A closer look at the dynamics of regional convergence

How have the regional convergence / divergence patterns been affected by the free movement of capital and labour?

Different theoretical explanations for regional convergence/divergence patterns

Neo-classical growth theory- Solow growth model
Regional Development theories- Hirschman-Rostow
Development economics- growth by state intervention
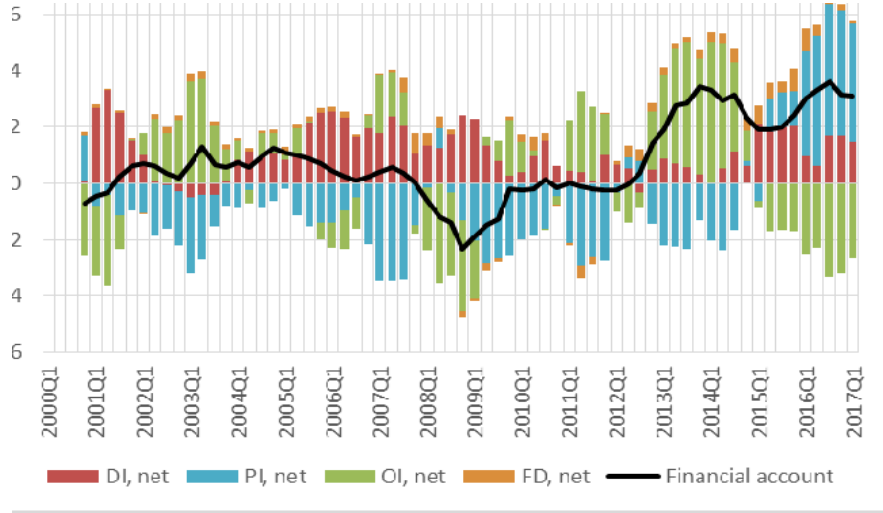
Endogenous growth
Capital logic
Dependency, unequal exchange

Not only the amount of capital flow but also the main attributes of the flows of capital matters in covergence/divergence patterns

*Financial flows by instruments
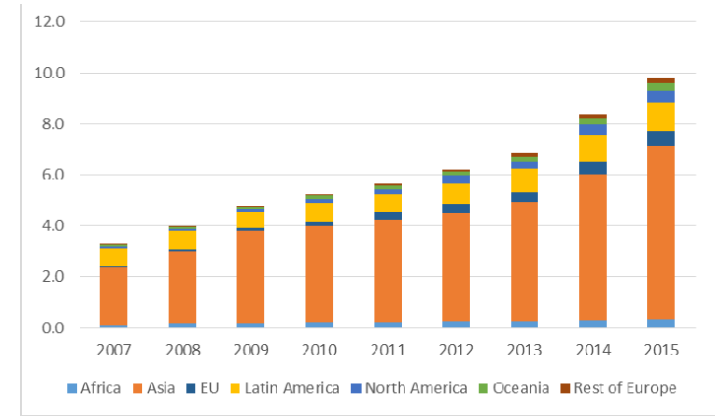*Financial flows by sectors
* Geographies of financial flows

Figure 6: Euro area net financial flows by instrument, % of GDP

The euro area plus China and Japan now represent 75 percent of global net savings. In the last two years, the US, together with the UK and some other advanced economies (Canada, Australia), have absorbed the vast majority of these savings.

In absolute terms, the euro area is now the world's largest exporter of capital.
China has moved from being a net receiver of foreign direct investment to becoming a net exporter.

Inflows to emerging market economies, which attracted a high share of global surpluses up to 2012-13, have receded without resulting in major turbulence.

Positive contribution to the economic competitiveness

Decreasing motivations in Technological change in advanced regions
Supporting middle-income trap

- **Labour**
- Two types of labour
- Skilled-creative-innovative-talented
- Unskilled-migrants (search for low wages-best quality)-flexibility/ short terms contracts/especially in construction

Mobility of labour

Graph 2: Share of working-age population born in other countries, 2013
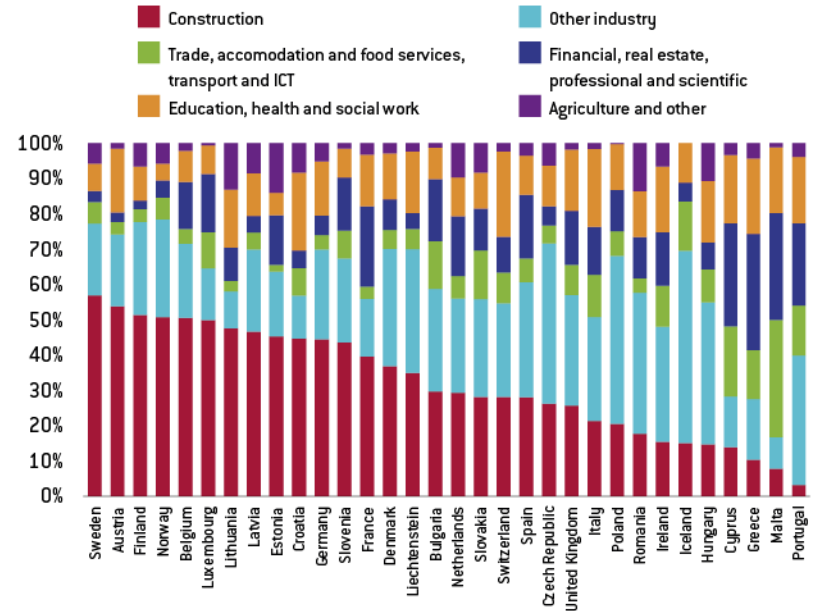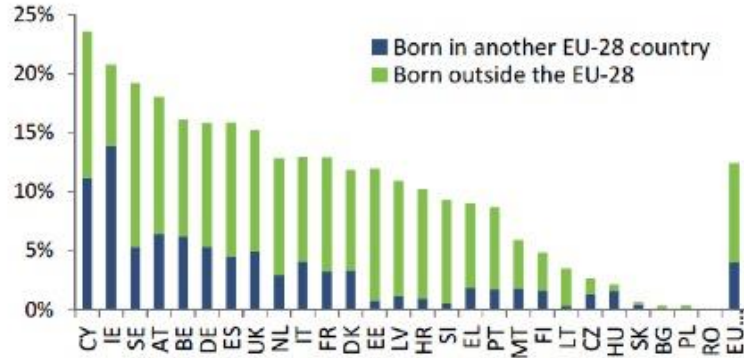
People on the move: migration and mobility in the European Union bruegel.org 2016

Global capital financing
Implications on regional convergence/divergence

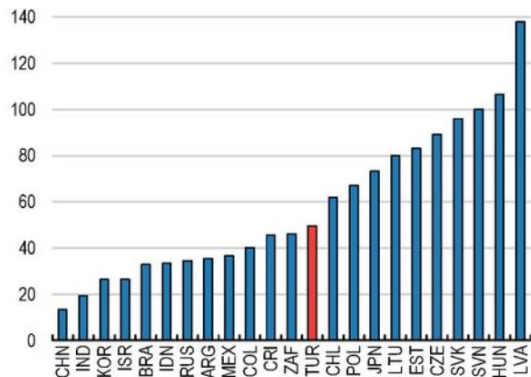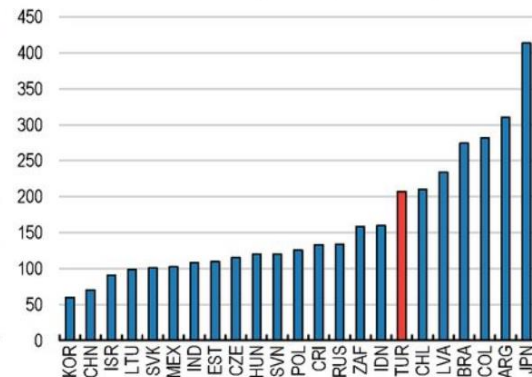Increasing importance of global capital financing economic growth: Turkish evidence is quite informative
Rapid growth of external debt in percentage GDP

C. External debt in percentage of GDP, 2016

D. External debt in percentage of exports, 2016

Note: For presentation purposes, Panel C and D exclude advanced European countries that typically have substantially higher external debt ratios.
Source: IMF (2018), Balance of Payments Statistics (database).

Figure A. Investment is dynamic but increasingly funded by debt

Note: SNA debt definition using consolidated accounts.
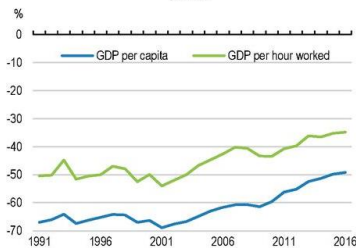Source: OECD (2018), OECD Economic Outlook and OECD Financial Accounts (databases).
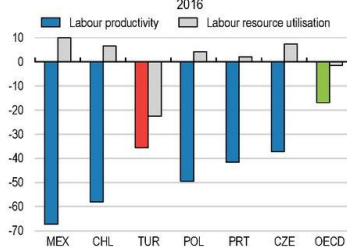StatLink https://doi.org/10.1787/888933798504

REGIONS & CITIES | European Week
Brussels 8-11 October 2018

A. Major reforms following the 2001 crisis have paid off

%
0
-10
-20
-30
-40
-50
-60
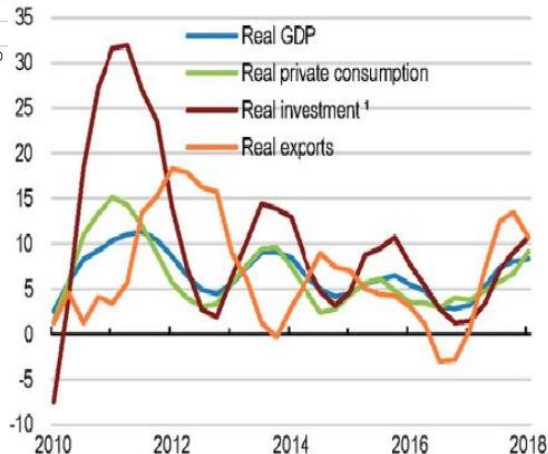-70

— GDP per capita   — GDP per hour worked

1991   1996   2001   2006   2011   2016

B. Percentage difference in labour resource utilisation and labour productivity¹
2016

■ Labour productivity   ▢ Labour resource utilisation

10
0
-10
-20
-30
-40
-50
-60
-70

MEX   CHL   TUR   POL   PRT   CZE   OECD

1. Labour productivity is measured as GDP per hour worked. Labour resource utilisation is measured as the total number of hours worked per capita.
Source: OECD (2018), Economic Policy Reforms 2018: Going for Growth Interim Report, OECD Publishing, Paris, http://dx.doi.org/10.1787/growth-2018-en.
StatLink 🔗 https://doi.org/10.1787/888933798599

Figure 3. Lately, exports and construction have driven growth

A. Real GDP growth

Y-o-y % changes²

— Real GDP
— Real private consumption
— Real investment¹
— Real exports

35
30
25
20
15
10
5
0
-5
-10

2010   2012   2014   2016   2018

B. Gross fixed capital formation in construction
% of GDP

— TUR   — CZE   — MEX
---- POL ---- PRT   — OECD

19
17
15
13
11
9
7

2000   2005   2010   2015
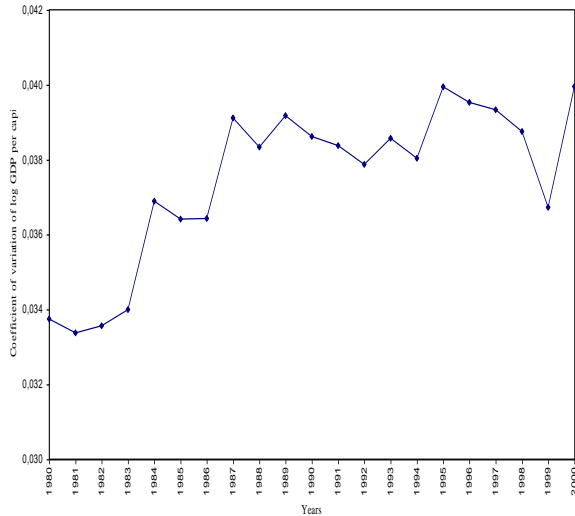
The implications of growth based on global capital

Divergence in growth period-convergence in recession period
Low productivity low tech specialisation leading to growth of less developed regions.
The low levels of divergence, although most of the capital flow concentrates in advanced regions

Results of Beta Convergence Analysis

Dependent variable: $\Delta Y_{it} - \Delta^{\wedge} Y_t$	Model 1		Model 2 (Club 2)	
Independent Variables	Coefficient (s.e)	Sig. t	Coefficient (s.e)	Sig. T
Constant	0,000752 (0,002620)	0,7749	-0,0086 (0.004)	0,047
$\log Y_{it^-} \log^{\wedge} Y_t$	0,032960 (0,011216)	0,0046	0,041 (0,015)	0,009
R^2	0,122		0,224	
Adjusted R^2	0,108		0,196	
Standard error	0,017		0,013	
d.f.	1		1	
F	8,63588		7,813	
Sig. F	0,0046		0,009	

Year of	LnPerCapitaRealGDP	Standard Deviation	Coefficient Variation
2004	8.6448	0.4148	0.0480
2005	8.7124	0.4132	0.0474
2006	8.7571	0.4197	0.0479
2007	8.7703	0.4206	0.0480
2008	8.7857	0.4182	0.0476
2009	8.7273	0.3988	0.0457
2010	8.8198	0.3738	0.0424
2011	8.8857	0.3789	0.0426
2012	8.9355	0.3647	0.0408
2013	8.9877	0.3684	0.0410
2014	9.0189	0.3704	0.0411

Both external flow of capital and labour mobility is important in regional convergence/divergence
But
The outcome can be different in different context and dynamics.

What about regional policies?