

Achieving high productivity in the small Nordic welfare states

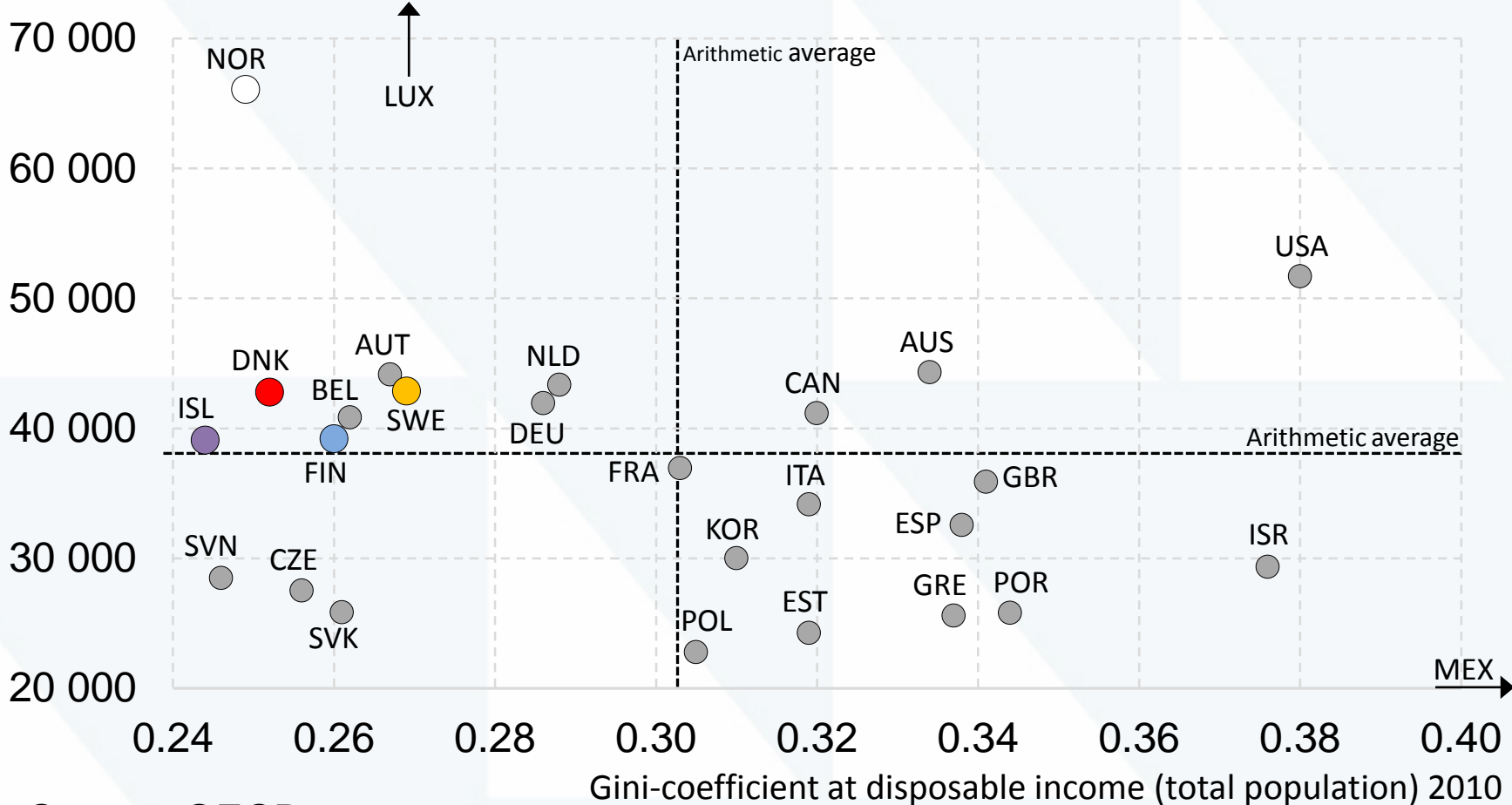
Vesa Vihriälä
11 June 2014

The Nordics have succeeded well

- High GDP/capita combined with low income disparities; the Nordics top many rankings of perceived quality of life (including OECD's better life index)
- Particularly employment rates but also productivity levels have been high
- The key - mutually reinforcing - elements of the “Nordic model”:
 - Substantial public spending on human capital, innovation support, safety nets; financed by high taxes
 - Trust, capacity to take risks, acceptance of structural change
 - High productivity, high employment => large tax base limiting the pressure on tax rates
 - Fiscal prudence => space for fiscal stabilisation

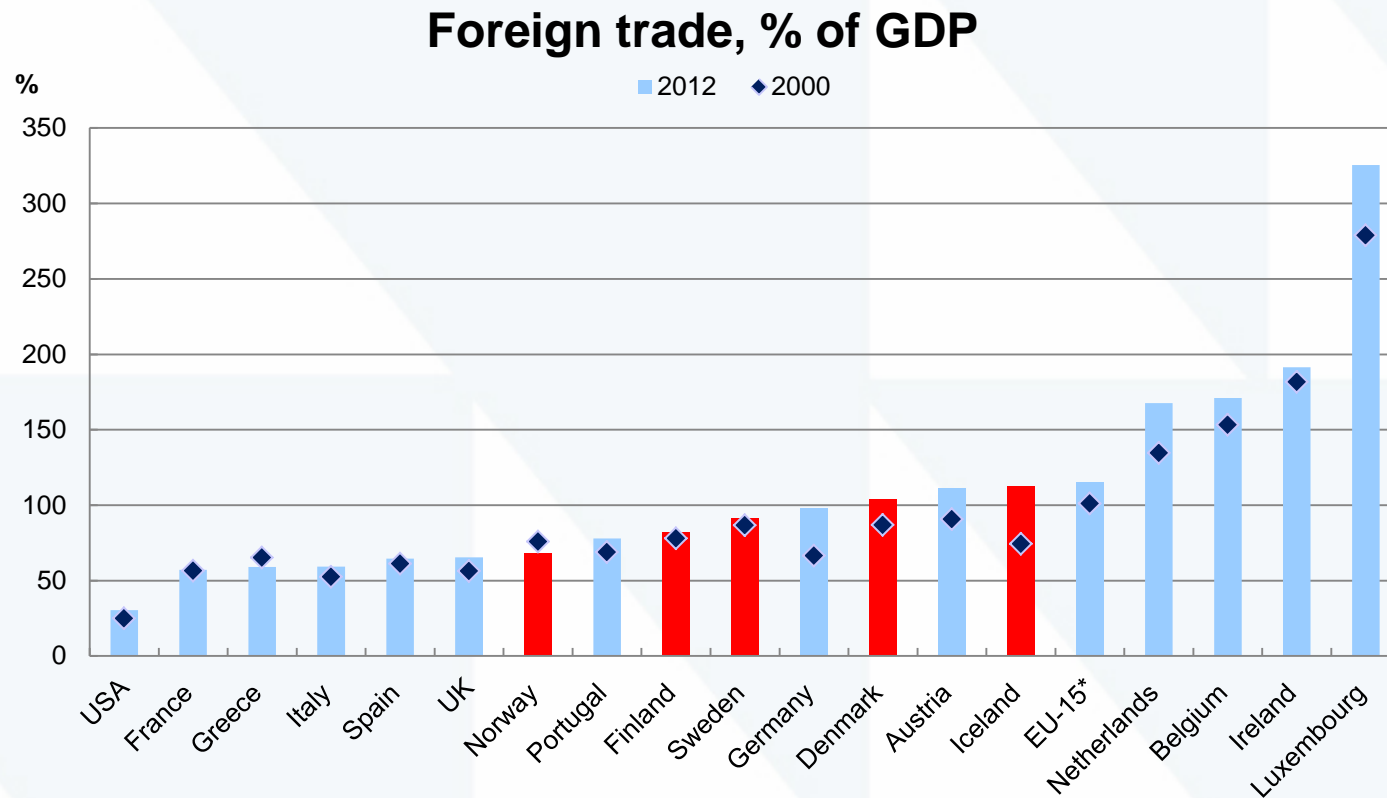
Attractive combinations of average welfare and equality

GDP per head, USD (CP & PPP) 2012

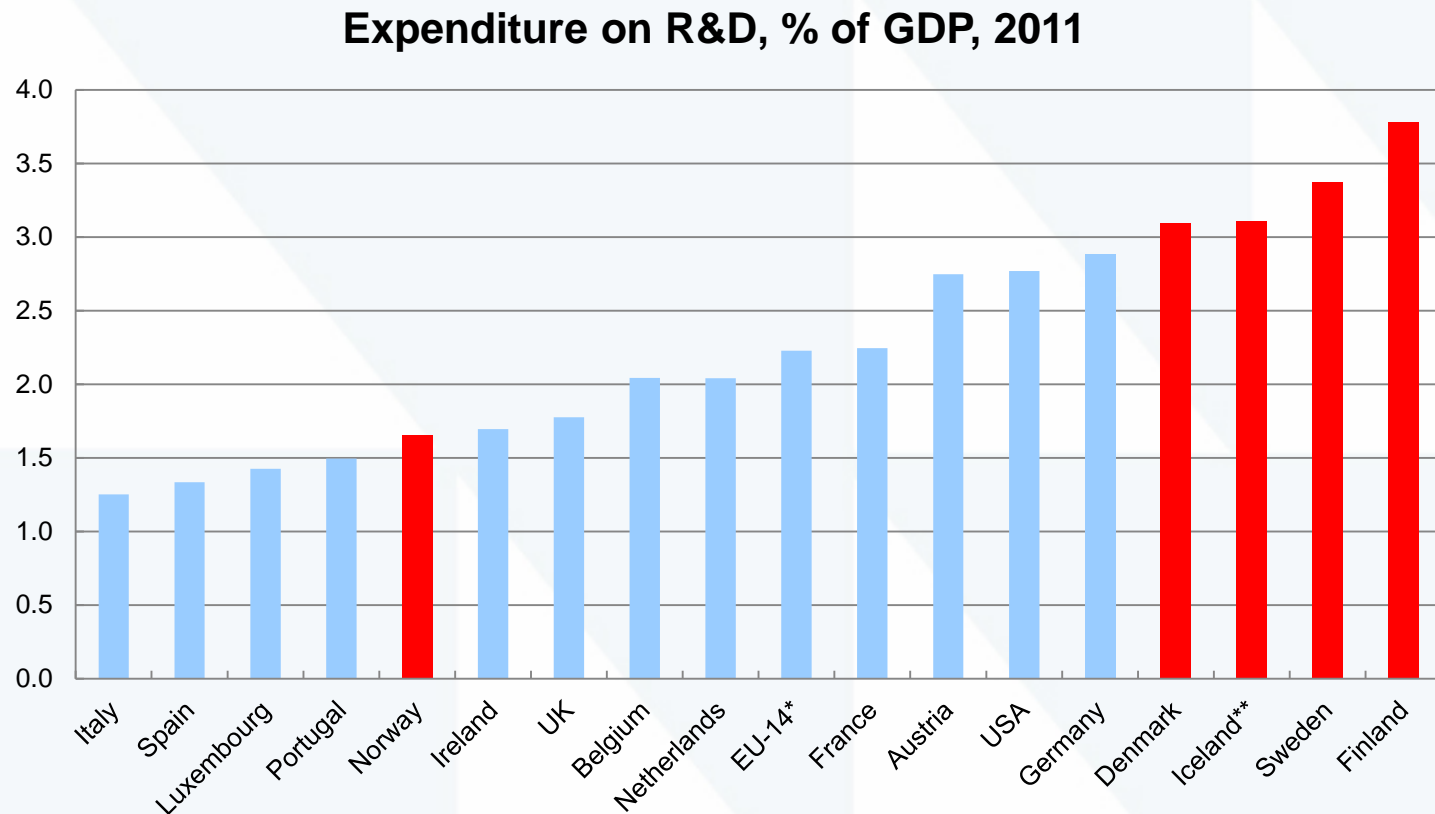


Source: OECD

Open economies, but not exceptionally so

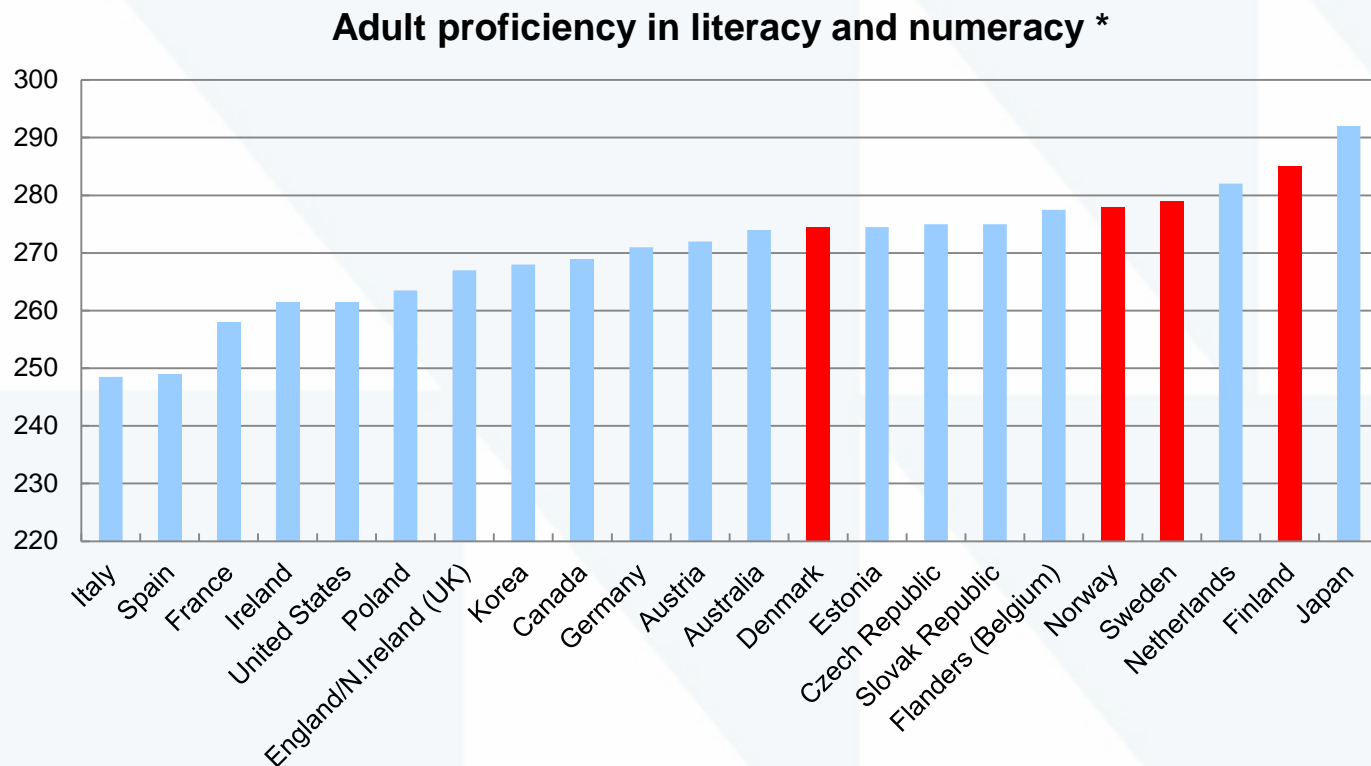


R&D expenditures high



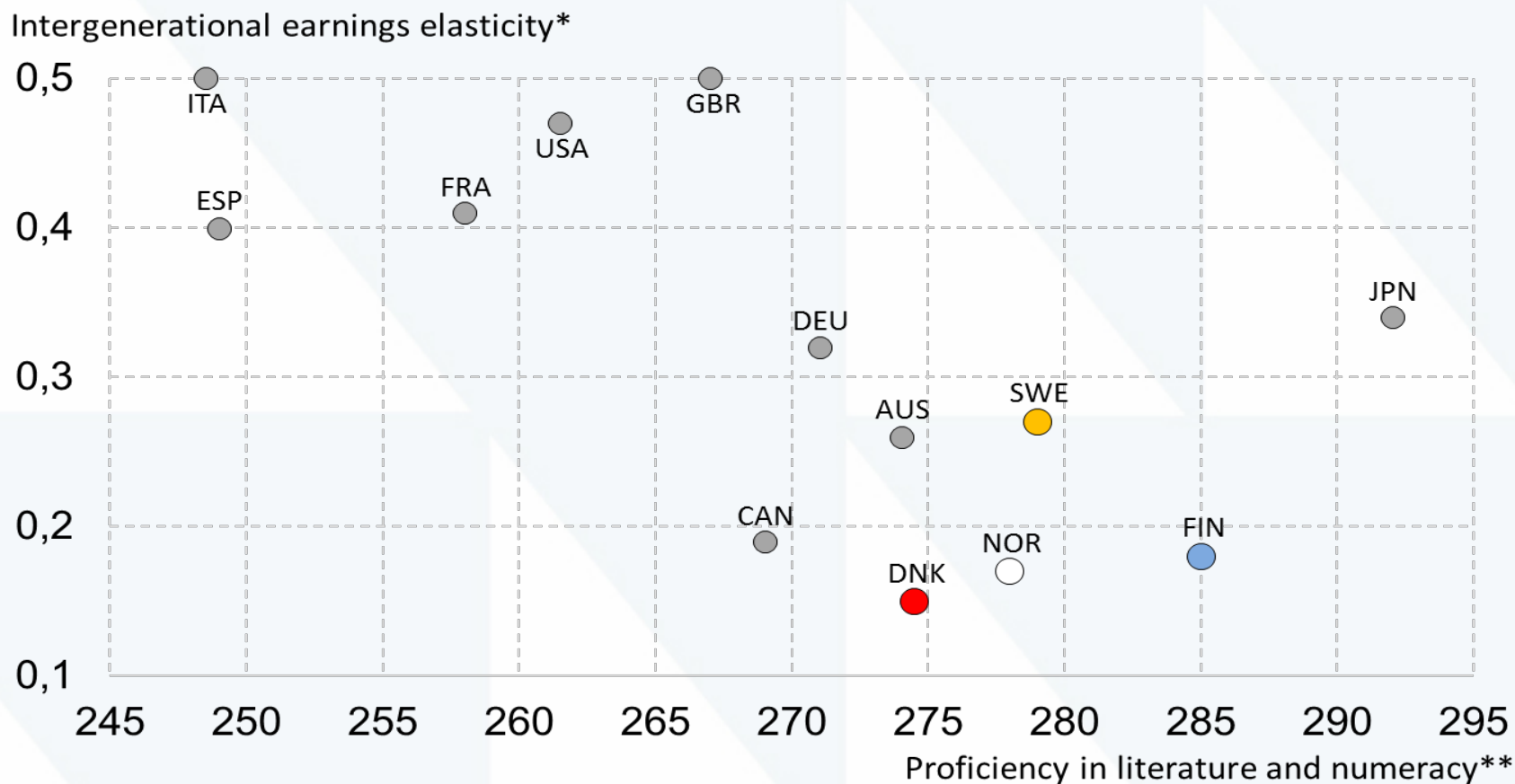
Source: OECD Main Science and Technology Indicators. *EU-14 arithmetical average, missing Greece. ** 2009

Competence levels good



* The average of literacy and numeracy scores in the OECD Survey of Adult Skills (PIAAC)

Strong competences associated with high intergenerational income mobility



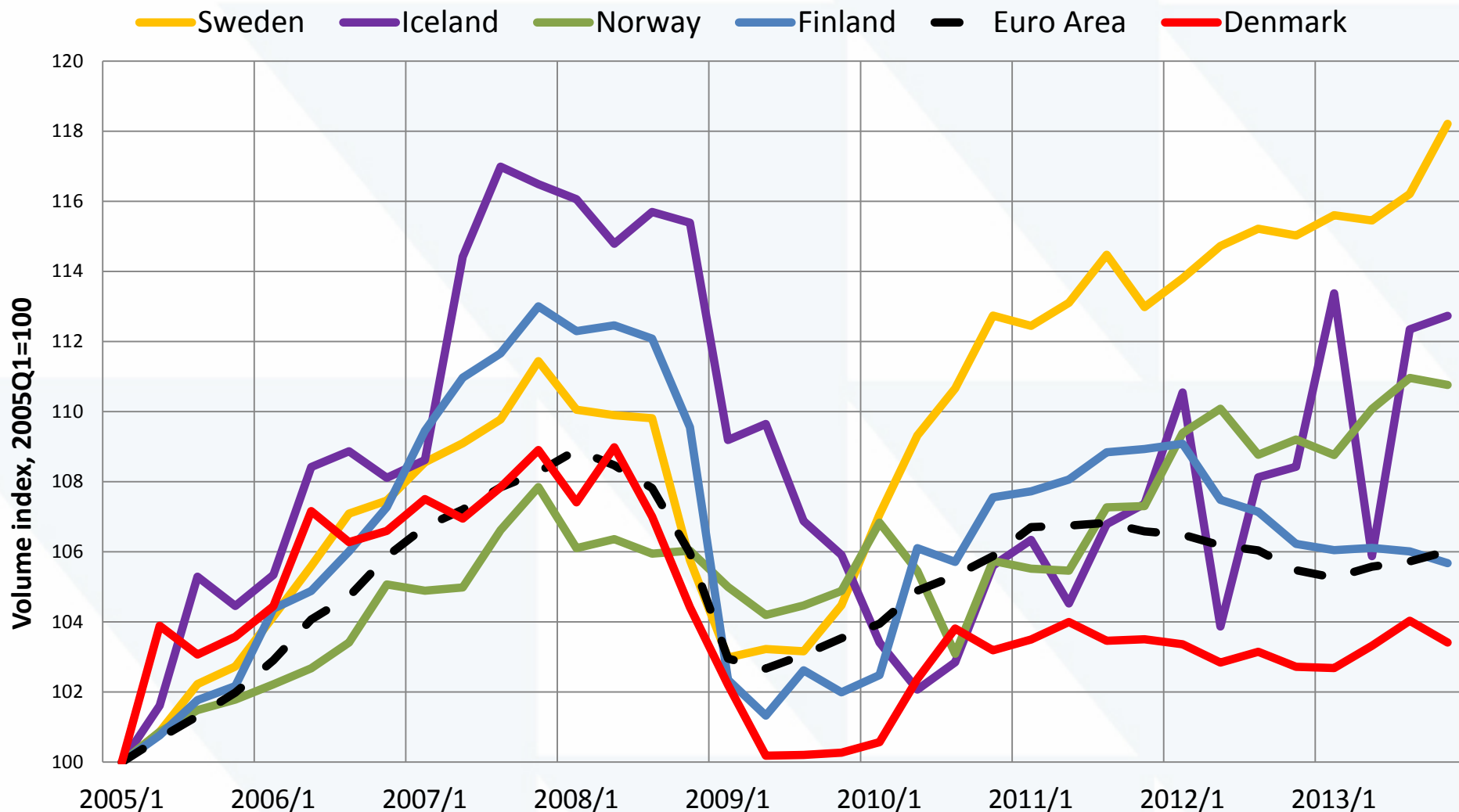
* Corak (2013). Inequality from generation to generation: The United States in comparison.

** The average of literacy and numeracy scores in the OECD survey of adult skills (PIAAC) 2012.

But vulnerabilities exist on several fronts

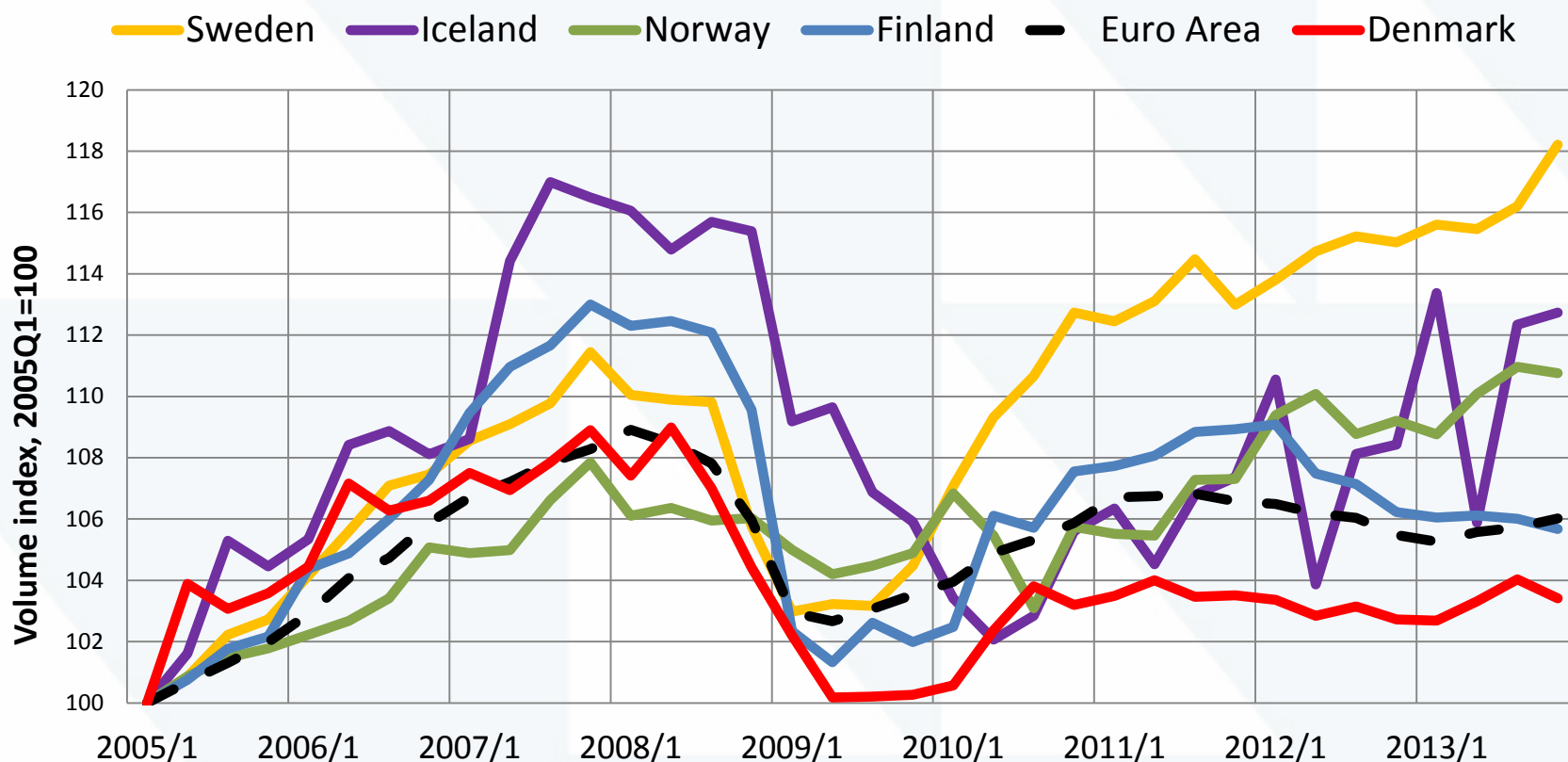
- Macroeconomic instability remains an issue
 - All Nordics affected by the global and EA crises
 - Iceland, Denmark experienced a boom-bust episode very much as Finland and Sweden over 20 years ago
 - Finland: a combination of cyclical and structural shocks
- Increasing factor mobility & high tax rates: pressures to reduce tax rates
- Ageing & the extensive welfare promise: pressures to increase public expenditure
- Global competition, technological change:
 - how to remain productive, capture value?
 - how to limit pressures on income disparities and trust?

Substantial variation in recent macro developments: seasonally adjusted GDP



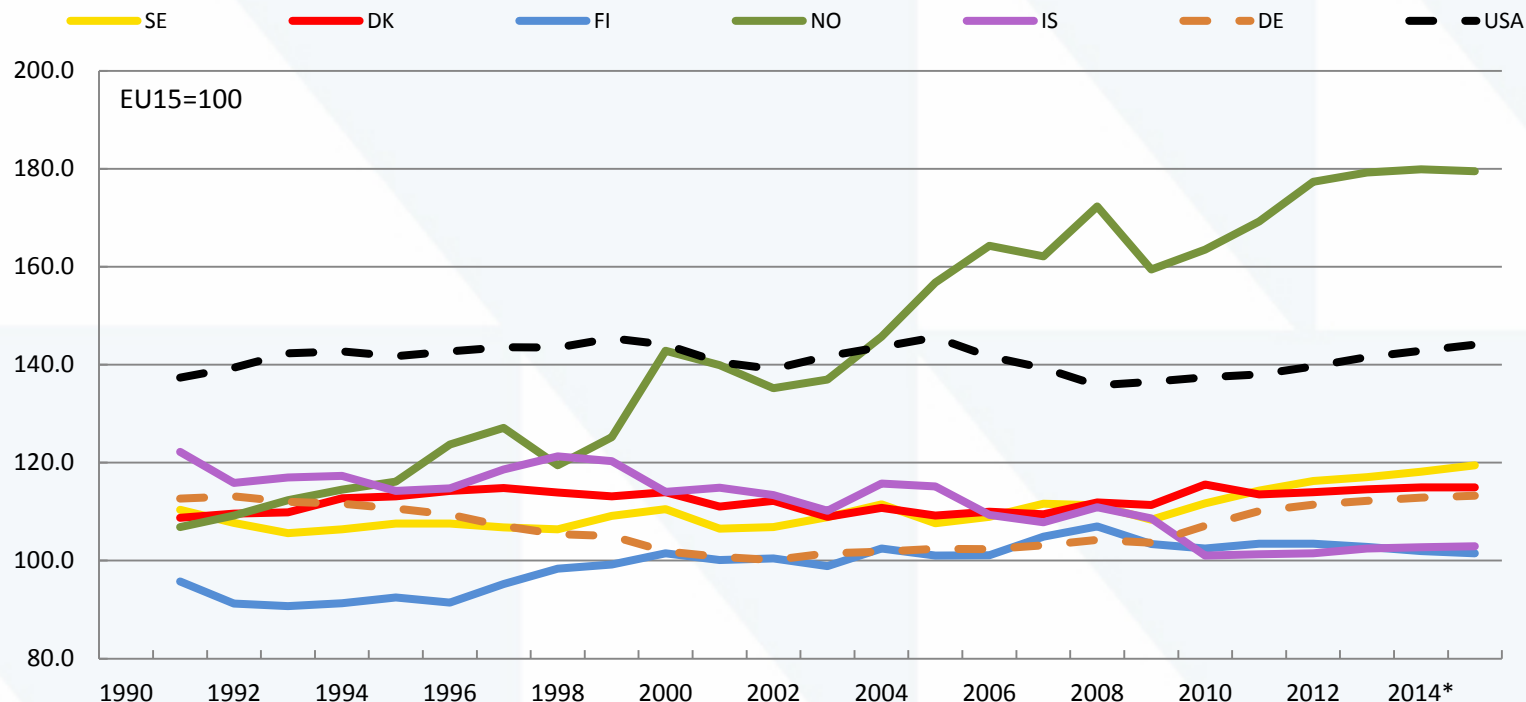
Substantial variation in growth performance over the past decade

Seasonally adjusted GDP



Some divergence of relative GDP levels over time

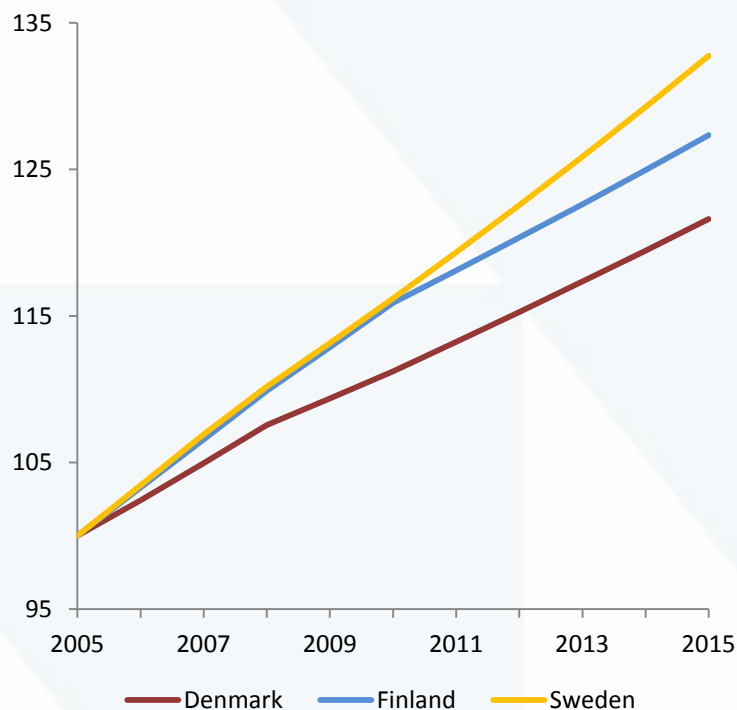
GDP (PPS, nominal prices) per cap., % average EU15



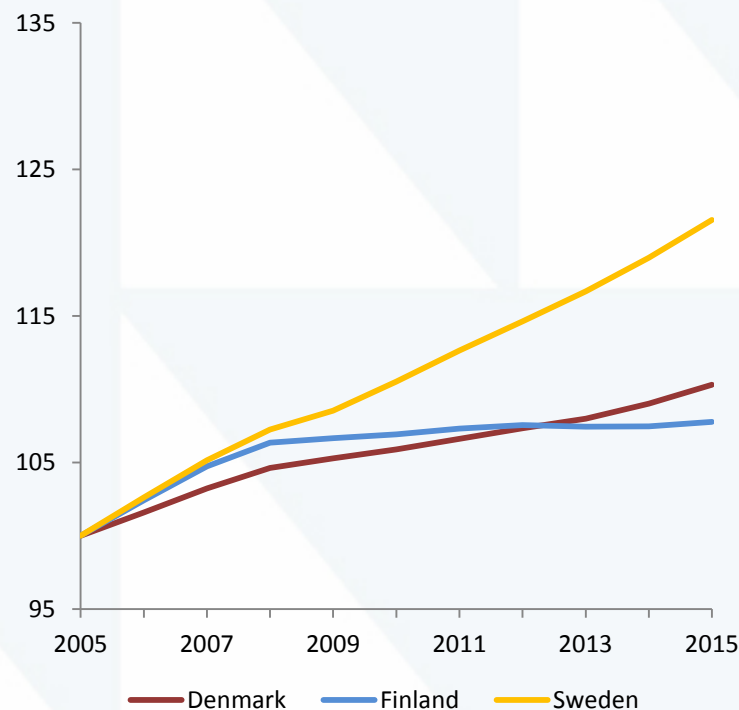
* Years 2013-15 EU Commission forecast (Autumn 2013)

Growth potential has weakened: potential GDP as assessed by EC in 2007 and 2014

Potential Output Projections in 2007
(2005=100), EU Commission



Potential Output Projections in 2014
(2005=100), EU Commission



The Nordic approach to productivity

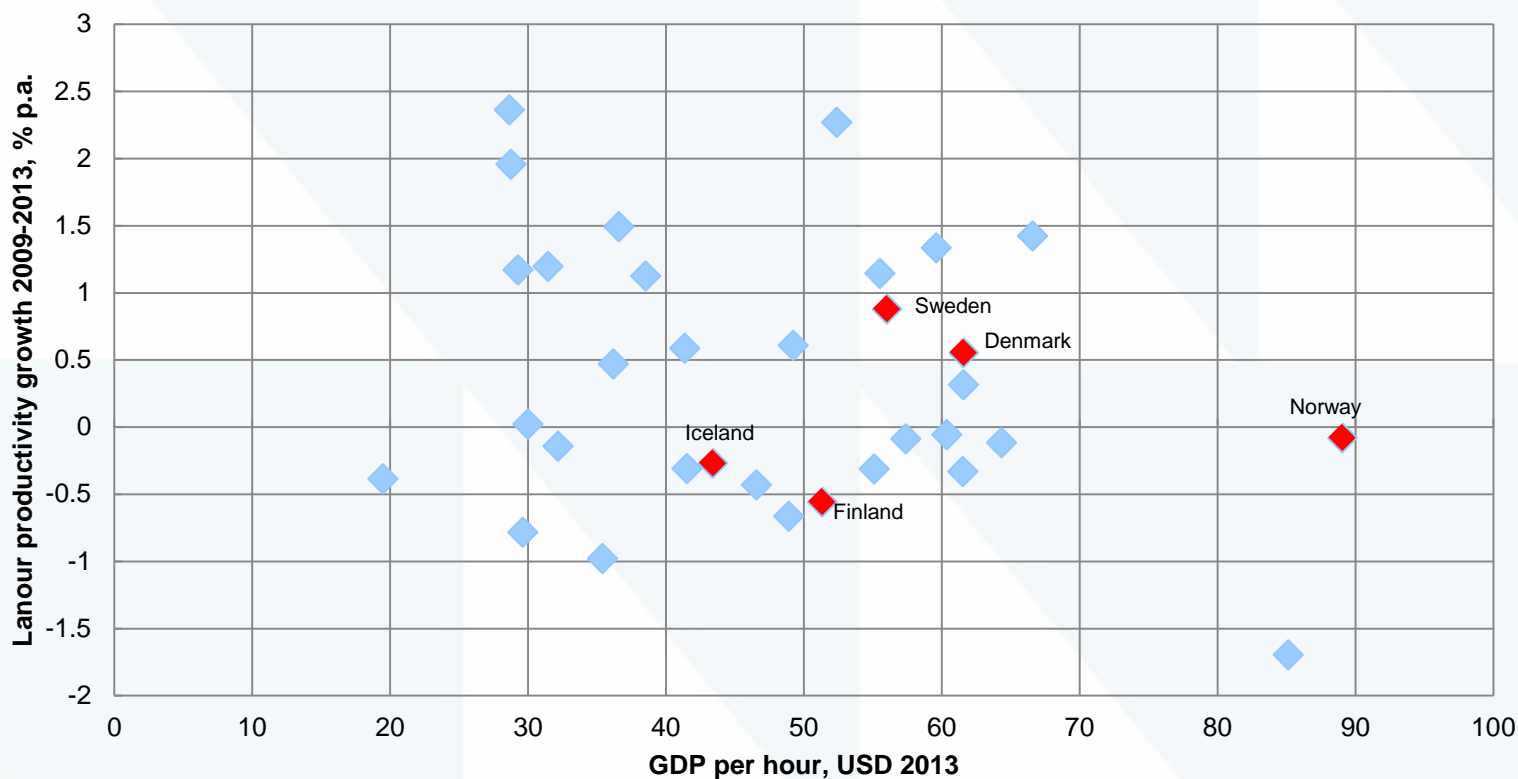
- Openness to trade: making the most of comparative advantage, embracing competition
- Acceptance of “creative destruction”; little efforts to save existing companies, “national champions”
- Extensive public investments in human capital and innovation
- Red tape on businesses limited/moderate
- Good infrastructure
- Competitive corporate tax systems, dual income taxation to spur capital formation

The approach is very much in line with the OECD recommendations. But is it delivering?

- Total economy productivity has been reasonably good but not at the top
- Recent productivity growth has been more mediocre or even weak
- Considerable variation among the Nordics
- All the Nordics have started to lag further behind the USA in business sector productivity
- The attractiveness of the Nordics as a destination of FDI not at the top and varies across the countries
 - Level: FI, NO below average
 - Recent growth: FI, DEN below average
- Are the Nordics or some of them underperforming?

Labour productivity and its recent growth

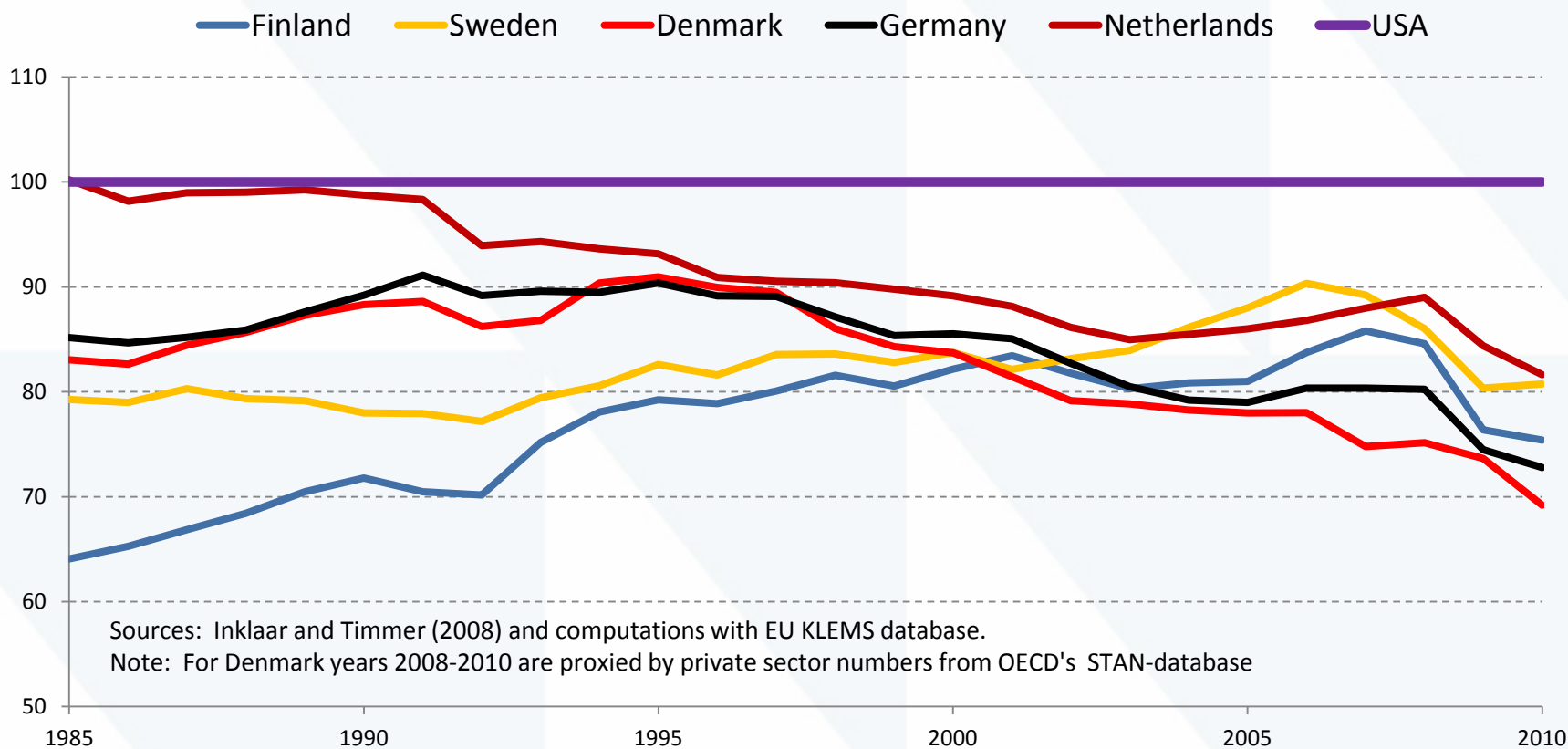
Labour productivity per hour in the total economy in OECD countries



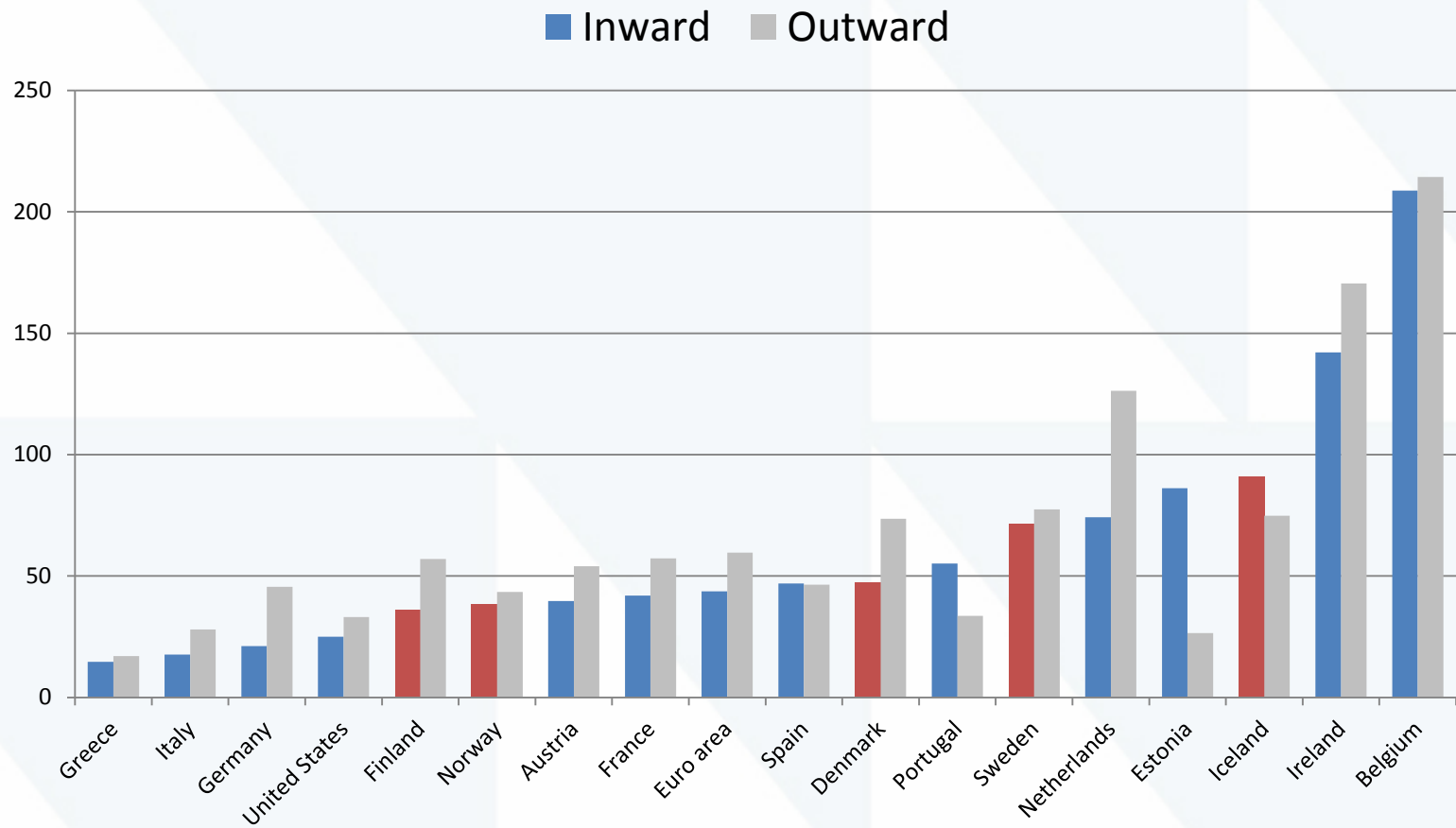
Source: OECD

Business sector productivity relative to the US

Relative labour productivity levels, market sector, USA= 100



Foreign direct investment, stock, % of GDP in 2012



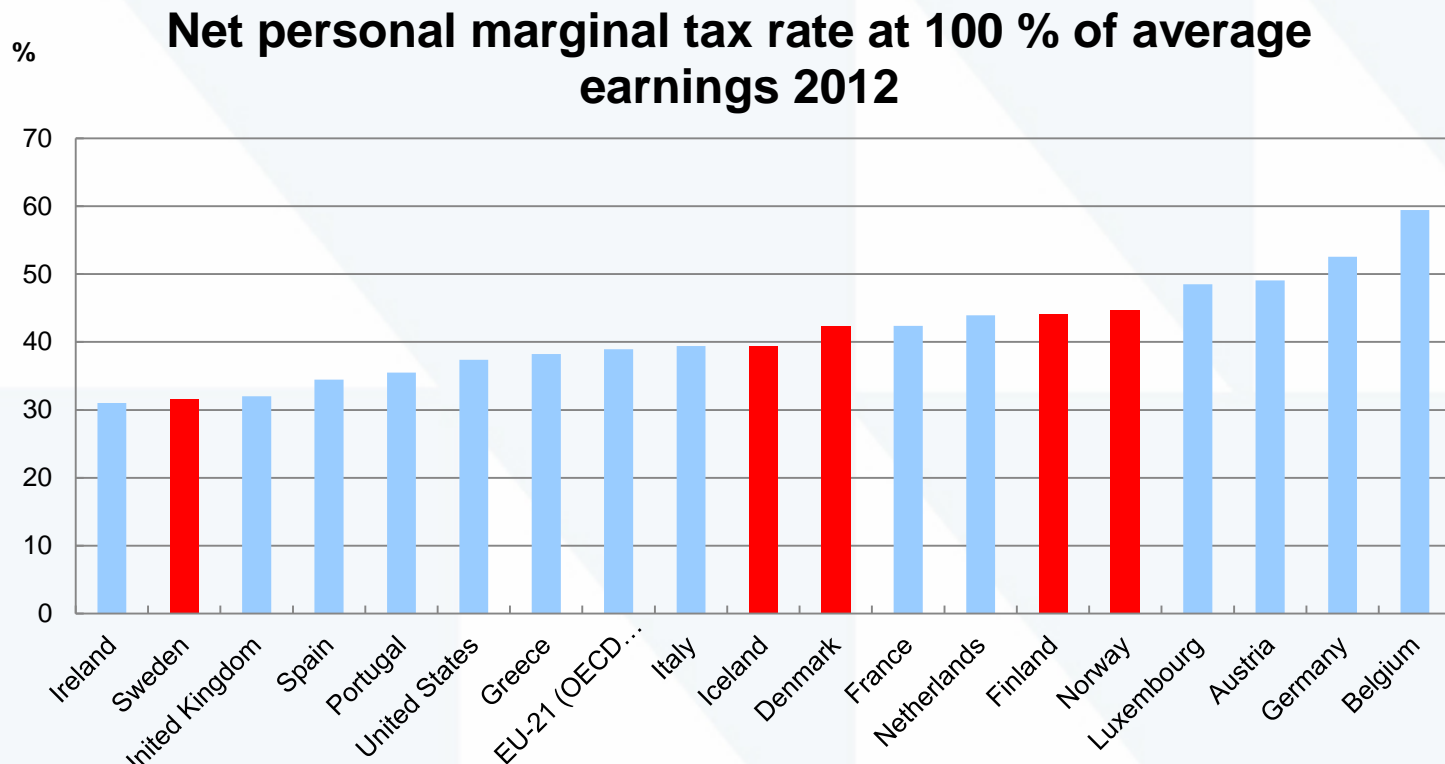
Potential problems

1. Are incentives for effort and risk-taking sufficient?
2. Can the Nordics keep and attract innovative talents?
3. Are the labour and product market institutions flexible enough to facilitate structural change?
4. Can popular support for creative destruction be maintained in the context of continued labour market polarisation and widening income/wealth disparities?
5. Can the Nordics cope with the innovation needs on a broad enough basis or are they forced to specialise in a way that makes them very vulnerable?

Incentives, attractiveness as entrepreneurial environment

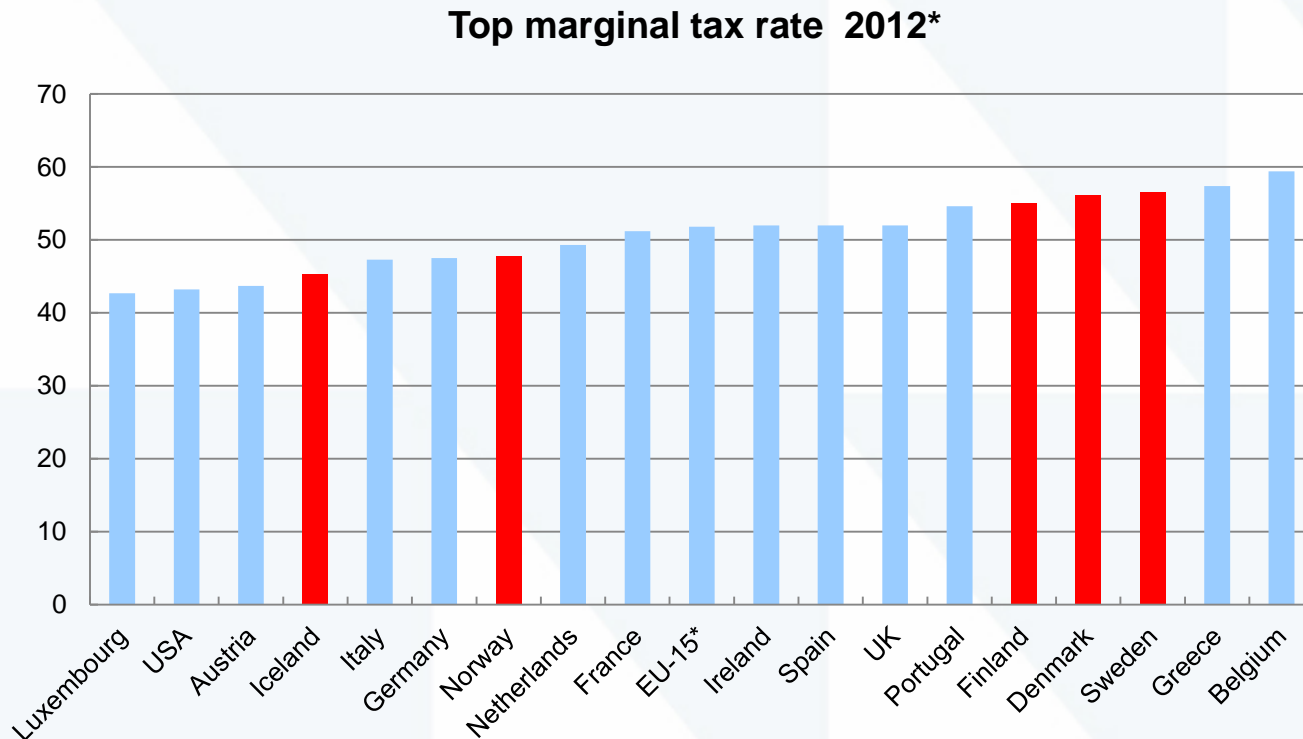
- The outcomes likely to depend on the “package”, rather than individual elements
- Taxes are not wholly out of line and in part compensated by
 - Risk-sharing arrangements, efficient, non-corrupt administrations and public services, functioning infrastructure
 - Also: liberal attitudes, lack of corruption, trust, general work ethics
 - Relative predictability of policy (consensus approach)
- Labour and product market flexibility neither best nor worst
- Anyway, there are several margins on which to improve
 - Improved efficiency of the public sector: less tax pressure
 - More robust and growth-friendly tax structures
 - Flexibility of wage formation, labour mobility

Typical marginal tax rate



Source: OECD

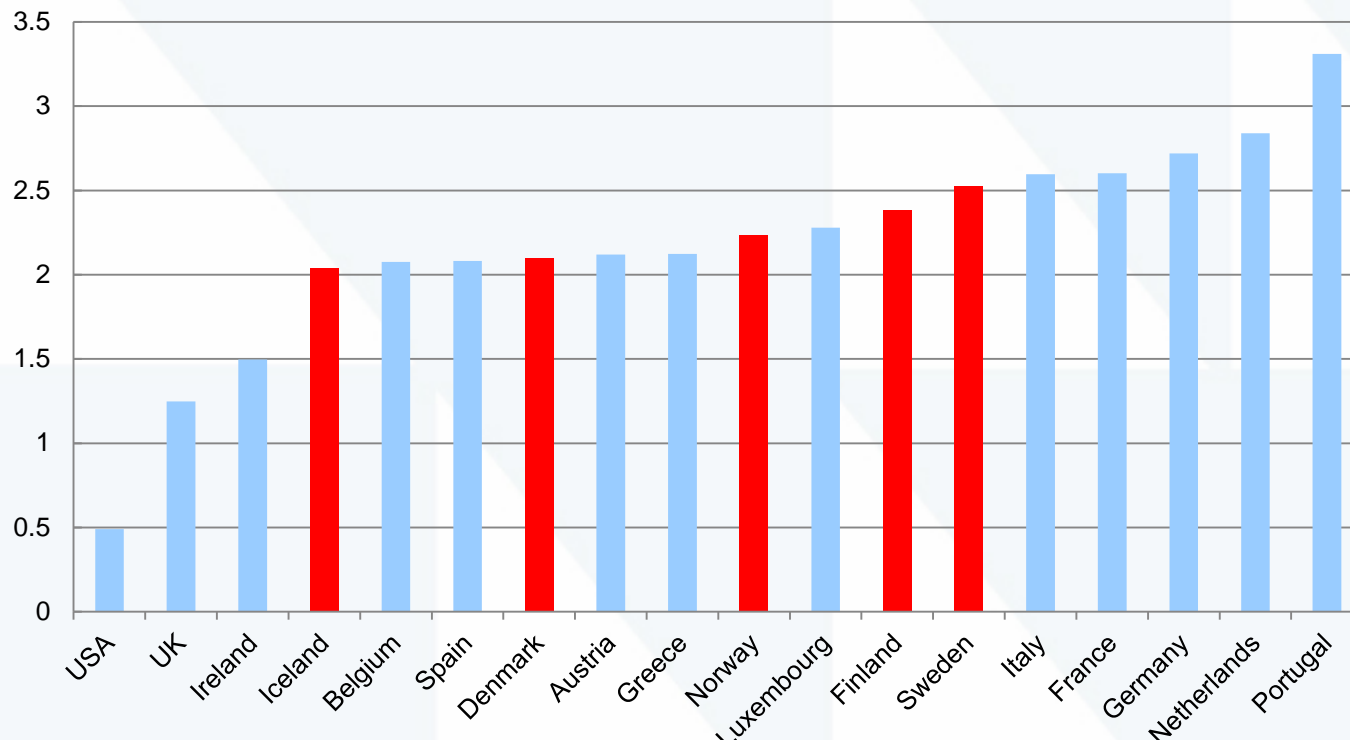
Top marginal all-in tax rate



* Personal income tax & employee social security contributions (all-in rate)
Source: OECD Taxation of Wage (2012). * EU-15 arithmetical average

Employment protection, all workers

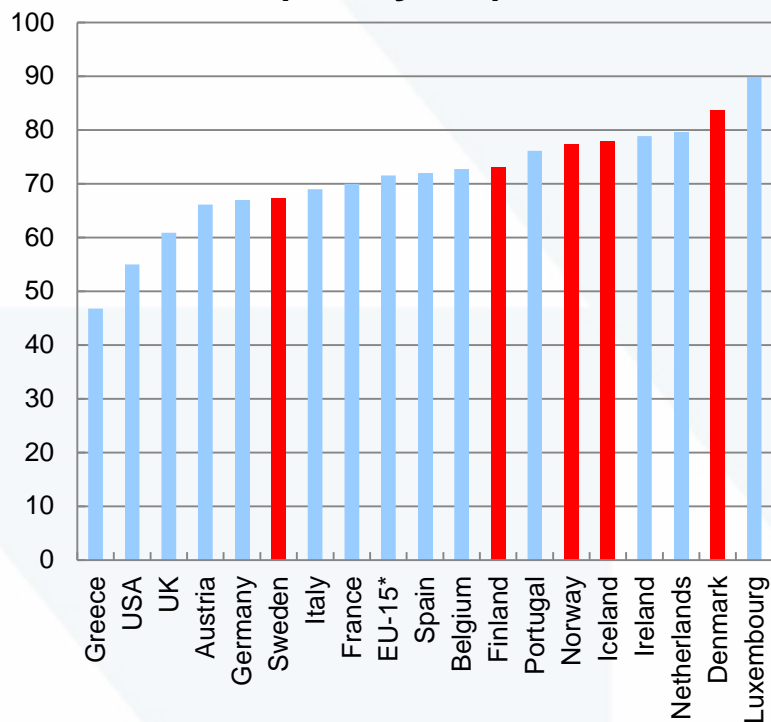
Strictness of employment protection indicator, 2012



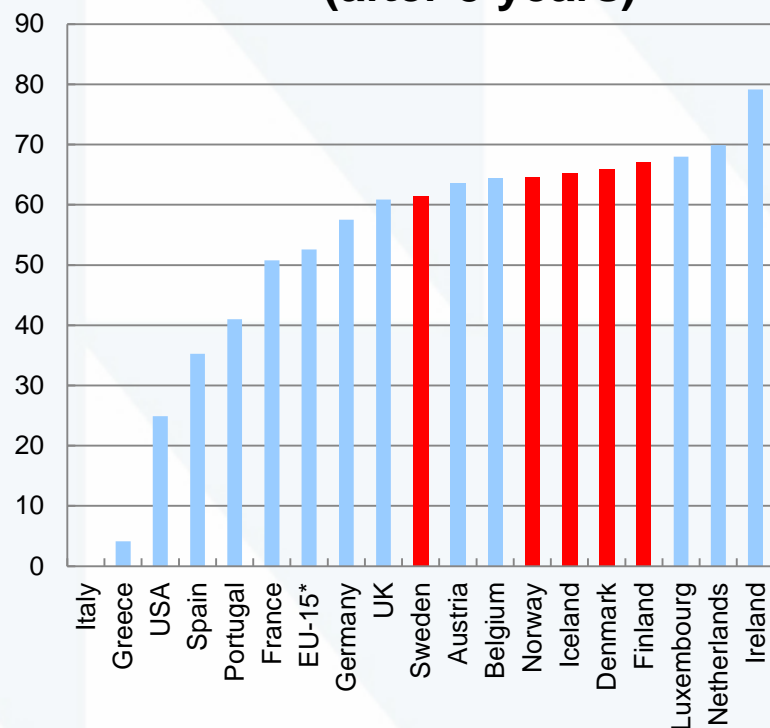
OECD Secretariat's reading of statutory laws, collective bargaining agreements and case law as well as advice from country experts. Source: OECD Employment and Labour Market Statistics.

Net replacement rates of unemployment benefits

Short-term unemployed (first year)



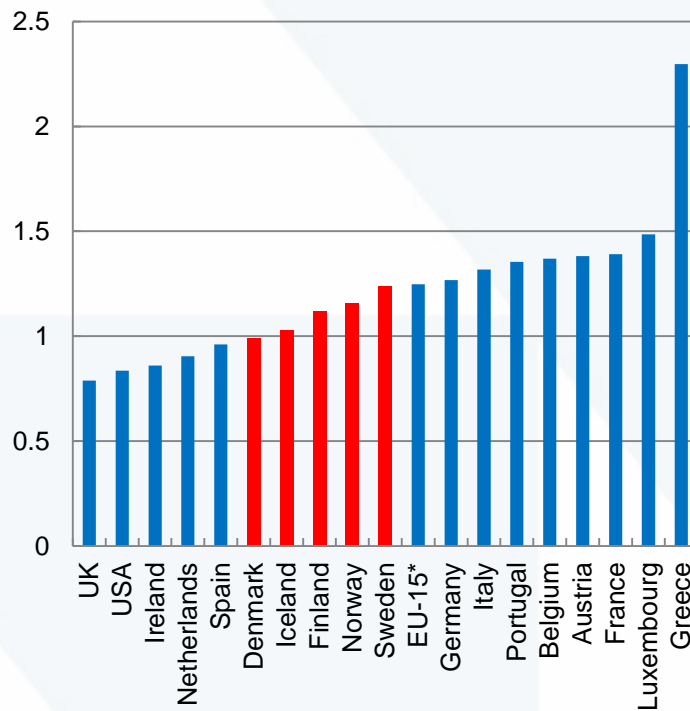
Long-term unemployed (after 5 years)



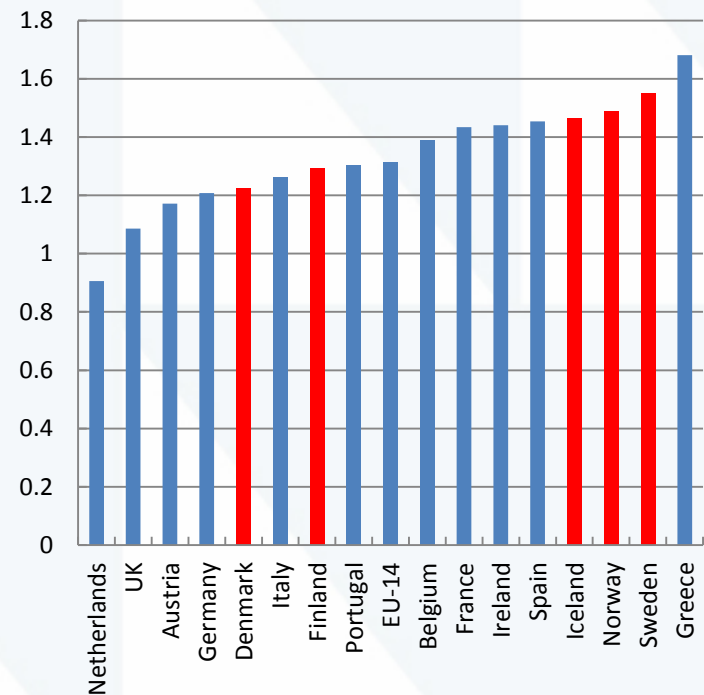
Source: OECD. *EU-15 arithmetical average

Product market regulation indicator

Product market regulation 2008



Product market regulation 2013



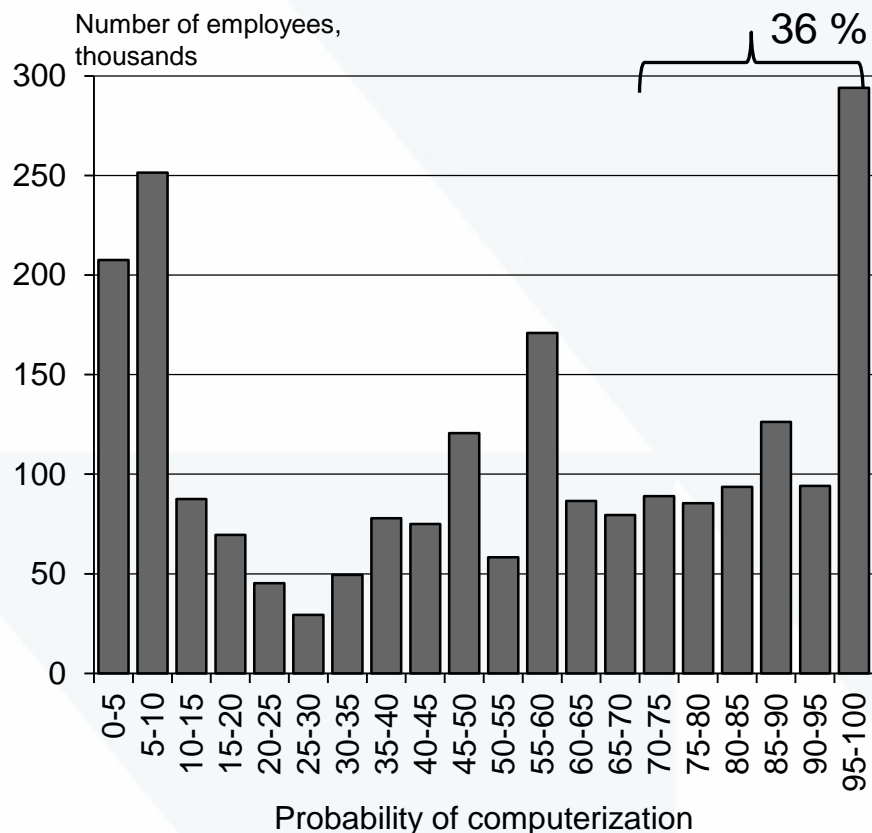
Source: OECD

Acceptance of structural change

- Facilitating factors
 - Good basic education, extensive adult education
 - Generous support for those in need of adjustment (incl. ALMP)
 - Experience of widely shared benefits of productivity-enhancing structural change
- Potential fault lines going forward
 - Strong polarisation of the job market, income disparities
 - Persistent unemployment (particularly skilled)
- Useful policy responses
 - More efforts to competence building in general and in the early years of life in particular
 - Evidence-based refining the flexicurity approach

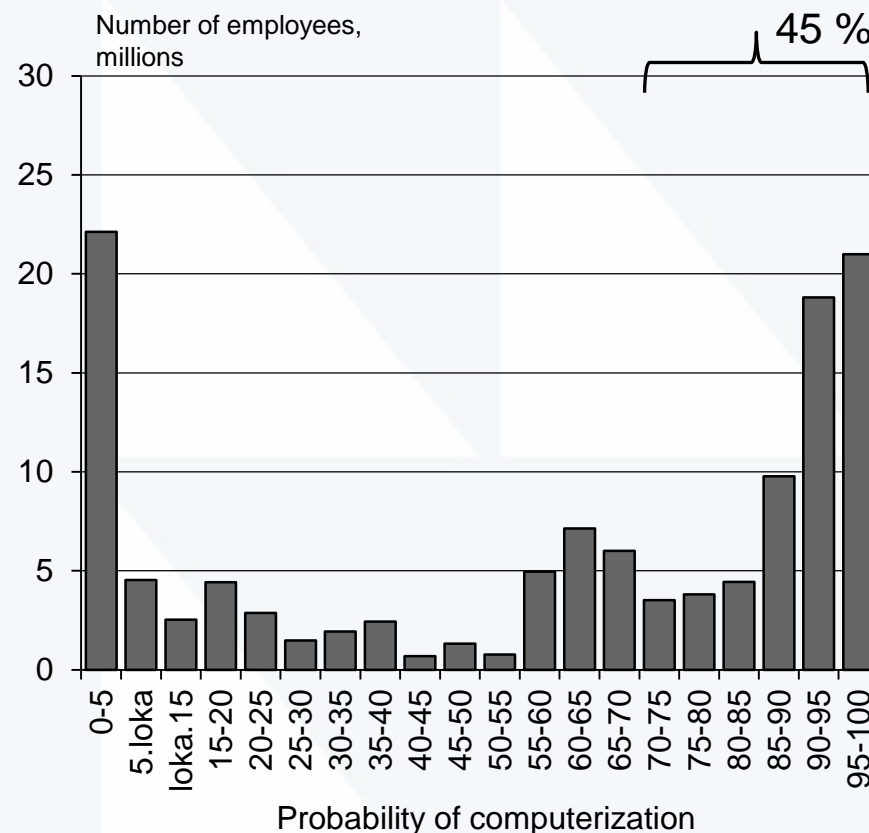
Jobs threatened by computerisation in Finland and the US

Finland



The distribution of *employment* over the probability of computerization, 5%-point intervals

USA



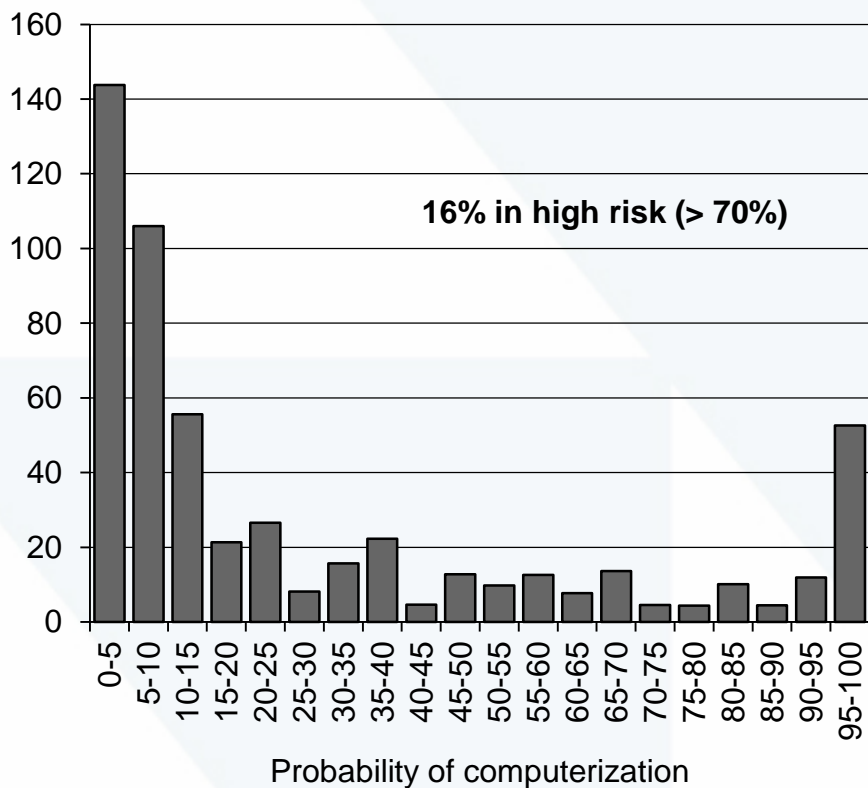
The distribution of *employment* over the probability of computerization, 5%-point intervals

Pajarinen & Rouvinen (13.1.2014). ETLA Briefs, 22. <http://pub.etla.fi/ETLA-Muistio-Brief-22.pdf>

Jobs threatened by computerization in Finland by level of education

University level education

Number of employees, thousands

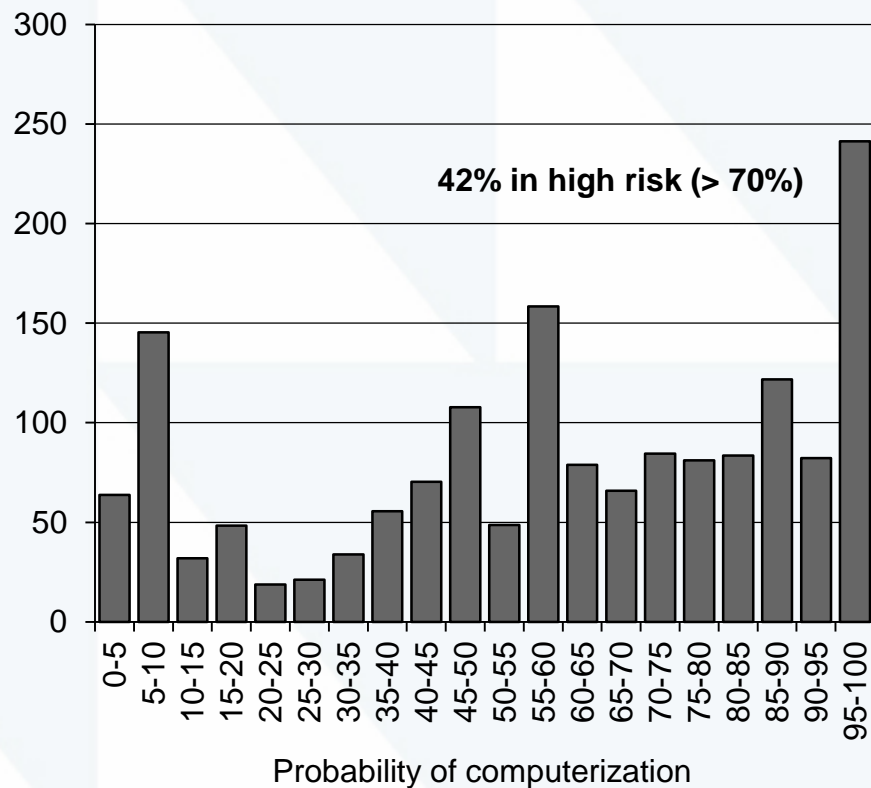


The distribution of *employment* over the probability of computerization

Data source: Statistics Finland, ETLA calculations.

Lower than university level education

Number of employees, thousands



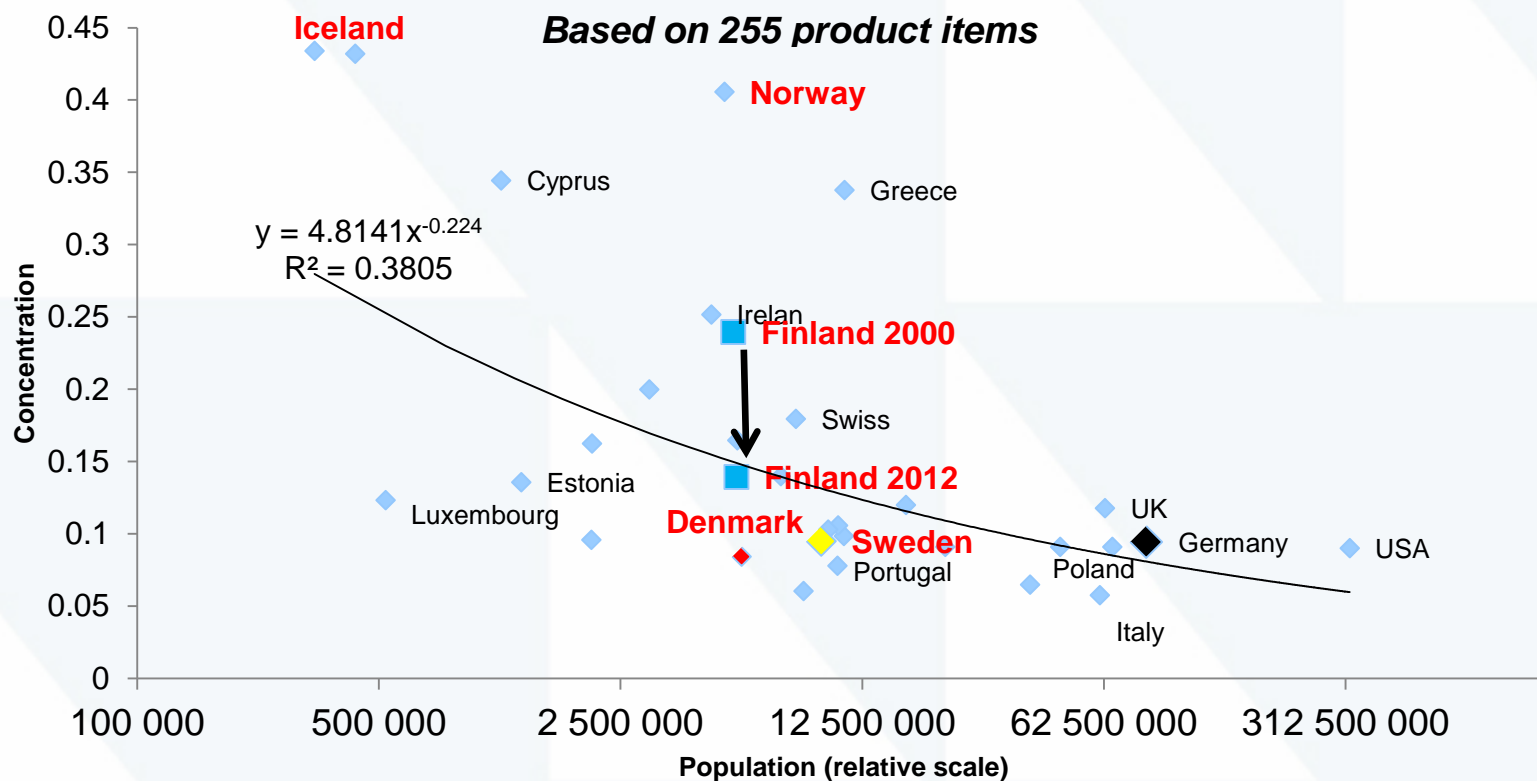
The distribution of *employment* over the probability of computerization

The vulnerability of the small economies close to the technology frontier?

- Potential problem: small specialised economies could be vulnerable to radical disruptions in cutting-edge technology and strategic choices of multinationals
 - Example: Finland and Nokia
- Are the Nordics highly specialised? Yes and no
- Are they dependent on a few large companies? Yes, but not in the same degree
- Can a good terms of trade development compensate for weak productivity growth? One should not trust that

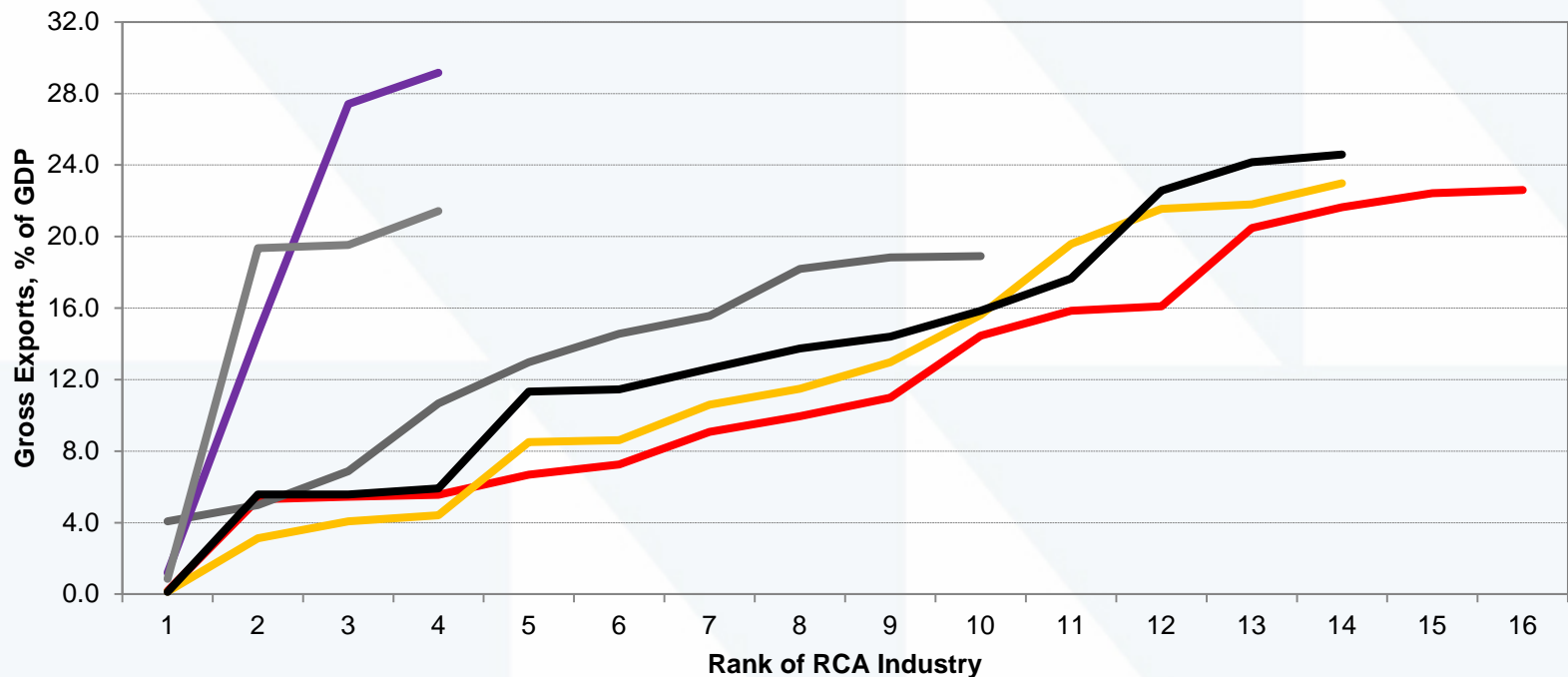
Concentration of exports and the size of the country

Concentration of product structure of exports and size of country, 2012



The importance of the industries in which countries specialise (1)

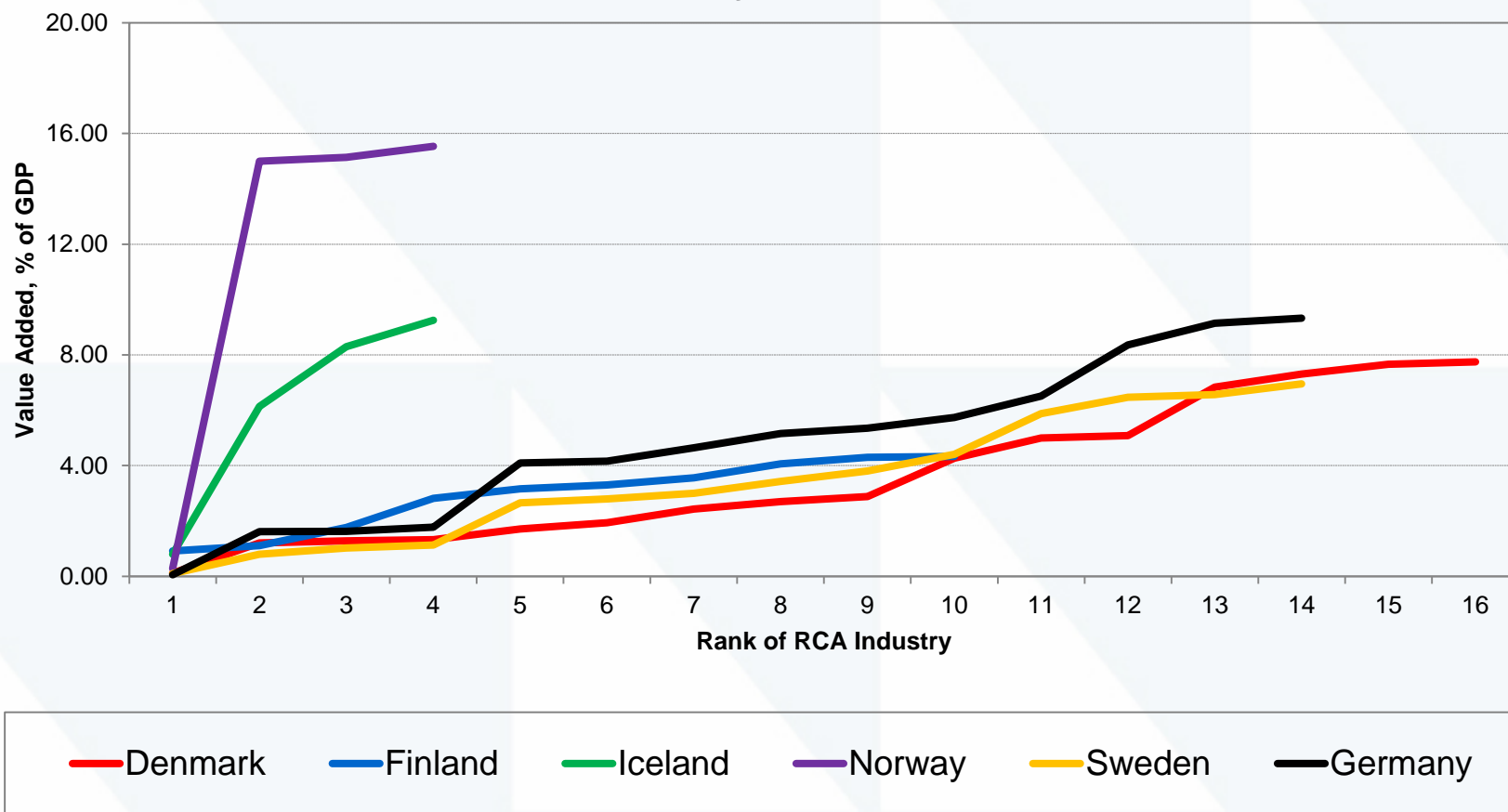
Cumulative gross exports by RCA industries in 2007-2009, % of GDP



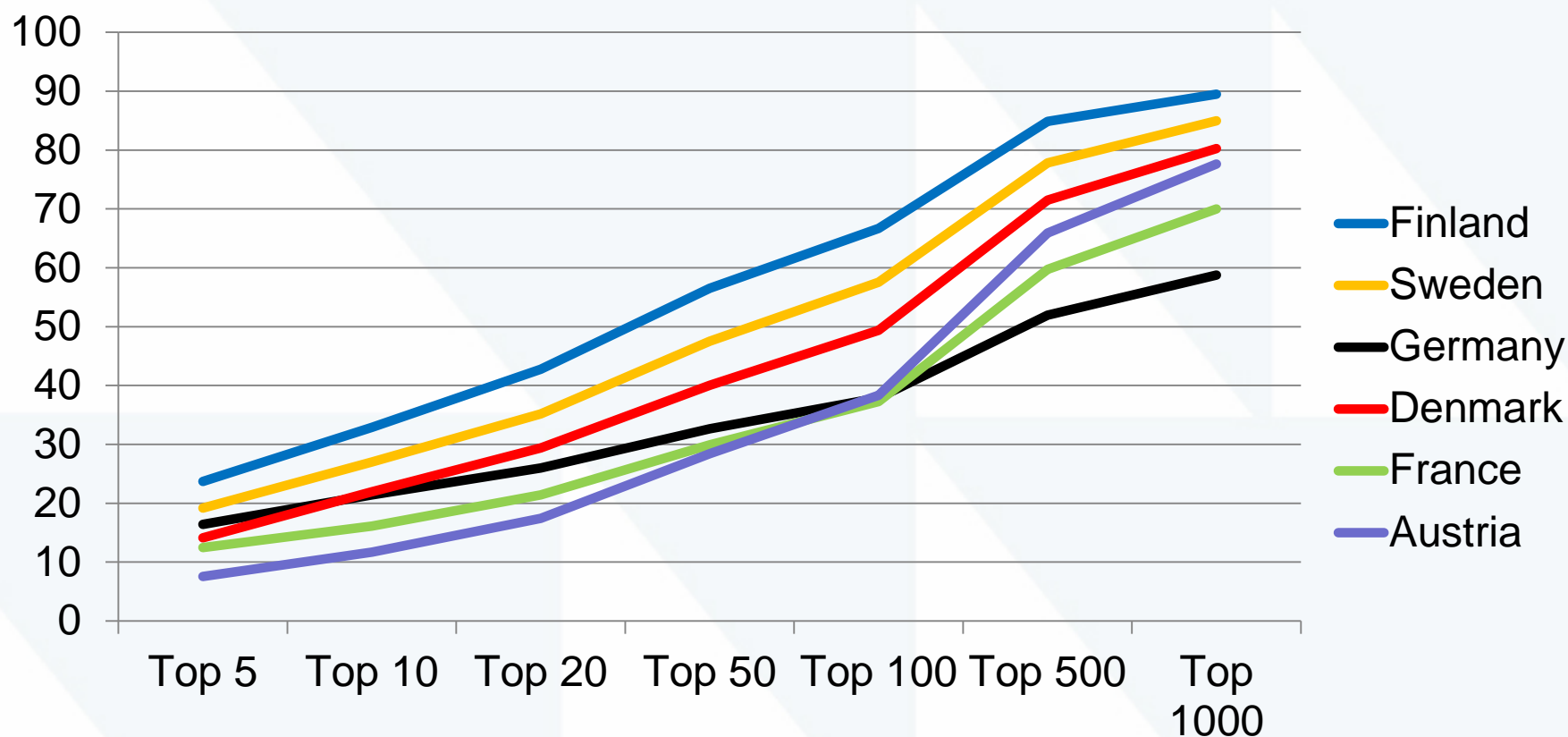
— Denmark — Finland — Iceland — Norway — Sweden — Germany

The importance of the industries in which countries specialise (2)

Cumulative Value Added Exports by RCA industries in 2007-2009, % of GDP

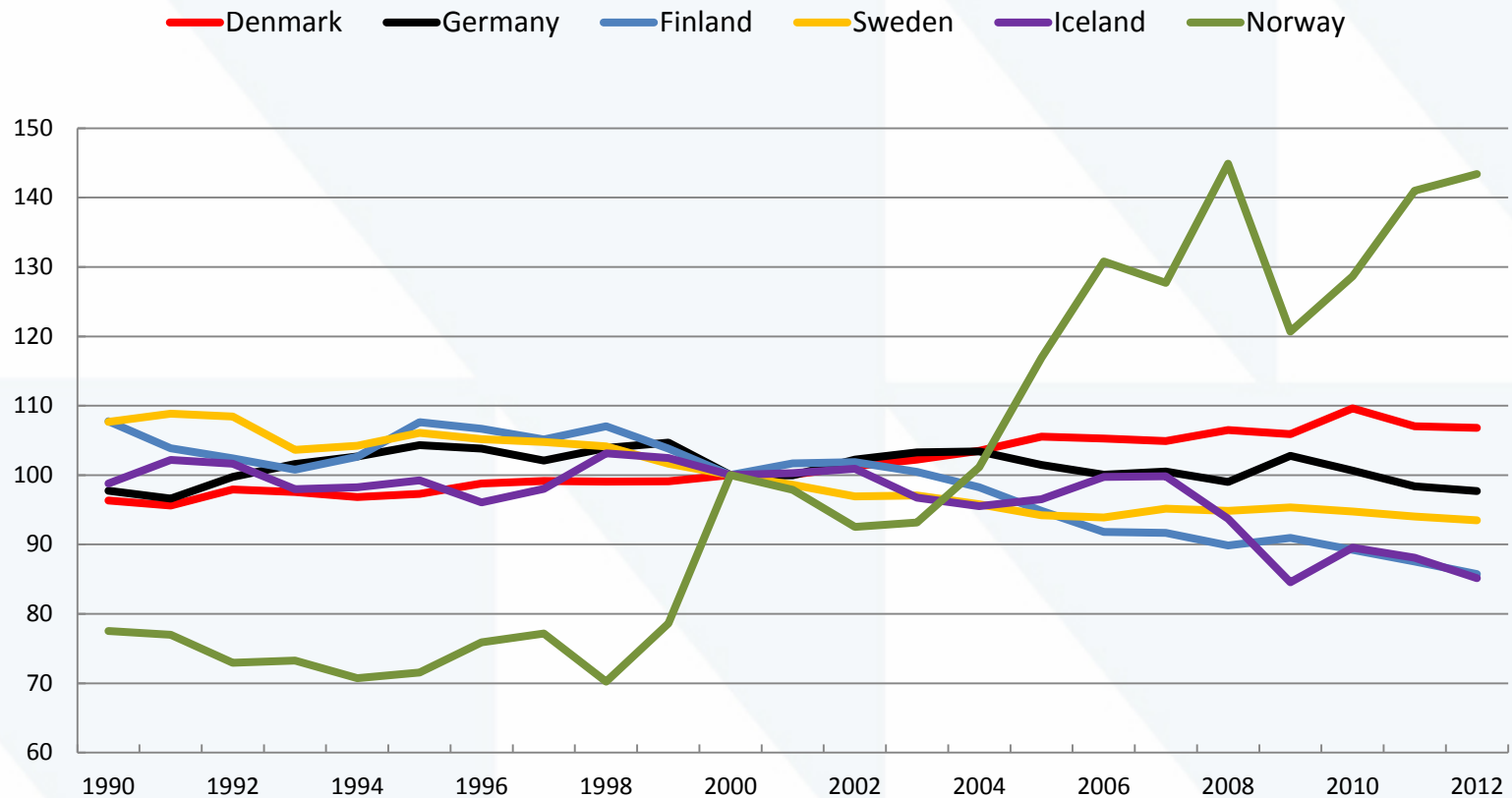


Largest enterprises' share of exports (%)



Source: OECD, TEC by top enterprises. Observations are from the year 2011.

Terms of trade, index 2000=100

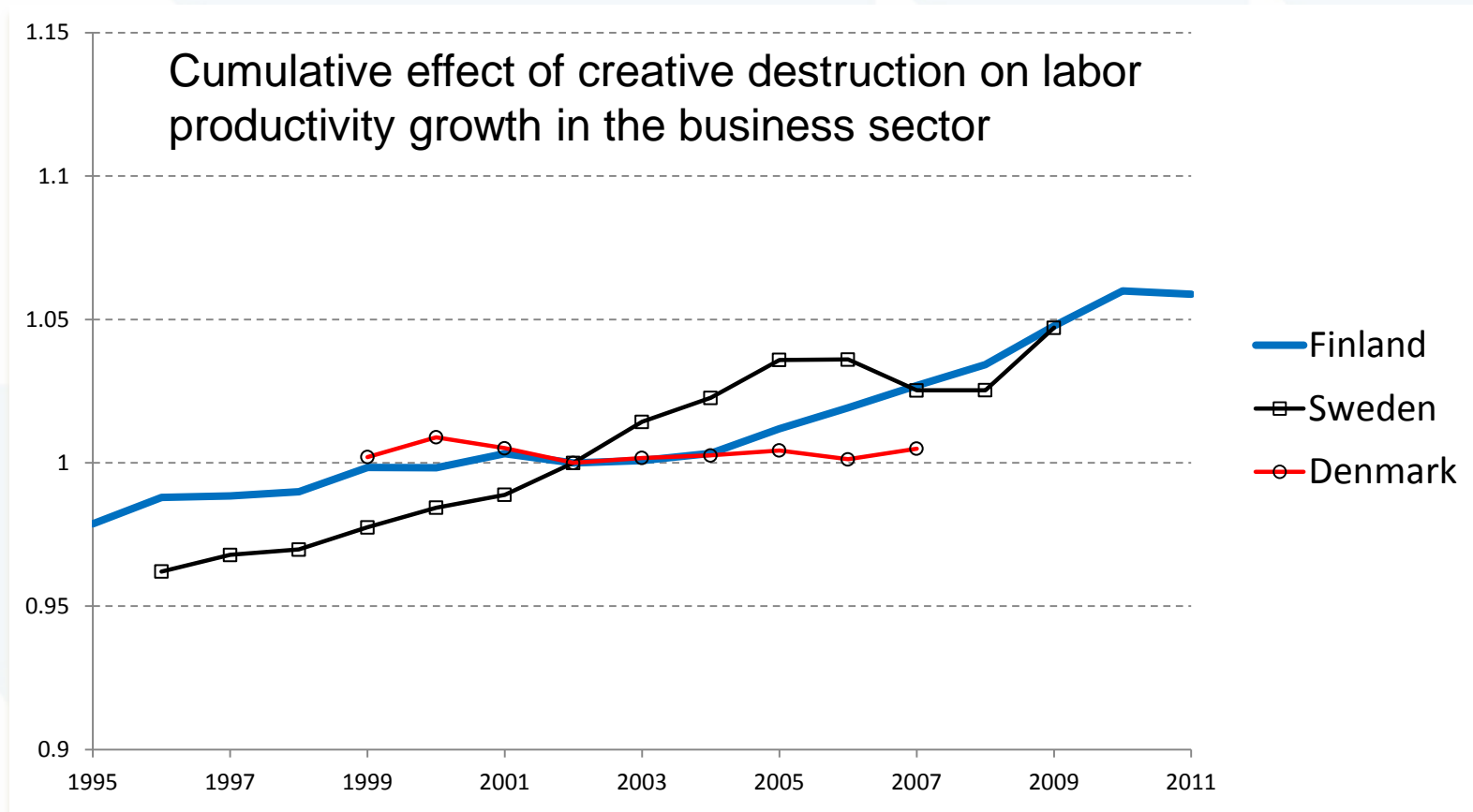


Source: Ameco

Ways to support innovation without taking excessive risks

- Difficult to see a sensible alternative to a neutral policy approach of not picking winners, emphasis on competition
- Nevertheless some choices in the use of scarce public resources necessary
 - Existing areas of strength have already passed a market test
 - Support development of general purpose technology rather than very specific applications
- Support entrepreneurial ecosystems
 - Incubators, start-up programmes, cluster programmes
 - Development of domestic capital markets to provide an alternative for foreign takeovers too early
- Co-operation between national funding agencies?

More productivity enhancing structural change already underway?



Concluding remarks

- The Nordics' point of departure to achieve high productivity is in many ways good
- But they have not performed recently quite as well as one might have expected and face challenges going forward
- There is potential to improve framework conditions
- Key issue: maintenance of acceptance/support for structural change to fully utilize the existing strengths