

Economic Interdependence and Regional Monetary Convergence

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IPES | University of Pittsburgh
28-29 October 2022



Motivation 1:

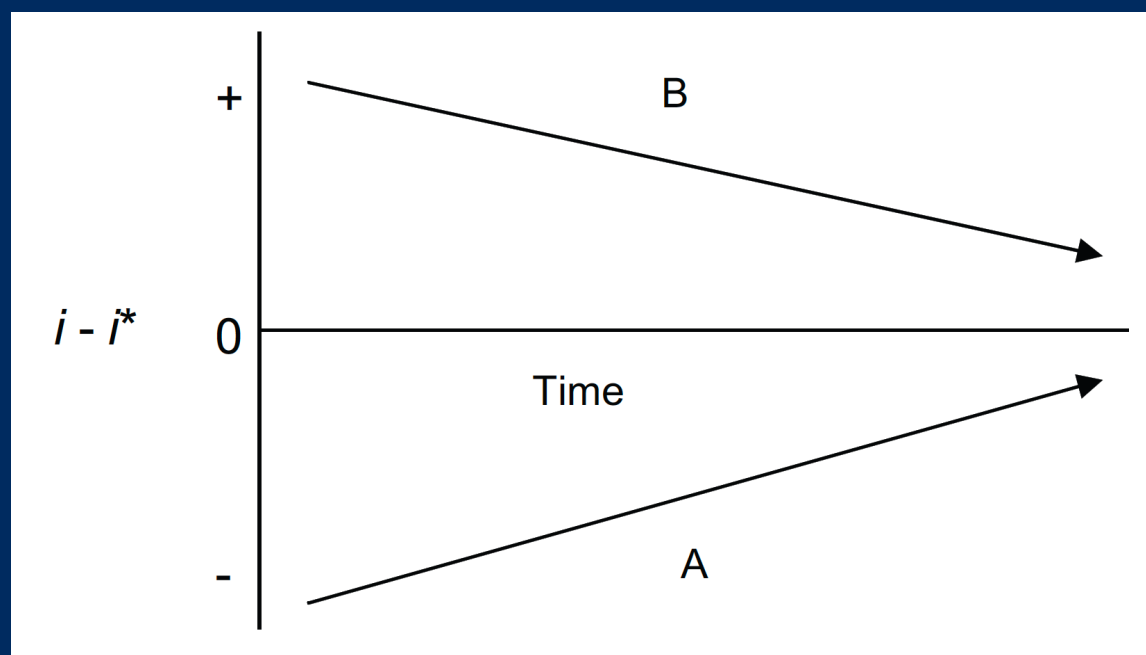
Increased regional interdependence

- More regional policy
 - Mansfield & Milner 1999; Baccini & Dür 2011
- More regional trade
 - Esp. East Asia, Europe
 - Petri 2006; World Economic Forum 2021
- New: more friendshoring/nearshoring

Motivation 2:

Studies on monetary convergence

- Prediction: capital market integration → fiscal/monetary convergence

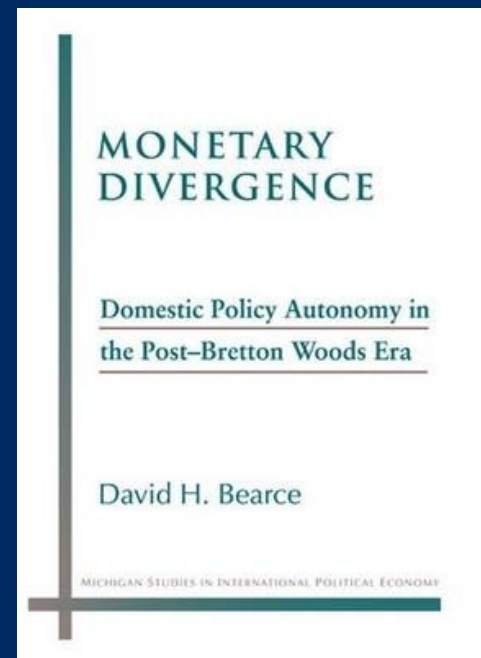
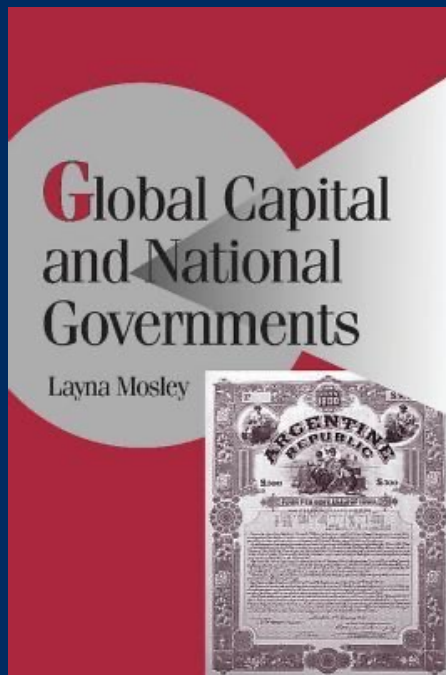


Source:
Bearce 2007

Motivation 2:

Studies on monetary convergence

- Findings: states maintained autonomy in fiscal and monetary policy



Motivation 2:

... and “fear of floating”

- More economic interdependence between states leads to...
 - Implementation of de facto pegs to anchors
 - Plümper and Neumayer (2011)
 - Loss of de facto monetary autonomy
 - Plümper and Troeger (2008)

This paper:

- Given increased regional interdependence, let's revisit convergence and fear of floating literature
- Has increased regional interdependence led to a loss of monetary autonomy?
- Are regions converging on monetary policy?

Research Design:

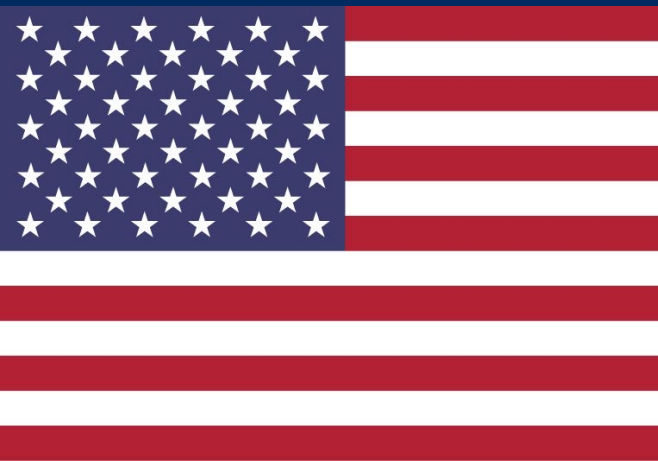
1. “Fear of floating” replication exercise

- interdependence \rightarrow de facto peg
- interdependence \rightarrow loss of monetary autonomy
 - monthly (w/o controls), annual (w/ controls)

2. Monetary convergence

- interdependence $\rightarrow |ir_{\text{anchor}} - ir_i|$
 - same for xr and inflation
 - monthly (w/o controls), annual (w/ controls)

3. Explore explanations for China results



Data:

2000-2022, monthly, 130 countries

- DV: Monetary Convergence:
 - Interest rates, overnight (IMF)
 - Inflation rates (IMF)
 - Exchange rates, SDR, REER (IMF, BIS)
- IV: Interdependence (bilateral)
 - import share (IMF)
 - gravity index (relative trade) (IMF)
 - global value chain trade (annual)
- Controls (annual):
 - FDI, CBI, FX reserves, gov't ideology, inflation history, etc.
 - Bilateral swap agreement (IMF)

1. “Fear of floating” replication

Interdependence \rightarrow Pr(de facto peg)?

YES: USA, Euro Area NO: China

	USA	Euro Area	China
Import.Share _{USA}	0.18*** (0.01)	-0.52*** (0.02)	0.14*** (0.02)
Import.Share _{Euro}	-0.31*** (0.01)	2.20*** (0.05)	-0.22*** (0.02)
Import.Share _{China}	-0.00 (0.02)	-0.03 (0.03)	-0.16*** (0.02)
Num. obs.	28, 125	28, 125	28, 125

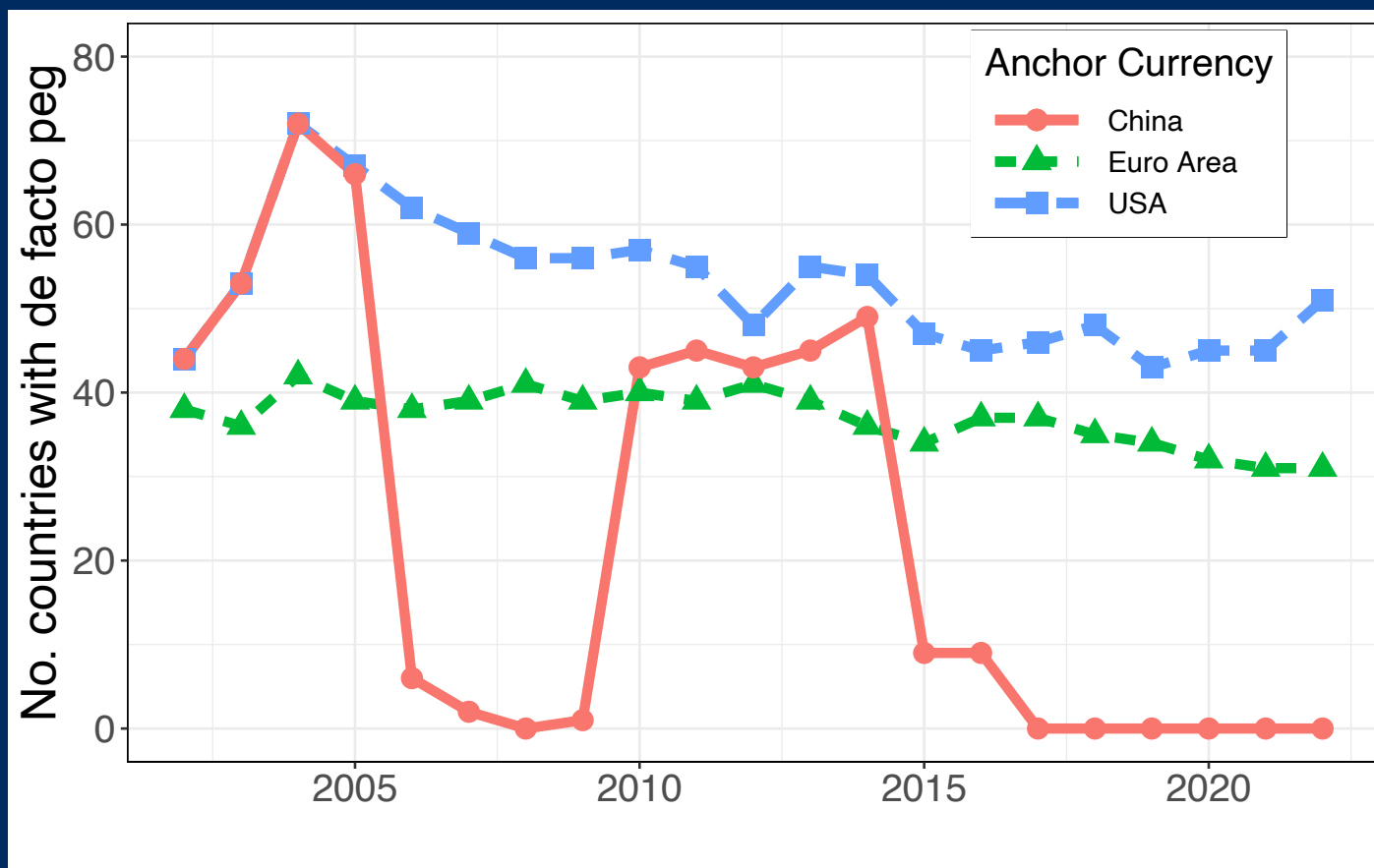
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

1. “Fear of floating” replication

Interdependence \rightarrow Pr(de facto peg)?

YES: USA, Euro Area

NO: China



2. Monetary convergence

Interdependence $\rightarrow |ir_{\text{anchor}} - ir_i|$

YES: China, Euro Area NO: USA

	USA	Euro Area	China
Import.Share _{USA}	0.10*** (0.01)	0.04*** (0.01)	0.12*** (0.01)
Import.Share _{Euro}	-0.12*** (0.02)	-0.04** (0.01)	-0.00 (0.02)
Import.Share _{China}	-0.09*** (0.01)	-0.04*** (0.01)	-0.27*** (0.01)
Num. obs.	28, 125	28, 125	28, 125

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

3. Monetary convergence

Interdependence $\rightarrow |xr_{\text{anchor}} - xr_i|$

YES: USA, Euro Area

NO: China

	USA	Euro Area	China
Import.Share _{USA}	-0.08*** (0.01)	-0.08*** (0.01)	-0.09*** (0.01)
Import.Share _{Euro}	-0.14*** (0.01)	-0.14*** (0.01)	-0.11*** (0.01)
Import.Share _{China}	0.18*** (0.00)	0.18*** (0.00)	0.09*** (0.01)
Num. obs.	28, 125	28, 125	28, 125

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

4. Monetary convergence

Gravity Measure $\rightarrow |xr_{\text{anchor}} - xr_i|$

YES: USA, Euro Area NULL: China

	USA	Euro Area	China
Relative.Gravity _{USA}	-0.08*** (0.01)	-0.07*** (0.01)	-0.08*** (0.01)
Relative.Gravity _{Euro}	-0.07*** (0.01)	-0.08*** (0.01)	-0.06*** (0.01)
Relative.Gravity _{China}	0.07*** (0.01)	0.08*** (0.01)	-0.01 (0.01)
Num. obs.	28, 125	28, 125	28, 125

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Quick Summary

1. USA and Euro Area maintained de facto pegs; still anchor currencies
2. China not an anchor currency (yet?)
3. Interdependence → IR convergence
 - Yes: China & Euro Area
 - No: USA
4. Interdependence → XR convergence
 - Yes: USA & Euro Area
 - No: China (but...NULL for most interdependent)
 - What explains this?

5. Bilateral Currency Swaps

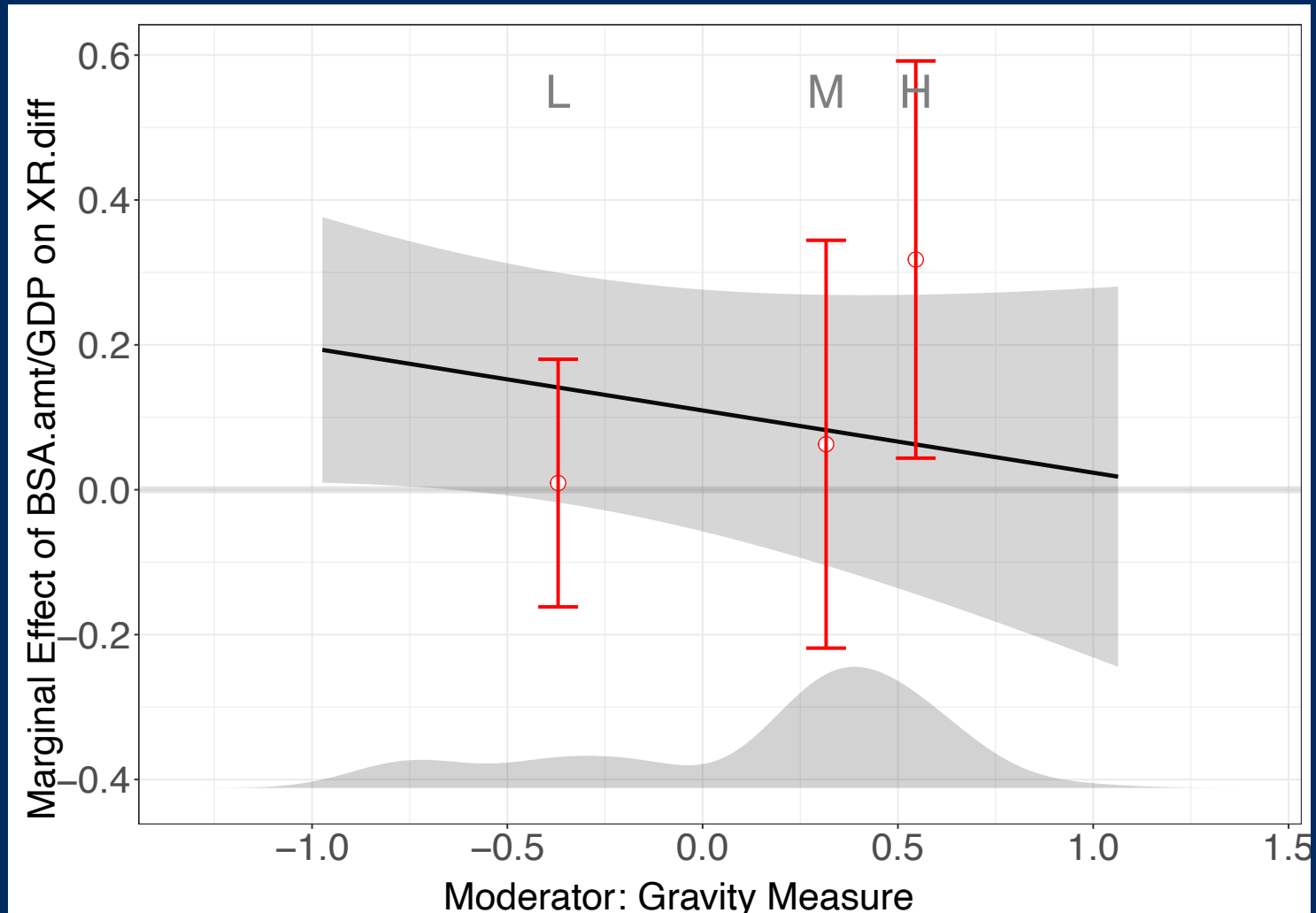
Gravity x China BSA \rightarrow $|xr_{\text{anchor}} - xr_i|$

	China
Relative.Gravity _{USA}	-0.13 (0.08)
Relative.Gravity _{Euro}	0.68*** (0.13)
Relative.Gravity _{China}	0.60*** (0.08)
BSA.Share.GDP _{China}	-0.09* (0.05)
Relative.Gravity _{China} \times BSA.Share.GDP _{China}	-0.17** (0.06)
Num. obs.	648

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

5. Bilateral Currency Swaps

Gravity x China BSA \rightarrow $|xr_{\text{anchor}} - xr_i|$



What does this all mean?

Findings add to resurgent debate about US currency power

Is the US Dollar's Global Hegemony at Risk?

May 5, 2022

The Big Question is a new feature in which *Project Syndicate* commentators provide compelling answers to a timely question.

With Russia's invasion of Ukraine and the resulting Western sanctions likely to fragment the global economy further, some think the US dollar's long reign as the world's favored reserve currency may be coming to an end. But, with no plausible alternatives to the greenback on the horizon, how realistic is such a scenario?

In this *Big Question*, we ask [Barry Eichengreen](#), [Şebnem Kalemli-Özcan](#), [Paola Subacchi](#), and [Yu Yongding](#) to address the latest doubts about the dollar's global supremacy.

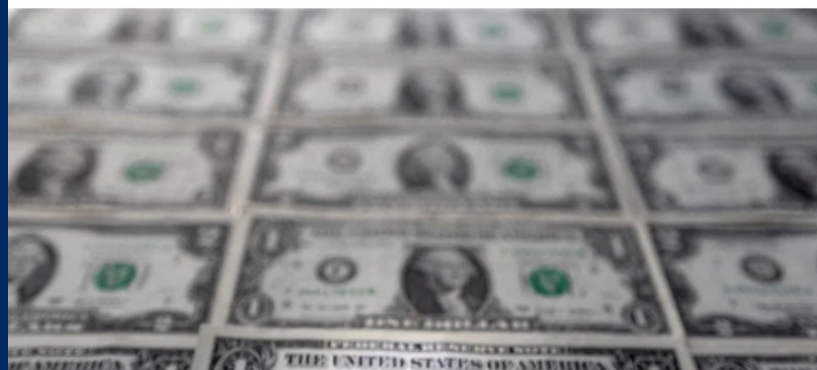
MONKEY CAGE

Jack Dorsey is wrong. The dollar is still a global reserve currency.

There are reasons the dollar is still king

Analysis by Mark Copelovitch

June 2, 2022 at 7:00 a.m. EDT



Thank you!

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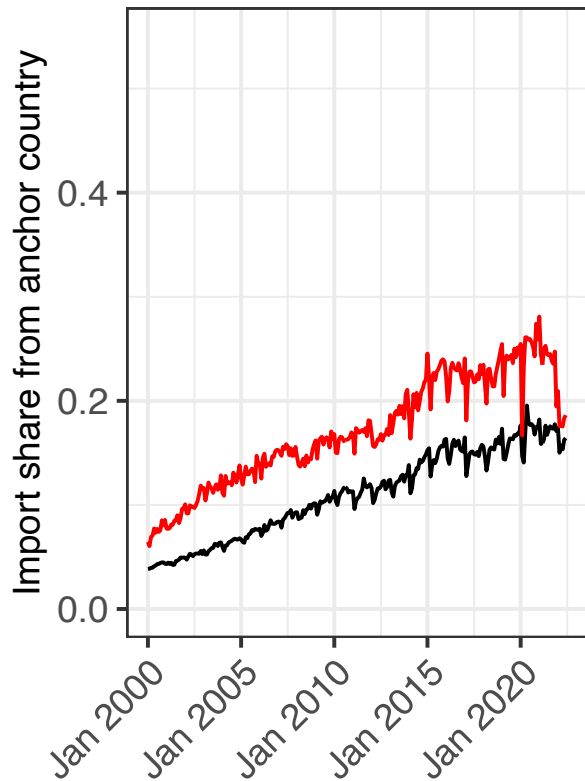


Economic Interdependence:

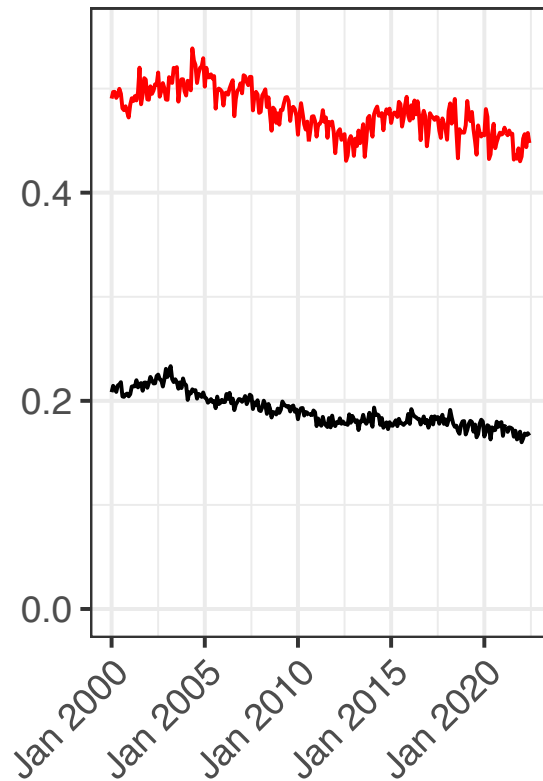
Import Share

Sample average (black); average of regional trading partners (red)

China



Euro Area



USA

