

5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES

Financial services are the most concentrated industry

Industries are unevenly distributed across OECD countries. According to the geographic concentration index, in 2003 the industry in which employment was, on average, most concentrated in OECD countries (Figure 5.1) was financial intermediation (45), followed by real estate, renting and business activities (43) and transport, storage and communication (37). In contrast, agriculture, hunting, forestry and fishing (20) and construction (31) displayed the lowest average concentration.

Agricultural concentration varies widely

These aggregate figures hide significant differences in industry concentration among regions within countries. Agriculture, hunting, forestry and fishing was most concentrated in Mexico, Sweden, the United States and Australia where the geographic concentration index stood at 46, 44, 42, and 38, respectively, in 2003 (Figure 5.2). In Finland (27), Belgium and Korea (26), Portugal and Canada (22), and Italy and Poland (21), this industry was more concentrated than the OECD average (20). It was more evenly distributed in Denmark, Greece (3), Ireland (9), Hungary and the Czech Republic (10).

During the last 30 years, the aggregate size of the manufacturing sector has gradually declined; nevertheless, it still employs 16% of the OECD

workforce. According to the concentration index, in 2003 concentration in this sector was greatest (Figure 5.3) in Sweden (54), Australia (51), Iceland (49), Finland (47), the United States and Korea (46), Spain (45) and Mexico (44), while the lowest values were recorded in Denmark and the Czech Republic (15), the Slovak Republic (17), Poland and the Netherlands (20), Ireland (22) and Hungary (23).

Structural changes have had an impact

The structural change from agriculture and manufacturing towards services has affected regions diversely, particularly in financial intermediation, the sector with the highest concentration index on average in OECD countries. The sector was very concentrated in Mexico (80), Iceland (76) and Sweden (64) followed by Greece and Australia (58), Portugal (56) and Finland (55) (Figure 5.4). The concentration was above the OECD average (45) in Belgium (48), Denmark (47) and Spain (46). Only in Poland (26), Italy (27), Canada (29), Germany (31), and Ireland, the Netherlands and Switzerland (33) was the regional pattern of employment in this sector more balanced.

These patterns highlight considerable differences in the concentration dynamics of industries, and indicate that regional factors tend to play a dominant role in determining the national concentration of different industries.

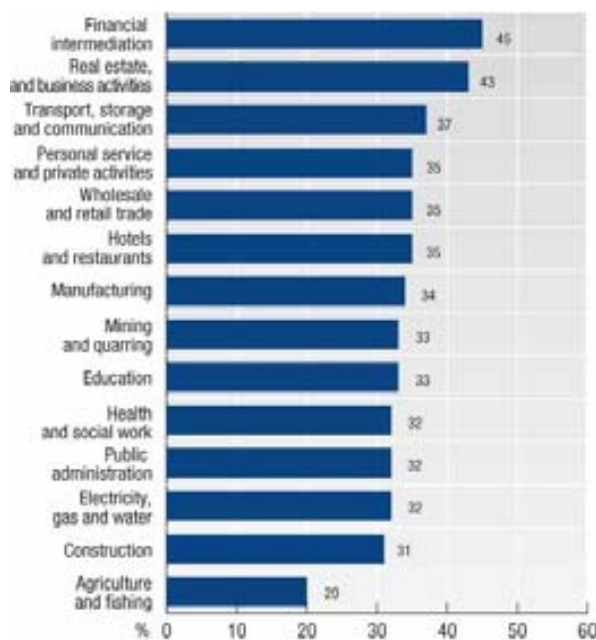
Definition

Industries are defined according to the International Standard Industrial Classification (ISIC) Rev. 3.1 (one digit). Industry size is defined by the total number of people employed in that industry.

5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES

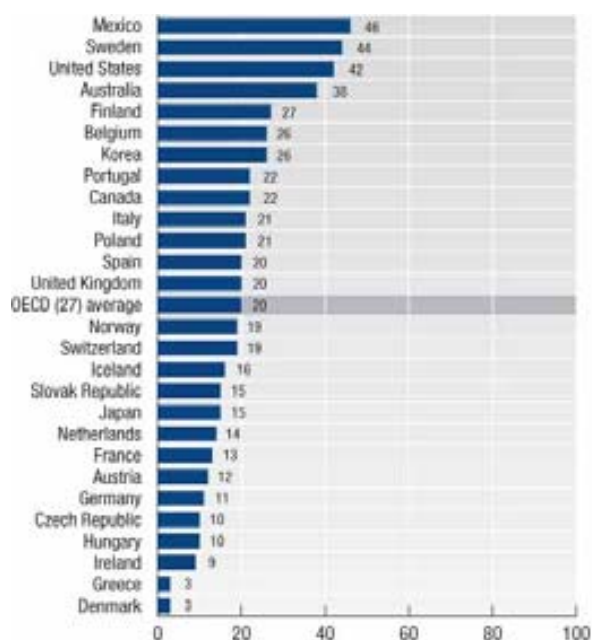
5.1. Financial intermediation is the most concentrated industry among OECD countries

Concentration index averaged across OECD countries for each industry,* 2003 (TL2)



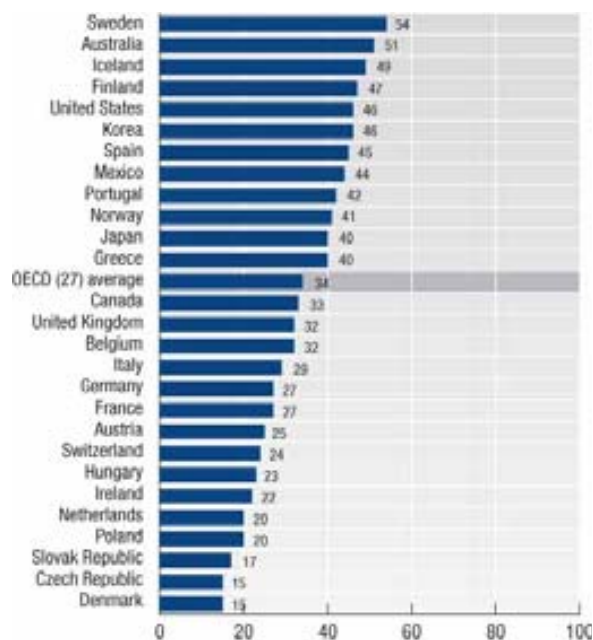
5.2. In 2003, agriculture, hunting, forestry and fishing was most concentrated in Mexico, Sweden and the United States

Geographic concentration index agriculture, hunting and forestry, and fishing sector, 2003 (TL2)



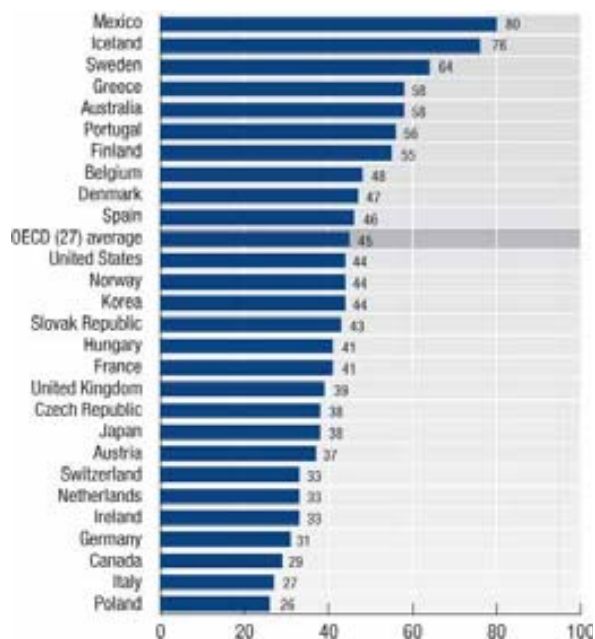
5.3. The manufacturing sector is least concentrated in the Czech Republic, Denmark and the Slovak Republic

Geographic concentration index manufacturing sector, 2003 (TL2)



5.4. Mexico and Iceland have the highest concentration in financial intermediation

Geographic concentration index financial intermediation, 2003 (TL2)

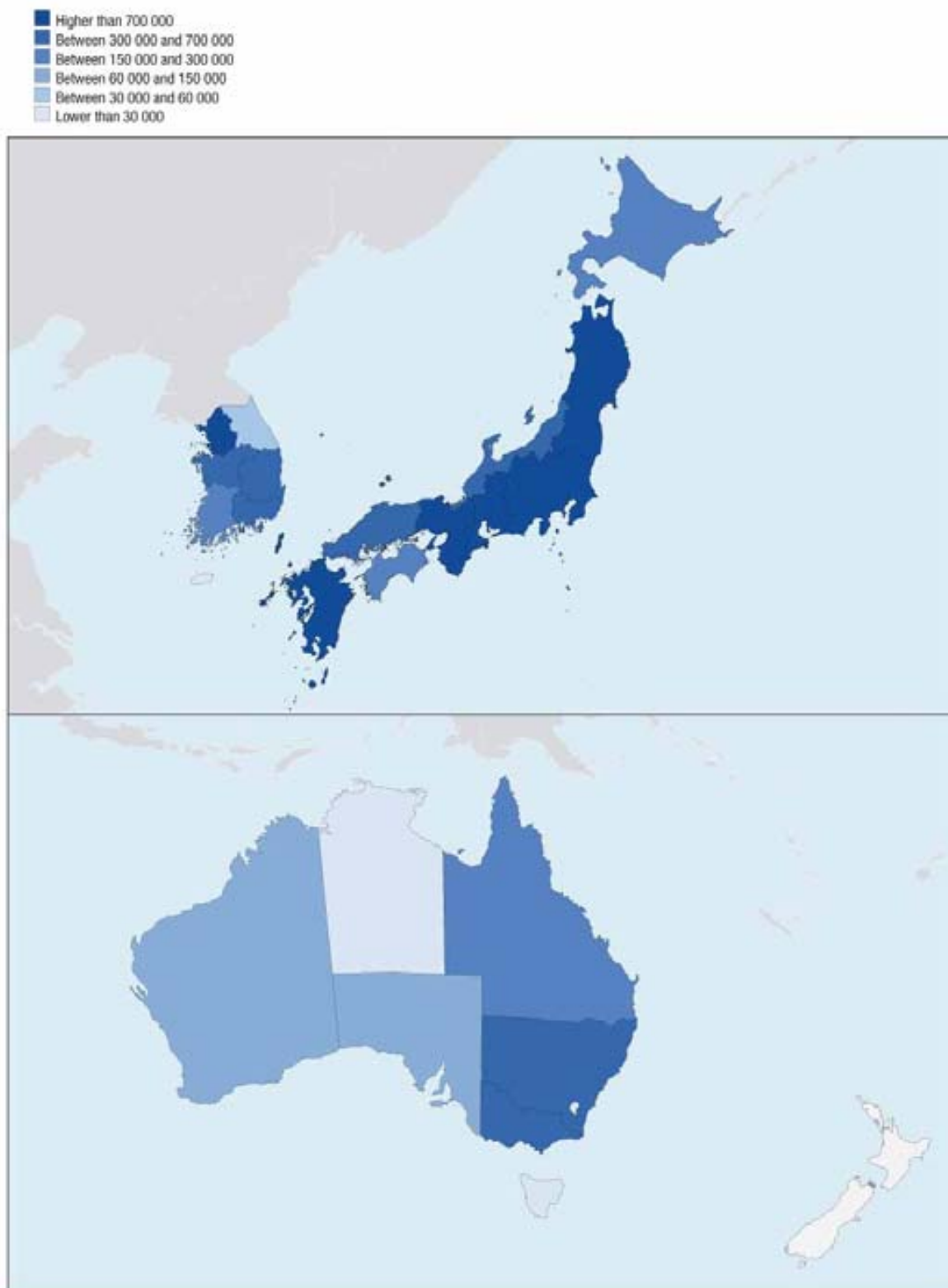



StatLink <http://dx.doi.org/10.1787/871701405174>

5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES

5.5. Regional employment in manufacturing: Asia and Oceania

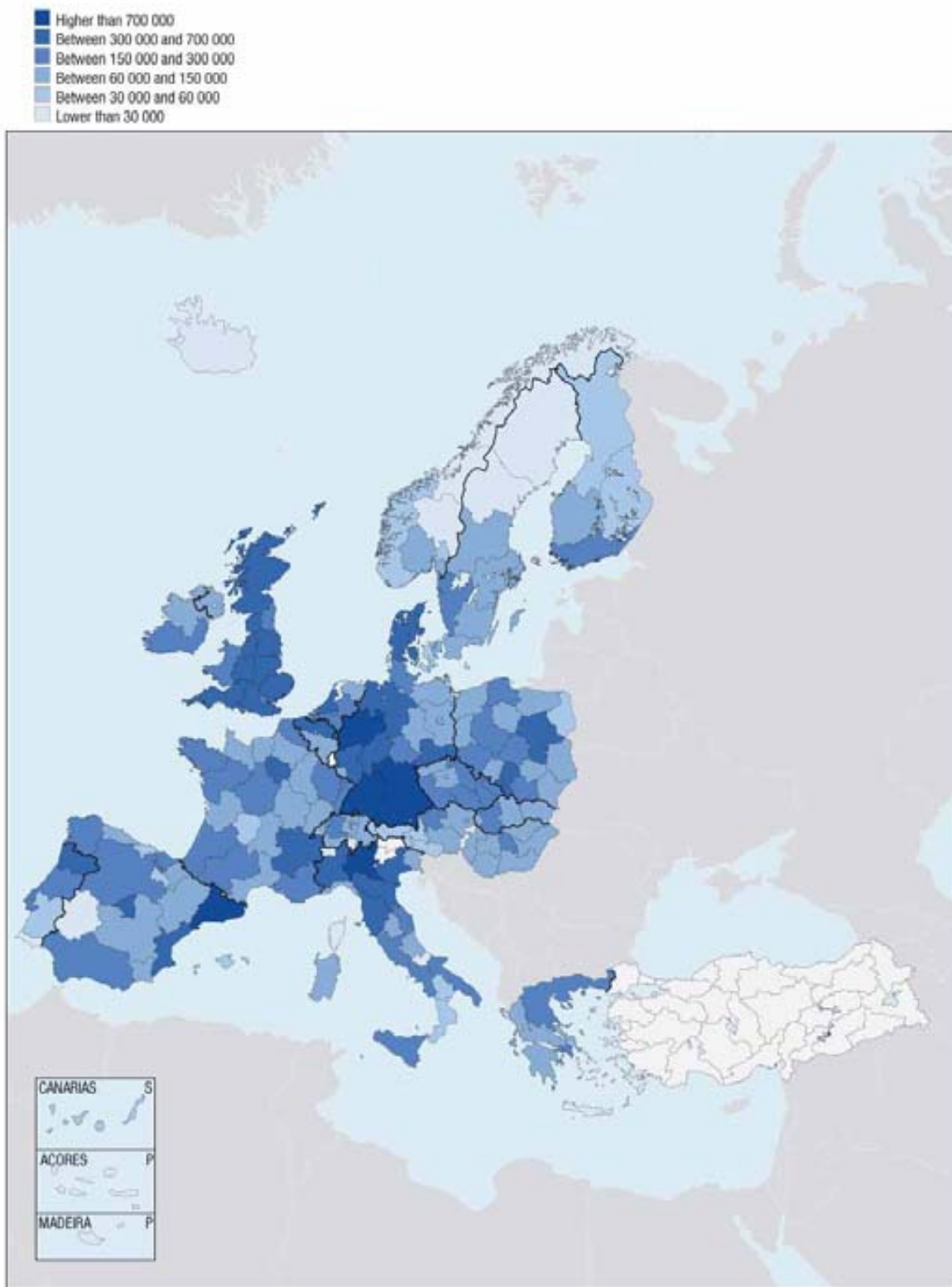
Total number of people employed, 2003




StatLink  <http://dx.doi.org/10.1787/615324323232>

5.6. Regional employment in manufacturing: Europe

Total number of people employed, 2003

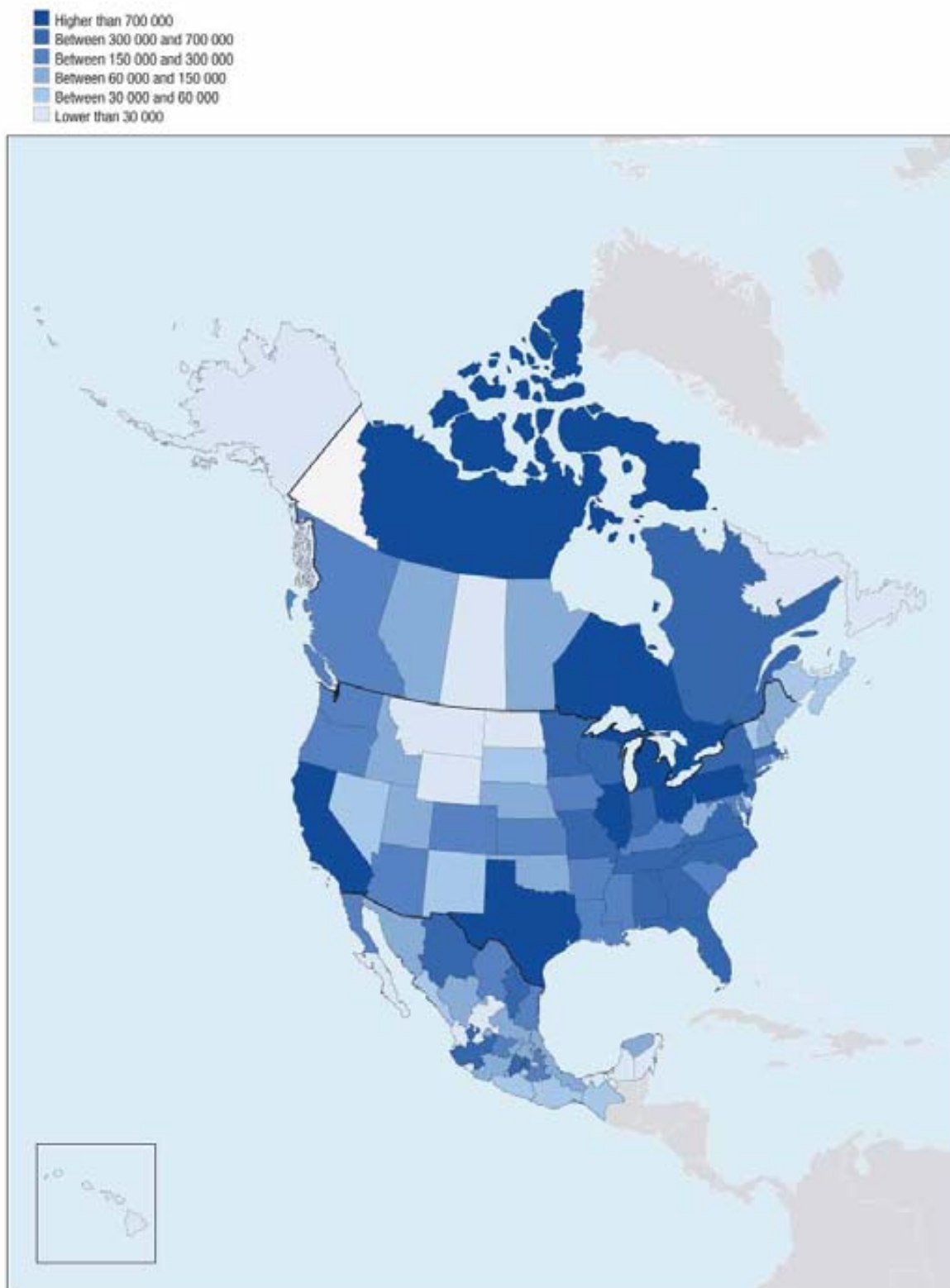



StatLink  <http://dx.doi.org/10.1787/615324323232>

5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES

5.7. Regional employment in manufacturing: North America

Total number of people employed, 2003



StatLink  <http://dx.doi.org/10.1787/615324323232>

The concentration index varies significantly among industries and countries

The geographic concentration index varies significantly among OECD countries and among industries (Table 5.8). Agriculture, hunting, forestry and fishing (a + b) appears to be the industry that is most evenly distributed among regions; in 15 out of 27 OECD countries, it had the lowest concentration index, as well as the lowest OECD average (20). This result is partly driven by the larger regional grid (TL2) and by the small share of agricultural employment (less than 3%).

On average, mining and quarrying (c) also displays a balanced regional pattern; in 6 OECD countries it recorded the lowest index of concentration. Finally, hotels and restaurants (h) was the least concentrated industry in the United States (41); public administration, defence and compulsory social security (l) in Poland (17); education (m) in Italy (19), and health and social work (n) in the Slovak Republic (10).

In contrast, financial intermediation (j) appears to be the industry with the highest concentration index; it recorded the highest value in 12 out of 27 OECD countries, as well as the highest OECD average (45). This sector tends to concentrate in large cities and highly urbanised areas.

Real estate, renting and business activities (k), and mining and quarrying (c) are also very concentrated; they recorded the highest concentration index in 7 and in 6 of 27 OECD countries, respectively. Finally, manufacturing (d) was the most concentrated industry in Italy (29), and education (m) in the United States (50).

The countries with the highest concentration (average value) among all industries in 2003 were Iceland (60), Sweden (52), Mexico (48), Australia (46), the United States and Finland (44), while the countries with the lowest concentration were the Slovak Republic (21), Ireland (22), Italy (23) the Netherlands and Poland (25). The range between the industry with the lowest concentration index and the highest was largest in Iceland (62), Greece (55), the Czech Republic and Poland (51). It was lowest in the United States (9), Italy (11), Canada (12), the Netherlands (19) and Belgium (25).

5.8. Concentration index by industry and by country

Standard Industrial Classification (ISIC) Rev. 3.1

Country	a + b	c	d	e	f	g	h	i	j	k	l	m	n	o + p	Average	Range
Australia	38	20	51	50	47	48	48	49	58	50	45	47	47	47	46	38
Austria	12	16	25	28	24	26	26	28	37	41	28	27	30	32	27	29
Belgium	26	23	32	23	25	29	31	30	48	33	26	24	25	26	29	25
Canada	22	34	33	28	30	29	28	28	29	31	27	27	27	29	29	12
Czech Republic	10	61	15	25	18	21	24	24	38	33	22	18	21	28	26	51
Denmark	3	9	15	28	23	29	32	34	47	43	36	28	28	.	27	44
Finland	27	24	47	47	44	49	46	48	55	53	43	43	41	45	44	31
France	13	29	27	33	25	29	37	36	41	40	29	28	25	31	30	28
Germany	11	52	27	28	19	.	.	28	31	31	21	.	.	.	28	40
Greece	3	19	40	32	37	41	33	49	58	52	44	35	42	48	38	55
Hungary	10	38	23	17	29	32	26	32	41	49	24	22	24	38	29	39
Iceland	16	.	49	57	57	71	66	70	76	79	49	66	69	.	60	62
Ireland	9	6	22	24	19	23	25	28	33	33	22	23	21	23	22	27
Italy	21	21	29	22	20	20	26	24	27	25	21	18.6	18.8	25	23	11
Japan	15	20	40	30	28	36	39	39	38	45	.	45	33	.	34	30
Korea	26	21	46	30	40	43	39	44	44	55	33	37	39	.	38	34
Mexico	46	42	44	43	40	44	42	48	80	52	.	52	44	.	48	40
Netherlands	14	24	20	23	22	25	26	31	33	30	26	22	22	.	25	19
Norway	19	53	41	29	35	40	37	39	44	46	35	34	35	41	38	34
Poland	21	68	20	20	23	21	24	21	26	27	17.09	17.12	19	26	25	51
Portugal	22	14	42	40	36	40	41	42	56	54	43	36	36	41	39	42
Slovak Republic	15	36	17	18	15	17	17	18	43	32	20	11	10	26	21	33
Spain	20	31	45	41	39	41	46	47	46	52	35	39	39	45	40	31
Sweden	44	35	54	50	51	56	54	56	64	61	51	50	49	55	52	29
Switzerland	19	64	24	20	22	24	19	26	33	29	36	23	24	22	28	45
United Kingdom	20	48	32	25	32	33	30	37	39	41	28	31	29	35	33	28
United States	42	46	46	43	42	43	41	43	44	44	42	50	44	46	44	9
OECD average	20	33	34	32	31	35	35	37	45	43	32	33	32	35	34	25

Symbols and Abbreviations

OECD (25) average	Unweighted average of 25 OECD countries.
OECD (25) total	Sum over all regions of 25 OECD countries.
OECD (25)	Range of variation over all regions of 25 OECD countries.
TL2	Territorial Level 2.
TL3	Territorial Level 3
NOG	Non Official Grid
*	Differences in the definition of data or regions. Please check the “Sources and Methodology” section.
PU	Predominantly Urban
IN	Intermediate
PR	Predominantly Rural
PPP	Purchasing Power Parity
USD	United States Dollar





I. REGIONS AS ACTORS OF NATIONAL GROWTH

1. GEOGRAPHIC CONCENTRATION OF POPULATION
2. GEOGRAPHIC CONCENTRATION OF THE ELDERLY POPULATION
3. GEOGRAPHIC CONCENTRATION OF GDP
4. REGIONAL CONTRIBUTIONS TO GROWTH IN NATIONAL GDP
5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES
6. REGIONAL CONTRIBUTIONS TO CHANGES IN EMPLOYMENT
7. GEOGRAPHIC CONCENTRATION OF PATENTS

Table of Contents

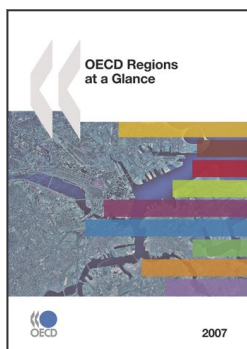
Executive Summary	7
Symbols and abbreviations	11
I. Regions as Actors of National Growth	
1. Geographic concentration of population	14
2. Geographic concentration of the elderly population	20
3. Geographic concentration of GDP	26
4. Regional contributions to growth in national GDP	32
5. Geographic concentration of industries	38
6. Regional contributions to changes in employment	44
7. Geographic concentration of patents	50
II. Making the Best of Local Assets	
8. Regional disparities in GDP per capita	58
9. Regional disparities in labour productivity	64
10. Regional disparities in specialisation	70
11. Regional disparities in tertiary education attainment	76
12. Regional disparities in unemployment rates	82
13. Regional disparities in participation rates	88
The Key Drivers of Regional Growth	
14. The factors behind regional performance	96
15. Regional growth in the OECD	98
16. National factors and regional performances	102
17. Regional factors: GDP per capita and population	106
18. Regional factors: productivity and specialisation	110
19. Regional factors: employment, participation and ageing	114
III. Competing on the Basis of Regional Well-being	
20. Accessibility: distance from the closest urban centre	120
21. Education: student enrolments in tertiary education	124
22. Voter turnout in national elections	128
23. Safety: reported crimes against property	132
24. Safety: reported murders	136
25. Home ownership	140
26. Environment: private vehicle ownership	144
27. Environment: municipal waste	148

IV. Regional Focus on Health

28. Health: age-adjusted mortality rate	154
29. Health status: premature mortality	160
30. Health status: incidence of cancer	166
31. Health resources: number of physicians	172
32. Health resources: density of practising nurses	178
33. Health resources: hospital beds	182
34. Health resources: medical technology	188
35. Non-medical determinants of health: prevalence of smoking	194
36. Non-medical determinants of health: prevalence of obesity	198

Source and Methodology

Territorial Grids and Regional Typology	205
Regional grids	205
Regional typology	205
Population – Chapters: 1, 8, 17, 21, 23, 24, 26, 27, 30, 31, 32, 33, 34, 35, 36	214
Population by age and sex – Chapters: 2, 11, 13, 19, 28	215
Gross domestic product – Chapters: 3, 4, 8, 9, 15, 16, 17, 18, 19	217
Employment by industry – Chapters: 5, 10, 18	219
Labour force, employment, unemployment and long-term unemployment – Chapters: 6, 9, 12, 13, 18, 19	220
Employment at place of work – Chapter 9	222
Patent applications – Chapter 7	223
Educational attainments – Chapter 11	224
Time distance from the closest urban centre – Chapter 20	226
Student enrolment in tertiary education – Chapter 21	228
Voter turnout in national elections – Chapter 22	229
Crimes against property – Chapter 23	230
Number of murders – Chapter 24	232
Number of dwellings inhabited by the owner; total number of occupied dwellings – Chapter 25	234
Number of private vehicles – Chapter 26	235
Volume of produced waste – Chapter 27	236
Death by age and sex: Chapters 28, 29	237
Number of new cases of cancer – Chapter 30	239
Number of physicians – Chapter 31	240
Number of nurses – Chapter 32	242
Number of hospital beds – Chapter 33	244
Number of CT scanners and MRI units – Chapter 34	246
Number of smokers aged 15 and over – Chapter 35	247
Number of people suffering from obesity – Chapter 36	248
Indexes and Formulas	249
The drivers of regional growth	251



From:
OECD Regions at a Glance 2007

Access the complete publication at:
https://doi.org/10.1787/reg_glance-2007-en

Please cite this chapter as:

OECD (2008), "Geographic concentration of industries", in *OECD Regions at a Glance 2007*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/reg_glance-2007-7-en

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.