Kirsch, Anja; Wrohlich, Katharina

Article

Gender diversity benefits supervisory board work of many companies

DIW Weekly Report

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

Suggested Citation: Kirsch, Anja; Wrohlich, Katharina (2021) : Gender diversity benefits supervisory board work of many companies, DIW Weekly Report, ISSN 2568-7697, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin, Vol. 11, Iss. 3/4, pp. 32-38, https://doi.org/10.18723/diw_dwr:2021-3-3

This Version is available at:
https://hdl.handle.net/10419/231652

Gender diversity benefits supervisory board work of many companies

By Anja Kirsch and Katharina Wrohlich

ABSTRACT

Over the past years, the proportion of women on the supervisory boards of major companies in Germany has increased. As this second report in the DIW Women Executives Barometer 2021 shows, this has a meaningful, positive impact on the supervisory boards of many companies, and affects interactions between members, discussions, and decision-making. These findings are based on qualitative interviews with 60 supervisory board members who serve on the boards of a total of 75 listed companies in Germany. These directors emphasize changes in the general atmosphere, and discussions are described as more comprehensive and multi-faceted. Women also appear to be more likely to question the executive board's proposals and decisions and to request additional information more often. Thus, gender diversity on supervisory boards can contribute to a board's ability to more effectively monitor executive boards. The interviews do not confirm the idea that women on supervisory boards act in an especially risk averse, altruistic, or ethical manner. Considering the frequency of top executives committing fraud—such as in the current Wirecard scandal—improvement to supervisory boards' discussions and decision-making is very important. In the same vein, it can be hoped that the minimum requirement for the participation of women on executive boards, a bill which was recently passed by the German Cabinet, will similarly have effects beyond providing momentum for greater gender equality.

In Germany, the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors Act (*Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen*, FüPoG) has been in effect since May 2015 and applies to 107 companies as of 2021. The law mandates that publicly listed companies that also have equal representation of shareholders and employees on their supervisory board (full co-determination) fulfill a gender quota of 30 percent on their supervisory boards. Companies that are either publicly listed *or* have fully co-determined supervisory boards must set their own target goals for increasing the proportion of women on their supervisory board.[1]

There are two motives for introducing statutory quotas for companies' boards: One, lawmakers aim to promote the actual implementation of gender equality and to work towards eliminating existing disadvantages. The second motive is strongly emphasized in public, political, and academic debates: the "business case," or the idea that an increase in the presence of women on company boards will provide it with economic advantages.[2]

The 2020 Women Executives Barometer focused on investigating the first motive,[3] as it was hoped that the quota regulation for supervisory boards in FüPoG I would have an indirect effect on the representation of women on executive boards. In the 2020 Women Executives Barometer, indications of such an effect were presented: the greater the share of women on a company's supervisory board, the higher the share of women on the executive board at a later date. It was also shown that supervisory board members have a wide range of opportunities to influence how executive board

1 See the other report in this issue by Anja Kirsch and Katharina Wrohlich, "Number of women on boards of large firms increasing slowly; legal requirements could provide momentum," *DIW Weekly Report* no. 3 (2021): 20–31.

2 Catherine Seierstad, "Beyond the business case: The need for both utility and justice rationales for increasing the share of women on boards," *Corporate Governance: An International Review* 24, no. 4 (2016): 390–405.

3 Cf. Anja Kirsch and Katharina Wrohlich, "More women on supervisory boards: Increasing indications that the effect of the gender quota extends to executive boards," *DIW Weekly Report* 4+5 (2020): 44-49 (available online; accessed on January 12, 2021. This applies to all other online sources in this report unless stated otherwise).

DOI: https://doi.org/10.18723/diw_dwr:2021-3-3

positions are filled and can thus work towards bringing more women to executive boards.[4]

This report investigates the second motive: the expectation that gender diversity on boards will bring about positive economic effects for companies. Meta-analyses have determined a small positive effect of board gender diversity on companies' financial performance[5] and a positive effect on their corporate social responsibility.[6] However, little is known about the causes of the observed differences between companies with male-dominated boards and those with more gender-balanced boards.

Quantitative studies frequently assume that the differences between the genders in attitudes and values found in the general population also occur on corporate boards and are reflected in gender-stereotypical behaviors. Thus, it is assumed that women directors are more risk averse, ethical, and altruistic than men and act accordingly.[7] However, there is no empirical evidence for this assumption. In fact, it seems to be the case that women who hold positions on boards differ in their attitudes and values from women in the general population.[8]

Therefore, research approaches that examine how the presence of women on boards impacts decision-making processes in these boards are important.[9] Following this line of research, this report uses a qualitative research design to examine how the presence of women affects the work of supervisory boards among German listed companies.

Majority of respondents notice changes to discussions and interactions due to women on supervisory boards

The research results reported here are based on 60 interviews with supervisory board members of listed German companies that were conducted as part of a research project at the Freie Universität Berlin (Box). All 60 interviewees expressed thoughts on the topic. The great majority, 22 men and 27 women, were of the view that the presence of women affected the discussions, interactions, and decision-making process in their supervisory board (or supervisory boards, for those with multiple appointments). The others did not notice any difference or did not feel they were able to make an assessment (Table).

Work atmosphere: many recognize an increase in politeness and mutual respect

A particularly large number of comments related to the "interactions," "style," "tone," "atmosphere," "culture," and "climate" of the supervisory board. Many supervisory board members emphasized that these improvements have occurred, resulting in "nicer" and "friendlier" supervisory boards. For example, one female entrepreneur spoke of developments on the supervisory board of her listed family business:

> *"Before women were on the supervisory board, the birthdays of supervisory board members weren't acknowledged, even if they were on the day of the meeting. But now if it is a supervisory board member's birthday, they are given a small bouquet and are congratulated."*

Many observed an increase in politeness, consideration, and mutual respect. A shareholder representative stated:

> *"There are positive changes because people have become more sensitive and considerate when dealing with each other. I experienced this as pleasant. Very normal, down to earth, but with a bit more respect and a bit more elegance, making it a positive experience overall."*

A further observation was that the supervisory board members now listened to each other more attentively. One supervisory board chairman related this phenomenon to the novelty of the situation:

> *"We listen to each other more intently because it is still a bit new. This leads us to be more attentive and careful in our argumentation. (...) [Women's presence] affects the sensitivity of topics and arguments, which is precisely because of the novelty of the situation."*

Some interviewees reported that fewer masculine behaviors (in their words: "displays of dominance," "turf mentality," "male vanity," "showing off," "hotshot attitudes," "boyish" and "comradely" behavior, "locker room talk") occurred in the presence of women, which also translated into less "rough," "aggressive," and "emotional" interactions. One female shareholder representative summarized her experiences:

> *"Less aggressive, less personal, more fact oriented—I'm sorry to provide such a clichéd answer, but I have to answer like this because this is how I experience it."*

4 Cf. Kirsch and Wrohlich, "More women on supervisory boards ."

5 Corinne Post and Kris Byron, "Women on boards and firm financial performance: A meta-analysis," *Academy of Management Journal* 58, no. 5 (2015): 1546–1571.

6 Kris Byron and Corinne Post, "Women on boards of directors and corporate social performance: A meta-analysis," *Corporate Governance: An International Review* 24, no. 4 (2016): 428–442.

7 For more on the differences in attitudes and values, see Rachel Croson and Uri Gneezy, "Gender differences in preferences," *Journal of Economic Literature* 47, no. 2 (2009): 448-474; Maureen L. Ambrose and Marshall Schminke, "Sex differences In business ethics: The importance of perceptions," *Journal of Managerial Issues* 11, no. 4 (1999): 454–474; James Andreoni and Lise Vesterlund, "Which is the fair sex? Gender differences in altruism," *Quarterly Journal of Economics* 116, no. 1 (2001): 293–312; and Julie A. Nelson, "Are women really more risk-averse than men? A re-analysis of the literature using expanded methods," *Journal of Economic Surveys* 29, no. 3 (2015): 566–585.

8 Renée B. Adams, "Women on boards: The superheroes of tomorrow?," The Leadership Quarterly 27, no. 3 (2016): 371–386; Renée B. Adams and Patricia Funk, "Beyond the glass ceiling: Does gender matter?," *Management Science* 58, no. 2 (2012): 219–235.

9 Sabina Nielsen and Morten Huse, "The contribution of women on boards of directors: Going beyond the surface," *Corporate Governance: An International Review* 18, no. 2 (2010): 136–148.

Discussions: Both women and men find them "more intense" and "more fact oriented"

Diversity can have both positive and negative consequences for a work team's performance.[10] Positive effects include a wider range of information and perspectives that allow the team to find good and innovative solutions to problems. Such positive effects were emphasized by many supervisory board members. Regarding the discussions and decision-making processes on the supervisory board, both men and women described the discussions as having become "more intense" and "fact oriented." Men in particular reported that discussions are now "multi-faceted" and issues are viewed from different angles. For example, one male shareholder representative observed that:

> *"Discussions have become noticeably more intense, more fact oriented. Fresh blood provides a different perspective, which is a real gain that we wouldn't have had without the gender quota."*

A supervisory board chairman phrased his thoughts in a similar manner:

> *"The spectrum of aspects that play a role in discussions is broader when men and women are sitting at the table rather than when only men, and presumably also only women, are sitting at the table. More viewpoints come to light. Whether it's now the women who are articulating that or whether maybe men think differently when women are present, I can't really say. But overall, the discussion is broader and richer."*

Further, one male and one female employee representative mentioned that the presence of women on supervisory boards broke up established "power constellations" and countered tendencies towards groupthink.

Some of the negative effects of team diversity include more difficulty in communicating, less cohesion, less knowledge exchange, or more frequent conflicts.[11] Although such effects were rarely mentioned, several interviewees nevertheless reported such problems, especially relating to the attitude of the supervisory board chairman towards gender diversity. For example, one female employee representative recalled:

> *"The former chairman was one of those men who realize that women are on boards, but they don't want them to be there. (...) The new chairman is younger and not as obstinate as old Mr. [Chairman] was. Interactions are fine and he doesn't have any issues with the role of women. But when I remember how it was with Mr. [Chairman], I had several arguments with him, and I think it really had a lot to do with the fact that I'm a woman."*

10 Bertolt Meyer, "Team Diversity," in Eduardo Salas, Ramón Rico, and Jonathan Passmore (eds.), *The Wiley Blackwell Handbook of the Psychology of Team Working and Collaborative Processes* (Chichester: 2017): 151-175.

11 Meyer, "Team Diversity."

Box

Methods and data

The effects of the increasing share of women on supervisory boards was the subject of a qualitative study as a part of a research project at the Freie Universität Berlin.[1] The qualitative interview is an especially suitable research method for exploring the interpretations and perspectives of the actors involved in social phenomena such as the increasing share of women on supervisory boards.[2] Interviews were conducted with 30 women and 30 men who were members of supervisory boards of 75 listed German companies (Table 1).[3] Many had additional board positions with unlisted companies, foreign companies,

Table 1

Overview of the companies

	Number of companies (Men)	Number of companies (Women)
Listing		
DAX-30	8	8
MDAX	14	5
SDAX	8	10
Other	14	23
Supervisory board		
Large (13–21 members)	13	13
Medium (7–12 members)	18	17
Small (3–6 members)	13	16
Co-determined	30	33
Total	44	46

1 The research leading to these results was funded by the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 303571 and by the Margherita von Brentano Center of the Freie Universität Berlin.

2 Steinar Kvale, *Doing Interviews* (London: 2007).

3 The interviews were conducted between January 2017 and February 2020. They were recorded and transcribed. At the request of one of the interviewees, one interview was not recorded. Notes were taken instead.

Women inquire more "persistently" and "investigate" more compared to men

Multiple interviewees emphasized that the female supervisory board members had been "selected for their specialist knowledge" and thus have "specific competencies." For example, one female employee representative reported:

> *"Two fantastic women joined on the shareholder representative side. They were really renowned and were leading authorities in their fields. And in contrast to the men, they took an investigative approach. Sometimes they asked questions that made me think, 'Yes, exactly, I wanted to*

and on boards of trustees or advisory boards of other types of organizations. Of the 30 women, 11 were employee representatives and one was a supervisory board chair. Of the 30 men, 13 were employee representatives and six were supervisory board chairs (Table 2).

In the interviews, the supervisory board members were asked, based on their personal experience on one or more supervisory boards, to evaluate if the presence of women affected the discussions, interactions, and decision-making on supervisory boards or not. It was emphasized that the question did not pertain to their opinion on the impact of women on the work of supervisory boards in general, but rather to their specific experiences on the boards they served on.

The interviewees provided answers from many different perspectives. Longtime male board members could compare past positions on all-male boards with current positions on mixed-gender boards. Longtime female board members could compare their early experiences as the only woman on a board with those as one of several women on current boards. Other female supervisory board members were able to report what their male colleagues had told them about changes since they joined. Many supervisory board members could observe other men and women on their board and compare their behavior.

The effects observed by the interviewees are presented in reduced, tabular form.[4] They were recorded in their words and grouped thematically. Presenting the findings in the interviewees' words, apart from a few linguistic and grammatical tweaks for comprehension, allows readers to see that the research findings presented here on the effect of women on supervisory boards are clearly grounded in the underlying interview data. This process increases the credibility of the research findings.[5]

Table 2

Interviewee characteristics

	Men (Number)	Women (Number)
Shareholder representatives		
Trade association representatives	1	1
Shareholder association representatives	1	2
Former company CEOs	2	0
Representatives of the founding family with management experience in the company	0	2
Government shareholder representatives (e.g. politicians)	2	2
Business experts (representatives with experience in other companies as entrepreneurs or executives)	7	6
Other experts (professors, accountants, lawyers, consultants)	4	6
Employee representatives		
Union officials	7	6
Representatives of managerial staff	3	2
Works councilors	3	3
Total	30	30
Demographic data		
Average age	62	54
Average number of board positions in listed companies	1.6	1.6
Average number of years of experience as supervisory board member of listed companies	15.2	9.9

The supervisory board members' narrations are presented in detail in this report and information is provided on the number of these narrations. This information is provided to present the study's findings as transparently as possible so as to allow readers to make up their own minds about the significance of individual aspects. However, no conclusions can be drawn from this information as to how frequently the phenomena described occur in other supervisory boards.

4 See the table in the main text of this Weekly Report.

5 Uwe Flick, "Gütekriterien qualitativer Sozialforschung," in *Handbuch Methoden der empirischen Sozialforschung*, eds. Nina Baur and Jörg Blasius (Wiesbaden: 2014), 411-423.

ask that too.' It was fascinating and because they were on the shareholder side, the executive board felt, I think, a bit more obliged to answer them than they would us [employee representatives]. Their interest in discussion and the way they operated was highly professional, it was a different league, you could say. They were really taken seriously."

Some interviewees reported their observations on the behavior of women on supervisory boards. Most frequently, they discussed that female supervisory board members created "sparring situations" for the executive board by "questioning their decisions." Through especially "persistent" and "investigative questioning" they forced the executive board "to work with care" and to provide "well-founded justification" for its decisions. They "demanded more information" and were more likely to see things that "could be an anomaly." For example, one male employee representative said:

"I see that women ask the right questions in an accurate and well-prepared way. In doing so, they create a sparring situation for the executive board and force it to drop its defense. But I've not yet experienced that a decision turned out differently because of that. (...) What happens is that decisions are sometimes postponed. I have seen men do it, too, but relatively speaking it's more women than men

Table

Summary of the interviewees' narrations

	Men (interview number)	Women (interview number)
Narrations of interactions, atmosphere, culture, style, tone, and climate of the supervisory board		
More polite, more courteous	2, 9, 25	3, 11, 17, 23
Nicer, friendlier, more amicable	26, 30	6, 12, 18, 21
More sensitive, more considerate, more moderate, more awareness of what one is saying	9, 13, 28	2, 17, 19
More relaxed, more pleasant, calmer, more equanimity	21, 25	1, 2, 19, 20, 23
More appreciative, more togetherness, more openness, more cooperation	10, 13	6, 20
More attentive, one listens more, more communicative, good culture of discussion	2, 10, 28	6, 13, 17, 20, 25
Less aggressive, less personal, less emotional, fewer harsh tones	7, 9	5, 13, 19, 24
More sophisticated, less locker room talk, less boyish, less comradely	9	5, 18, 23
Fewer displays of dominance, turf mentality, male vanity, and less showing off	3, 7, 8	1, 2, 10, 21, 26
Narrations of supervisory board discussions		
More animated, more lively, more intense	1, 6, 15, 21	18, 20, 29
More fact oriented, more objective, more structured	6, 7, 15, 30	1, 5, 13, 20
Broader, more multi-faceted, wider range of opinions, topics viewed from different angles, new perspectives	10, 15, 18, 19, 25, 27, 28	17, 20
Breaking up old power structures, women as a counter to the tendency of men in groups to see things in similar ways	14	17
Narrations of characteristics and behaviors of women on supervisory boards compared to men		
Professional, experts, highly competent, with special competencies	11, 28	16, 22
Ask questions more precisely, persistently and in an investigative way; question decisions; are more likely to see something that could be an anomaly; think outside of the box; consider what could come next; demand more information, say "That's not enough, I want to know more about this," "I want to understand it because I have to hold responsibility for it;" create a sparring situation for the executive board so that it is forced to work with care, account for its actions, and justify its proposals more intensively	3, 5, 6, 7, 8, 14	4, 14, 16
Mediating role	7	
More active in discussions, more proactive, stronger in proposing reports, hearings, and measures	7, 21, 28	
More fearless and do not integrate into existing hierarchies	29	14, 25
Say things straight out, address difficult topics more directly and in an unvarnished way, not so roundabout, quick to the point	15, 24	6, 23
Female shareholder representatives respect employee representatives more, easier communication, interactions on more equal terms	21	20

who say: 'No, I want to know more about this, this isn't enough. I need more input on this.'"

One male shareholder representative addressed the mediating role of women in discussions. He said:

"When things get heated among the men, escalate, they speak up and make a factual contribution. They say, 'Let's be level headed about this, both arguments have merits, we need to calmly deliberate them.' They say, 'Let's treat each other with respect, let's think about both arguments objectively and calmly.' I've experienced this a few times, and what happens is that people pull themselves together and everyone starts discussing on a different level. That's a bit of a mediating role."

Many men viewed female supervisory board members as especially active and proactive. One male supervisory board chair expressed it in the following manner:

"The women are more proactive. Because women are in the minority and it's a newer development that women are more often in board positions, these women also want to show that they can leave a mark. They are more proactive, they say more, they are stronger in proposing reports or people we should consult or regarding plans that the executive board should present on specific topics. In the male-only boards that I serve on, it's more entrenched. There the chair dominates, maybe another member as well, but many others come and go."

A further male supervisory board chair also noticed significant changes and emphasized that female supervisory board members were less likely to integrate themselves into existing hierarchies:

"There used to be a very hierarchical principle in these supervisory boards. The chair would say something and ask the group: 'Does anyone have any comments?' Then there would be tentative comments and then the issue was done. I'm exaggerating a little. And I think they don't do that with women, especially not with the self-confident women who serve on supervisory boards. The times have changed too, you have to admit. I very much run this supervisory board in a way that everyone should really voice their opinion—and the women do so fearlessly. The

hierarchical ranking that used to be widespread and perhaps still partly exists today doesn't really apply to them because they position themselves differently. (...) They voice their opinion and communicate more openly. (...) These are women who have prevailed in business at a time that may not have been easy for them to do so. (...) They have seen a lot and they have had to be assertive. That's something you notice. I find that to be very, very positive."

A female employee representative who observed the female shareholder representatives on her supervisory board described it similarly:

"I find that women are much more persistent in asking questions and much less worried that they may have asked the wrong thing. Sometimes their counterpart then says: 'Have you still not understood?' But thank God, that is water off a duck's back to those ladies I work with. Self-confidently, they say, 'As long as I don't understand it, I will not approve it.' (...) I think that's related to the fact that by the time you have managed to attain a board position like that, you're not so easily shaken. After all, you've already been through a lot. (...) And I think that's a characteristic that is a bit different."

A further difference between the behavior of women and men was observed, namely that difficult topics were brought up more quickly in supervisory board discussions. One male shareholder representative remembered:

"Straight out, they say things straight out, yeah. On one board, this is my own perception, there were one or two women who would jump right in to the difficult part, to the numbers. There was no nice prologue, rather, 'Bam!" (hits table) 'We have a problem.' (...) I think that discussions are more intense due to the women, a bit more direct. But that doesn't mean that discussions took a different path, it just means that topics came up more quickly and were unvarnished."

A male and a female employee representative addressed changes in the relationship between the employee side and the shareholder side of the board. The female employee representative asserted that:

"When women serve on both sides, the relationship between the shareholder side and the employee side changes. Because this similarity – of being a woman on one side and on the other side there are women too – is a connecting element."

The male employee representative had experienced improvements in interactions and communication.

"For a long time, the employee representatives in this supervisory board were viewed by the executive board as a hindrance and an obstruction, we were not really appreciated. And that also meant that on some issues, communication with the executive board wasn't easy. From my point of view, it is remarkable that the two new female shareholder representatives on the supervisory board have a more pleasant way of interacting, let's say, more respect for the employee representatives than their male predecessors. (...) This has benefited us because they communicate with us more openly and on more equal terms. (...) As an employee representative, I also feel respected as an equal by [the new female executive board member]. That seems to be easier or more natural with these three women than with the men."

Conclusion: Companies could benefit from more women on boards

Female directors have a positive effect on discussions, interactions, and decision-making in supervisory boards. That summarizes the views of most of the supervisory board members interviewed for the research project underlying this report. Some stated that there had been changes in the work atmosphere and in the way supervisory board members interacted with one another, resulting in improvements in the culture of discussions and in working relationships. Others reported that the discussions themselves have become more comprehensive and multi-faceted. Regarding the behavior of women on the supervisory board, some interviewees noticed that female supervisory board members were particularly investigative in their inquiries, questioned the proposals and decisions of the executive board, and demanded further information. In this way, they forced the executive board to justify its plans more comprehensively and thus better.

These findings show how the presence of women on supervisory boards impacts discussions and decision-making processes. In contrast to the common assumptions about gender stereotypical attitudes and values of female directors described in the introductory section of this report, the interviewees' statements on the effects of women on supervisory boards did not contain any indications that female directors make particularly risk-averse, altruistic, or ethical contributions to discussions or the decision-making process.

Further, the findings show that gender diversity in supervisory boards can contribute to more effectively monitoring executive boards. This confirms recent studies on the causes of misconduct by top management. According to that research, board composition and the organizational culture in the top ranks of companies are factors that influence fraudulent activities by executives. Specifically, homogeneously constituted boards and organizational cultures that rationalize unethical behavior encourage fraudulent activities.[12] There is increasing evidence in the research that

12 Shaker A. Zahra, Richard L. Priem, and Abdul A. Rasheed, "The antecedents and consequences of top management fraud," *Journal of Management* 31, no. 6 (2005): 803–828 and Karen Schnatterly, K. Ashley Gangloff, and Anja Tuschke, "CEO wrongdoing: A review of pressure, opportunity, and rationalization," *Journal of Management* 44, no. 6 (2018): 2405–2432.

companies with women on their boards are less likely to engage in fraudulent activity.[13]

This argument is also made in the public debate. For example, Monika Schnitzer, a member of the German Council of Economic Experts, doubts that the Volkswagen emissions scandal would have occurred with women on the executive board.[14] She argues that in a heterogeneous group, the group dynamic would have been different and criminal behavior could not have occurred without resistance. The Wirecard scandal also concerns criminal behavior of top executives that the supervisory board was unable to prevent. As can be seen from her resignation letter to the chairman of the supervisory board from 2017, which has now become public, former Wirecard supervisory board member Tina Kleingarn had attempted to effectively monitor the company. She wrote that she was resigning because of major discrepancies between her idea of adequate corporate governance and the supervisory board practice at Wirecard and because she had not succeeded in resolving them.[15]

In this vein, it can be hoped that an increase in the proportion of women on the executive boards of large companies in Germany – resulting from a new statutory requirement – will also have effects that reach beyond providing for greater gender equality. An increase in the share of women on these boards can also have positive effects for the companies and society as a whole.

13 Binay K. Adhikari, Anup Agrawal, and James Malm, "Do women managers keep firms out of trouble? Evidence from corporate litigation and policies," *Journal of Accounting & Economics* 67, no. 1 (2019): 202–225; Douglas Cumming, T.Y. Leung, and Oliver Rui, "Gender diversity and securities fraud," *Academy of Management Journal* 58, no. 5 (2015): 1572–1593; Trang Doan and Mai Iskandar-Datta, "Are female top executives more risk-averse or more ethical? Evidence from corporate cash holdings policy," *Journal of Empirical Finance* 55 (2020): 161–176; Yaoyao Fan, Yuxiang Jiang, Xuezhi Zhang, and Yue Zhou, "Women on boards and bank earnings management: From zero to hero," *Journal of Banking & Finance* 107 (2019); Meredith B. Larkin, Richard A. Bernardi, and Susan M. Bosco, "Does female representation on boards of directors associate with increased transparency and ethical behavior?," *Accounting & the Public Interest* 13, no. 1 (2013): 132–150; Chelsea Liu, "Are women greener? Corporate gender diversity and environmental violations," *Journal of Corporate Finance* 52 (2018): 118–142; Alaa Mansour Zalata et al., "Female directors and managerial opportunism: Monitoring versus advisory female directors," *Leadership Quarterly* 30, no. 5 (2019).

14 Georg Meck, "Mit Frauen wäre der VW-Skandal nicht passiert," Interview with Monika Schnitzer from the *Frankfurter Allgemeine Sonnstagszeitung* (May 2020): 21 (in German).

15 Martin Hesse, "Wirecard: Ehemalige Aufsichtsrätin belastet Ex-Chef Markus Braun," *Spiegel Online* (November 2020) (in German; available online) and Tim Bartz, "Die verspätete Heldin des Wirecard-Skandals," *Spiegel Online* (November 2020) (in German; available online).

Anja Kirsch is a research fellow at the Chair of Human Resource Management and Labor Politics at the Freie Universität Berlin | anja.kirsch@fu-berlin.de

Katharina Wrohlich is Head of the Gender Economics Research Group in the Public Economics Department at DIW Berlin | kwrohlich@diw.de

JEL: D22, J16, J59, J78, L21, L32, M14, M51

Keywords: Keywords (englisch): corporate boards, board composition, boards of directors, board diversity, Europe, women directors, gender equality, gender quota, Germany, management, private companies, public companies, supervisory boards, executive boards, CEOs, women

LEGAL AND EDITORIAL DETAILS

DIW Berlin — Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
www.diw.de
Phone: +49 30 897 89–0 Fax: –200
Volume 11 January 27, 2021

Publishers
Prof. Dr. Tomaso Duso; Prof. Marcel Fratzscher, Ph.D.; Prof. Dr. Peter Haan; Prof. Dr. Claudia Kemfert; Prof. Dr. Alexander S. Kritikos; Prof. Dr. Alexander Kriwoluzky; Prof. Dr. Stefan Liebig; Prof. Dr. Lukas Menkhoff; Dr. Claus Michelsen; Prof. Karsten Neuhoff, Ph.D.; Prof. Dr. Carsten Schröder; Prof. Dr. C. Katharina Spieß; Dr. Katharina Wrohlich

Editors-in-chief
Dr. Gritje Hartmann; Dr. Anna Hammerschmid (Acting editor-in-chief)

Reviewer
Annekatrin Schrenker

Editorial staff
Marten Brehmer; Rebecca Buhner; Claudia Cohnen-Beck; Petra Jasper; Sebastian Kollmann; Sandra Tubik

Sale and distribution
DIW Berlin Leserservice, Postfach 74, 77649 Offenburg
leserservice@diw.de
Phone: +49 1806 14 00 50 25 (20 cents per phone call)

Layout
Roman Wilhelm, DIW Berlin

Cover design
© imageBROKER / Steffen Diemer

Composition
Satz-Rechen-Zentrum Hartmann + Heenemann GmbH & Co. KG, Berlin

ISSN 2568-7697