



Spillovers to Latin America from Growth Slowdowns in China and the United States

OCTOBER 2019

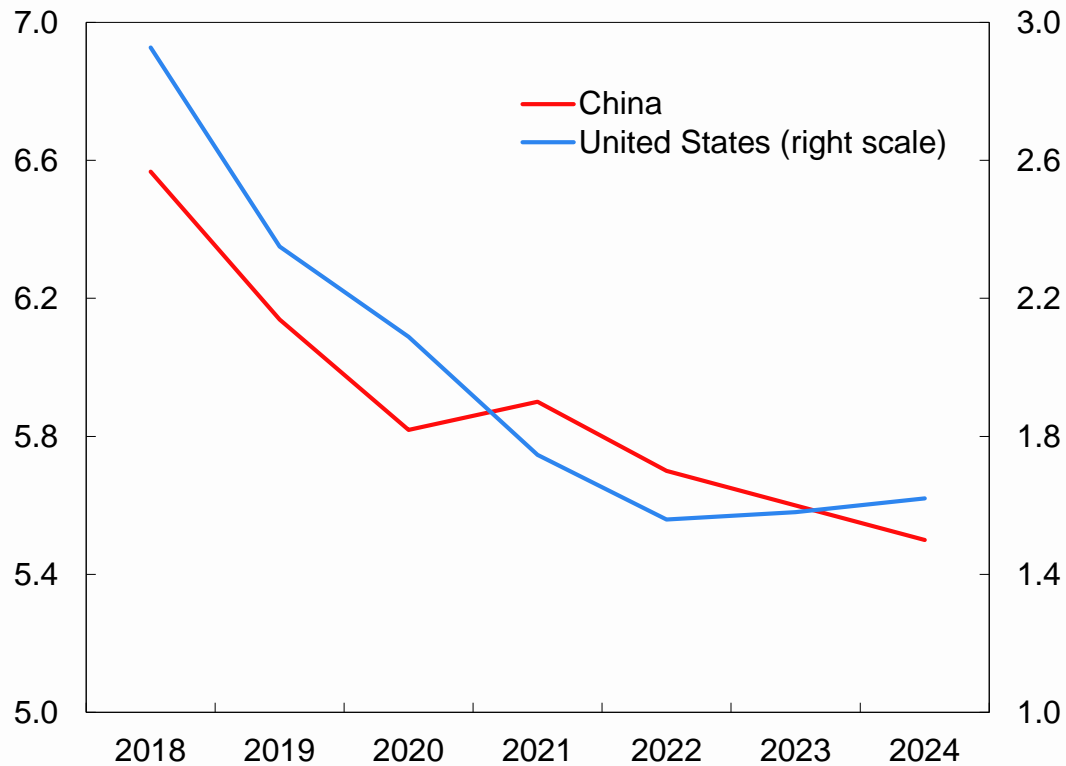
Regional Studies Division
Western Hemisphere Department

Presentation Outline

- I. **Motivation**
- II. Spillover channels and country exposures:
 - a. Trade
 - b. Commodity prices
 - c. Financial flows
- III. Quantifying the size of spillovers
- IV. Conclusion

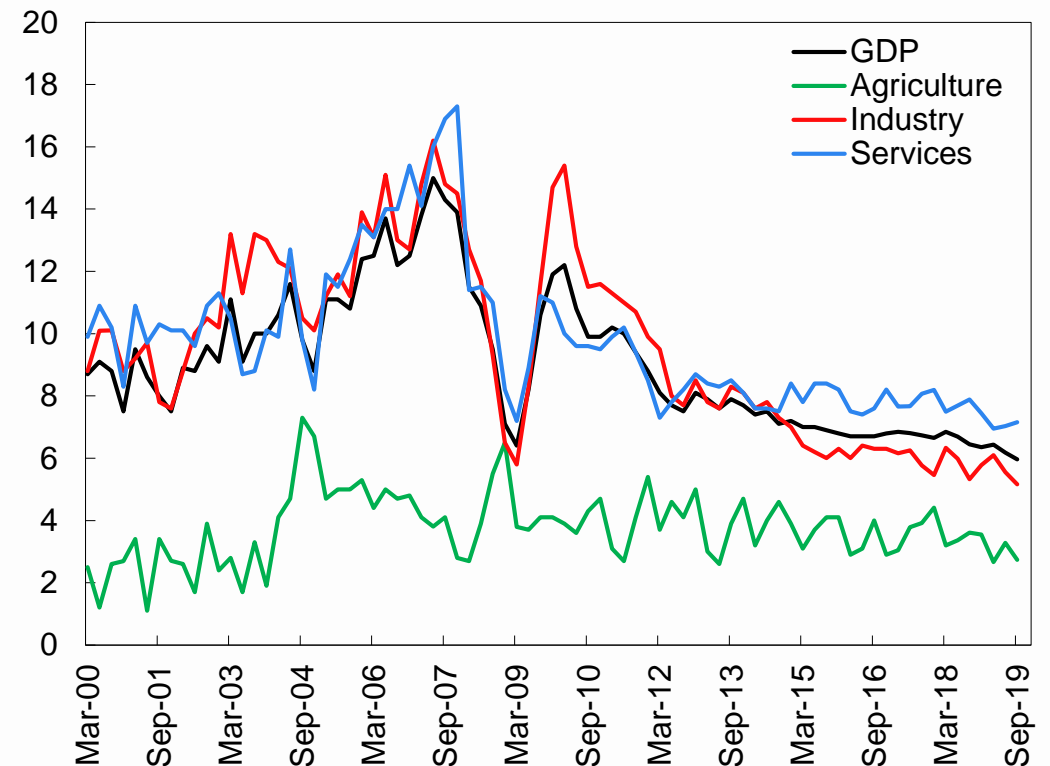
Growth in China and the United States is slowing, with potentially large spillovers to other countries

Real GDP Growth
(Year-over-year percent change)



Source: IMF, World Economic Outlook database.

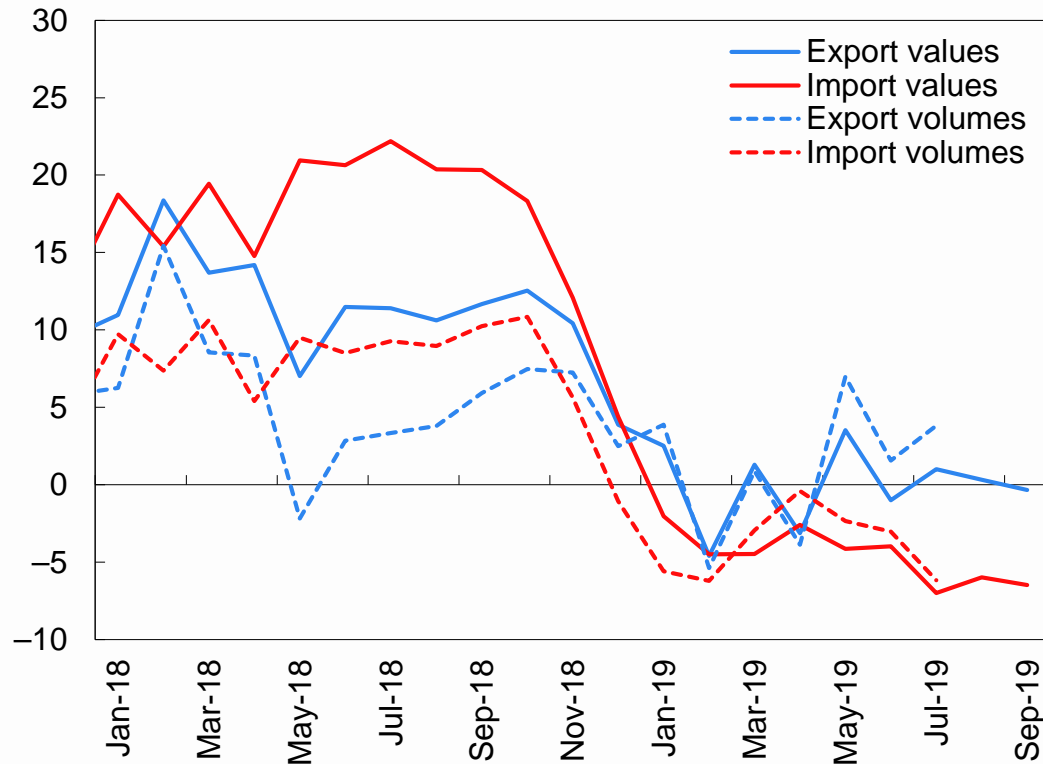
China: Real GDP Growth by Sector
(Percent; four-quarter moving average)



Sources: China, National Bureau of Statistics; and IMF staff calculations.

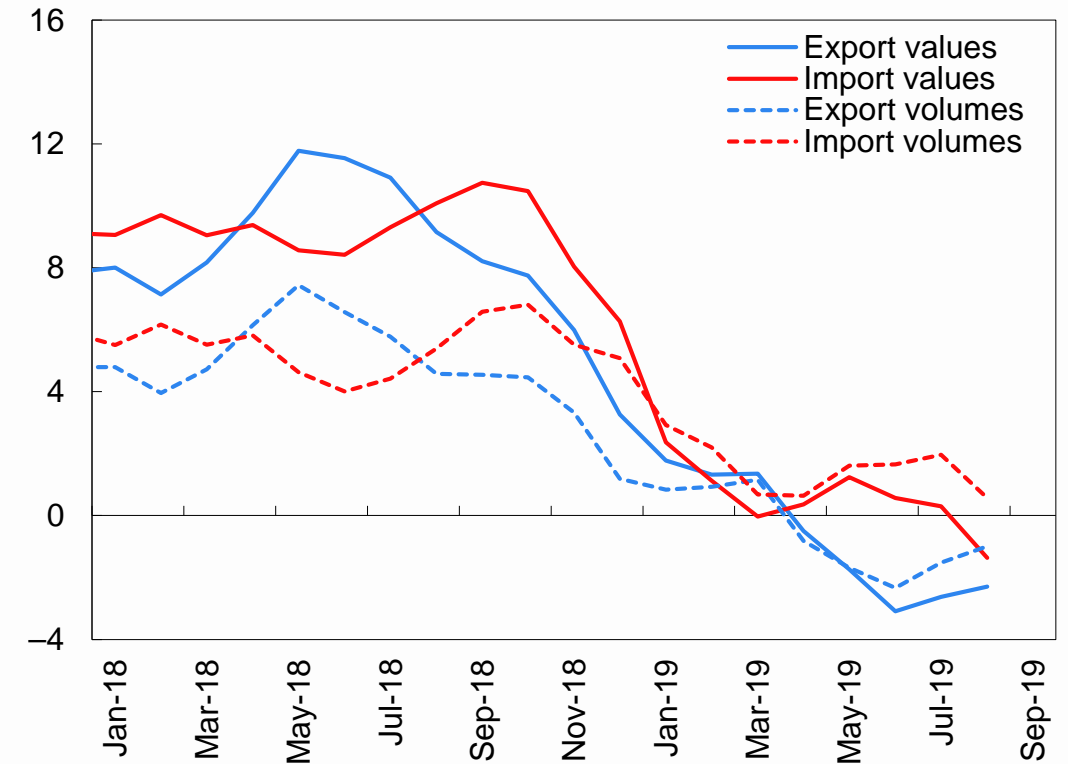
The growth slowdown and trade tensions have affected exports and imports in China and the U.S. this year

China: Growth of Merchandise Exports and Imports
(Percent; three-month moving average)



Sources: China Customs; and IMF staff calculations.

United States: Growth of Merchandise Exports and Imports
(Percent; three-month moving average)



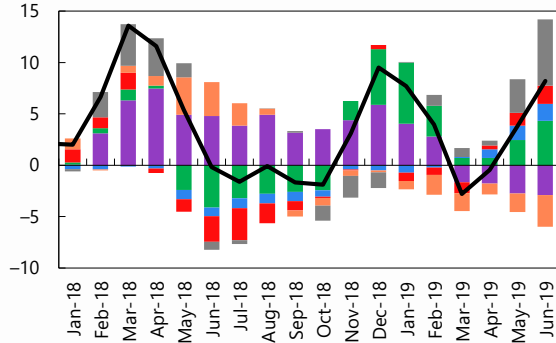
Sources: United States Bureau of the Census; and IMF staff calculations.

Latin America's merchandise exports have also been affected by these developments...

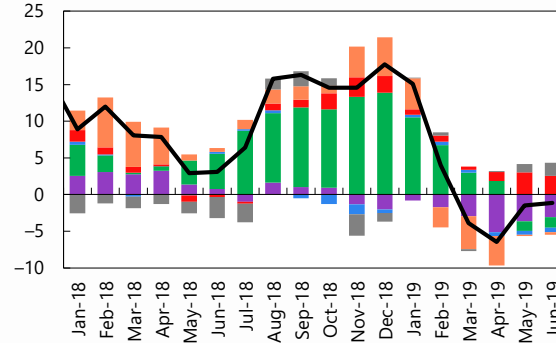
Growth of Merchandise Exports by Trading Partner
(Percent; three-month moving average)

LAC CHN JPN-KOR USA EUR Other World

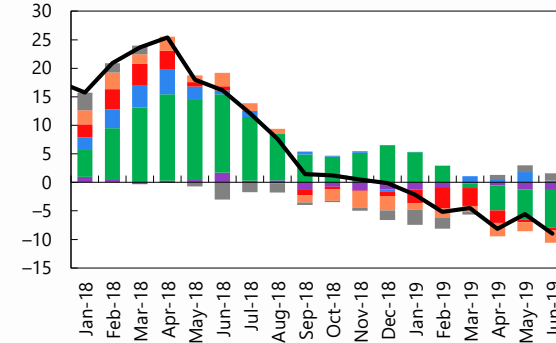
Argentina



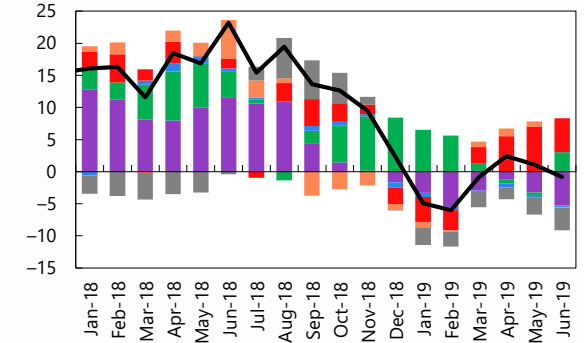
Brazil



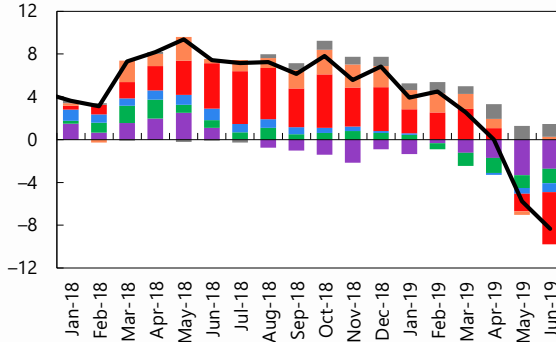
Chile



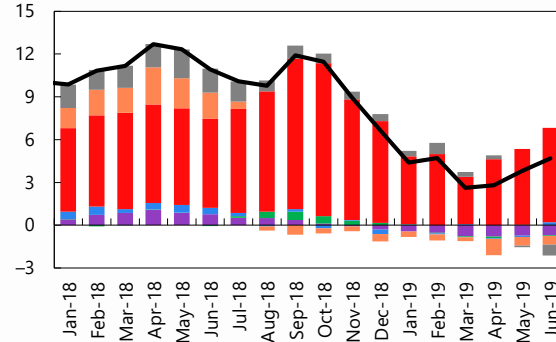
Colombia



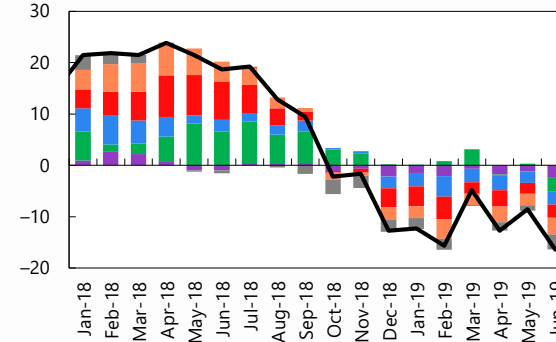
Costa Rica



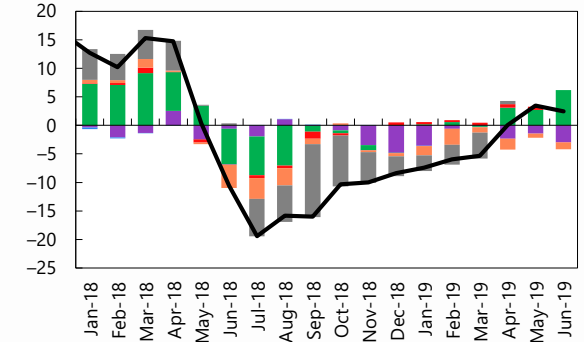
Mexico



Peru



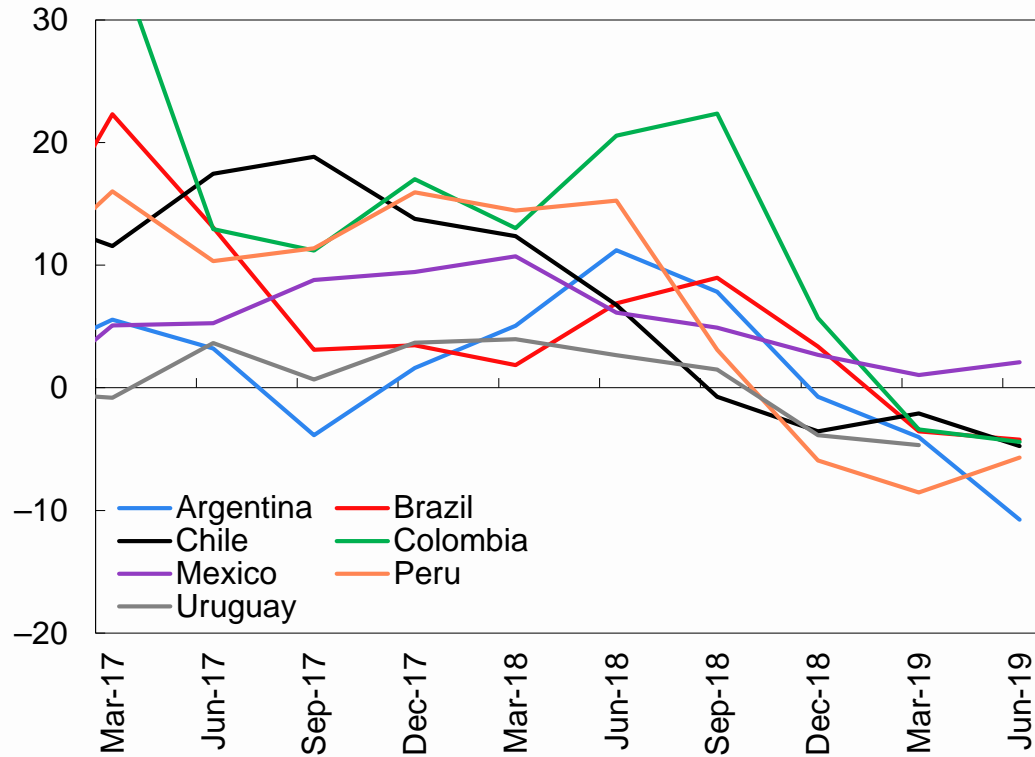
Uruguay



Sources: IMF, Direction of Trade Statistics database; and IMF staff calculations.

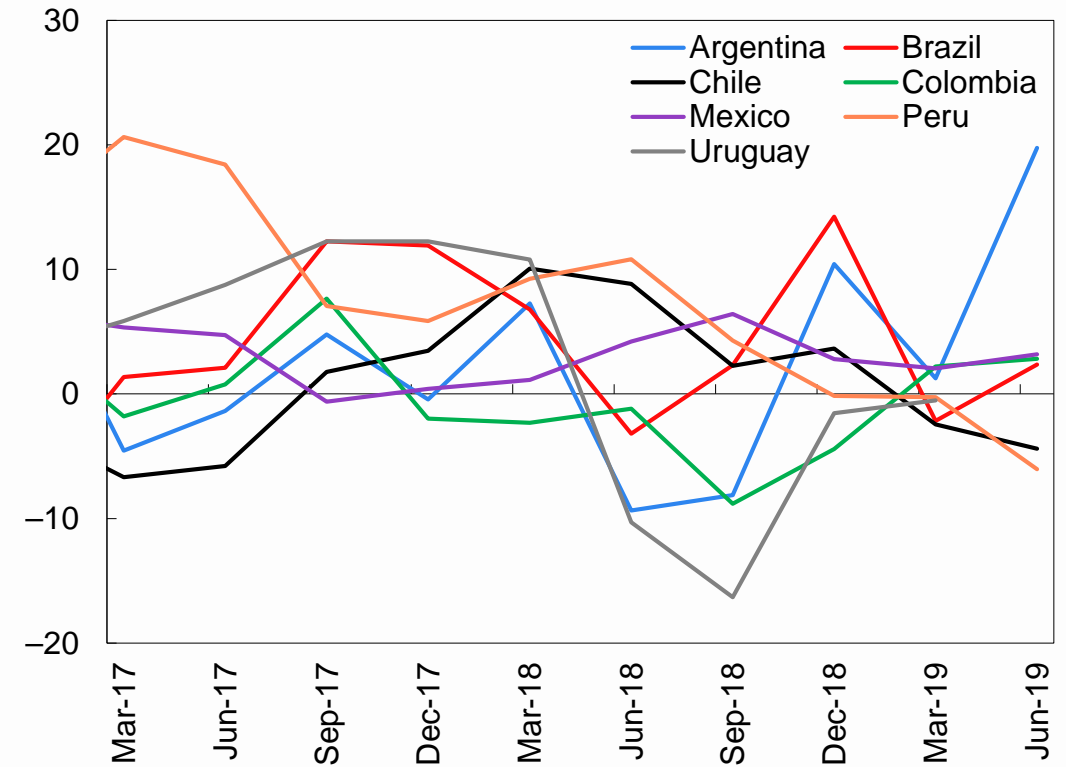
... with a moderation in both export prices and volumes in the first half of 2019

Merchandise Export Prices
(Year-over-year percent change)



Sources: National authorities; and IMF staff calculations.

Merchandise Export Volumes
(Year-over-year percent change)



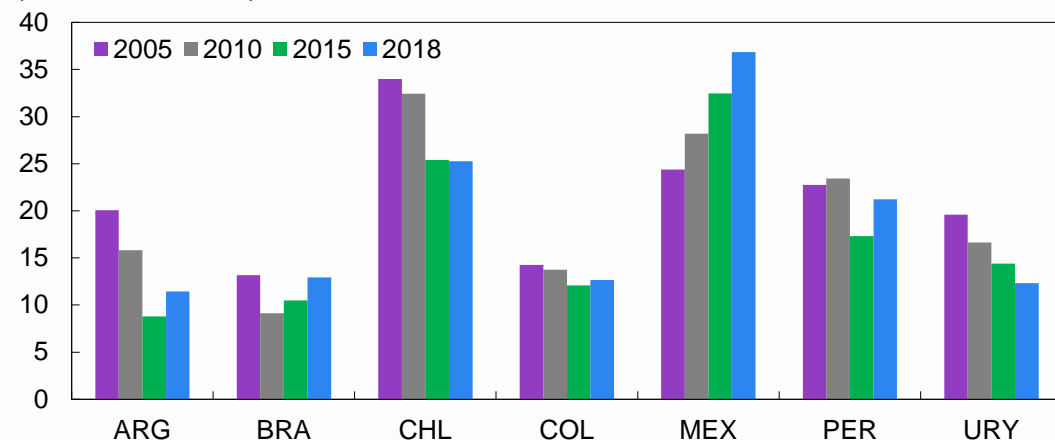
Sources: National authorities; and IMF staff calculations.

Presentation Outline

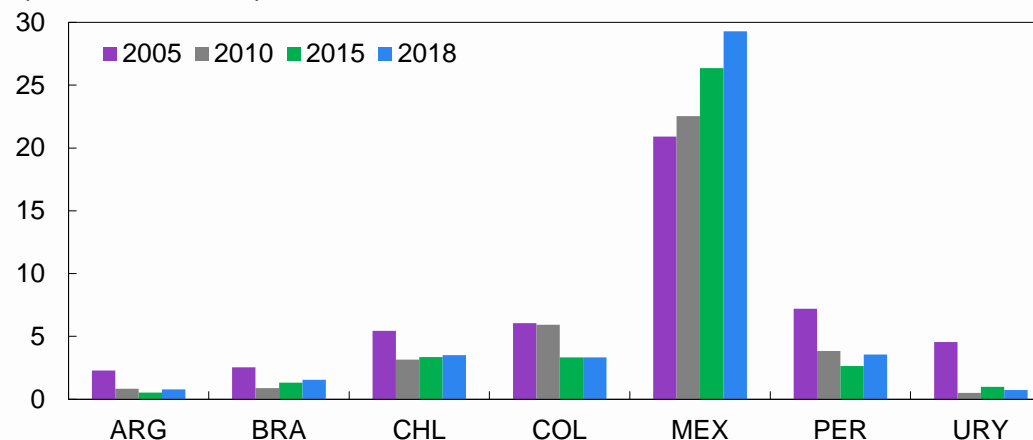
- I. Motivation
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LAC trade exposures to China and the U.S. are large; Mexico with the US; Chile and Peru with both

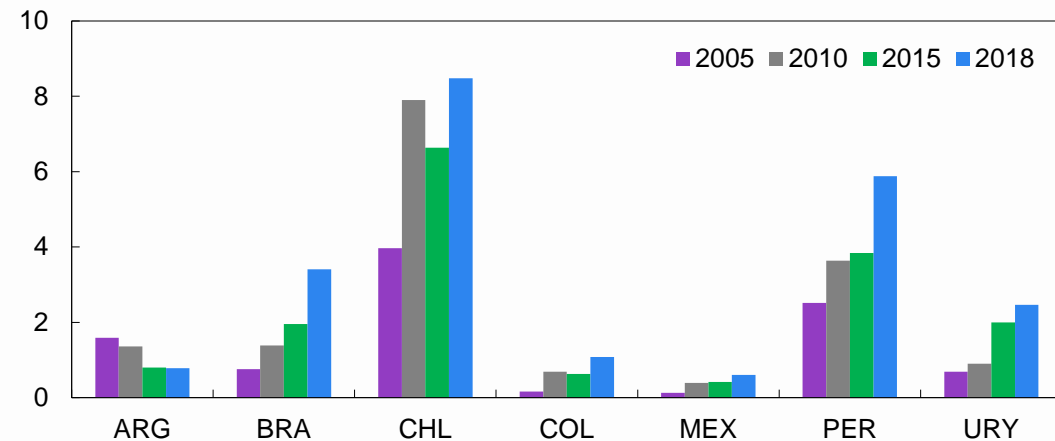
Total Gross Exports of Goods
(Percent of GDP)



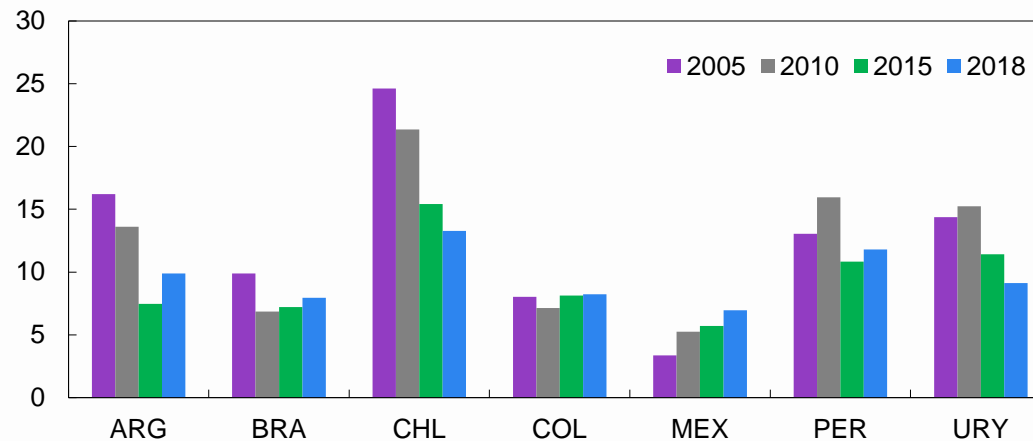
Gross Exports of Goods to the United States
(Percent of GDP)



Gross Exports of Goods to China
(Percent of GDP)



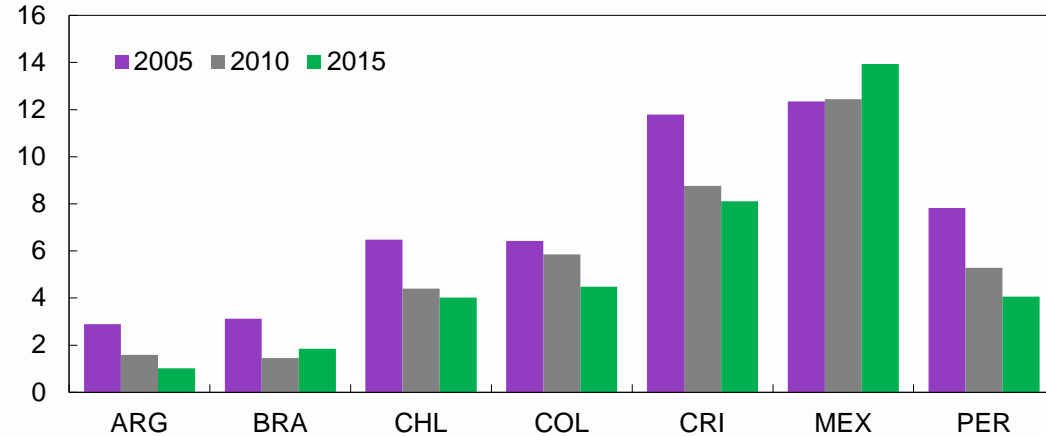
Gross Exports of Goods to Other Countries
(Percent of GDP)



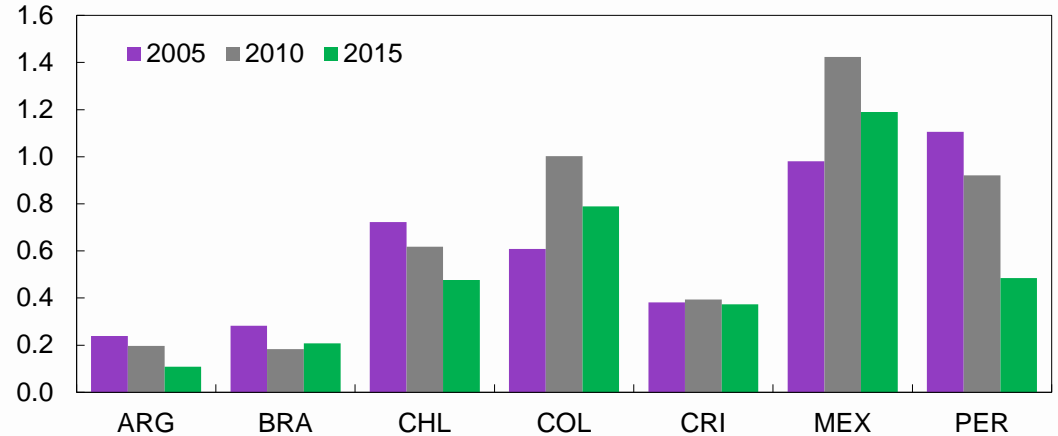
Sources: IMF, Direction of Trade Statistics database; and IMF staff calculations.

LAC trade exposures to China and the U.S. also large when measured in trade in value added

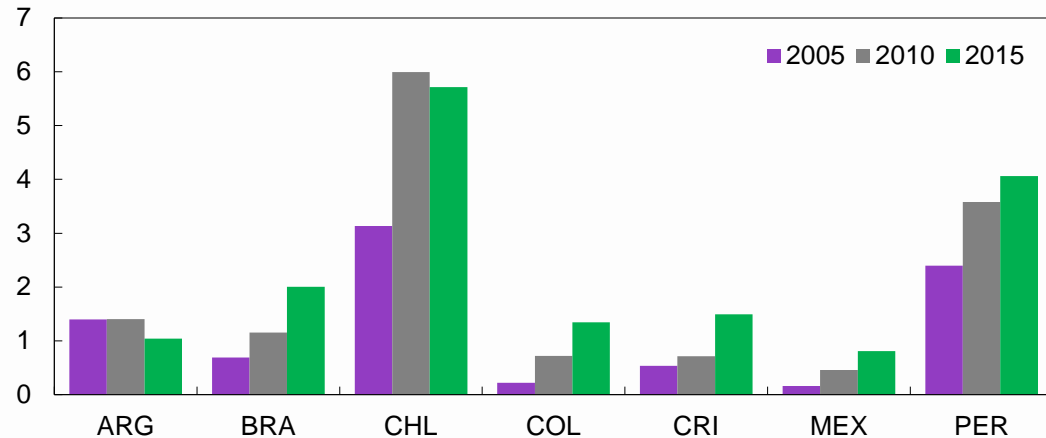
Value Added Embedded in US Final Demand
(Percent of GDP)



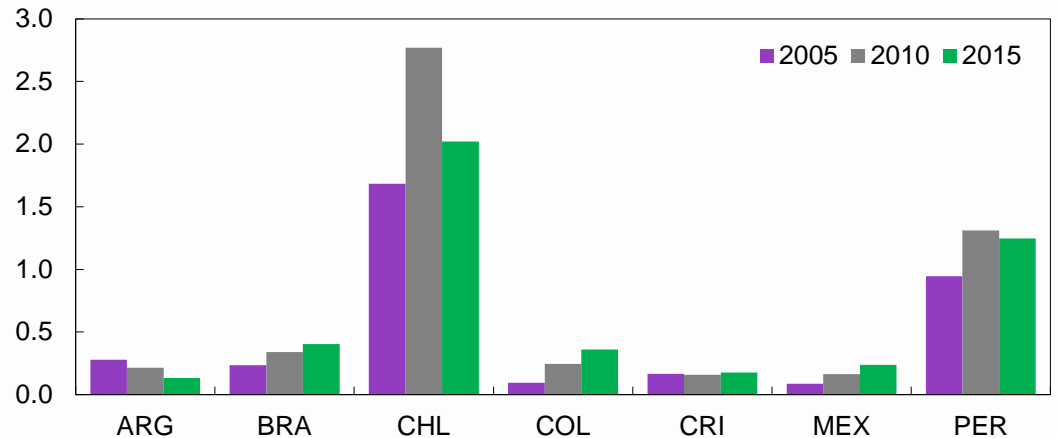
Value Added Embedded in US Gross Exports
(Percent of GDP)



Value Added Embedded in China's Domestic Demand
(Percent of GDP)



Value Added Embedded in China's Gross Exports
(Percent of GDP)



Sources: IMF, Direction of Trade Statistics database; and IMF staff calculations.

LAC is also exposed to swings in commodity prices, which could be driven by growth shocks in China or the U.S.

Latin America: Commodity Exports

	Commodity Exports (percent of GDP)	Net Commodity Exports (percent of GDP)	Top 3 Commodities (share in total goods exports)
Argentina	5.7%	3.7%	Soybean meal (16.5%), Soybeans (6.2%), Corn (6.2%)
Bolivia	26.4%	21.8%	Natural gas (45.8%), Zinc (7.8%), Soybean meal (5.4%)
Brazil	5.2%	3.0%	Iron ore (11.3%), Soybeans (10.2%), Sugar (4.4%)
Chile	18.5%	11.7%	Copper (51.0%), Salmon (6.1%), Timber (3.8%)
Colombia	10.2%	7.0%	Oil (35.7%), Coal (12.2%), Coffee (5.4%)
Ecuador	19.4%	14.3%	Oil (34.9%), Bananas (11.6%), Shrimp (9.9%)
Mexico	4.0%	-0.1%	Oil (3.4%), Lead (0.4%), Copper (0.3%)
Peru	10.5%	6.1%	Copper (24.7%), Zinc (4.5%), Fishmeal (3.4%)
Trinidad and Tobago	32.4%	17.6%	Natural gas (21.2%), Oil (9.8%), Iron ore (4.6%)
Uruguay	9.4%	5.0%	Beef (17.7%), Soybeans (17.6%), Rice (5.3%)
Venezuela	37.7%	35.2%	Oil, Iron ore, Hides

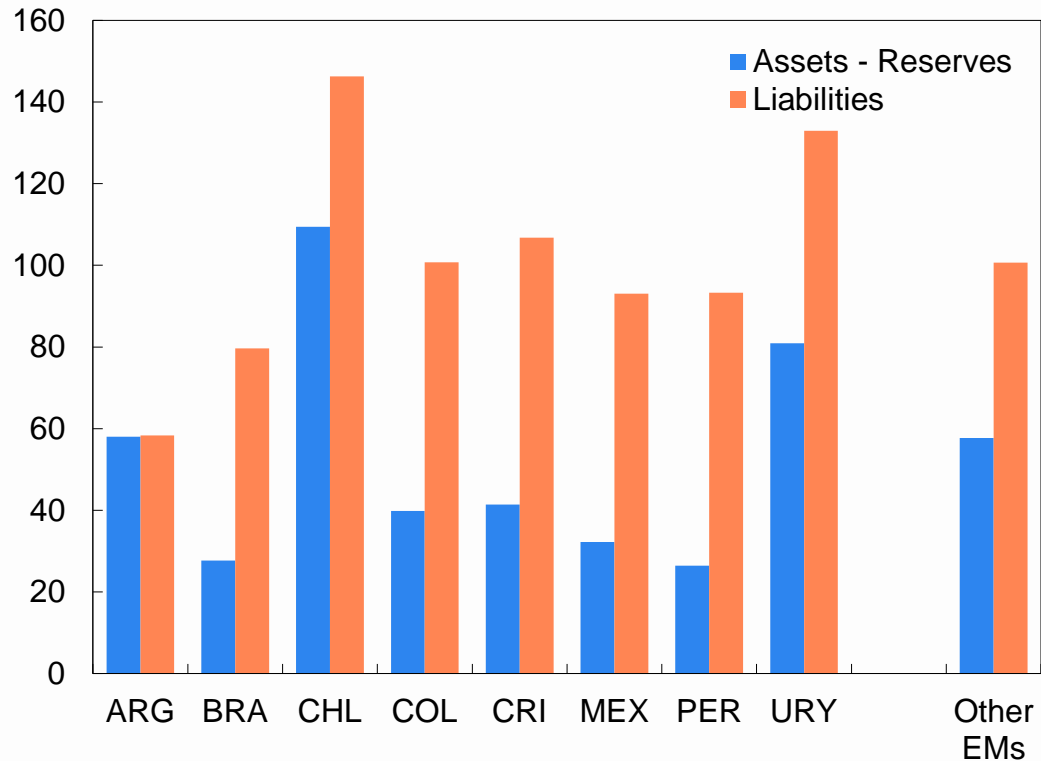
Sources: IMF, Commodity Terms of Trade database (see Gruss and Kebhaj, 2018); IMF, Direction of Trade Statistics database; UN Comtrade; and IMF staff calculations.

Note: Values refer to the three-year average of 2013–15.

Financial exposures are also sizable give the region's generally open capital accounts

De Facto Capital Account Openness, 2018

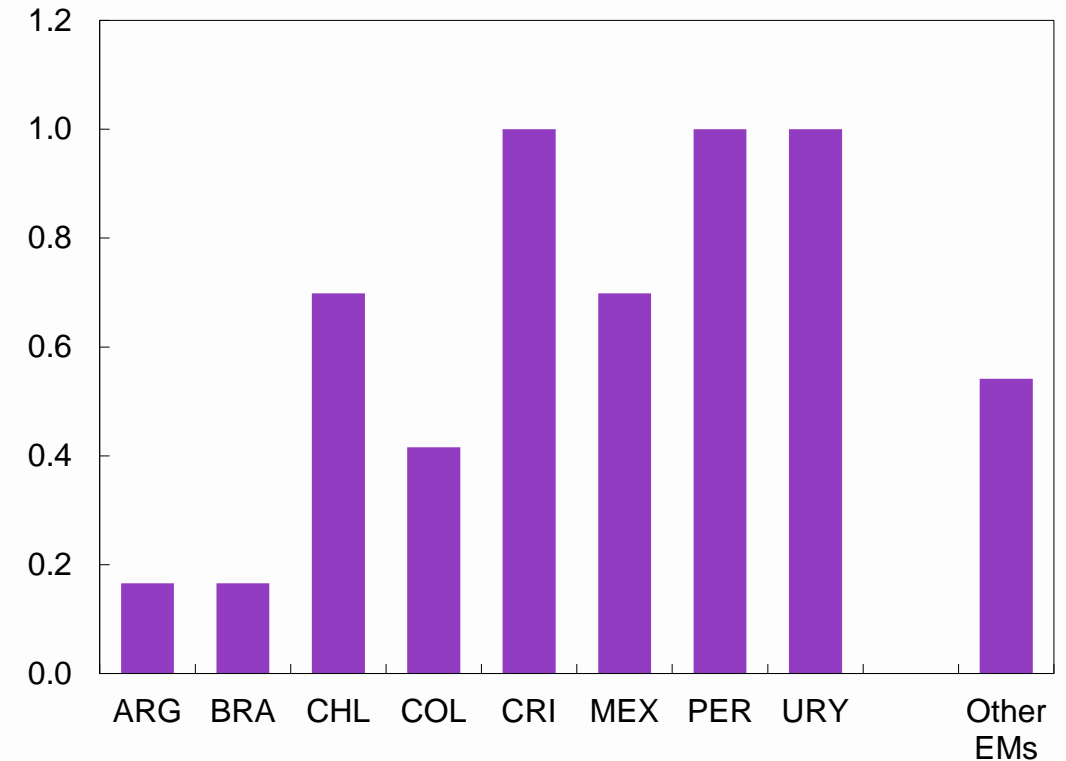
(Foreign assets excluding reserves and foreign liabilities; percent of GDP)



Sources: IMF, International Financial Statistics database; and IMF staff calculations.

De Jure Capital Account Openness, 2016

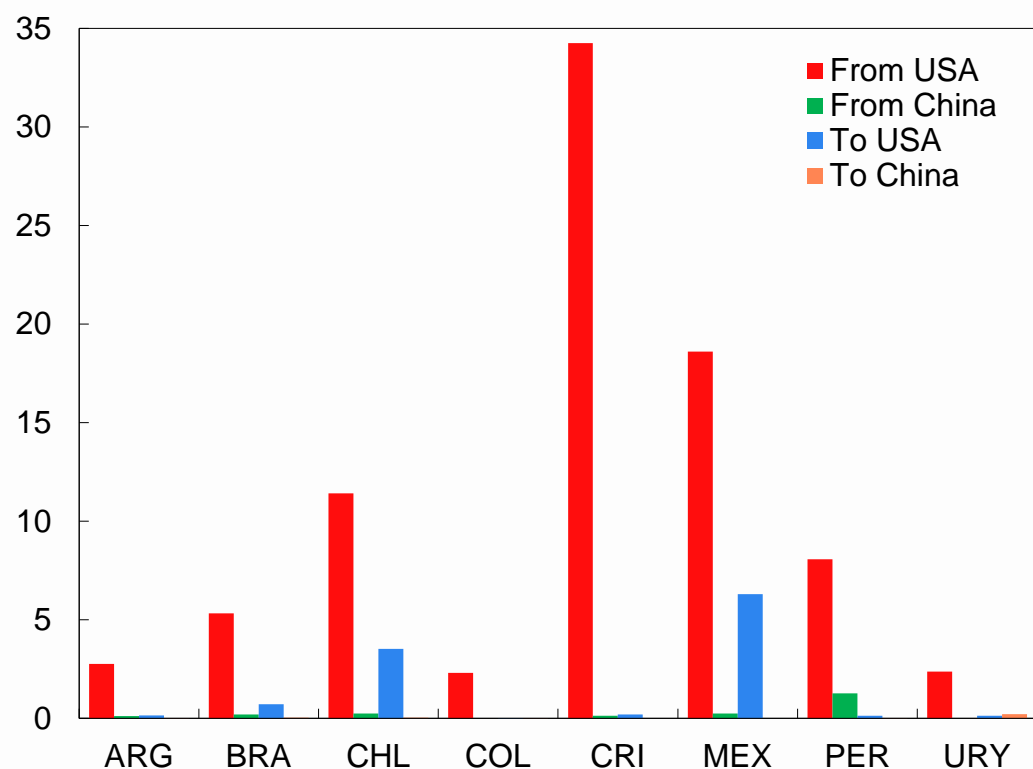
(Chinn and Ito financial openness index; normalized to range between 0 and 1)



Sources: Chinn, Menzie D., and Hiro Ito (2006); and IMF staff calculations.

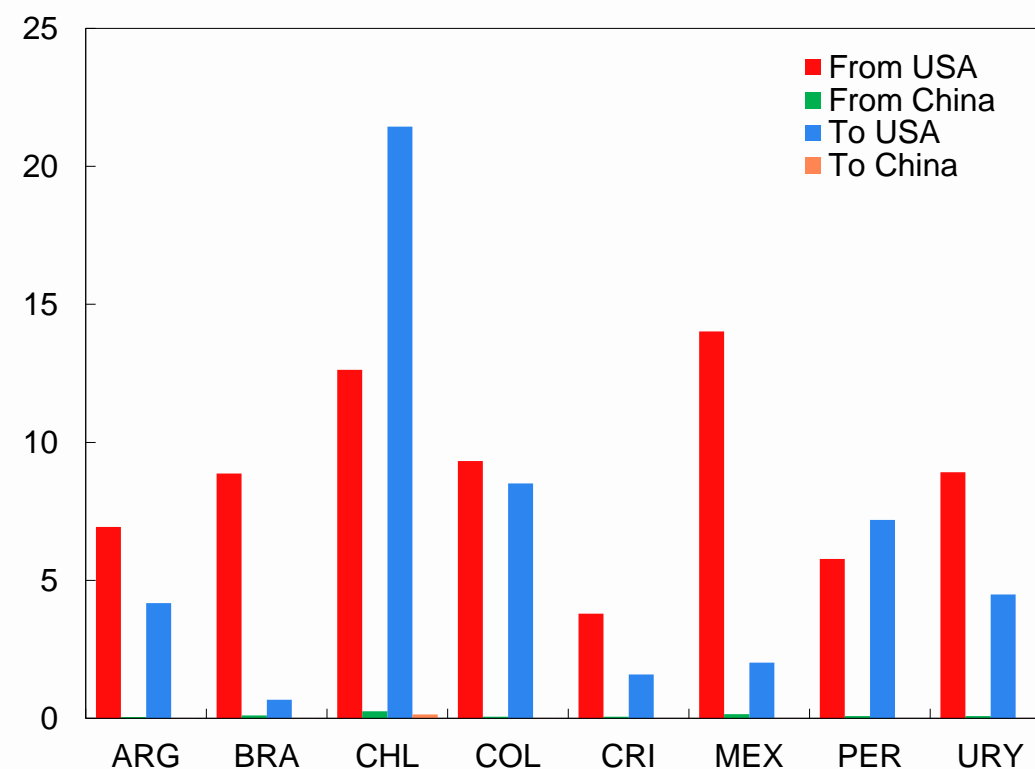
LAC financial exposures through direct and portfolio investment is larger with the U.S. than with China

Direct Investment from/to China and the United States
(Percent of GDP)



Sources: IMF, Coordinated Direct Investment Survey database; and IMF staff calculations.

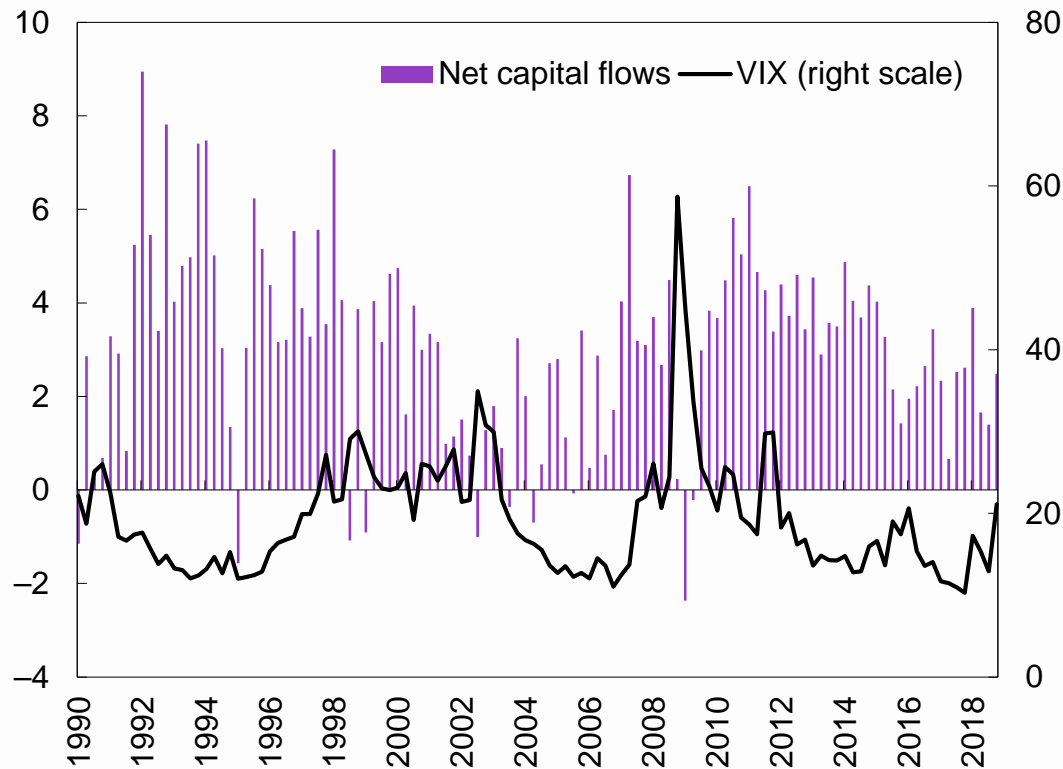
Portfolio Investment from/to China and the United States
(Percent of GDP)



Sources: IMF, Coordinated Portfolio Investment Survey database; and IMF staff calculations.

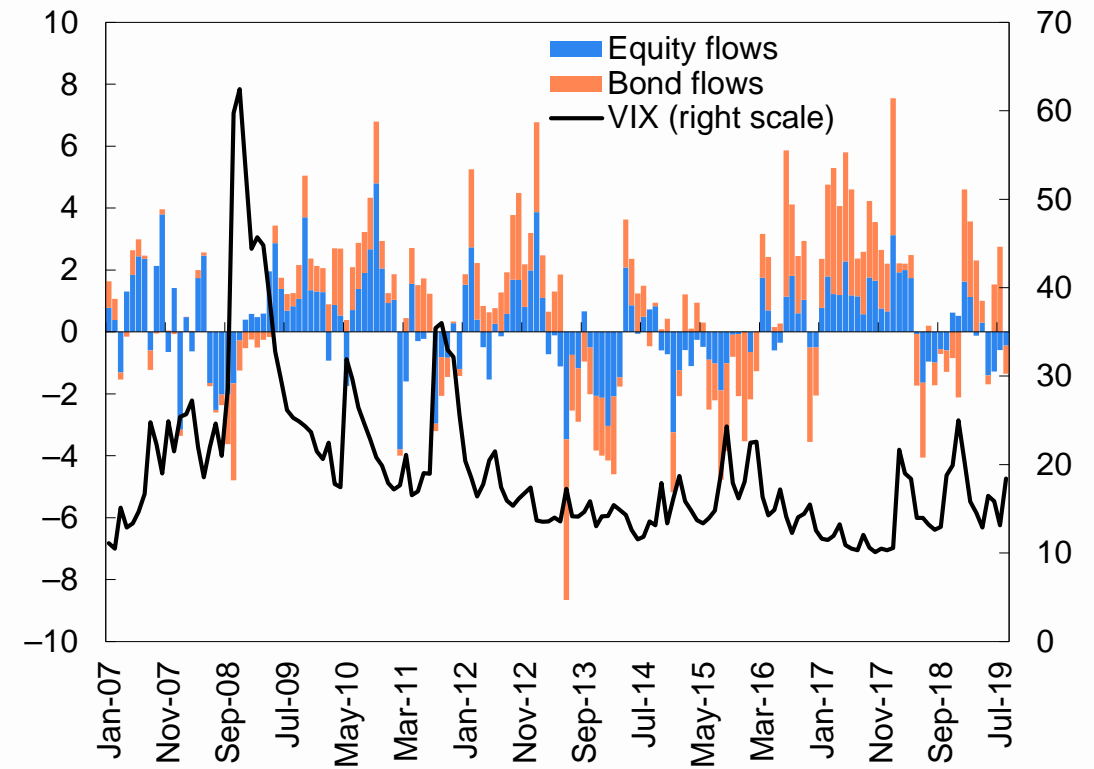
Another financial spillover channel is spikes in the VIX in response to growth shocks in China and the U.S.

Latin America: Net Capital Flows
(Percent of GDP)



Sources: Haver Analytics; IMF, Balance of Payments Statistics database; and IMF staff calculations.

Latin America: EPFR Portfolio Flows and the VIX
(Billions of US dollars)



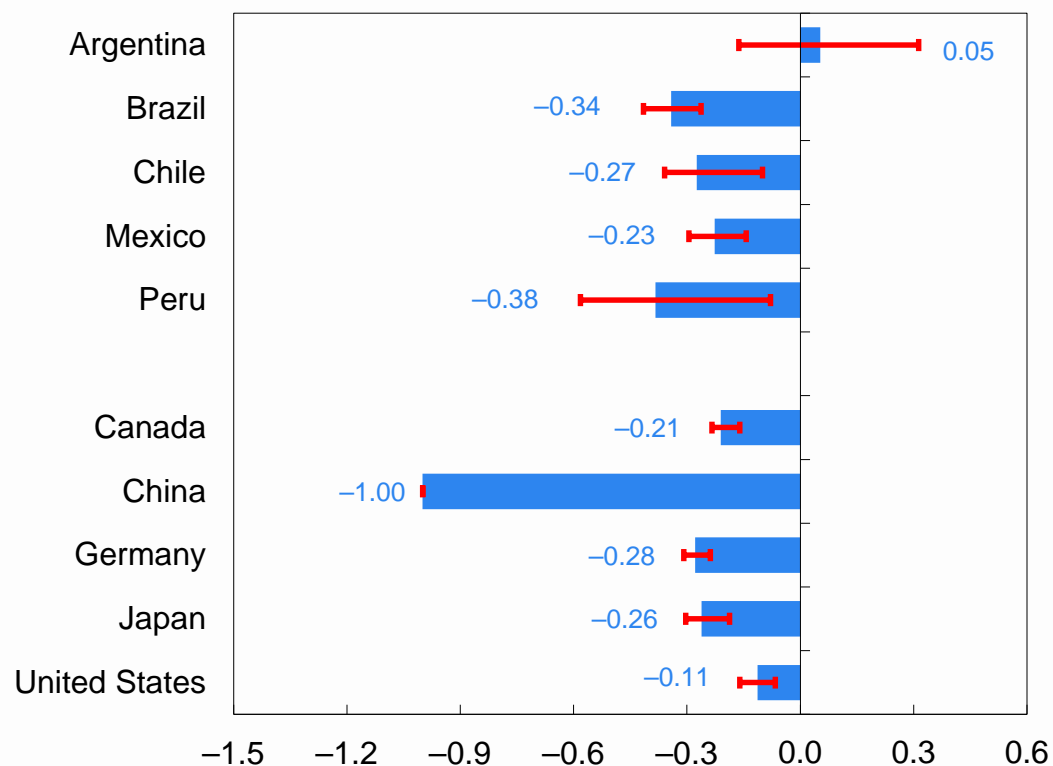
Sources: Haver Analytics; IMF, Balance of Payments Statistics database; and IMF staff calculations.

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GVAR: Spillovers to LAC from growth shocks in China larger than from U.S. shocks, except for Argentina and Mexico

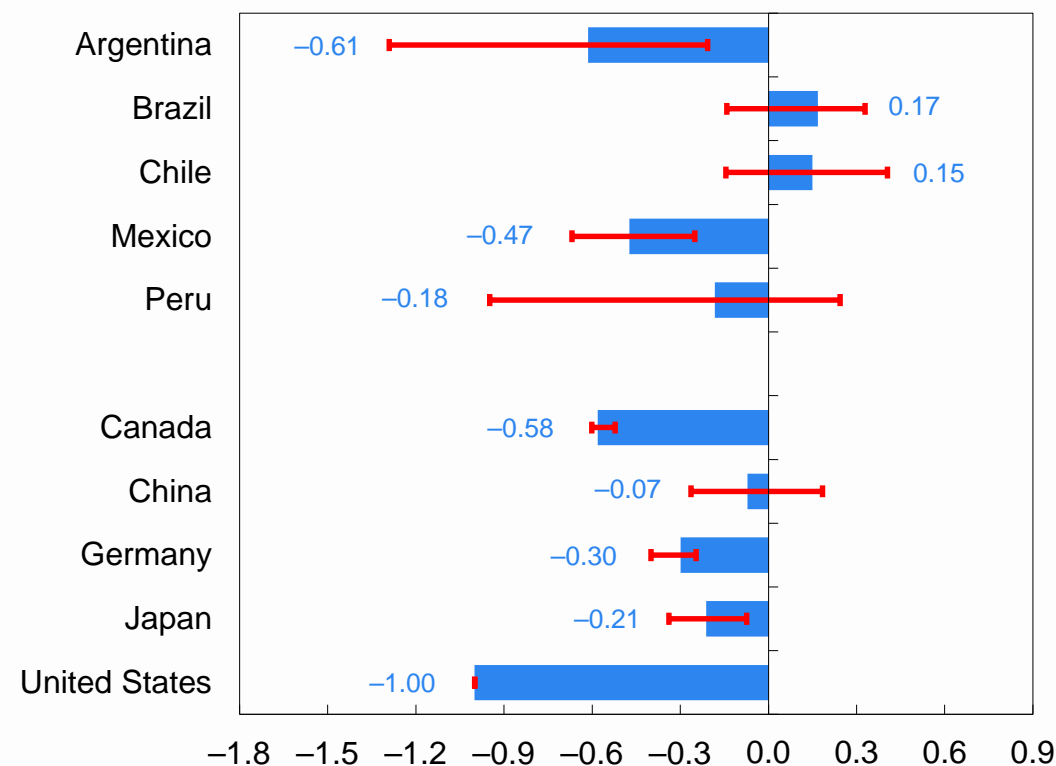
Growth Responses to a Negative China Growth Shock
(Percent; one-year impact)



Sources: Cashin and other (2016, 2017); IMF Fiscal Monitor, April 2019; and IMF staff calculations.

Note: Shows the percent change in GDP of each country associated with a one-time 1 percent decline in China's real GDP growth, and the 16th and 84th percentile error bands.

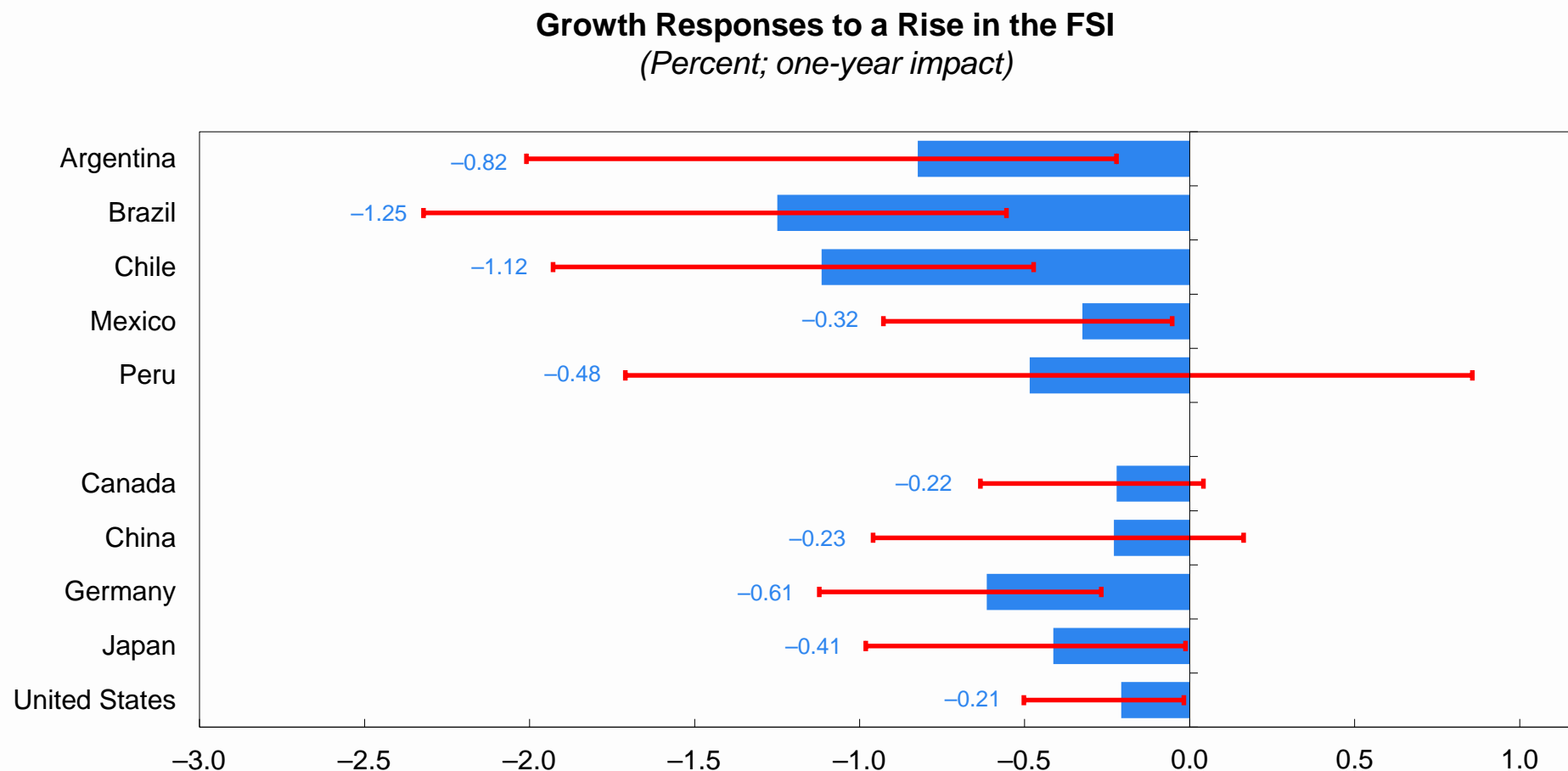
Growth Responses to a Negative US Growth Shock
(Percent; one-year impact)



Sources: Cashin and other (2016, 2017); IMF Fiscal Monitor, April 2019; and IMF staff calculations.

Note: Shows the percent change in GDP of each country associated with a one-time 1 percent decline in US real GDP growth, and the 16th and 84th percentile error bands.

GVAR: These spillovers could be much larger if they also lead to tighter financial conditions

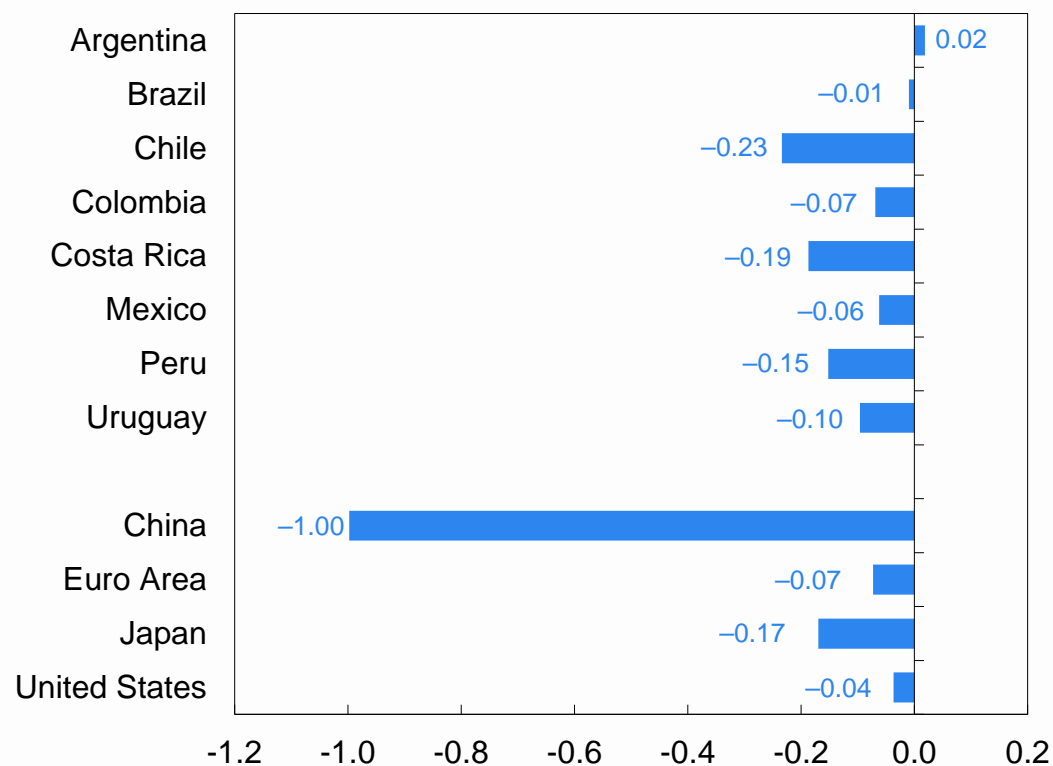


Sources: Cashin and other (2016, 2017); IMF Fiscal Monitor, April 2019; and IMF staff calculations.

Note: Shows the percent change in GDP associated with a one standard deviation increase in the financial market stress index (FSI) of the advanced economies, together with the 16th and 84th percentile error bands.

Model: Sizable spillovers from growth shocks in China in Chile, and from U.S. shocks in Costa Rica and Mexico

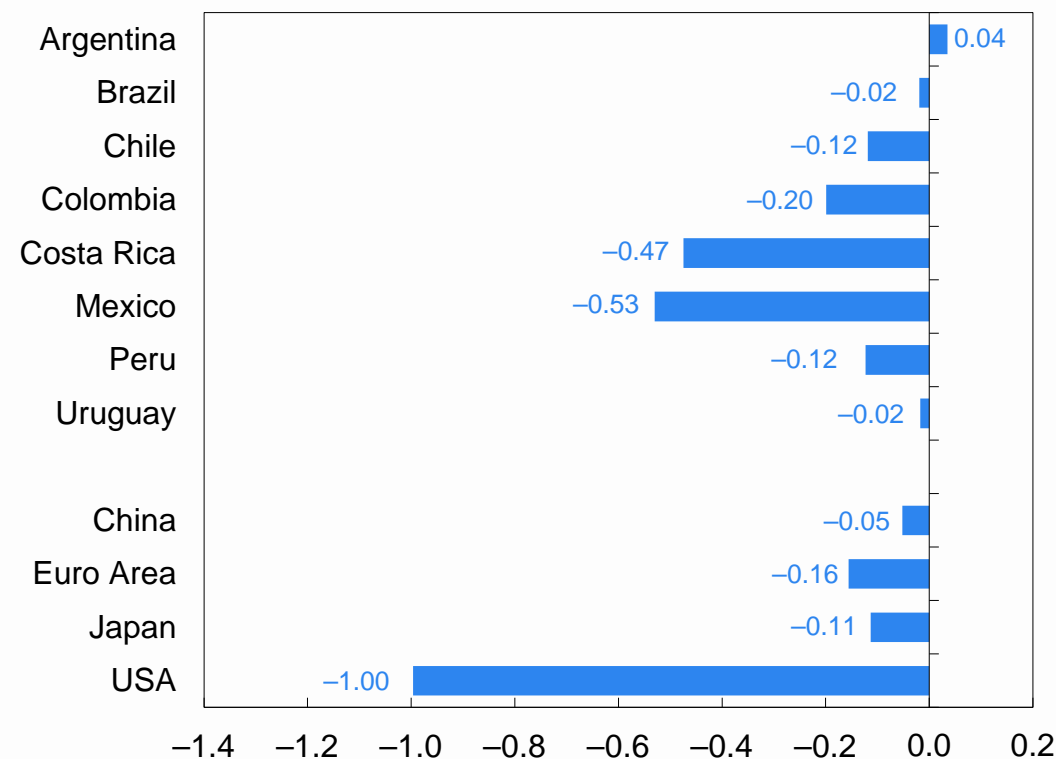
Growth Response to a China Growth Shock
(Percent; one-year impact)



Source: IMF staff calculations.

Note: Shows the one-year growth response in each country associated with a 1 percentage point decline in China's growth driven by a shock to aggregate demand.

Growth Response to a United States Growth Shock
(Percent; one-year impact)

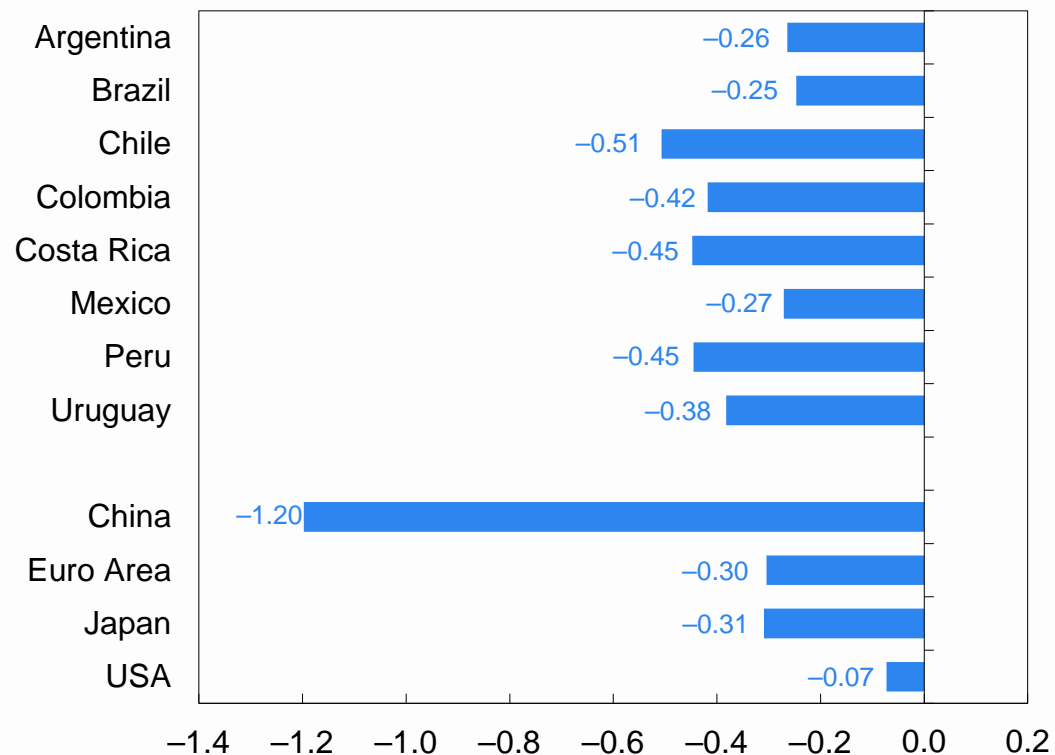


Source: IMF staff calculations.

Note: Shows the one-year growth response in each country associated with a 1 percentage point decline in US growth driven by a shock to aggregate demand.

Model: Much larger spillovers in the growth shocks in China and the U.S. lead to higher sovereign spreads on EMEs

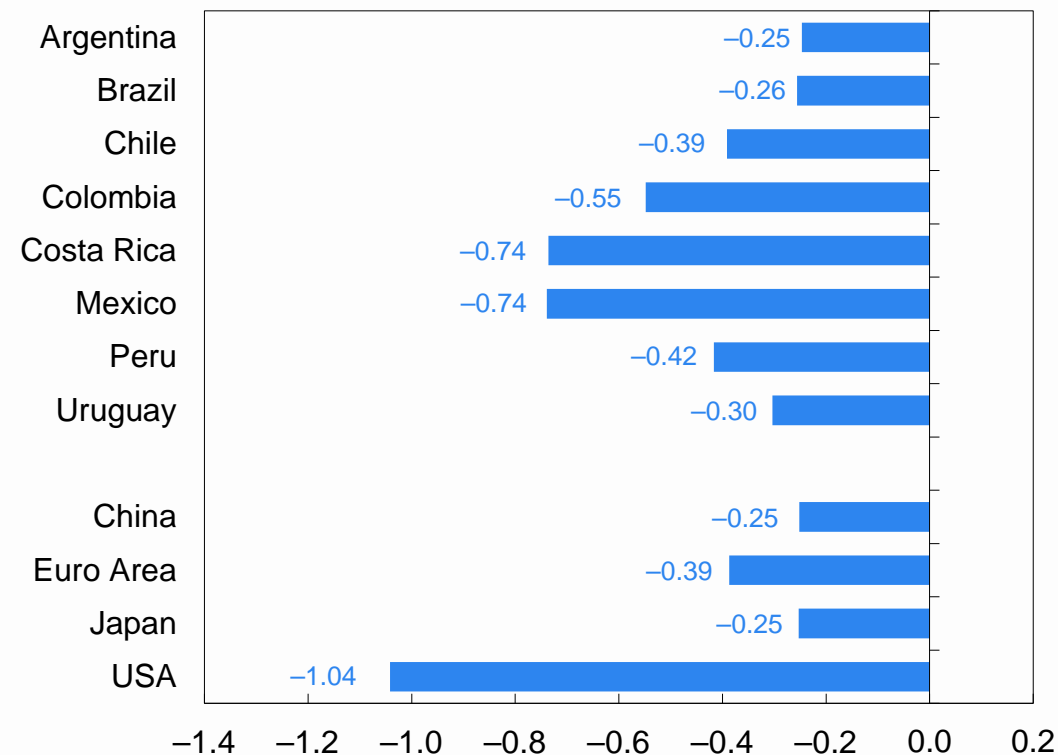
Growth Response to a China Growth Shock and Higher Spreads
(Percent; one-year impact)



Source: IMF staff calculations.

Note: Shows the 1-year growth response in each country associated with a 1 percentage point decline in China's growth plus an increase in sovereign spreads by 100 basis points.

Growth Response to a US Growth Shock and Higher Spreads
(Percent; one-year impact)



Source: IMF staff calculations.

Note: Shows the 1-year growth response in each country associated with a 1 percentage point decline in US growth plus an increase in sovereign spreads by 100 basis points.

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Conclusions

- ❑ Growth in China and the United States is projected to slow in the coming years, which will have important spillovers to the rest of the world, including to Latin America.
- ❑ Empirical and model-based analyses show large spillovers to countries with high trade, commodity price, and financial exposures to China and the United States.
- ❑ A fall of 1 percentage point in China's growth would reduce growth in Chile and Peru—the two countries most exposed to China—by 0.2–0.3 percentage points.
- ❑ A similar US shock would lower growth in Costa Rica and Mexico—the two countries most exposed to the U.S.—by 0.5 percentage points.
- ❑ These spillovers could be much larger if the slowdowns in China and the United States also lead to tighter financial conditions in emerging market economies.
- ❑ These large potential spillovers highlight the need to maintain adequate policy buffers and enhance resilience by diversifying exports and trading partners.

Thank You