

# Rapid growth firms in space

## Where do rapidly growing firms thrive?

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# Small firms, growth firms and innovation

- The purpose of regional innovation policy and regional innovation systems is to advance the formation of enterprises that will flourish and create jobs and wealth for local communities
- As research community we seem to focus on territorial environments with supposedly fast growing firms and vital entrepreneurial activities:
  - *Business clusters/ dynamic agglomerations*
  - *Science park/ university environments and new ventures in high tech industries: ICT, bio- and nano-tech*
  - *Urban environments with fast development of KIBS*



# Turning the research problem

- Our procedure:
  - Identify the rapid-growth firms, find the mechanism that seems to trigger this unique performance, and analyse how these factors relates to the location of the firm
    - *Identify the representation of fast-growth firms in industrial sectors and different territories based on secondary data*
    - *Based on a survey, indentify the organizational change and ‘the core skills’ of these firms and their involvement in learning and innovation*



## Our definition of rapid growth firms

- The firm has to be active over a period of four years – in our case from 2003 to 2006
- In the initial year the firm must have a turnover of at least NOK 1 million (around € 120.000)
- Growth in revenues of at least 100% over this four years period
- Positive operating profit over these years
- No negative growth of income year by year in the period



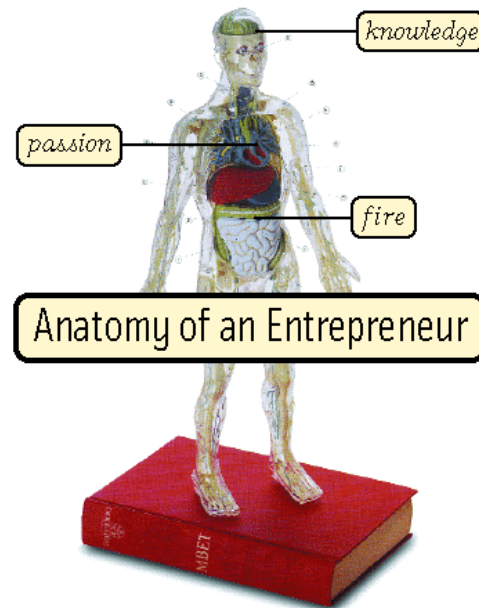
## What we know about rapid-growth firms

- A small number of rapidly growing firms contribute a disproportional large share of the net job creation
- Growth firms tend to be younger firms, but not necessarily new firms
- Growth firms are found in all size groups with a bias towards smaller firms
- Over a firm's lifespan, rapid growth accrues once or twice, seldom continuously

## What we know about location

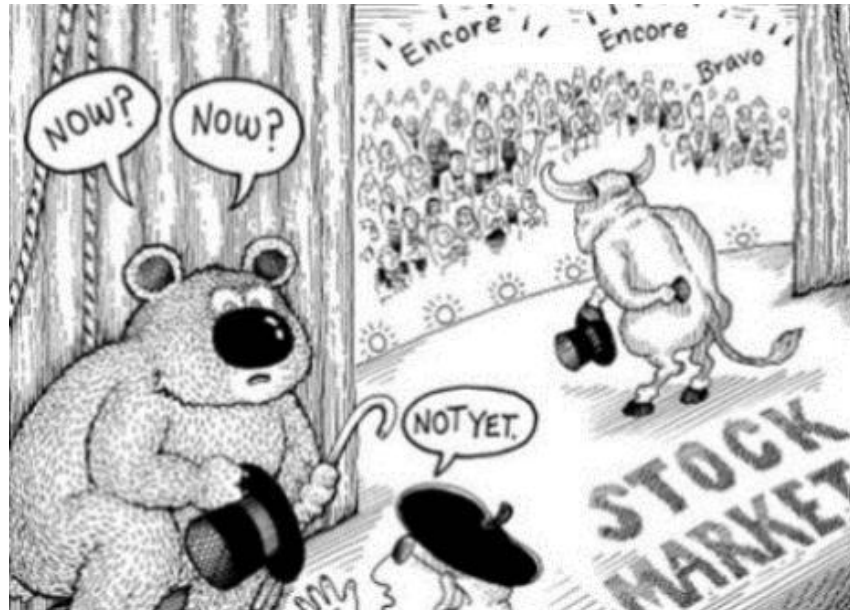
- Some find a centralized pattern – other find a diverse pattern
- Service-gazelles are centralized
- Manufacturing-gazelles more decentralized
- Few growth firms in rural areas

# Drivers for rapid growth of firms



- Capabilities of the firm and entrepreneur
  - *Specific qualifications of the entrepreneur(s)*
  - *Uniqueness of production resources*
  - *Successful strategy and management*

# Drivers for rapid growth of firms



- Structural elements of business environment
  - *Industry*
  - *Size and age of the firm*
  - *Location*
  - *Business cycle*

# Key attributes differentiating rapid and slow growth firms

- **Characteristics with the entrepreneur**
  - Higher education
  - Entrepreneurial experience
  - Social and professional network
  - Size of founding team
- **Characteristics of the firm**
  - Growth oriented strategy and commitment to grow
  - Participation in interorganizational arrangements
  - A proactive, planning attitude towards expansion
  - Geographic location
  - A focus on a narrow market and few customers

# Key attributes differentiating rapid and slow growth firms

- **Characteristics of business practices**
  - Creating unique value for customers
  - Product superiority
  - Innovation (facilitated by location)
  - Advanced technology
- **Characteristics with management of human resources**
  - Selective hiring
  - Geographical labour pool
  - Performance based incentives
  - Stock ownership plans

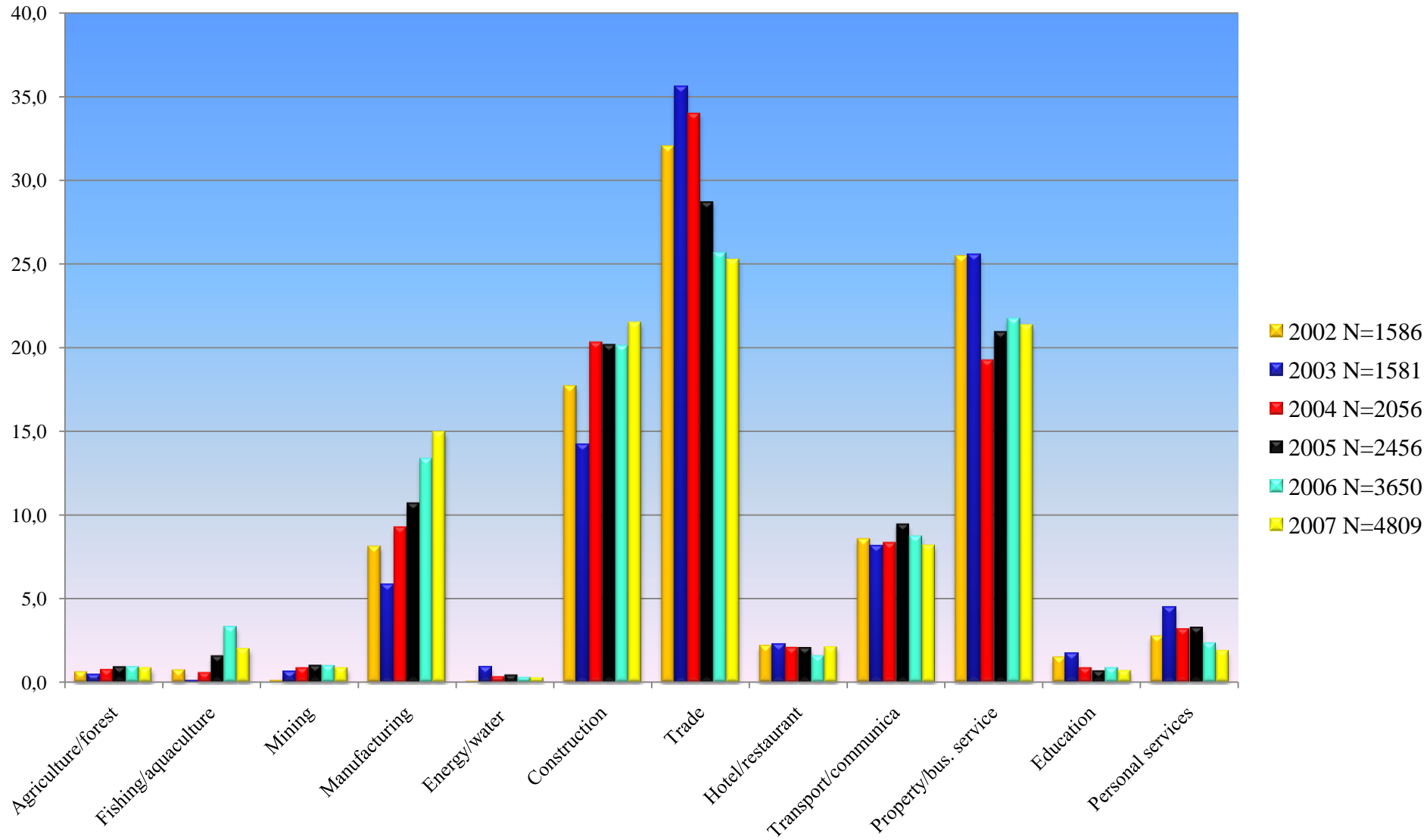
# Important capabilities of growth firms

- Based on a diverse and heterogeneous set of knowledges
- Unique understanding of the demand side of specific markets
  - Understanding the needs of customers
  - Understanding the dynamics of the industry they serve and the behaviour of their competitors
- A clear and proactive development strategy
- High absorptive capacity developed through
  - Social and institutional networks
  - Skills in hiring competent staff
  - Capacity to build an achievement and change oriented organizations

## Hi-tech companies?

- 98 % of the rapid growth firm does not report any values on patents
- 97 % of rapid growth firms does not report any cost under the label "research and development".

# In what industries do firms grow rapidly?



# In what industries do firms grow rapidly?

Industry	N all firms	N growth firms	Share	Industry	N all firms	N growth firms	share
13 Mining of metal ores	4	1	25,00 %	15 Food products and beverages	1232	49	3,98 %
41 Collection, purification and distribution of water	17	2	11,76 %	33 Medical, precision/optical instruments, watches	331	13	3,93 %
37 Recycling	91	10	10,99 %	17 Manufacture of textiles	245	9	3,67 %
05 Fishing, fish farms	1149	119	10,36 %	74 Other business activities	14785	496	3,35 %
34 Motor vehicles, trailers and semi-trailers	108	11	10,19 %	50 Sale and repair of motor vehicles, automotive fuel	4317	142	3,29 %
27 Basic metals	119	11	9,24 %	18 Manufacture of wearing apparel; dressing	103	3	2,91 %
28 Fabricated metal products	1230	108	8,78 %	24 Chemicals and chemical products	175	5	2,86 %
31 Electrical machinery and apparatus	287	25	8,71 %	02 Forestry	215	6	2,79 %
14 Other mining and quarrying	288	24	8,33 %	62 Air transport	39	1	2,56 %
35 Transport equipment, ships etc	631	48	7,61 %	92 Recreational, cultural and sporting activities	1819	45	2,47 %
32 Radio, television and communication equipment	97	7	7,22 %	36 Furniture	570	13	2,28 %
60 Land transport; transport via pipelines	2544	169	6,64 %	40 Electricity, gas, steam and hot water supply	407	8	1,97 %
29 Machinery and equipment	1030	68	6,60 %	73 Research and development	166	3	1,81 %
45 Construction	11537	731	6,34 %	22 Publishing, printing, reproduction recorded media	1631	29	1,78 %
71 Renting of machinery	701	44	6,28 %	52 Retail trade, repair personal/household goods	13302	231	1,74 %
72 Computer and related activities	3141	196	6,24 %	93 Other service activities	1717	27	1,57 %
11 Extraction of crude petroleum and natural gas	162	10	6,17 %	55 Hotels and restaurants	4136	57	1,38 %
25 Rubber and plastic products	289	17	5,88 %	21 Pulp, paper and paper products	76	1	1,32 %
51 Wholesale trade and commission trade	9647	546	5,66 %	70 Real estate activities	10416	40	0,38 %
63 Supporting transport activities; travel agencies	1564	85	5,43 %	10 Mining of coal and lignite; extraction of peat	6	0	0,00 %
26 Non-metallic mineral products	393	21	5,34 %	16 Tobacco	1	0	0,00 %
20 Products of wood	796	39	4,90 %	19 Tanning of leather; luggage, handbags, saddlery	20	0	0,00 %
90 Sewage and refuse disposal	296	14	4,73 %	23 Coke, refined petroleum products and nuclear fuel	7	0	0,00 %
01 Agriculture	600	28	4,67 %	30 Office machinery and computers	17	0	0,00 %
64 Post and telecommunications	437	20	4,58 %	91 Activities of membership organizations n.e.c.	63	0	0,00 %
61 Water transport	720	31	4,31 %	95 Private households with employed persons	1	0	0,00 %
80 Education	798	32	4,01 %	<b>Total population</b>	<b>99407</b>	<b>3595</b>	<b>3,62 %</b>

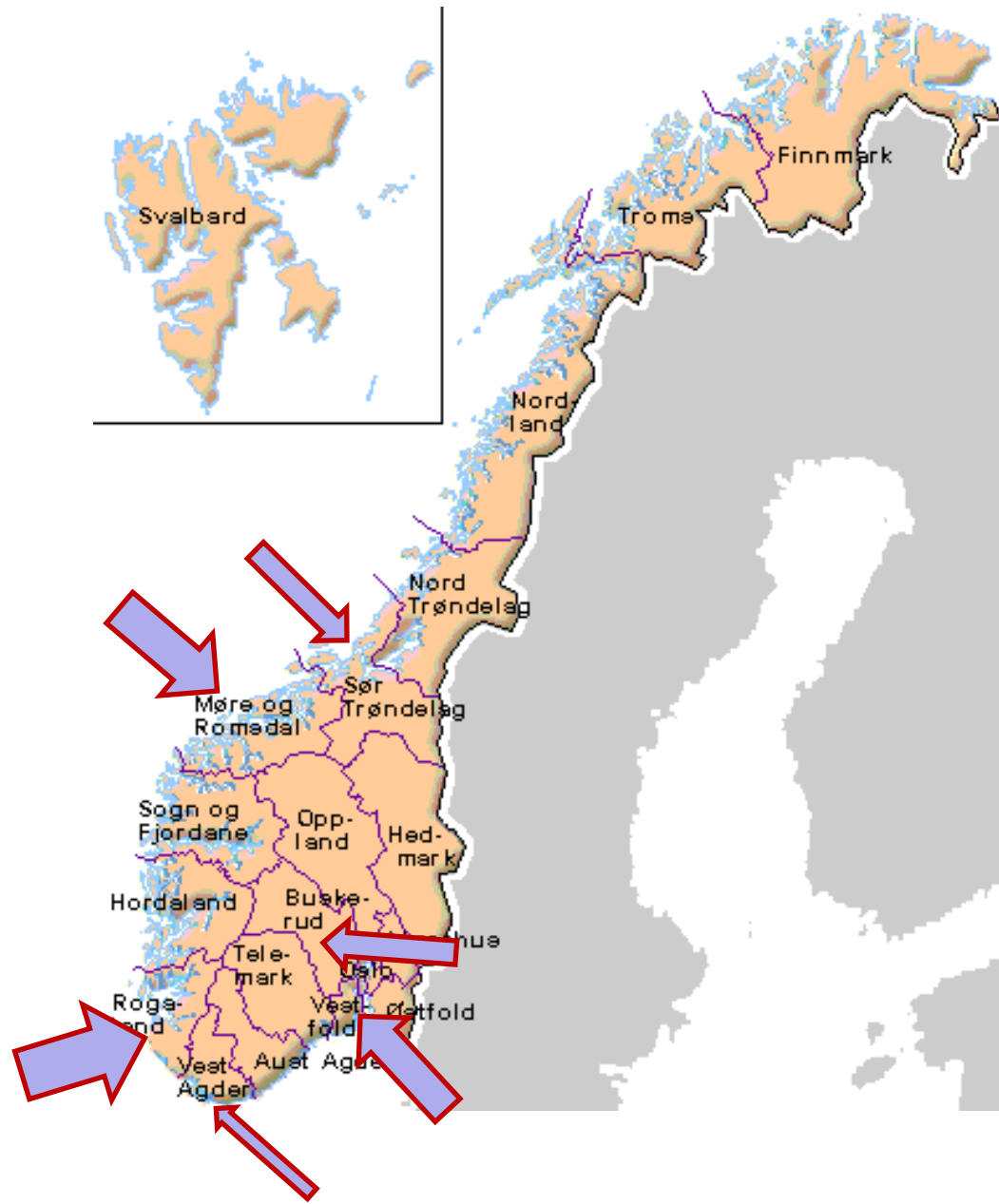
# The geography of Norway



# Regional distribution of rapid-growth firms

County	I	II	III	IV	V	VI	VII	VIII
	# rapid-growth firms	% of rapid-growth firms	% of all active AS/ASA	% of population in Norway	% of working population after place of work	% growth firms of all firms	Growth firms per 10.000 inhabitants	Growth firms per 10.000 jobs
01 Ostfold	175	4,9	4,8	5,6	4,8	3,9	6,7	15,4
02 Akershus	345	9,6	10,4	10,8	9,6	3,5	6,9	15,1
03 Oslo	563	15,7	16,4	11,6	17,1	3,6	10,5	13,9
04 Hedmark	75	2,1	3,1	4,1	3,5	2,5	4	9
05 Oppland	97	2,7	3,2	3,9	3,6	3,2	5,3	11,3
06 Buskerud	212	5,9	5,4	5,3	4,9	4,2	8,6	18,4
07 Vestfold	195	5,4	4,9	4,8	4,2	4,2	8,8	19,5
08 Telemark	126	3,5	3,3	3,6	3,2	4,1	7,6	16,8
09 E-Agder	65	1,8	2,2	2,2	1,9	3,1	6,2	14,5
10 V-Agder	130	3,6	3,5	3,5	3,4	3,9	8	16,3
11 Rogaland	392	10,9	7,9	8,6	8,8	5,3	9,9	18,8
12 Hordaland	327	9,1	9,2	9,8	9,7	3,8	7,2	14,2
14 S&Fjord.	68	1,9	2,3	2,3	2,2	3,1	6,4	13
15 M&Roms.	233	6,5	5,6	5,3	5,1	4,4	9,5	19,4
16 S-Trond.	230	6,4	5,7	5,9	6,2	4,3	8,4	15,7
17 N-Trond.	70	1,9	2,5	2,8	2,5	3	5,4	12
18 Nordland	151	4,2	4,7	5,1	4,7	3,4	6,4	13,7
19 Troms	88	2,4	3,1	3,3	3,3	3	5,7	11,4
20 Finnmark	51	1,4	1,7	1,6	1,5	3,2	7	14,6
21 Svalbard	2	0,1	0,1	...	0,1	3	...	15,8
Total	3595	100	100	100	99,9	3,8	7,7	15,2

# The geography of Norway

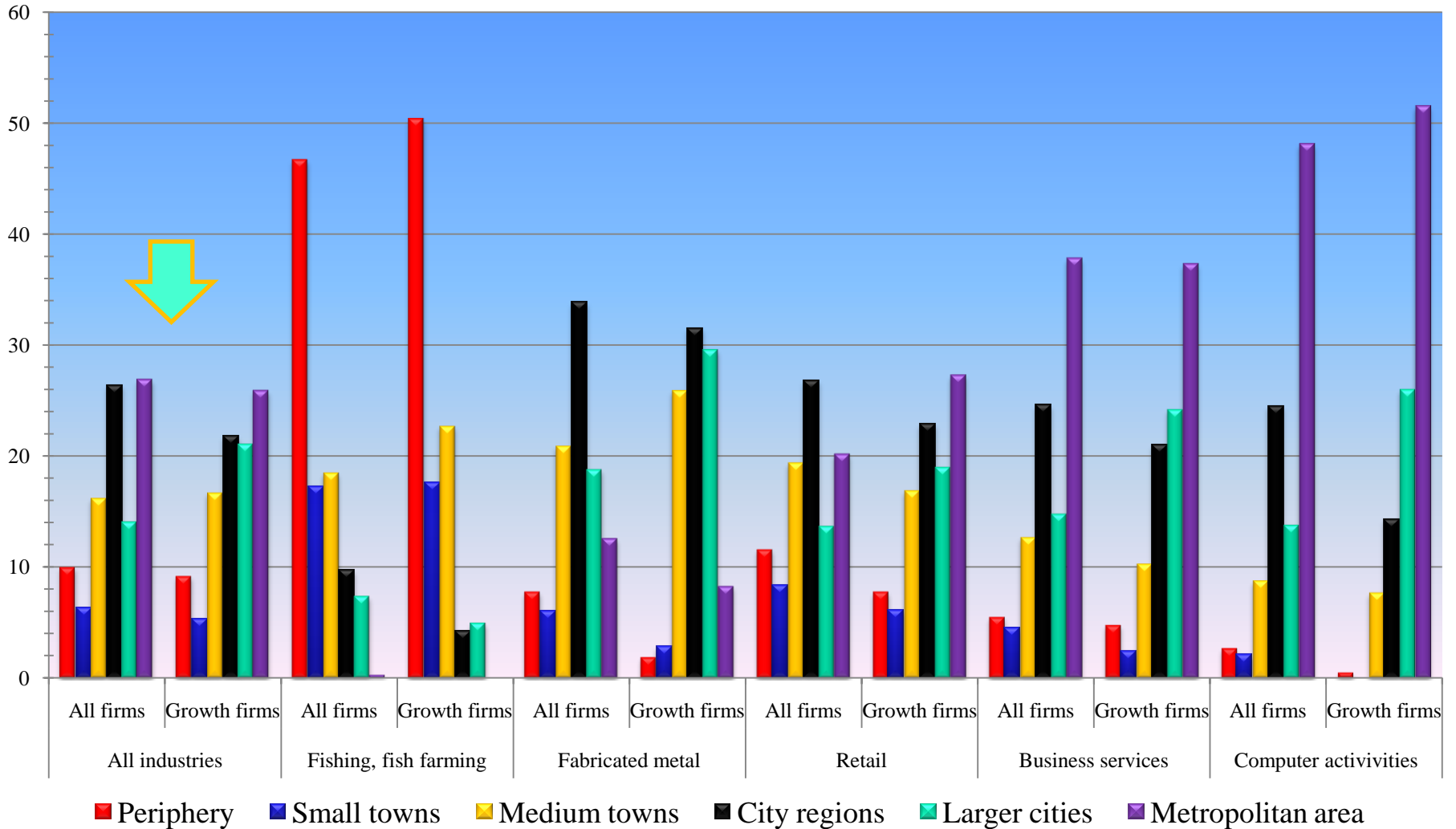




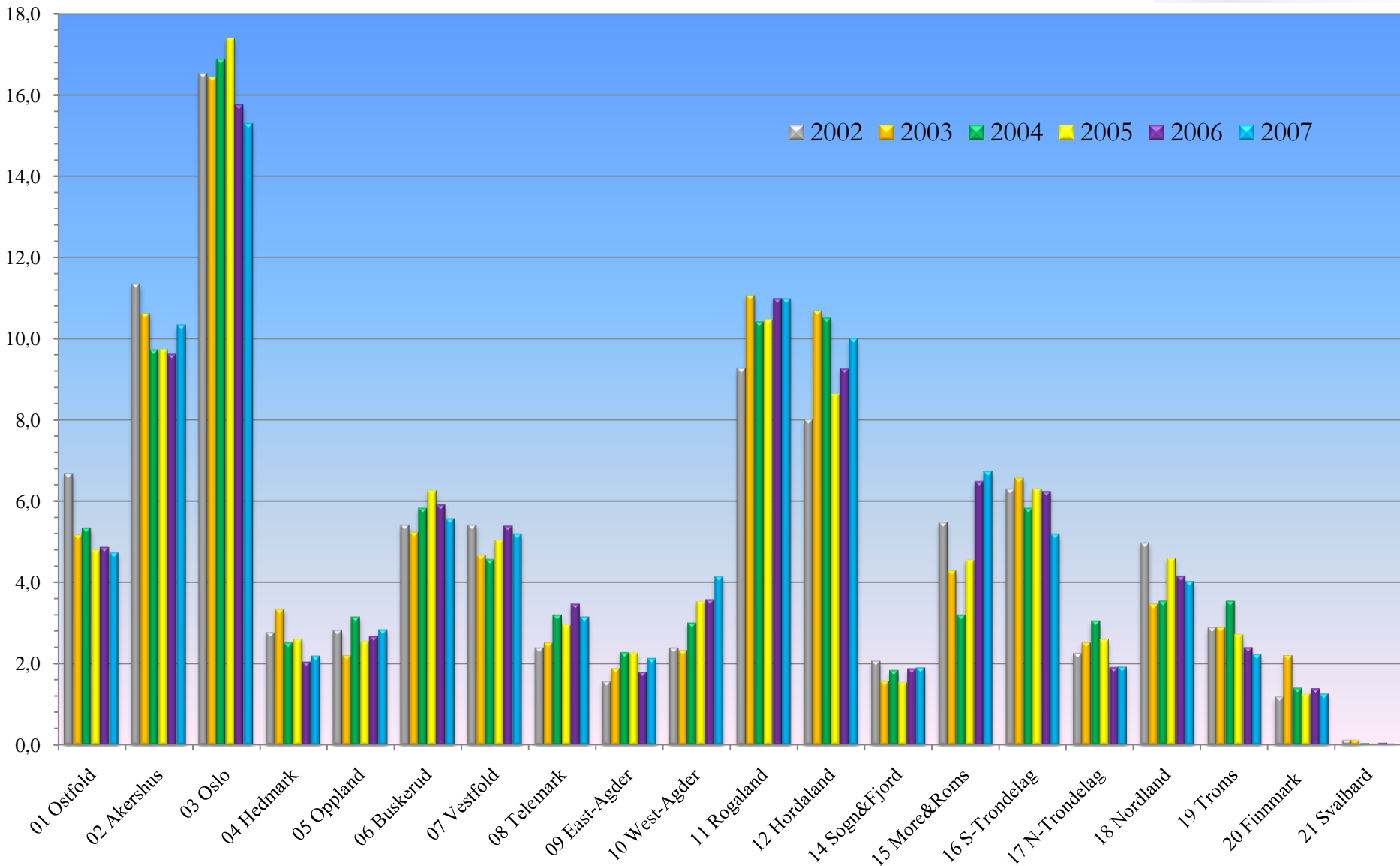
# Location pattern of rapid-growth firms

Regions	Number of firms - percent		Percent of total population
	All firms	Growth firms	
Periphery region	10,0	9,2	10,1
Small town region	6,3	5,3	6,4
Medium town region	16,2	16,7	17,6
Medium city region	22,3	21,8	23,1
Larger city region	17,8	21,1	18,7
Metropolitan area	27,3	25,9	24,1
Total population	94.473	3.595	4.640.219

# Location - industries



# Location - time span





# Repeated game?

Number of times "gazelle"	N	Score location	Stand. div.
1	2.454	4.13	1.569
2	431	4.27	1.527
3	491	4.22	1.554
4	151	4.46	1.415
5	53	4.66	1.386
6	14	4.43	1.158
Total	3.594	4.18	1.556

## Conclusion



- Particular concentration in the second layer of the urban hierarchy
- Generally urbanization and territorial clusters of specific industries attract rapid-growth firms
- More concentrated in the ‘preferred’ location of an industry than the main pattern of location
- In the service sector they are more centralized, in the extraction sector more decentralized. In manufacturing no clear difference with the main pattern

Thank you for your attention

