

Central,  
Eastern and  
Southeastern Europe

# Convergence: ARE WE THERE YET?



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IMF – Croatian National Bank  
Conference  
Dubrovnik, 11 July 2017





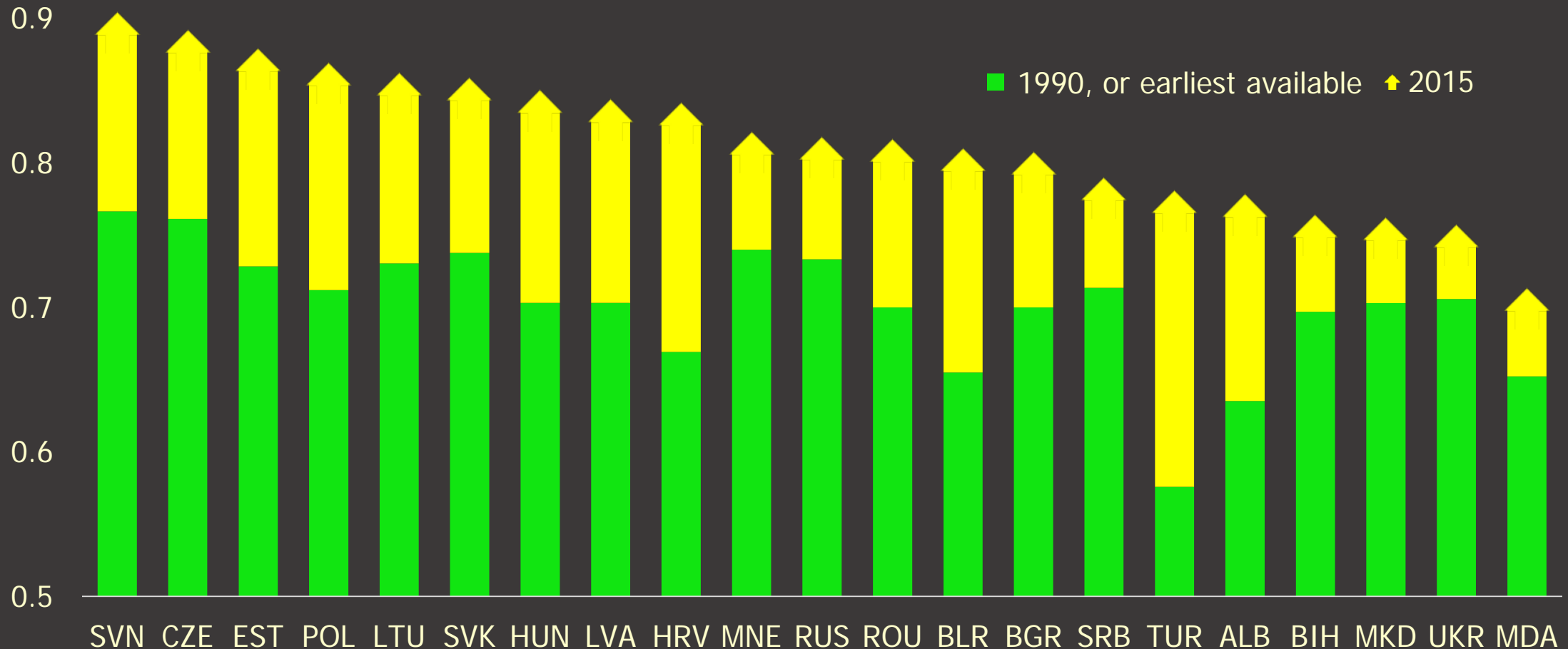
1990s



**NOW**

# Substantial progress has been made since 1990

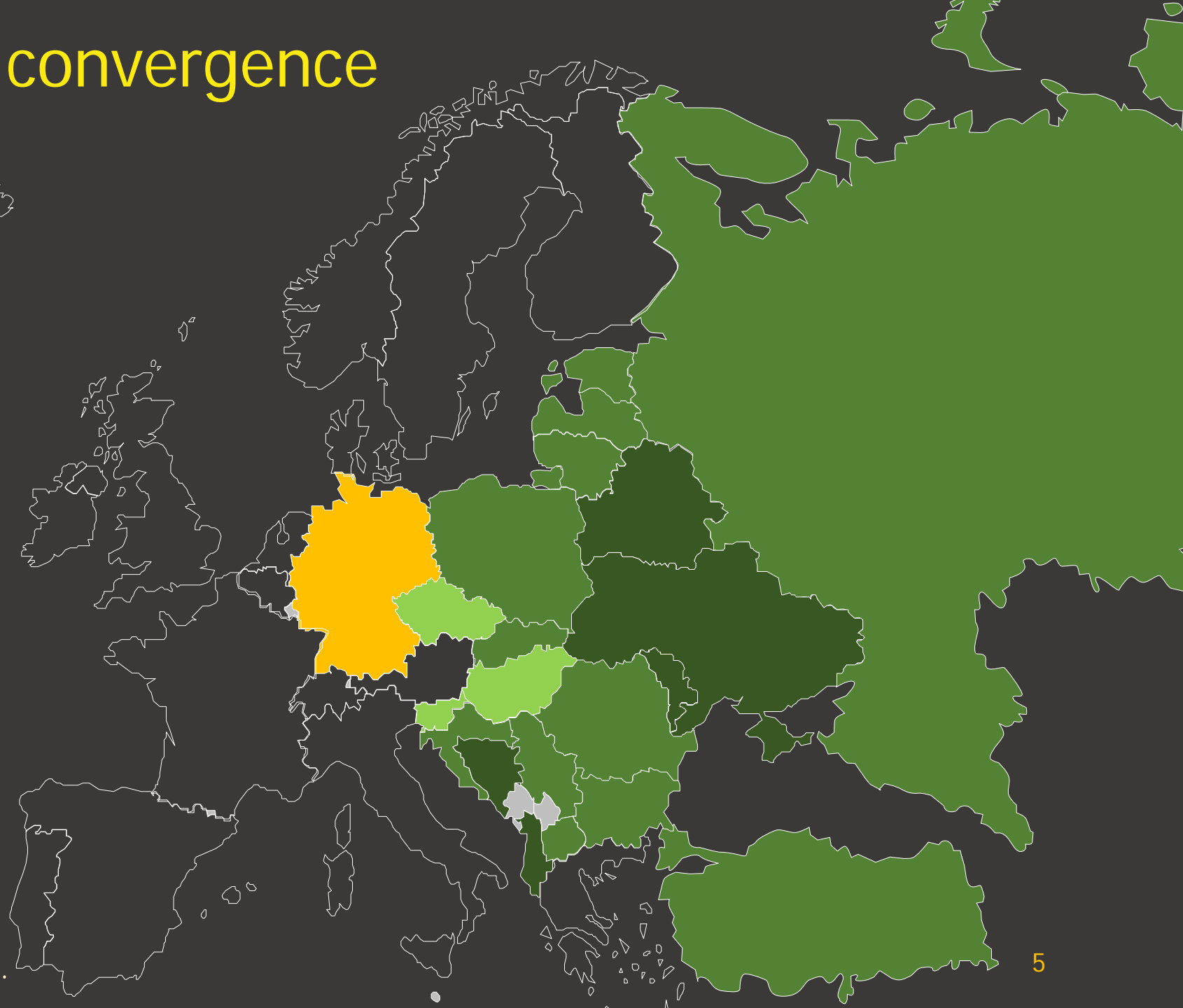
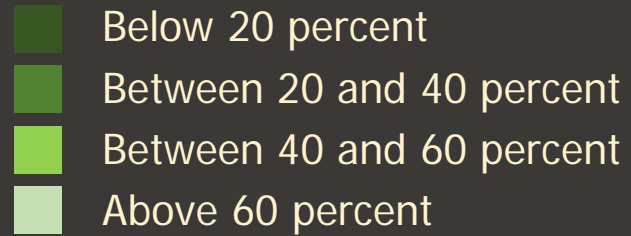
**Human Development Index**  
(Index, 0 to 1)



# Substantial income convergence has been achieved

PPP GDP per capita compared to Germany's

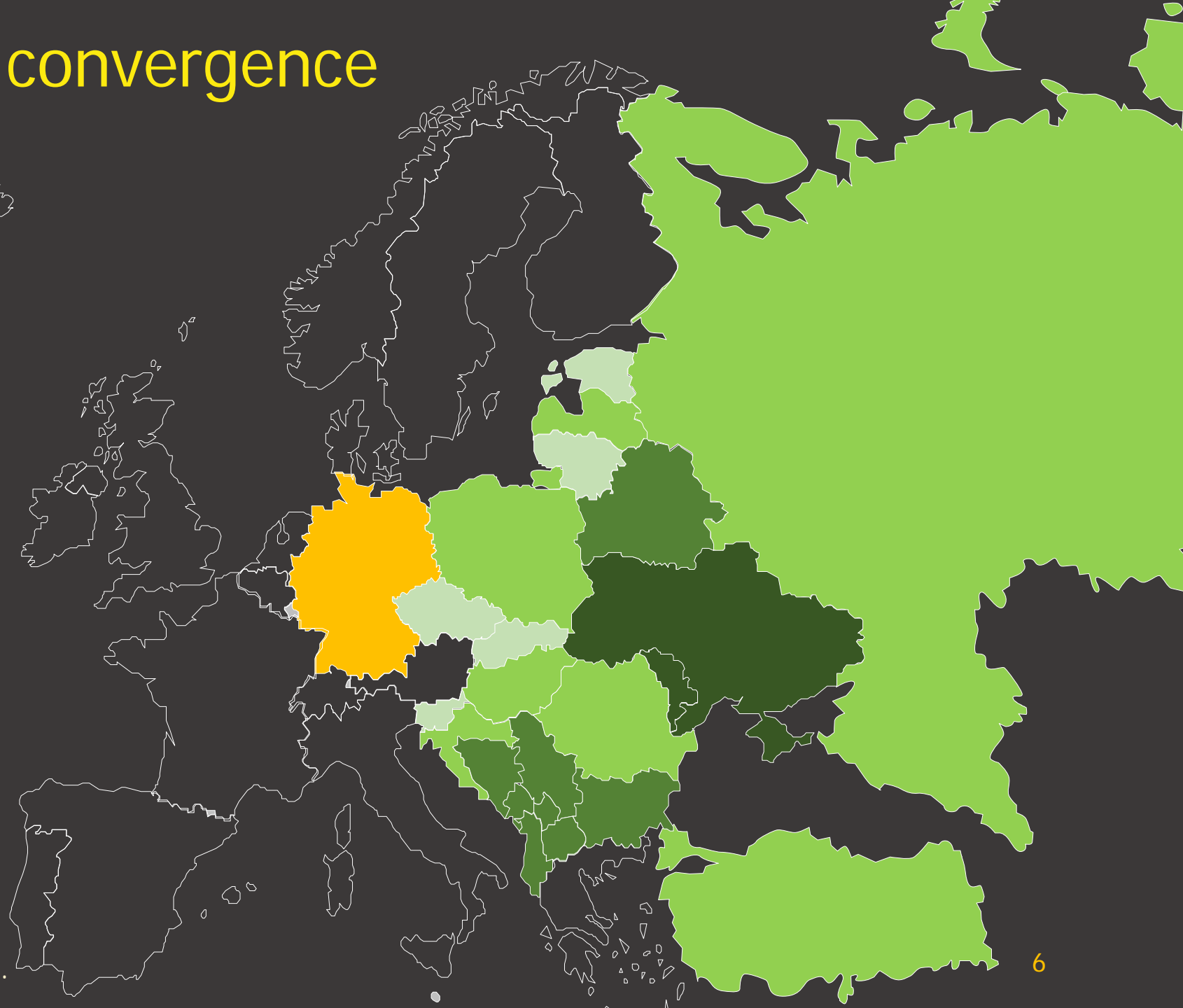
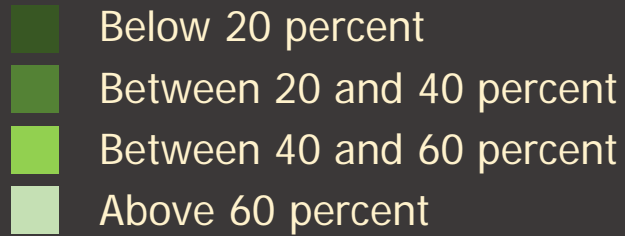
1995



# Substantial income convergence has been achieved

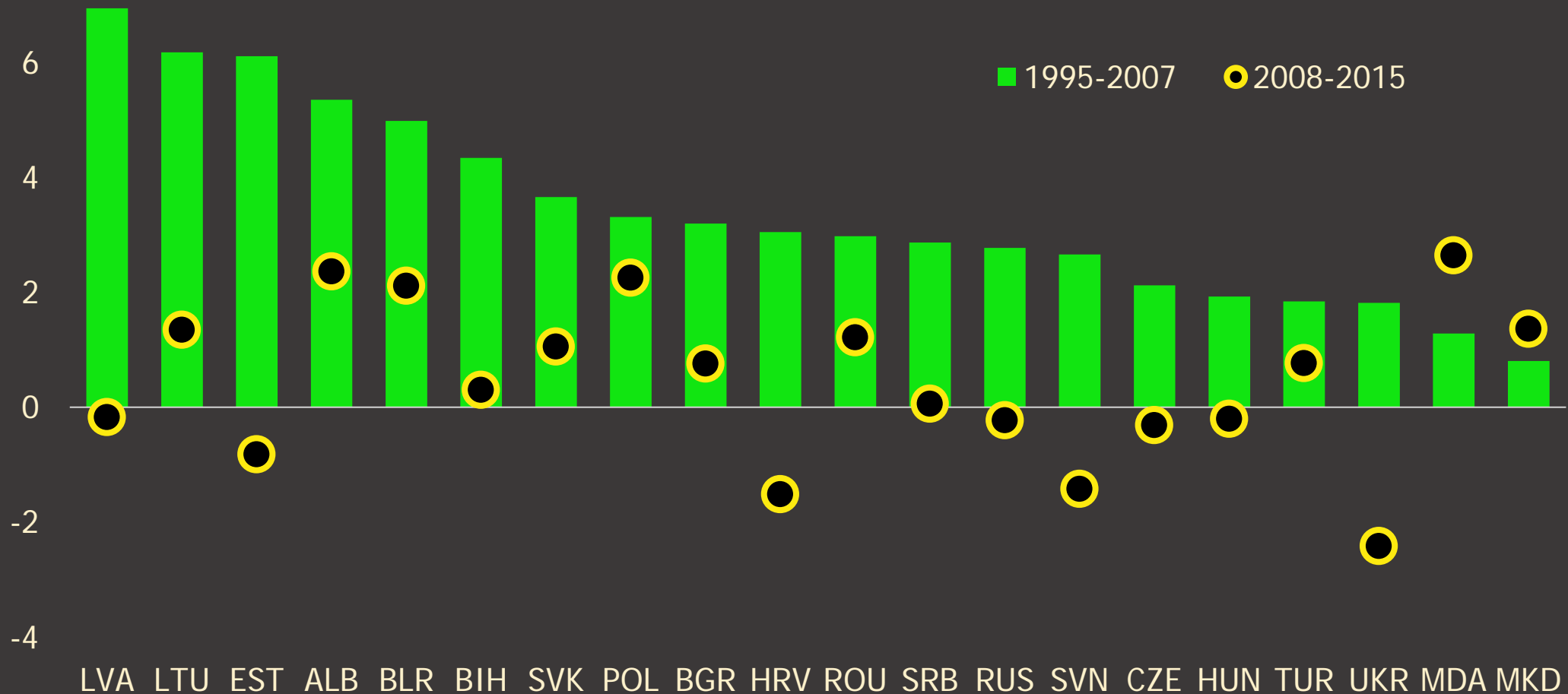
PPP GDP per capita compared to Germany's

2015



# But convergence has slowed. Some divergence

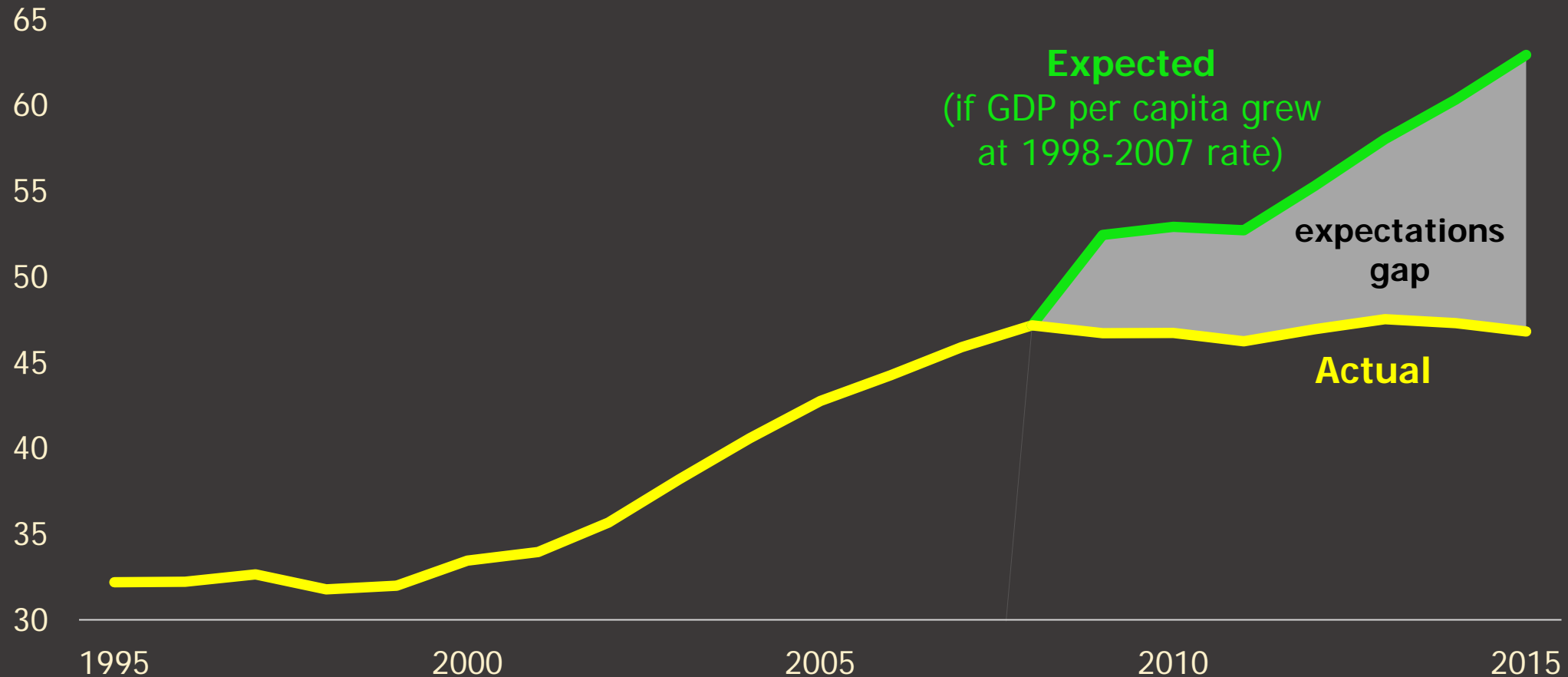
**Growth Differential Before and After the Crisis**  
(Difference in average PPP GDP per capita growth with Germany)



Sources: World Bank Development Indicators; and IMF staff calculations.

# People have been disappointed

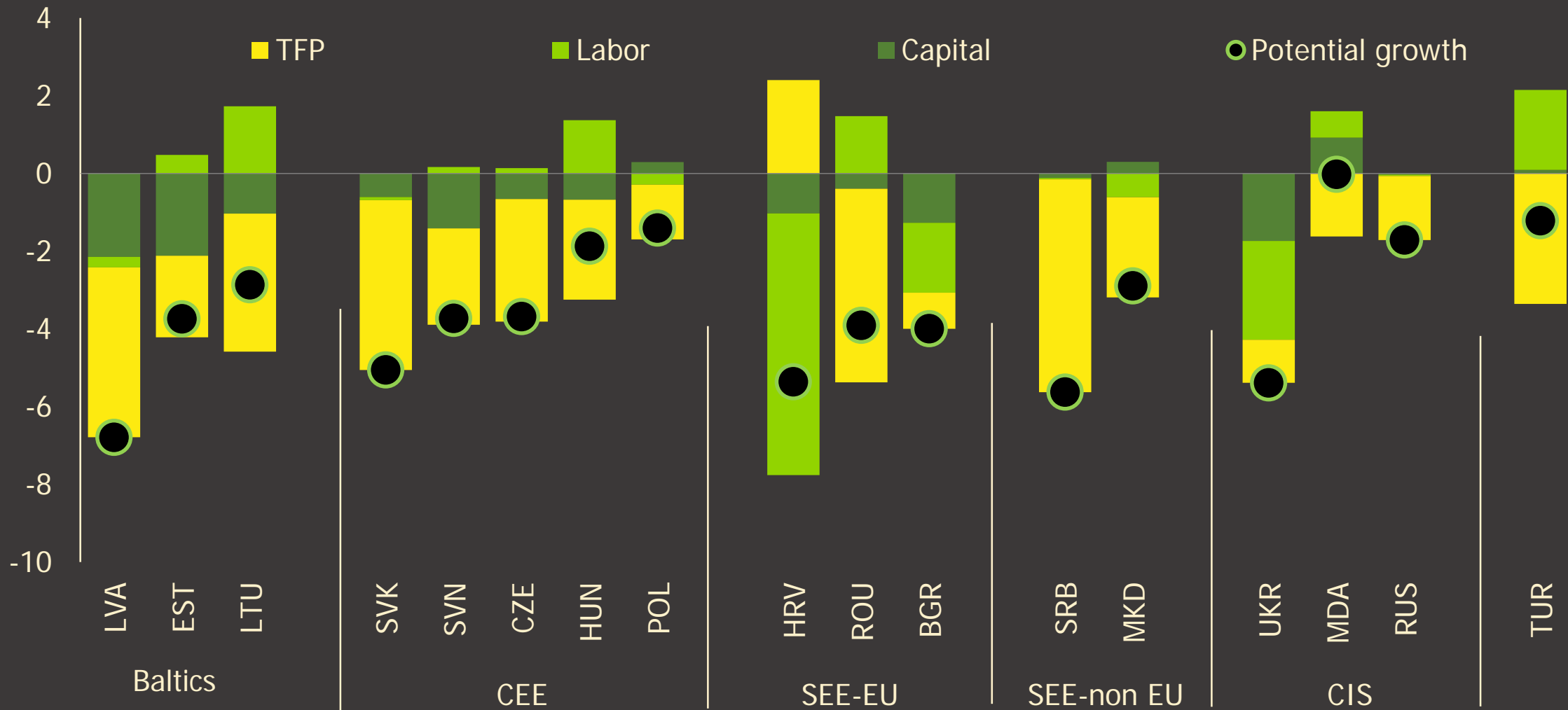
CESEE: GDP per Capita Relative to Germany' GDP per Capita  
(In percent)





# TFP behind the growth slowdown

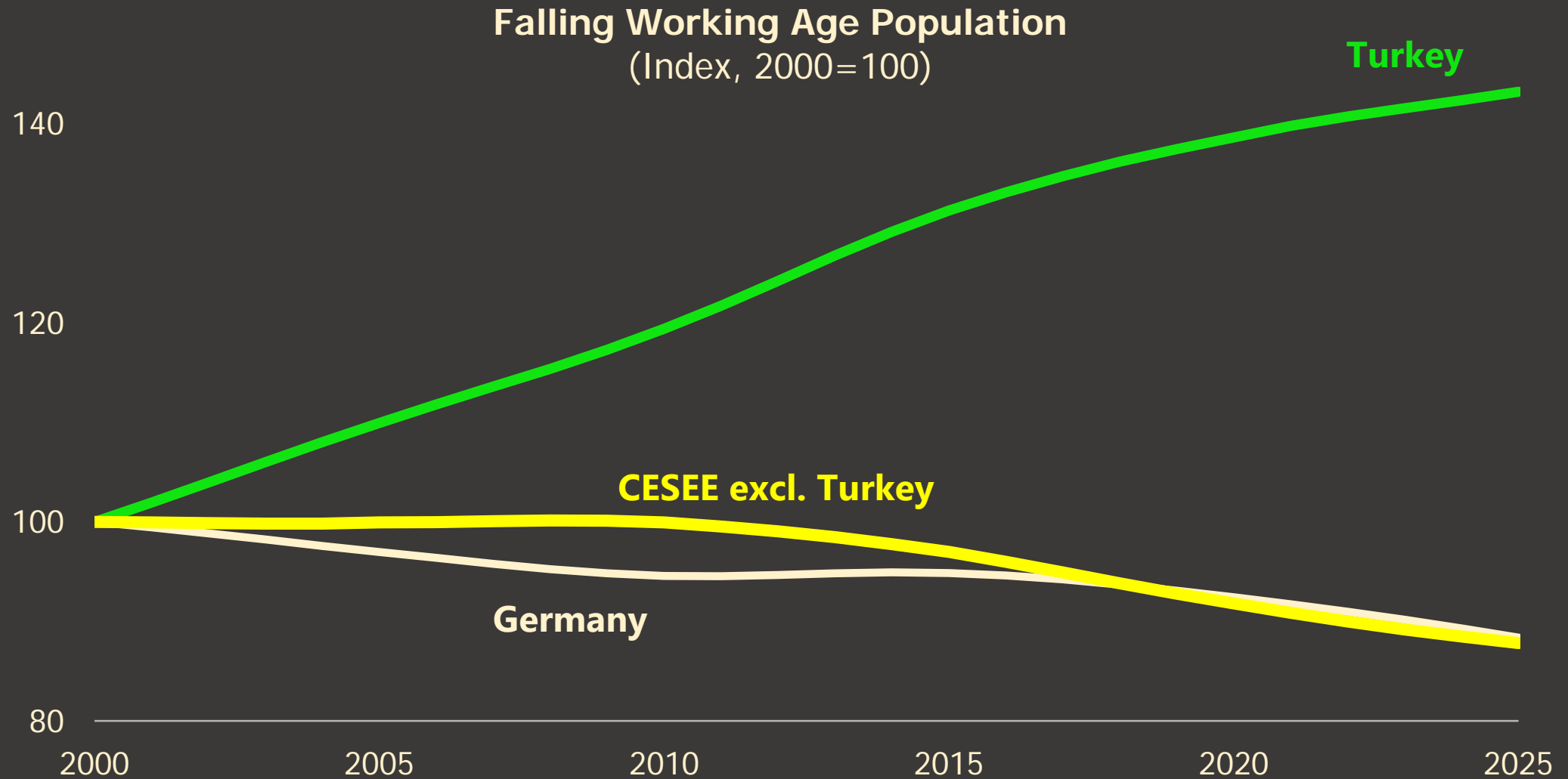
Change over 2013-15 versus 2002-08  
(Percentage points)



Sources: Penn World Tables, Version 8.1; Haver Analytics; and IMF staff calculations.



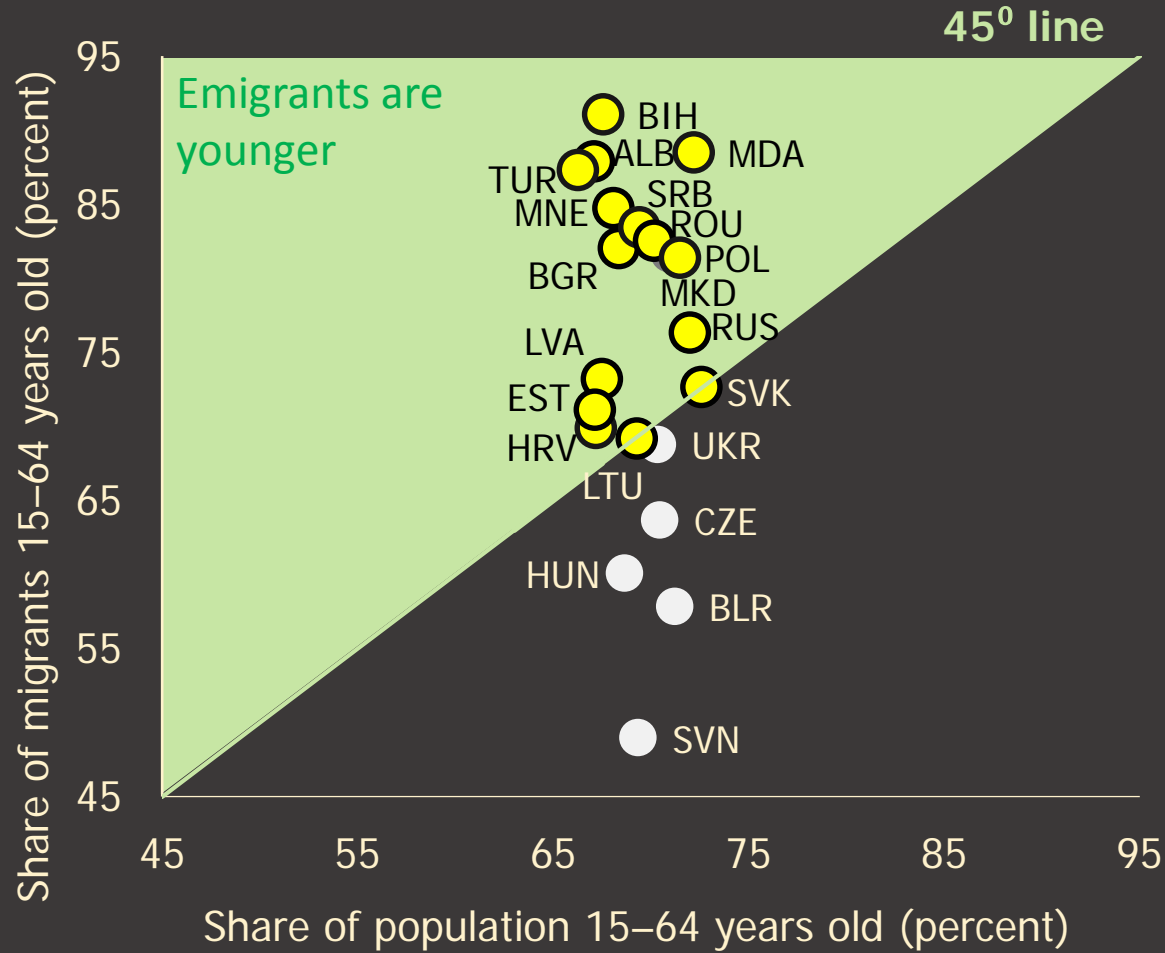
# Major demographic headwinds ahead



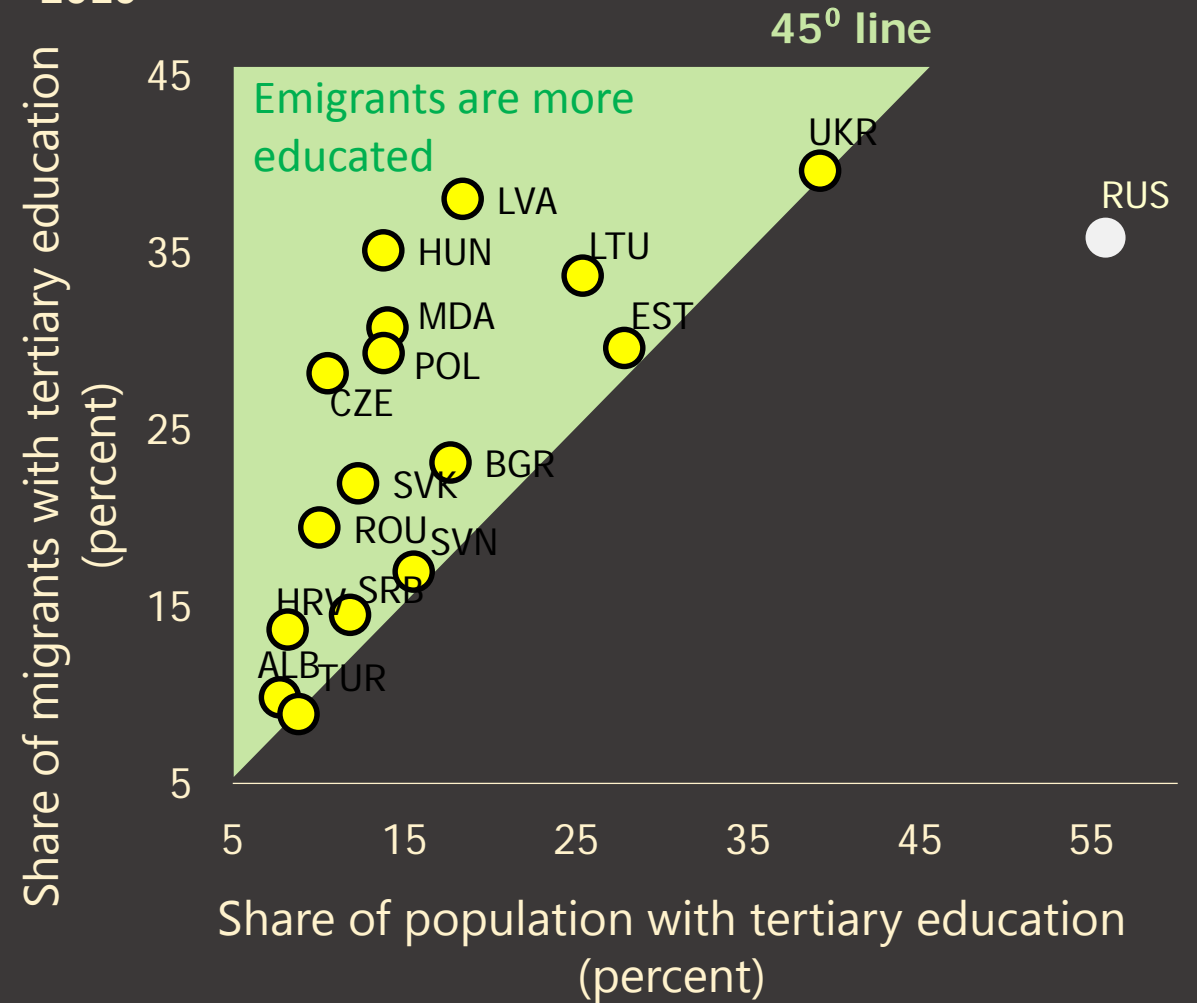
Source: United Nations World Population Prospects (2015).

# Will emigration continue?

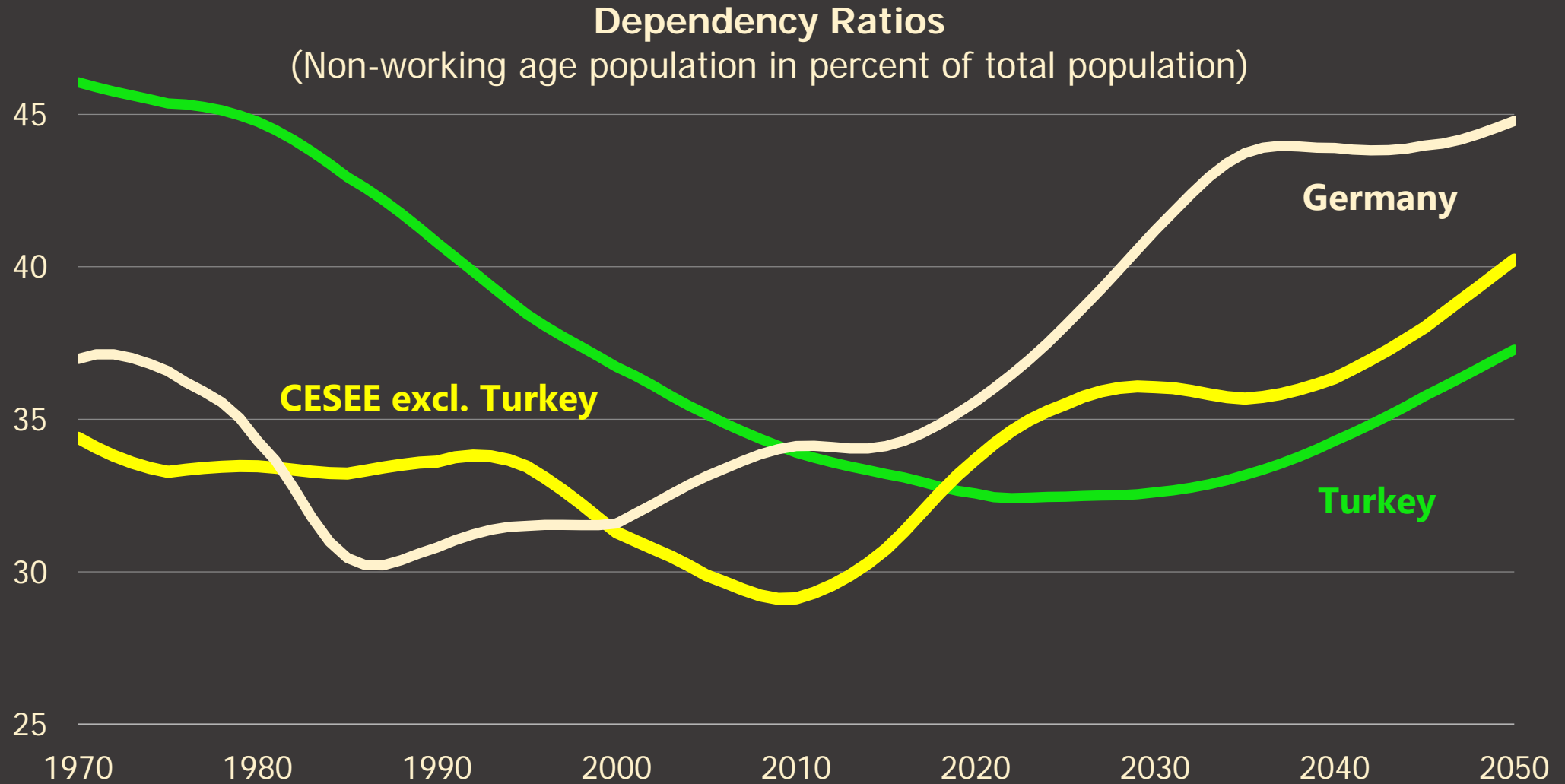
Age of Migrants and Sending Country Population, 2010



Education of Migrants and Sending Country Population, 2010



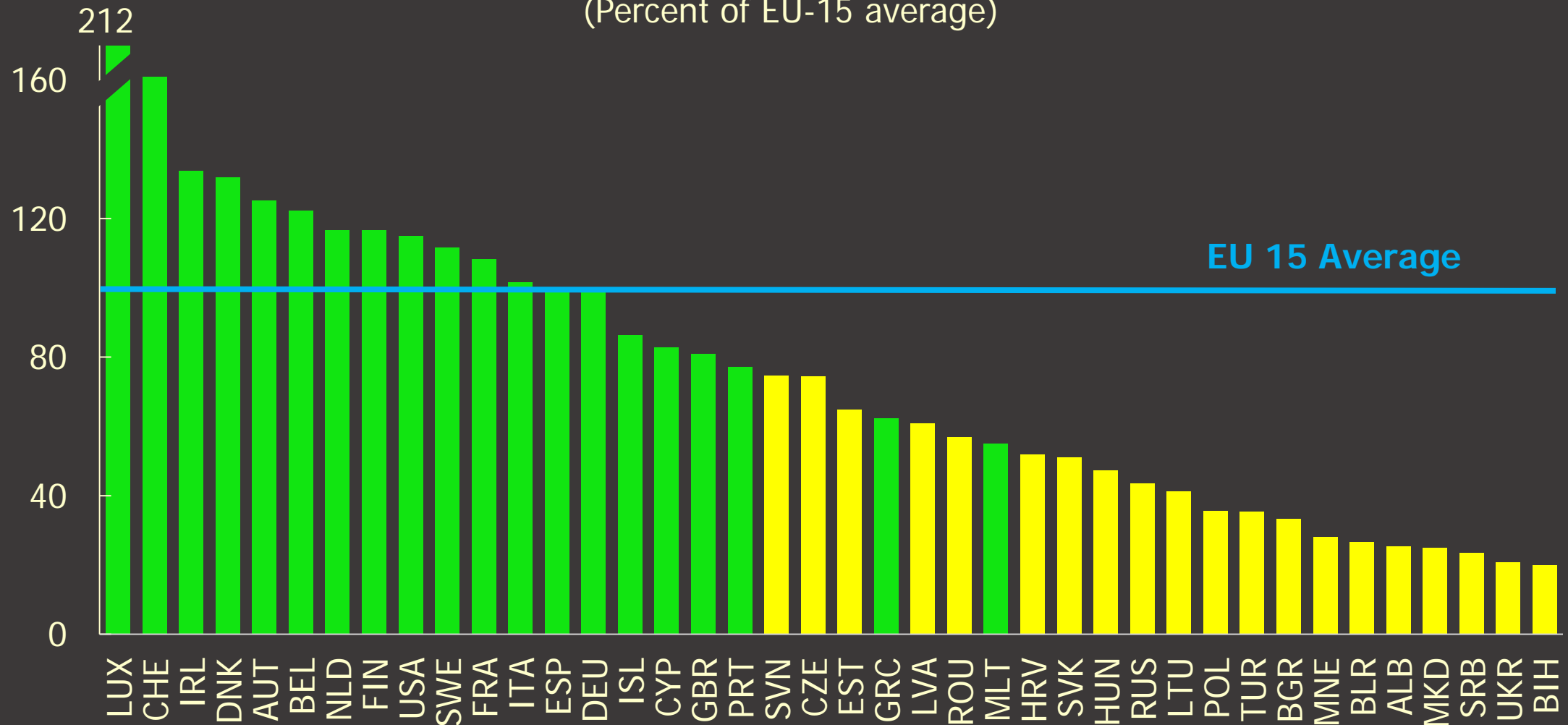
# Rising dependency ratios lower saving



Source: United Nations World Population Prospects (2015).

# Investment is likely to remain weak

Capital Stock, Per Capita, 2015  
(Percent of EU-15 average)

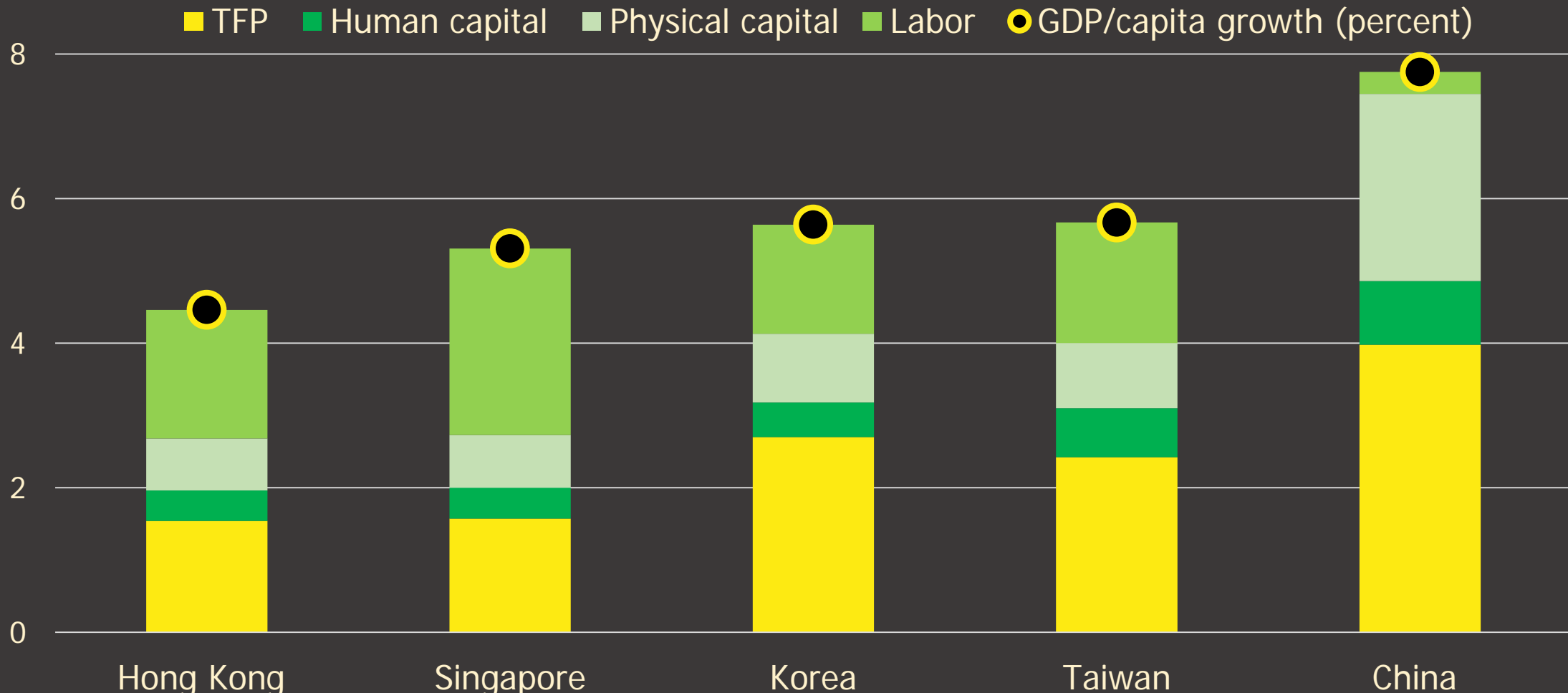




Examples of convergence from Asia

# Sustained convergence requires robust TFP growth

**Growth Success in Asia**  
(Contribution to GDP growth)



Sources: Aiyar and others, 2013, "Growth Slowdowns and the Middle Income Trap", IMF WP/13/71; and IMF staff estimates.

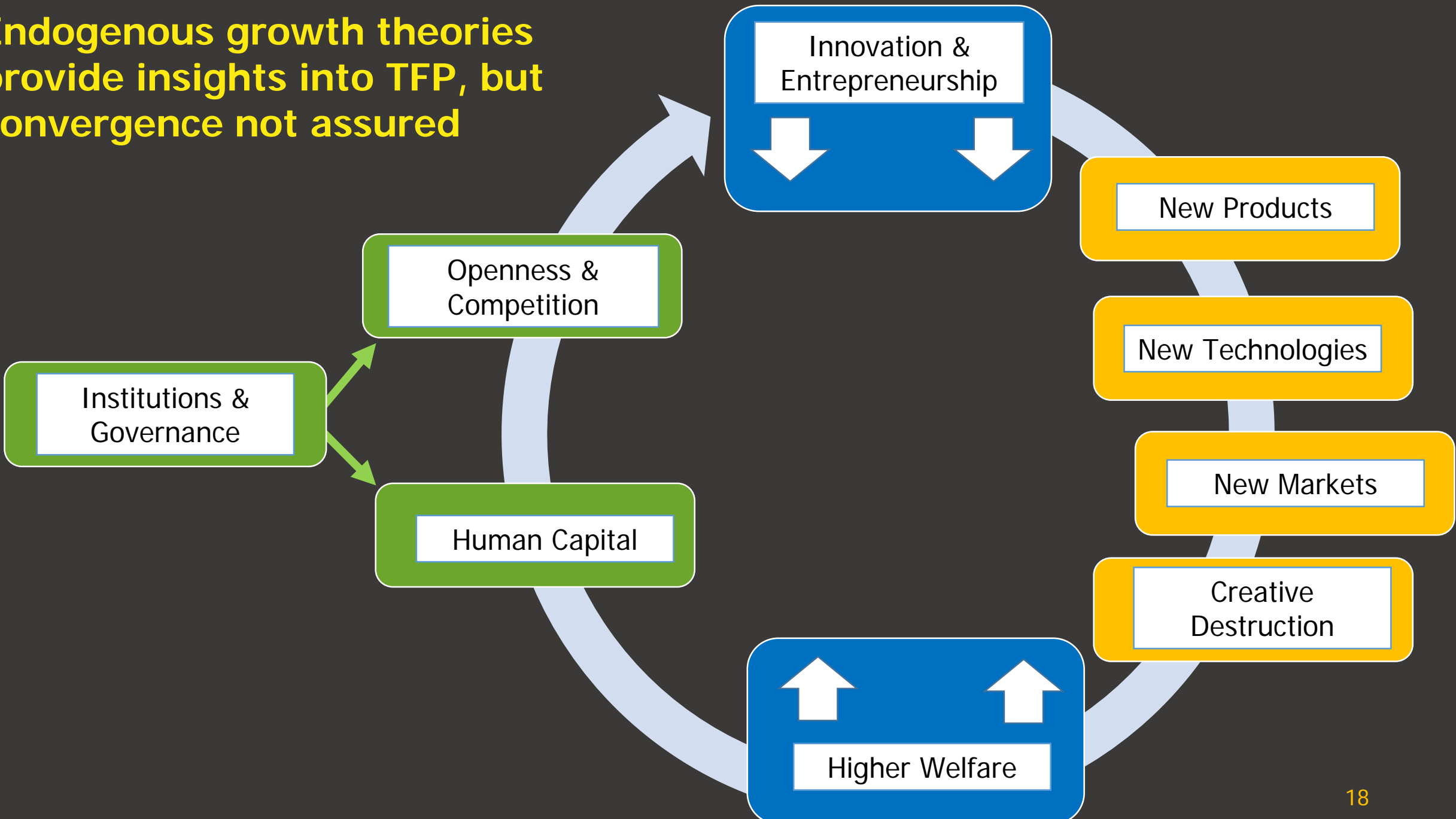




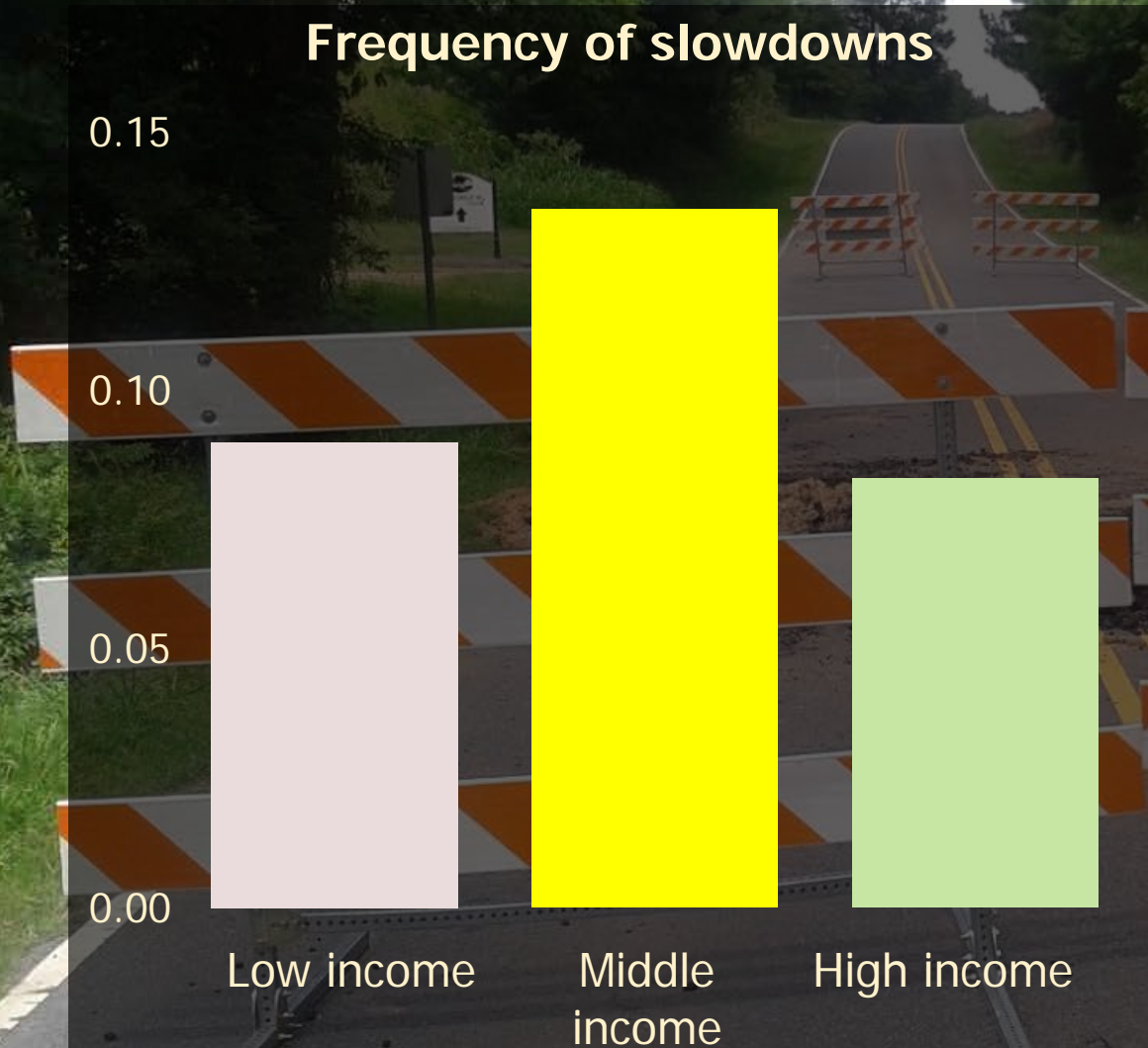
**HOW  
TO INCREASE TFP?**

EXIT 13A SOUTH	13
EXIT 48 NORTH	48
EXIT 57 NORTH	57

Endogenous growth theories provide insights into TFP, but convergence not assured



# IS THERE A MIDDLE INCOME TRAP?



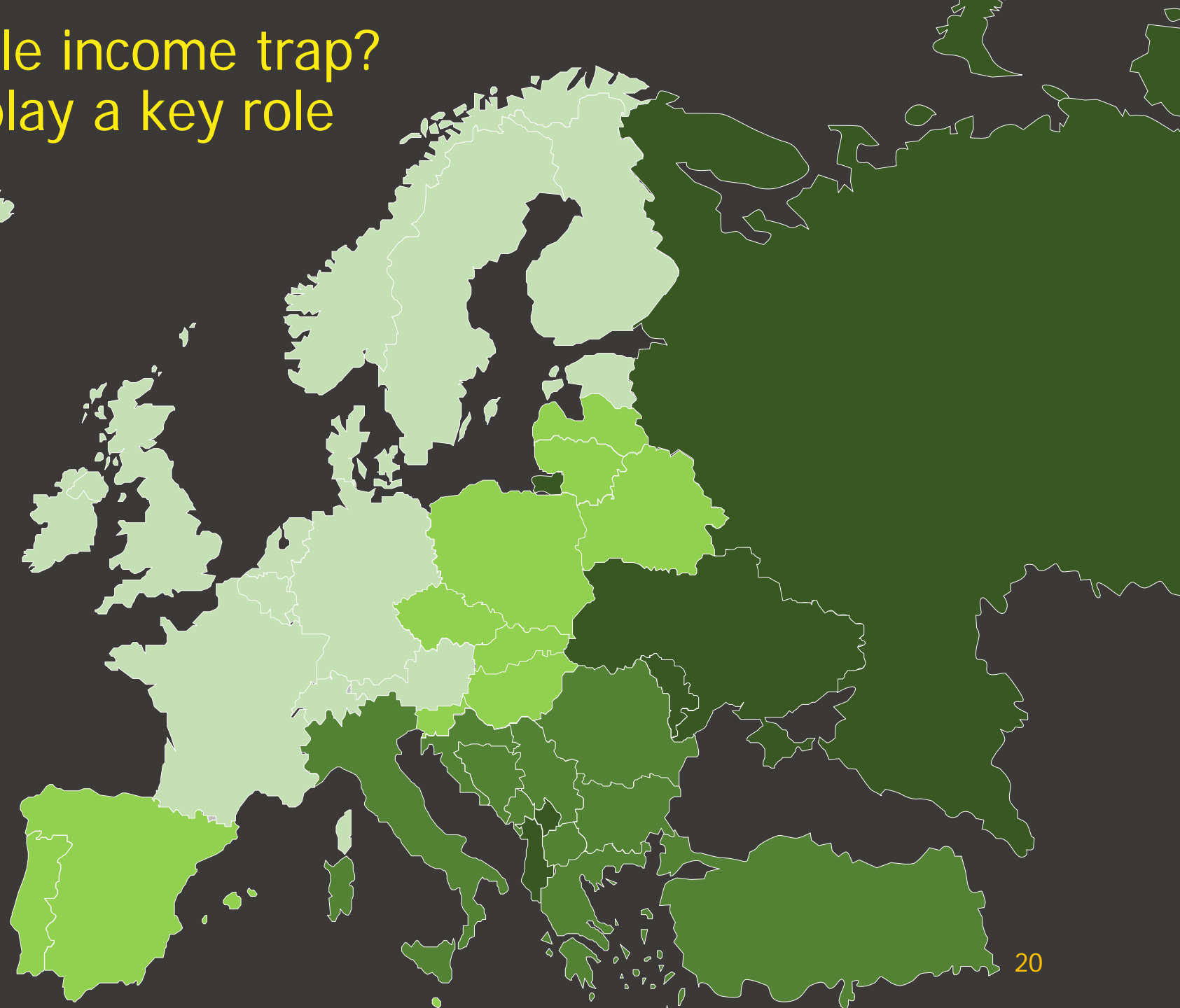
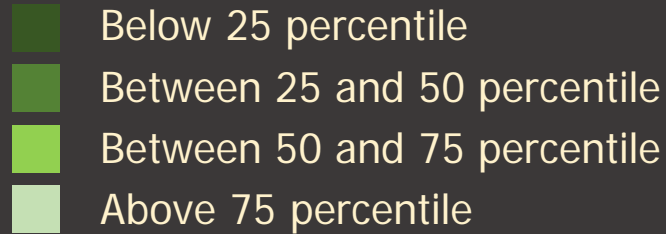
Source: Aiyar and others, 2013, "Growth Slowdowns and the Middle Income Trap" , IMF WP/13/71.



# How to escape the middle income trap? Better governance can play a key role

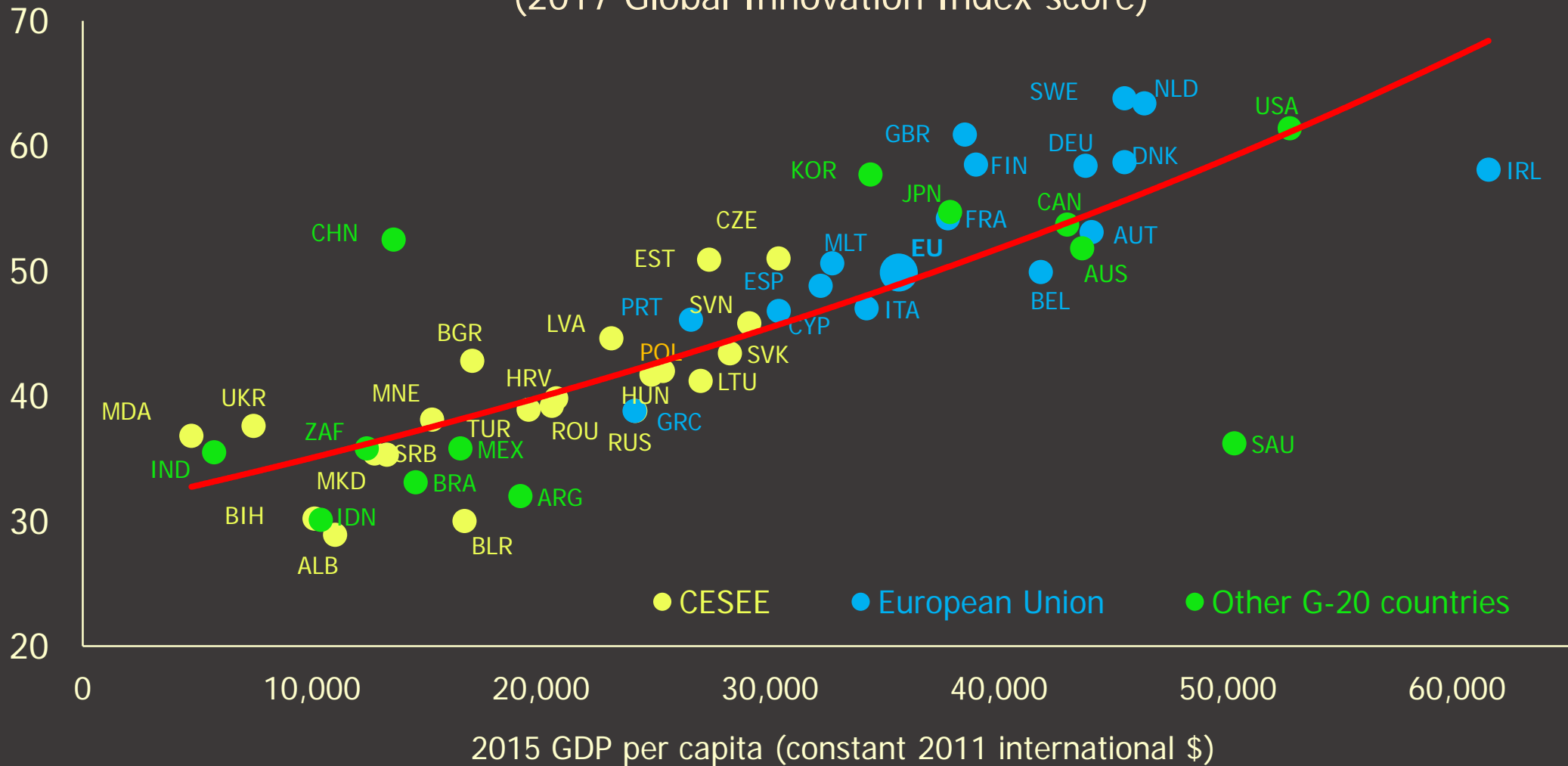
Rule of Law,  
Worldwide distribution,  
2015

Lighter green is better



# The link between institutions and innovation

Where does CESEE stand on innovation?  
(2017 Global Innovation Index score)

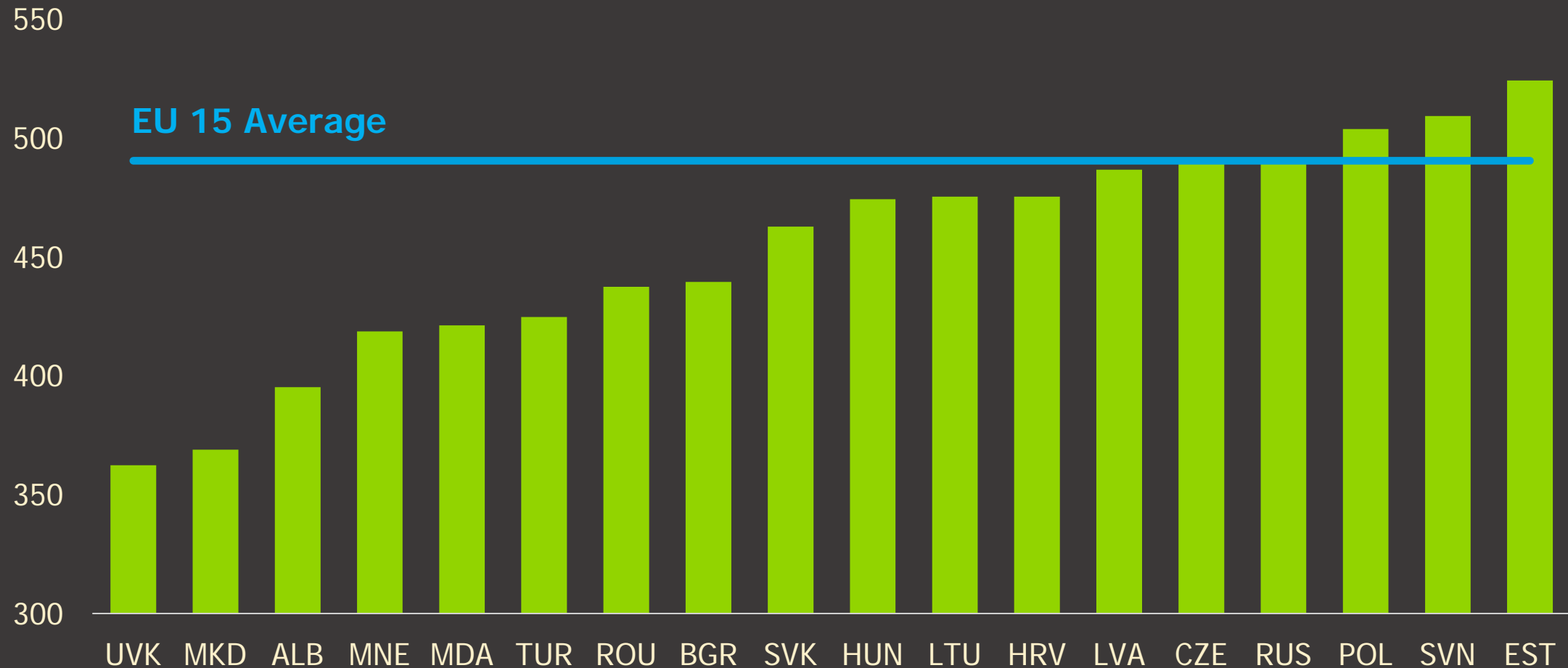


Sources: Global Innovation Index Report (2017); and World Bank Development Indicators.

# Most of the region has a well educated labor force, which is more sensitive to institutions

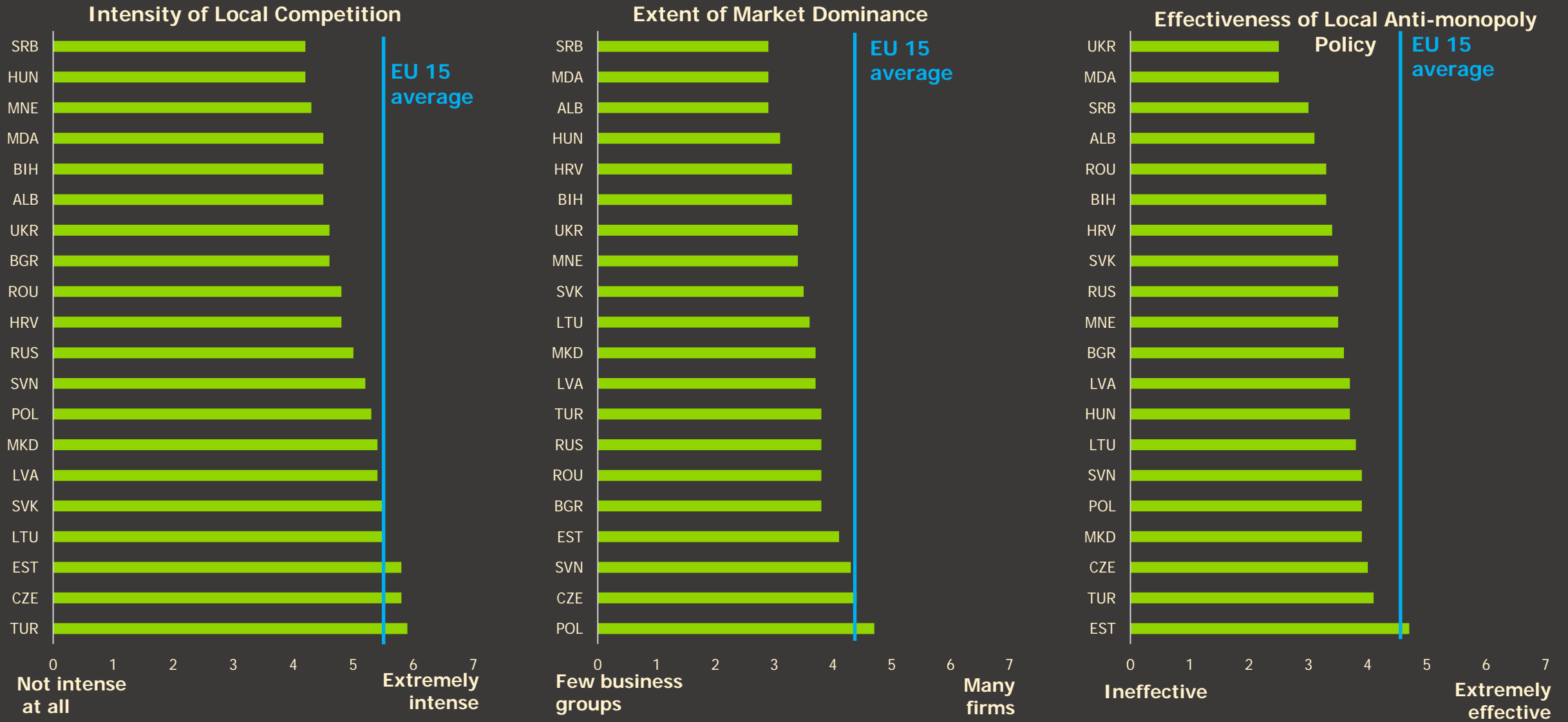
## PISA Scores, 2015

(average of math, science and reading scores; min score=320, max score=565)



Source: OECD.

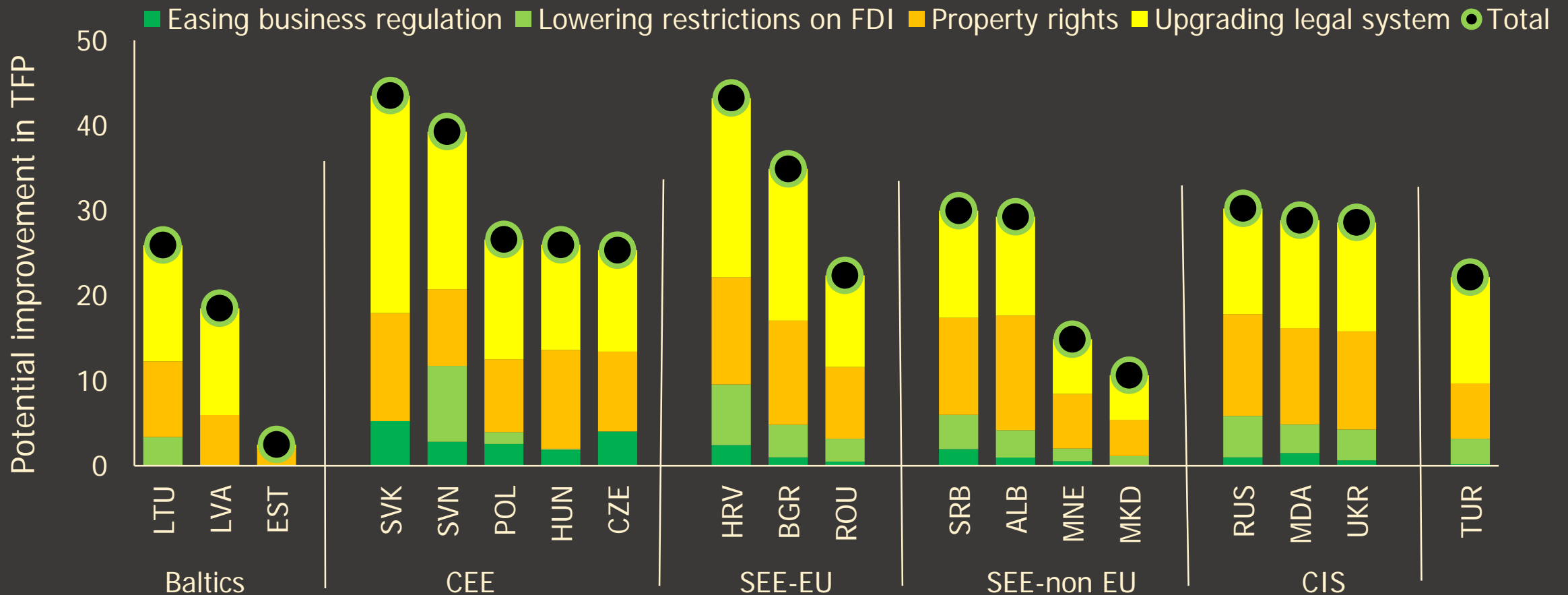
# The importance of competition in fostering TFP



Source: World Economic Forum.

# More effective legal systems key for moving to a higher growth trajectory

Potential Efficiency Gains from Structural Reforms  
(In percent)



Sources: Penn World Tables, Version 8.1; and IMF staff calculations.



# Key messages

■ A lot of progress achieved, but convergence not assured

■ Strong demographic headwinds ahead

■ Productivity growth needed for higher incomes

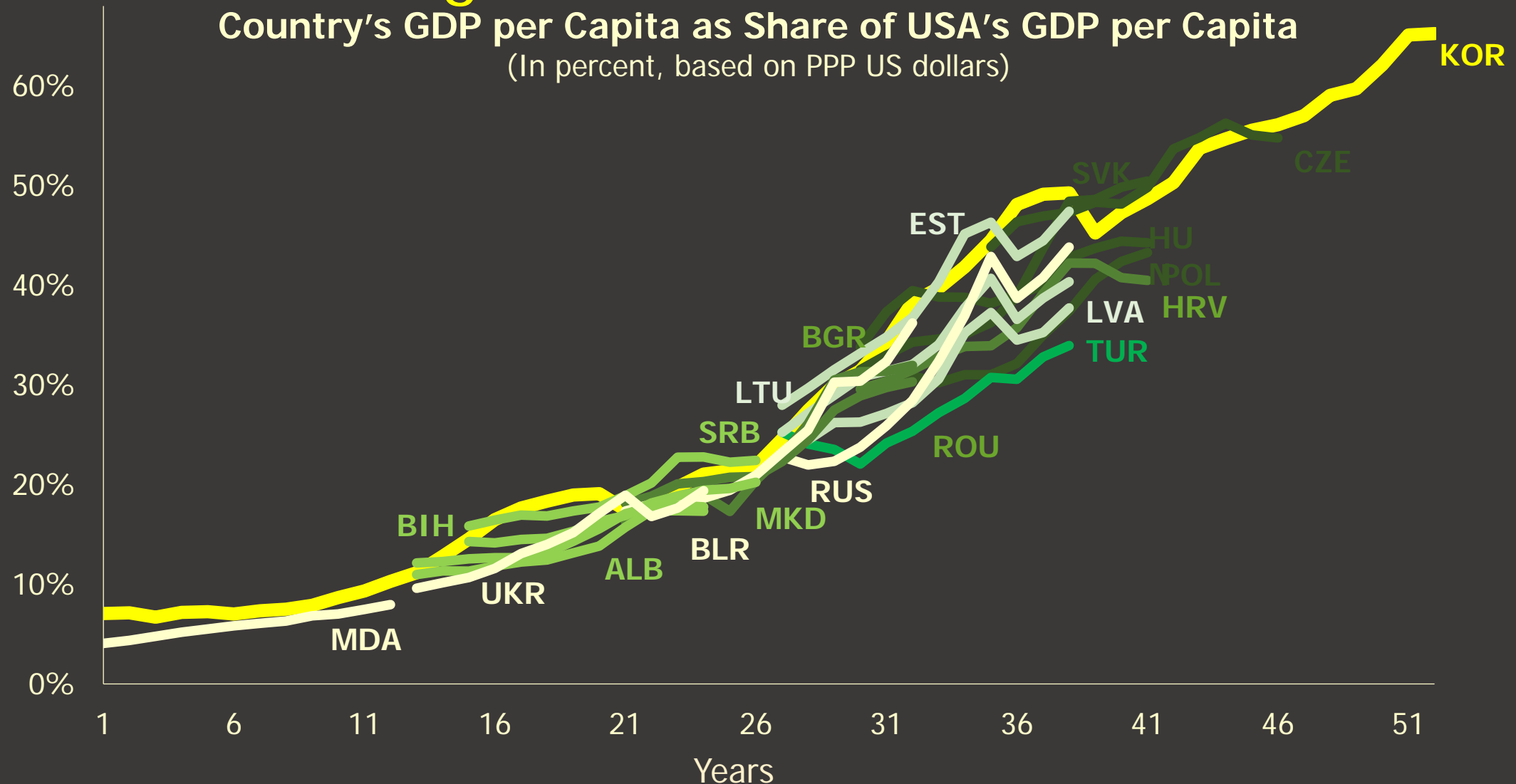
■ Better governance and institutions key to increasing productivity and spurring innovation

■ Retaining/attracting skilled workers and fostering competition are the main economic channels through which governance helps



# Additional Slides

# CESEE: Convergence

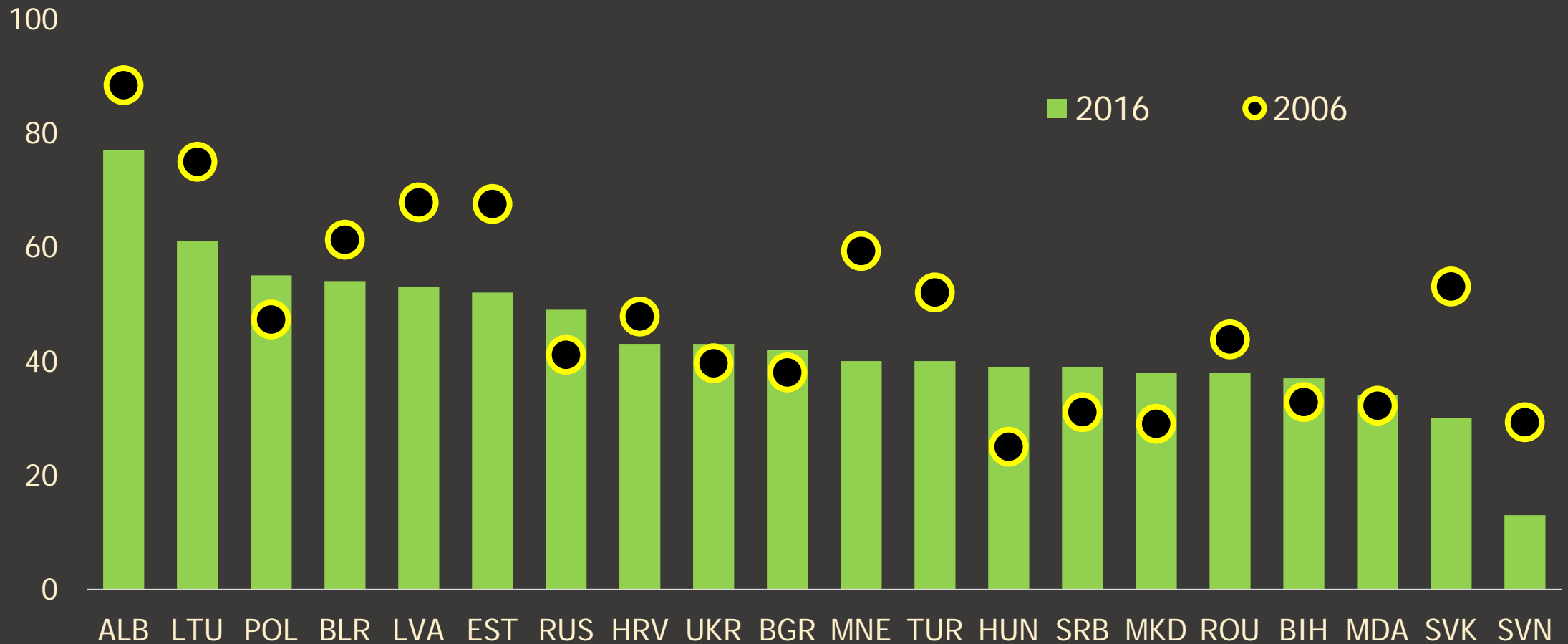


Sources: Penn World Tables, Version 8.1, Haver, and IMF staff.

Note: Each short line represents the transition path of a CESEE country over 2000-2011. The position of each CESEE line shows how its transition path compared to Korea's, when Korea was at the similar level of development. The x-axis represents years of Korea's transition from 1960 to 2011.

# People have mixed expectations about the future

Will future generations have a better life than the current generation?  
(Percent of respondents who agree)



# Investment

## Reported Adequacy of Investment in the Last 3 Years

(Percent of all firms who report investing about right or more)

