



WED
world elite database

World Elite Database (WED) Methodological Report:

Construction of the Economic Elite Population for Germany

Version 2024.1

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Established in 2020, the World Elite Database (WED) project is an international consortium of scholars working together to develop a new standardized data regime to study, and share data about, elites across the world. It aims to solve the problems of comparability and heterogeneity in the study of national power structures, and to foster a cooperative community of scholars interested in studying elite populations systematically.

The logic behind the selection criteria that the WED project uses is explained fully on the WED website. The aim of this WED Methodological country report is to document important national sources, decisions and data sources regarding the construction of study populations for each country. Each Report, as well as other information about the WED, are available at: <https://worldelitedatabase.org/>

Each national WED population uses standardized criteria for each of four selection criteria that together are intended to represent the economic elite of a country: the heads of the publicly listed companies, other large companies, the wealthiest individuals in the country, and other relevant entities participating in the making of economic regulation. Because the precise sources and logic used to define these populations is subject to researcher discretion and expertise, these Reports are intended to clarify the specific logic and sources used by each national team.

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General information

The WED Germany data contains information on **163 individuals in 171 positions** (see Table A6 for overlap of positions). The selection of these individuals and positions is explained in the following pages of this Report, which outlines the specific selection criteria used for the study population. If not stated otherwise, the reference year of all data is December 31, 2020.

1) First criterion: The publicly listed companies

30 companies from the main stock market index were selected, which is the DAX, with 60 positions (see Table A1 in the appendix). Due to overlap of offices (Table A6), the number of individuals (CEO and Chairs) included by this criterion is **n=58**.

The DAX (Deutscher Aktienindex) is a stock market index consisting of the 30 major German blue chip companies trading on the Frankfurt Stock Exchange. It is a total return index. Prices are taken from the Xetra trading venue. According to Deutsche Börse, the operator of Xetra, DAX measures the performance of the Prime Standard's 30 largest German companies in terms of order book volume and market capitalization. DAX is the equivalent of the UK FTSE 100 and the US Dow Jones Industrial Average, and because of its small company selection it does not necessarily represent the vitality of the German economy as a whole.

<https://en.wikipedia.org/wiki/DAX>

2) Second criterion: Other large companies of similar size

39 individuals were selected from 39 positions in 22 companies of similar size to criterion 1 companies that had more than **32,110 employees** and more than **\$14.1 billion turnover** in 2020 (each threshold is the lower quartile from the companies in criterion 1, see Table A2 in the appendix). To identify these companies, the 2020 FAZ 200 list was used: <https://www.faz.net/aktuell/wirtschaft/die-100-groessten-unternehmen-16259120.html>

Information was counter-checked and in some cases replaced by information from the annual reports (see Table A3 in the appendix). Following this procedure, WED-Germany includes roughly the 30 companies with the largest turnover as well as the 30 largest employers in Germany in 2020 (see Table A7 and A8).

3) Third criterion: The Rich-List

28 individuals from the Forbes Billionaires 2020 - Germany List were selected, who had total assets of more than **\$4.7 billion**. The application of the selection rule was as follows: The mean market capitalization of the last three companies from the main stock index (criterion 1) was 10.96 billion USD. Half of this mean is 5.48 billion USD. Because this threshold is higher than the second rule, which is to include all billionaires with a net worth larger than the upper quartile of all billionaires (4.7 billion USD, see Table A4), the latter threshold was used.

As a source of information, the Forbes Billionaires 2020 list for Germany was used. The Forbes World's Billionaires list is a snapshot of wealth using stock prices and exchange rates. Individuals are listed rather than multigenerational families who share fortunes, though wealth belonging to a billionaire's spouse and children is included if that person is the founder of the fortune. For non-founders, Forbes previously listed couples and family members together in certain cases. Forbes estimates the net worth of each billionaire using a variety of assets, including private companies, real estate, art and more.

In two cases, family assets were split and assigned equally to individuals family members.

<https://www.forbes.com/billionaires/>

https://de.wikipedia.org/wiki/Chronologie_der_reichsten_Deutschen

4) Fourth criterion: Other entities participating in the making of the economic regulation

44 additional individuals who are most influential in the making of economic regulations were included, following the WED questionnaire (see Table A5 in the appendix).

1) Public Governance, including financial governance, top politicians in relevant ministries, top political aides in relevant ministries, top bureaucrats in relevant ministries, state agencies and government economic councils:

- Chairmen of Central Bank
- Federal ministers of Finance, Economy and Labor
- Parliamentary state secretaries at the ministries (Finance, Economy, Labor)
- State secretaries at the ministries (Finance, Economy, Labor)
- Chairmen of economic committee (Wirtschaftsausschuss)
- German council of economic experts (Sachverständigenrat)
- Federal cartel office (Bundeskartellamt)
- Federal audit office (Bundesrechnungshof)

2) Interest groups, including business associations, public employer associations, largest unions, major think tanks.

- Confederation of German employers' associations (BDA)
- The federation of German industries (BDI)
- Institute of the German economy (IW)
- ifo institute for economic research
- German institute for economic research (DIW)

Appendix

Table A1: The DAX-30 companies in December 2020

Rank	Company	Market capitalization	Employees	Turnover
1	Linde plc	123.60	74.200	33.509
2	Siemens	118.91	293.000	70.281
3	Allianz	101.27	150.300	172.760
4	SAP	95.10	102.400	33.626
5	BASF	72.89	110.300	72.753
6	Adidas	64.61	62.300	24.408
7	Daimler	60.59	288.500	189.420
8	Deutsche Telekom	59.86	226.300	124.218
9	Bayer	59.27	99.500	50.922
10	Deutsche Post	49.76	572.000	82.171
11	Infineon Technologies	49.40	46.700	10.537
12	Münchener Rück	42.25	39.642	67.515
13	Vonovia	38.20	10.600	4.958
14	Volkswagen	34.54	662.600	274.147
15	Deutsche Börse	31.64	7.200	4.328
16	BMW	29.24	125.400	121.758
17	RWE	27.87	19.500	16.836
18	E.ON	24.54	78.100	74.961
19	Deutsche Bank	22.95	84.700	29.520
20	Merck	21.76	58.100	21.567
21	Henkel	19.56	53.000	23.678
22	Fresenius	19.51	311.300	44.621
23	Delivery Hero	19.47	29.600	3.488
24	Fresenius Medical Care	16.97	125.400 *	44.621
25	Deutsche Wohnen	16.82	0.243	1.900
26	Continental	15.85	236.400	46.398
27	MTU Aero Engines	13.39	10.300	4.892
28	Beiersdorf	11.27	20.300	8.641
29	Heidelberg Cement	11.05	53.100	21.655
30	Covestro	10.56	17.100	13.168

Ranked by market capitalization on December 30, 2020. Source: Index Composition Report (see: www.stoxx.com) & Annual reports. Lufthansa was replaced by Deutsche Wohnen in June 2020. In August, Wirecard was replaced by Delivery Hero due to bankruptcy. In September, Siemens Energy was split off from Siemens and was also included in the DAX for two days to avoid price distortions. *Employees already included in Fresenius.

Table A2: Descriptive statistics on Criterion 1 (DAX) companies

Indicator	Mean	SD	Median	1 st quartile	Min	Max
Market capitalization	42.76	31.74	30.44	19.48	10.56	123.60
Employees	132.270	156.917	76.150	32.111	0.243	662.000
Turnover	56.44	62.56	33.57	14.09	1.90	274.15
Mean of last three	10.96	0.29	11.05	10.81	10.56	11.27

Market capitalization and turnover in billion US dollars. Employees in thousand. Based on data from Table A1.

Table A3: Other companies of similar size (employees and turnover)

Company	Turnover	Employees
Aldi-Group	119.3	251.000
Bertelsmann SE	21.3	132.800
Boehringer Ingelheim	24.1	51.900
Ceconomy AG	25.6	52.900
Deutsche Bahn	49.1	349.100
dm-drogerie markt	14.2	62.600
Edeka-Verbund	75.0	402.000
Evonik Industries AG	15.0	33.100
Hochtief AG	30.2	46.600
Lufthansa Group	16.7	110.100
Metro AG	31.5	97.600
Otto Group	19.2	49.900
Phoenix Group	34.7	39.500
Rewe Group	92.6	384.000
Robert Bosch GmbH	87.9	395.000
Schaeffler AG	15.5	83.300
Schwarz-Gruppe	139.4	458.000
Siemens Energy	33.8	92.000
Thyssenkrupp	35.5	103.600
Uniper	62.7	11.800
Würth-Gruppe	17.7	79.100
ZF Friedrichshafen	40.1	141.300

Some non-listed companies only have one operationally active managing director. Total number of positions: N=39; total number of individuals: n=39.

Table A4: Wealth distribution of high-net-worth individuals

Indicator	In billion USD
Mean	4.13
SD	4.19
Median	2.45
4 th quartile	4.70
Min	1.00
Max	19.80
N	108

Table A5: Criterion 4 questionnaire

Organizations/Positions	Elite position in Germany?	Top30?	Organization/Position
<i>Public governance</i>			
4.1.1 Financial Governance - Central bank	yes	yes	Chairman Deutsche Bundesbank
4.1.2 Government – Top politicians in relevant fields	yes	yes	Federal ministers (Finance, Economy, Labor)
4.1.3 Government – Top political aides of politicians	yes	no	Parliamentary state secretaries at the ministries
4.1.4 Parliament – Legislative commissions in relevant fields	yes	no	Chairman economic committee (Wirtschaftsausschuss)
4.1.5 State Administration – The top bureaucrats in relevant fields	yes	yes	State Secretaries at the Ministries
4.1.6 State Agencies – Regulation of competition and financial activities	yes	no	Director Federal Financial Supervisory Authority (BaFin)
	yes	yes	Federal Cartel Office (Bundeskartellamt)
	yes	no	President Federal Fiscal Court (Bundesfinanzhof)
	yes	yes	President of Federal Audit Office (Bundesrechnungshof)
4.1.7 Government councils - Economic councils	yes	yes	German Council of Economic Experts (Sachverständigenrat)
<i>Interest groups</i>			
4.2.1 Business associations	yes	no	Deutscher Industrie- und Handelskammertag
	yes	no	Verband der Automobilindustrie
	yes	yes	Confederation of German Employers' Associations (BDA)
	yes	yes	The Federation of German Industries (BDI)
4.2.2 Public employer – Heads of public employer's association	no	no	Bundesinnenministerium
	no	no	Vereinigung kommunaler Arbeitgeberverbände (VKA)
	no	no	Tarifgemeinschaft deutscher Länder (TdL)
4.2.3 Largest unions	yes	no	DGB
	yes	no	IG Metall
	yes	no	Ver.di
4.2.4 Major economic think tanks	yes	yes	President Institute of the German Economy
	yes	yes	President ifo Institute
	yes	yes	German Institute for Economic Research
<i>Crucial intermediaries</i>			
4.3.1 Consulting-Auditing	no	no	e.g. Accenture, Deloitte, PriceWaterhouseCoopers
4.3.2 M&A financial or legal advisors	no	no	
4.3.3 Rating Agencies	no	no	
4.3.4 Large Economic Exchanges	no	no	
4.3.5 University_Leading economy university	no	no	e.g. University Frankfurt
4.3.6 Professional Economists' Organizations	no	no	e.g. Bundesverband Deutscher Volks- und Betriebswirte
4.3.7 Mercenaries engaged in economic activities	no	no	
4.3.8 Large crime syndicates, e.g. Mafia/Yakuza	no	no	e.g. mafia, motorcycle gangs, clans
<i>Institutional investors</i>			
4.4.1 Asset Management	no	no	e.g. Allianz Dresdner Asset Management
4.4.2 Hedge Funds and Private Equity	no	no	
4.4.3. State-owned investment company/institutional investor	no	no	e.g. Kreditanstalt für Wiederaufbau (KfW)
4.4.4 Major pension funds	no	no	e.g. Deutsche Rentenversicherung
4.4.5 Foundations acting as investors	no	no	e.g. Robert Bosch Stiftung, Volkswagen Stiftung, Bertelsmann Stiftung
4.4.6 Churches	no	no	e.g. Katholische Kirche, Evangelische Kirche

Table A6: Overlap of positions

A) Overlap *within* criteria

Criterion 1: The main stock index (DAX-30)

Positions	Companies
Chair	Continental
Chair	Linde plc
Chair	Deutsche Post
Chair	Munich RE

This overlap of positions leads to the inclusion of 58 individuals in 60 positions.

Criterion 2: Other large companies
(No *within*-criterion overlap of positions)

Criterion 3: The rich
(No *within*-criterion overlap of positions)

Criterion 4: The regulators
(No *within*-criterion overlap of positions)

B) Overlap *between* criteria

C1 & C2: Overlap between DAX and other companies

Positions	Companies
Chair	E.ON
Chair	Deutsche Lufthansa
Chair	Vonovia
Chair	Ceconomy

C1 & C3: Overlap between DAX and the rich

Positions	Companies
Chair	SAP

C1 & C4: Overlap between DAX and regulators
(No *between*-criterion of positions)

C2 & C3: Overlap between other companies and the rich

Positions	Companies
Leader	Schwarz-Gruppe
Chair of foundation	Würth-Gruppe
Leader	Schaeffler

C2 & C4: Overlap between other companies and the regulators
(No *between*-criterion overlap of positions)

C3 & C4: Overlap between the rich and the regulators
(No *between*-criterion overlap of positions)

The overall **overlap of positions (n=8)** leads to the inclusion of **163 individuals in 171 positions.**

Table A7: Companies with largest turnover in Germany 2020 and inclusion in WED

Rank	Company	Turnover (in billion USD)	Inclusion note
1	Volkswagen	274.1	C 1
2	Daimler	189.4	C 1
3	Schwarz-Gruppe	139.4	C 2
4	Deutsche Telekom	124.2	C 1
5	BMW Group	121.8	C 1
6	Aldi-Group	119.3	C 2
7	Rewe Group	92.6	C 2
8	Robert Bosch GmbH	87.9	C 2
9	Deutsche Post	82.2	C 1
10	Edeka-Verbund	75.0	C 2
11	E.ON	75.0	C 1
12	BASF	72.8	C 1
13	Siemens	70.3	C 1
14	Uniper	62.7	C 2
15	Audi	61.5	not included – national sub of Volkswagen
16	Bayer	50.9	C 1
17	Deutsche Bahn	49.1	C 2
18	Continental	46.4	C 1
19	Fresenius SE	44.6	C 1
20	ZF Friedrichshafen	40.1	C 2
21	Heraeus Holding	38.7	not included – employee threshold (<32.100)
22	Thyssenkrupp	35.5	C 2
23	Porsche	35.3	not included – national sub of Volkswagen
24	Phoenix Group	34.7	C 2
25	Siemens Energy	33.8	C 2
26	SAP	33.6	C 1
27	Linde plc	33.5	C 1
28	Amazon Deutschland	31.8	not included – employee threshold (<32.100)
29	Metro AG	31.5	C 2
30	Hochtief AG	30.2	C 2
31	Thüga Gruppe	29.5	not included – employee threshold (<32.100)
32	Gazprom Germania	29.5	not included – employee threshold (<32.100)
33	Traton SE	27.8	not included – national sub of Volkswagen
34	Ceconomy AG	25.6	C 2
35	Volkswagen Leasing	25.4	not included – national sub of Volkswagen
36	BP Europa SE	24.4	not included – employee threshold (<32.100)
37	Adidas AG	24.4	C 1
38	Ford Werke GmbH	24.4	not included – employee threshold (<32.100)
39	EnBW AG	24.2	not included – employee threshold (<32.100)
40	Tennet TSO GmbH	24.1	not included – employee threshold (<32.100)
41	Boehringer Ingelheim	24.1	C 2
42	Henkel AG	23.7	C 1
43	Fresenius Medical Care	22.0	C 1
44	DB Schenker	21.7	not included – national sub of Deutsche Bahn
45	Heidelberg Cement	21.7	C 1
46	Merck KGaA	21.6	C 1
47	Bertelsmann SE	21.3	C 2
48	BayWa AG	21.1	not included – employee threshold (<32.100)
49	McKesson Europe AG	21.1	not included – employee threshold (<32.100)
50	Otto Group	19.2	C 2
51	Amprion GmbH	19.1	not included – employee threshold (<32.100)
52	Siemens Healthineers	17.8	not included – national sub of Siemens
53	Würth-Gruppe	17.7	C 2
54	Airbus Operations GmbH	17.1	not included – employee threshold (<32.100)
55	BSH Hausgeräte	17.1	not included – national sub of Bosch
56	RWE AG	16.8	C 1
57	Lufthansa Group	16.7	C 2
58	Lekkerland Gruppe	16.1	not included – national sub of REWE
59	Droege Group AG	16.0	not included – employee threshold (<32.100)
60	Shell Deutschland	16.0	not included – employee threshold (<32.100)
61	Opel	15.9	not included – employee threshold (<32.100)
62	Hapag-Lloyd AG	15.7	not included – employee threshold (<32.100)
63	Schaeffler AG	15.5	C 2
64	Aurubis AG	15.3	not included – employee threshold (<32.100)
65	Evonik Industries AG	15.0	C 2
66	Brenntag SE	14.5	not included – employee threshold (<32.100)
67	dm-drogerie markt	14.2	C 2
68	Vodafone GmbH	14.2	not included – employee threshold (<32.100)

Companies listed with a turnover over 14.1 billion USD. Turnover in EUR calculated using the exchange rate of 1 EUR = 1.23 USD.

Table A8: Largest employers in Germany 2020 and inclusion in WED

Rank	Company	Employees (in thousand)	Inclusion note
1	Volkswagen	662.6	C 1
2	Deutsche Post	572	C 1
3	Schwarz Gruppe	458	C 2
4	Edeka-Verbund	402	C 2
5	Robert Bosch GmbH	395	C 2
6	Rewe Group	384	C 2
7	Deutsche Bahn AG	349.1	C 2
8	Fresenius	311.3	C 1
9	Siemens AG	293	C 1
10	Daimler AG	288.5	C 1
11	Aldi-Gruppe	251	C 2
12	Continental	236.4	C 1
13	Deutsche Telekom	226.3	C 1
14	Allianz	150.3	C 1
15	ZF Friedrichshafen	141.3	C 2
16	Bertelsmann	132.8	C 2
	Fresenius Medical Care	125.4	not included – employees included in Fresenius
17	BMW Group	125.4	C 1
18	BASF	110.3	C 1
19	Lufthansa Group	110.1	C 2
20	Thyssenkrupp	103.6	C 2
21	SAP	102.4	C 1
22	Leoni AG	101	not included – turnover threshold (<14.1 B USD)
23	Bayer AG	99.5	C 1
24	Metro AG	97.6	C 2
25	Siemens Energy	92	C 2
26	Deutsche Bank	84.7	C 1
27	Schaeffler	83.3	C 2
28	Würth-Grupp	79.1	C 2
29	E.ON	78.1	C 1
30	Dräxlmeier-Group	75	not included – turnover threshold (<14.1 B USD)
31	Linde plc	74.2	C 1
32	Mahle GmbH	72.2	not included – turnover threshold (<14.1 B USD)
33	Asklepios Kliniken	67	not included – turnover threshold (<14.1 B USD)
34	B. Braun Melsungen AG	64.3	not included – turnover threshold (<14.1 B USD)
35	Unternehmensgruppe Tengelmann	63.4	not included – turnover threshold (<14.1 B USD)
36	dm-drogerie markt Gruppe	62.6	C 2
37	Adidas AG	62.3	C 1
38	Mc Donalds Deutschland	60	not included – turnover threshold (<14.1 B USD)
39	Merck KGaA	58.1	C 1
40	Dirk Rossmann GmbH	56.3	not included – turnover threshold (<14.1 B USD)
41	Heidelberg Cement AG	53.1	C 1
42	Henkel AG	53	C 1
43	Ceconomy AG	52.9	C 2
44	Boehringer Ingelheim	51.9	C 2
45	Otto Group	49.9	C 2
46	TUI AG	48.3	not included – turnover threshold (<14.1 B USD)
47	Liebherr-International	47.9	not included – turnover threshold (<14.1 B USD)
48	Freudenberg SE	47.8	not included – turnover threshold (<14.1 B USD)
49	Commerzbank AG	47.7	not included – turnover threshold (<14.1 B USD)
50	Infineon Technologies AG	46.7	not included – turnover threshold (<14.1 B USD)
51	Hochtief AG	46.6	C 2
52	Globus Holding GmbH	46.2	not included – turnover threshold (<14.1 B USD)
53	Dekra SE	44	not included – turnover threshold (<14.1 B USD)
54	Deichmann	41	not included – turnover threshold (<14.1 B USD)
55	Münchner Rück	39.6	C 1
56	Phoenix Group	39.5	C 2
57	Oetker Gruppe	36.8	not included – turnover threshold (<14.1 B USD)
58	Hella GmbH	36.3	not included – turnover threshold (<14.1 B USD)
59	Kion Group	36.2	not included – turnover threshold (<14.1 B USD)
60	Müller Holding	36.1	not included – turnover threshold (<14.1 B USD)
61	Sana Kliniken	36	not included – turnover threshold (<14.1 B USD)
62	Knauf Gruppe	35	not included – turnover threshold (<14.1 B USD)
63	Rhenus SE	33.5	not included – turnover threshold (<14.1 B USD)
64	Evonik Industries	33.1	C 2
65	Carl Zeiss Gruppe	32.2	not included – turnover threshold (<14.1 B USD)

Companies listed with employees over 32,100.