European Commission Project on Effective Tax Rates

MENA-OECD WG3 meeting
January 2009

Jean-Pierre De Laet

The need for ETRs

- ECOFIN Council (1998): Commission mandate for a Comprehensive study on company taxation in the EU on
  - ✓ "differences in effective corporate taxation in the EU"
  - ✓ "effects on the location of economic activity"
- Tax differentials may result in relocation of economic activity or loss of government revenue
- Statutory corporate tax rates provide limited information:
  - ✓ no account for the diversity of elements composing the tax base
  - ✓ no information on interrelations of different tax regimes
- A 'correct' measure for assessing effective tax burdens involves the application of the tax rate to the tax base

The need for ETRs

- Ideally ETRs are calculated using detailed firm-level micro data. However:
  - ✓ backward-looking indicators depends on past history of the firm
  - ✓ identical firms may face different economic conditions
- Analysis of the impact of taxation on investment behaviour requires forward-looking indicators which
  - ✓ includes the relevant taxes triggered by corporate investment
  - ✓ make abstraction of the influence of the economic conditions.
- Comparability with previous studies (Commission, OECD)
  - ✓ Study carried out by ZEW, Mannheim
  - ✓ Cost of capital, EATR
  - ✓ Domestic and cross-border investment

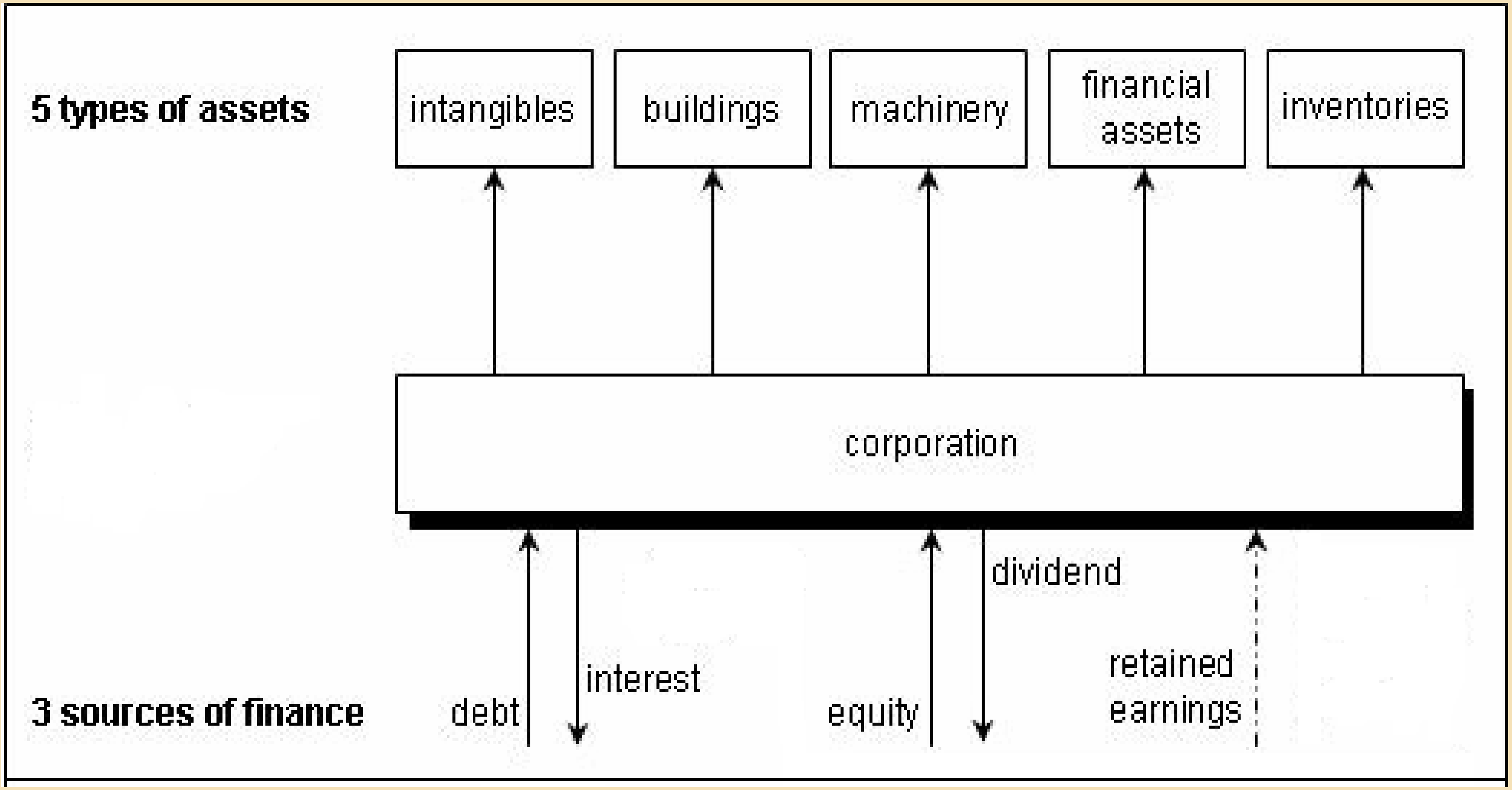
New features

- Full coverage of EU MS after EU enlargement
  - ✓ a broader range of tax policies
- The production of time series of ETRs for the EU 27 (1998-2007)
  - ✓ understand the dynamic effects of reforms in progress
  - ✓ observe trends in tax rates + tax base
- Computation of specific ETRs for SME corporations and partnerships
  - ✓ analytical input for a DG Enterprise study

Methodology

- Devereux/Griffith approach (1999,2003)
- Hypothetical investment :
  - o in a specific country (cost of capital, EMTR)
    - ✓ by a resident company (domestic)
    - ✓ by a non-resident company (cross-border)
  - o in two mutually exclusive locations (EATR)
- Investment takes place in one period and generates a return in the next period

Structure of the model



Economic assumptions

- Manufacturing sector (sensitivity analysis for service sector)
- Inflation rate: 2% in all countries
- Profit rate: 20% / minimum rate of return: 5%.
- Financing (unequal weights): retained earnings 55%, new equity 10% and debt 35% (OECD 1991)
- Assets (equal weights): 20% each
- True economic depreciation rate (Ifo Munich, Leibfritz 1989): intangibles (15.35%), industrial buildings (3.1%); machinery (17.5%), financial assets (0%), and inventories (0).

Tax parameters

- Statutory tax rate + surcharges + local profit taxes and special rates applying to specific forms of income and expenditure
- Tax credits associated with dividend payments made from domestic and foreign source in-come, and equalisation taxes
- Capital allowances for industrial buildings, machinery and intangibles / tax treatment of inventories
- Real estate tax, net wealth tax and other non-profit taxes on assets
- Treatment of foreign source dividends and interest received by parent companies from EU subsidiaries; and withholding taxes on dividends and interest paid by subsidiaries in the EU to parent companies.
- Shareholder taxation in the case of SMEs

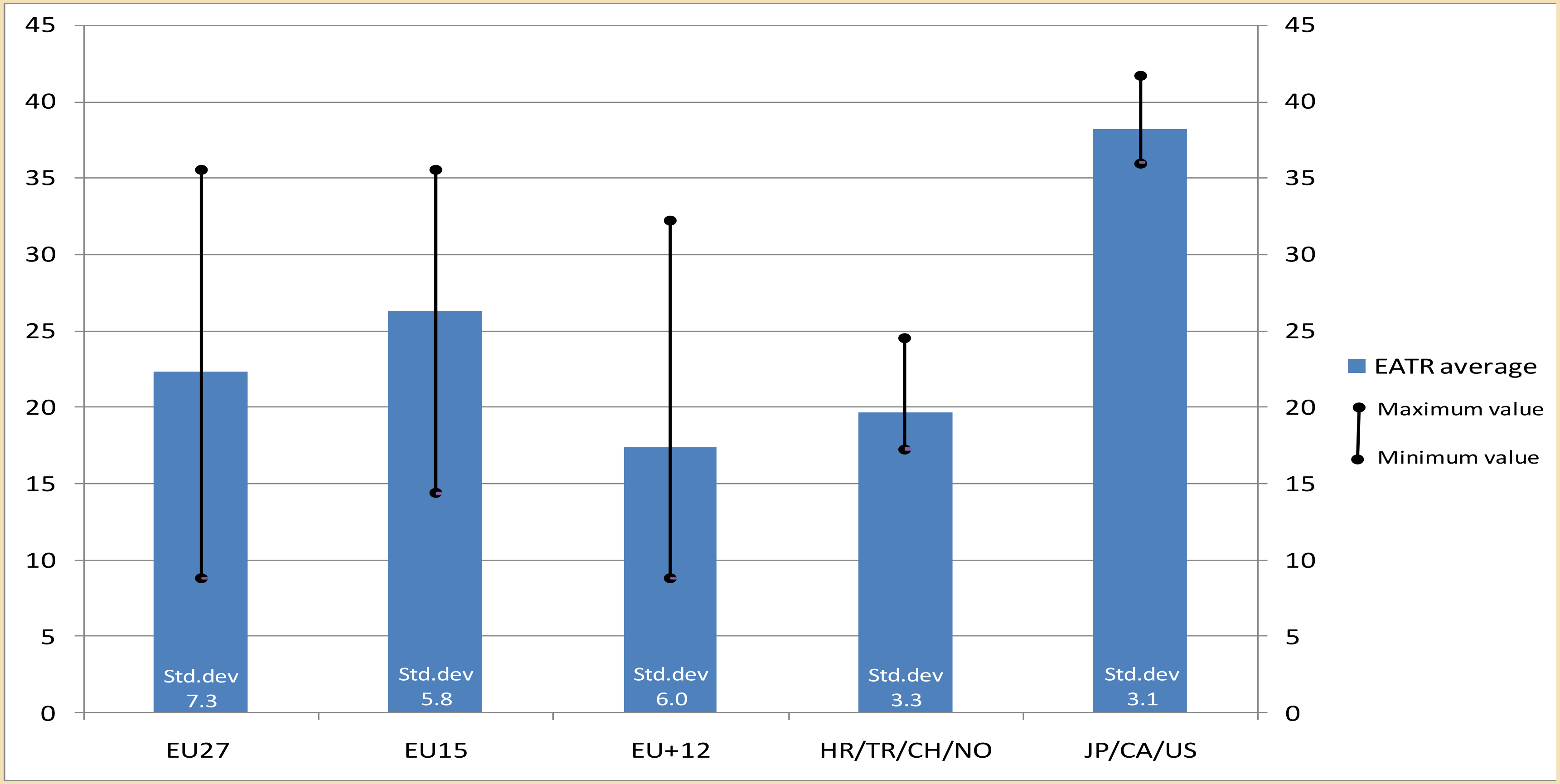
Coverage

Large enterprises			
CIT	domestic + cross-border effective tax rates	1998-2007	EU 25
CIT	domestic + cross-border effective tax rates	2005, 2007	Bulgaria, Romania, Croatia, Turkey, Switzerland, Norway
CIT	domestic + cross-border effective tax rates	2000, 2005, 2007	USA, Canada, Japan

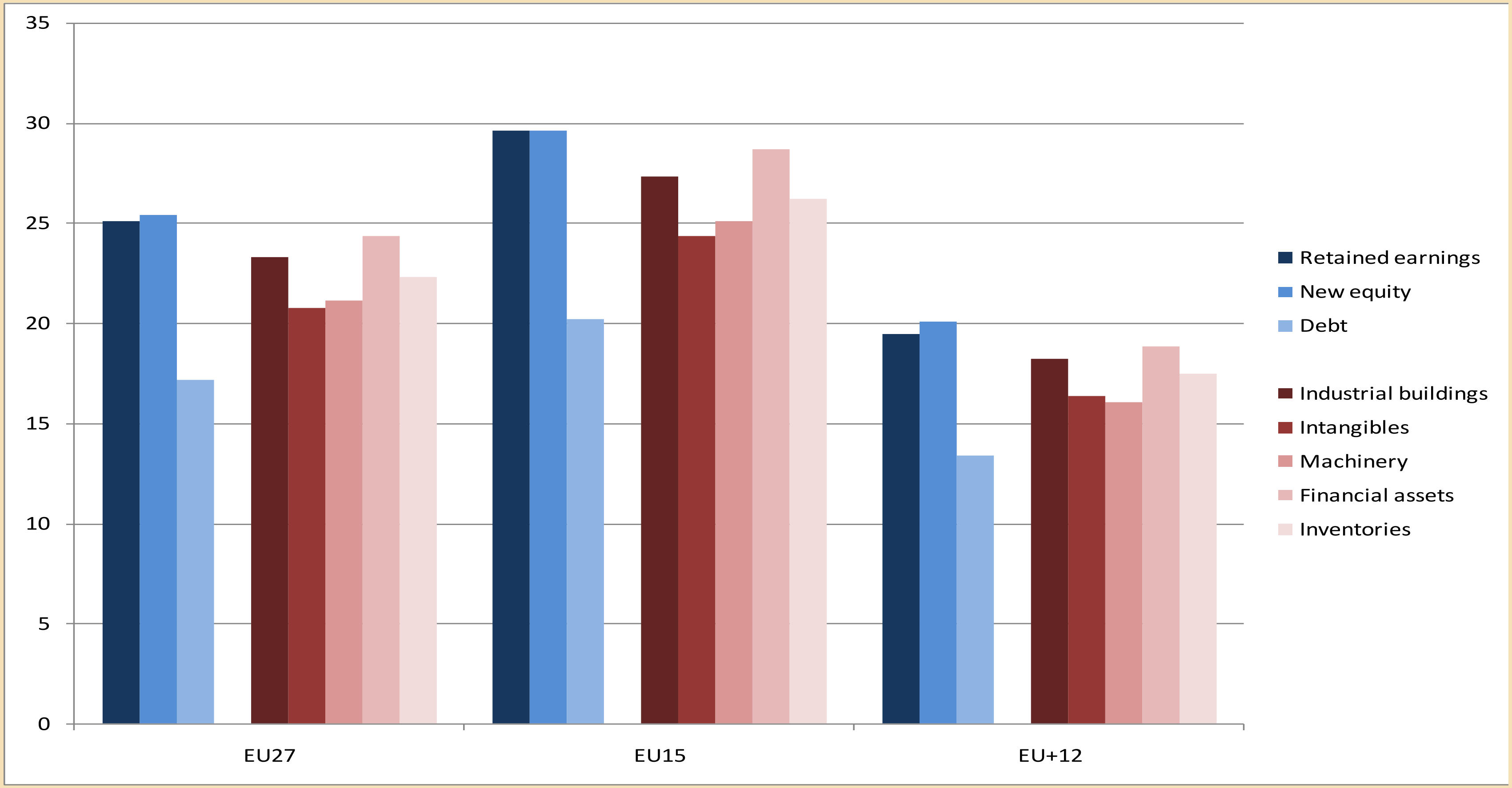
Coverage

Small and medium-sized enterprises			
CIT	domestic effective tax rates	2005, 2007	EU 25
CIT	domestic effective tax rates	2005, 2007	Bulgaria, Romania, Croatia, Turkey, Switzerland, Norway
PIT	domestic effective tax rates	2005, 2007	Germany, France, UK, Italy, Spain, Poland

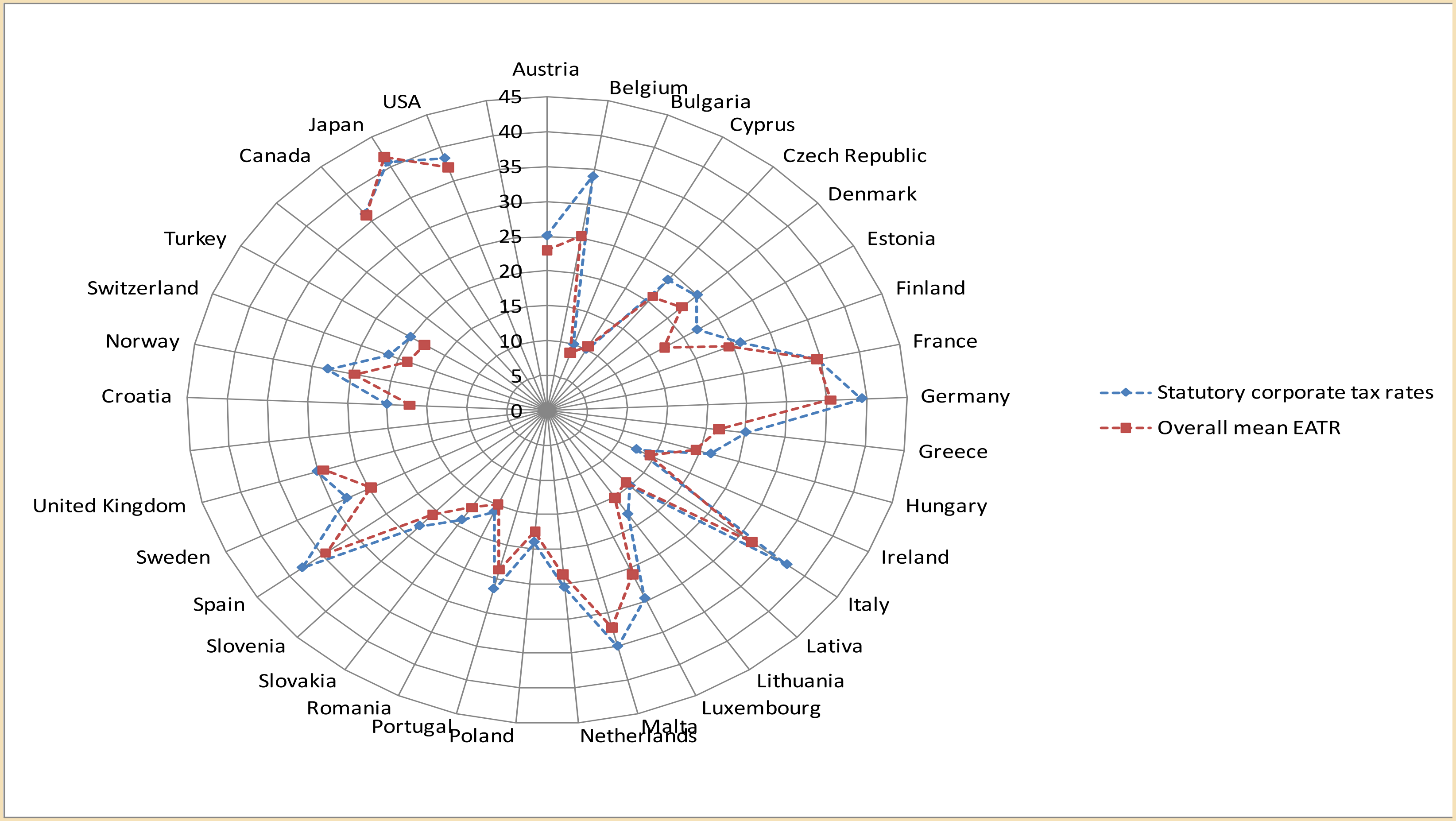
Effective corporate tax burden (EATR) (2007) on domestic investment



Effective corporate tax burden (EATR) (2007) across sources of finance and assets

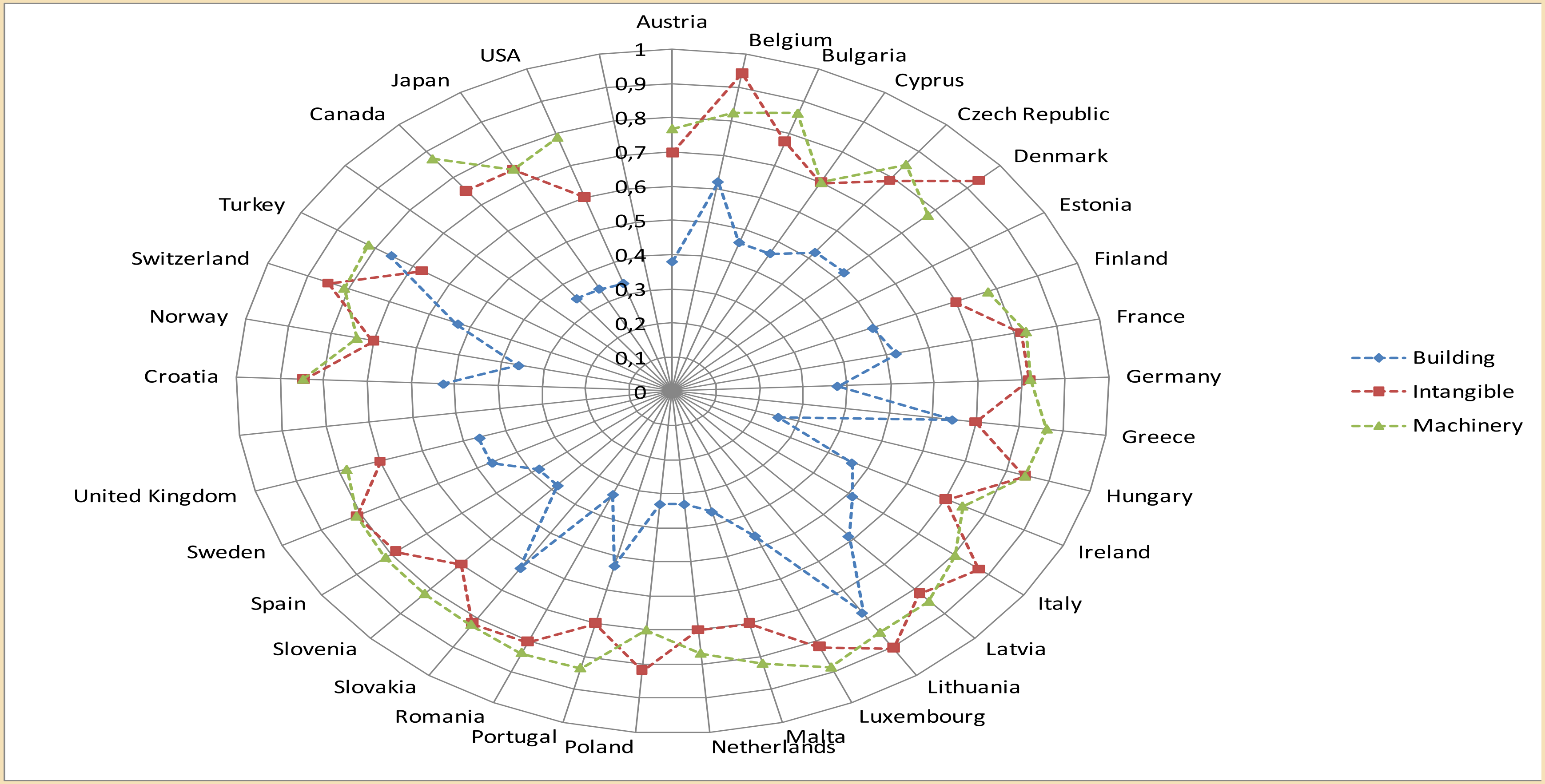


Comparison Statutory rate and EATR (2007) on domestic investment



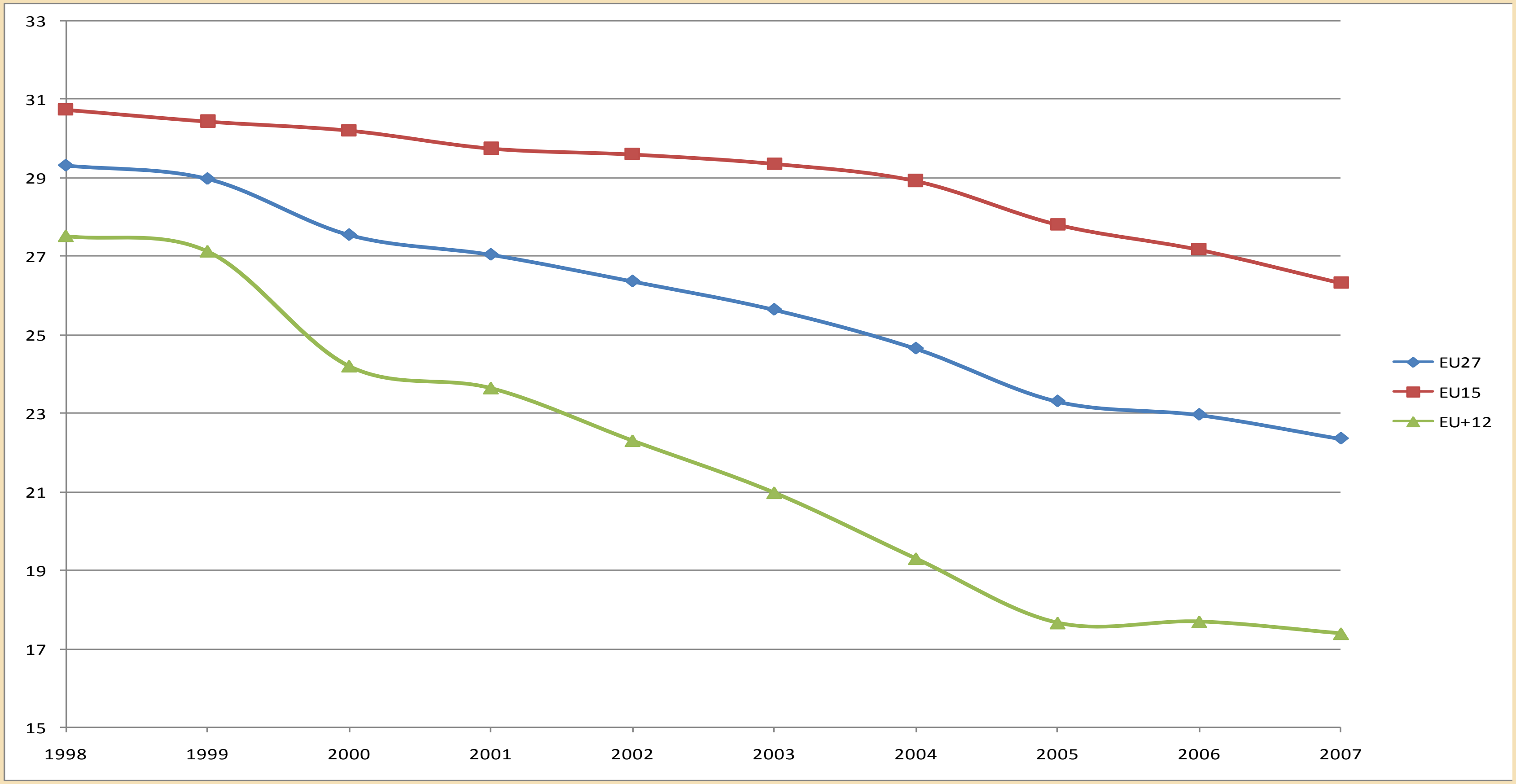
European Commission /
Taxation and Customs Union

Capital allowances across types of depreciable assets (2007 domestic investment)



European Commission /
Taxation and Customs Union

Development of the AETR on domestic investment in the EU (1998-2007)



Development of statutory rates and EATRs in the EU MS (1998-2007)

- For most EU MS the decline in EATRs is closely correlated with the decline in Statutory rates
- Some EU MS show an increase in EATRs:
  - ✓ Ireland: increase of corporate tax rate + real estate tax
  - ✓ Hungary: introduction of a solidarity tax on corporate income tax
  - ✓ Sweden: reduction of the deferral system (periodisation fund)
- Only 1 EU MS shows an unchanged EATR (Malta)

Findings on the development of EATRs compared to statutory rates (1998-2007)

- EATRs did not decrease to the same extent as the statutory tax rates
- The sum of rate cuts in p.p. (8.7) exceeds the sum of changes in EATR (7)
- Capital allowances remained on average stable over time, but worsened in countries with higher statutory rates
- The slower decline in EATRs as opposed to statutory tax rates on the EU level cannot be explained solely by corporate tax base broadenings through less generous capital allowances
- The main explaining factors for the trend are significant underlying tax reforms of corporate tax systems in the EU MS and the abolition of incentives

Underlying tax reforms in the EU MS (1998-2007)

- Most countries cut tax rates in several steps; large tax rate cuts in one step occurred in Austria, Belgium and Luxembourg; France, Malta and Sweden did not change the tax rate

- Few countries levy substantial non-profit taxes on corporations (no clear trend)
  - ✓ France: 'tax professionnelle' on tangible fixed assets (stable)
  - ✓ Italy: local tax based on value-added of production (constant)
  - ✓ Hungary: local tax based on value-added of production (increasing)

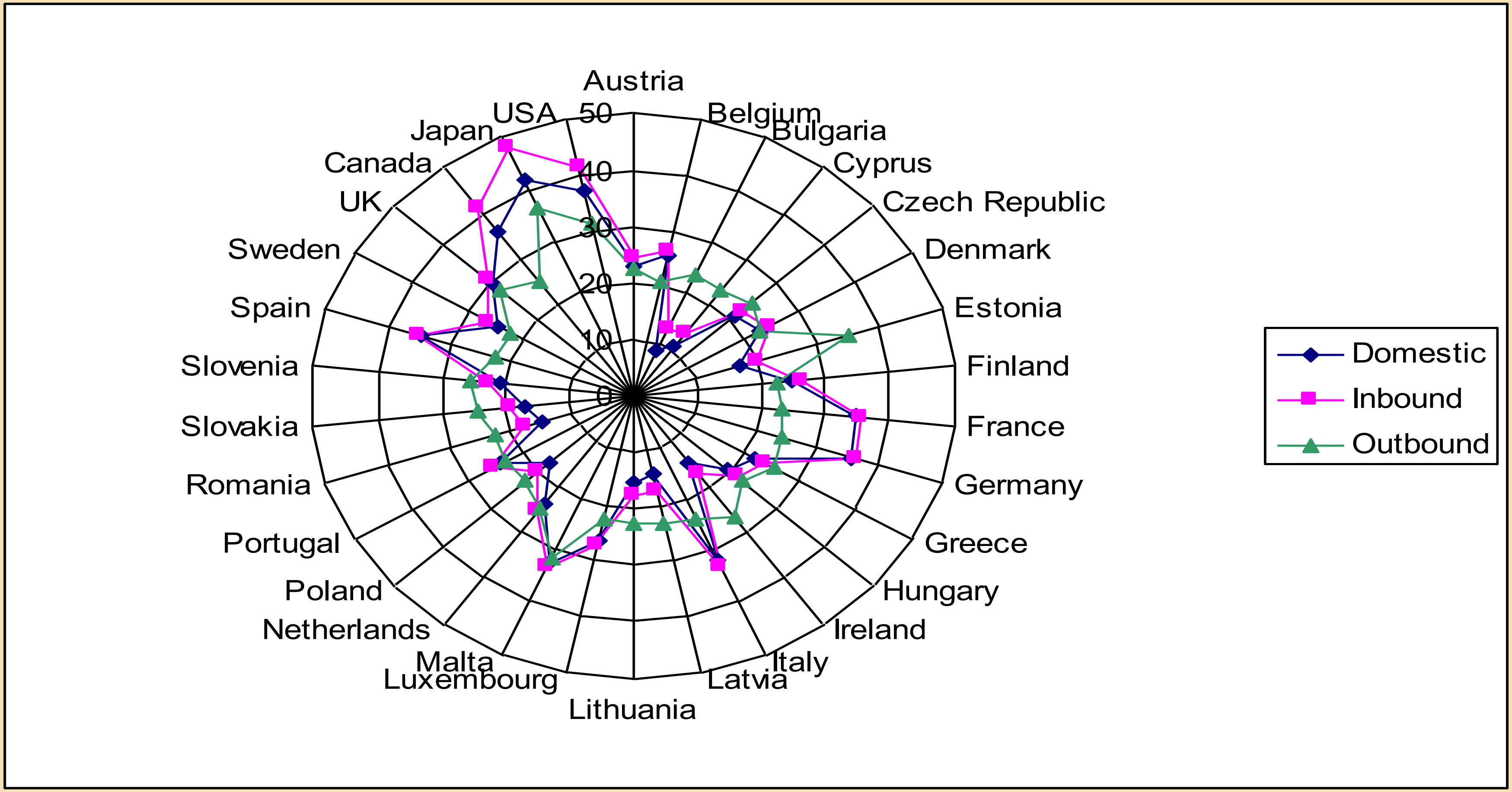
Underlying tax reforms in the EU MS (1998-2007)

- Several countries treat interest income or investment financed with equity differently
  - either resulting in a decrease of EATR for equity financing:
    - ✓ Italy (1998-2001): reduced rate on ordinary return (non-financial assets)/ Austria (2001-2004): reduced rate for investment in new assets
    - ✓ Belgium (2006 - …): ACE system
  - either resulting in higher EATRs for investments in financial assets:
    - ✓ Germany/Spain: local taxes do not allow for full deduction of interest
    - ✓ Cyprus: additional tax on interest income
    - ✓ Ireland: higher corporate tax rate on investments in financial assets

Underlying tax reforms in the EU MS (1998-2007)

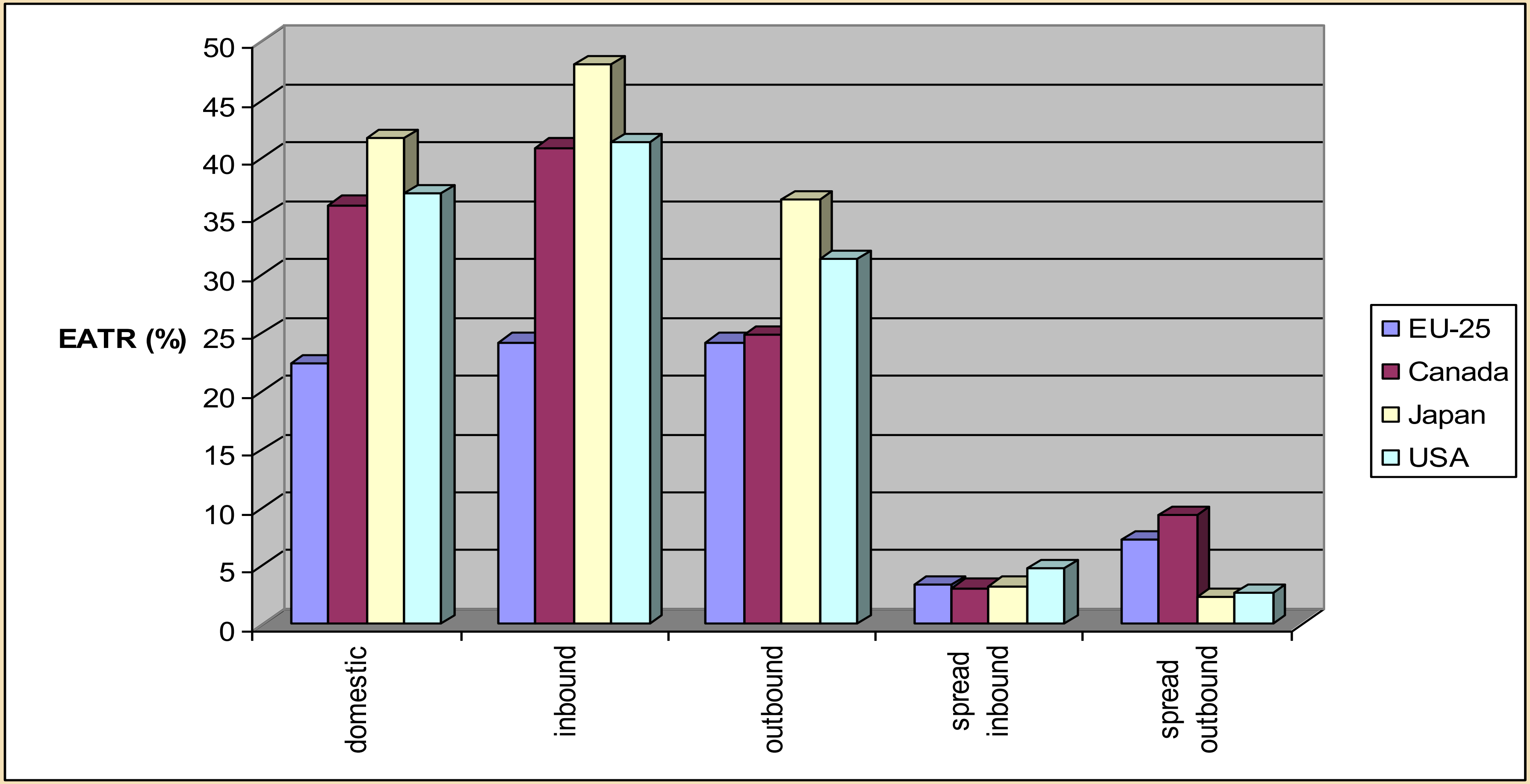
- Two countries tax(ed) retained profits differently from distributed profit:
  - ✓ Germany: levied a higher tax on retained earnings than on distributed profits on the corporate level (until 2000)
  - ✓ Estonia: profits are not taxed until they are distributed to the shareholder (as of 2000)

Effective corporate tax burden (EATR) (2007) on cross-border investment



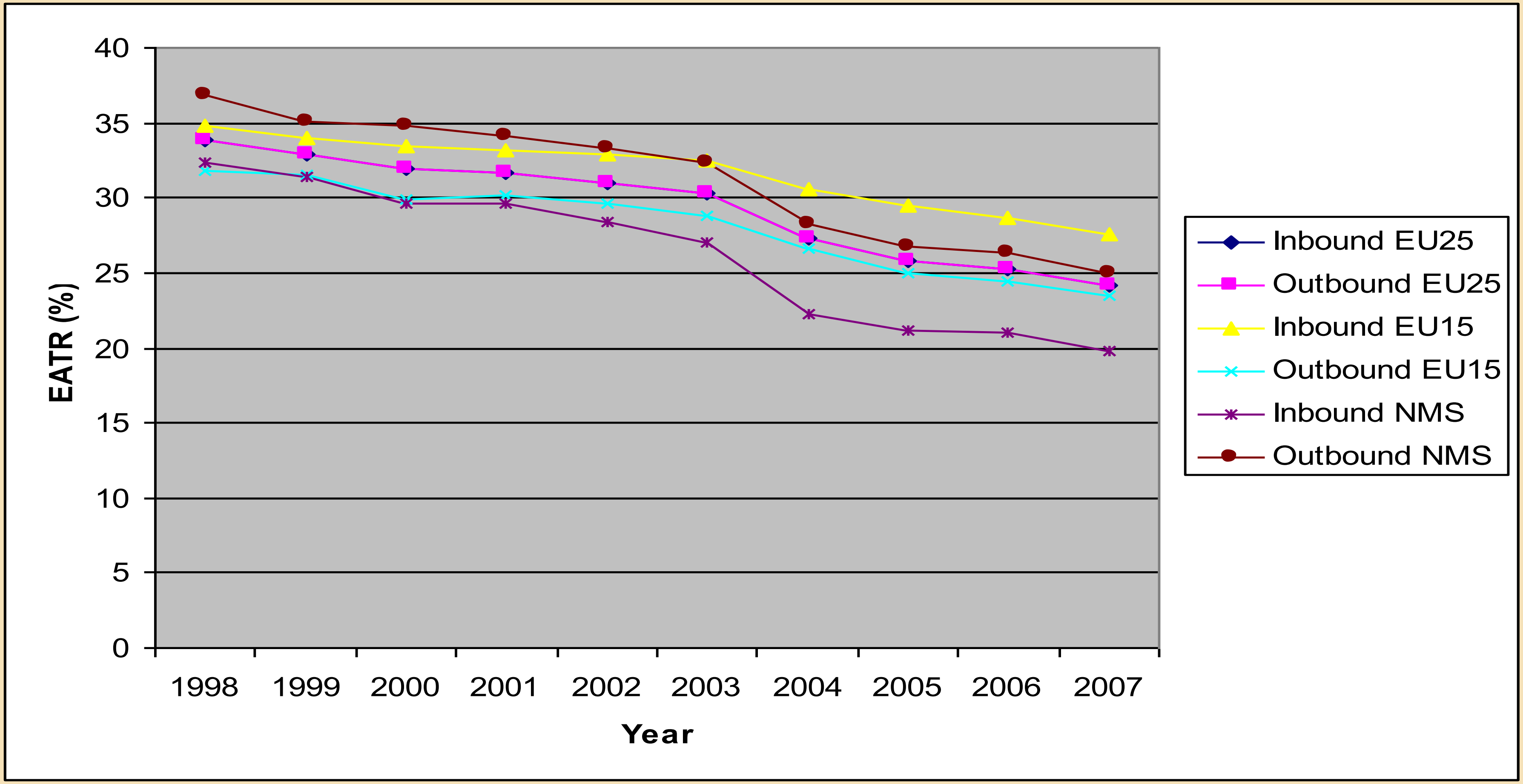
European Commission /
Taxation and Customs Union

Effective corporate tax burden (EATR) (2007) on cross-border investment

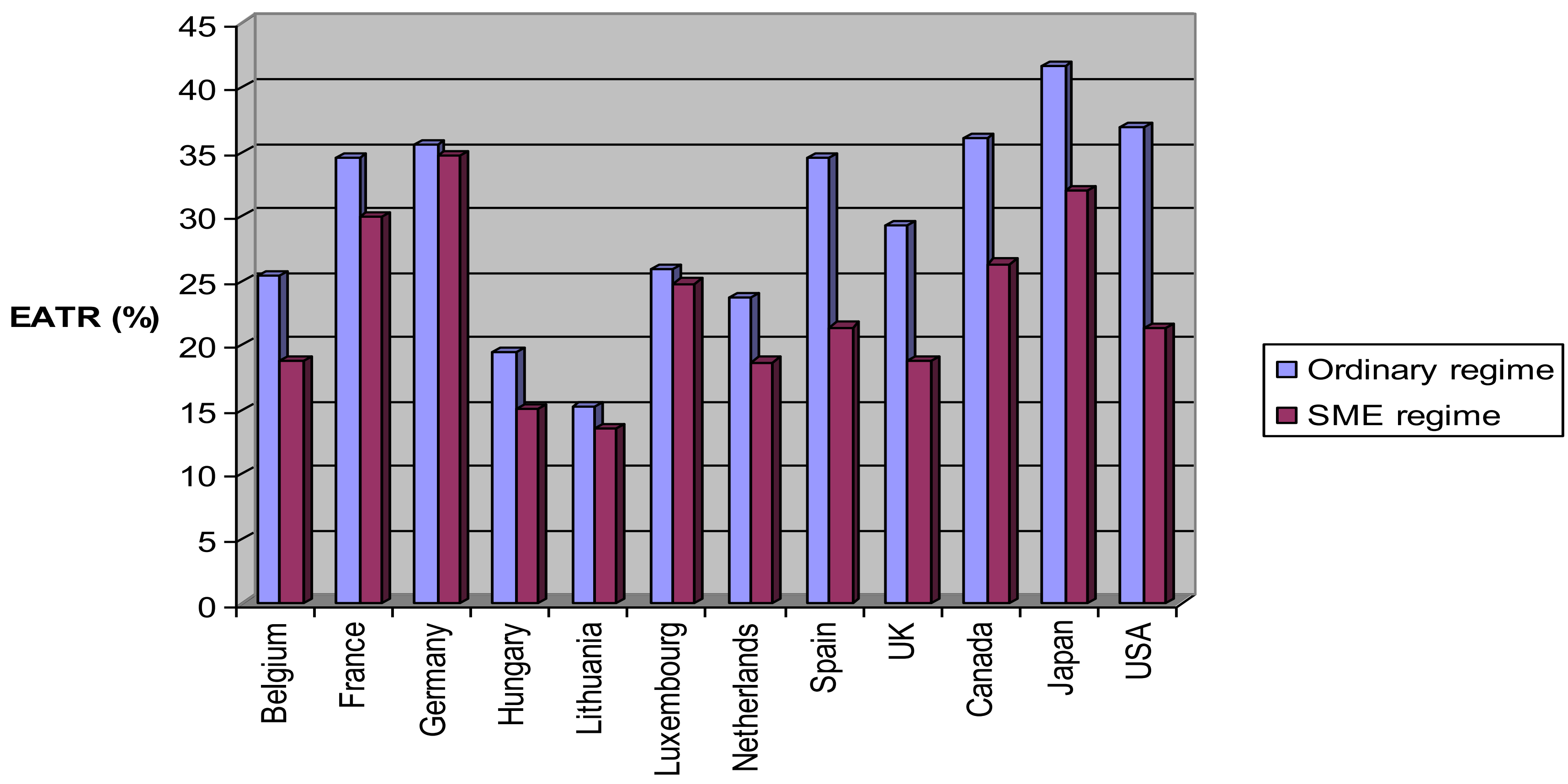


European Commission /
Taxation and Customs Union

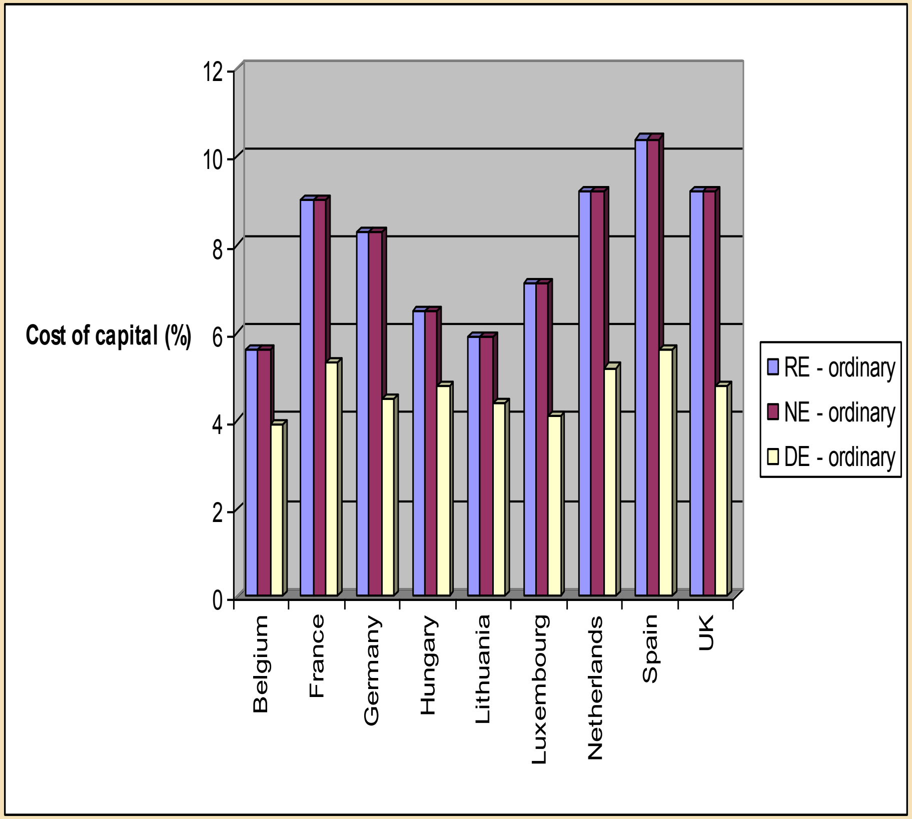
Development of corporate tax burden (EATR) on cross-border investment (1998-2007)

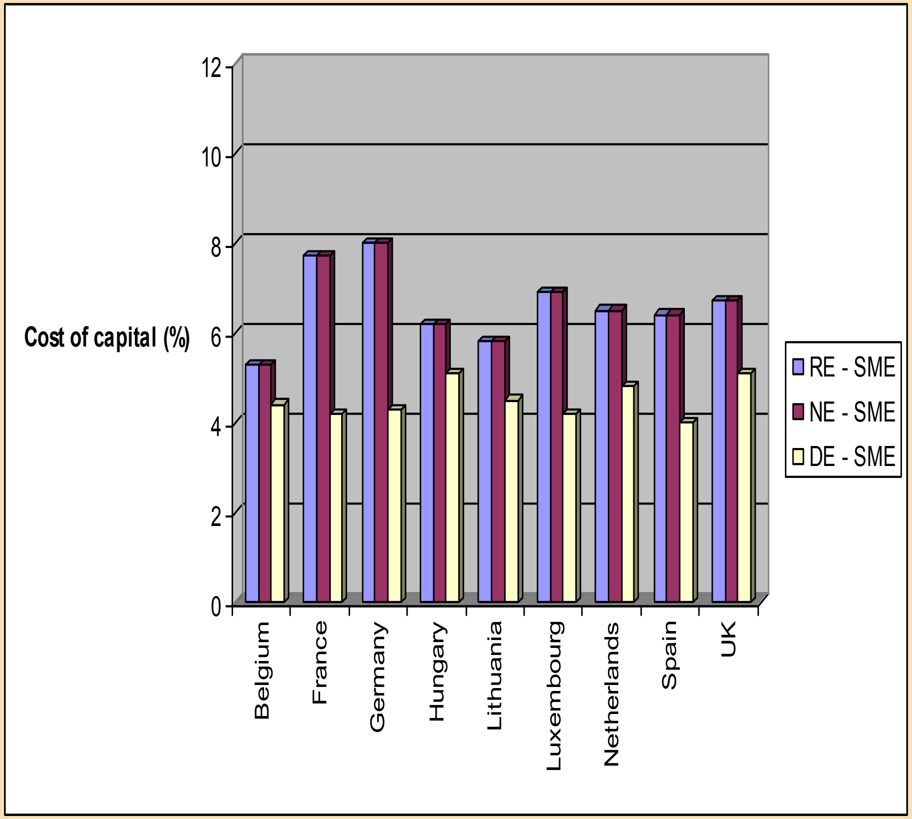


Effective tax burden of SMEs (2007) on domestic investment

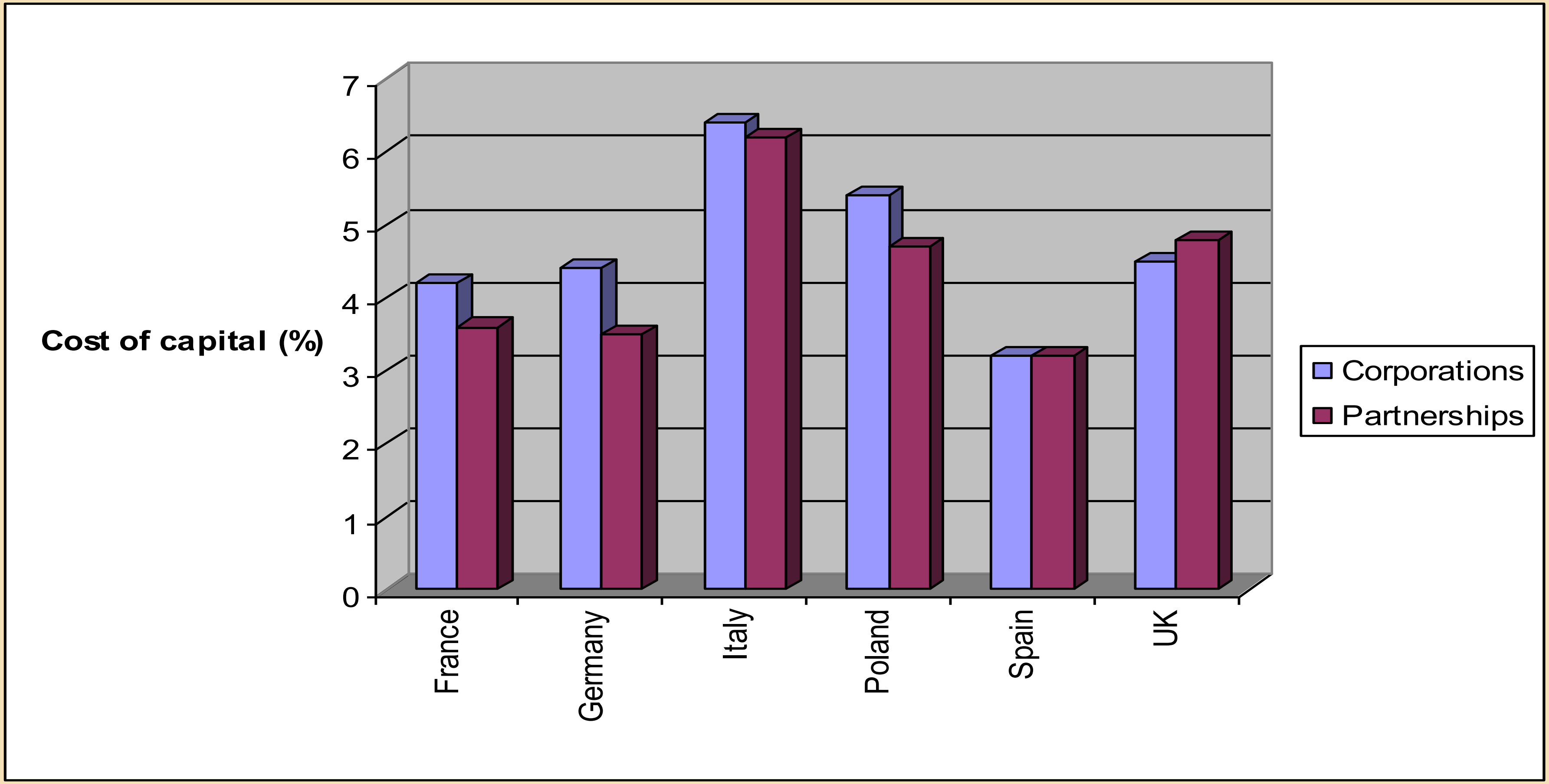


Effective tax burden of SMEs (2007) by source of finance, on domestic investment



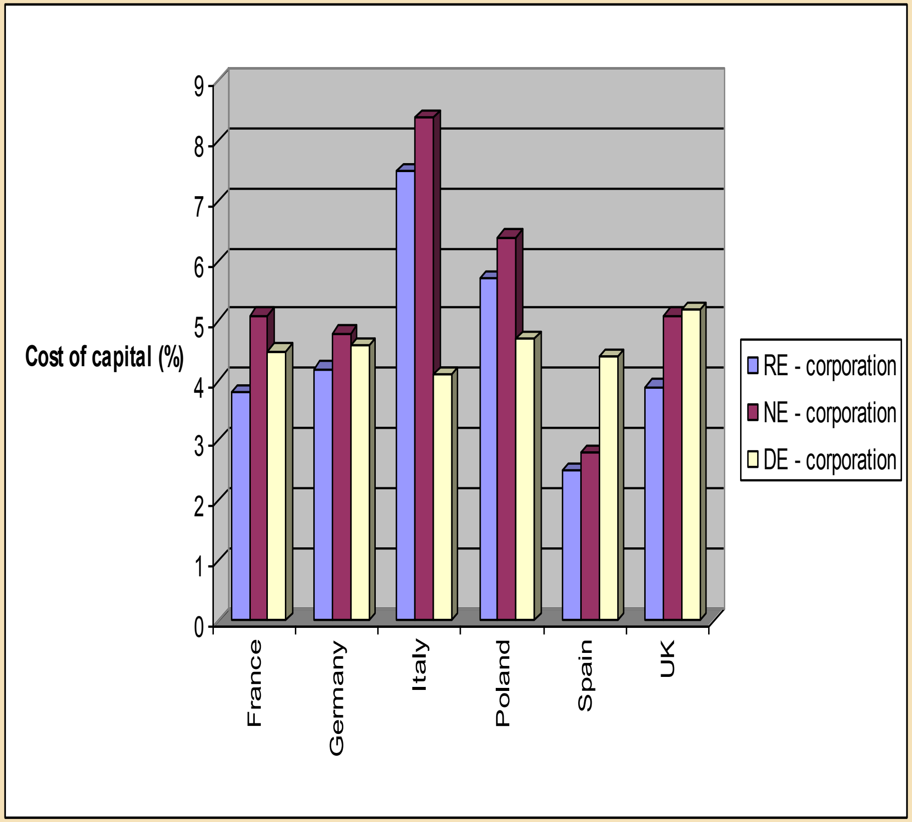


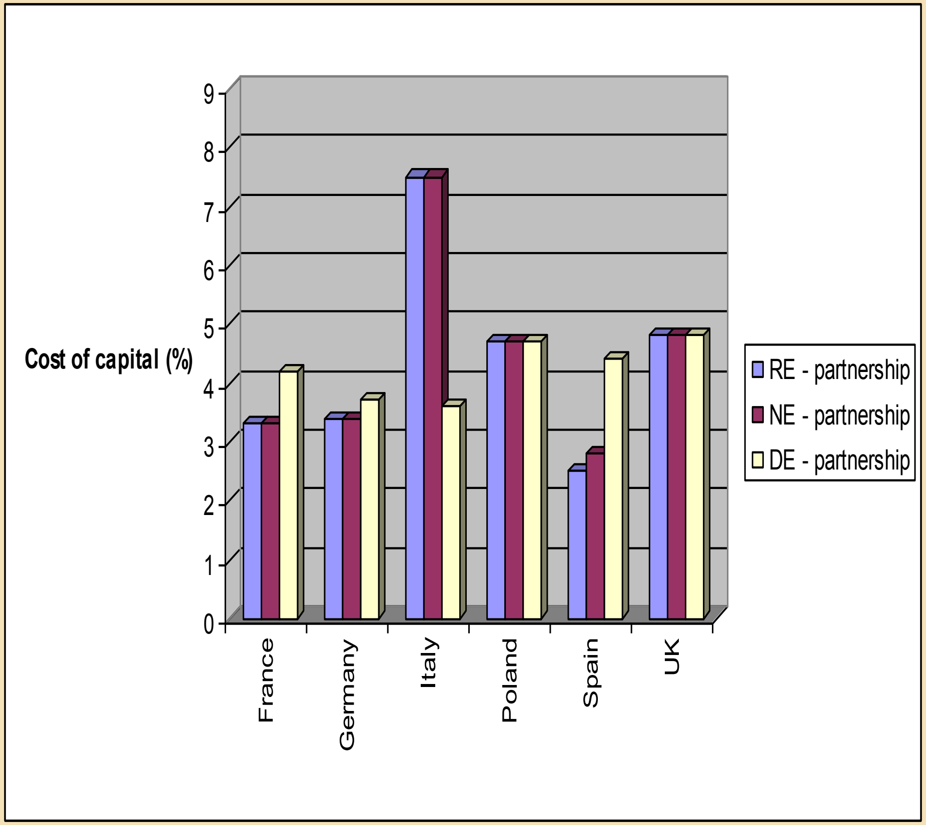
Effective tax burden of corporate SMEs vs partnerships (2007) on domestic investment



European Commission /
Taxation and Customs Union

Effective tax burden of corporate SMEs vs. partnerships (2007) by source of finance, on domestic investment





Sensitivity analysis

- Impact of local variation of tax levels on EATRs
  - ✓ important for France, Germany, Spain
  - ✓ due to business taxes on the local level

- Impact of the general economic assumptions
  - ✓ EATRs are affected
  - ✓ country rankings are largely unaffected
  - ✓ except for:
    - ➢ weighting of the source of finance in the case of Estonia (-)
    - ➢ weighting of the asset-mix can have significant effects for countries heavily targeting capital allowances to particular assets