



FIRM IN THE MARKET ECONOMY

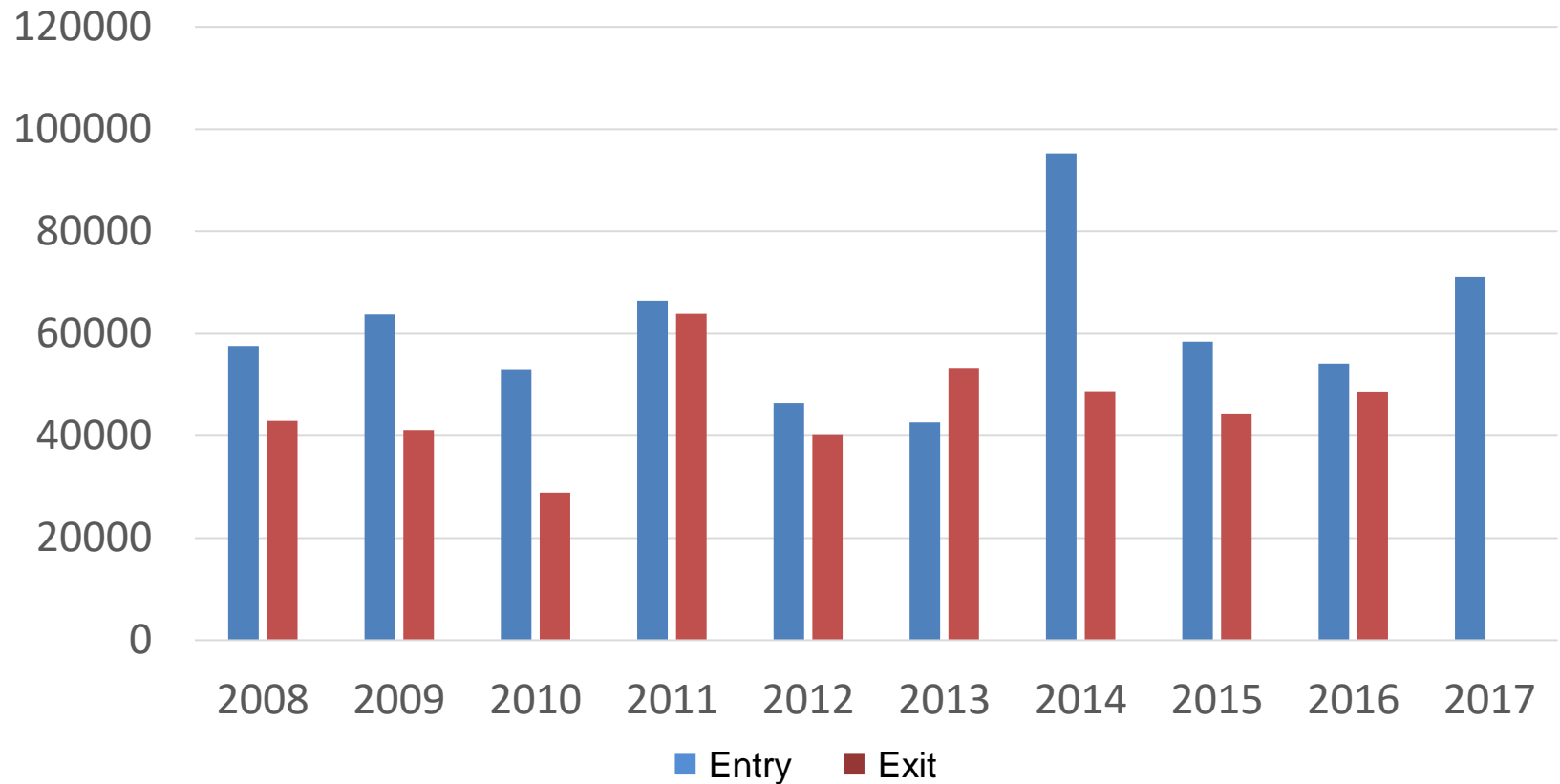
Martin Grančay. PhD.

Business administration

- firm/business/company/enterprise**: a commercial organization that usually operates on a for-profit basis and participates in selling goods or services to consumers.
- it procures inputs and transforms them to outputs
- it is a set of people and material means that is created to reach a pre-determined goal (e.g. profit)
- entrepreneur**: an organizing element in the transformation process
- entrepreneurship**: purposeful activity that the entrepreneur carries out on his own behalf and on his own responsibility with the intention to achieve a pre-determined goal (often profit)
- companies have ***economic autonomy*** and ***legal personality***

Market entry / exit

Slovak Republic (2008-2017)



Statistical Office of the SR. 2021 (newer data currently not available).

Typology of firms

- dozens of criteria
- the most widely used ones:
 - based on final outputs
 - based on economic activity / sector
 - based on technical-organizational characteristics
 - based on size
 - based on legal form
 - based on ownership

Typology of firms

-based on **final outputs**:

a) Producing firms:

- primary production
- secondary production
- production of consumer goods

b) Non-producing firms

- trade firms / trade enterprises
- financial firms
- transport and communication firms
- firms providing other services

Typology of firms

-based on **economic sector**:

- a) agricultural
- b) forestry
- c) water management
- d) mining
- e) industrial
- f) construction
- g) transport
- h) trade
- i) financial
- ...

Typology of firms

European Union

	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply; sewerage, waste mgmt, remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	ICT
Belgium	192	34 132	727	1 268	106 444	127 781	18 095	49 261	32 079	47 370	150 094	41 084	27 824
Bulgaria	357	31 323	1 704	820	19 526	140 524	22 711	27 032	12 646	21 767	43 082	10 989	11 141
Czech Republic	399	175 425	11 026	6 424	174 910	240 599	38 439	60 120	41 382	46 480	183 979	31 321	37 885
Denmark	:	:	:	:	:	:	:	:	:	:	:	:	:
Germany	1 753	201 826	1 974	5 526	358 919	588 705	106 559	230 040	123 523	151 322	485 448	199 471	107 169
Estonia	146	7 259	235	281	10 167	16 351	5 244	2 799	4 802	5 939	12 564	4 413	4 141
Ireland	413	15 583	551	1 008	:	:	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:	:	:	:	:	:	:
Spain	2 046	166 984	14 077	6 682	367 601	796 049	196 166	306 851	67 437	169 031	394 359	165 551	:
France	1 675	216 049	29 687	12 834	507 048	760 007	115 627	270 760	133 824	275 371	481 900	212 981	111 629
Croatia	228	19 475	670	837	17 598	36 620	8 372	19 913	6 642	4 585	24 170	6 921	6 130
Italy	2 140	387 866	11 523	9 262	508 696	1 105 396	123 442	323 563	101 269	243 883	734 520	143 408	103 588
Cyprus	52	4 966	61	190	7 330	16 331	2 988	5 675	1 349	880	7 053	2 703	:
Latvia	270	11 090	567	357	11 752	28 991	7 654	4 092	6 871	14 459	20 107	8 015	6 567
Lithuania	126	19 969	1 441	424	31 151	59 639	13 603	5 985	6 887	13 369	29 096	8 121	6 097
Luxembourg	:	:	:	:	:	:	:	:	:	:	:	:	:
Hungary	410	49 951	678	1 822	63 871	135 197	27 668	29 976	39 149	32 831	124 004	38 896	32 515
Malta	59	2 230	14	147	3 949	9 298	1 430	2 437	1 264	1 933	4 232	1 785	1 114
Netherlands	467	65 243	1 201	1 812	167 022	250 117	42 081	58 088	92 838	27 559	345 527	72 961	79 548
Austria	348	25 037	2 430	2 170	35 078	77 808	14 141	47 474	18 510	17 966	66 079	15 498	15 929
Poland	2 056	196 067	3 670	7 382	264 440	502 029	153 586	54 833	94 054	54 893	268 255	72 651	90 750
Portugal	1 045	66 953	3 977	1 229	78 866	220 359	21 799	97 562	16 453	35 787	120 198	163 936	14 257
Romania	1 076	48 349	1 350	2 968	49 717	169 712	44 504	25 612	22 012	15 349	60 324	20 802	21 844
Slovenia	99	19 074	1 503	415	18 706	26 382	8 574	11 130	9 092	2 885	32 527	7 348	7 687
Slovakia	226	68 413	551	1 371	87 665	113 274	19 020	18 048	20 190	13 852	70 452	30 296	16 952
Finland	829	20 264	934	1 458	40 891	42 661	20 538	12 042	10 156	27 420	35 840	13 976	8 578
Sweden	:	:	:	:	:	:	:	:	:	:	:	:	:
United Kingdom	:	:	:	:	:	:	:	:	:	:	:	:	:
Iceland	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway	1 113	17 143	482	1 209	57 377	50 239	20 831	11 806	16 666	51 238	47 298	19 725	12 618
Switzerland	212	20 367	465	740	21 364	32 856	4 798	16 864	6 425	4 494	23 837	8 677	6 216
FYROM	:	:	:	:	:	:	:	:	:	:	:	:	:
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:
Bosnia and Herzegovina	199	10 282	191	390	3 791	25 482	6 504	:	1 217	:	:	1 162	1 278

3. 1. 2.
Number of Firms. Eurostat. 2020.

Typology of firms

European Union

	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply; sewerage, waste mgmt, remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	ICT
Belgium	819,2	246 308,0	31 311,1	9 991,7	70 441,4	454 084,0	50 515,3	15 294,1	35 045,3	13 545,0	63 061,6	40 014,1	43 060,5
Bulgaria	1 255,2	29 457,0	7 751,6	877,2	5 802,8	54 759,0	6 923,3	2 228,2	4 605,6	1 354,6	3 131,0	1 852,2	5 470,2
Czech Republic	2 868,5	160 973,3	36 571,0	4 243,3	25 964,3	139 534,1	21 485,6	5 694,8	14 909,6	7 231,5	17 734,5	10 035,6	27 330,8
Denmark	:	:	:	:	:	:	:	:	:	:	:	:	:
Germany	11 769,7	2 095 634,2	491 909,7	58 141,1	250 269,0	1 959 147,5	315 076,0	88 932,8	265 592,0	131 366,9	313 714,9	210 411,3	343 858,1
Estonia	407,3	11 881,5	1 772,2	437,6	4 174,1	22 534,9	4 585,6	831,9	1 884,0	1 512,3	1 503,5	1 430,5	3 712,6
Ireland	1 365,4	215 788,6	8 212,8	1 786,7	:	:	:	:	:	:	:	:	:
Greece	:	:	:	:	:	:	:	:	:	:	:	:	:
Spain	3 421,3	466 087,9	83 242,0	19 193,2	111 369,6	724 594,1	106 712,3	66 632,3	79 771,2	25 688,7	85 879,5	69 402,1	:
France	6 336,2	909 055,4	109 833,4	36 424,7	276 542,7	1 419 794,2	206 789,3	96 043,4	184 960,6	86 360,1	208 490,6	149 058,9	210 862,2
Croatia	371,7	20 021,8	4 270,5	973,7	5 704,9	31 332,2	4 546,9	3 728,5	3 529,4	1 018,0	3 628,7	1 809,2	4 344,5
Italy	43 324,3	889 271,7	168 758,3	34 736,8	159 896,6	981 215,4	152 995,5	79 542,4	105 933,0	39 146,5	110 843,8	87 279,3	125 078,8
Cyprus	50,4	3 044,2	579,1	281,6	2 341,7	11 337,1	2 648,3	2 174,0	2 730,1	123,9	1 782,0	447,1	:
Latvia	226,9	7 686,1	2 011,2	319,1	3 033,6	26 091,8	5 187,2	758,4	1 853,7	1 449,0	1 430,6	1 117,5	3 471,0
Lithuania	194,8	18 114,5	2 305,3	565,3	4 634,6	32 990,0	8 448,0	870,7	2 106,0	1 479,3	2 303,7	1 764,2	3 305,0
Luxembourg	:	:	:	:	:	:	:	:	:	:	:	:	:
Hungary	355,5	102 005,2	14 392,5	2 429,8	11 975,6	88 804,8	16 957,0	3 772,4	10 962,7	5 091,9	10 971,6	8 533,6	23 238,2
Malta	28,4	2 451,8	:	:	:	8 185,0	:	976,6	1 576,8	408,9	1 947,2	1 179,7	2 244,1
Netherlands	22 273,7	322 255,0	28 410,2	9 635,5	89 633,3	617 487,7	80 927,9	24 171,1	64 995,6	27 750,0	84 107,8	70 166,1	:
Austria	2 012,5	181 005,4	33 871,1	5 417,8	46 819,8	240 216,9	41 556,1	19 163,0	22 502,9	17 826,9	32 698,8	23 231,4	31 581,6
Poland	10 759,2	288 672,3	44 374,7	8 450,7	58 905,4	355 537,0	48 610,0	8 483,6	31 099,5	16 722,9	30 257,6	17 177,6	41 420,3
Portugal	918,5	82 103,9	20 571,5	3 278,6	17 490,7	128 087,7	18 424,7	11 614,5	11 898,5	5 423,0	11 185,5	10 952,1	:
Romania	4 645,5	75 169,5	12 752,0	2 767,3	16 026,0	111 451,4	16 181,7	3 966,0	11 064,4	2 732,0	8 097,5	5 388,8	14 817,2
Slovenia	282,1	26 387,8	5 583,3	1 107,9	4 304,5	31 073,4	5 281,9	1 794,8	3 207,4	651,1	4 217,3	1 572,1	3 744,2
Slovakia	520,8	72 080,5	11 486,6	1 113,9	9 657,1	54 689,6	8 721,6	1 947,9	6 481,0	3 238,3	10 064,3	5 738,0	12 788,0
Finland	1 487,1	121 792,4	12 902,4	2 806,9	32 786,3	115 589,3	22 550,4	6 474,0	19 855,3	9 155,6	14 363,5	11 197,6	:
Sweden	:	:	:	:	:	:	:	:	:	:	:	:	:
United Kingdom	:	:	:	:	:	:	:	:	:	:	:	:	:
Iceland	:	:	:	:	:	:	:	:	:	:	:	:	:
Norway	60 677,8	82 993,1	13 651,2	2 765,2	56 128,5	168 495,9	43 226,6	8 556,6	25 386,0	16 302,3	23 916,5	18 905,1	:
Switzerland	2 171,9	282 315,5	32 190,1	5 598,6	65 100,5	1 074 323,6	60 202,1	20 033,5	51 388,0	10 096,3	93 260,4	32 417,8	:
FYROM	:	:	:	:	:	:	:	:	:	:	:	:	:
Turkey	:	:	:	:	:	:	:	:	:	:	:	:	:
Bosnia and Herzegovina	468,9	7 749,6	1 682,4	323,0	1 675,1	15 355,1	1 228,4	:	1 062,7	:	:	231,7	1 223,3

2.

3.

1.

Turnover in 1.000.000 €. Eurostat. 2020.

Typology of firms

-based on **technical-organizational characteristics**:

a) based on specialization

- object-specialized enterprises
- technology-specialized enterprises

b) based on type of production

- tailor-made production. serial production. mass production

c) based on concentration of activities

- horizontal concentration
- vertical concentration
- diversified concentration

d) based on predominant factor of production

- labor-intensive enterprises
- capital-intensive enterprises
- material-intensive enterprises
- energy-intensive enterprises

Typology of firms

-based on **size**:

- a) small
- b) medium
- c) large

$$HI = \sum_{i=1}^n s_i^2$$

-What criteria to use?

Number of employees. sales. turnover. profit. assets.
liabilities. export...

-based on the EU classification:

	Employees	Turnover	Balance sheet
MICRO	< 10	≤ 2 mil. €	≤ 2 mil. €
SMALL	< 50	≤ 10 mil. €	≤ 10 mil. €
MEDIUM	< 250	≤ 50 mil. €	≤ 43 mil. €
LARGE	250 and more	> 50 mil. €	> 43 mil. €

Herfindahl-Hirschman

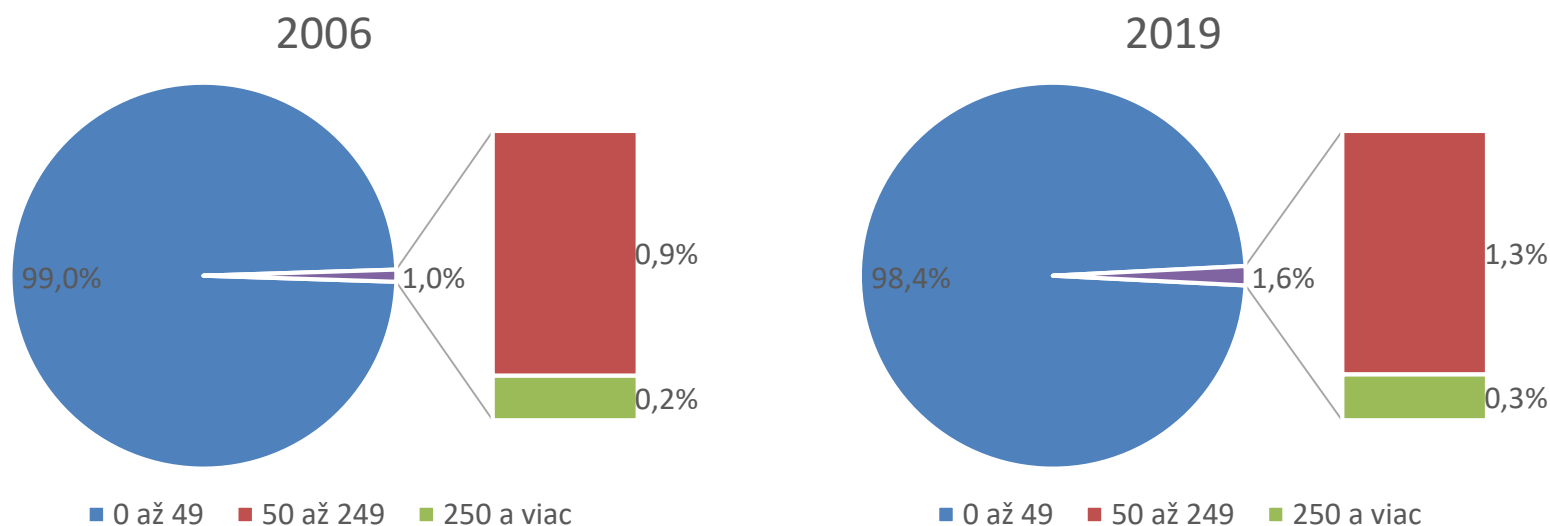
$$HI = \sum_{i=1}^n s_i^2$$

5 companies on the market:

1 -	20 % (0.04)	60 % (0.36)	96 % (0.92)
2 -	20 % (0.04)	10 % (0.01)	1 % (0.00)
3 -	20 % (0.04)	10 % (0.01)	1 % (0.00)
4 -	20 % (0.04)	10 % (0.01)	1 % (0.00)
5 -	20 % (0.04)	10 % (0.01)	1 % (0.00)
HHI:	0.20	0.40	0.92

Typology of firms

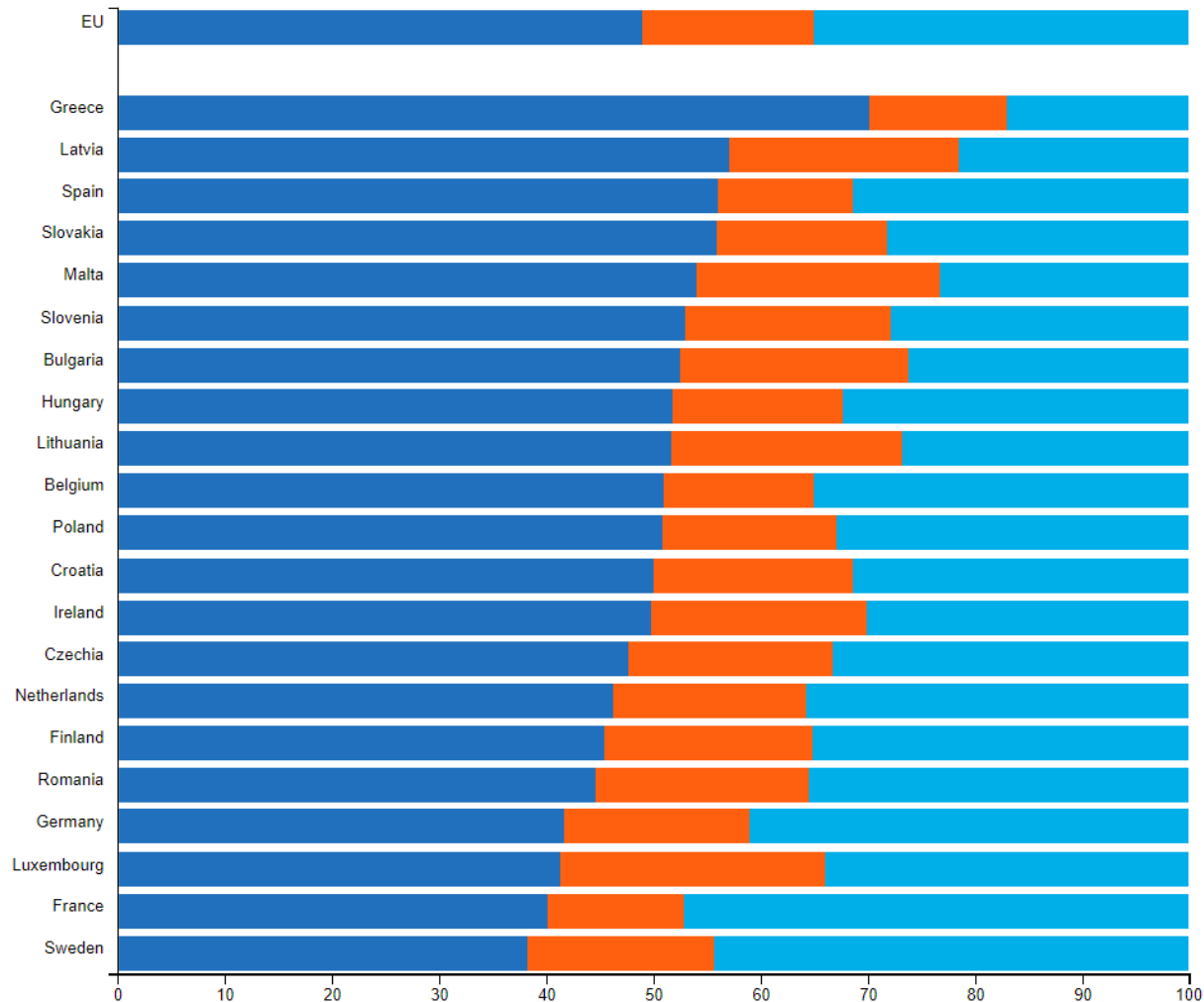
Slovak Republic (2006 and 2019)



Statistical Office of the SR. 2020.

Typology of firms

Companies by number of employees



Eurostat. 2022.

Typology of firms

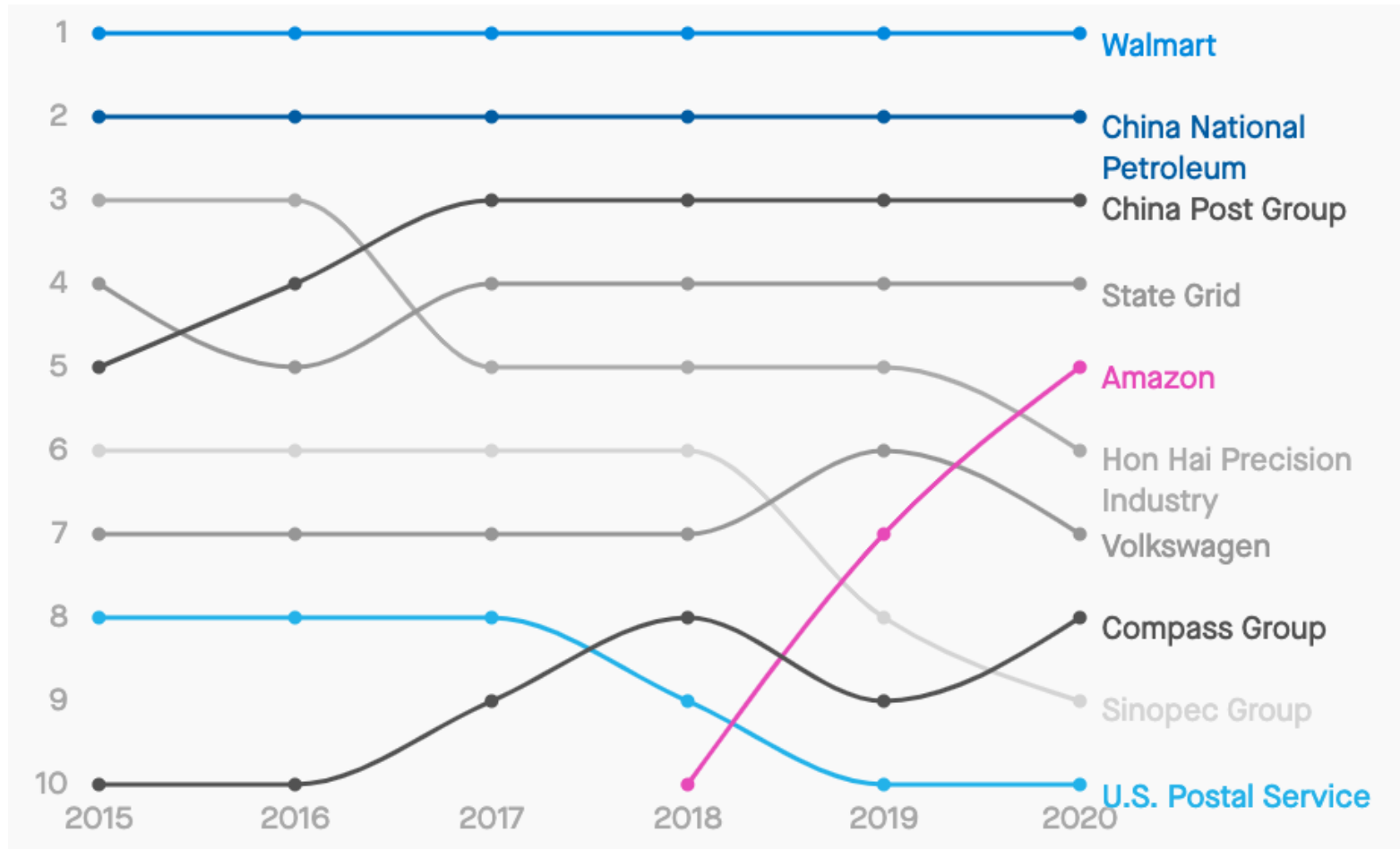
Largest non-financial employers in Slovakia (2018)

1.	Volkswagen Slovakia	14624
2.	Železnice SR	13693
3	Slovenská pošta	12873
4	Schaeffler Slovensko	10096
5	US Steel Košice	9960
6	Tesco Stores SR	8517
7	Grafobal Group	6750
8	Kaufland SR	6166
9	Železničná spoločnosť Slovensko	5938
10	Ž.s. Cargo Slovakia	5549

Etrend. 2019.

Typology of firms

Largest employers in the world (excl. armies of USA and CHN)



World Economic Forum. 2021.

Typology of firms

Largest producers in Slovakia (2018)

1.	Volkswagen Slovakia	10 380 075 000 €
2.	Kia Motors Slovakia	5 185 633 000 €
3	Slovnaft	3 612 653 000 €
4	PCA Slovakia	2 752 018 000 €
5	US Steel Košice	2 711 643 000 €
6	Slovenské elektrárne	2 539 581 000 €
7	Samsung Electronics Slovakia	1 856 861 000 €
8	Mobis Slovakia	1 315 511 000 €
9	Foxconn Slovakia	1 199 463 000 €
10	Schaeffler Slovensko	1 131 219 000 €

Etrend. 2019.

Typology of firms

Largest profit after taxes in Slovakia (2018)

1.	Kia Motors Slovakia	240 681 000 €
2.	Eustream	198 795 000 €
3	Volkswagen Slovakia	191 902 000 €
4	Slovenský plynárenský priemysel	180 861 000 €
5	Continental Matador Rubber	156 829 000 €
6	SPP - distribúcia	156 822 000 €
7	US Steel Košice	126 831 000 €
8	Minerfin	119 884 000 €
9	Lidl Slovenská republika	114 822 000 €
10	Slovak Telekom	112 817 000 €

Etrend. 2019.

Typology of firms

Largest revenue in the world (2021)

The Top 10

Revenues (\$M)

1	Walmart	\$523,964
2	State Grid	\$383,906
3	Amazon	\$280,522
4	China National Petroleum	\$379,130
5	Sinopec Group	\$407,009
6	Apple	\$260,174
7	CVS Health	\$256,776
8	UnitedHealth Group	\$242,155
9	Toyota Motor	\$275,288
10	Volkswagen	\$282,760

Fortune. 2022.

Typology of firms

Largest revenue by country



Europeanpost.co. 2016.

Typology of firms

Largest chemical companies by sales (2021)

1	BASF Germany/Diversified	11 -3	ExxonMobil US/Petrochemicals
2	Sinopec China/Petrochemicals	12 -1	Air Liquide France/Industrial gases
3	Dow US/Diversified	13	Petrochina China/Petrochemicals
4 +2	Ineos UK/Petrochemicals	14	DuPont US/Diversified
5 -1	SABIC Saudi Arabia/Petrochemicals	15 +11	Hengli Petrochemical China/Petrochemicals
6 -1	Formosa Plastics Taiwan/Petrochemicals	16 +1	Sumitomo Chemical Japan/Petrochemicals
7 +5	LG Chem South Korea/Diversified	17 -2	Toray Industries Japan/Diversified
8 -1	Mitsubishi Chemical Japan/Diversified	18 +1	Shin-Etsu Chemical Japan/Diversified
9 +1	Linde UK/Industrial gases	19 -1	Evonik Industries Germany/Diversified
10 -1	LyondellBasell Industries US/Petrochemicals	20 -4	Reliance Industries India/Petrochemicals

Cen.acs.org. 2022.

Typology of firms

-based on **legal form**:

a) Sole proprietorship (self employed)

b) Partnerships and companies

- general partnership

- limited partnership

- limited liability company

- joint stock company

c) Cooperative

d) Special forms

- groups of companies (company integration)

- silent partnership

Typology of firms

Slovak Republic (2021)

	2021		
	Number of employees: 0 - 49	Number of employees: 50 - 249	Number of employees: 250 and more
Total	335 734	4 328	842
Joint stock companies	2 586	487	227
Limited liability companies	128 010	2 028	384
Other trading partnerships	391	18	6
Co-operatives	821	86	21
State enterprises	2	6	4
Subsidized organizations	430	248	51
Badgetary organizations	4 971	1 171	82
Self-employed persons	179 966	36	3
Other legal forms	7 250	247	64
Natural persons - entrepren. total	191 273	37	3

Statistical Office of the SR. 2022.

Typology of firms

Slovak Republic (2021)

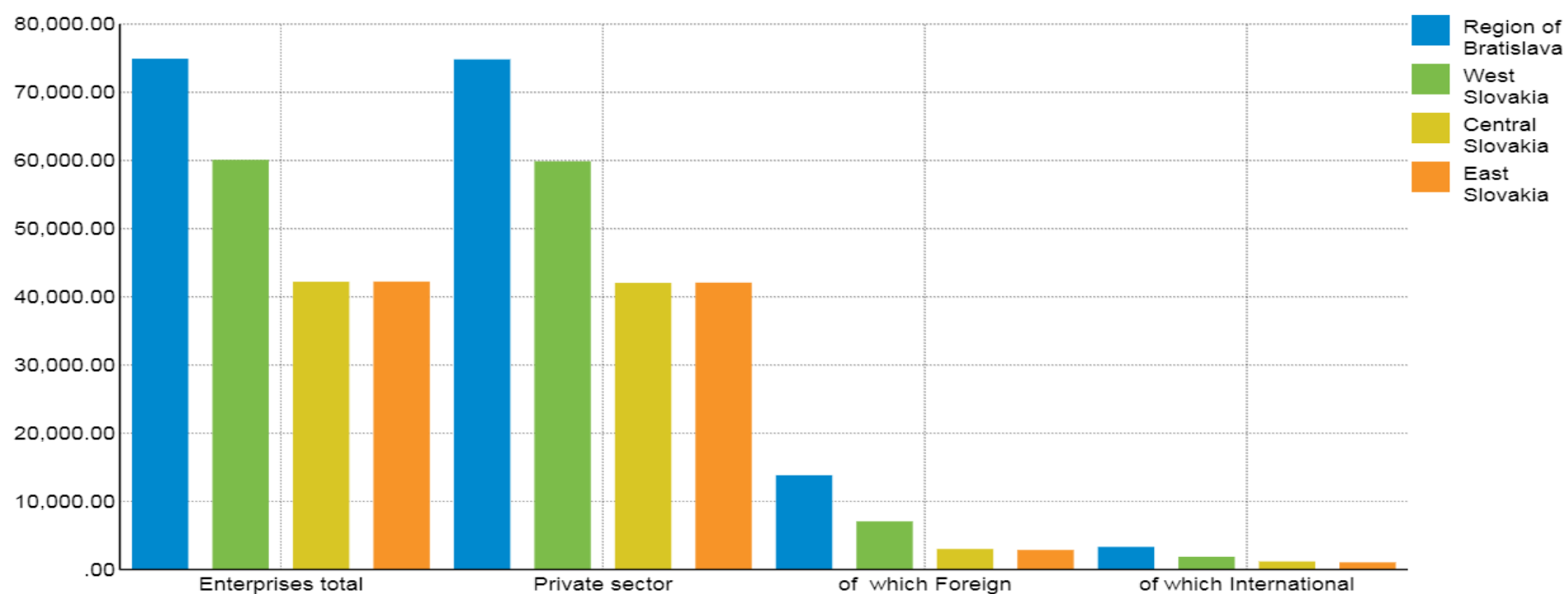
	SOLE	JSC	LLC	COOP	Other	Total
Slovak Republic total	51,8%	0,8%	35,8%	0,2%	11,4%	675851
Agriculture, forestry and fishing (A)	51,1%	0,5%	20,0%	2,6%	25,7%	24664
Mining and quarrying (B)	24,8%	6,1%	66,5%	0,0%	2,5%	278
Manufacturing (C)	64,7%	0,7%	33,3%	0,1%	1,1%	82683
Electricity, gas, steam and air conditioning supply (D)	1,5%	15,5%	73,8%	0,2%	9,0%	599
Water supply; sewerage, waste management and remediation activities (E)	30,0%	3,1%	62,8%	0,0%	4,0%	2037
Construction (F)	78,8%	0,2%	20,0%	0,0%	0,9%	120186
Wholesale and retail trade; repair of motor vehicles, motorcycles (G)	57,8%	0,7%	40,6%	0,1%	0,7%	102309
Transportation and storage (H)	50,5%	0,5%	40,2%	0,0%	8,7%	26223
Accommodation and food service activities (I)	49,8%	0,6%	48,2%	0,0%	1,4%	20354
Information and communication (J)	47,6%	1,2%	50,1%	0,1%	1,0%	29478
Financial and insurance activities (K)	20,1%	1,3%	6,0%	0,1%	72,7%	12869
Real estate activities (L)	8,5%	4,8%	70,0%	1,2%	15,4%	21211
Professional, scientific and technical activities (M)	42,6%	1,0%	47,3%	0,1%	9,0%	92262
Administrative and support service activities (N)	41,6%	1,0%	55,4%	0,2%	1,8%	52637
Public administration and defence; compulsory social security (O)	0,0%	0,1%	0,2%	0,1%	99,6%	3236
Education (P)	38,6%	0,3%	30,7%	0,0%	30,4%	12868
Human health and social work activities (Q)	6,6%	0,6%	57,1%	0,0%	35,7%	11988
Arts, entertainment and recreation (R)	16,9%	0,6%	23,1%	0,0%	59,3%	15051
Other service activities (S)	40,7%	0,0%	9,4%	0,0%	49,9%	44918

Statistical Office of the SR. 2022.

Typology of firms

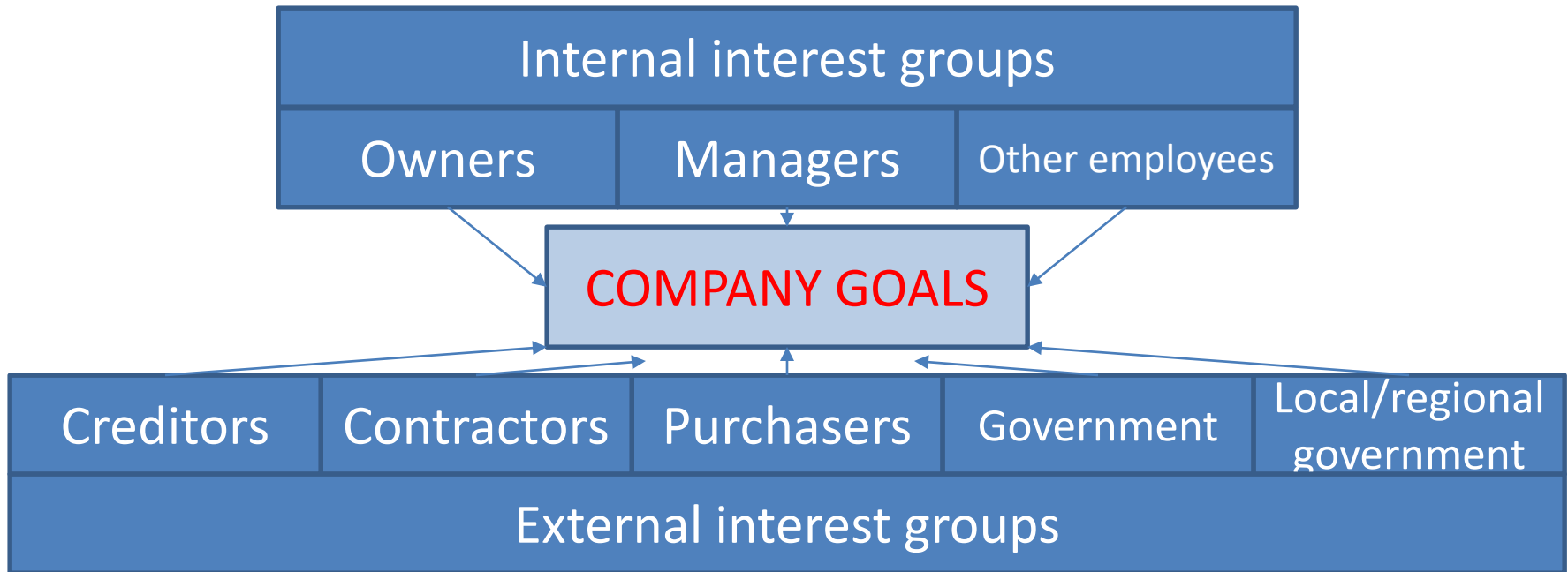
-based on **ownership**:

- a) individual ownership / partnership / joint stock company
- b) private ownership / public ownership
- c) national / foreign



Objectives of firms

- they are always a result of mutual influence of multiple factors: internal. external. interest groups (customers. contractors. creditors. competitors...)
- owners vs. managers
- input from other employees (e.g. via trade unions)



Objectives of firms

-system of company goals (examples):

PROFIT (maximization)

Sales maximization

Welfare maximization

Growth maximization

Market share maximization

Survival

Social responsibility

Independence

Customer satisfaction

...

Example



Our Vision

VISION 2025

To become the most competitive and leading aviation group in Africa by providing safe, market driven and customer focused passenger and cargo transport, aviation training, flight catering, MRO and ground services by 2025.

Our Mission

- To become the leading Aviation group in Africa by providing safe and reliable passenger and cargo air transport, Aviation Training, Flight Catering, MRO and Ground Services whose quality and price "value proposition" is always better than its competitors,
- To ensure being an airline of choice to its customers, employer of choice to its employees and an investment of choice to its Owner,
- To contribute positively to socio economic development of Ethiopia in particular and the countries to which it operates in general by undertaking its corporate social responsibilities and providing vital global air connectivity,

Example

Our Mission

Our Roadmap starts with our mission, which is enduring. It declares our purpose as a company and serves as the standard against which we weigh our actions and decisions.

- To refresh the world...
- To inspire moments of optimism and happiness...
- To create value and make a difference.

Our Vision

Our vision serves as the framework for our Roadmap and guides every aspect of our business by describing what we need to accomplish in order to continue achieving sustainable, quality growth.

- **People:** Be a great place to work where people are inspired to be the best they can be.
- **Portfolio:** Bring to the world a portfolio of quality beverage brands that anticipate and satisfy people's desires and needs.
- **Partners:** Nurture a winning network of customers and suppliers, together we create mutual, enduring value.
- **Planet:** Be a responsible citizen that makes a difference by helping build and support sustainable communities.
- **Profit:** Maximize long-term return to shareowners while being mindful of our overall responsibilities.
- **Productivity:** Be a highly effective, lean and fast-moving organization.



Example

At the heart of The Chevron Way is our vision...to be the global energy company most admired for its people, partnership and performance.

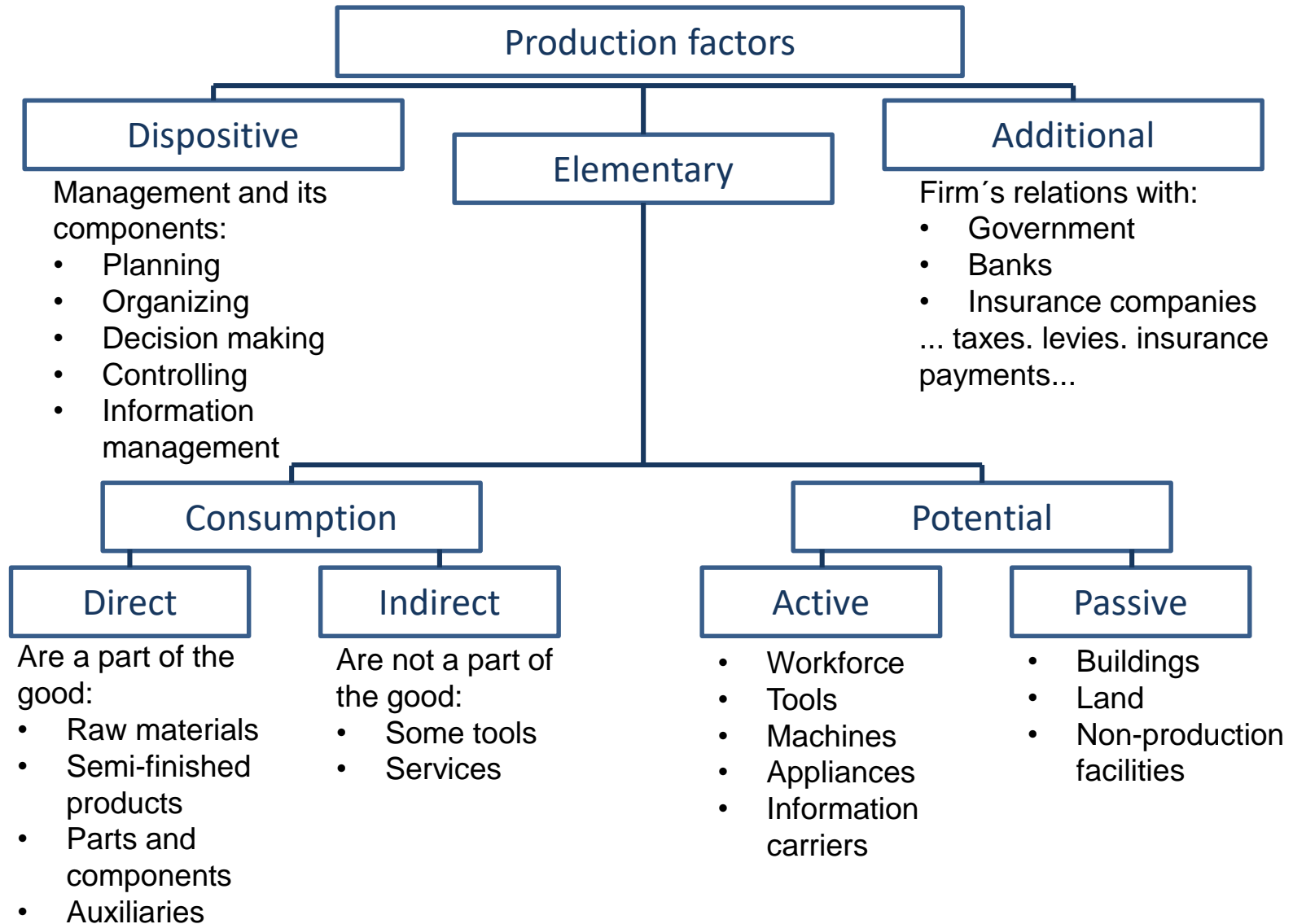


Mission of Chevron: Our company's foundation is built on our values, which distinguish us and guide our actions. We conduct our business in a socially responsible and ethical manner. We respect the law, support universal human rights, protect the environment and benefit the communities where we work.

Elements of a firm

- companies transform inputs into outputs using a transformation process
- all the inputs of a firm are called **production factors in business administration**
- they include 3 types of elements:
 - a) Elementary – direct inputs for the production process
 - potential factors
 - consumption factors
 - b) Dispositive – activities entering the production process
 - c) Additional – links to environment

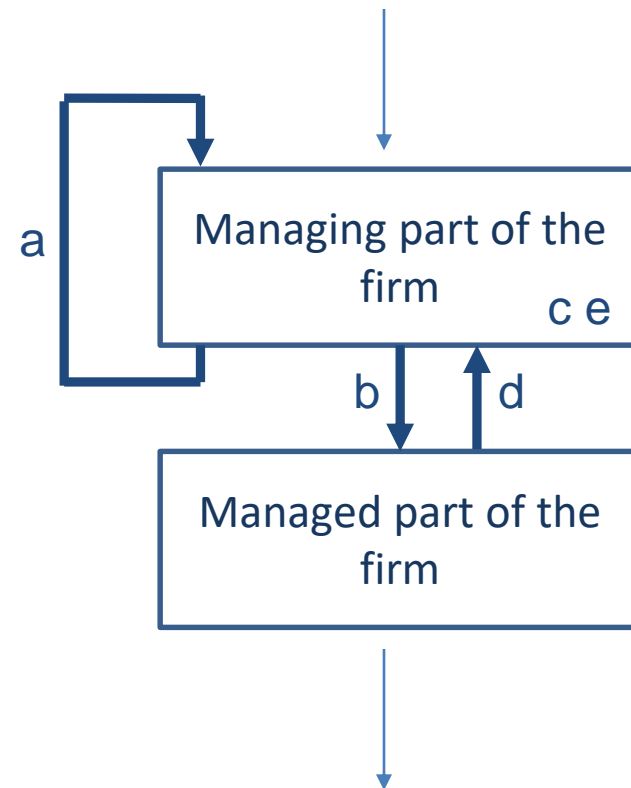
Elements of a firm



Dispositive factors

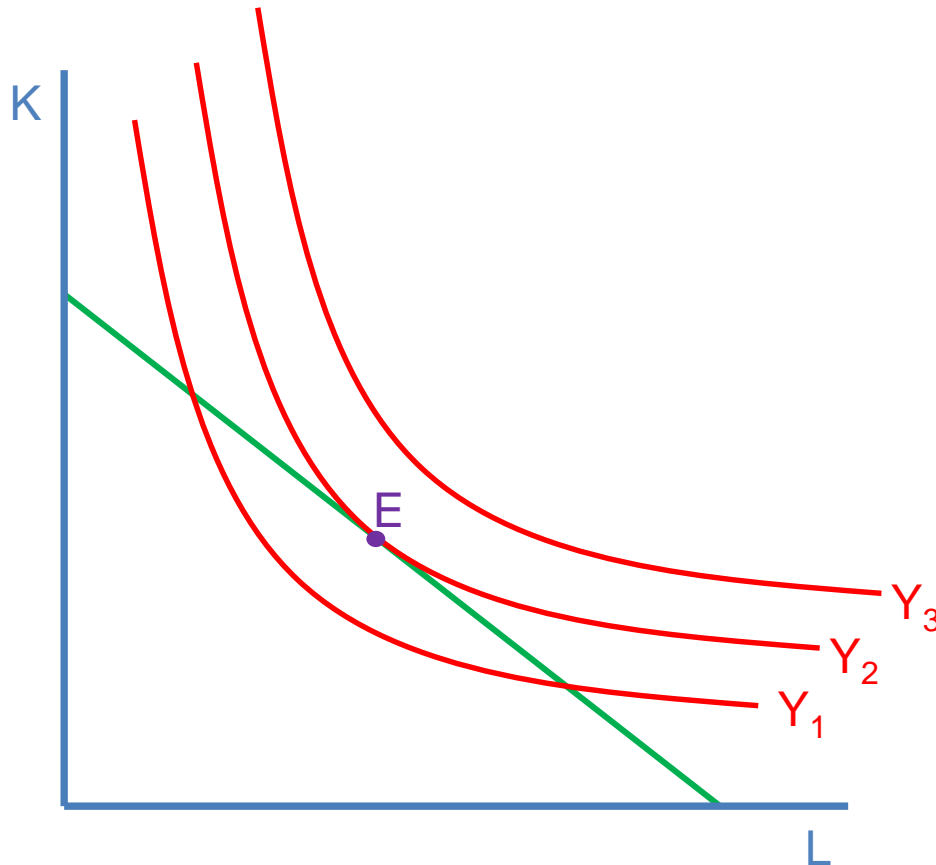
-**managerial activities**; their goal is to combine other factors of production to achieve company's goals:

- a) planning
- b) organizing
- c) decision making
- d) controlling
- e) information management



Profit maximization

$$Y = f(x_1, x_2, x_3, x_4, \dots, x_n)$$



Isoquants

Budget line / constraint

Technological optimum