



**“The future of corporate financing
in an integrating EU financial market”
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New Evidence on the Finance-Growth- Nexus in the enlarged EU

Relevance of financial system performance and investigation of the finance-growth link in the enlarged EU

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* The opinions expressed are the authors' personal views



Research Project: The Finance - Growth - Nexus

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NEXUS WebPage:
<http://www2.wu-wien.ac.at/europainstitut/ef/nexus.html>

Overview

- **Research Issue / Motivation / Conclusions**
- **features of NMS/CEE and SEE financial markets**
- **Finance-Growth Nexus**
 - **EU/USA historic & more recent data**
 - **CEE/AC (credit, bond and stock markets)**
 - **the role of foreign banks**
 - **bond market size**
- **Conclusions**



Research Issue

- **contribution of the financial sector to growth?**
- **of the individual segments (credit, bond, stock)?**
- **in the New Member States / Accession Countries?**
- **what is the role of foreign banks?**

Motivation

- **importance to EU economy**
- **mixed empirical findings**
- **specific transition situation in CEE/SEE**



Key Messages



- **bond markets & bank credit contributed to growth in transition**
- **foreign direct investment in CEE financial sector helped to stabilize banks and markets and improved efficiency**
- **regional approaches advisable to achieve critical size of capital markets**
- **need for broadening the finance-growth-nexus**

Overview on Financial Markets in CEE



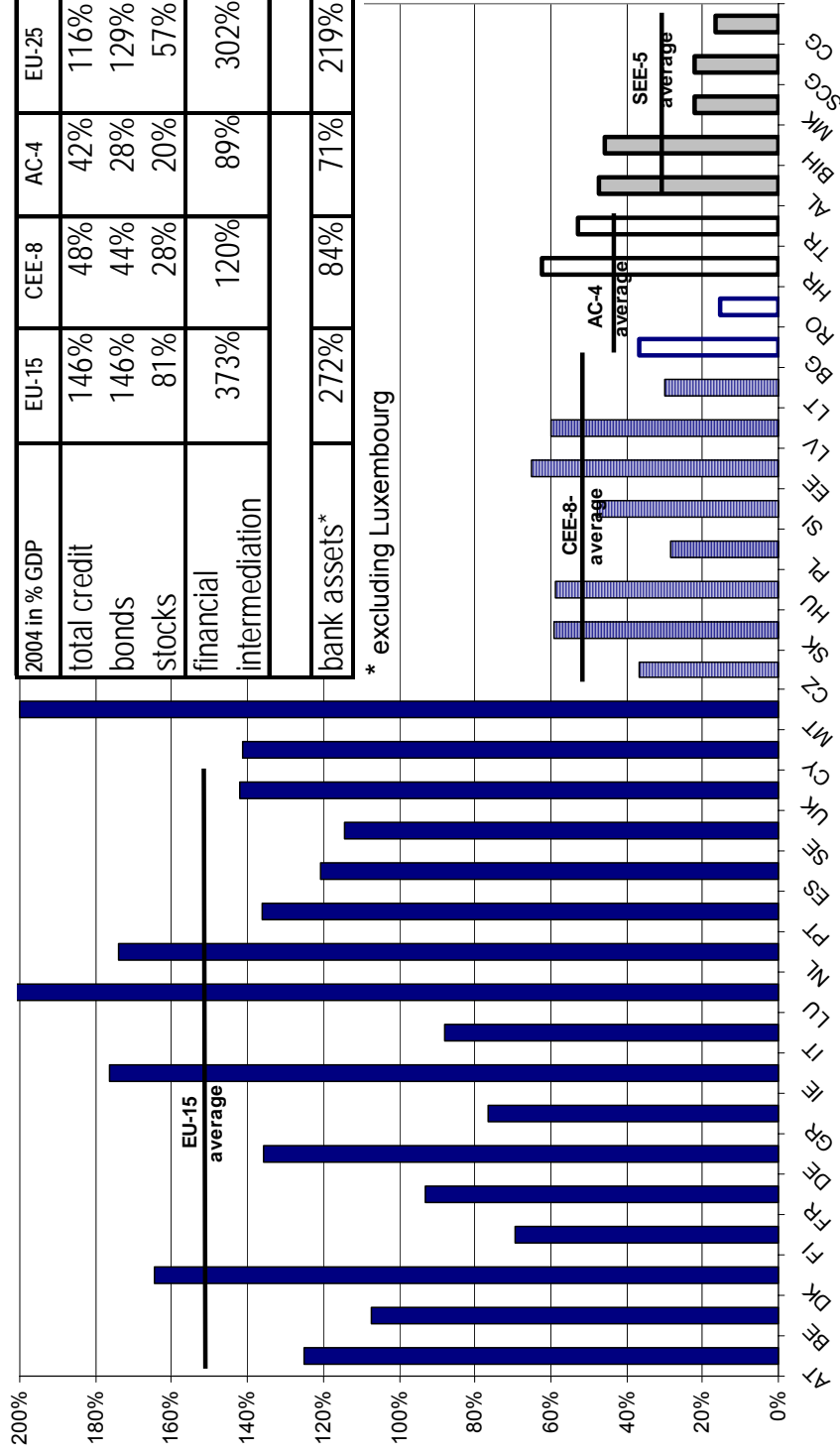
- **successfully converged towards a bank-based system**
- **structural differences prevail compared to EU-15**
 - **low level of financial intermediation**
 - **high, retail & FX-driven loan growth**
 - **higher foreign involvement and concentration**
 - **improving loan structure (NPL, maturity & spread)**

Overview on Financial Markets



lower financial intermediation

Total Credit in Percent of GDP (2004)

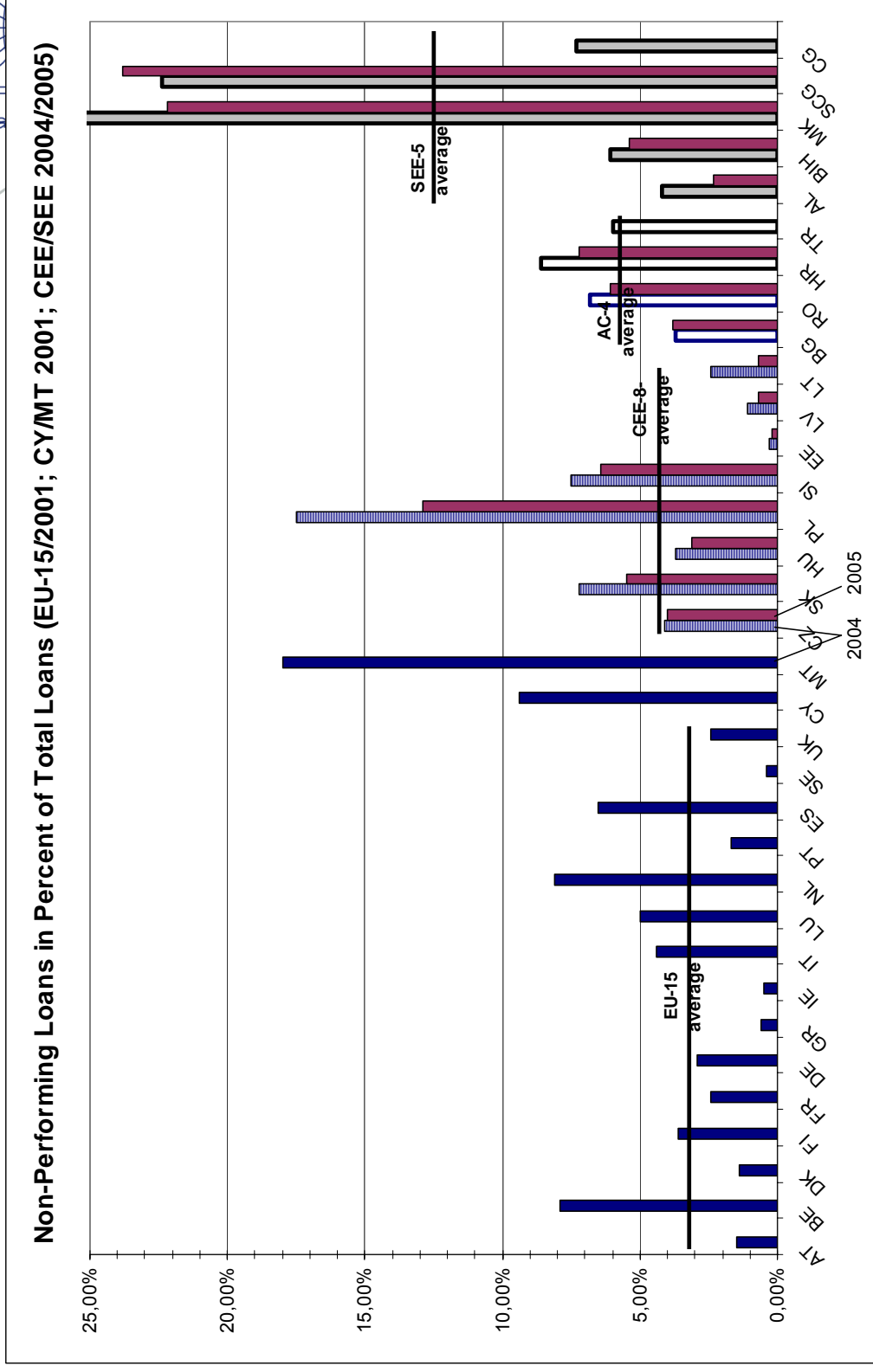


* excluding Luxembourg

Overview on Financial Markets

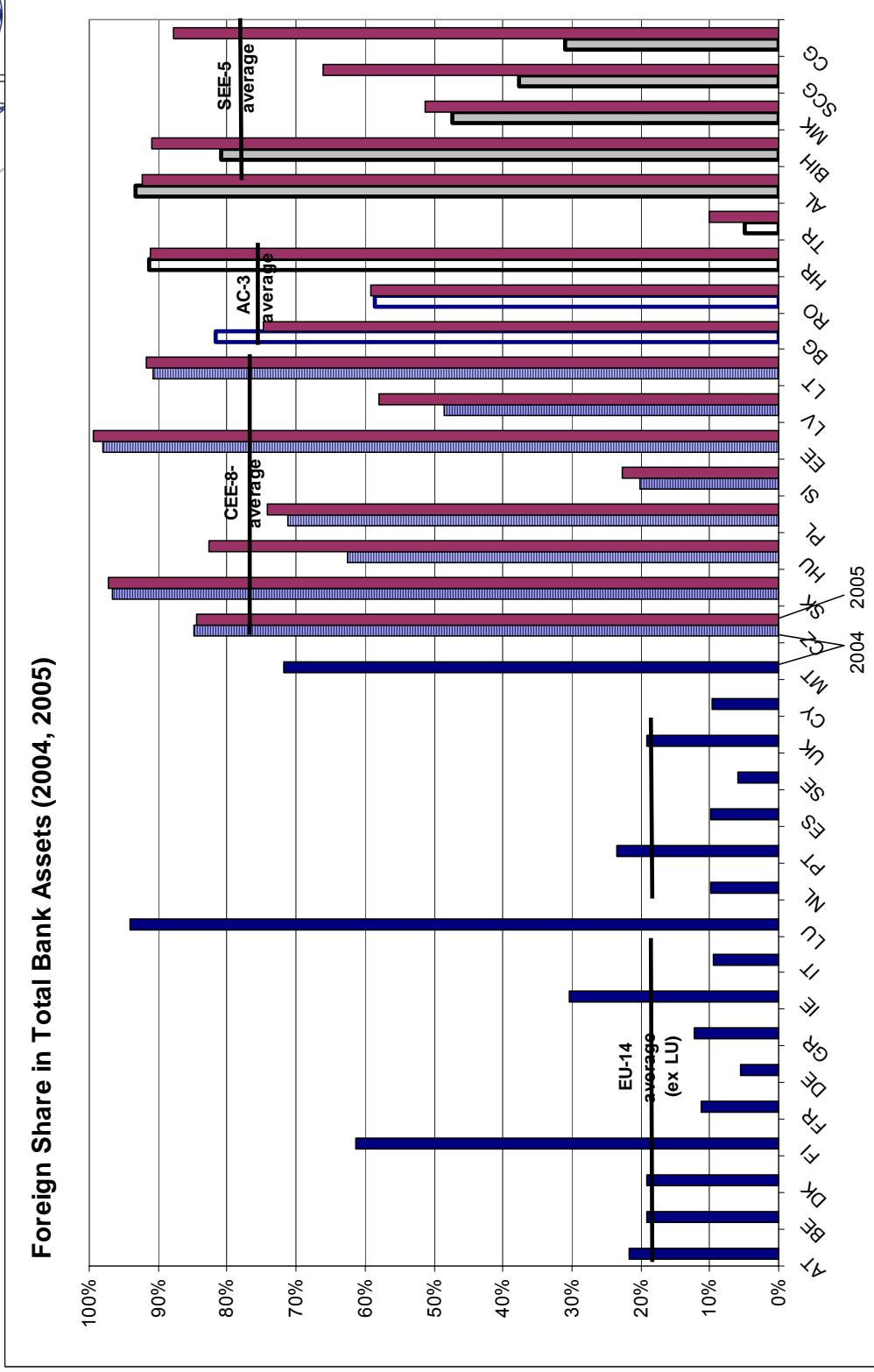


- (mostly) improved share of non-performing loans



Overview on financial markets

- higher foreign share in total bank assets



Data Source: ECB (2005, 2006); EBRD (2005); Allen, Bartiolo, Kowalewski (2005); BA-CA (2006a, b)

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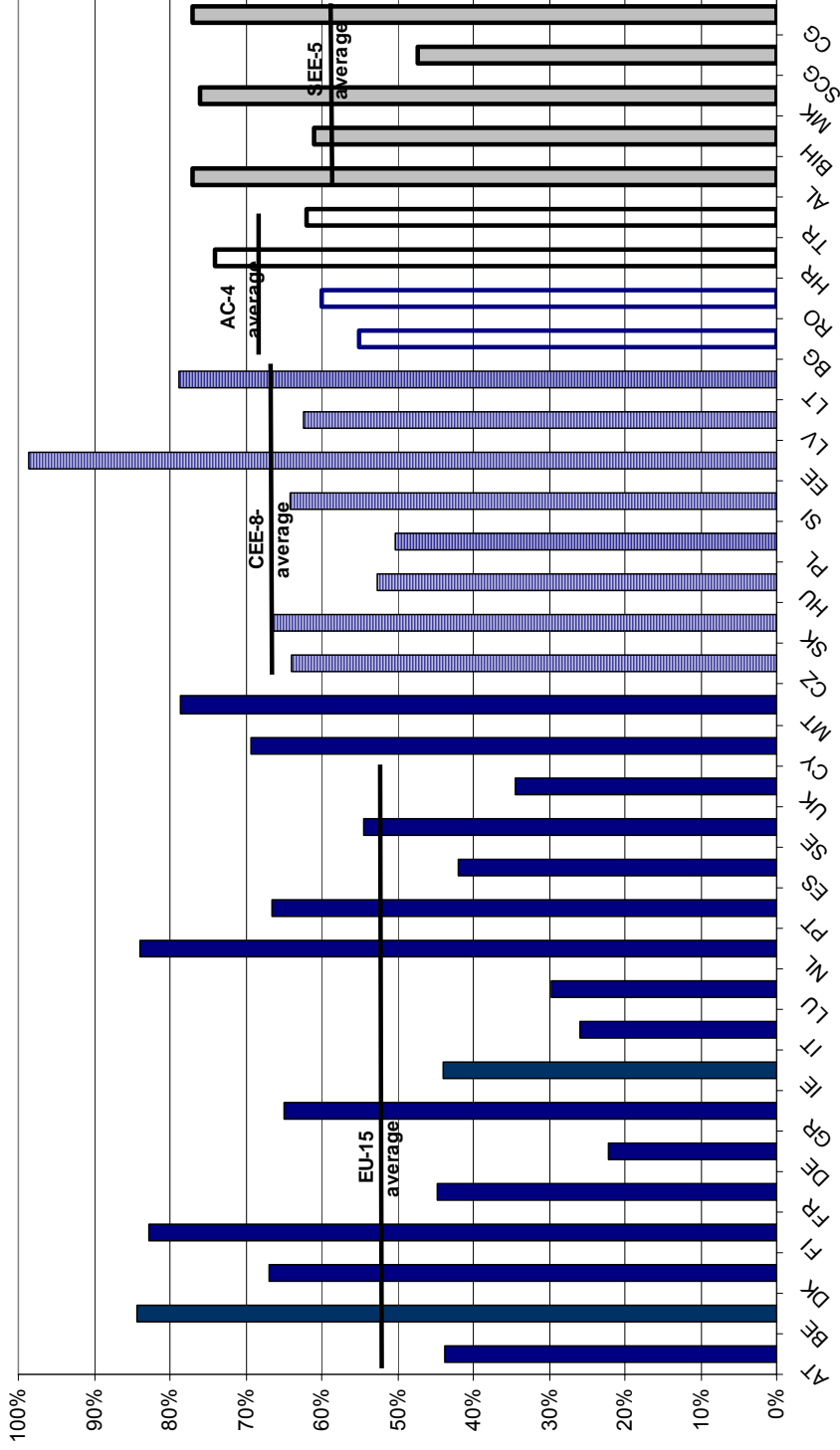


Overview on financial markets

■ higher banking market concentration



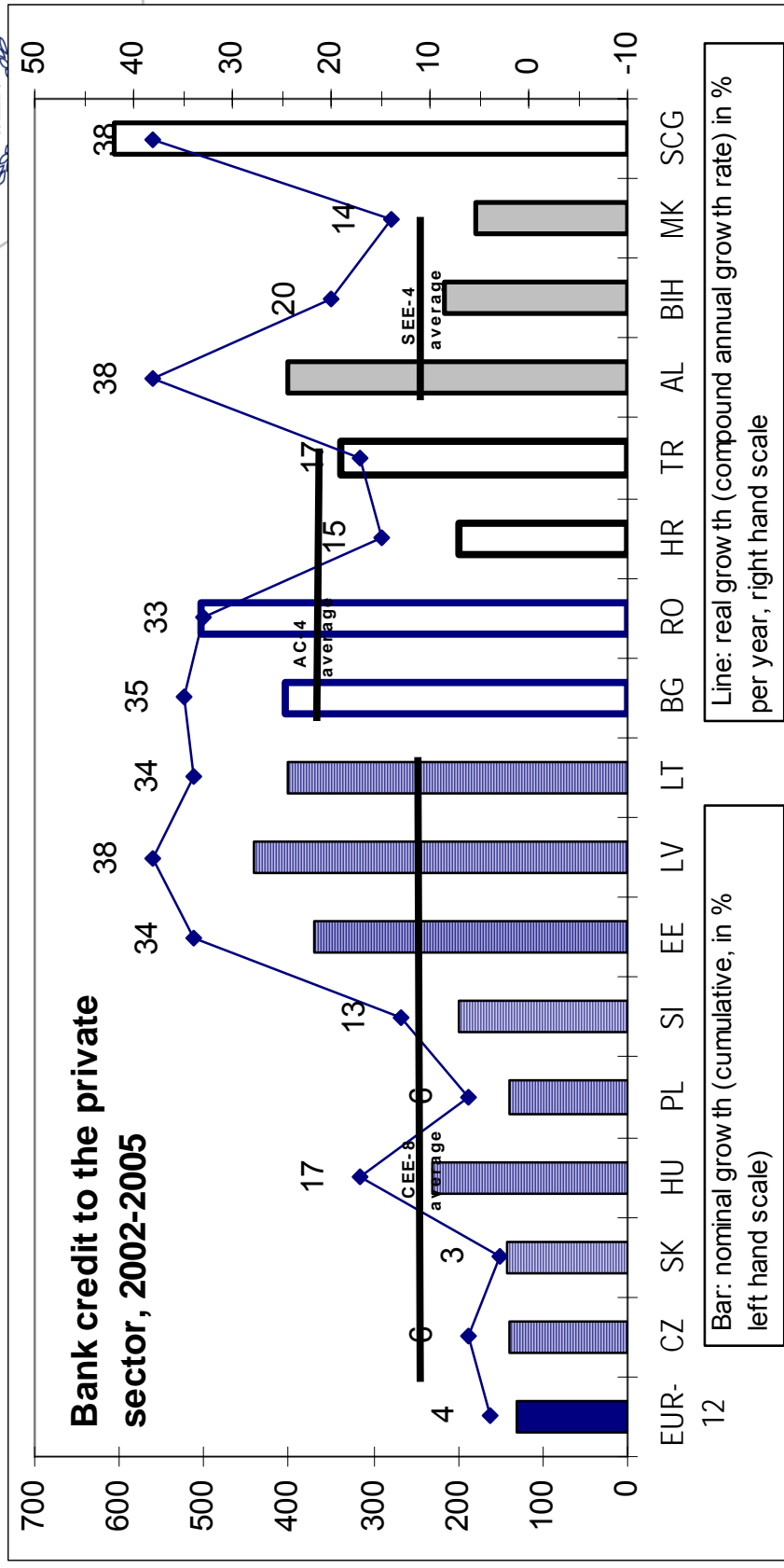
Share of the Five Largest Credit Institutions in Total Assets in Percent (CR5, 2004)



Structural Issues



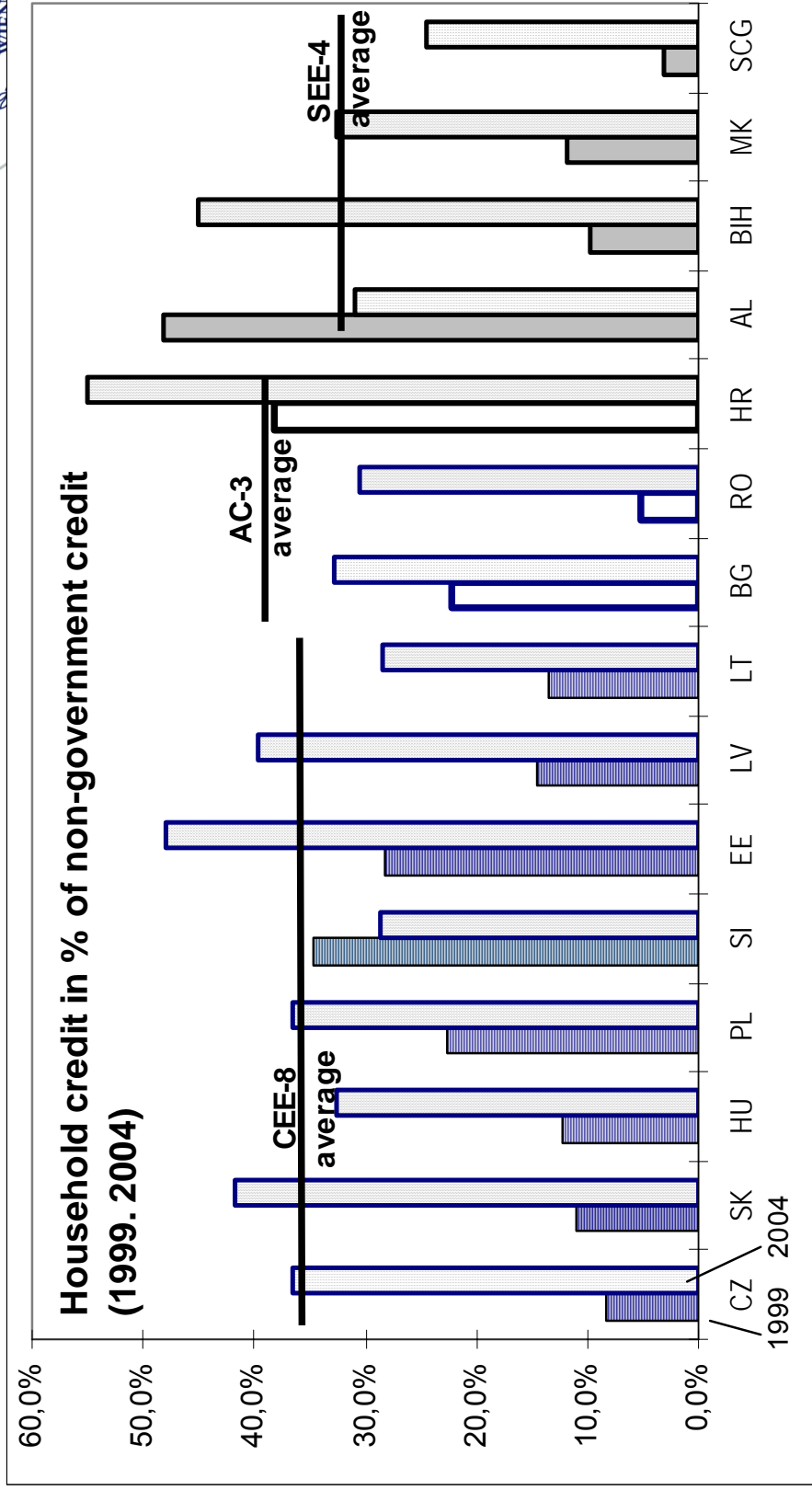
■ Rapid growth of private sector credit



Data source: Mihaljek (2006)

Structural Issues

■ Retail loans are the major growth driver

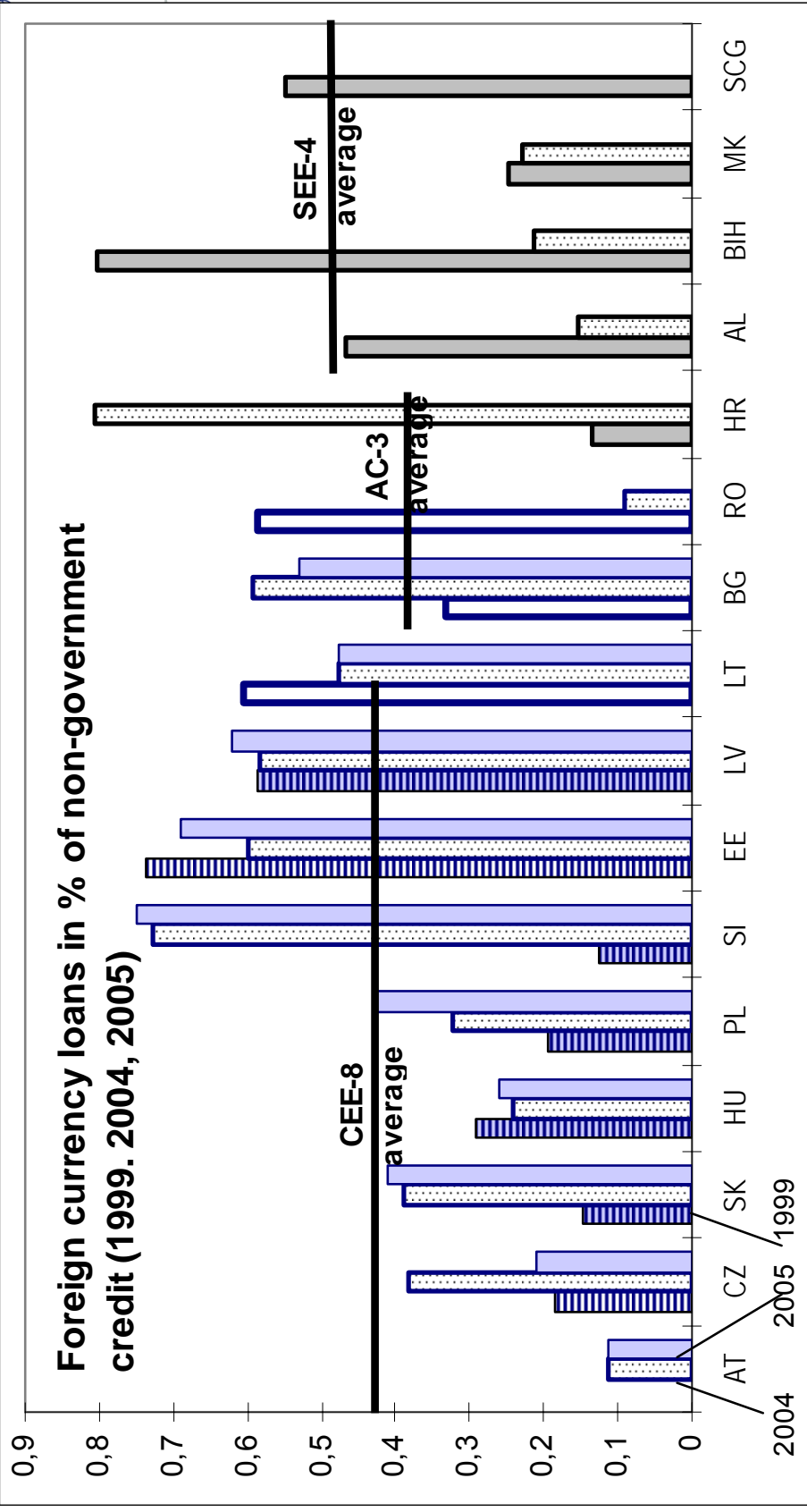


Data source: EBRD (2005)

Structural Issues



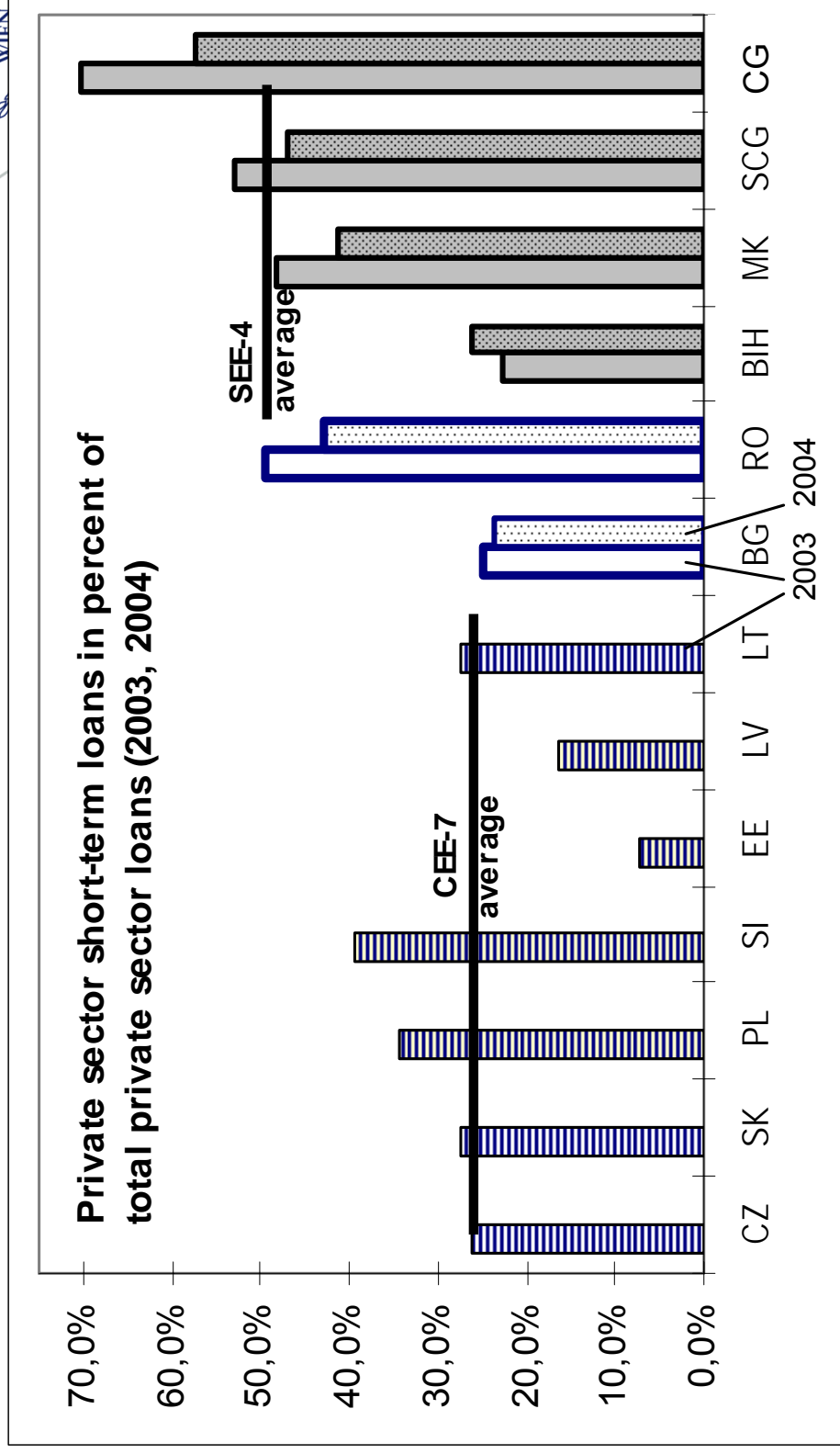
High share of foreign currency (FX) lending



Data source: EBRD (2005), BA-CA (2005b)

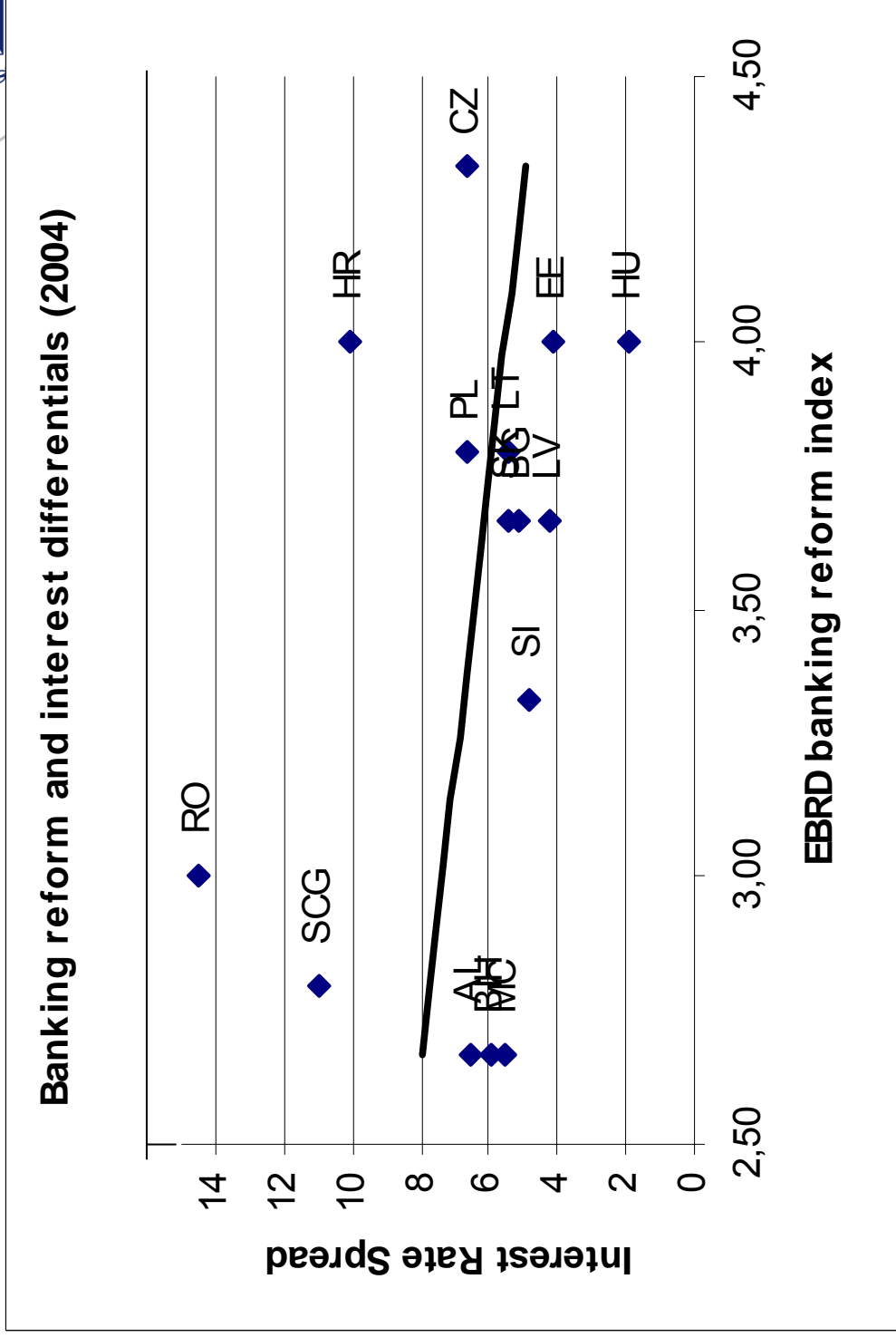
Structural Issues

■ short-term loans in SEE: higher, but shrinking



Structural Issues

■ Reform efforts show results



Source: Haiss (2006) following Kraft (2005)

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Nexus results for EU-5, USA, JPN, CH



- **Long range time series studies (1951-2001 annual data)**
 - Granger causality of financial markets to growth in selected countries only: USA, UK, DE, CH, AT
 - bilateral causalities in JPN and NL
 - a positive impact of bank markets on growth at earlier stages of development.
- **Short range studies (quarterly data) over recent periods**
 - in some countries Granger causality of economic growth to issues of government bonds;
 - Granger causality of bank and corporate bonds to growth
 - overall growth of financial intermediation had either no significant effect on growth or it had negatively affected economic growth.

- **note: bond markets included for the first time!**

Nexus results for CEE/AC*



EU & industrialized countries:

- growth of aggregate intermediation either no significant or a negative effect on growth
 - significant: capital accumulation, education and labor participation
- **EU accession countries:**
 - positive and significant impact of aggregate financial development
 - bonds and domestic credit turned out as important determinant
 - stock markets and private credit had no significant effects

• EU structural fund countries:

- positive influence of bond markets on economic growth,
- negative impact of domestic credit,
- no significant effect of aggregate financial intermediation on growth,
- positive impact of level of education and capital accumulation

* production function approach (Mankiw, Romer, Weil, 1992): physical capital stock, labor participation, human capital; added credit, bond, stock; aggregate financial sector

Interpretation of nexus results



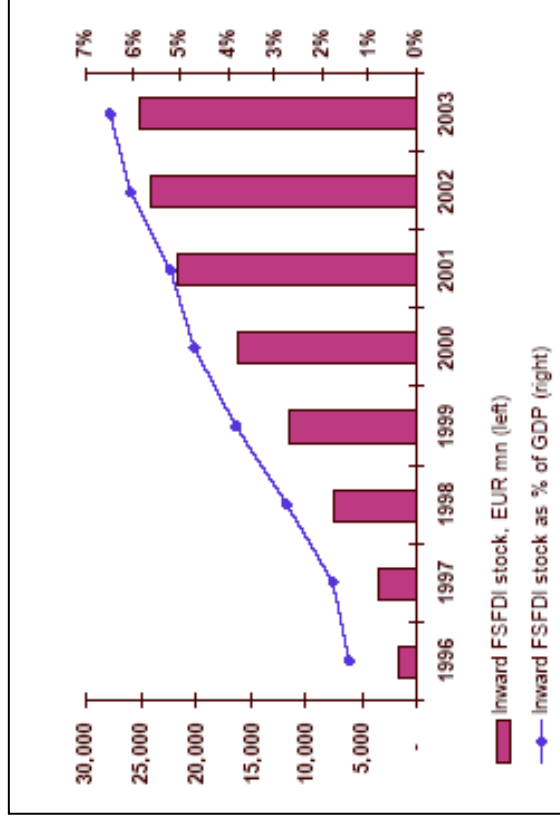
- **CEE / Accession Countries**
 - financial funds channeled through the combination of public and private sectors seem to provide stronger growth triggers than those channeled solely through the private sector
 - possible obstacles hindering private credit and stock markets to exploit their full potential need to be explored further
- **results are more differentiated than Rousseau & Wachtel (2005)**
 - the widely accepted aggregate effect of finance on growth found in broad 1960-1989 country samples vanishes since early 90ies
 - finance-growth impact varies with the level of economic development
 - payoff for financial deepening is strongest for middle range countries and for bond market development
 - Rajan (2005) “one can no longer just examine the state of the banking system to reach conclusions about credit reaction”
 - country characteristics need to be considered

Inflow of Financial Sector-FDI to CEE

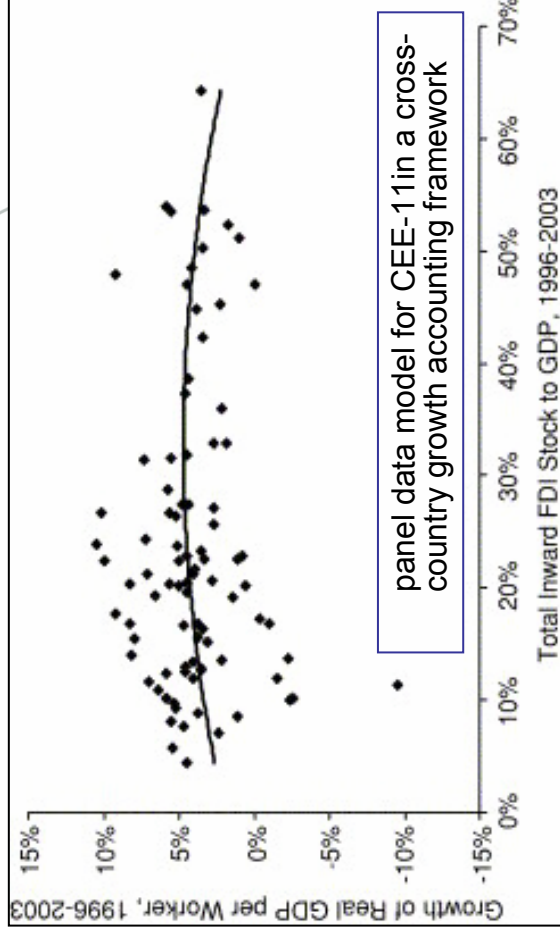


approach: combine FDI-growth research with finance-growth-nexus

Inflow of FSFDI to CEE



Can FSFDI spur growth? Yes:



- medium FSFDI supports growth if human capital suffices
- above a certain threshold, crowding out of local physical capital via foreign bank entry may slow growth
- level & quality of FSFDI influences contribution to growth

Bond market size



- **bond markets can support financial stability and improve growth**
 - long term (bond) interest rate is a prerequisite for EMU
 - but: are 25 single EU bond markets efficient?
- **size and efficiency**
 - bond market size is usually linked to a country's economy
 - integrated markets as substitute for domestic economic size
 - Jiang/McCauley (2004): critical size about EUR 100bn threshold
 - 25 single EU bond markets are not efficient
- **intra-regional linkups could follow links in trade, FDI & banking**

Conclusions



- **bond markets & bank credit contributed to growth during transition**
- **foreign direct investment in CEE financial sector helped to stabilize banks and markets and improved efficiency**
- **regional approaches advisable to achieve critical size of capital markets**
- **need for broadening the finance-growth-approach**

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