

# STRUCTURAL REFORMS AND GROWTH

## JVI ALUMNI MEETING IN MOLDOVA

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 Joint Vienna Institute  
 April 28, 2015

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## Agenda

Economic Convergence and Challenges

Role of Structural Reforms

Structural Reforms in Moldova

Conclusions

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## Economic growth matters, but also the quality of growth



**Inclusive = Broad-based**  
life improvement for all income groups

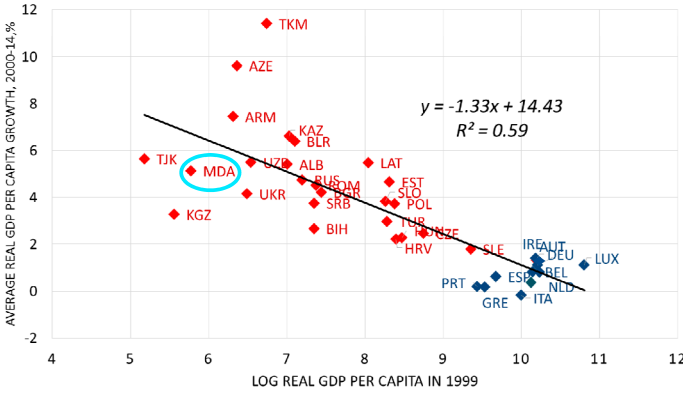


**Sustainable**  
current path of welfare/ consumption can be sustained in the future

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## Convergence: JVI Target Countries with Lower Initial Income Tended to Grow Faster

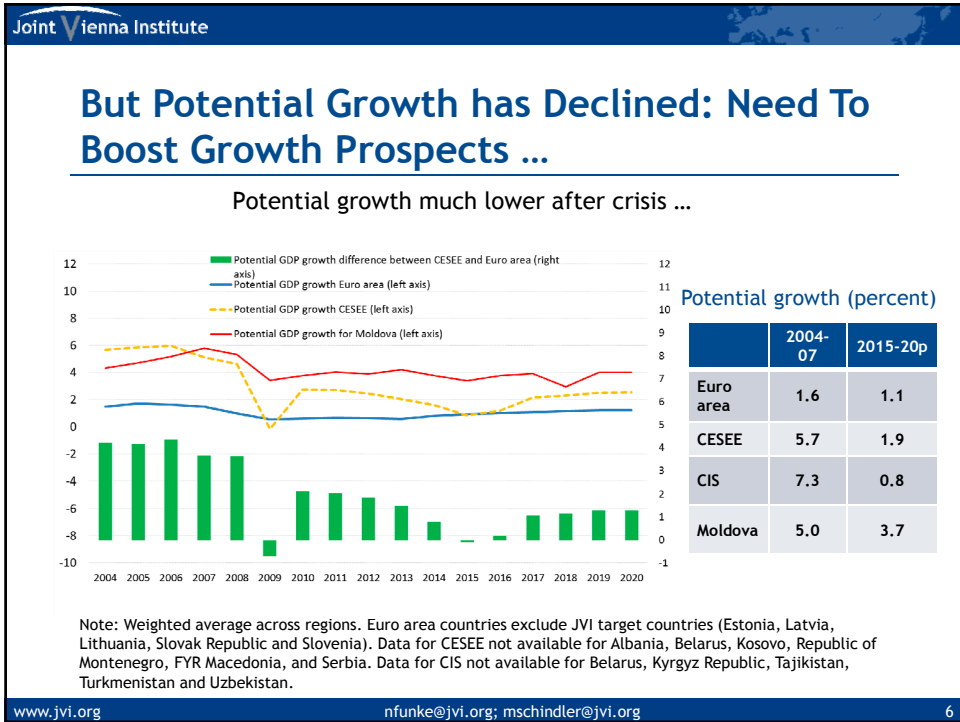
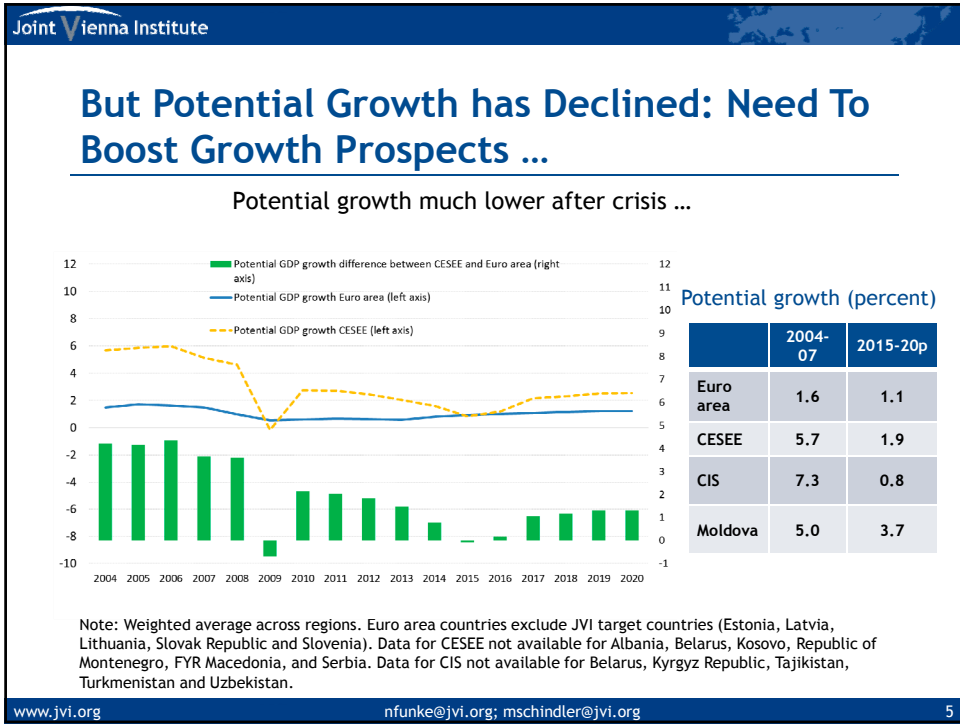


$y = -1.33x + 14.43$   
 $R^2 = 0.59$

◆ CESEE and CA countries      ◆ Euro area countries as of 1999

Source: IMF World Economic Outlook, April 2015

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- Role of Structural Reforms**
- Structural Reforms in Moldova
- Conclusions

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## Structural Reforms: Multiple Objectives and Multiple Reform Areas

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Institutions, Governance	Infrastructure, Health and Education
<p><b>Increase Growth</b>  <b>Raise Competitiveness</b>  <b>Reduce Vulnerabilities</b></p>	
Innovation, Technology	Business Climate, Goods Markets, Labor Markets, Financial Sector

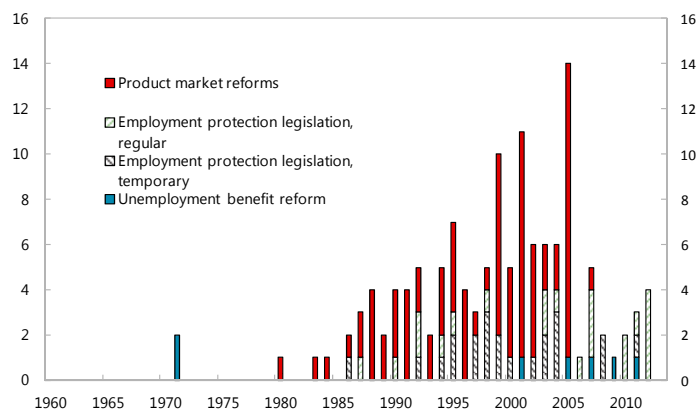
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## Measuring Structural Reforms is Not Easy

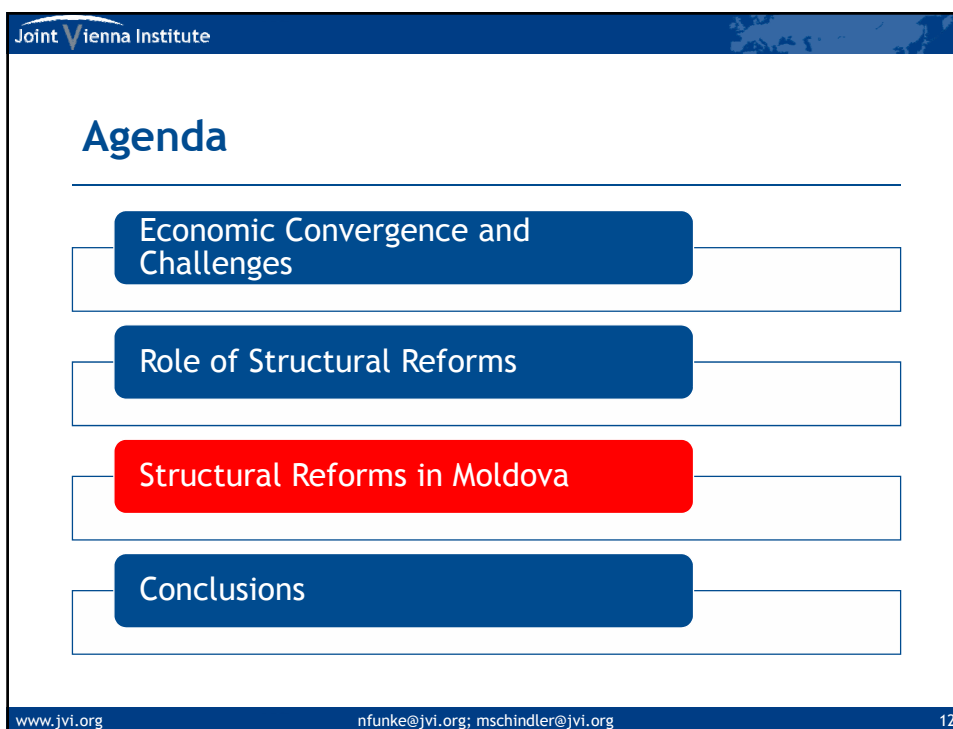
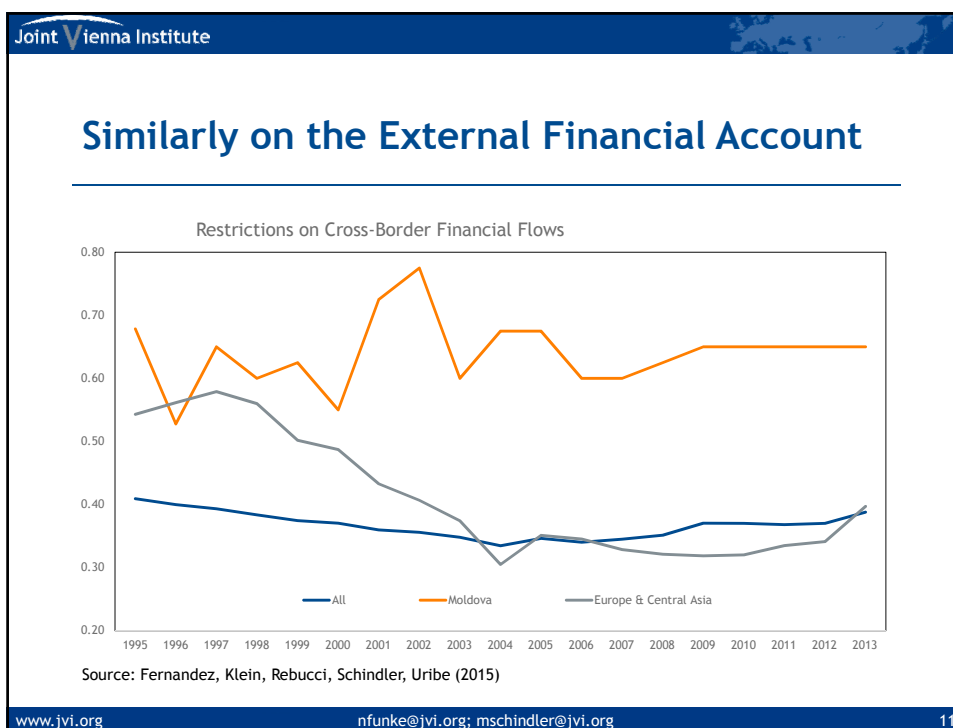
- Indicators
  - Plenty of directions, areas; hundreds of possible indicators
  - Longer historical time series practically unavailable
  - Luckily, profusion of indicators in 2000s
- Outcome-based vs. direct reform measures  
/ De-facto vs. de-jure measures
  - Presence of interest rate controls vs. loan-deposit rate difference
  - Heavy employment protection regulation vs. size of informal labor markets
  - Capital flows vs. capital controls

## Some Domestic Reform Progress Until Mid-2000s But Slowdown Since Then

Number of reforms



Note: Sample covers OECD countries only.  
Source: OECD and IMF Staff calculations.



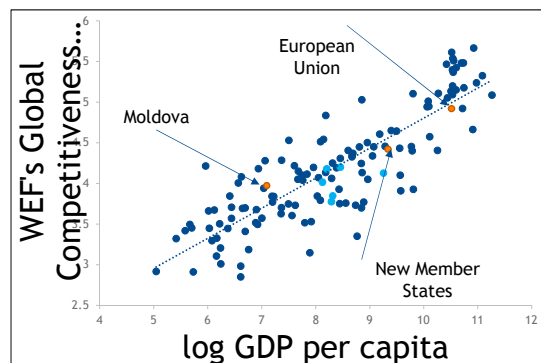
## Analysis Focuses on Global Competitiveness Index

- Global Competitiveness Index published by World Economic Forum
- 144 Countries
- Twelve pillars capture different aspects of competitiveness

1 - Institutions,  
 2 - Infrastructure  
 3 - Macroeconomic Environment  
 4 - Health and Primary Education,  
 5 - Higher Education and Training,  
 6 - Goods Markets Efficiency,  
 7 - Labor Markets Efficiency,  
 8 - Financial Markets Development,  
 9 - Technological Readiness,  
 10 - Market Size  
 11 - Business Sophistication,  
 12 - Innovation.

Pillars marked in red not considered in following analysis

## Structural Reforms Positively Correlated with Higher Growth



Sources: World Economic Forum; IMF WEO, and IMF staff calculations.

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## How To Identify Reform Priorities?

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Analysis of Reform Gaps, compared to Peers, NMS, EU average

Growth Regressions

Large Gap and Reform Area with Large Impact on Growth = High Reform Priority

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## Steps to Calculating Reform Gaps

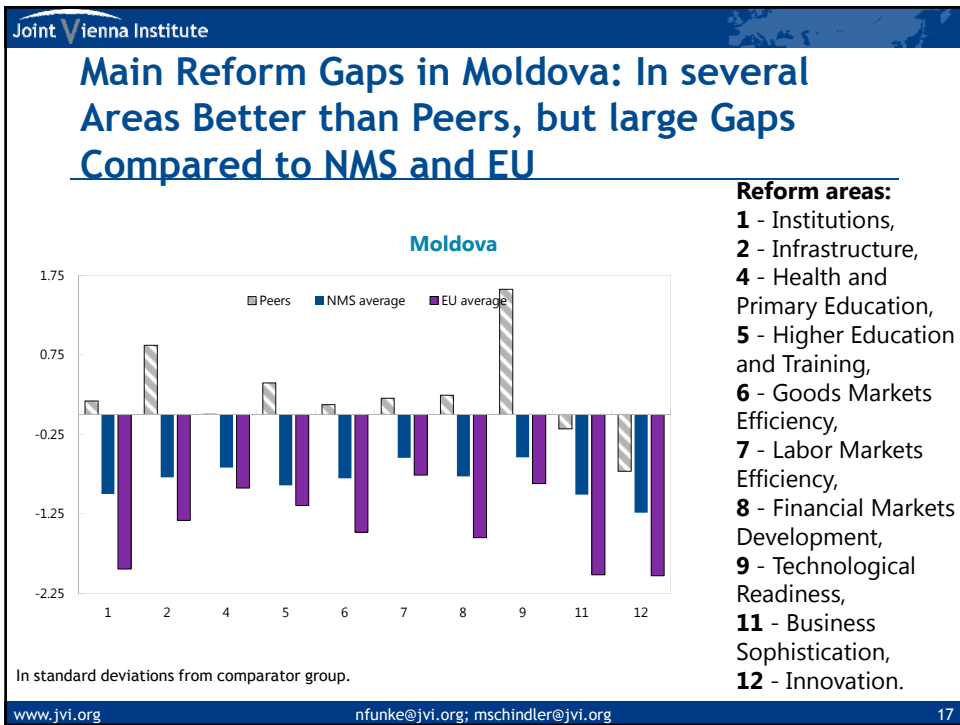
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1.  $I_i^k = \alpha + \beta X_i + \epsilon_i$
2.  $gap_i^k = I_i^k - \hat{\alpha} - \hat{\beta} X_i$

where  $I$  is indicator  $k$  in country  $i$ ;  $X$  is the set of controls—GDP per capita, geographical location ( dummy for the sub-Saharan region), common historical past ( Emerging Europe dummy), and a dummy for resource-richness

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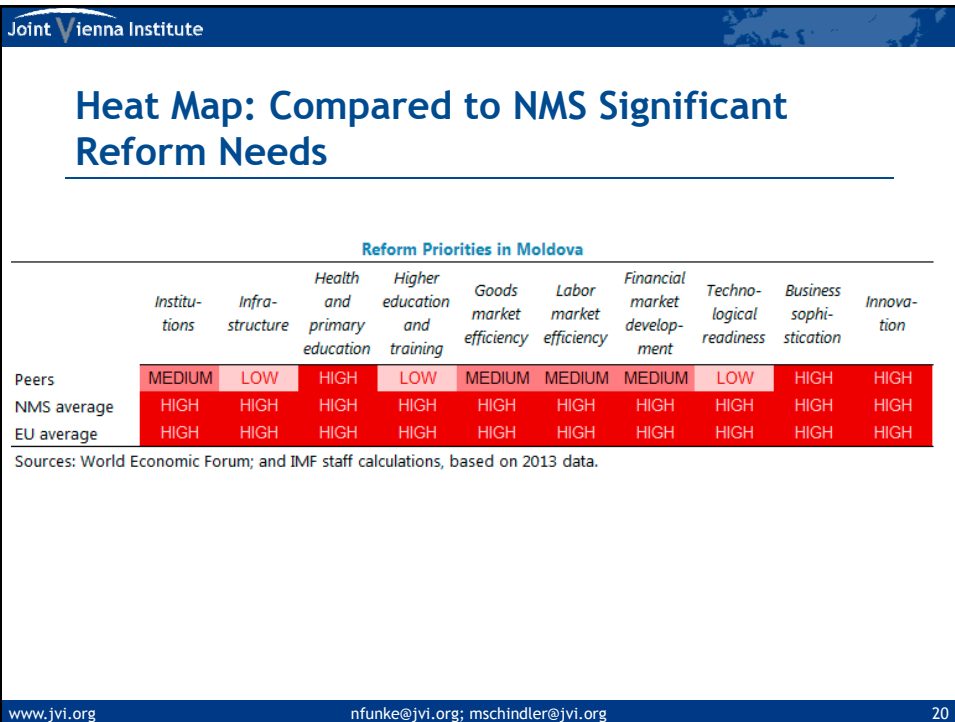
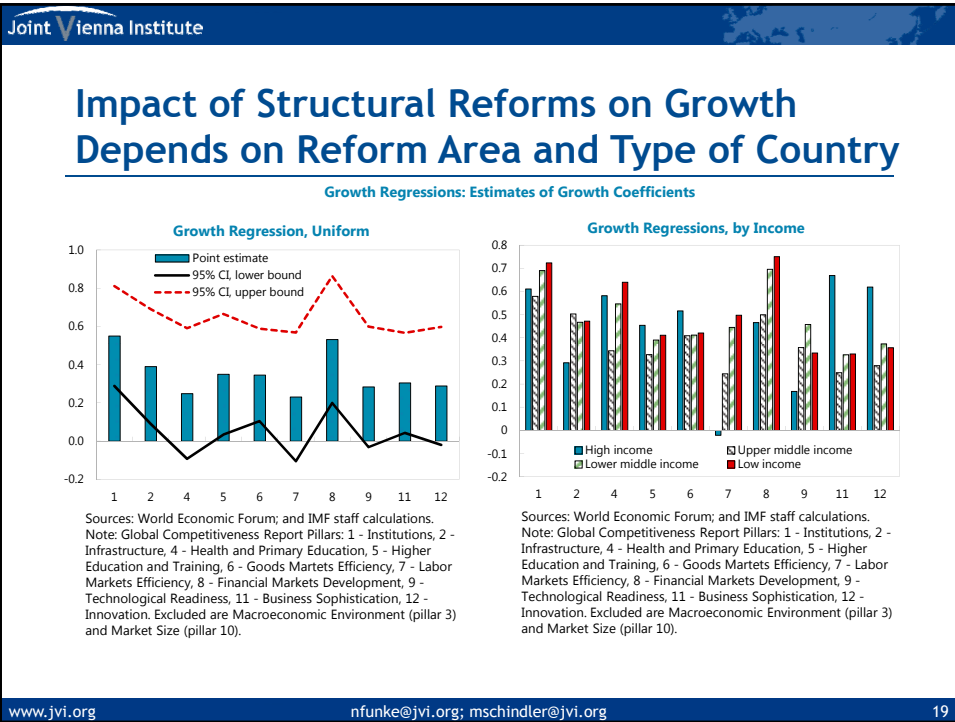
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## Large Gaps for Selected Reform Areas <sup>1/</sup>

<b>Institutions</b>	<ul style="list-style-type: none"> <li>Judicial independence, property rights, intellectual property protection</li> <li>Diversion of public funds, irregular payments and bribes, reliability of police</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>Quality of roads</li> <li>Overall quality of infrastructure</li> </ul>
<b>Goods Market</b>	<ul style="list-style-type: none"> <li>Agricultural policy costs</li> <li>Effect of anti monopoly policy, burden of customs procedures, degree of customer orientation</li> </ul>
<b>Labor Market</b>	<ul style="list-style-type: none"> <li>Capacity to attract and retain talent</li> <li>Effect of taxation on incentives to work</li> </ul>
<b>Financial Sector</b>	<ul style="list-style-type: none"> <li>Availability of financial services</li> <li>Regulation of securities exchange</li> </ul>

<sup>1/</sup> Large gaps are defined as those where the respective indicator is at least 1 standard deviation below that of the average EU New Member State.

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## Many Factors Affect the Reform Impact

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- Lags: reform impact takes time to materialize (possibly negative in the short run)
  - E.g., reducing firing restrictions → short-term increase in U
  - Bouis et al. (2012): 3-5 years on average for full impact
- Timing of reforms: are reforms more effective in booms or recessions?
  - Empirical findings unclear (Bouis et al.; IMF)
  - Let no crisis go to waste

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## Conclusions

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Structural reforms can increase growth, improve competitiveness, and reduce vulnerabilities

Identification of reform priorities - reform gaps, growth impact, list of key reforms

According to growth regressions, reforms in institutions and financial markets particularly important

Considerations beyond the analysis - complementarity of reforms, timing, lags, political economy considerations