



# NORDREGIO

Nordic Centre for Spatial Development

## The role of HEI in regional development

*Strategies for interaction and  
potential for policy actions*

Nordregio Workshop

12 December 2011

# Agenda

10.00	<b>Welcome to Nordregio</b> <i>Director Ole Damsgaard</i>
10.10	<b>Introduction to the project</b> <i>Maria Lindqvist, Nordregio</i>
10.45	<b>Presentations from case study regions</b>  Karlstad University ( <i>Håkan Spjuth, Grants and Innovation Office, Anders Olsson, Region Värmland</i> )  University of Iceland ( <i>Thorvardur Arnason, Hörnafjordur Regional Research Center</i> )  Aalborg University ( <i>Niels Maarbjerg Olesen, Engineering, Science and Medicine Faculty/ AAU Innovation</i> )
11.45	<b>Reflections from a project on the Role of University as Growth Engine in Denmark</b>  <i>Merete Daniel Nielsen, REG LAB, Denmark</i>
12.00	<b>Comments and reflections</b>
12.15	<b>Lunch</b>
13.00	<b>Workshop: What can regional and national policy makers do to support the role of HEI in regional development?</b>
14.30	<b>Concluding comments</b>
15.00	<b>Coffee</b>

# The role of HEI in regional development

*Introduction to the project*

Maria Lindqvist, Nordregio



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# Main focus of the HEI-project

- What are the roles of HEIs in their region?
  - How can HEI strategies and activities support regional development?
  - How can HEI:s balance academic excellence and regional development?
- What are the policy implications at regional and national level?



# Roles of HEI

- Economic impact/multiplier effects
  - GRP, revenues, investments
  - Staff and students
- Traditional role
  - Education for knowledge and human capital to the labour market (students, advanced students and researchers, life long learning)
  - Research (basic and applied)
- Third role
  - Knowledge and technology transfer (e.g. information, patents, licensing, collaborative projects, etc)
  - Entrepreneurship (e.g. spin-offs, new company establishment, attitudes)
- Engaged university
  - Supporting innovation and business development (products, services, processes)
  - Active networking (clusters, competence centers, platforms, etc)
  - Regional development actor
- Indirect effects
  - Image and regional attractiveness (national and international competition for students, researchers, inhabitants)
  - Provide international linkages/knowledge flows

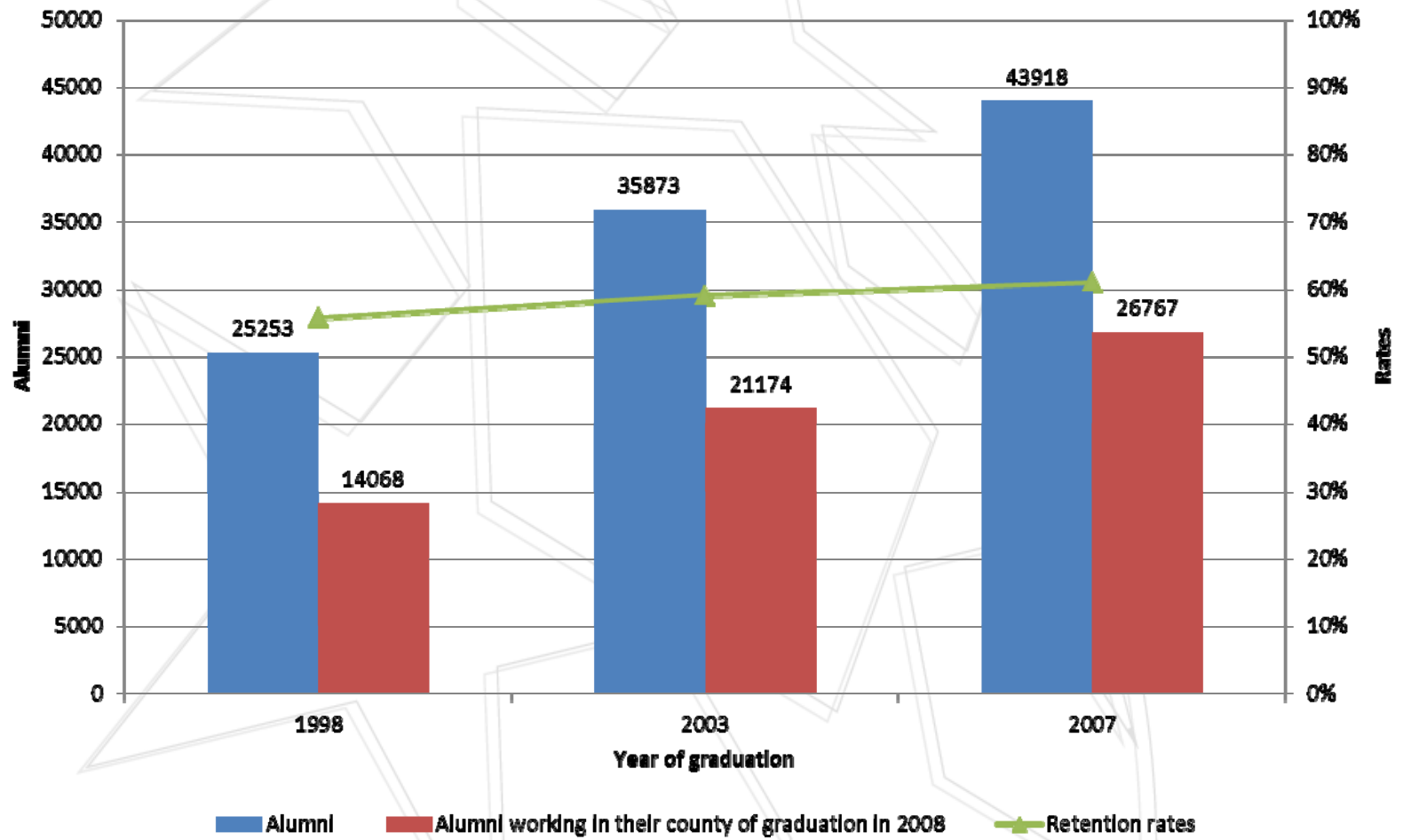


# Pilot study

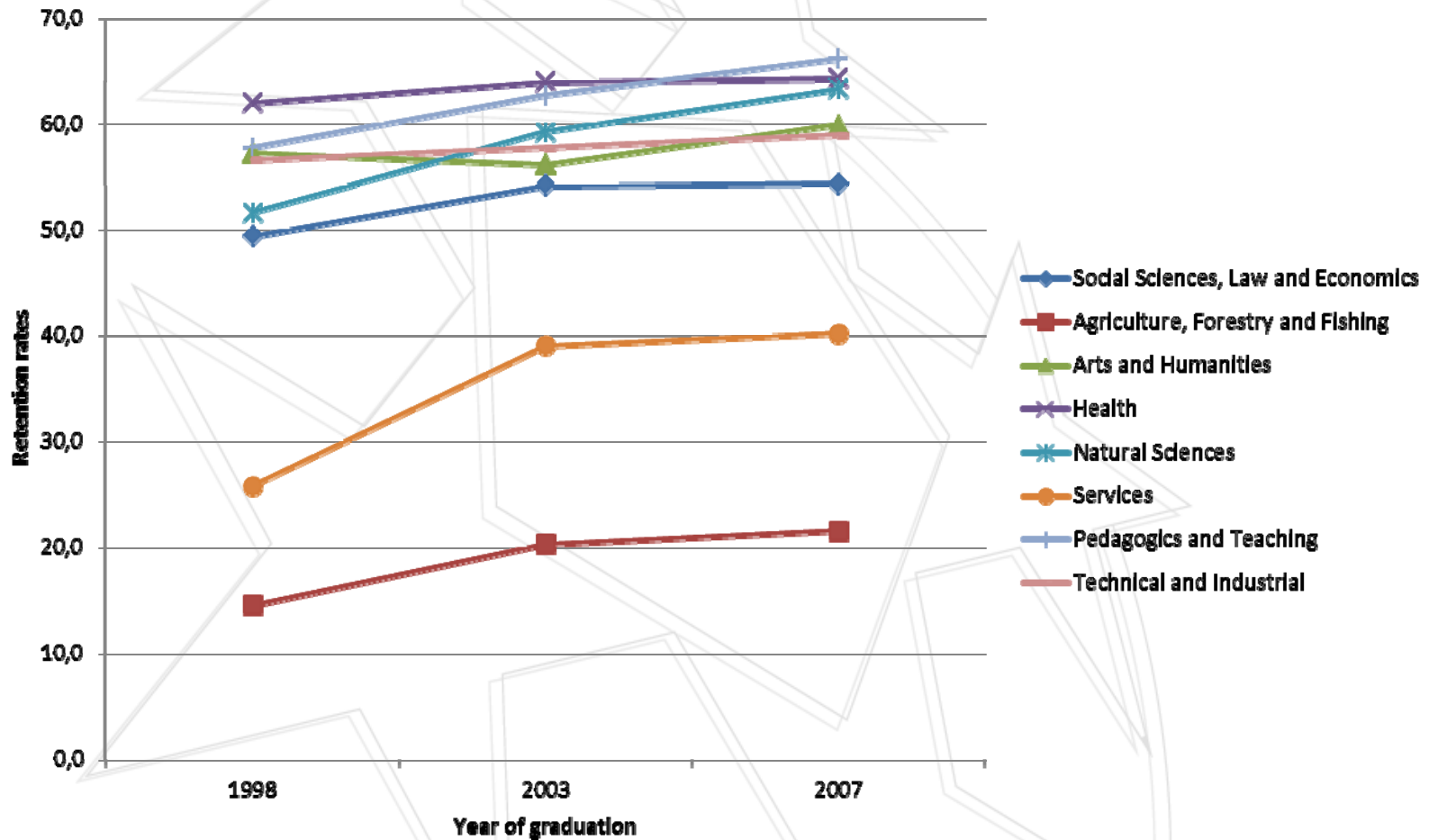
- Regional mobility of students
  - Migration and carrier patterns
  - Entrepreneurship
- Swedish individual data
  - 2008 labor force
  - University graduates: 1998, 2003, 2007



# Aggregate retention rates

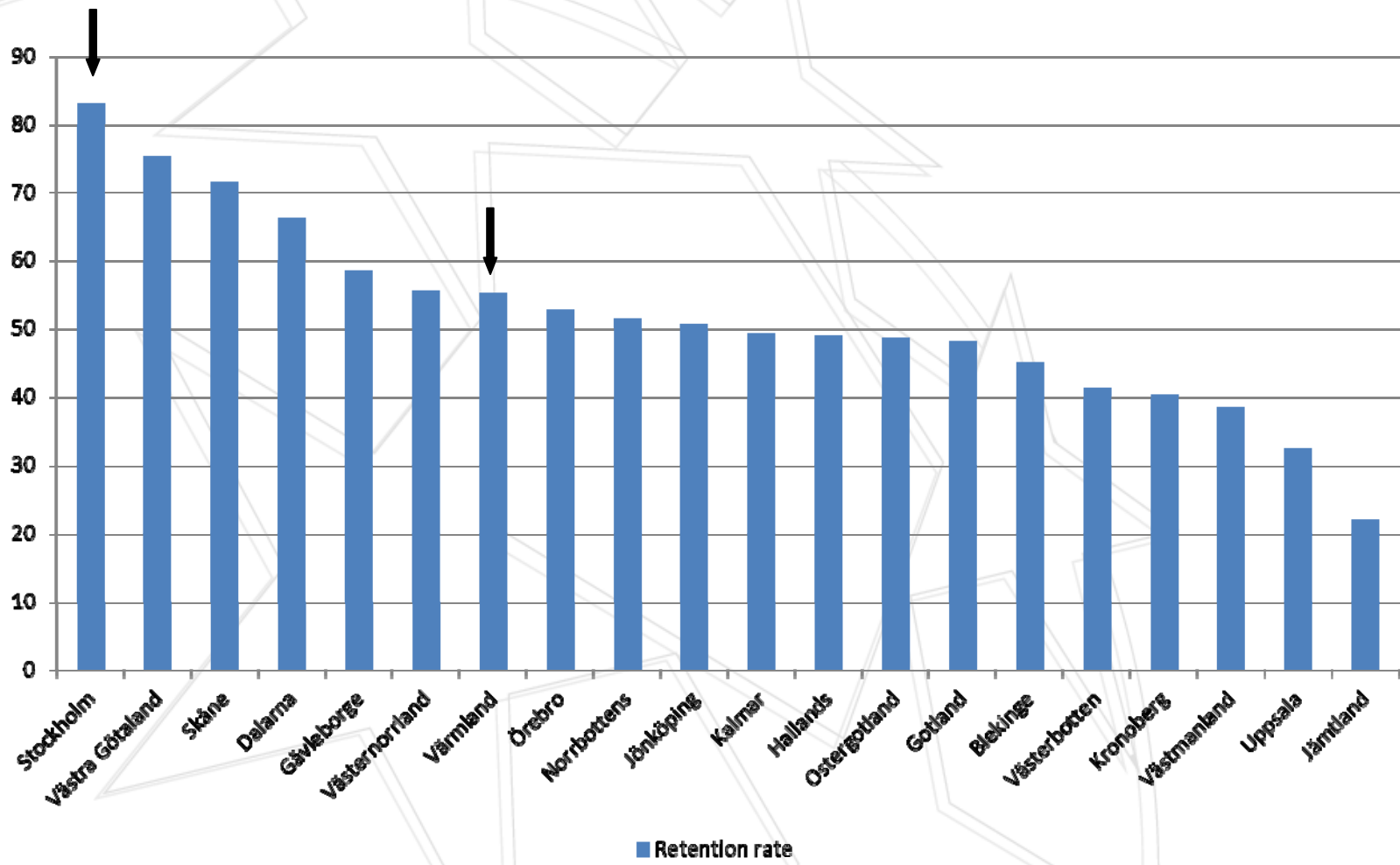


# Aggregate retention rates per field of studies





# Regional ranking based on retention rates, 2007-2008



# Alumni-founded firms

Employment (2008) in firms founded 2003-2005

	Sweden	Stockholm, Uppsala, Västmanland, Södermanland, Örebro counties	Stockholm county	Värmlands county
<i>Entrepreneur from:</i>				
Stockholm university	371	350	336	0
<b>KTH</b>	<b>999</b>	<b>938</b>	<b>923 (91%)</b>	<b>0</b>
Handelshögskolan	214	210	209	0
Karolinska institutet	108	95	87	0
Södertörns högskola	15	13	13	0
Mälardalens högskola	76	58	25	0
Örebro universitet	98	55	27	0
Uppsala universitet	477	433	339	4
<b>Karlstad university</b>	<b>114</b>	<b>80</b>	<b>78 (68%)</b>	<b>18 (16%)</b>
Stockholm other HEI	1 853	1 731	1 688	0
<b>Total (alumni-founded)</b>	<b>4 325</b>	<b>3 963</b>	<b>3 725</b>	<b>22</b>
<b>TOTAL</b>	<b>230 442</b>	<b>84 907</b>	<b>61 122</b>	<b>6 354</b>
<b>Share</b>	<b>2%</b>	<b>5%</b>	<b>6%</b>	<b>0,35%</b>



# Case study selection criteria

- Representation from all countries
- Universities and polytechnics/university colleges
- Different types of regions
- Expert recommendations
- Access to data/contacts



# Case study HEIs

HEI	Year of establishment	Numbers of staff/ students 2010	Revenues (% state funding) 2010
<b>Aalborg University</b>	1994 (1974 University Centre)	2 864/ 15 800	250 M€ (73%)
<b>University of Iceland</b>	1911	N.A./14 000	
<b>University of Nordland</b>	2011 (1994 University college)	600/ 5 700	
<b>University of Tromsø</b>	1968	2 500/ 9 000	297 M€ (80%)
<b>Karlstad University</b>	1999 (1977 University college)	1 200/ 12 500	100 M€ (95%)
<b>Royal Institute of Technology (KTH)</b>	1927 (1877 Polytechnic)	3 200/ 15 700	367 M€ (54%)
<b>HAMK University of Applied Science</b>	1995	777/ 8 196	67 M€ (73%)
<b>University of Lappeenranta</b>	1969 (1919 School of Business)	930/ 5 264	71 M€ (57%)

# Case study regions

HEI	Region	Size of region 2010 (population density)	Annual population growth, 2005-2010
<b>Aalborg University</b>	North Denmark region	579 628 persons (73 pers/km <sup>2</sup> )	0.8 (promille)
<b>University of Iceland</b>	Iceland	317 630/ persons (3 pers/km <sup>2</sup> )/	15.7
<b>University of Nordland</b>	Nordland County (fylke)	236 271 persons (7 pers/km <sup>2</sup> )	-0,5
<b>University of Tromsø</b>	Troms County (fylke)/ Northern Norway region	156 494 persons (6 pers/km <sup>2</sup> )/ 465 621 persons (4 pers/km <sup>2</sup> )	4.9/N.A.
<b>Karlstad University</b>	Värmland County (län)	278 000 persons (16 pers/km <sup>2</sup> )	-0.2
<b>Royal Institute of Technology (KTH)</b>	Stockholm County (län)	1.9 million persons (311 pers/km <sup>2</sup> )	15
<b>HAMK University of Applied Science</b>	Kanta Hämeen County (maakunta)	173 828 persons (33 pers/km <sup>2</sup> )	7.3
<b>University of Lappeenranta</b>	South Karelia County (maakunta)	134 019 persons (24 pers/km <sup>2</sup> )	-2.6

# Preliminary observations

- History matters!
- Few specific strategies on regional development
- Activities to stimulate collaboration
  - Changing attitudes
  - Develop incentives
  - Quality assessment
  - Influence ranking systems
- Importance of internationalisation
  - Foreign students
  - International HEI collaboration
  - Research funding



# Preliminary observations

- Active role in regional development
  - Education and life long learning
  - Research collaboration
  - Commercialisation and innovation
  - Partnerships
  - Regional strategies and dialogues
  - Industrial restructuring
  - Cluster development
  - Regional support structures
  - Regional attractiveness



# Preliminary conclusions

- Universities have an important role to play in supporting regional development in all types of regions
- Universities can be active in regional development without compromising education and research
- Clusters, innovation networks and partnerships can be efficient ways of organising collaboration
- Universities may secure knowledge flows across regional borders, to avoid regional lock-in
- Impact, roles and activities varies!

