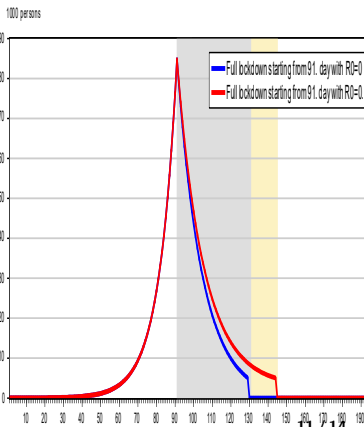

Share of Loans in External Debt

An Epi+Macro Model for EM

Cakmakli, Demiralp, Kalemli-Ozcan, Yesiltas, Yildirim, April 2020

**Partial
Lockdown–Annual Cost
11%GDP**

**Full
Lockdown–Annual Cost
5.8%GDP**

Sectors with more Trade Links and External Finance Needs have higher COVID Losses

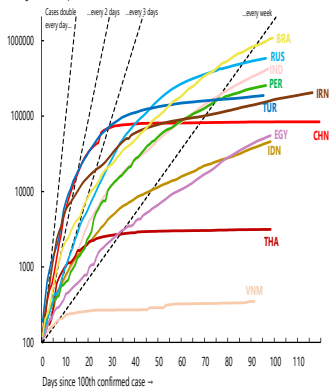Cakmakli, Demiralp, Kalemli-Ozcan, Yesiltas, Yildirim, April 2020

Dep. Variable	Sector Output Loss (1)	Sector Output Loss (2)
I-O Trade	15.98**	16.47**
	(6.402)	(6.426)
I-O Trade Finance	34.78*	35.63**
	(17.351)	(17.256)
FX Debt		0.16**
		(0.076)
R^2	0.12	0.20

Data on Cumulative Confirmed Cases
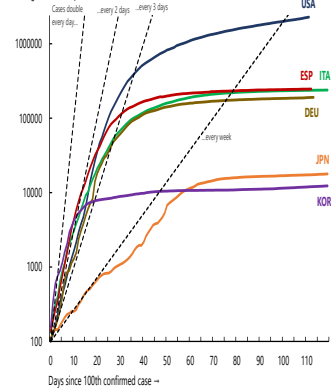## European Centre for Disease Prevention and Control

EMDE: Cumulative confirmed cases
(log scale; Last update: June 22)

AE: Cumulative confirmed cases
(log scale; Last update: June 22)

R^2: GDP explains 24% of variation in deaths, whereas "time passed since first death" explains a larger fraction, 44%. Adding other variables have minimal effect on R^2