ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Bjerre, Liv; Peter, Frauke H.; Spieß, C. Katharina

Article

Child care choices in Western Germany also correlated with mother's personality

DIW Economic Bulletin

Provided in Cooperation with:
German Institute for Economic Research (DIW Berlin)

Suggested Citation: Bjerre, Liv; Peter, Frauke H.; Spieß, C. Katharina (2011) : Child care choices in Western Germany also correlated with mother's personality, DIW Economic Bulletin, ISSN 2192-7219, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin, Vol. 1, Iss. 5, pp. 20-26

This Version is available at:
https://hdl.handle.net/10419/57708

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Child Care Choices in Western Germany Also Correlated with Mother's Personality

by By Liv Bjerre, Frauke Peter*, and C. Katharina Spieß

The expansion of formal child care, particularly for children under the age of three, has resulted in more and more children from this age group attending day care facilities. This formal child care setting is frequently combined with care provided by grandparents or other individuals. The combination and number of child care settings made use of is influenced by a variety of socio-economic factors and the range of options available. Maternal personality can also explain differences in child care choices, if only to a relatively limited extent and predominantly in families residing in Western Germany. Analyses based on the German Socio-Economic Panel Study (SOEP) show that mothers in Western Germany who are very open to new experiences are more likely to combine the use of formal with informal child care. Mothers, who classify themselves as conscientious, in line with personality research, are less likely to use this setting as the sole additional type of child care alongside parental care. The analyses emphasize just how different parental preferences are. A policy that is focused on freedom of choice and on creating the conditions for this by expanding the child care infrastructure should take these differences into account.

In recent years, the use of child day care facilities in Germany has dramatically increased, particularly for younger children. In 2010, 15 percent of all children under the age of three in Western Germany attended a day care facility. For children in their third year, the percentage was 35.[1] Since 1996, older children who do not yet go to school have been legally entitled to at least a half-day kindergarten place. However, not all three and four-year-old children attend a day care facility. Only in the last year before school enrolment almost all children attend such a facility.

Reasons for using a day care facility are closely connected to parental employment behavior, particularly that of mothers. This is supported by various empirical studies.[2] As the child gets older, families with only one employed parent also use day care. Here, educational considerations are at the fore: children attend a child day care facility for social or other reasons which may benefit the development of the child.[3]

Attendance at a day care facility is not, however, the only child care option available to parents. Alongside other formal types of child care, such as family day care, parents also make use of informal child care. Informal care can be provided by relatives, predominantly grandparents, or by other paid or unpaid caregivers (such as a privately paid nanny, friends or neighbors). The role of grandparents is of crucial importance here: in 2008, 55 percent of all two to three-year-olds and 48 percent of all five to six-year-olds in Western Germany were looked after by their grandparents for at least one hour per week.

* Frauke Peter would like to thank the Federal Ministry of Education and Research (BMBF) for financially supporting her research with a doctoral grant for young researchers as part of its Framework Programme for the Promotion of Empirical Education Research.

1 See Federal Statistical Office (Statistisches Bundesamt): Statistiken der Kinder- und Jugendhilfe. Kinder und tätige Personen in Tageseinrichtungen und Kindertagespflege 2006-2010; Berechnungen der Dortmunder Arbeitsstelle Kinder- und Jugendhilfestatistik.

2 For a summary, see: Spieß, C. K., "Vereinbarkeit von Familie und Beruf—wie wirksam sind deutsche "Care Policies"?," Perspektiven der Wirtschaftspolitik. Special Issue 2011, (12): 4-27.

3 These considerations are, of course, also significant in cases where both parents are employed.

Table 1

Type of Child Care, Number of Child Care Settings, and Maternal Employment Status

Age of child	Employment status	Day care facility (row percentage)	Relatives	Child care by others (e.g., friends, neighbors) (row percentage)	Parental child care only (row percentage)	Number of non-parental child care settings(mean values)
2–3 years	Full-time	78.5	76.3	...	...	1.6
	Part-time	75.1	74.8	10.0	1.8	1.6
	In marginal employment	54.4	75.9	[13.4]	...	1.4
	Not employed	36.2	55.1	7.7	25.6	1.0
5–6 years	Full-time	92.8	73.9	...	...	1.7
	Part-time	93.6	54.3	[12.4]	...	1.6
	In marginal employment	100.0	[74.4]	...	...	1.8
	Not employed	92.3	55.0	...	...	1.5

Note: Multiple responses for different types of child care are possible. If number of cases N<10 percentages are not shown, if number of cases 10<=N<29 percentages are shown in square brackets.
Sources: SOEP v26 (2005-2009), weighted; calculations by DIW Berlin.

© DIW Berlin 2011

Employed mothers use a greater variety of child care settings.

In Eastern Germany, these figures were 60 and 62 percent, respectively.[4]

Employed and Not Employed Mothers Use Different Child Care Arrangements

Analyses based on the German Socio-Economic Panel Study (SOEP) clearly demonstrate the variety of types of child care made use of by different groups of mothers (Table 1). We find that almost 80 percent of children in the two to three-year age group with mothers in full-time employment attend a child day care facility. Furthermore, 76 percent of two to three-year-olds with mothers in full-time employment are also cared for by relatives, primarily by grandparents, even if only for a few hours. Of the two to three-year-olds whose mothers are not employed, around 36 percent attend a day care facility. This figure is far higher among older children and differences between the children of not employed and employed mothers are no longer significant.

However, parents frequently combine formal and informal child care options if, for example, the opening hours of a day care facility are not compatible with their working hours. This is demonstrated by the finding that, in 2008, 29 percent of all mothers in Western Germany whose youngest child was under three years of age were in employment,[5] but only 12 percent of children under three are in formal care settings.[6] SOEP-based analyses provide further evidence of this: with an average of 1.6 child care settings, the younger children of full-time and part-time mothers are more likely to use two additional combinations of child care alongside parental care. In contrast, the children of not employed mothers or mothers in marginal employment only use one additional type of child care. Among children from the older age group (five to six years), this difference is less obvious. In this group, on average, two additional types of care are always used (Table 1). One child is, for example, allocated two forms of care if he/she attends a day care facility and is also cared for by grandparents.

The extent to which the choice of specific types of child care is actually driven by parents' preferences or can be explained by the limited availability of high-quality child day care with flexible opening hours cannot be differentiated in the majority of studies. Nevertheless, research conducted to date has identified some important factors for the use of formal and, to a lesser extent,

4 Own analyses based on SOEP v25 (2008).

5 Federal Statistical Office: Erwerbstätigenquoten der 15- bis unter 65 Jährigen mit Kindern unter 18 Jahren: Früheres Bundesgebiet/Neue Länder, Jahre, Alter des jüngsten Kindes, Geschlecht, Ergebnisse des Mikrozensus, Wiesbaden. (2010)

6 In the city states, 32 percent of all children under three use a child day care facility. See: Federal Statistical Office: Statistiken der Kinder- und Jugendhilfe, Kinder und tätige Personen in Tageseinrichtungen und Kindertagespflege 2006-2010; Berechnungen der Dortmunder Arbeitsstelle Kinder- und Jugendhilfestatistik.

Box

Personality Traits—the Big-Five

Extraversion refers to personality dispositions such as sociableness, activeness, drive, assertiveness, and enthusiasm.

Agreeableness includes the different facets of flexibility, openness, humility, cooperation, trust, and altruism.

Conscientiousness means that an individual is achievement-oriented, level-headed, thorough, well-organized, responsible, and self-disciplined.

Neuroticism refers to the different facets of anxiety, sadness, insecurity, irritability, impulsiveness, and vulnerability.

The *openness* dimension encompasses imagination, fantasy, an openness to new ideas, sensitivity to beauty, feelings, and openness to change as well as a flexible system of norms and values.

Source: Lang, F. R. and O. Lüdtke: "Der Big Five-Ansatz der Persönlichkeitsforschung: Instrumente und Vorgehen," in Persönlichkeit: eine vergessene Größe der empirischen Sozialforschung, ed. S. Schumann (Wiesbaden: VS Verlag, 2005), 32.

also informal child care. Alongside the mother's occupation and her volume of work, household income, parental education, and migration background are all important factors.[7] These socio-economic variables go a long way towards explaining the heterogeneity among types of child care used, but do not account for everything. There must, therefore, be other factors, that have not yet been captured in these models. Here, attitudes towards education or parental educational aspirations might be important. International research in this field indicates, however, that psychological factors are significant as well.

Personality Traits are Correlated with Type and Number of Child Care Types

Research on education and family economics in Germany to date has rarely questioned the extent to which psychological factors, which could be perceived as elements of parental preference structure, are correlated with the choice of child care types used. This is even more striking since research in the field of early childhood conducted in the US, which has gained in prominence due to the work of the Nobel laureate in Economics, James Heckman, has provided substantial evidence regarding the significance of parental personality in the development of children and their skills.[8]

Against this research backdrop, we consider the extent to which the choice of specific types of day care and also the number of care settings selected are influenced by the mother's personality. We restrict our analyses to maternal personality traits as mothers continue to be the main caregiver. We also draw on some international studies from psychology which have already analyzed the correlation between psychological variables and the choice of child care.[9] These studies capture both mothers' personal attitudes and assessments and their psychological well-being. An early study by Applebaum (1997)[10] analyzed, for example, to what extent the mother's personality, alongside other psychological factors, may explain the combinations of child care settings used. This US study found a significant positive correlation between mothers' extraversion and agreeableness and the selection of certain types of child care. Here, the connection with extraversion was the strongest: the more a mother was classified as extroverted, the greater the probability that her child would attend non-parental care for at least ten hours per week.

Our analyses are based on a German representative study of private households and persons, the German Socio-Economic Panel (SOEP). We analyze the SOEP waves 2005 to 2009. In 2005, the SOEP survey, conducted by the DIW Berlin in cooperation with the fieldwork organization TNS Infratest Sozialforschung, collected information on personality for the first time.[11] These were collected according to the so-called "Big Five" concept. Thereafter, the following five personality dimensions

7 For a summary, see, for example: Spiess, C. K. "Early Childhood Education and Care in Germany: The Status Quo and Reform Proposals," Zeitschrift für Betriebswirtschaftslehre 67 (2008): 1-20.

8 See Heckman, "The economics, technology, and neuroscience of human capability formation," Proceedings of the National Academy of Sciences of the United States of America,104(33); Aug 14, 2007, and also Heckman "Integrating Personality Psychology into Economics," IZA Discussion Paper 5950, (Bonn: 2011).

9 See, for example, Barnes, J., "Infant care in England: Mothers' aspirations, experiences, satisfaction, and caregiver relationships." Early Child Development and Care 176 (5) (2006): 553-573; Network, N. E. C. C. R., "Child-care effect sizes for the NICHD Study of Early Child Care and Youth Development" American Psychology 61(2) (2006): 99-116; or Sylva, K., et al.. "Family and child factors related to the use of non-maternal infant care: An English study." Early Childhood Research Quarterly 22(1) (2007): 118-136

10 See: Appelbaum, M. et al. "Familial factors associated with the characteristics of nonmaternal care for infants," Journal of Marriage and the Family 59 (2) (1997): 389-408.

11 On this, see: Dehne, M. and J. Schupp, "Persönlichkeitsmerkmale im Sozio-oekonomischen Panel (SOEP): Konzept, Umsetzung und empirische Eigenschaften. DIW Research Notes no. 26, Berlin (2007). http://www.diw.de/documents/publikationen/73/diw_01.c.76533.de/rn26.pdf

can be measured: extraversion, agreeableness, conscientiousness, neuroticism and openness (see box). Using these dimensions, we are able to describe the personality of mothers of young children.

We distinguish between different age groups of children as the factors correlated with the use of specific forms of child care are different for younger than for older children. This enables us to analyze, on the one hand, an age group (two to three years) where 52 percent attend formal care and, on the other hand, a group (five to six years) where the majority (94 percent) attend formal care. Information on combinations of child care settings is drawn from the SOEP mother-child questions. Since 2003, these specific questionnaires have captured child care in greater detail than in the household questionnaire.[12]

Extroverted Mothers More Likely to Use Child Day Care Facilities

An initial bivariate analysis demonstrates the correlation between the five personality dimensions of the mother and the number of specific child care types (Table 2).

We then analyze all types of child care individually, irrespective of whether or not they are combined.[13] We find evidence that extroverted mothers (characterized by greater enthusiasm and drive) of children in the two to three-year age group are more likely to use a child day care facility than those who are less extroverted. The use of family day care, in contrast, is correlated with the mother's neuroticism. Presumably, insecure and nervous women are more likely to choose family day care because this type of child care is closer to family care. Mothers characterized by greater openness are inherently more likely to use relatives for child care than the correspon-

12 On this, see: Schupp, J., C. K. Spiess, and G. G. Wagner, "Die verhaltenswissenschaftliche Weiterentwicklung des Erhebungsprogramms des SOEP," Vierteljahrshefte zur Wirtschaftsforschung 77, 3: (2008): 63-76.

13 This means that the types of care are not mutually exclusive.

Table 2

Correlation Between Type of Child Care, Number of Child Care Settings and Maternal Personality
Marginal effects

Age of child	Maternal personality	Logit model					OLS model
		Daycare facility	Family Day Care	Relatives	Care by others (e.g., friends, neighbors)	Parental care only	Number of child care settings
2–3 years	Openness	0.018	0.004	0.022**	0.013	–0.016	0.053**
	Extraversion	0.035**	0.000	0.006	0.019	–0.017	0.059**
	Conscientiousness	0.006	–0.009	–0.002	0.021	–0.005	0.026
	Neuroticism	0.015	0.016**	–0.014	0.022	–0.004	0.022
	Agreeableness	–0.022	–0.003	–0.005	0.002	0.010	–0.024
	N	838	838	838	838	838	838
	pseudo R^2/adj.R^2	0.006	0.022	0.012	0.005	0.008	0.015
5–6 years[1]	Openness	–0.021**	–0.000	0.037**	–0.035	...	–0.023
	Extraversion	0.004	–0.001	0.029*	0.025	...	0.059*
	Conscientiousness	–0.016*	–0.001	–0.029*	0.062**	...	0.011
	Neuroticism	–0.010	0.001	–0.039***	–0.005	...	–0.065*
	Agreeableness	–0.006	0.000	–0.012	–0.027	...	–0.046
	N	334	334	334	334	...	334
	pseudo R^2/adj.R^2	0.087	0.253	0.072	0.023	...	0.026

1 No results in Column 5, as very few children in this age group are cared for exclusively by their parents. The different forms of child care are not mutually exclusive.

** p < 0,10, ** p < 0,05, *** p < 0,01*
Sources: SOEP v26 (2005-2009), weighted; calculations by DIW Berlin.

© DIW Berlin 2011

Mothers who are open and more extroverted use a wider variety of child care settings.

ding reference group of mothers, either in combination with a child day care facility or on its own.

The situation regarding mothers of five to six-year-olds looks somewhat different: the initial similarity is that the children of mothers who are characterized as being more open are, on average, more likely to make use of child care provided by relatives but less likely to use child day care facilities. The more neurotic the mother, i.e., the more nervous and insecure she is, the less likely she will use relatives as additional carers for her child—on the whole, almost all children in this age group attend a child day care facility. The more conscientious the mother, the more likely it is that the pre-school child will be cared for by friends or neighbors.

The number of child care settings used can also be correlated with the mother's personality traits: the more open and extroverted the mother of a two to three-year-old, the greater the number of types of child care she is likely to use. With regard to extraversion—this also applies to children in the five to six-year age group. The more neurotic the mother, the fewer types of child care she is likely to use.

A Mother's Conscientiousness Correlates with Use of Day Care Facilities, But Only in Western Germany

In a multivariate analysis we consider other factors alongside personality, such as the mother's occupation, child's age, etc., which are associated with the use of different types of child care. We focus here on the use of a child day care facility or family day care as formal care. In our first model, we do not distinguish between whether or not formal care is combined with informal forms of care. In our second model, however, we draw a distinction between whether the formal child care is the only type, alongside parental care, or whether it is combined with informal child care.

First, the analyses confirm the findings of previous studies: use of a child day care facility and family day care depends particularly on the child's age, the mother's occupation, her education, household income, the number of children, family migration background, and region. This particularly applies to children in the two to three-year age group, whereas in the case of pre-school children, the number of children and household income are significant.

With regards to the personality traits that are of interest to us here, it appears that two to three-year-old children of mothers who are characterized by a higher level of conscientiousness, i.e., those who consider themselves to be dutiful and orderly, are less likely to use formal care exclusively, without any additional types of child care. The correlation is insignificant if formal care is combined with informal care. The correlation between the openness of mothers and the combined usage of formal and informal child care has a weak positive significance (Table 3).

A comparison of East and West provides no evidence, in the Eastern German sample, of significant correlations between the type of child care and mother's personality. For Western Germany, the comparison demonstrates the relationship between the mother's openness and the use of child care combinations even more clearly. It is shown that the mother's agreeableness is also significant. Mothers who can be considered agreeable are less likely to combine different types of child care.

When we look at pre-school children, a different picture emerges: here, mothers who are more open to experience and more conscientious are less likely to use a child day care facility if other combinations are not further differentiated. If we do differentiate, only the correlation with conscientiousness remains statistically significant. Other associations are weakly significant such as the positive correlation between extraversion and the use of combinations of other child care forms. This relationship is weakly negative if we examine the use of formal child care exclusively (Table 3). A comparison of East and West demonstrates here, too, that the measured effects apply, almost exclusively, to mothers from Western Germany (no table).

Mother's Openness Correlates with Number of Different Types of Child Care

In further multivariate analyses, we associate the number of different forms of child care with maternal personality traits and other socio-economic variables (Table 4). In this case, we restrict our analysis to children who are not only cared for by their parents. The bivariate findings (Table 1) confirm that employed mothers in particular combine different forms of child care. Furthermore, this also depends on the child's age, the presence of a partner in the household, household income, migration background, and the region in which the family resides.[14] This applies in particular to two to three-year-olds, whereas the correlation for five to six-year-olds is

14 This "regional indicator" also reflects the significant differences between Eastern and Western Germany in terms of availability of child day care facilities for children under the age of three.

Table 3

Models Describing the Probability of Using Formal Child Care
Marginal effects

	2–3 years			5–6 years		
	Model I, Logit	Model II, Multinominal logit		Model II, Logit	Model II, Multinominal logit	
	Formal child care	Only formal child care	Formal child care and other combinations of child care	Formal child care	Only formal child care	Formal child care and other combinations of child care
Openness	0.023	–0.013	0.036*	–0.013**	0.037	–0.050*
Extraversion	0.033	0.007	0.026	0.002	–0.046*	0.048*
Conscientiousness	–0.008	–0.033**	0.027	–0.013**	–0.052**	0.039
Neuroticism	0.031	–0.005	0.036*	–0.003	0.015	–0.019
Agreeableness	–0.015	0.004	–0.018	–0.004	0.014	–0.018
N	786	786		317	317	
Pseudo R^2	0.230	0.168		0.251	0.123	

The following socio-economic factors were included in all models besides the variables measuring maternal personality: maternal employment status, partner in household, age of mother, maternal education, age of child (in months), gender of child, migration background of child, number of children in household <16 years, logarithmized household income, and region (Eastern or Western Germany).

** p < 0,10, ** p < 0,05, *** p < 0,01*
Sources: SOEP v26 (2005-2009); calculations by DIW Berlin.

© DIW Berlin 2011

Conscientious mothers are less likely to use formal child care facilities exclusively.

only statistically significant with regard to the mother's full-time employment and household income.

When we consider the mother's personality, it appears that mothers who are more open are more likely to use more types of child care for their two to three-year-old children. The correlation with the extraversion personality trait is only weakly significant. The latter is also only weakly significant for pre-school children which means that the more a mother describes herself as assertive and enthusiastic, the more likely she is to use a variety of forms of care for her children.

Conclusion

The use of formal child care, its combination with other forms of informal child care, and the number of child care settings used are correlated with the mothers' personality, alongside regional and socio-economic factors. However, statistically speaking, personality traits cannot explain much of the variance in child care settings and can only be proven, almost exclusively, for mothers who reside in Western Germany: the more conscientious these mothers consider themselves to be, assuming other factors remain constant, the less likely they are to use a child day care facility without additional forms of child care such as care provided by grandparents. This finding may conceal personal attitudes and assessments of formal care that cannot be directly measured. It is notable that the correlation between personality and types of day care is almost completely insignificant for Eas-

Table 4

Model Describing the Number of Child Care
OLS estimates, regression coefficients

	2–3 years	5–6 years
	Number of child care settings	Number of child care settings
Openness	0.049**	–0.044
Extraversion	0.045*	0.058*
Conscientiousness	0.021	0.001
Neuroticism	0.032	–0.043
Agreeableness	–0.012	–0.036
N	786	317
Adj. R^2	0.152	0.078

The following socio-economic factors were included in all models besides the variables measuring maternal personality: maternal employment status, partner in household, age of mother, maternal education, age of child (in months), gender of child, migration background of child, number of children in household <16 years, logarithmized household income, and region (Eastern or Western Germany).

** p < 0,10, ** p < 0,05, *** p < 0,01*
Sources: SOEP v26 (2005-2009); calculations by DIW Berlin.

© DIW Berlin 2011

Correlation between openness and number of child care settings is significant.

tern German mothers—here, particularly with regard to younger children, employment-related factors are decisive. Furthermore, it appears that mothers who are more open are more likely to use a wider variety of different types of child care.

A family and education policy should take these correlations into account, alongside other objective factors, and should ensure that parents are free to make the decisions that suit their personal preferences. Parents need to be given a range of options in order to be able to do so. A further expansion of day care facilities on offer would provide parents with a wider choice.

From a research perspective, it would be interesting to analyze, using a cross-country comparison, whether the differences between Eastern and Western Germany can also be applied to a comparison between different countries. A comparison could be drawn between countries, where for many years, similarly to Eastern Germany, the majority of children have used formal day care and these forms of child care are widely accepted (e.g, France and the Scandinavian countries) with countries which, similar to Western Germany, have only experienced an increase in the use of such child care in recent years, particularly for younger children (e.g., Austria). It is likely that in countries with a widely established child care system fewer correlations between personality traits and the types of child care used will be found than in other countries.

Liv Bjerre is a doctoral candidate at WZB | bjerre@wzb.eu.

Frauke Peter is Research Associate and doctoral candidate at the longitudinal Socio-Economic Panel Study (SOEP) at DIW Berlin | fpeter@diw.de.

Prof. Dr. C. Katharina Spieß is acting head of the Educational Policy Department at DIW Berlin and Professor at FU Berlin | kspiess@diw.de

JEL: J13, J22

Keywords: Child care, personality factors, maternal employment

Article first published as "Was hilft Migrantennachkommen in Frankreich und Deutschland?", in: DIW Wochenbericht Nr. 41/2011

DIW BERLIN

DIW Berlin—Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
T +49 30 897 89 -0
F +49 30 897 89 -200

Volume 1, No 5
4 November, 2011
ISSN 2192-7219

Publishers
Prof. Dr. Pio Baake
Prof. Dr. Tilman Brück
Prof. Dr. Christian Dreger
Dr. Ferdinand Fichtner
PD Dr. Joachim R. Frick
Prof. Dr. Martin Gornig
Prof. Dr. Peter Haan
Prof. Dr. Claudia Kemfert
Karsten Neuhoff, Ph. D.
Prof. Dr. Jürgen Schupp
Prof. Dr. C. Katharina Spieß
Prof. Dr. Gert G. Wagner
Prof. Georg Weizsäcker, Ph. D.

Editors in chief
Dr. Kurt Geppert
Sabine Fiedler

Editorial staff
Renate Bogdanovic
Dr. Frauke Braun
PD Dr. Elke Holst
Wolf-Peter Schill

Editorial manager
Alfred Gutzler

Press office
Renate Bogdanovic
Tel. +49-30-89789-249
Sabine Fiedler
Tel. +49-30-89789-252
presse@diw.de

Sales and distribution
DIW Berlin

Reprint and further distribution—including extracts—with complete reference and consignment of a specimen copy to DIW Berlin's Communications Department (kundenservice@diw.berlin) only.

Printed on 100% recycled paper.