EMERGING ECONOMIES: WHAT, WHO AND WHY

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Turin, May 16, 2017

INTRODUCTION

RATIONALE: Concept of EEs largely used in the economic literature without a common and clear definition – often confused with the concept of emerging markets.

Some undefined aspects that have been used in the economic literature:
-per capita GDP or GNI (low and middle-income economies);
-fast economic growth (Jain, 2006);
-fast economic growth under economic liberalization (Arnold and Quelch 1998 and Hoskisson et al., 2000);
-significant economic scale and population (BOAO Forum for Asia, 2009);
-per capita GDP in a defined time period less than half of the average of developed countries and export growth at least 10 percentage points higher than the average level of industrial countries (French Center d'Etudes Prospectives et d'Information Internationales-CEPII).

AIM: 1) **WHAT**: providing general and precise **criteria** to define what is an EE
2) **WHO**: applying them to find out **the group of EEs** in the period 2000-14
3) **HOW**: providing a preliminary analysis of the **factors related to their emergence**

WHAT

We generally define emerging an economy that in the **last 15 years** has showed:

(a) **an average level of the GDP per capita lower than the world average;**

(b) **an average growth rate of GDP per capita higher than the world average.**

ACCOUNTING FOR THE 'REBOUND EFFECT':
1) we cautiously look at countries that suffered from one or more years of recession in the decade before the analysed period;

2) we exclude from the group of EEs those countries that suffered from one or more years of recession in the decade before the analysed period and that have not yet recovered the pre-recession level of GDP per capita.

WHO
(2000-2014)

- Data source: Total Economy Database, Conference Board

- Full sample of 123 countries (average rate of growth: 2.9%; real GDP per capita: 21273 US$ PPP)

⟹ 44 countries satisfying criteria a) and b)

⟹ list of **38 EEs** after correcting for the 'rebound effect'

- Oil-exporting countries kept in the list; we control for that in the empirical analysis.

NOTICE: three of the five BRICS are excluded from the list: Brazil and South Africa given their too low growth rates, and Russia because of a level of per capita income slightly above the full sample mean.

	GDP PER CAPITA (US$, PPP)	GROWTH RATE
EAST ASIA AND PACIFIC (7 countries)		
Myanmar	2,996	9.6
China	7,975	9.1
Cambodia	2,334	6.1
Vietnam	4,041	5.3
Indonesia	8,152	4.0
Thailand	13,243	3.6
Philippines	5,250	3.1
SOUTH ASIA (3 countries)		
India	4,023	5.5
Sri Lanka	6,829	4.8
Bangladesh	2,114	4.2
MENA (1 countries)		
Iraq *	12,532	4.1
Morocco	6,273	3.3
LAC (5 countries)		
Peru	9,337	4.1
Chile	19,228	3.3
Dominican Republic	10,682	3.3
Uruguay	16,015	3.2
Colombia	11,322	3.0
EUROPE & CENTRAL ASIA (14 countries)		
Azerbaijan	11,890	10.6
Armenia	6,217	7.4
Turkmenistan	9,324	7.3
Kazakhstan	17,629	6.8
Belarus	13,281	6.3
Moldova *	3,487	6.1
Lithuania	20,851	5.7
Georgia *	5,093	5.7
Tajikistan *	1,989	5.6
Latvia	18,982	5.3
Uzbekistan	4,082	5.1
Albania	8,386	5.0
Bulgaria	15,242	4.3
Serbia & Montenegro	9,700	3.9
Romania	15,264	3.9
Ukraine *	7,744	3.8
Poland	20,017	3.7
Kyrgyz Republic *	2,844	3.5
Turkey	16,110	3.0
SSA (8 countries)		
Angola	7,886	6.1
Ethiopia	930	5.2
Mozambique	945	5.1
Nigeria	4,523	5.0
Ghana	3,172	4.1
Zambia	3,025	3.9
Uganda	1,652	3.5
Tanzania	2,034	3.3

WHY

In line with the empirical literature on economic growth (Barro 1991, 2000, 2013; Bloom and Williamson 1998; Bassanini and Scarpetta 2001; Bloom et al. 2010; Choudhry and Elhorst 2010), we estimate the model:

$$growth_{it} = \alpha + \beta_1 y_{i0} + \beta_2\ demography_{it} + \beta_3\ physical\_capital\_accumulation_{it} + \beta_4\ human\_capital_{it} + \beta_5\ trade_{it} + \beta_6\ macroeconomic\_policy_{it} + \beta_7\ exogenous\_shocks_{it} + \beta_8\ institutional\_quality_{it} + u_{it}$$

We test the model with different estimation techniques:
1) single **cross section** – **OLS** (age dependency ratio and average years of education taken at the beginning-of-period values to cope with possible endogeneity; other variables averaged over the period 2000–2014, except for the initial level of GDP per capita to verify the neoclassical convergence hypothesis)

2) 5-year time-series cross sections – **GLS** (2000–2004; 2005–2009; 2010–2014)

Dependent variable: growth rate of real GDP per capita

	(1) Cross-section	(2) GLS	(3) GLS	(4) GLS	(5) G2SLS	(6) G2SLS
log of initial GDP per capita	-0.8716	-0.8656 *	-1.5497 ***	-2.6426 ***	-1.5890 ***	-1.6366 ***
age dependency ratio	-0.0859 ***	-0.0733 ***	-0.0568 ***	-0.0703 **	-0.0480 **	-0.0486 *
investment growth	0.2416 ***	0.1240 ***	0.1530 ***	0.0305 **	0.1531 ***	0.1526 ***
export growth	0.1596 ***	0.1652 ***	0.0839 ***	0.0014	0.0752 **	0.0695
inflation	0.0482	0.0159	-0.0431	-0.0209	-0.0465	-0.0474
terms of trade	0.0018	0.0155 *	0.0007	0.0030	0.0005	0.0012
democracy	-0.0791	-0.1090	0.0106	0.0174	0.0148	0.0153
government consumption			0.0164	0.1185	0.0240	0.0284
public deficit			0.0666	0.1371	0.0824	0.0932
average years of education			0.3942 ***	0.4662 ***	0.4769 ***	0.4886 ***
_cons	13.7744	12.7131***	16.2648***	26.2754***	15.4611***	15.7699***
time dummies		yes	yes	yes	yes	yes
R2	0.73	0.47	0.60	0.35	0.60	0.60
Obs.	34	98	69	69	69	69

Note: In column 1, 2 and 3 the age dependency ratio and, where included, the average years of education are at the beginning-of-period values, as well as all the regressors in column 4. In column 5 the age dependency ratio and the average years of education are instrumented with their lagged values, like in column 6, where also the growth rate of export is instrumented with the same method. ***$p < 0.01$, **$p < 0.02$, *$p < 0.05$.

WHY

ADDITIONAL MODEL SPECIFICATIONS:

1) In order to further check the role of institutions, we substituted the index of democracy with alternative indicators of rule of law: law, government size, money, trade freedom and regulation.

2) We introduced a series of dummy variables to account for geographical area, recession during the decade before the analysed period and OPEC membership.

3) We alternatively substituted the growth rate of export with the growth rates of import and FDI.

$\Longrightarrow$ In all the three cases, we did not find any significant effects, while previous results were confirmed.

DISCUSSION

1) The paper (along with the workshop!) calls for the **need of common and precise criteria** to define what and, then, who EEs are.

2) When common criteria are individuated, they can be applied to different historical periods to track the changes within the category of EEs (**in and out movements**).

3) Further extensions of empirical analysis: moving from a static to dynamic perspective, studying the factors determining the **transition processes** over time.

MANY THANKS FOR YOUR ATTENTION!

DATA SOURCES AND VARIABLE DEFINITION

growth: growth rate of real GDP per capita

y_{i0}: log of the initial level of real GDP per capita with EKS PPP

(Total Economy Database, Conference Board)

demography: the total age dependency ratio

physical capital accumulation: growth rate of investment

human capital: average years of education received by people aged 15 and over

trade: growth rate of export

macroeconomic policy: set of proxies to measure macroeconomic stability and government intervention (inflation, government consumption and public deficit)

exogenous shocks: terms of trade

(World Development Indicators, World Bank)

institutional quality: alternatively proxied by democracy (Polity IV Project,

Center for Systemic Peace) and rule of law indicators (Economic Freedom of the World, Fraser Institute).