

# Nordic Globalization Barometer 2010

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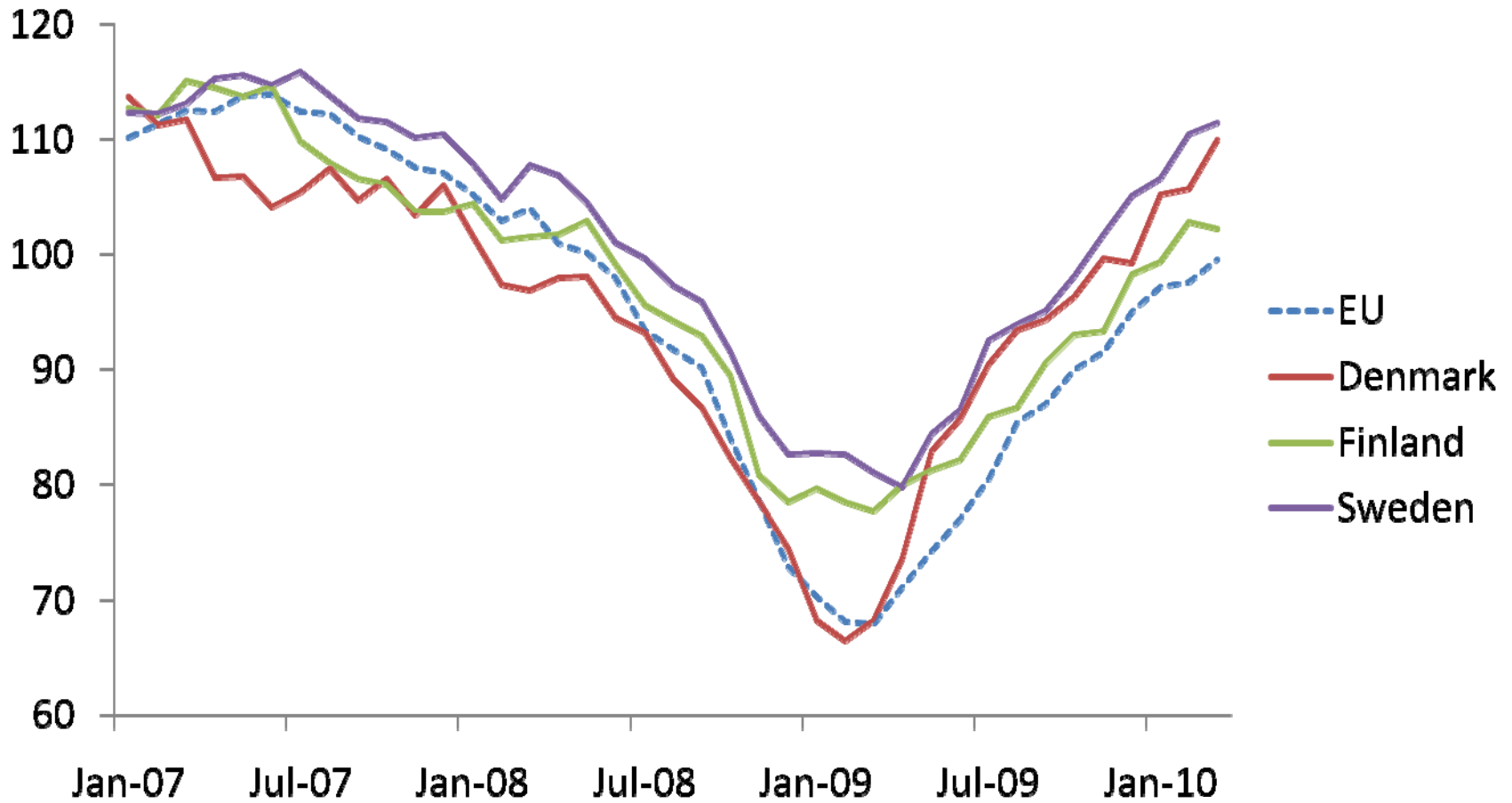
Harvard Business School &  
Stockholm School of Economics

- How *globally competitive* is the Nordic region in the aftermath of the crisis?
- How do Nordic multinationals view the global attractiveness of the Nordic region for *R&D activities*?

# Current Economic Climate

## Too good, too fast

Economic Sentiment Indicator



# Economic Performance

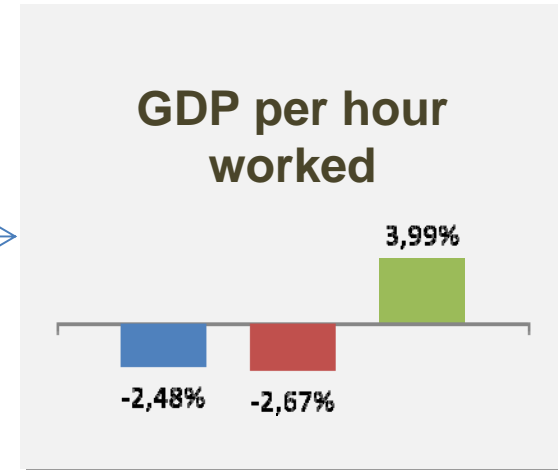
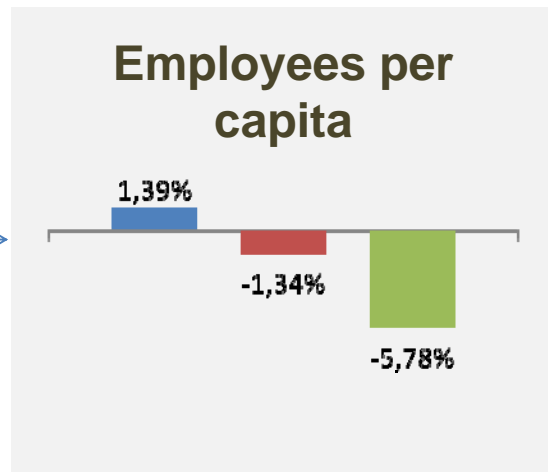
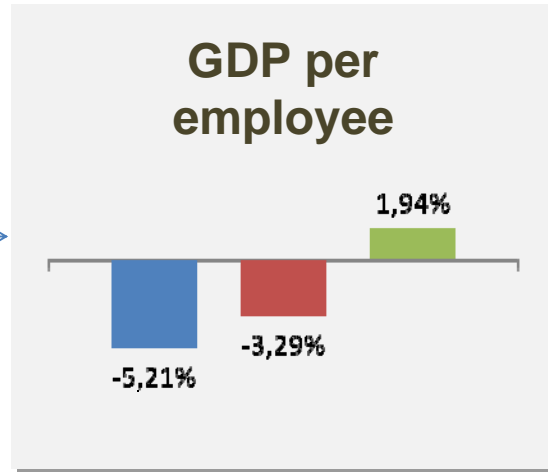
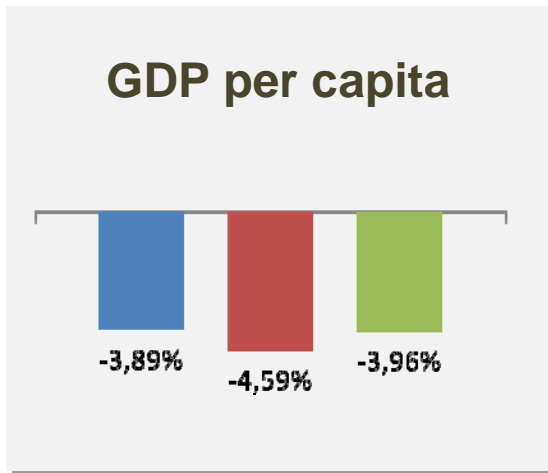
## Prosperous, but hard hit

Prosperity			
	Level	Growth	Growth Dynamism
<b>NORDICS</b>	Green	Red	Yellow
<b>Denmark</b>	Green	Red	Green
<b>Finland</b>	Green	Red	Red
<b>Iceland</b>	Green	Red	Red
<b>Norway</b>	Green	Green	Green
<b>Sweden</b>	Green	Red	Yellow

Prosperity is measured by GDP per capita, adjusted for purchasing power parity; level data is for 2009, growth is relative to 2008, and growth dynamism is the change of the annual growth rate from 2008 to 2009. Coloring is relative to OECD/EU. Source: The Conference Board, 2010

# Economic Performance

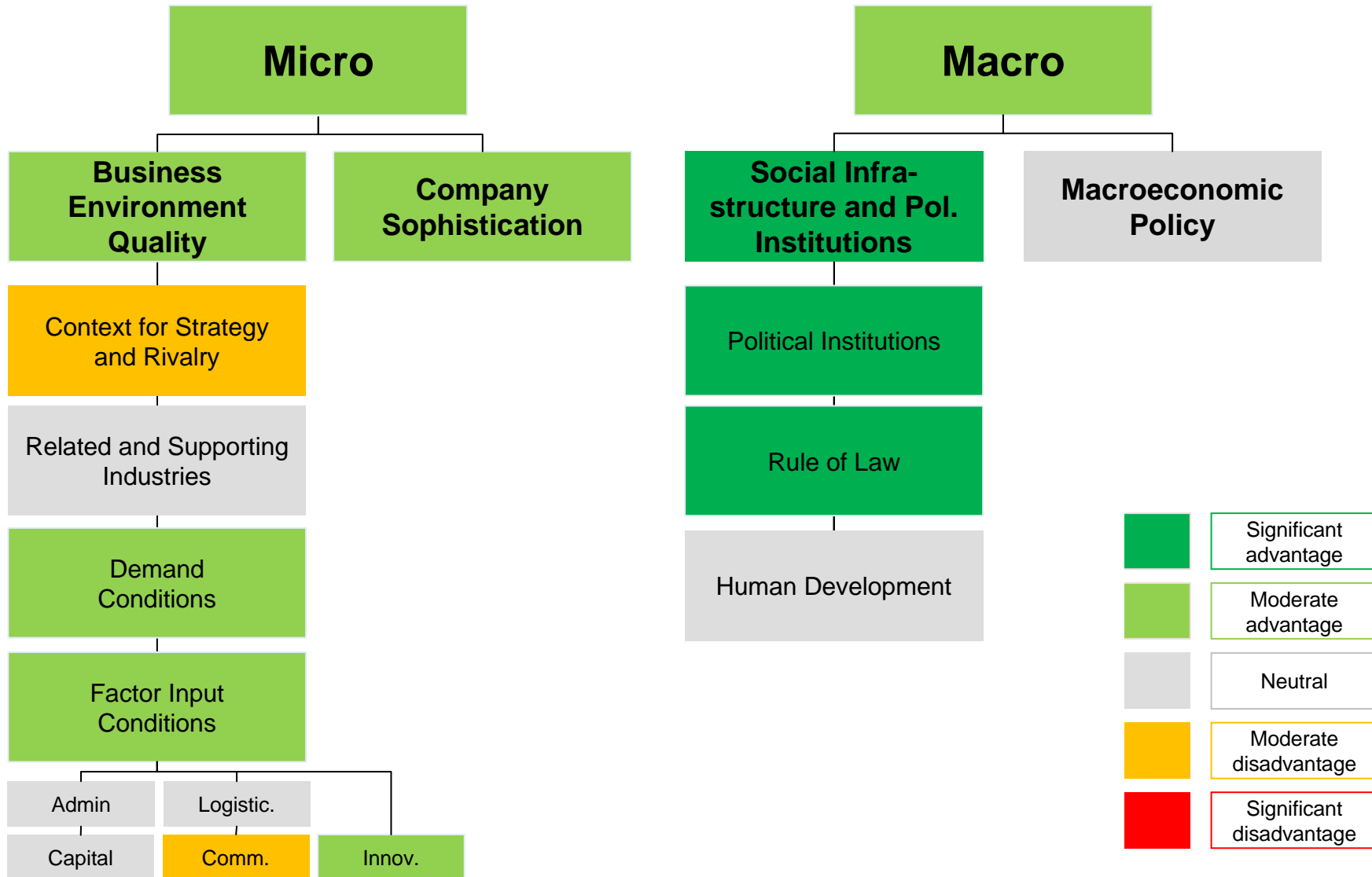
## Adjusting, the Nordic Way



Note: Changes 2009 versus 2007

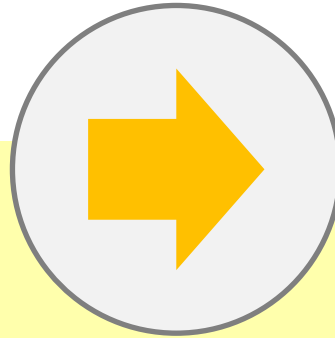
# Global Competitiveness of the Nordics

High and resilient



# Globalization Readiness of the Nordics

Short-term pain – or more?



**Exports**

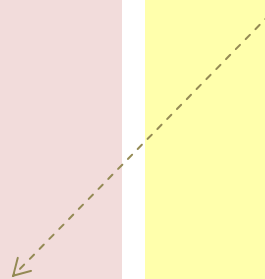
**Entry**

**Inward FDI**

**Inward FDI**

**Outward FDI**

**Exit**



# Issues to Address

## From Analysis to Action

### *What to do?*

- Market integration the most powerful tool at the regional level
- ...

Global  
Governance

Global  
Competitiveness

Regional  
Macroeconomic Policy  
Framework

### *How to do it?*

- Policy learning about different approaches across the Nordics

# Corporate R&D in the Nordics

## Profile

- High R&D intensity driven by **industry specialization**, not by positioning of Nordic companies within their industries
- Significant **concentration** of corporate R&D activity (spending, patenting) across companies

**Table 1: Top 25 Nordic companies by Global R&D Spending, 2008**

Global rank	Company	Sector	Country	2008 R&D spending	2008 R&D spending as % of sales
8	Nokia	Telecom equipment	Finland	5,321.00	10.5
29	Ericsson	Telecom equipment	Sweden	2,975.46	15.7
65	Volvo	Trucks	Sweden	1,479.40	5.4
87	Novo Nordisk	Pharmaceuticals	Denmark	994.94	16.3
252	Lundbeck	Pharmaceuticals	Denmark	300.07	19.8
309	StatoilHydro	Oil & gas producers	Norway	230.47	0.3
314	Vestas	Alternative energy	Denmark	223.00	3.7
315	Sandvik	Industrial machinery	Sweden	222.53	2.6
347	Genmab	Biotechnology	Denmark	191.16	190.9
349	Electrolux	Household goods	Sweden	190.33	2.0
389	Danfoss	Industrial machinery	Denmark	159.35	4.4
396	Atlas Copco	Industrial machinery	Sweden	156.30	2.3
398	Vattenfall	Electricity	Sweden	155.76	1.0
403	DONG Energy	Oil & gas producers	Denmark	154.65	1.9
421	Grundfos	Industrial machinery	Denmark	149.12	5.8
441	Hexagon	Industrial machinery	Sweden	141.65	10.8
469	Novozymes	Biotechnology	Denmark	133.69	12.2
475	SAAB	Aerospace & defence	Sweden	130.92	6.0
479	Metso	Industrial machinery	Finland	129.00	2.0
486	Nordea Bank	Banks	Sweden	127.00	1.5
505	Wartsila	Trucks	Finland	121.00	2.6
549	SKF	Industrial machinery	Sweden	109.08	1.9
573	Telenor	Telecommunications	Norway	103.16	1.0
578	TeliaSonera	Telecommunications	Sweden	102.53	1.1
605	Danisco	Food producers	Denmark	96.61	3.9

**Table 2: Top 25 Nordic companies by US Patents registered from Nordic locations, 2003–2007**

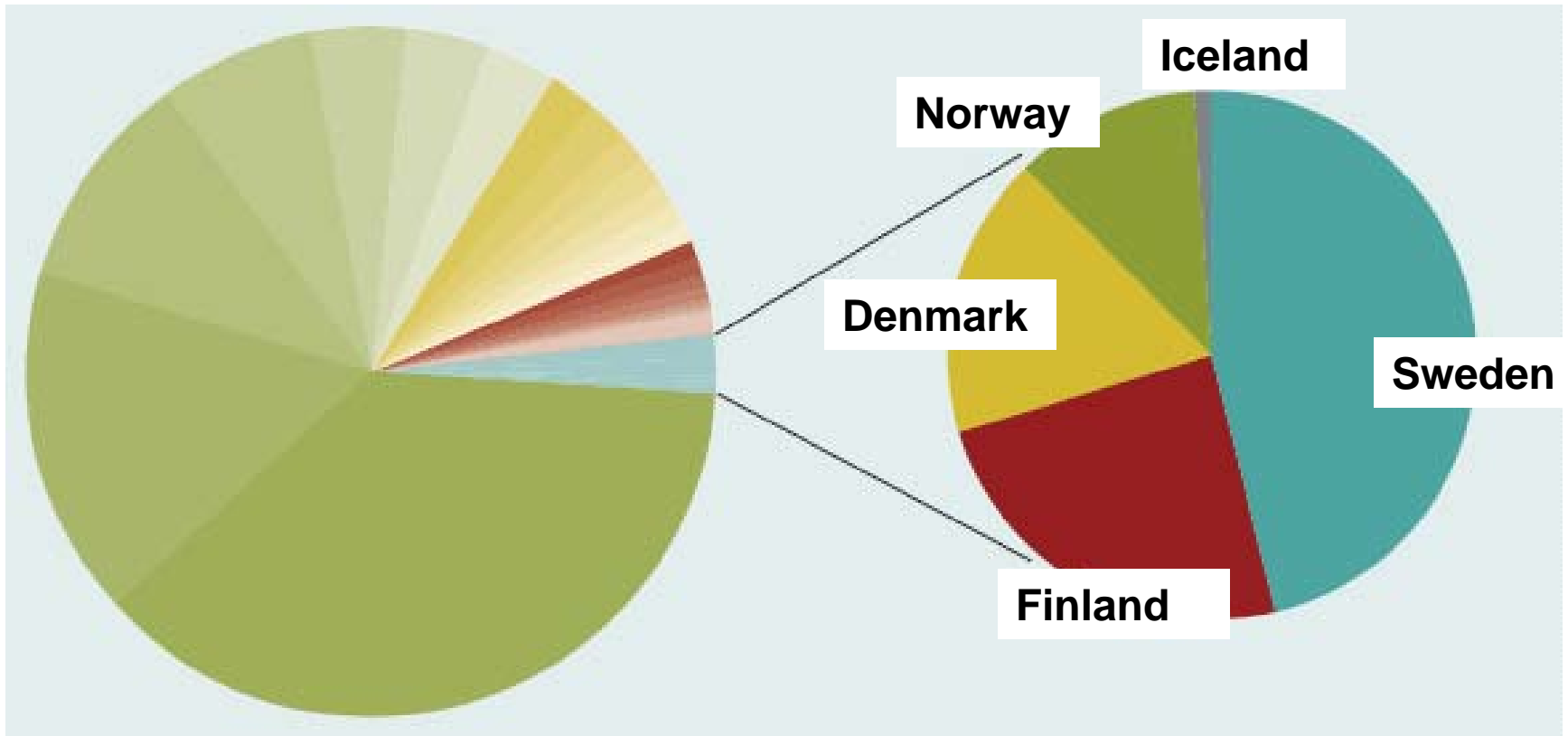
Company	Nordic Patentee locations	US patents, 2003–2007
NOKIA CORPORATION	DK/FI/SE	1592
TELEFONAKTIEBOLAGET LM ERICSSON	DK/IS/FI/NO/SE	1209
METSO	FI/SE	293
SANDVIK AKTIEBOLAG	SE	176
ASTRAZENECA AB	DK/SE	158
ASEA BROWN BOVERI AB	NO/SE	153
SCA HYGIENE PRODUCTS AB	SE	136
VOLVO LASTVAGNAR AB	SE	108
ST. JUDE MEDICAL AB	SE	81
BOREALIS TECHNOLOGY OY	FI/NO/SE	70
TETRA LAVAL HOLDINGS & FINANCE S.A.	DK/SE	70
OUTOKUMPU OYJ	FI/SE	64
DELAVAL HOLDING AB	SE	58
FORD GLOBAL TECHNOLOGIES, L.L.C.	SE	58
SECO TOOLS AB	SE	57
ALFA-LAVAL AB	SE	56
AKZO NOBEL NV	SE	55
SAAB AKTIEBOLAG	SE	55
ANOTO AB	SE	53
SCANIA CV AKTIEBOLAG	SE	52
AKTIEBOLAGET ELECTROLU	SE	47
MICRONIC LASER SYSTEMS AB	SE	47
NEUROSEARCH A/S	DK/SE	44
INFINEON TECHNOLOGIES AG	SE	42
PHARMACIA AKTIEBOLAG	DK/SE	42

# Corporate R&D in the Nordics

## Profile

- High R&D intensity driven by **industry specialization**, not by positioning of Nordic companies within their industries
- Significant **concentration** of corporate R&D activity (spending, patenting) across companies
- **Modest share** of global corporate R&D spending

# Global Corporate R&D Spending (PPP terms)



# Corporate R&D in the Nordics

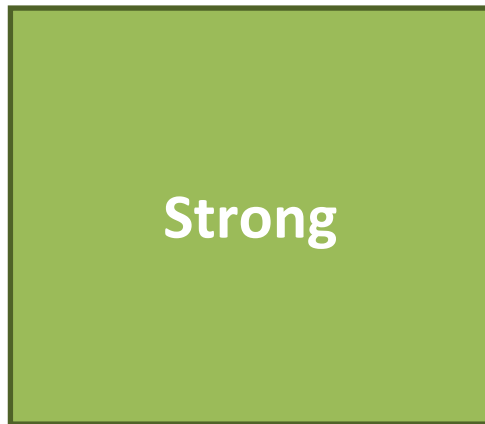
## Current Role of the Nordics Across Types of R&D

		<i>Activity</i>	
		<i>Research</i>	<i>Development</i>
<i>Industry</i>	<i>High R&amp;D Intensity</i>	<b>Strong</b>	<b>Weak</b>
	<i>Low R&amp;D Intensity</i>	<b>Moderate</b>	<b>Weak</b>

# Corporate R&D in the Nordics

## Trends

### Current



*“Short-term position  
is stable”*

- Overall **growth** of R&D activities
- Short-term **consolidation** of R&D activities across OECD locations
- Short-term **stability** of Nordic attractiveness for R&D activities
- Long-term growth of markets, skill supply, and competences in **Asia**
- Long-term **concerns** about Nordic attractiveness for R&D activities

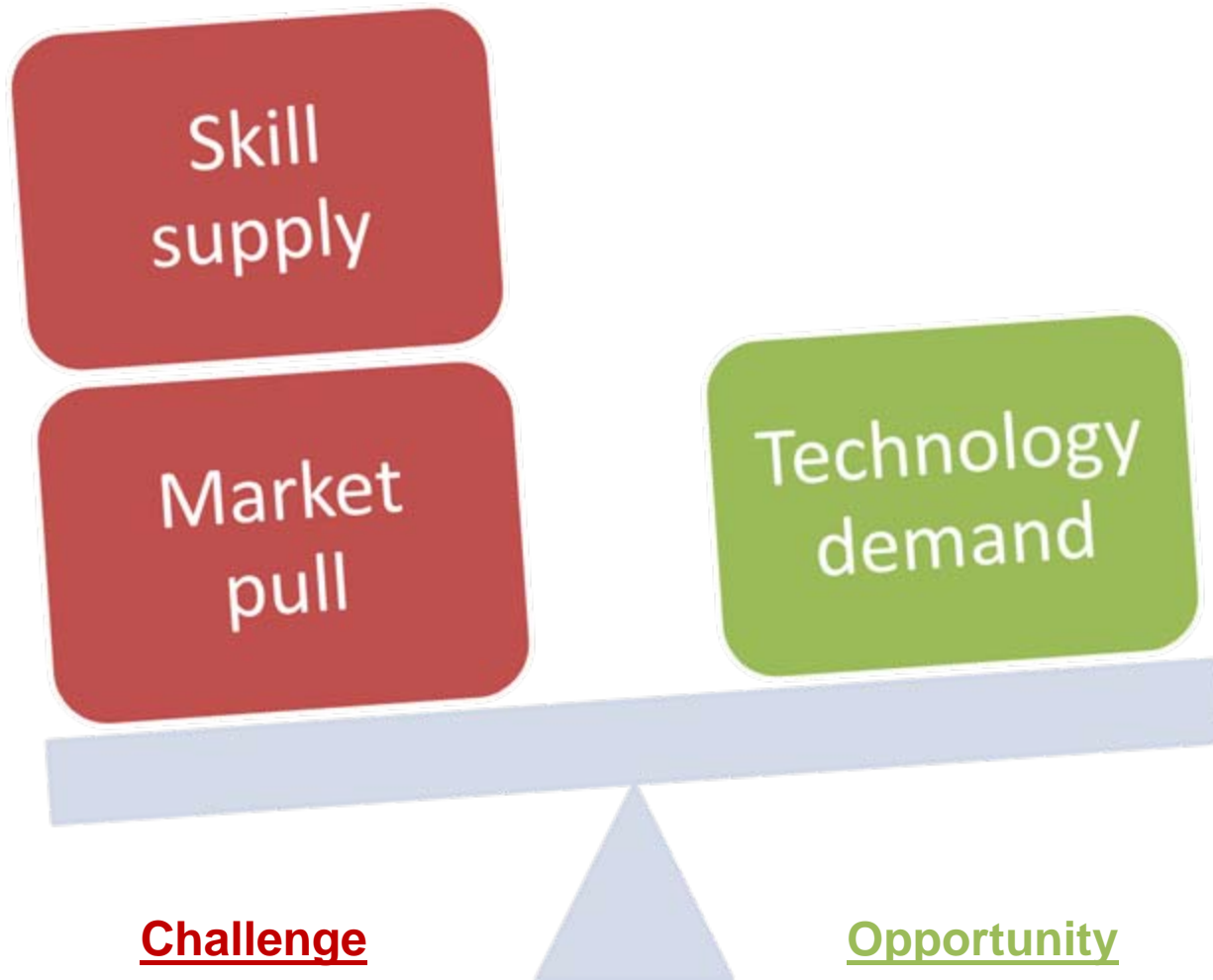
### Future



*“Long-term decline  
is likely”*

# Corporate R&D in the Nordics

## The Impact of China



# Corporate R&D in the Nordics

## Drivers

**Market  
potential**

**Clusters**

**Demand  
sophistication**

**Access  
to Skills**

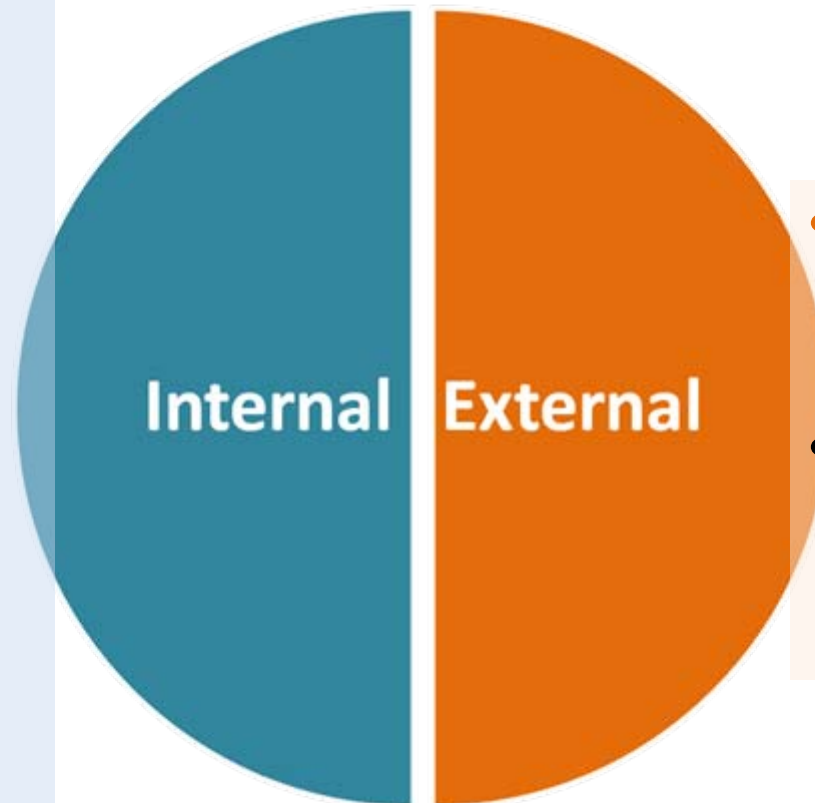
*Lacking high-  
growth SMEs*

*Falling behind in  
some areas*

*Eroding  
gradually*

# Corporate R&D in the Nordics

## Action Areas



- Focus on efforts to strengthen skill development
- Align portfolio of capabilities with changing market needs
- Align innovation policy to shifting nature of clusters
- Integrate markets and innovation policies across the Nordics

- Cooperate on the attraction of skills and companies
- Strengthen linkages to science potential in neighboring regions