Equity and sustainable development

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Joint LSE IGA-FMG Conference on "*Financial Resilience and Systemic Risk*", 31 January 2019

European Bank
for Reconstruction and Development

The usual disclaimer applies

Is booming credit the best way to finance sustainable economic development?

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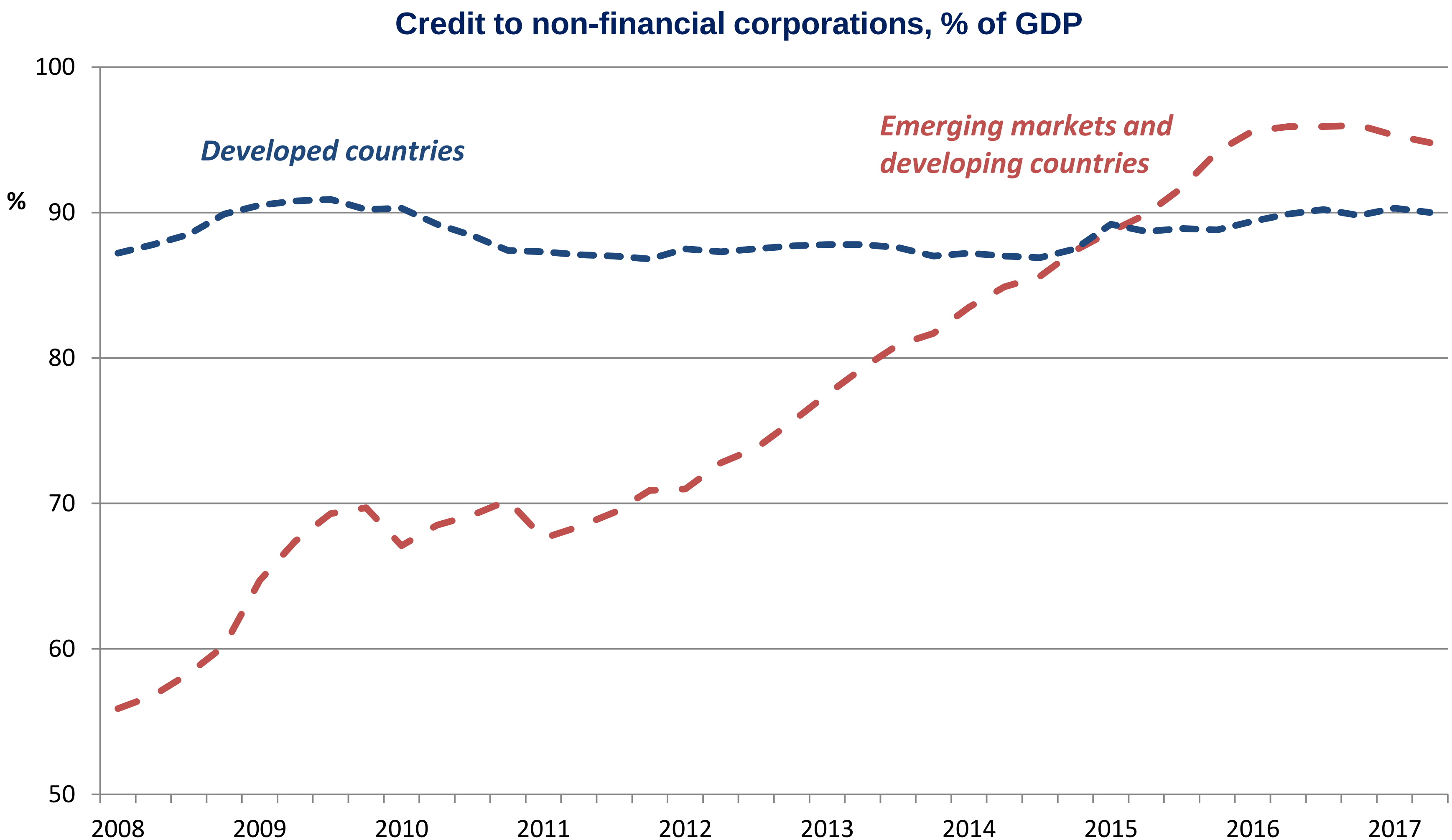


Source: BIS and authors' calculations.

Background: A re-appreciation of equity finance

1. Conventional wisdom: "More finance causes more growth. Financial structure is irrelevant" (King and Levine, 1993; Beck and Levine, 2004; etc)

2. Recent research provides a more nuanced view. Marginal impact of ever more finance declines or even becomes negative at some point. Why?
   a) Gradual move from productive (corporate) to unproductive (consumer) credit
   b) Worsening trade off between growth and macro risk
   c) Financial sector 'steals' too much talent from the real economy

3. Moreover, financial structure <u>does</u> seem to matter:
   a) Equity markets become more important for growth, relative to banks, as economies develop (Demirguc-Kunt, Feyen and Levine, 2013; Gambacorta, Yang and Tsatsaronis, 2014)
   b) High-tech industries innovate more (less) in countries with deeper equity (credit) markets (Hsu, Tiang and Xu, 2014)

What are the implications for middle-income countries?

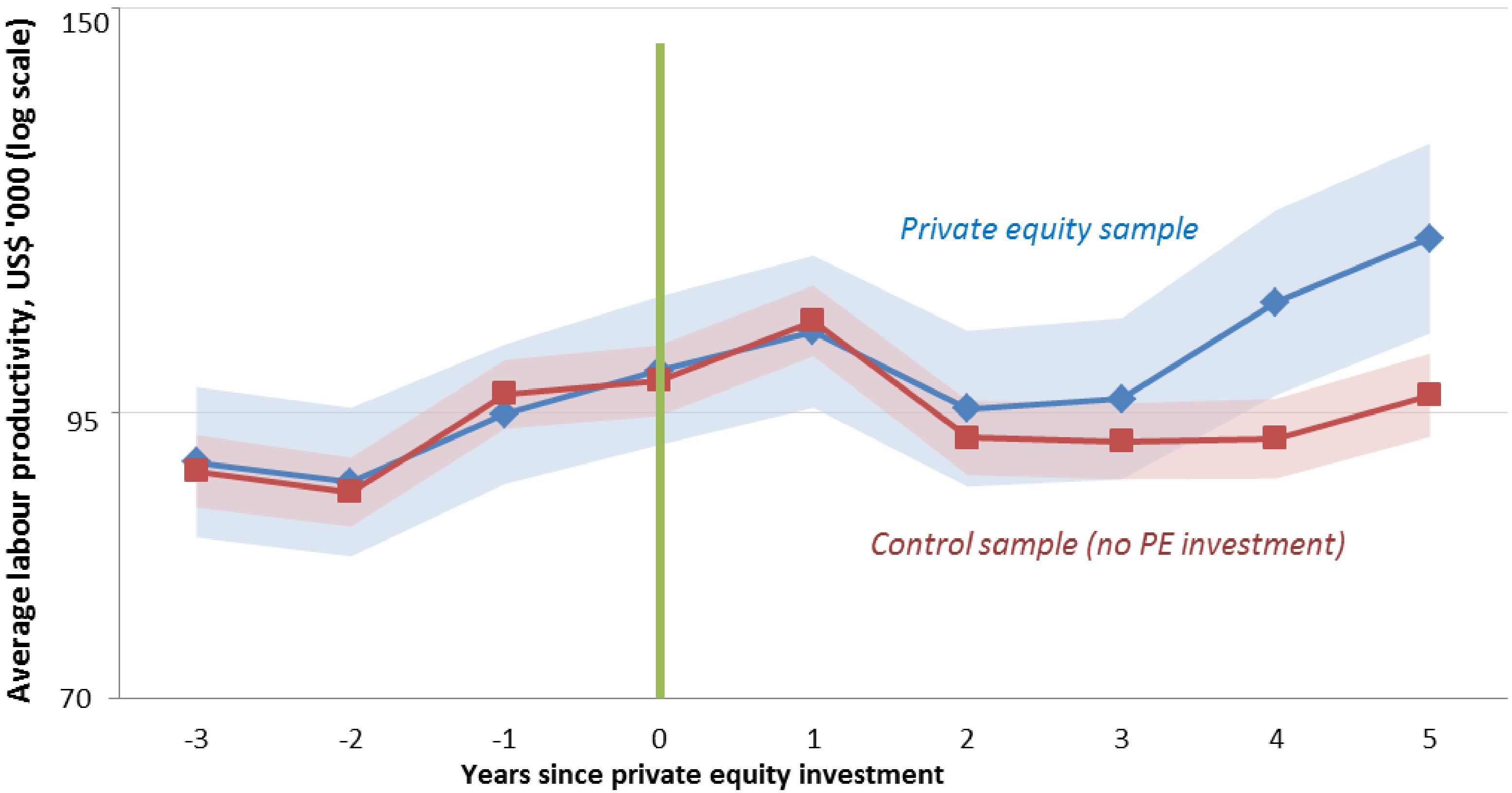
Macro: Deeper stock markets increase the likelihood of "growth miracles"

Correlates of growth outperformance episodes

Factor	Increases likelihood of outperformance	Reduces chance of underperformance	More important post-2008		Makes episodes last longer	Helps ensure "soft landing"
			Supporting outperf.	Preventing underperf.		
Investment	++	+	+		++	++
Democratic institutions	+	+	–	+?		
Economic institutions	+	++		–?	+?	+
Openness to trade		+?			+	
Openness to finance		+	–	+	–	
Debt finance	– –	–				
Equity finance	++	+		+		
Domestic savings	++	++				+
Infrastructure	+	+				

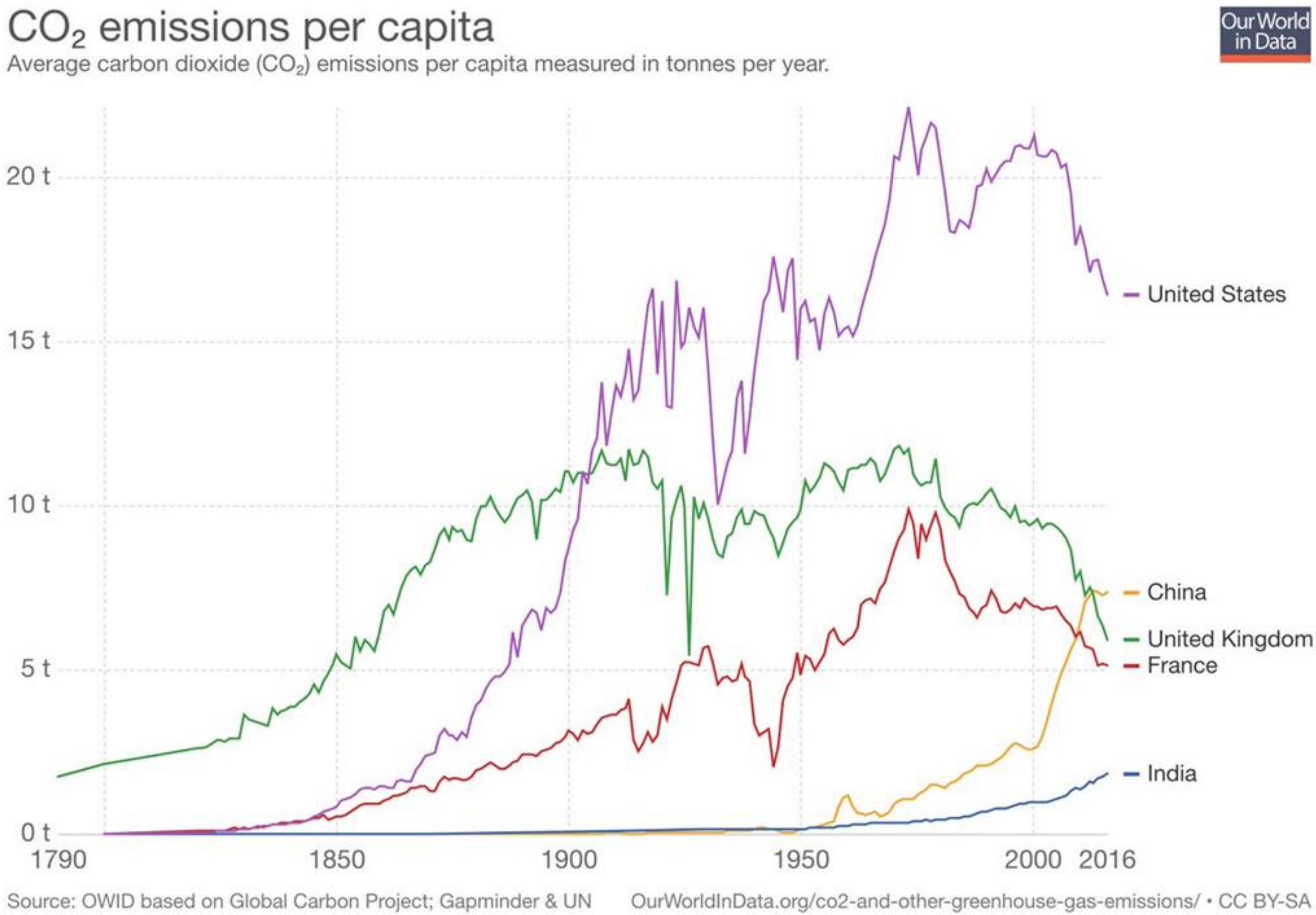
Source: Transition Report 2017-18 and Plekhanov and Stostad (2017)

Micro: In emerging markets, private equity helps firms to become more productive and to scale up



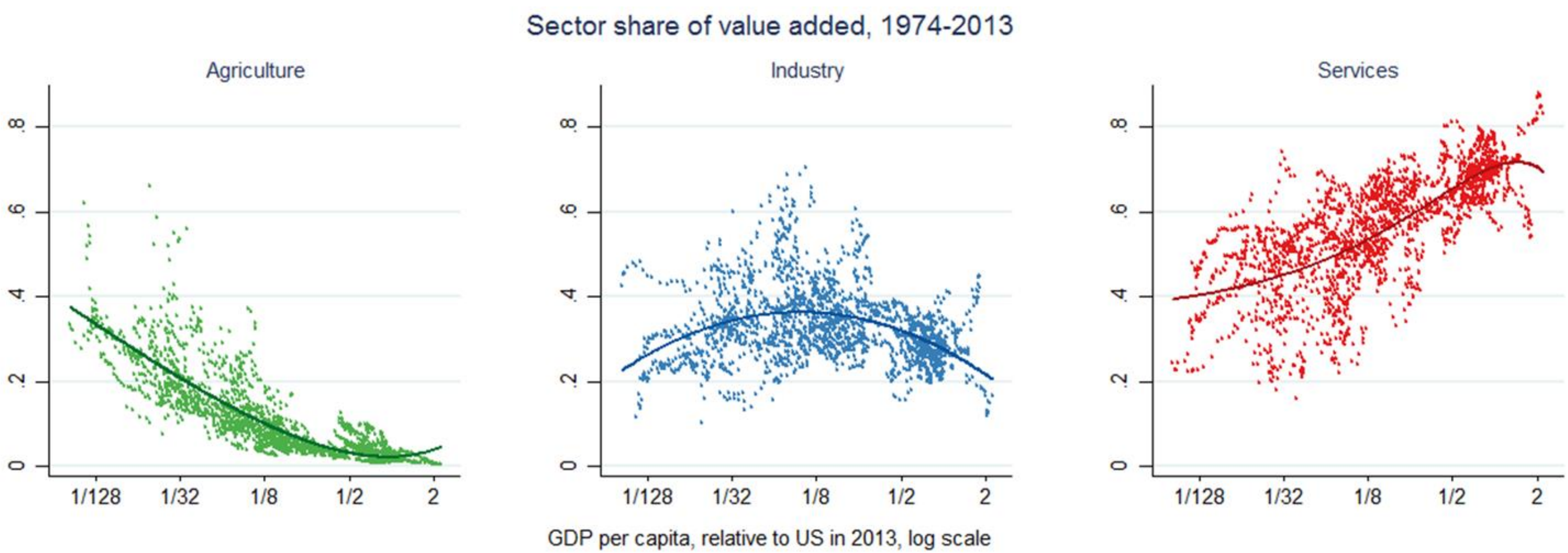
Sources: EBRD, Orbis and authors' calculations

Is equity finance greener, too?



Role of equity vs banks in shaping the two main environmental Kuznets forces?

1. Changing industrial composition (across sectors)
2. Moving technological frontier (within sectors)



Source: World Bank WDI

Why may equity be “greener” than banks?

- New technologies may undermine the value of collateral in existing loans (Minetti, 2011)
- „Green“ assets: firm-specific, intangible, human-capital-intensive? (Hall and Lerner, 2010)
- Banks may misprice the long-term value of assets (Delis, De Greiff, and Ongena, 2019)
- Stock markets punish environmental negligence (Salinger, 1992)

Ongoing work

- Identify the impact of financial development and financial structure on pollution
  - ➢ Analyze CO_2 emissions across countries-industries and over time
  - ➢ Compare the role of credit markets and stock markets
  - ➢ Comprehensive dataset: 53-country, 16-industry, 40-year panel

1. Financial structure skewed towards equity is associated with lower pollution levels
   - This effect is independent of that of economic development

1. Channel 1: Cross-industry reallocation
   - Stock (credit) market deepening associated with higher (lower) growth in „clean“ sectors
   - More new business creation in „clean“ sectors in countries with deeper stock markets

3. Channel 2: Within-industry efficiency improvement
   - Stock (credit) market deepening associated with lower (higher) CO_2 per output in „dirty“ sectors
   - Accompanied by a stock-market led increase in patented innovation in „dirty“ sectors
     - ➢ Especially in green technologies

De Haas, R. and A. Popov (2018), “Financial development and industrial pollution”, EBRD Working Paper No. 217.

To conclude

- In many emerging markets, including in EBRD‘s countries op operation, financial deepening has mainly and increasingly been bank based

- Post GFC: rapid increases in corporate indebtedness, with deteriorating risk profile (FX, short-term, concentrated)

- Macro and micro evidence suggest that a more balanced financial system, with a stronger focus on public and private equity, may result in (i) more, (ii) more resilient, and (iii) more sustainable/greener economic growth