

Heavy Industry.

The data of Czecho-Slovakia ought to be examined by provinces too.

In Bohemia some 42 per cent and in Moravia 41 per cent of the population are engaged in industry and mining; while in Slovakia only 19 and in Ruthenia 12 per cent. In Hungary the majority of the industrial population is living in the capital and around it. In Roumania Transylvania and Bucovina were the centers of industry. In the historical Roumanian provinces the rate of the industrial population among the other employed ones is 5 per cent or below that, and their rate is increased to 9.6 per cent in Muntenia by the capital and the oil region. In Bucovina 7.5 per cent, in Transylvania 9.4, and in the Bánát 11.2 per cent of the employed population was engaged in industry in 1930.

Prior to the First World War, industrialisation had been very rapid. Ever since there has been hardly any development on the whole, but rather a shift may be noticed. The agrarian states show a high development; some of them again were compelled to get industrialised due to their critical position between 1918 and 1938. At the same time, there was a sharp decline in the highly industrialised states.

The formation of the number of the factory hands in the Austro-Hungarian Monarchy is indicated in thousands by the following Table. /Kálmán Buday: The Economic Consequences of the Peace-treaties of St.Germain and Trianon and the Future of Central Europe.- Budapest, 1944. Manuscript/

Area	Year	According to the censuses number of gainfully employed in thousands			Per- centage to the total	Year	Statistics of establishments Employed in manufacturing in thousands
		Total	Miners	Engaged in industry			
Czecho-Slovakia	1930	6.920	143	2.359	33.0	1930	1.078
Austria	1934	3.780	42	1.018	28.0	1930	423
Hungary	1930	4.000	36	887	23.0	1930	219
Roumania	1930	8.800	53	694	8.1	1930	174
Jugoslavia	1931	6.610	27	691	10.9	1938	197

We are unable to give maps about the different branches of manufacturing industry in this provisional edition. The industrial statistics of the various states do not enable us to construct detailed maps. The data of the industrial establishments concerning production and employment were kept as economic and military secret even in peace-time. The published data appeared in various detailing and in different grouping of industrial branches. The criterion of manufacturing industries is different as well. The state and public establishments are included in some of the statistics, and are omitted from the others. The plants of some big concerns manufacturing different byproducts appear either separately by their own industrial branches, or occur combined with the data of the chief establishments.

The industrial Compasses, edited privately, are incomplete and do not contain even the most important data of establishments and plants. Those industrial maps again, produced by most of the Atlases, do not make any distinctions between small, big and giant concerns, accordingly they are of no value.

For these reasons the data of the manufacturing industry are given in our Atlas but in text and by countries. We have endeavoured to form homogeneous groups, if possible. The states which are not illustrated by the maps in their total area, have been omitted, as their public data are not typical anyhow of the mapped areas.

Year	Austria	Index	Czecho- Slovakia	Index	Hungary	Index	Rouma- nia	Index	Jugo- slavia	Index	Com- bined	Index
1922	342	97	.	.	189	81	149	83
1925	330	93	.	.	199	85	191	106
1928	354	100	1.063	100	234	100	180	100	127	100	1.958	100
1932	210	59	650	61	171	74	134	75	120	95	1.285	66
1935	218	62	692	65	216	92	206	114	136	107	1.466	75
1936	241	68	992	93	289	124	255	142	179	141	1.956	100

in the whole area combined there had been no development in industry; some part of it, however, shifted from the industrial regions to the areas of a strong agrarian character before. This is partly due to a general development, /industrialisation moving from northwest to southeast/, partly to the political boundaries. /Decline in the Bohemian and Austrian industrial regions/. The industrialisation of the agrarian states is a favourable phenomenon, as it means evolution, a rise of the living standards and prosperity, as well as bigger consumption toward the different markets. However, in these areas not always those industries show a rapid development, the vital conditions of which are at hand.

The shift in industries during the period between the First and Second World War may be noticed not only between the states. The industrial concerns shifted within the area of the various states as well. In most cases this was not due to natural causes /opening new sources of energy, creation of new markets, new demands/.

Prior to the First World War the Hungarian government had established industrial concerns of importance in the northern highland areas of the Carpathian Basin for the subsistence of the population living in a region poor in agrarian areas. These new industrial establishments being at the beginning of their development, found protected markets in the Hungarian areas of Transdanubia and the Great Hungarian Plain. By annexing these highland areas to Czecho-Slovakia in 1920, the natural and protected markets of these industrial concerns had been cut off and connected to the highly developed industry of Czecho-Slovakia being in want of markets as well. This resulted in the sharp decline of the industry of the Slovakian regions.

Notes: x/ Minimum in 1933: Austria 189; Czecho-Slovakia 596; Roumania in 1931 132, Jugoslavia 114.

At the eastern edge of the Great Hungarian Plain, in the areas annexed to Roumania there were cities of considerable importance with a fairly developed and diversified industry. /Nagyvárad, Arad, Temesvár./ As these cities were lying on the unprotected borderland of the country and their tradesman and manufacturers were Hungarians, their activity had been limited to a large extent by the Roumanian government, and the establishment of new industrial concerns had been prevented. On the other hand, industry had been artificially directed towards the interior of the country. Beside the capital, the city of Brassó and her surroundings became the second focus of this artificial establishment of industry.

In Upper Silesia the triple state-boundary also resulted in the shift of industries established in the coal districts

In Jugoslavia two special focal points of industrial life came into being; the one around Beograd, the other around Zagreb.

There was a sharp decline in the industry of the cities of the Great Hungarian Plain located on the northern borderland as well. Political causes account for the fact that the Transylvanian natural gas-fields and the coal reserves of Petrozsény could not aid the development of Hungarian industry to such an extent, as their natural energy would enable them to do.

Table below indicates the employed industrial population by industrial branches per countries according to the data of the censuses. Then follow the statistical data drawn up by the manufacturing industries arranged in the same groups. The comparison of both Tables provides information about the number of the craftsmen employed in the various branches of industry.

Gainfully Employed Industrial and Mining Population.
/In thousands/.

Branches of Industry	Austria		Czecho-Slovakia		Hungary		Roumania		Jugoslavia		Combined	
	1934	%	1930	%	1930	%	1930	%	1931	%		%
Iron, machinery, electrical	228	7.2	486	7.4	201	5.0	130	1.2	133	2.0	1.178	3.8
textile	84	2.7	349	5.3	53	1.3	241	2.3	35	0.5	762	2.5
clothing and leather	296	9.3	382	5.8	220	5.5			176	2.6	1.074	3.5
quarry-earth-clay-glass-and building	202	6.4	586	9.0	143	3.6	70	0.7	89	1.3	1.090	3.5
foodstuffs	132	4.2	231	3.5	97	2.4	97	0.9	79	1.2	636	2.1
lumber	96	3.0	210	3.2	60	1.5	104	1.0	87	1.3	557	1.8
mining, metal	23	0.7	143	2.2	35	0.9	53	0.5	27	0.4	281	0.9
chemicals	33	1.0	32	0.5	15	0.4	48	0.5	11	0.2	139	0.5
paper and printing	56	1.8	72	1.1	26	0.7			15	0.2	169	0.5
others	10	0.3	9	0.1	58	1.5	12	0.1	56	0.8	145	0.5
Total industrial and mining population	1.160	36.6	2.500	38.2	908	22.7	755	7.2	708	10.6	6.031	19.6
Total gainfully employed	3.170	100.0	5.537	100.0	3.999	100.0	10.458	100.0	6.683	100.0	30.847	100.0
Total population	6.760	100.0	14.730	100.0	8.688	100.0	18.057	100.0	13.934	100.0	62.169	100.0

Miners and factory hands in thousands.

	1936.	%	1937	%	1937	%	1937	%	1937	%		%
Iron, machinery, electrical	55	24.1	326	30.4	87	27.7	46	17.4	27	13.3	541	26.0
textile	65	28.5	245	22.8	68	21.5	75	28.5	50	24.6	503	24.1
clothing and leather			74	6.9	19	6.1			8	4.2	102	4.9
quarry-earth-clay-glass-and building	9	3.7	151	14.1	29	9.2 ^{+/}	20	7.7	15	7.4	224	10.7
foodstuffs	27	11.9	33	3.1	33	10.4	29	11.0	18	8.7	139	6.7
lumber	7	3.3	68	6.4	13	4.1	39	15.0	25	12.4	153	7.4
mining, metal	27	11.8	80	7.5	39	12.4	17	6.5	41	20.4	205	9.8
chemicals	38	16.7	42	3.9	14	4.6	23	8.6	11	5.3	128	6.2
paper and printing			53	4.9	13	4.0	13	4.8	7	3.7	85	4.1
others					0	0.0	1	0.5			2	0.1
Totally:	228	100.0	1.072	100.0	315	100.0	263	100.0	202	100.0	2.081	100.0

^{+/} building industry not included.

The following data serve to illustrate the course of development in the various branches of industry. In 1902 the number of the employees in the iron and machinery industry in the later German-Austria was 148.258, in 1930 179.757. The development was rather slight; it did not correspond either to the increase in needs, or to the rapid development evidenced in the iron industry of other regions during the same period. A higher development may be noticed in the Czech province. In

1902 the number of the employees in the iron, metallurgical and machine industry was 119.853, while in 1930 it amounted to 237.786. In the Carpathian Basin in 1898 79.873 workers were employed by the factories in the same branch of industry; in 1913 112.517. In Disembled Hungary in 1913 the number of the employees in this branch of industry was 81.483, in 1933 40.955, and in 1938 91.148.

In Czecho-Slovakia the number of workers in the iron and machinery industry in 1929 was 307.870; in 1932 this diminished to 123.133, while in 1937 it amounted to 325.675. In Austria their number decreased from 121.636 to 47.304 between 1929 and 1933; it amounted again to 79.824 in 1937. In Roumania the number of workers in 1929 was 35.736; in 1931 20.882; in 1936 50.537; in 1937 44.149; in 1938 46.069; In Yugoslavia their number in 1932 was 16.751; in 1938 26.992.

The number of workers employed in the textile and clothing industry of Czecho-Slovakia in 1928 was 325.555; in 1933 208.927, and in 1937 319.311. In Austria their number in 1928 was 88.962; in 1933 54.753, and in 1937 63.221. In Hungary in 1928 they numbered 54.734; in 1932 50.003, and in 1937 87.357. In Roumania in 1928 41.397; in 1931 35.903, and in 1937 74.901; in Yugoslavia in 1932 33.123, and in 1937 58.074.

The number of workers employed in the quarry - clay- and glass-industry fluctuated by countries as follows; /data of 1928 and 1937 and between them those of the lowest year are indicated./

In Austria in 1928 30.470; in 1933 15.154, and in 1937 29.044. In Czecho-Slovakia in 1928 232.068; in 1935 100.163, and in 1937 150.976. In Hungary in 1928 35.265; in 1933 16.360, and in 1937 28.931. In Roumania in 1928 17.198, in 1932 12.023, and in 1937 21.693. In Yugoslavia in 1933 10.023 and in 1937 14.888.

The lumber industry had undergone especially great crisis during the period between the First and Second World War. The forest areas had been divided by the political boundaries in the most absurd way. The major part of the most important timber-producing areas had been cut off from their nearest markets, and transportation had been directed from the natural routes and waterways into artificial routes. In Czecho-Slovakia the number of workers employed in lumber industry, in 1928 was 111.860; in 1933 48.143, and in 1937 68.505. In Austria their number was in 1928 27.266; in 1933 6.157, and in 1937 6.777. In Hungary in 1928 14.007; in 1932 7.131, and in 1937 12.902. In Roumania in 1928 35.805; in 1931 21.785, and in 1937 39.362. In Yugoslavia in 1934 18.105; in 1937 25.061.

The industry of chemicals shows a general development everywhere, as here new branches of industry, as well as new manufacturing methods have come into being in recent times. In Czecho-Slovakia the number of workers employed in the chemical industry amounted between 1928 and 1937 from 29.275 to 41.974; in Hungary from 9.954 to 14.380; in Roumania from 16.448 to 22.568. In Yugoslavia their number in 1937 was 10.799. It declined only in Austria where the number of workers in the chemical industry in 1928 was 13.796; in 1934 9.668, and in 1937 10.799.

In the industry of foodstuffs the Central European states show neither a considerable development, nor a decline during the period between the First and Second World War. Only Austria is an exception to this. Here the number of factory hands working in the industries of foodstuffs diminished from 37.116 to 25.919 between 1928 and 1937.

In Czecho-Slovakia their number changed from 34.446 to 32.758. In Hungary from 33.336 to 32.802; in Roumania from 24.826 to 28.927 between 1928 and 1937. In Yugoslavia their number in 1932 was 16.184 and in 1937 17.690.

The paper and printing industry shows a development in Czecho-Slovakia and in Roumania, a stagnation in Hungary and in Yugoslavia, and a decline in Austria. The number of the employees in this branch of industry between 1928 and 1937 amounted in Czecho-Slovakia from 39.911 to 52.495; in Roumania from 9.419 to 14.780. It decreased in Austria from 39.426 to 25.466, in Hungary it changed from 12.442 to 12.593.

There are far greater differences to be found in the consumption of industrial products among the inhabitants of the various regions than in the consumption of cereals and foodstuffs. The urban population consumes more varied industrial products and in larger amounts as well, than the rural population. More industrial products are consumed by the population of the culturally advanced areas than by those with primitive living standards. These differences are well reflected in the volumen calculations of consumption done by Kálmán Buday.

Production, Foreign Trade and Consumption of Industrial Products.
between 1934-1937.

Industrial branches	Volumen of production in 1000 dollars	Per capita production in dollars	Volumen of Imports	Volumen of Exports	Volumen of apparent consumption	Per capita consumption in doll.
<u>Iron, metal, machinery.</u>						
Austria	115.976	17.17	38.383	51.524	102.835	15.22
Czecho-Slovakia	725.864	47.53	97.619	108.070	715.413	46.85
Hungary	117.055	12.95	21.719	19.560	119.214	13.19
Roumania	80.580	4.12	72.770	648	152.702	7.82
Jugoslavia	45.808	2.99	48.954	11.831	82.931	5.43
<u>Quarry-clay-glass.</u>						
Austria	19.649	2.91	2.373	5.121	16.900	2.50
Czecho-Slovakia	97.849	6.41	2.992	37.888	62.953	4.12
Hungary	19.568	2.17	853	1.057	19.364	2.14
Roumania	20.817	1.06	3.607	371	24.053	1.23
Jugoslavia	11.862	0.79	4.624	329	16.157	1.06
<u>Clothing, leather</u>						
Austria	36.961	5.47	7.082	13.225	30.818	4.56
Czecho-Slovakia	155.315	10.17	17.136	44.460	127.991	8.38
Hungary	37.345	4.13	14.285	9.751	41.879	4.64
Roumania x/	-	-	-	-	-	-
Jugoslavia x/	-	-	-	-	-	-
<u>Textile</u>						
Austria	85.989	12.73	24.410	27.760	82.639	12.23
Czecho-Slovakia	429.478	28.13	35.393	109.490	355.381	23.27
Hungary	130.286	14.42	21.017	6.305	144.998	16.05
Roumania xx/	127.132	6.51	39.089	3.437	162.784	8.33
Jugoslavia	99.231	6.49	42.830	3.552	138.509	9.06

x/ Included in the data of textile industry
xx/ With clothing industry combined.

Industrial branches	Volumen of production in 1000 dollars	Per capita production in dollars	Volumen of Imports in 1000 dollars	Volumen of Exports in 1000 dollars	Volumen of apparent consumption	Per capita consumption in dollars
<u>Chemicals</u>						
Austria	36.062	5.34	17.770	4.657	49.175	7.28
Czecho-Slovakia	156.851	10.27	26.866	13.261	170.456	11.16
Hungary	49.025	5.42	8.325	1.560	55.790	6.17
Roumania	101.362	5.19	10.259	581	111.040	5.68
Jugoslavia	23.303	1.52	6.178	4.125	25.356	1.66
<u>Paper and printing</u>						
Austria	44.287	6.55	4.761	19.333	29.715	4.40
Czecho-Slovakia	91.803	6.01	6.128	16.842	81.098	5.31
Hungary	20.698	2.29	6.914	640	26.972	2.98
Roumania	25.792	1.32	2.629	755	27.666	1.42
Jugoslavia	10.139	0.66	5.477	1.313	14.303	0.94
<u>Industrial branches combined:</u>						
Austria	338.924	50.17	94.778	121.620	312.082	46.20
Czecho-Slovakia	1,657.160	108.52	186.134	330.011	1513.283	99.09
Hungary	373.977	41.38	73.113	38.873	408.217	45.17
Roumania	355.683	18.20	123.354	5.792	478.245	24.48
Jugoslavia	190.343	12.45	108.063	21.150	277.256	18.15

There are differences between consumers and consumers. The inhabitants of Czecho-Slovakia consume twice as much iron and metal products as the Serbian ones; the Austrians and Hungarians twice as much as the Roumanians. Nearly four times as much manufactures of the textile and clothing industry are consumed by the Czecho-Slovakian population as by the Roumanians who stand far behind the Hungarian consumers being content with 2 and a half times less amount. In determining the consumption and the needs in Central Europe, these differences should be also taken into consideration.

Critical times naturally affect the consumption of industrial products much better than that of foodstuffs. The decline in consumption is of course the sharpest in case of the biggest consumers, whereas the lower amounts of consumption hardly change.