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Innovation intensity, by sector groups and employment size classes¹²

		Share in %				
	Economic activity	2019	2020	2021	2022	2023
B 05-09	Mining and quarrying	1.5	1.2	1.3	0.4	1.0
C 10-33	Manufacturing	6.0	6.2	5.7	5.3	5.4
C 10-12	Manufacture of food products, beverages and tobacco products	1.0	1.1	1.0	0.9	0.9
C 13-15	Manufacture of textiles, wearing apparel and of leather and related products	3.3	3.2	3.2	3.4	3.3
C 16-18	Manufacture of wood (except furniture), paper and paper products; printing and reproduction of recorded media	1.8	1.7	1.4	1.3	1.3
C 19	Manufacture of coke and refined petroleum products	0.4	0.5	0.4	0.3	0.4
C 20	Manufacture of chemicals and chemical products	4.8	5.0	4.5	4.1	5.2
C 21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	19.5	20.6	17.2	17.1	17.1
C 22	Manufacture of rubber and plastic products	2.9	2.7	2.5	2.1	2.3
C 23	Manufacture of other non-metallic mineral products	2.5	2.8	2.8	2.4	2.7
C 24	Manufacture of basic metals	2.0	1.6	1.3	1.2	1.5
C 25	Manufacture of fabricated metal products, except machinery and equipment	2.0	2.2	1.7	1.6	1.8
C 26	Manufacture of computer, electronic and optical products	12.9	13.7	12.7	11.0	11.4
C 27	Manufacture of electrical equipment	8.1	8.2	7.9	7.8	8.1
C 28	Manufacture of machinery and equipment n.e.c.	6.4	6.8	6.1	5.7	5.4
C 29	Manufacture of motor vehicles, trailers and semi-trailers	9.7	10.2	9.9	9.2	8.7
C 30	Manufacture of other transport equipment	8.1	10.7	9.6	8.3	8.3
C 31-32	Manufacture of furniture; other manufacturing	4.0	4.0	4.3	4.3	3.8
C 33	Repair and installation of machinery and equipment	2.8	2.8	3.1	2.3	2.4
D 35, E 36-39	Electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	0.7	0.6	0.5	0.3	0.3
D 35	Electricity, gas, steam and air conditioning supply	0.7	0.5	0.4	0.3	0.3
E 36-37	Water collection, treatment and supply; sewerage	1.2	1.1	1.2	1.1	1.1
E 38-39	Waste collection, treatment and disposal activities; materials recovery; remediation activities and other waste management services	0.8	1.1	0.9	0.8	0.6
G 46; H 49-53; J 58-63; K 64-66; M 69/70.2, 71-74; N 78-82	Business-related services	1.6	1.7	1.6	1.6	1.5
G 46	Wholesale trade (except of motor vehicles and motorcycles)	0.3	0.3	0.3	0.3	0.3
H 49-53	Transportation and storage	2.0	1.8	1.8	1.6	1.8
J 58-60	Publishing activities; motion picture, video and television programme production, sound recording and music publishing activities; programming and broadcasting activities	3.4	3.7	3.9	3.2	2.9
J 61-63	Telecommunications; computer programming, consultancy and related activities; information service activities	7.9	8.2	8.2	7.8	7.3
K 64-66	Financial and insurance activities	0.9	0.9	0.8	0.9	0.8
M 69/70.2	Legal and accounting activities; management consultancy activities	1.5	1.3	1.2	1.1	1.1
M 71-72	Architectural and engineering activities; technical testing and analysis; scientific research and development	8.5	9.4	8.1	8.2	8.5
M 73-74	Advertising and market research; other professional, scientific and technical activities	2.6	1.8	1.7	1.7	1.6
N 78-82	Other business services	0.7	0.8	0.8	0.7	0.7

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						Share in %				
Employment size class						2019	2020	2021	2022	2023
Enterprises with employees										
5	to	9				2.0	1.5	1.8	1.3	1.5
10	to	19				1.7	1.6	1.4	1.1	1.4
20	to	49				1.3	1.6	1.4	1.5	1.6
50	to	99				1.3	1.4	1.6	1.5	1.4
100	to	249				1.4	1.5	1.3	1.0	1.0
Subtotal						1.5	1.5	1.5	1.2	1.3
250	to	499				2.0	2.0	1.5	1.3	1.4
500	to	999				2.0	2.0	2.0	1.5	1.5
1,000	and more					5.4	5.7	5.0	4.5	4.6
Subtotal						4.2	4.3	3.8	3.3	3.4
Total						3.3	3.3	3.0	2.6	2.7

1 Innovation intensity: the ratio of innovation expenditure to turnover. All data are projected on the population of enterprises with five or more employees.

2 Classification of Economic Activities - 2008 edition (based on NACE 2008 - Nomenclature statistique des activités économiques dans la Communauté européenne).

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Source: ZEW - Leibniz Centre for European Economic Research - Mannheim Innovation Panel, special evaluation

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<https://www.govdata.de/dl-de/by-2-0>