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Volkswagen's Bad Decisions & Harmful Emissions: How Poor Process Corrupted Codetermination in Germany's Dual Board Structure

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VOLKSWAGEN'S BAD DECISIONS & HARMFUL EMISSIONS: HOW POOR PROCESS CORRUPTED CODETERMINATION IN GERMANY'S DUAL BOARD STRUCTURE

Nicola Faith Sharpe*

This Article directly challenges the often argued proposition that Germany's two-tier board of directors is superior to America's single-tier board structure. It argues that regardless of structure, any decision-making body that lacks effective decision-making processes is at significant risk of failure, scandal, and ineffectiveness. Legal scholars and policymakers have largely ignored the connection between decision-making processes and the efficacy of corporate leadership. The Article is the first to examine this underexplored relationship in the context of the German dual-board.

Volkswagen's 2015 emissions scandal provides a vehicle to critically assess the relationship between Germany's two-tiered board and an effective decision-making process. This Article argues that the structure of Volkwagen's dual board did not automatically result in an effective decision-making process—the attributes of which can be found in organizational behavior theory—is essential to helping German boards accomplish their legislative mandate. Moreover, it is essential to helping the boards of transnational corporations, which have a wide range of structural variations, effectively govern the organizations for whom they work.

In sum, Volkswagen and other German corporations may follow the structural requirements of German corporate law, but without effective processes, German directors are likely to fail in their monitoring and supervisory roles. Without effective processes, directors are watchers asleep at their post, uninformed, dormant, and ineffective in preventing gross failures of corporate integrity. Unless German boards adopt and implement a Process-Oriented Approach, the Volkswagen emission scandal will simply be another mark on a timeline for a century plagued by corporate failure.

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Introduction

The Volkswagen diesel emissions scandal sounds like the plot to a Hollywood blockbuster movie: In an effort to evade the law, senior executives at one of the world's oldest and most recognized automobile corporations install sophisticated software in over 11 million of its vehicles. The software allows the vehicles to appear environmentally compliant, when in fact, they are illegally spewing toxic, possibly deadly, pollutants into the atmosphere. Scientists from a small lab in West Virginia suspect the deception. Over the course of several years, these scientists confirm that the

company was cheating on emissions testing through the use of "defeat devices." Their discovery brings the corporate behemoth and its powerful executives to their knees. The company's stock price plummets. The deception, which was intended to catapult the company into the top spot in the automobile industry, backfires, costing the company over \$30 billion in fines and vehicle buybacks. The CEO and other high-ranking executives are forced to resign, and the company's reputation is irrecoverably damaged.

Although it may sound like excellent fiction, it is a frighteningly accurate synopsis of the largest scandal in the automobile industry's history.² Recent developments continue to confirm the Volkswagen tale is far from finished. In January 2017, the FBI arrested Oliver Schmidt, a German citizen who served as Volkswagen's manager for its Michigan-based environmental and engineering office. Schmidt, a 48-year-old German citizen, pled guilty to charges related to the admission scandal. On December 6, 2017, a Federal District Court in Detroit sentenced Mr. Schmidt to seven years in prison and fined him \$400,000 for conspiracy to defraud the federal government and for violating the Clean Air Act.³ The same court sentenced James Liang, a Volkswagen engineer, to a 40 month prison sentence for his role in emissions scandal.⁴

While Volkswagen's defeat devices⁵ may have been a surprise to many, the usual suspect—the board of directors—shouldered the blame. When

^{1.} See generally Paul A. Eisenstein, Volkswagen Slapped with Largest Ever Fine for Automakers, NBC News (Apr. 21, 2017), https://www.nbcnews.com/business/autos/judge-ap proves-largest-fine-u-s-history-volkswagen-n749406.

^{2.} Guilbert Gates, Jack Ewing, Karl Russell & Derek Watkins, *Explaining Volkswagen's Emissions Scandal*, N.Y. Times (Apr. 28, 2016), http://www.nytimes.com/interactive/2015/ business/international/vw-diesel-emissions-scandal-explained.html?_r=0; Margot Sanger-Katz & John Schwartz, *How Many Deaths Did Volkswagen's Deception Cause in the U.S.?*, N.Y. Times (Sept. 28, 2015), http://www.nytimes.com/2015/09/29/upshot/how-many-deaths-did-volkswagens-deception-cause-in-us.html. *See also* Clive Irving, *Revealed: How VW Designed the Greatest Scandal in Automotive History*, Dailly Beast (July 19, 2016, 10:25 AM), https://www.thedailybeast.com/revealed-how-vw-designed-the-greatest-scandal-in-automotive-history.

^{3.} Bill Vlasic, *Volkswagen Official Gets 7-Year Term in Diesel-Emissions Cheating*, N.Y. Times (Dec. 8, 2017), https://www.nytimes.com/2017/12/06/business/oliver-schmidt-volks wagen.html.

^{4.} Eric D. Lawrence, *VW Engineer Gets 40 Months in Prison for Role in Diesel Scandal*, USA Today (Aug. 25, 2017), https://www.usatoday.com/story/money/cars/2017/08/25/vw-engineer-gets-40-months-prison-role-diesel-scandal/602584001/ ("In addition to his prison sentence, Liang was ordered to serve two years of supervised release and pay a \$200,000 fine. He is to be deported after his sentence.").

^{5. 40} C.F.R § 86.004-2 (2016) ("Defeat device means an auxiliary emission control device (AECD) that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless: (1) Such conditions are substantially included in the Federal emission test procedure . . . (2) The need for the AECD is justified in terms of protecting the vehicle against damage or accident; (3) The AECD does not go beyond the requirements of engine starting; or (4) The AECD applies only for engines that will be installed in emergency vehicles ";

corporations fail or scandals surface, there is a refrain, like the chorus of a well-known song, which fills the airwaves: Where was the board? The board failed to monitor managers. The board lacked independence. This refrain was heard over and over again after most of the well-known failures of this century—Enron, World Com, Adelphi, Merrill Lynch, and AIG—to name a few. Volkswagen is no exception. The company's shocking admission that it had systematically cheated on years of emissions tests through the use of sophisticated "defeat devices" dominated news headlines and shook the foundation of one of the world's largest and oldest corporations. Within days of the admission, Volkswagen's stock price dropped by more than half and led many financial experts to suggest that the company might never recover.

The question remained: How could such a long term and meticulously executed deception have occurred? Articles in the *Financial Times* and *The Wall Street Journal* cite the company's poor corporate governance as a "root cause of the diesel-emissions scandal." The Volkswagen Supervisory Board was criticized because it lacked "diversity, expertise, and independence."

Volkswagen is a German company, organized with a dual-tier structure. Germany's two-tier board structure is often considered superior to American corporations' unitary boards. The dominant theory of United States corporations' purpose is shareholder wealth maximization. This is distinct from the theory that informs German boards. The German two-tier model is in many ways a reflection of stakeholder primacy,

see generally Criminal Complaint \P 49, United States v. Schmidt, No. 16-mj-30588 (E.D. Mich. filed Dec. 30, 2016).

^{6.} See generally Lisa M. Fairfax, Sarbanes-Oxley, Corporate Federalism, and the Declining Significance of Federal Reforms on State Director Independence Standards, 31 Ohio N.U. L. Rev. 381, 382–83 (2005) ("Indeed, corporate governance scandals suggested that directors had failed to appropriately monitor corporate officers, and that such failure enabled officers to engage in fraud and other behavior detrimental to shareholders and the markets in general."); Allan D. Grody, Letter to the Editor, N.Y. Times, Jan. 18, 2009, at MM28 (stating that the financial crisis was properly blamed on "lack of management oversight and diligence"); Ben Stein, It's Time to Act Like Grown-Ups, N.Y. Times, Nov. 11, 2007, at 4 (wondering where the directors were when banks such as Merrill Lynch faced financial disaster); Ralph Ward, Editorial, CEOs Got Grilled, but Let's Hear from Board Leaders, Too, DETROIT FREE PRESS, Dec. 10, 2008, at 15 ("All our corporate disasters of the past decade, from Enron up to the current financial meltdown, have drawn the same question: Where was the board?").

^{7.} See, e.g., Chris Bryant & Richard Milne, Boardroom Politics at the Heart of VW Scandal, Fin. Times (Oct. 4, 2015), http://www.ft.com/intl/cms/s/0/e816cf86-6815-11e5-a57f-21b88f7d973f.html#axzz48h2iiM7s.

^{8.} *Id*

^{9.} See generally Tien Glaub, Lessons From Germany: Improving on the U.S. Model for Corporate Governance, 5 BYU Int'l L. & Mgmt. Rev. 235 (2009); Cherie J. Owen, Board Games: Germany's Monopoly on the Two-Tier System of Corporate Governance and Why the Post-Enron United States Would Benefit from its Adoption, 22 PA. St. Int'l L. Rev. 167 (2003).

codetermination, and managerialism.¹⁰ The defining principle of Germany's board management is codetermination; codetermination is a principal that seeks to balance capital, shareholder wealth, and the needs of employees, including organized labor.¹¹ In American corporate governance parlance, it would be called "stakeholder wealth maximization" instead of "shareholder wealth maximization." Despite this theoretical distinction, this Article argues that German corporate boards are susceptible to the same shortcomings as American boards. The ideal of codetermination is easily subsumed by greed and wealth maximization when proper process is not prioritized.

A look underneath the hood reveals that despite the dual-tier structure of Volkswagen's board, the process employed was grossly inadequate. My earlier work developed a novel Process-Oriented Approach ("POA") for decision-making. ¹² I have argued that process is more important than structure for boards of directors, like Volkswagen's, to be effective. ¹³ This approach has clearly identified the specific attributes of a decision-making process that are essential to sound governance. This Article uses that foundation to provide an innovate analysis of one of the most significant corporate governance failures in history, the Volkswagen emissions scandal.

Many policy makers, corporate governance advocates, and scholars have argued that Germany's dual-board structure promotes codetermination and allows for a wide-range of views to shape corporate strategy. Consequently, these policy makers argue that it is a superior monitoring mechanism to the single-tier board used in the United States because the members of the two-tier board have a vested interest in seeing their views

^{10.} David Block & Anne-Marie Gerstner, One-Tier vs. Two-Tier Board Structure: A Comparison Between the United States and Germany (Spring 2016) (unpublished seminar paper, University of Pennsylvania Law School) (on file with the University of Pennsylvania Law School Legal Scholarship Repository).

^{11.} Rebecca Page, Co-Determination in Germany: A Beginner's Guide, Arbeitspapier 33, Hans Boeckler Found. at 10-11 (June 2009), https://www.boeckler.de/pdf/p_arbp_033.pdf; see also Lutz Englisch & Mark Zimmer, The Future of German Codetermination, Bus. L. Magazine (Aug. 9, 2016), http://www.businesslaw-magazine.com/2016/09/08/the-future-of-german-codetermination/.

^{12.} See, e.g., Nicola Faith Sharpe, Process Over Structure: An Organizational Behavior Approach to Improving Corporate Boards, 85 SOUTHERN CAL. L. Rev. 261 (2012).

^{13.} See id.

^{14.} Alan S. Gutterman, Business Transactions Solutions § 347:30, Westlaw (database updated Jan. 2018) ("While protections for minority shareholders in Germany were characterized as 'weak' large holders of shares were given seats on the Supervisory Board where they could exert control and closely monitor management activities and pursue their strategic interests with respect to the firm; Roberta Romano, *Metapolitics and Corporate Law Reform*, 36 Stan. L. Rev. 923, 967 (1984) ("Codetermination seeks by its structuring of the board to implement cohesive and harmonious employer-employee relationships More practically, the primary benefit of codetermination is said to be an absence or lessening of labor unrest, which fosters the social cohesion and stability emphasized by corporatism.") (citations omitted).

heard and in understanding the company's business decisions. This Article shows that a dual-board structure is subject to the same shortcomings seen in U.S. corporations when it is not used in conjunction with the type of process that leads groups to make sound and well-informed decisions. The Article applies the foundational attributes of an effective decision-making process to show why a two-tiered board without these attributes leaves the corporation vulnerable to gross malfeasance and managerial failure. An analysis of Volkswagen reveals that there were numerous process failures at Volkswagen and suggests ways that all boards, regardless of structure, can use a process-oriented approach to detect, deter, and defend against malfeasance and corruption.

This Article proceeds as follows. Part I examines the timeline of events leading up to September 2015, when Volkswagen admitted to installing defeat devices, and the subsequent admission in November 2015. Part II provides an overview of German corporations' two-tier corporate governance structure, with a specific examination of Volkswagen's structure. It identifies the laws that dictated Volkswagen's board structure and discusses the animating theory of codetermination. This foundation is necessary to understand how Volkswagen's two-tiered board failed. Part III analyzes how Volkswagen's Supervisory Board failed to fulfill its monitoring responsibility. It argues that the Supervisor Board was a cosmetic feature of Volkswagen's governance structure and that it lacked the substantive knowledge or information to meaningfully monitor. Part IV applies the Process-Oriented Approach. It shows that Volkswagen lacked an effective decision-making process which allowed both for blatant fraud to run rampant and for watchdogs, including many of the Supervisory Board directors, to lie dormant and ignorant while the deception took root and grew. In order to understand how Volkswagen's decision-making process was suboptimal, this Part will closely analyze the decisions made both at the board and at senior management levels. In all, the Volkswagen board failed to establish the type of decision-making process that would have helped to identify the corruption that led to the emissions scandal. This Part goes on to discuss alternatives drawn from the POA that may help corporations like Volkswagen in the future. Part V concludes.

I. Defeat Devices, Decisions, and Emissions

In September 2015, Volkswagen (VW) shocked the world when it admitted that it had installed "defeat device" software in almost half a million of its cars sold in the U.S. and more than 11 million vehicles globally.¹⁶ The software avoided detection by the automobiles' emission

^{15.} See infra Part IV.B (discussing the attributes of an effective decision making process).

^{16.} Jeff Plungis & Dana Hull, VW's Emissions Cheating Found by Curious Clear-Air Group, Bloomberg (Sept. 20, 2015), http://www.bloomberg.com/news/articles/2015-09-19/volkswagen-emissions-cheating-found-by-curious-clean-air-group [https://perma.cc/AS8M-69KH].

control system when it "bypasse[d], defeat[ed], or render[ed] inoperative elements" of the system in order to avoid emissions testing. As a result, Volkswagen's diesel-powered vehicles emitted high levels of nitrogen oxides and fine particulates that are harmful to children or individuals with respiratory disease. Their admission followed a September 18, 2015 U.S. Environmental Protection Agency ("EPA") Notice of Violation to Volkswagen AG, Audi AG, and Volkswagen Group of America ("VW") concluding that Volkswagen had manufactured and installed defeat devices in certain light-duty diesel vehicles equipped with 2.0 liter engines from 2009-2015.

Volkswagen's stock plummeted 37% in the 48 hours following their admission.²⁰ The company's loss will be extensive. Costs from the violations and vehicle recalls have already exceeded \$30 billion.²¹ The defeat devices were not an isolated incident that led to an unexpected failure to follow the law. Instead, it was a well-researched, intentional, and concerted effort by Volkswagen's leadership to increase sales and to grow their market share.

One might ask: How could a well-known company such as Volkswagen carry out a multi-year deception? Many commentators have been quick to identify the Volkswagen Supervisory Board's lack of authority and poor monitoring of the Management Board and Volkswagen's executives as causes. This Part of the Article examines the timeline of events leading-up to the September realization that Volkswagen had cheated on emission tests. This Part, furthermore, studies the Volkswagen incident to illustrate why Germany's two-tier board is subject to many of the same limitations of American corporate boards. The timeline of events shows that the structure of the Supervisory Board lacked the necessary safeguards to

^{17.} Letter from Phillip A. Brooks, Dir., Air Enf't Div., Office of Civil Enf't, Envtl. Prot. Agency, to David Geanacopoulos, Exec. Vice Pres. Pub. Affairs and Gen. Counsel, Volkswagen Grp. Of Am., Inc., and Stuart Johnson, Gen. Manager, Eng'g and Envtl. Office, Volkswagen Grp. Of Am., Inc. (Sept. 18, 2015) (on file with E&E News) http://www.eenews.net/assets/2015/09/21/ document_cw_01.pdf [hereinafter Notice of Violation].

^{18.} Susan Carpenter, Based on Academic Research, Volkswagen Emissions Scam Could have Killed More than a Hundred, Orange County Reg. (Sept. 29, 2015), http://www.ocregister.com/articles/health-685158-air-california.html [https://perma.cc/4QTV-BJQK].

^{19.} See Notice of Violation, supra note 17 (Volkswagen specifically violated $\S\S 203(a)(3)(B)$ and 203(a)(1) of the Clean Air Act (42 USC $\S\S 7522(a)(3)(B)$ and 7522(a)(1), respectively).

^{20.} Richard Milne, *Volkswagen: System Failure*, Fin. Times (Nov. 4, 2015), http://www.ft.com/cms/s/2/47f233f0-816b-11e5-a01c-8650859a4767.html.

^{21.} Eisenstein, *supra* note 1; Timothy Gardner & Bernie Woodall, *Volkswagen Could Face \$18 Billion Penalties from EPA*, REUTERS (Sept. 18, 2015), http://www.reuters.com/article/us-usa-volkswagen-idUSKCN0RI1VK20150918 [https://perma.cc/LL68-VMW7].

^{22.} See Keith Ferrazi, Volkswagen's Fatal Flaw: Its Corporate Structure, LinkedIn (Oct. 6, 2015), https://www.linkedin.com/pulse/volkswagens-fatal-flaw-its-corporate-struc ture-keith-ferrazzi [https://perma.cc/4M57-AC9T]; Charles M. Elson, Craig K. Ferrere & Nicholas J. Goossen, The Bug at Volkswagen: Lessons in Co-Determination, Ownership, and Board Structure, 27 J. Applied Corp. Fin. 36 (2015).

make it effective. More importantly, the Supervisory Board did not have an effective decision-making process.

A. Timeline of Events²³

Volkswagen's 2015 admission was not the first time it had cheated the U.S. EPA by installing defeat devices. In 1973, Volkswagen was fined \$120,000 by the EPA for installing defeat devices to shut down their vehicle's emissions systems. The 1973 violation was a clear indication that defeat devices were a violation of the law. Additionally, in 1998 a diesel truck-engine manufacturer settled a suit with the EPA for \$1 billion for the same violation Volkswagen committed in 2015. While Volkswagen was not part of the 1998 suit, the suit should have served as an obvious indicator of the consequences following intentional installation of software programmed to fake test technology relating to a vehicle's pollution control system.

It appears that Volkswagen contemplated the installation of defeat devices as early as May 2006.²⁶ In 2007, the company moved to software based technology to manage emissions controls.²⁷ At the same time, the company had ambitions to increase U.S. market share. From a practical standpoint, that meant Volkswagen needed to manufacture bigger vehicles that appealed to American consumers but also complied with the Obama Administration's increasingly strict mileage standards.²⁸

Volkswagen's strategy for achieving such paradoxical results utilized diesel engines that offered better mileage.²⁹ Unfortunately for Volkswagen, diesel engines also emit more harmful emissions. This increase in harmful emissions created a separate problem for Volkswagen with the U.S. environmental regulations on acceptable levels of emissions.³⁰ In addition, American standards were stricter than European standards.³¹

The defeat device software solved Volkswagen's problems. These devices saved Volkswagen from having to develop and to install more costly emissions reduction technology. False compliance with acceptable levels of emissions gave owners better mileage and performance. Volkswagen used its false compliance with emissions numbers to present an image of

^{23.} Volkswagen Interim Report, Jan.-Sept. 2015, Volkswagen (Oct. 28, 2015), https://www.volkswagenag.com/presence/investorrelation/publications/interim-reports/2015/volkswagen/englisch/Q3_2015_e.pdf.

^{24.} Danny Hakim, Aaron M. Kessler & Jack Ewing, *As Volkswagen Pushed to be No. 1, Ambitions Fueled a Scandal*, N.Y. Times (Sept. 26, 2015), https://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html.

^{25.} Id.

^{26.} See Criminal Complaint, supra note 5, at 4.

^{27.} Hakim et al., supra note 24

^{28.} See id.

^{29.} See id.

^{30.} See id.

^{31.} See id.

engines so pure that they were given angel's wings in a Volkswagen Super Bowl commercial.³²

Volkswagen used the defeat devices in engines over a seven year period in the 2009-2016 model years. According to the complaint, West Virginia University's Center for Alternative Fuels & Emissions questioned Volkswagen's representatives about the elevated emissions levels in two categories of vehicles: (1) those equipped with 2.0L diesel engines and (2) those with 3.0L diesel engines.³³ When questioned, Volkswagen misrepresented the truth.³⁴ The company even asserted that "regulators were not doing the testing properly."³⁵ Volkswagen claimed that the high in-use emissions levels "were attributable to various yet-to-be identified technical issues."³⁶

The company has since admitted that then CEO Winterkorn was sent a memo in May 2014 with details that some Volkswagen vehicles had nitrogen oxide emissions that were 35 times greater than permitted.³⁷ The memo informed Winterkorn of the West Virginia study.³⁸ Volkswagen, however, claims that they do not know if Winterkorn took notice of the May 2014 memo.³⁹ On November 14, 2015, he was sent another memo that covered several issues including "a cost framework of approx[imately] EUR 20 million for the diesel issue in North America."⁴⁰ Despite this information, Volkswagen informed regulators that they could optimize the vehicles' software to address the excess emissions problem and authorized two recalls for the 2.0L engine vehicles in December 2014 and March 2015 for some of the vehicles affected.⁴¹ In July 2015, according to the FBI's criminal complaint against Oliver Schmidt, Volkswagen's executive man-

^{32.} See id.

^{33.} See WVU Study Found Elevated Levels of Emissions from Volkswagen Vehicles, W. Va. Univ. (Sept. 24, 2015), http://wvutoday-archive.wvu.edu/n/2015/09/24/wvu-study-found-elevated-levels-of-emissions-from-volkswagen-vehicles.html; Guilbert Gates, Jack Ewing, Karl Russell & Derek Watkins, How Volkswagen's 'Defeat Devices' Worked, N.Y. Times (Mar. 16, 2017), https://www.nytimes.com/interactive/2015/business/international/vw-dieselemissions-scandal-explained.html?smid=pl-share; Dr. Gregory J. Thompson et al., Final Report: In-Use Emissions Testing of Light-Duty Diesel Vehicles in the United States (2014), https://www.cafee.wvu.edu/files/d/843c9c22-dfb4-4901-a6ec-68943652924a/wvu_lddv_in-use_icct_report_final_may2014.pdf. See also Complaint ¶¶ 56, 60, and 85, United States v. Volkswagen AG, No. 16-cv-10006-LJM-MJH (E.D. Mich. filed Jan. 4, 2016), https://www.justice.gov/opa/file/809826/download [hereinafter Complaint].

^{34.} See id. at ¶¶ 87, 93-95.

^{35.} See Hakim et al., supra note 24.

^{36.} Complaint, supra note 33, at ¶ 87.

^{37.} Rupert Neate, VW CEO Was Told About Emissions Crisis a Year Before Admitting To Cheat Scandal, The Guardian, (Mar. 2, 2016, 6:10PM), https://www.theguardian.com/business/2016/mar/02/vw-ceo-martin-winterkorn-told-about-emissions-scandal.

^{38.} *Id*.

^{39.} *Id*.

^{40.} *Id*.

^{41.} Complaint, supra note 33, at ¶ 88.

agement was informed of the defeat device and authorized the continued cover-up.⁴²

While Volkswagen was aware of the issue, it continued to deny that there was in fact a problem with its cars. During this time, the California Air Resources Board (CARB) along with the EPA conducted independent testing into Volkswagen's high emissions levels to examine the recall's effectiveness.⁴³ Contrary to Volkswagen's promises, the recalled vehicles showed only a limited reduction in emissions levels. Puzzlingly, the real world driving conditions yielded different results than did emission in a simulated environment.⁴⁴ Volkswagen continued to attribute the test results to technical issues and to particular in-use conditions.⁴⁵

In fact, Volkswagen concealed facts that would have revealed the defeat device and lied to investigators.⁴⁶ It was not until almost a year later, in September 2015, after the EPA issued its September 18, 2016 Notice of Violation to Volkswagen, that Volkswagen admitted the recalled 2.0L vehicles contained a defeat device.⁴⁷ The device contained a software algorithm(s) that detected when the vehicle was "undergoing emission testing."⁴⁸

Despite the September Notice of Violation and subsequent admission, Volkswagen did not admit to installing similar devices in the 3.0L engine vehicles. In fact, when the EPA issued a second Notice of Violation on November 2, 2015 pertaining to 3.0L vehicles, Volkswagen "immediately issued a statement denying that" a defeated device had been installed.⁴⁹ It took three weeks for Volkswagen to admit that the 3.0L vehicles contained such devices.⁵⁰

Volkswagen's two-tier structure was intended to prevent such widespread fraud and rampant disregard for the law. Yet, it did not. To understand why it failed, it is necessary to have an understanding of what the two-tier board is and what it was meant to accomplish. This information is addressed in Part II.

^{42.} Theo Leggett, VW Papers Shed Light on Emissions Scandal, BBC News (Jan. 12, 2017), http://www.bbc.com/news/business-38603723.

^{43.} See Complaint, supra note 33, ¶ 88.

^{44.} *Id*. at ¶ 89.

^{45.} See id. at ¶ 90.

^{46.} *Id.* at ¶ 93 ("VW entities including at least Volkswagen AG knowingly concealed facts that would have revealed the existence of the dual-calibration strategy utilized in the 2.0L Subject Vehicles to regulators when they had a duty to share such information, and also engaged in affirmative misrepresentations and took affirmative actions designed to conceal these facts.").

^{47.} *Id*. at ¶ 91.

^{48.} *Id*.

^{49.} *Id.* at ¶¶ 97-98.

^{50.} *Id*. at ¶ 99.

II. GERMAN TWO-TIER BOARD

German stock corporations separate their boards of directors into two-tiers: (1) Supervisory Board ("SB") (*Aufsichtsrat*) tier and (2) Management Board ("MB") (*Vorstand*) tier. The two-tier board is mandated under German law and applies to all German stock corporations.⁵¹ While the structural differences between the American unitary board and German two-tier board are easily observed, the corporate governance theories that inform each type of structure vary in the stated purpose of the corporation. ⁵² American corporations are organized with the primary purpose of maximizing shareholder wealth.⁵³ German corporations, following a system of codetermination, are thought to follow a "stakeholder" theory of the corporation.⁵⁴

Specifically, codetermination weighs and values the interests of shareholders, executive management, and other employees, and thus, goes beyond merely maximizing shareholder wealth.⁵⁵ The theory of codetermination is embodied in the two-tier German board. This structure which consists of a Supervisory Board and a Management/Executive Board is intendent to protect the interest of workers and other stakeholders. This theory of codetermination is nearly impossible to operationalize when the representatives on the Supervisory Board are ill-informed or not informed at all of the Management Board's decisions and policies. Part II delves into the German legal foundation for the two-tier board, specifically, the theory of codetermination. It sets the stage for understanding how the theory easily failed at Volkswagen.

A. German Corporate Governance Laws

Volkswagen uses a complicated governance and ownership structure. There are multiple regulations governing German business leaders. These include laws that enable the creation of various types of corporations and laws mandating the composition of the boards running those firms. German governance code flows from four major laws: The German Stock Corporation Act (Aktiengesetz), 56 the German Codetermination Act (Mitbestimmungsgesetz), the German Corporate Governance Code, and the German Act on Employee Involvement in a European Company

^{51.} Deutscher Corporate Governance Kodex [DCGK] [German Corporate Governance Code], § 1, translation at http://www.dcgk.de/en/code//foreword.html (Ger.).

^{52.} See Jens C. Dammann, The Future of Codetermination After Centros: Will German Corporate Law Move Closer to the U.S. Model?, 8 Fordham J. Corp. & Fin. L. 607, 607-09 (2003).

^{53.} Id. at 607.

^{54.} See Katharine V. Jackson, Towards a Stakeholder-Shareholder Theory of Corporate Governance: A Comparative Analysis, 7 Hastings Bus. L.J. 309, 356-57 (2011).

^{55.} Dammann, supra note 52, at 608-09.

^{56.} Fundamentals of German Corporate Governance, SGL GROUP, https://perma-archives.org/warc/82KD-6RPE (last visited Oct. 27, 2017).

("SEBG").⁵⁷ The final of these dictates the practices of a Societas Europaea ("SE").⁵⁸ Although such organizations organize under the laws of the European Union, Germany exerts an element of control for their operation within Germany.

1. German Stock Corporation Act

Volkswagen is an *Aktiengesellschaft*, meaning that it an entity created under the German Stock Corporation Act. Administrative power and composition of German firms depends on the initial organization of the firm. This initial organization can take three primary forms under the German Stock Corporation Act. These three distinct corporate forms are as follows: Gesellschaft mit beschrankter Haftung ("GmbH"), similar to the closed corporation; Volkswagen's Aktiengesellschaft ("AG"), which is a stock corporation; and Societas Europaea ("SE"), a transnational European based corporation.⁵⁹

The modern form of the law is known as the Aktiengesetz von 1965 or Sharelaw of 1965.⁶⁰ This is the code that mandates the creation of a bifurcated board: the Aufsichtsrat and Vorstand or the Supervisory and Management board.⁶¹ Specifically, section 119 of the law enumerates many of the basic provisions governing German Corporations, including the "Rights of The Stockholder Meeting." This provision gives broad discretion to whatever the company lists in its articles of incorporation and functions as the main avenue for investor input and grievances.⁶² The law

^{57.} Id.

^{58.} See Jochem Reichert, Experience with the SE in Germany, 4 UTRECHT L. REV. 22, 23-24 (2008) (The SE represents the only type of transnational corporation available in Europe, including Germany. Volkswagen chose not to become an SE.).

^{59.} See Franck Chantayan, An Examination of American and German Corporate Law Norms, 16 Saint John's J. Legal Comment. 431, 434-35 (2002); see also Cornelius Wilk, U.S. Corporation Going European?—The One-Tier Societas Europaea (SE) in Germany, 35 Suffolk Transnat'l L. Rev. 31, 104 (2012).

^{60.} Florian Stamm, A Comparative Study of Monitoring of Management in German and U.S. Corporations After Sarbanes-Oxley: Where are the German Enrons, WorldComs, and Tycos?, 32 Ga. J. Int'l & Comp. L. 813, 818-19 (2004).

^{61.} See id. at 819.

^{62.} AKTIENGESETZ [AKTG] [STOCK CORPORATION ACT], §119, translation at http://www.nortonrosefulbright.com/knowledge/publications/147034/german-stock-corporation-actaktiengesetz (Ger.) ("1.The appointment of members of the Supervisory Board, to the extent they are not to be appointed to the Supervisory Board or be elected as representatives of employees pursuant to the Codetermination act, the Supplemental Co-determination act, the One-Third Co-determination Act or the Act on Employee Co-determination within Crossborder Mergers; 2. The appropriation of distributable profits; 3. The ratification of the acts of the members of the Management Board and the Supervisory Board; 4. the [annual] appointment of an auditor; 5. amendments to the articles; 6. measures to increase or reduce the share capital; 7. the appointment of auditors for the examination of the matters in connection with the formation or the management of the company; 8. the dissolution of the company. (2) The shareholders' meeting may decide on matters concerning the management of the company only if required by the Management Board."). See also JOACHIM H BORGGRĀFE ET AL., BUSINESS LAWS OF GERMANY: CHAPTER 8 COMPANY TAX LAW § 8.49 (May 2012), https://

provides that the stockholders may assert their rights to control the fundamental policies of the company without interfering with its day-to-day operation. Stockholders can also declare dividends.⁶³ German corporations generally must adhere to a national set of rules, with little state level corporate law.⁶⁴

2. German Codetermination Act

Codetermination represents an important and defining principle of German board management. Codetermination laws contain a broad set of regulations. The regulations provide for organized labor to sit on the Management Board and empowers their views in decision-making. Ultimately, the regulations create a balance to capital and consider the needs of the employees. Germany created several forms of codetermination—the 1976 Codetermination Law affects companies employing more than 2,000 employees. The law states that no overlap is allowed between boards. Members may be removed for material cause and/or through a supermajority vote. Other codetermination laws depend on the size of the firm and impose similar requirements of labor input.

Codetermination laws create five possible compositions of the Supervisory Board, depending on the required input of various parties in the firm.⁶⁹ The board generally includes three or four multiples of three members, based on the firm's capital. While some shareholders may appoint members, and the articles of incorporation may change the board's composition, most public companies contain a maximum of twenty-one board members; they serve five year positions with re-election.⁷⁰

1.next.westlaw.com/Document/I7540447c257d11dfbd6bdb10f7886766/View/FullText.html?ori ginationContext=previousnextsection&contextData=(sc.Document)&transitionType=Statute Navigator&needToInjectTerms=False ("The legal power of the shareholders of a public stock corporation is exercised at regular shareholders' general meetings (Hauptversammlung).").

- 63. Stamm, supra note 60, at 821.
- 64. Chantayan, supra note 59, at 436.
- 65. See generally Stamm, supra note 60, at 821.
- 66. Id. at 823.
- 67. AKTIENGESETZ [AKTG] [STOCK CORPORATION ACT], § 105(1) Incompatibility of Management and Supervisory Board Membership, *translation at* http://www.nortonrosefulbright.com/files/german-stock-corporation-act-147035.pdf (Ger.) ("A member of the Supervisory Board may not also be a member of the Management Board, a permanent deputy member of the Management Board, a registered authorised officer (Prokurist) or general manager of the company.").
- 68. AKTIENGESETZ [AKTG] [STOCK CORPORATION ACT], § 103 Removal of Members of the Supervisory Board, *translation at* http://www.nortonrosefulbright.com/files/german-stock-corporation-act-147035.pdf (Ger.).
 - 69. Stamm, supra note 60, at 821.
- 70. *Id.*; see also Peter Steffen Carl et al., Corporate Governance and Directors' Duties in Germany: Overview, Practical Law Country Q&A 8-502-1574, https://content.next.westlaw.com/Document/I9fb3f7b51cac11e38578f7ccc38dcbee/View/FullText.html?contextData=(sc.Default)&transitionType=Default&firstPage=true&bhcp=1.

3. Deutscher Corporate Governance Kodex ("DCGK")

The Deutscher Corporate Governance Kodex, the German corporate governance code (the Code or "DCGK") provides responsible corporate governance guidelines and standards for AGs.⁷¹ A commission (Regierungskommission) reviews the code annually and revises it if necessary.⁷²

The DCGK is non-binding, but the executives of AGs, nonetheless, must explain their total or partial derivation from the code and must explain why they made their decision. The "declarations of conformity" does not have legal implications, but the boards must make the content of the declaration public⁷³ and can be liable for deviations to shareholders.⁷⁴

4. The Volkswagen Law

The Volkswagen Law best represents the central role Volkswagen played in the economy of Lower Saxony and Germany at large. The Volkswagen law prevented any organization from exercising more than 20% of the voting rights of Volkswagen regardless of the actual number of shares owned; for example, the lower state of Saxony's 20.2% voting interest had an effective veto right and in 2015 could exert control and could prevent takeover attempts.⁷⁵ In 2007, EU Tribunal prohibited Germany from enforcing certain elements of the law, including the 20% voting provision; however, Volkswagen responded by changing its charter in 2009 to give employees and the state of Saxony certain veto powers of plant closure and of employee firings. The Volkswagen law still required an 80% supermajority of votes to proceed with "important decisions," preserving the state's continued veto element.⁷⁶ Since Porsche SE expanded its holdings to greater than 50% of the company, the board functions as a private family owned business with a state government veto power, instead of as an independent and diverse corporation.⁷⁷

- 71. DEUTSCHER CORPORATE GOVERNANCE KODEX, *supra* note 51.
- 72. Carl et al., supra note 70.
- 73. DEUTSCHER CORPORATE GOVERNANCE KODEX, *supra* note 51 (Declarations of conformity "have to be explained and disclosed with the annual declaration of conformity").
- 74. See Axel Werder et al., Compliance with the German Corporate Governance Code: an empirical analysis of the compliance statements by German listed companies, 13 Corp. Gov. 178 (2005); Francesca Cuomo et al., Corporate Governance Codes: A Review and Research Agenda, 24 Corp. Gov. Int'l. R. 222 (2016).
- 75. See Stephanie Bodoni, Germany Wins EU Court Battle Over VW Law, Escapes Fines, Bloomberg (Oct. 22, 2013, 6:40 AM EDT), http://www.bloomberg.com/news/articles/2013-10-22/germany-wins-eu-court-fight-over-vw-law-legality-escapes-fines [https://perma.cc/M73X-2C4W].
- 76. See Matina Sevis, EU To Sue Germany Again Over "Volkswagen Law", WALL ST. JOURNAL (Nov. 24, 2011), http://www.wsj.com/articles/SB100014240529702046309045770577 30270544356 [https://perma.cc/2JPL-6B4H].
- 77. Charles M. Elson, Craig K. Ferrere & Nicholas J. Goossen, *The Bug at Volkswagen*, CLS Blue Sky Blog (Apr. 8, 2016), http://clsbluesky.law.columbia.edu/2016/04/08/the-bug-at-volkswagen/. (noting that "[T]he Porsche and Piëch families control 50.7% of the

B. The Structure of a German Board

As mentioned above, the German Stock Corporation Act of 1965 mandates Germany's dual board structure for all stock corporations that are organized as AGs.⁷⁸ Pursuant to the Act, the Volkswagen's board structure incorporates both tiers: (1) Supervisory Board ("SB") (*Aufsichtsrat*) tier and (2) Management Board ("MB") (*Vorstand*) tier.⁷⁹

1. Supervisory Board

The Supervisory Board represents the higher of the two German boards in its dual-board structure and role. The Supervisory Board functions much like an American corporation's board of directors. Like the American unitary board, it is thought to be the primary mechanism by which managers are monitored.⁸⁰ It has been described as performing a "'watch dog' function to prevent serious abuses."⁸¹ As has traditionally been the case for U.S. board of directors,⁸² the German Supervisory Board is often blamed whenever managers, the Management Board, or the company perform poorly or when internal controls fail.⁸³

voting rights This control is further leveraged through the use of a pyramid structure. Half of the shares of Porsche Automobil Holding are ordinary voting shares, and the other half are non-voting shares. The Porsche and Piëch families own the ordinary shares, but not the non-voting shares. Through these structural devices, the families control five board seats (half of the investor representatives on the supervisory board), while limiting their own economic exposures."); Geoffrey Smith & Roger Parloff, Hoaxwagen: How the Massive Diesel Fraud Incinerated VW's Reputation—and Will Hobble the Company for Years to Come, FORTUNE (Mar. 7, 2016), http://fortune.com/inside-volkswagen-emissions-scandal/ ("By law, Lower Saxony has been granted veto power over VW's strategic decisions.")

- 78. Carsten Jungmann, The Effectiveness of Corporate Governance in One-Tier and Two-Tier Board Systems: Evidence from the UK and Germany, 3 Eur. Co. & Fin. L. Rev. 426, 427.
 - 79. See supra Part II (discussing two-tiered structure of German boards).
- 80. See Grit Tungler, The Anglo-American Board of Directors and the German Supervisory Board Marionettes in a Puppet Theatre of Corporate Governance or Efficient Controlling, 12 Bond L. Rev. 230, 233 (2000), http://epublications.bond.edu.au/cgi/viewcontent.cgi?article=1194&context=blr.
 - 81. Id. at 234.
- 82. See Nicola F. Sharpe, Questioning Authority: The Critical Link Between Board Power and Process, 38 J. Corp. L. 1, 15 (2012)
- 83. Tungler, supra note 80, at 233 (U.S. boards of directors are often blamed when corporations fail); James D. Westphal & Michael Bednar, Pluralistic Ignorance in Corporate Boards and Firms' Strategic Persistence in Response to Low Firm Performance, 50 Admin. Sci. Q. 262, 263 (2005) ("Yet there is considerable qualitative and anecdotal evidence that boards often fail to check executives' tendencies to persist with failing strategies, regardless of the number of outside directors on the board."); see also Sanjai Bhagat & Bernard Black, The Non-Correlation Between Board Independence and Long-Term Firm Performance, 27 J. Corp. L. 231 (2002) (finding that firms with more independent boards do not perform better than other firms); Sanjai Bhagat & Bernard Black, The Uncertain Relationship Between Board Composition and Firm Performance, 54 Bus. Law. 921, 922 (1999) (presenting evidence that overall firm performance was not correlated to the composition of the board and that "[i]ndependent directors often turn out to be lapdogs rather than watchdogs"); Dan R. Dalton et al., Meta-Analytic Reviews of Board Composition, Leadership Structure, and Finan-

During the reorganization of German governance codes in the 1990s, much focus went into reforming the role and the power of the Supervisory Board.⁸⁴ Principally, the members of the Supervisory Board appoint the members of the Management Board;⁸⁵ similarly, U.S. boards are responsible for hiring and firing the senior executives of their respective corporations.⁸⁶ The role of Supervisory Board members also requires them to call shareholder meetings; to oversee the financial health of the company, including examining annual financial statements; and to remove management members. Personal liability exists for failure to meet the equivalent of a fiduciary duty.⁸⁷

2. Board of Managers

The Management Board is said to be "responsible for managing the company," and "[i]ts members are jointly accountable for the management of the company."88

Volkswagen's Management Board is comprised of nine members, each of which is responsible for one or more upper-management functions within the Volkswagen Group. There are two types of members: (1) those that are chairs for other Volkswagen affiliate brands such as Audi and (2) those that hold a role similar to a department head in a U.S. corporation and oversee organizational functions such as "Finance and Controlling" or "procurement." Matthias Muller, who was appointed CEO in September 2015, is the Chairman of Volkswagen's Management Board. 90

cial Performance, 19 Strategic Mgmt. J. 269, 278 (1998) (finding "little support for a systematic relationship" between board composition and financial performance); Sydney Finkelstein & Ann C. Mooney, Not the Usual Suspects: How to Use Board Process to Make Boards Better, 17 Acad. Mgmt. 101, 102 (2003) (studying the relationship of several indicia of board independence to shareholder returns and finding that there was "no significant difference in the number of outsiders, director shareholdings, board size, and CEO duality" between the firms that performed in the upper quartile of the S&P 500 and those that performed in the lower quartile). See generally John A. Wagner et al., Board Composition and Organizational Performance: Two Studies of Insider/Outsider Effects, 35 J. Mgmt. Stud. 655, 655 (1998) (Their results "suggest the existence of a curvilinear homogeneity effect in which performance is enhanced by the greater relative presence of either inside or outside directors").

- 84. Jean J. du Plessis et al., German Corporate Governance in International Context 20 (2d ed., 2012).
 - 85. Jungmann, *supra* note 78, at 427-32.
- 86. While Volkswagen was permitted some special exceptions due to the Volkswagen Law (see supra discussion Part II.A.4), it still followed the dual board structure mandated by the German Stock Corporation Act (see supra Part II.A.1) and composition required under the Codetermination Act (see supra Part II.A.2), thus Volkswagen is still representative of the structural design mandated under German Law.
 - 87. Plessis et al., supra note 84, at 20; see also Tungler, supra note 80, at 232.
 - 88. Deutscher Corporate Governance Kodex, supra note 51.
- 89. Executive Bodies, Volkswagen, http://www.volkswagenag.com/en/group/executive-bodies.html (last visited Oct. 31, 2017).
 - 90. *Id*.

The Management Board does not have internal committees. Rather, separate sub-Management Boards from other brands (e.g., Audi) and regions (e.g., North America) report to the various brand chairs and "department heads" that sit on the Management Board. A sub-Management Board of particular relevance is the "Board of Management of the Volkswagen Passenger Cars" brand, which is headed by Dr. Herbert Diess as of July 1, 2015.⁹¹

The Management Board has substantial discretion over both decision making and the information that the Supervisory Board utilizes in approving major business decisions. Particularly, the Management Board is entrusted with managing the business under section 76(1) of the German Stock Corporation Act ("AktG") that requires it to install an adequate risk management and control system within Volkswagen. While major decisions necessitate the approval of the Supervisory Board, the Management Board comprises the true operators of the company.

C. Volkswagen Board Regulations and Deviations Complying with German Corporate Code

The remainder of this section will provide a more in-depth examination of Volkswagen's corporate governance structure, with an underlying focus on the composition and on the decision-making process of Volkswagen board. While Volkswagen is organized as an AG, its parent company, whose owners exert control and influence over the Volkswagen board, organizes as an SE subject to the rules of all other SEs.⁹² Volkswagen, its holding companies, and its parent all maintain a Management Board and a Supervisory Board.

Unions and employees also hold votes on the Supervisory Board and the Board of Managers. These agreements function as a larger understanding between labor and the management. The agreement notwithstanding, Volkswagen must comply with the Codetermination Act that requires half of board members to represent employment.⁹³ Volkswagen itself maintains a grandfathered, unique board structure that does not comply with many of the regulations, but the government excuses it from

^{91.} Brand Management, Volkswagen, http://en.volkswagen.com/en/company/brand-management/brand-management.html (last visited Nov. 1, 2017).

^{92.} See Volkswagen and Porsche Create Integrated Automotive Group, Volkswagen (July 4, 2012), http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2012/07/Automotive_ Group.html [https://perma.cc/YU7W-ALNZ].

^{93.} Carl et al., *supra* note 70, at 4 ("Employees of foreign subsidiaries are not counted. For determining the relevant number under the One-third Participation Act, the employees of subsidiaries of a company are only included if a domination agreement is in place between the parent and the relevant subsidiary, or the controlled company is integrated into the parent company. A domination agreement is an agreement entitling the dominating enterprise to issue instructions to the dominated enterprise. For purposes of the Co-determination Act, the employees of all enterprises belonging to a group of companies must be included.").

complete compliance based on its partial state ownership.⁹⁴ As a result, Volkswagen's structure deviates from the norm, failing both tests of codetermination and independence.⁹⁵ As discussed above, Volkswagen receives special protection from the "Volkswagen Act," in part due to its importance to the German economy.⁹⁶

Unions and government representatives, such as those from the state of Lower Saxony, generally cooperate with management through intertwined employment and control agreements.⁹⁷ A former executive believes the close cooperation between owners and unions stems from Volkswagen's national mission of full employment.⁹⁸ In a 2004 effort to repeal the Volkswagen Act, the lawyers for Germany argued "that because of its size, Volkswagen is a strategic national asset that needs to be protected."99 The Act has resulted in lower profitability from Volkswagen, has deviated from the standard mission to maximize profits, 100 and has caused the firm to employ much higher numbers of employees than in other comparably sized car companies. ¹⁰¹ Many of these employees work in the state of Lower Saxony, reinforcing the culture of prioritizing the company's and employee's survival and contributing to the eventual culture of complicity to the outside world. 102 The interconnected nature of these relationships and the general interdependence of the board representatives left the board without the requisite independence to monitor the company.

It is widely accepted that the board typically exercises its authority through oversight or monitoring of managers. The next Part of this Article examines why the Volkswagen Supervisory Board not only lacked independence, but was also subject to significant psychological and practical limitations, stemming from both the board's composition and dependency

^{94.} See generally Sevis, supra note 76 (discussing the "Volkswagen law" restricting shareholders' full exercise of voting rights in Volkswagen AG).

^{95.} Id.

^{96.} Paul Meller, Europe Set to Challenge German Law Guarding VW, N.Y. Times (Oct. 13, 2004), http://www.nytimes.com/2004/10/13/business/worldbusiness/europe-set-to-challenge-german-law-guarding-vw.html. For information on the size of Volkswagen, see also John McElroy, How Volkswagen is Run Like No Other Car Company, Autoblog (Dec. 6, 2012), http://www.autoblog.com/2012/12/06/how-volkswagen-is-run-like-no-other-car-company/ [https://perma.cc/V365-XKWK]. For a discussion of Volkswagen's importance to Germany's economy see supra Part II.A.4.

^{97.} See Milne, supra note 20.

^{98.} James Stewart, *Problems at Volkswagen Start in the Boardroom*, N.Y. Times (Sept. 24, 2015), https://www.nytimes.com/2015/09/25/business/international/problems-at-volks wagen-start-in-the-boardroom.html?_r=0.

^{99.} Meller, supra note 96.

^{100.} Id.

^{101.} Id

^{102.} REUTERS, Volkswagen Just Got More Bad News About the Emissions Scandal, Bus. Insider (Mar. 8, 2016), http://www.businessinsider.com/r-vw-faces-more-bad-news-from-emissions-scandal-lower-saxony-pm-2016-3.

on the Management Board's information. Viewed through an organizational behavior lens, the Supervisory Board's time, information, and knowledge were severely constrained.¹⁰³ In summary, the Supervisory Board was and is subject to significant process limitations that ultimately contributed to its oversight failure of the Volkswagen emissions scandal.

III. Cosmetic Independence, Poor Process, and Structural Failure

While a two-tier board has unique checks and balances lacking in American boards, Volkswagen's deviation from these checks and balances as well as its poor culture of compliance led to its downfall. In American corporations, like German corporations, the board's control or monitoring role, is by far the most prevalent role in legal scholarship. ¹⁰⁴ Viewed from this lens, Volkswagen's board failed to monitor its managers. In fact, the board was so uninformed and uninvolved in decision making that one former senior Volkswagen executive said, "The board was really just for show." ¹⁰⁵ The following section explores and categorizes how the Supervisory Board had little more than a name and how it had no substantive supervisory role.

A. Volkswagen: Cosmetic Independence and Structural Failures

Volkswagen's board structure reveals the weaknesses of several elements of the German board structure. Principally, Volkswagen's board

^{103.} See generally Nicola Faith Sharpe, The Cosmetic Independence of Corporate Boards, 34 Seattle U. L. Rev. 1435 (2011).

^{104.} See Henry T.C. Hu & Jay Lawrence Westbrook, Abolition of the Corporate Duty to Creditors, 107 Colum. L. Rev. 1321, 1351 (2007). For an in-depth analysis of the monitoring model of the board, see Melvin A. Eisenberg, Corporate Law and Social Norms, 99 COLUM. L. Rev. 1253, 1278 (1999) ("The managerial model of the board has now been supplanted by a monitoring model."); Larry E. Ribstein, Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002, 28 J. CORP. L. 1, 11 (2002) ("One of the favorite projects of corporate reformers has been the creation of the so-called 'monitoring' board."); Lynn A. Stout, The Shareholder As Ulysses: Some Empirical Evidence on Why Investors in Public Corporations Tolerate Board Governance, 152 U. PA. L. REV. 667, 673-77 (2003). In addition to the control or monitoring role, the other roles include the boards relational role, which is grounded in resource dependence theory and the stewardship role, found in stewardship theory. See generally Mark Macus, Board Capability: An Interactions Perspective on Boards of Directors and Firm Performance, 38 Int'l Stud. Mgmt. & Org. 98, 100 (2008) (discussing stewardship theory and the role of the board of directors. In their relational role, boards use their network of connections and individual resources, such as their expertise, to serve the firm. This is often done through providing access to outside resources, such as sources of credit or supply networks and through providing useful advice. For a more in depth discussion of resources-dependence, see generally Jeffrey Pfeffer & Gerald R. SALANCIK, THE EXTERNAL CONTROL OF ORGANIZATIONS: A RESOURCE DEPENDENCE PER-SPECTIVE (1978). In its stewardship role, the board severs as a steward to management and seeks to empower managers to be better leaders of the company. See generally Stephen M. Bainbridge, Why a Board? Group Decision Making in Corporate Governance, 55 VAND. L. Rev. 1, 10 (2002).

^{105.} Milne, supra note 20.

lacked practical independence. The DCGK requires boards, and especially audit committees, to meet rigorous standards of independence under 5.3.2 of the DCGK. A firm wishing to deviate must declare so in its annual declaration of conformity. 106 Volkswagen, in its 2014 declaration, decried what it viewed as the DCGK author's ambiguous view of independence. The Management Board explained that it would declare a deviation from the DCGK as a result of the indirect interest many Management Board members held with Porsche as a "precautionary measure." 107 A year later, in another "precautionary measure," Volkswagen once again declared that the Chair of the Audit Committee may be lacking independence because "of his membership of the Supervisory Board of Porsche Automobile Holding SE, kinship with other members of the Supervisory Board of [Volkswagen] and [other connections to the Porsche and Piech families]."108 Volkswagen, however, thought that "in the opinion of the Supervisory Board and the Board of Management, these relationships do not constitute a conflict of interest nor do they interfere with his duties as the Chairman of the Audit Committee."109

Specifically, the test for independence according to the German Corporate Governance Code states that:

The Supervisory Board shall include what it considers to be an appropriate number of independent members, thereby taking into account the shareholder structure. Within the meaning of this recommendation, Supervisory Board members are to be considered non-independent in particular if they have a personal or business relationship with the corporation, its governing bodies, a controlling shareholder or a company affiliated with the controlling shareholder that may cause a substantial and not merely temporary conflict of interest. No more than two former members of the Management Board shall be members of the Supervisory Board. Members of the Supervisory Board shall not be members of governing bodies of, or exercise advisory functions at, significant competitors of the company.

Volkswagen's Supervisory Board lacked independence because it deviated greatly from the standard board structure. This deviation stemmed from its hybrid control—a partially state run, partially private entity—and

^{106.} DEUTSCHER CORPORATE GOVERNANCE KODEX, supra note 51, at 2.

^{107.} Declaration of the Board Management and the Supervisory Board of Volkswagen AG on the Recommendations of the Government Commission of the German Corporate Governance Code Pursuant to Section 161 of the German Stock Corporation Act, Volkswagen (Nov. 21, 2014), http://www.volkswagenag.com/content/vwcorp/content/en/investor_relations/corporate_governance/declaration_of_conformity.bin.html/downloadfilelist/downloadfile/downloadfile_12/file/GC_ Eblanko+21.11.14.pdf.

^{108.} Declaration of the Board Management and the Supervisory Board of Volkswagen AG, Volkswagen (Nov. 20, 2015), https://www.volkswagenag.com/presence/investorrela tion/publications/corporate-governance/2015/declarations/englisch/2015-11-20%20Declara tion%20of%20Conformity.pdf.

^{109.} Id.

^{110.} Deutscher Corporate Governance Kodex [DCGK] [German Corporate Governance Code], § 5.4.2, *translation at* http://www.dcgk.de/en/code/current-version/supervisory-board.html (Ger.).

the Porsche family's practical control of the boardroom. For instance, the Supervisory Board included Dr. Wolfgang Porsche, the Chairman of various Porsche entities, including: Porsche AG and Porsche Automobil Holding SE as well as the CFO and Deputy President of Porsche Automobil Holding SE and Porsche AG, Holger P. Harter.¹¹¹

Volkswagen allocated over half of the Supervisory Board's management positions to Porsche and Piech members as part of a dramatic takeover that occurred several years ago, and these members generally vote as a single bloc on all issues. 112 One of the most striking indicators of family influence occurred in 2012 when shareholders elected Piech's former governess, then fourth wife, and previous kindergarten teacher to the Supervisory Board. 113 Although many shareholders protested her qualifications and independence, they simply lacked the influence to effect change. In the year prior to the scandal breaking, the two families controlled four board seats, with the state of Saxony and Qatar holdings each seating two representatives.¹¹⁴ Additionally, in the same year, the Chairman at the time, Hans Dieter Potsch, was Volkswagen's former finance director and was close to both of the owning families. 115 Such an allocation raises issues of the families putting forward unqualified or under qualified candidates. Furthermore, codetermination requires that half the Supervisory Board seats go to workers. The ten employee representatives are all German workers who have traditionally aligned with management's position and who appreciate the importance of Volkswagen to the German economy. 116 At Volkswagen, a former trade union (employee) board representative, Berthold Huber, who was the former head of the IG Metall labor union, served as interim chair of Volkswagen after Ferdinand Piech resigned in April 2015.¹¹⁷

The Supervisory Board also functioned as a 'captured board' of long time manager and family patriarch Mr. Piech.¹¹⁸ Through family connections and charismatic leadership, he indirectly or directly made every important decision in the company.

^{111.} Volkswagen, 2008 Annual Report 111-12 (2009).

^{112.} See Gwyn Topham, Volkswagen Swallows Porsche, The Guardian (Jul. 5, 2012), https://www.theguardian.com/business/2012/jul/05/volkswagen-buys-porsche; Stewart, supra note 98 https://www.nytimes.com/2015/09/25/business/international/problems-at-volkswagen-start-in-the-boardroom.html.("Porsche and Piech family members own over half of the voting shares and vote them as a bloc under a family agreement.")

^{113.} Stewart, supra note 98.

^{114.} Milne, supra note 20.

^{115.} *Id*.

^{116.} See id.

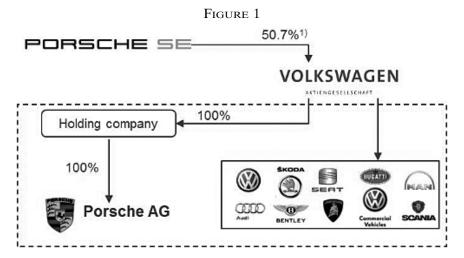
^{117.} VW Interim Chairman to Stay On, Hunt for Piech Successor Continues: Bild, Reuters (July 12, 2015), http://www.reuters.com/article/us-volkswagen-management/vw-in terim-chairman-to-stay-on-hunt-for-piech-successor-continues-bild-idUSKCN0PM0DW2015 0712.

^{118.} Id.

B. Volkswagen's Decision Making Capacity

Volkswagen's decision making capacity begins with the structural composition of the two boards, but the processes and avenues of power within the organization paint a different picture of family control and employee interests. As noted, Volkswagen does not comply with the necessary levels of independence the Corporate Governance Code contemplates. The 2015 annual report showed that at Volkswagen, a large number of preferred votes actually voted on the board. In 2015, the voting rights of the company, as represented through the Supervisory Board, includes the following: 52.2% from Porsche SE (its parent company in the control of the Porsche family), 20% from the state of lower Saxony, Hanover, 17% from Qatar holdings, and 10.8% from others, represented from a single seat on the Supervisory Board.

The below photo from Volkswagen captures the structure of the organization:¹²²



Notably, Volkswagen has shaken up its Management Board and spun off much of the decision making power to various regional brands following the scandal. This change implies that the Supervisory Board held too much centralized decision-making power.¹²³ Critics have pointed to the

- 119. See supra Part II.C.
- 120. Volkswagen AG, 2015 Annual Report 12 (2016).
- 121. Shareholder Structure, Volkswagen (Dec. 31, 2017), https://www.volkswagen.com/en/InvestorRelations/shares/shareholder-structure.html.
- 122. Volkswagen and Porsche Create Integrated Automotive Group, Volkswagen (July 5, 2012), http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2012/07/Automotive_Group.html [https://perma.cc/YU7W-ALNZ].
- 123. See The Volkswagen Group is Restructuring: Supervisory Board Passes Resolutions for New Organization, Volkswagen (Sept. 25, 2015), https://www.volkswagen-media-ser vices.com/en/detailpage/-/detail/The-Volkswagen-Group-is-restructuring-Supervisory-Board-passes-resolutions-for-new-organization/view/2726863/7a5bbec13158edd433c6630f5ac445da?

failure of the independence of the Supervisory Board. Additionally, early analysis points to a failure of independence and authority at the Supervisory Board level, largely due to strong representation of employees, family control, and state protection. Taken together, the Supervisory Board promoted a dysfunction and a complicity that allowed the scandal to proceed, and it adopted a centralized policy from the works council that failed to prevent the scandal. The choice to make policy first from the work council and then bring it before the board, nonetheless, does not fully explain the scandal. After all, the American model of allowing shareholders little policy involvement continues to function with varying success; however, certainly, it does not necessitate failure.

Decision making at Volkswagen was largely centralized within each brand, creating separate "silos" for different brands. ¹²⁷ The structure relied heavily on senior leadership for direction, with a culture that left many junior managers afraid to speak up. ¹²⁸ Decision making capacity at Volkswagen hampered communication and did not allow for middle managers to honestly communicate with their superiors. The demanding top down centralization of the company left little room for outside inputs and concerns. ¹²⁹ Recent efforts to reorganize included: grouping brands by region, grouping brands by market, and creating blocs of three brands into single management cores. ¹³⁰ Management intended to give each of those groups more autonomy. Despite attempts to change this structure, each Volkswagen brand retains high levels of autonomy within the decision making process of maximizing its own position, ¹³¹ with ultimate decision making continuing to run through senior management.

 $\label{eq:ppath} $$p_p_auth=X6W5O8dM$ [https://perma.cc/7NCG-74KE] [hereinafter $\mbox{\it Volkswagen Group Restructuring}].$

- 124. See Milne, supra note 20.
- 125. See id.
- 126. See id. For an explanation and definition of a German works council, see L. Fulton, Workplace Representation in Europe, ETUI (2015), http://www.worker-participation. eu/National-Industrial-Relations/Countries/Germany/Workplace-Representation/ (explaining that works councils provide representation for employees at the workplace and have substantial powers including "an effective right of veto on some issues;" works council elections are held every four years).
- 127. VW Group to be revamped into 4 holding companies, reports say, AUTOMOTIVE News, (June 15, 2015, 3:46 AM), http://www.autonews.com/article/20150615/COPY01/306159919/vw-group-to-be-revamped-into-4-holding-companies-reports-say.
- 128. Ferrazi, *supra* note 22. *See also* Chris Bryant & Richard Milne, *Volkswagen's 'Uniquely Awful' Governance At Fault In Emissions Scandal*, CNBC.com (Oct. 4, 2015, 8:12 AM), https://www.cnbc.com/2015/10/04/volkswagens-uniquely-awful-governance-at-fault-in-emissions-scandal.html.
- 129. See generally Jack Ewing, VW Says Emissions Cheating Was Not a One-Time Error, N.Y. Times (Dec. 10, 2015), http://www.nytimes.com/2015/12/11/business/international/vw-emissions-scandal.html (noting that members of the Volkswagen Supervisory Board "conceded that the deception reflected organizational shortcomings").
 - 130. Volkswagen Group Restructuring, supra note 123.
 - 131. AUTOMOTIVE NEWS, supra note 127.

Following the break of the scandal, Mr. Piech resigned, as did the director of Volkswagen America. Besides decentralizing management from the executive suite in Lower Saxony, the company made little other substantive changes. The board insisted that it had a lack of knowledge about the engineering scandal; 132 neither the shareholders nor company replaced any members of either the Supervisory Board or Management Board. Although the company currently turned over several key positions, it retained a family connection and control.¹³³ The Supervisory Board did not change the control structure of the company or ratio of representation on the Supervisory Board; currently, the board only maintains one independent voice, Annika Falkengren. 134 The Management Board, moreover, continues to use some codetermination; this may continue to incentivize structures that protect employees and encourages full employment, including employees at fault. The culture of Lower Saxony Hanover and the insulated region in which Volkswagen operates provides insular political thinking, and many blame American regulators for the onerous standards that 'caused' the scandal. 135

C. Process Failure

The atypical ownership and indirect interest structure of Volkswagen lays bare the incredible challenge to creating a dynamic board capable of avoiding and mitigating scandals. But failures of board structure best principles do not prevent the implementation of process changes, nor should the shortcomings of one board structure or of process changes impinge on the implementation of the other. Supervisory and Management Board members still lack key process tools to prevent future wrongdoing. The Volkswagen board also provides a case study of improving the independence and oversight of a board that will never retain actual independence and provides an opportunity to test theories of independence as a cure-all following scandals. As I have noted in earlier work, three key elements any decision-making group must have in order to make effective judgments are time, information, and knowledge. Volkswagen's board was lacking in each of these three categories.

1. Time

Boards often lack the time necessary to accomplish crucial tasks of guiding a company.¹³⁷ When a board fails to devote sufficient time to issues confronting the company, the board's decision making speed slows,

^{132.} See generally id. at 2.

^{133.} See Milne, supra note 20, at 3-7.

^{134.} *Id.* at 3 (noting that Falkengren is chief executive of Swedish bank SEB and questioning her independence due to SEB's role as an advisor to one of VW's twelve brands).

^{135.} Id

^{136.} See generally Sharpe, supra note 103.

^{137.} Id. at 1453.

and this failure belies the board's effectiveness in guiding the company. 138 For example, American boards meet on average 8 times a year. 139 The Volkswagen Supervisory Board met with shocking infrequency. The board usually held between five and six meetings a year from 2008 (when the company started using defeat devices) to 2015 (when the scandal broke). 140 See the meeting frequency variations below:

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2008: five meetings<sup>141</sup>
2009: nine meetings<sup>142</sup>
2010: six meetings<sup>143</sup>
2011: six meetings<sup>144</sup>
2012: six meetings<sup>145</sup>
2013: five meetings<sup>146</sup>
2014: six meetings<sup>147</sup>
2015: eight meetings<sup>148</sup>
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The limited number of Supervisory Board meetings raises concerns that the Volkswagen Supervisory Board may not have devoted the time necessary to properly monitor the corporation.

Volkswagen boards also consist of members that are not truly independent due to the relationship with the company—this includes both family members and employees of the company—and sometimes both.¹⁴⁹ Moreover, the Volkswagen board must comply with the regulations of Germany, the European Union, and each of the member states in which it operates.¹⁵⁰ It also contends with international regulations.¹⁵¹ The byzan-

- 138. Id. at 1454.
- 139. Id. at 1453.
- 140. No annual report or readily available information online, however, explained how long the Board met.
 - 141. Volkswagen, 2008 Annual Report, supra note 111, at 4.
- 142. Volkswagen, 2009 Annual Report 4 (2010), https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2010/volkswagen/Y_2009_e.pdf.
 - 143. Volkswagen, 2010 Annual Report 17 (2011).
- $144. \quad Volkswagen, 2011 \ Annual \ Report \ 15 \ (2012), \ https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2012/volkswagen/english/Y_2011_e \ .pdf.$
 - 145. Volkswagen, 2012 Annual Report 15 (2013).
 - 146. Volkswagen, 2013 Annual Report 7 (2014).
 - 147. Volkswagen, 2014 Annual Report 7 (2015).
 - 148. Volkswagen, 2015 Annual Report 12 (2016).
- 149. See Deutscher Corporate Governance Kodex, supra note 110 ("Supervisory Board members are to be considered non-independent in particular if they have a personal or business relationship with the corporation, its governing bodies, a controlling shareholder or a company affiliated with the controlling shareholder that may cause a substantial and not merely temporary conflict of interest."); see also Milne, supra note 20, at 3.
 - 150. Ferrazi, supra note 22.
- 151. For a discussion of the EU's oversight over Volkswagen's structure, see supra Part II.A.4 and Part II.C.

tine top-down structure of the decision-making consumed the time of the board, as regional brand decision-making shifted to the purview of the board.

2. Information

Boards need access to recent and complete information in order to make informed decisions. Unfortunately, the Volkswagen board members lacked access to complete and useful information. Coverage of the scandal indicates the board created an environment of insulation around the engineers designing the diesel products. The board may have lacked information about the ability of the engineers to create a diesel engine within the diesel standards. Although executives received information about the ability to cheat the EPA testing system, the investigation into Volkswagen found no similar presentation to the board. The board lacked the information about the goals and the limitations of the program. 153

Volkswagen's process did not yield information dissemination that would lead a board to substantively understand the company's challenges and strategies. For example, in most German companies, the chairman would approach the shareholder side of the Supervisory Board first, find a common position, and then bring the matter before the entire board. This process was not the case at Volkswagen. The former chairman, Ferdinand Piech, who was in charge from 2002 until he stepped down in 2015, would first talk to the works council (employee side) and then come to shareholder representatives. That meant that the boardroom was not privy to many sensitive matters that were resolved without their oversight. In addition, board members could not seek out additional information to supplement their knowledge and to aid them in their oversight role.

Supervisory board members have stated that they did not know anything about cheating on emissions testing and that they never discussed the defeat device.¹⁵⁸ In fact, three members said they did not know anything until two weeks after executives had admitted to the scandal.¹⁵⁹ The consensus among academics, governance professionals, and lawyers is that

^{152.} Sharpe, supra note 103, at 1453.

^{153.} Ferrazi, supra note 22.

^{154.} Milne, supra note 20.

^{155.} *Id*.

^{156.} Id.

^{157.} *Id.* (The same former senior VW executive said that the board "lacked the ability to ask any deep technical questions – and you see that in the current scandal").

^{158.} Id.

^{159.} Jack Ewing & Jad Mouawad, *Directors Say Volkswagen Delayed Informing Them of Trickery*, N.Y. Times (Oct. 23, 2015), https://www.nytimes.com/2015/10/24/business/international/directors-say-volkswagen-delayed-informing-them-of-trickery.html.

Volkswagen's information deficit was severe and was indicative of a much larger communication problem. ¹⁶⁰

Even if the board had the available information about the current status of the cheating devices and information about the development of the related vehicles, the investigation into the scandal made clear that the board may have lacked the imperative to act upon it. The board functioned much like a family business, with most of the control concentrated within the Porsche family and employees, with the local state government standing by to prevent drastic change using the Volkswagen Law. A former Volkswagen executive told the *New York Times*, "There's no other company where the owners and the unions are working so closely together as Volkswagen." He added that the company "guarantees jobs for over half the Supervisory Board." ¹⁶² The interest of management, union employees, and the government were all aligned. ¹⁶³

In conclusion, the board lacked independent access to information and lacked access to a sufficient number of outsiders with information about the implications about such a decision.

3. Knowledge

A board requires in-depth knowledge about the firm and its operation. ¹⁶⁴ In fact, the German Corporate Governance Code requires that "[t]he composition of the Supervisory Board has to ensure that its members collectively have the knowledge, skills, and professional expertise required to properly perform all duties" ¹⁶⁵ Independence requirements, on most boards, require members to acquaint themselves with the inner workings of a company with which they rarely interact. ¹⁶⁶ Volkswagen, however, operates with the opposite problem. Nearly every member on the board functioned as an insider, whether through connections to the Porsche family or the Volkswagen organization. ¹⁶⁷ Unlike most board failures, the board knew exactly how the firm made money. Despite knowledge about the automobile industry generally, the board lacked firm-specific knowledge about the technical details required to manufac-

^{160.} *Id.* (Markus Kienle, a Frankfurt lawyer and board member of SdK, a shareholder-advocacy group, said of the Supervisory Board, "That they were not informed about a problem of this dimension, that points to a huge communications problem."); *see also* Stewart, *supra* note 98 (Professor Elson called the organization an "echo chamber").

^{161.} Stewart, supra note 98.

^{162.} *Id*.

^{163.} *Id*.

^{164.} Sharpe, supra note 103.

^{165.} See supra Part III.A.; see also Deutscher Corporate Governance Kodex [German Corporate Governance Code] § 5.4.1, translation at http://www.dcgk.de/en/code/current-version/supervisory-board (Ger.).

^{166.} *Id*

^{167.} See Bryant & Milne, supra note 128 ("VW's Supervisory Board is short of people with relevant experience and skills and — significantly — independence.").

ture vehicles compliant with relevant regulatory requirements.¹⁶⁸ Arguably, the board did not have enough members with the experience and with the skills needed to effectively oversee management.¹⁶⁹ Information that has trickled out during the investigation indicates that the Supervisory Board did not have the kind of technical knowledge necessary to detect defeat devices. A former senior Volkswagen executive noted that the Supervisory Board "lacked the ability to ask deep technical questions – you see that in the current scandal." Additionally, a former Supervisory Board member said, "Matters of technical expertise were not for us." ¹⁷¹

There are many explanations for the board's lack of technical knowledge. One longtime executive stated that such a scandal "was all but inevitable" due to "the company's isolation, its clannish board and a deeprooted hostility to environmental regulations among its engineers." That executive went on to say that the owners and union will "look the other way about anything" other than its "national mission to provide employment to the German people." One former director said that life under former CEO Winterkorn was a "dictatorship" where "no dissent" was allowed. The investigation revealed a culture of subversion to the CEO's goals, a strict hierarchy, and a lack of independent will among board members. Taken together, the inaction of the board to change the toxic structure of Volkswagen, a structure that bred insular thinking, presents a thorny challenge for any future leaders of the organization.

IV. POLLUTED INFORMATION AND POOR PROCESS

Dominant theories of German corporate governance and actual legislative efforts within the European Union have mirrored efforts in the United States to vest boards with significant responsibility for protecting the corporation from malfeasance, fraud, and poor decisions. These efforts are a far cry from what is necessary to establish effective safeguards. Simply put, any group structure that removes a critical decision making or monitoring body from the primary information gatherers and from the individuals implementing corporate decisions is an exercise in futility. The German academic and legislative efforts do not properly calibrate and appreciate the gap between the nominal authority given to a board and this board's practical ability to monitor or effect a corporation's trajectory. This Part draws on my prior work to identify the components necessary

- 168. Id.
- 169. See id.
- 170. Milne, supra note 20.
- 171. Id.
- 172. Stewart, supra note 98.
- 173. Milne, supra note 20.

^{174.} See Deloitte, Corporate Governance Forum: Information for Supervisory Board and Audit Committee Members 17 (Mar. 2012), http://www2.deloitte.com/content/dam/Deloitte/de/Documents/governance-risk-compliance/GRC-Newsletter-CGF-3-2012-engl.pdf [https://perma.cc/5BLB-K72Q].

for a decision-making body, such as Volkswagen's Supervisory Board, to have meaningful influence over the decisions of management. It concludes by identifying the ways in which these components were lacking in Volkswagen's Supervisory Board.

A. Corporate Failure and Failed Process

Studies of corporate control within American corporations have found that in practice boards do not effectively constrain or influence managerial decision-making.¹⁷⁵ Despite the two-tier structure, Volkswagen's board arguably failed in this manner as well. Thus, it is important to once again examine how a Supervisory Board can and should exert influence over managerial decisions.

An organizational behavior approach to group decision making provides the answers.¹⁷⁶ The decision-making process a group utilizes is determinative of its practical efficacy. Within the organizational behavior literature, there are multiple descriptions of what constitutes an effective decision-making process.¹⁷⁷ These components are the basis of my Process Oriented Approach. They are best separated into five distinct steps, including: "identifying the problem for which a decision must be made, analyzing the problem and possible response, deciding on a response, approving that response, and implementing the final decision."¹⁷⁸

Part IV.B will examine each step in turn and then analyze how Volkswagen's Supervisory Board disadvantaged the directors. Concrete examples of Volkswagen's decision-making process over the course of the almost decade long emissions testing deception and scandal illustrate the need for gatekeepers, such as the Supervisory Board, to have the information and authority necessary to detect and deter malfeasance.

B. Five Steps for an Effective Decision-Making Process

This Part evaluates how each of the five steps of an effective decision-making process—identification, analysis, choice of response, approval, and implementation—are critical to successful monitoring and decision-mak-

^{175.} See Neil Fligstein & Peter Brantley, Bank Control, Owner Control, or Organizational Dynamics: Who Controls the Large Modern Corporation? 98 Am. J. Soc. 280, 280–307 (1992) (finding that boards have little influence on managers' behavior).

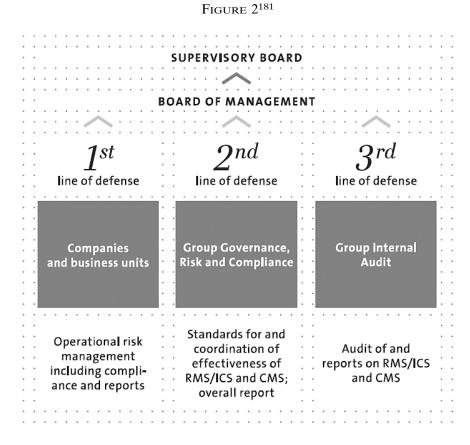
^{176.} Linda K. Stroh et al., Organizational Behavior: A Management Challenge 35-45 (3d ed. 2002); Chip Heath & Sim B. Sitkin, *Big-B Versus Big-O: What is Organizational About Organizational Behavior?*, 22 J. Org. Behav. 43, 51 (2001); Benjamin Schneider, *Organizational Behavior*, 36 Ann. Rev. Psychol. 573, 574 (1985).

^{177.} Decision Making: An Organizational Behavior Approach (Johannes M. Pennnings ed., 2d ed. 1986).

^{178.} Sharpe, *supra* note 82, at 22. For an example of a systematic decision-making process, *see* John R. Schermerhorn Jr. et al., Organizational Behavior, 196-97 (Wiley, 12th ed. 2012) (explaining that systematic decision-making involves: (1) recognizing and defining problem/opportunity, (2) identifying and analyzing other courses of action, (3) choosing best/preferred course of action, (4) implementing preferred option, and (5) evaluating the results and following up).

ing. It includes a step-by-step examination of Volkswagen's process, which reveals how a Supervisory Board without proper information is in fact an impotent gatekeeper incapable of preventing a scandal of the magnitude of faking emission test results.

Broadly speaking, Volkswagen employs a "three lines of defense" risk management system; however, each channel is funneled through the Management Board before the information makes it way to the Supervisory Board. The three channels are: (1) companies and business unit level operational risk management; (2) group governance risk and compliance; and (3) group internal audit. The Management Board holds the exclusive rights over the choice to inform the Supervisory Board, hence all elements of the decision-making process are limited by management's self-interest bias and any other shortcomings.



^{179.} Volkswagen, 2014 Annual Report, supra note 147, at 161.

^{180.} *Id*.

^{181.} Id.

1. Identification

Identification is the first step, and it is an example of where an organizational behavior lens can provide a deeper understanding of what is necessary for effective decision-making to occur. In part, this result occurs because successful gatekeeping and identification are closely intertwined. Identification is the step where a decision-making body, such as the Volkswagen Supervisory Board, notes the scope of problems and identifies opportunities the firm faces and must consider. For a decision-making body to be effective, it should proactively (instead of passively) search for relevant information and look for problem areas. In other words, the information it seeks should be forward-looking. Forward-looking information allows for ex-ante identification of high risk areas and allows for a strategy that anticipates and addresses problems before they occur.

A decision, whether explicit or implicit, about the order in which information is gathered, reviewed, and digested is inherent in any information gathering process. There is a sequence to this process, which in turn creates the universe of alternatives, problems, and choices available to the decision maker. 183 The manner in which Volkswagen's Supervisory Board obtained information defines the outer boundaries of the types of problems and opportunities they were able to identify. 184 At Volkswagen, the Management Board and other company executives performed the essential gatekeeping function of searching and identifying information.¹⁸⁵ The Management Board filtered all material information before it was presented to the Supervisory Board. 186 This was an inherent weakness and limitation on the Supervisory Board's ability to identify problematic behaviors and concerns of the company.¹⁸⁷ For example, at Volkswagen, as far back as 2011, engineers and technicians tried to bring the information to the attention of their superiors. 188 Numerous employees, primarily from the Wolfsburg location, confessed that they knew of the emission evasion activities. 189

The information gatherer's biases, including her expertise and goals, further narrow the universe of information that is obtained and processed. ¹⁹⁰ It is common knowledge that individuals are more likely to identify information that bolsters their credibility and supports their goals.

^{182.} Sharpe, *supra* note 82, at 35.

^{183.} See Richard M. Cyert & James G. March, A Behavioral Theory of the Firm 10 (2d ed. 1992).

^{184.} *Id*

^{185.} Volkswagen, 2014 Annual Report, supra note 147.

^{186.} Id.

^{187.} *Id*.

^{188.} Leah M. Goodman, *Why Volkswagen Cheated*, Newsweek (Dec. 15, 2015), http://www.newsweek.com/2015/12/25/why-volkswagen-cheated-404891.html.

^{189.} See id.

^{190.} Cyert & March, supra note 183, at 10.

Information that would make a project or a goal less feasible is unlikely to be identified. As a result, at Volkswagen, the Management Board had already limited the known universe of alternatives to those that reflected their priorities, interests, and goals, before the Supervisory Board had the opportunity to examine the wider range of information.¹⁹¹ While unintentional biases are problematic, decision makers who intentionally exert significant bias in their information gathering to protect and to support their self-interest are even more damaging, particularly when that information is not shared with others.¹⁹²

The positive side of Volkswagen's emissions focus, and its introduction of diesel in the U.S. Market was no secret. With its goals in mind, Volkswagen continually presented biased and limited information to the Supervisory Board and investing public. Their annual reports going back to 2008 consistently mention emissions, evidencing its importance to Volkswagen. In 2009, the annual report praised the roll out of "clean diesel in America." It stated:

Introducing clean diesel technology and the 1.61 TDI common rail engine in the market established us to reach significant milestones for diesel engines in 2009, which will ensure that we will remain the innovation leader in the field of diesel engine development. . . . These engines have enjoyed considerable success in the North American market in particular, which tends to have a low take-up of diesel. ¹⁹⁴

In 2011, Volkswagen continued to champion its efforts and to brag about its success in the American market. The annual report stated:

The Volkswagen Group has also continued to write the success story of the diesel engine in other areas. Steadily rising market shares in the North American market, which has a critical attitude towards diesel engines, and recognition in Europe . . . are examples of this. We have also successfully advanced the diesel engine in the higher engine capacity classes. 195

Throughout the years of the scandal, Volkswagen was praising its efforts, emphasizing its focus on emissions, and continuing to build upon its success in North America. Despite this, the Supervisory Board was kept in the dark about the defeat device, which was the reason behind Volkswagen's success.

The Volkswagen Management Board's conscious and unconscious biases had already attached to the information that reached the Supervisory Board. This attachment was problematic because, as in most organizations, Volkswagen's executives had a better understanding than the Super-

^{191.} See supra Part IV.B.

^{192.} George Geis, *Business Outsourcing and the Agency Cost Problem*, 82 NOTRE DAME L. REV. 955, 974–75 (discussing the strong incentives of agents to make decisions that serve their self-interests).

^{193.} See Volkswagen, 2008 Annual Report, supra note 111.

^{194.} Volkswagen, 2009 Annual Report, supra note 142, at 178.

^{195.} Volkswagen, 2011 Annual Report, supra note 144, at 215.

visory Board of the challenges facing the company. The executives were also the individuals that were the most motivated to obscure or to highlight a problem. Volkswagen was reputed to be a place of "command-and-control" and a company "where even relatively minor decisions require approval from the high-rise executive office building." Unfolding news stories and information about the key decision-makers within Volkswagen indicate that they may have suffered from a pervasive and pernicious self-interest bias. Moreover, it appears that the Supervisory Board did not receive the information that would have allowed it to discover the "defeat devices" and cheating on emissions testing.

2. Analysis

Although identifying information is the most critical step in determining the range of choices presented to a decision-making body, proper analysis of that information is necessary for the decision-makers to engage in an effective decision-making process. Like information identification, analysis is an information-intensive activity. Specifically, decision-makers must decide what information goes into the analysis of a particular action.²⁰¹

The Volkswagen Supervisory Board was required to conduct analysis, particularly when a decision posed significant risk. This reporting obligation is not a duty it could ignore or rubber stamp. German courts have clearly stated that all members of the Supervisory Board—individually and as a group—must carry out an "independent risk analysis." According to German courts, this analysis is of even greater importance when a transaction is complex, strategically important, or involves a great deal of risk. Volkswagen's 2014 Annual Report shows that the Supervisory Board at Volkswagen, instead, played a passive role. In fact, the Supervisory Board met a mere six times throughout 2014. At Volkswagen, the Supervisory Board's representatives appeared to have lacked the ex-

^{196.} See supra Part III.C.3 (discussing the Supervisory Board's lack of expertise and knowledge).

^{197.} Ewing, supra note 129.

^{198.} *Id*

^{199.} Goodman, *supra* note 188 (discussing Volkswagen's bonus system that rewarded consensus: "But Volkswagen saw the 2004 EPA decision as an irresistible challenge—and an opportunity. The automaker rolled out its new-model diesels in the U.S. in 2008 and won the first Green Car of the Year award ever granted to a diesel at the Los Angeles Auto Show.").

^{200.} See supra Part III.C.2.

^{201.} Sharpe, supra note 82, at 24.

^{202.} Deloitte, supra note 174.

^{203.} Id

^{204.} Volkswagen, 2014 Annual Report, supra note 147, at 7.

^{205.} Id.

pertise required to effectively analyze the information it received from the Management Board. 206

Experts were also concerned that the company's culture "hamper[ed] internal communication and may [have] discourage[ed] midlevel managers from delivering bad news." There was no system in place to ensure that information relating to something of the magnitude of the emissions scandal came to the attention of upper level management. The Supervisory Board did not engage in an in-depth analysis of the Management Board's proposals; it simply accepted the information the Management Board identified. For instance, in 2008 when the Management Board presented strategy to gain a "sustained foothold in the US Market," the Supervisory Board simply concurred. Page 101.

There have been consistent allegations that a select number of managers were responsible for perpetrating the emissions cheating scandal at Volkswagen.²¹⁰ The Supervisory Board was a passive recipient of the Management Board's analysis, cover-up, and reporting on Volkswagen's emission numbers.²¹¹ This fact runs contrary to the more engaged and informed role a Supervisory Board should take. Experts on best practices for German boards posit that the Supervisory Board should actively minimize risk.²¹² To do this task properly, the board must "intensively and in detail" analyze the Management Board's risk assessment.²¹³ Furthermore, it should verify its assessment.²¹⁴ There is no doubt that the analysis the Volkswagen Supervisory Board received was subject to the Management Board's biases, limitations, and motivations.²¹⁵ The Volkswagen Supervisory Board, however, did not scrutinize this information or verify its accuracy.²¹⁶ Consequently, the Supervisory Board failed to carry

^{206.} See Moody's Inv'rs Serv., Volkswagen Aktiengesellschaft: Sweeping Corporate Governance Reforms Remain At The Discretion Of Controlling Shareholders, Autoactu.com 4 (Oct. 27, 2015), http://www.autoactu.com/doc_new/354RapportMoodysgouvernance VW.pdf. See also Complaint, supra note 33, at 18-19.

^{207.} Ewing, supra note 129.

^{208.} See id.

^{209.} Volkswagen, 2008 Annual Report, supra note 111, at 6.

^{210.} See Ferrazi, supra note 22; see also Jack Ewing, Volkswagen Inquiry's Focus to Include Managers Who Turned a Blind Eye, N.Y. Times (Oct. 25, 2015), http://www.nytimes.com/2015/10/26/business/international/volkswagen-investigation-focus-to-include-managers-who-turned-a-blind-eye.html. Cf. Elson et. al., supra note 22, at 3 ("[T]he violations were only the result of 'the grave errors of a very few' employees.").

^{211.} See *generally* Volkswagen, Report of the Supervisory Board (2015), http://annualreport2015.volkswagenag.com/strategy/report-of-the-supervisory-board.html [https://perma.cc/KY2P-T7H8].

^{212.} See Deloitte, supra note 174, at 8.

^{213.} Id.

^{214.} Id.

^{215.} See supra Part III.B.

^{216.} See Volkswagen, 2014 Annual Report, supra note 147.

out an independent decision making process and failed to engage in "independent risk analysis."

3. Choice of Response

The Supervisory Board did not make an informed or active choice on how to respond to the emission standards set by U.S. regulatory authorities. Even when management operates in good faith, a natural by-product of any communication is that the very act of communicating something changes the information in some way. Often the result is information that is withheld or distorted. Most managers have to choose what information to share and in what way to share it.²¹⁷

The Volkswagen Supervisory Board made their decisions and conducted their oversight on substantially less information than was available to Volkswagen managers and the Management Board—the group the Supervisory Board was charged with monitoring. Volkswagen's newest chairman of the Supervisory Board, Hans-Dieter Pötsch, claims "that the decision by employees to cheat on emissions tests was made more than a decade ago, after they realized they could not meet United States clean air standards legally." Moreover, both persistently concede the cheating was confined to a "small number of people" and was facilitated by organizational structures that allowed the culpable group to insulate itself from oversight both from the Management and from the Supervisory Boards. However, evidence is beginning to emerge indicating that the Management Board may have had knowledge of wrongdoing since 2006. Volkswagen has delayed the release of the fact report by their law firm, Jones Day, because it imposes unacceptable risks. 221

4. Approval

Based on Volkswagen's 2014 Annual Report, the "Topics Discussed by the Supervisory Board" mostly included approvals of Management Board proposals and reports.²²² Volkswagen's Supervisory Board was a passive recipient of the information the Management Board deemed relevant. No

^{217.} Jay W. Lorsch & Andy Zelleke, *The Chairman's Job Description*, 30 DIRECTORS & BOARDS 28, 29 (Fourth Quarter 2005) (explaining that receiving large amounts of information without enough time to analyze and understand it is as much of a problem as receiving inadequate or insufficient information).

^{218.} See generally Ewing, supra note 129.

^{219.} Id.

^{220.} Georgina Prodhan et. al., *Volkswagen Probe Finds Manipulation Was Open Secret in Department*, Reuters (Jan. 23, 2016), http://www.reuters.com/article/us-volkswagen-emis sions-investigation-idUSKCN0V02E7 [https://perma.cc/72JE-AX7A].

^{221.} Jay Ramey, VW Seems Mighty Uncomfortable With Its Own Diesel Investigation Report, AUTOWEEK (Apr. 25, 2016), http://autoweek.com/article/vw-diesel-scandal/vw-wont-publish-internal-diesel-investigation-report-just-yet [https://perma.cc/A5K6-5KGB].

^{222.} Volkswagen, 2014 Annual Report, supra note 147, at 8-9.

dissent was noted in the roughly 300 page Annual Report.²²³ The same is true for annual reports in the preceding years. In this manner, the information contained in the reports is limited by the underlying biases of the managers who obtained it; therefore, it will likely favor the goals and positions of the managers who prepared and presented it. Even if there was a "constructive conflict generation" mechanism in play, the Supervisory Board's composition likely produces significant psychological limits on dissent (e.g., the Porsche and Piech family members who own a majority of Volkswagen voting shares and who have four seats on the Supervisory Board, and the labor representation that is partnered with management). Thus, the Supervisory Board was poised to act as a "pawn" of the Management Board by merely putting a rubber stamp on whatever came across the table. Supervisory Board approval was based on a deeply flawed decision-making process where managers and the Management Board had the clear and overwhelming informational advantage.

5. Implementation

In German corporations, implementation, or the literal operationalization of approved course of action, is subject to Supervisory Board oversight.²²⁴ The Volkswagen Supervisory Board relied heavily on reports, including compliance and risk management assessments, prepared by the Volkswagen Management Board.²²⁵ Like the previous four steps, successful implementation depends on information about the organization.

Once a decision has been made, implementation is almost completely within the purview of management.²²⁶ According to the German Corporate Governance Code, "The Management Board develops the strategy for the company, agrees it with the Supervisory Board and ensures its implementation."²²⁷ Managers are responsible for general operations and daily management activities. As a result, managers have tremendous discretion as to how to operationalize the decisions that the board has approved. Because boards almost always approve management's proposals,²²⁸ the problem is not whether management will zealously im-

^{223.} Id. at 161

^{224.} See Deloitte, *supra* note 174, at 8. ("The Supervisory Board supervises the Executive Board and therefore also the strategy, its implementation as well as the company's [Strategic Risk Management].").

^{225.} See Volkswagen, 2014 Annual Report, supra note 147.

^{226.} See generally Del. Code Ann. tit. 8, § 141(a) (2010); Id. §§ 109(a) (noting some decisions, however, require board approval, including decisions involving mergers and acquisitions, dissolution, and amending bylaws); Robert A. Kessler, *The Statutory Requirement of a Board of Directors: A Corporate Anachronism*, 27 U. Chi. L. Rev. 696 (1960) (providing a general discussion of the powers of the board under Delaware and other model laws).

^{227.} DEUTSCHER CORPORATE GOVERNANCE KODEX [GERMAN CORPORATE GOVERNANCE CODE] § 4.1.2, *translation at* http://www.dcgk.de/en/code/current-version/management-board.html (Ger.).

^{228.} See Donald C. Langevoort, Resetting the Corporate Thermostat: Lessons from the Recent Financial Scandals About Self-Deception, Deceiving Others and the Design of Internal

plement the decision, but whether the manner of implementation is consistent with the understanding of the board and with the long-term health of the corporation. In the case of Volkswagen, the Supervisory Board's implementation assessments are almost exclusively confined to backward-looking reports prepared by the very individuals who are being assessed. As such, any deviations from expected initiatives would have to be self-reported by the Management Board.

6. Information, Process, and Practical Authority

In a German corporation, the Supervisory Board's decisions, like those of all decision-making groups, are dependent on the information it receives.²²⁹ At Volkswagen, the Supervisory Board relied heavily on the good faith of the Management Board, which extended to a pro forma review of their decisions and recommendations.²³⁰ As a result, the Supervisory Board lacked the relevant information it needed to make informed decisions. Consequently, it did not fulfill two of its mandates under German Law. First, under section 111(1) of the German Stock Corporation Act ("AktG"), it was required to "monitor the Executive [Management] Board."231 Second, a Supervisory Board has a duty to supervise the systems within the company that are intended to identify risk, specifically the control and monitoring systems.²³² The Volkswagen Supervisory Board failed in both instances. Figure 3 below, illustrates step-by-step the Process Oriented Approach. For a German Supervisory Board to effectively do their job, they must implement an approach such as the one suggested below. 233

Controls, 93 GEO. L.J. 285, 293-95 (2004) (discussing status quo bias and the other cognitive biases that lead boards to defer to management and the CEO).

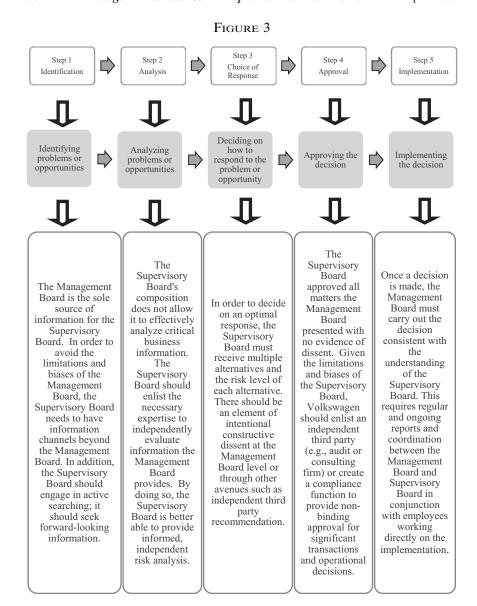
 $^{229.\,}$ Kenneth J. Arrow, The Limits of Organizations 48-49 (1974). ("Decisions are necessarily a function of information.").

^{230.} See generally Prodhan, supra note 220. But see Jay Ramey, VW Board Clears Itself of Wrongdoing in Diesel Scandal, Autoweek (May 13, 2016), http://autoweek.com/article/vw-diesel-scandal/vw-board-clears-itself-wrongdoing-diesel-scandal.

^{231.} AKTIENGESETZ [AKTG] [STOCK CORPORATION ACT], supra note 67, at § 111(1).

^{232.} Id. at § 107(3).

^{233.} See generally Sharpe, supra note 82, at 27.



Each of the steps above are critical to the Supervisory Board being able to have legitimate and effective supervisory control over the decisions of executives and over the Management Board. The simple structure of having a board tasked with supervising will not accomplish the kind of monitoring necessary to stop poor decisions and malfeasance from occurring. The way information is obtained, analyzed, and utilized is crucial to improving monitoring and thereby improving outcomes.²³⁴

^{234.} See Sharpe, supra note 103, at 1454 (describing the limited channels through which board members receive information); Lisa M. Fairfax, The Uneasy Case for the Inside Direc-

CONCLUSION

Volkswagen's two-tier board structure did not prevent the largest scandal in the automobile industry's history. Volkswagen, and other German corporations, may follow the structural requirements of German corporate law, but without an effective review and accountability process, the valuable idea of codetermination is never actualized. Instead, the Supervisory Board fails in their monitoring and supervisory roles. They are watchers asleep at their post, uninformed, dormant, and ineffective in preventing gross failures of corporate integrity. Unless, German boards adopt and implement the Process Oriented Approach, the Volkswagen emission scandal will simply be another mark on the timeline of a century plagued by corporate failure and malfeasance.

APPENDIX

Volkswagen Board as of September 2015

Affiliation: Porsche-Piëch Family

Ownership in VW: 30.8% indirectly through Porsche Automobil Holdings SE, 52.2% voting rights via Porsche Automobil Holdings SE¹ Ownership in Porsche SE: 50.7% ownership, 100% voting rights²

Name	Title	Years on the board as of Sept. 2015	Personal Ownership in Porsche SE	Ownership in VW
Ferdinand k. Piëch	Chairman of the board	13	14.71% ³	See above
Dr. Rer. Comm. Wolfgang Porsche	Chairman of the Supervisory Board of Porsche Automobil Holding SE; Chairman of the Supervisory Board of Dr. Ing. h.c. F. Porsche AG	7	Unknown (likely large via Familie Porsche Beteiligung GmbH and indirect holdings) ⁴	See above
Dr. Jur. Hans Michel Piëch	Lawyer in private practice	6	14.71% (via HMP Vermögensverwaltug GmbH) ⁵	See above
Dr. Jur. Ferdinand Oliver Porsche	Member of the Board of Management of Familie Porsche AG Beteiligungsgesellschaft Years on the board as of September 2015: 6	6	Unknown (likely large via Familie Porsche Beteiligung GmbH and indirect holdings) ⁶	See above
Dr. Louise Kiesling ⁷	Designer and entrepreneur; niece of Ferdinand Piëch	>1	Unknown	Unknown
Julia Kuhn- Piëch ⁸	Real estate manager; niece of Ferdinand Piëch	>1 (left Oct. 1, 2015)	Unknown	Unknown

^{1.} Shareholder Structure, Volkswagen, http://www.volkswagenag.com/content/vwcorp/content/en/investor_relations/share/Shareholder_Structure.html.

^{2.} The Porsche-Piëch Family holds 100% voting control rights through the privately owned Familie Porsche Beteiligung GmbH and other private Gmbhs. *See Voting Rights Announcement*, Porsche Automobil Holding SE (June 2 2016), http://www.dgap.de/link.php?template=porschenew&a=100&sprache=en&hp_lang=en&von=20100101&typ=pvr,nvr&id=943785. Volkswagen AG fully owns Porsche AG, the auto making arm of Porsche and a separate entity from the Porsche Automobil Holding SE holding. Chad Thomas & Dorothee Tschampa, *VW to Pay \$5.6 Billion for Rest of Porsche*, Bloomberg (July 5, 2012), http://www.bloomberg.com/news/articles/2012-07-04/volkswagen-to-purchase-remaining-porschestake-for-5-6-billion.

- 3. Veröffentlichung des Tenors und der wesentlichen Begründung der Bescheide der Bundesanstalt für Finanzdienstleistungsaufsicht (Jan. 1, 2016), http://www.bafin.de/Shared-Docs/Downloads/DE/Befreiungsentscheidung/porsche_ua.pdf?__blob=publicationFile&v=1; See Jack Ewing, Ex-Chairman Has Chance to Shake Up Volkswagen, as a Shareholder, New York Times (May 12, 2015), http://www.nytimes.com/2015/05/13/business/international/ex-chairman-piech-has-chance-to-shake-up-volkswagen.html.
- 4. Although ownership of Familie Porsche Beteiligung GmbH is not available publicly, a New Zealand overseas regulatory filing offers some clues as to the ownership before a family merger in 2014; however, it does not disclose current ownership or controlling shares during the merger. See Case 201420004 Familie Porsche Beteiligung GmbH, Land Information New Zealand, (Aug. 21, 2014), http://www.linz.govt.nz/regulatory/overseas-invest ment/decision-summaries-statistics/2014-08/201420004.
- 5. HMP Vermögensverwaltug GmbH, Moneyhouse (May 8, 2015), https://www.moneyhouse.de/HMP-Vermoegensverwaltung-GmbH-Muenchen; Veröffentlichung des Tenors und der wesentlichen Begründung der Bescheide der Bundesanstalt für Finanzdienstleistungsaufsicht (Jan. 1, 2016), http://www.bafin.de/SharedDocs/Downloads/DE/Befreiungsentscheidung/porsche_ua.pdf?__blob=publicationFile&v=1.
- 6. Although ownership of Familie Porsche Beteiligung GmbH is not available publicly, a New Zealand overseas regulatory filing offers some clues as to the ownership before a family merger in 2014; however, it does not disclose current ownership or controlling shares during the merger. See Familie Porsche, supra note 4.
- 7. Noah Joseph, *Volkswagen names Piech's nieces to supervisory board*, AUTOBLOG (Apr. 30, 2015), http://www.autoblog.com/2015/04/30/volkswagen-supervisory-board-piechnieces-official/.
 - 8. *Id*.

Affiliation: State of Lower Saxony

Name	Title	Years on the board as of Sept. 2015	Ownership in Porsche SE	Ownership in VW
Stephan Weil	Minister-President of the Federal State of Lower Saxony	2	n/a, 0% voting rights	11.8% via State of Lower Saxony, 20% voting rights ⁹
Olaf Lies	Minister of Economic Affairs, Labor and Transport for the Federal State of Lower Saxony	2	n/a, 0% voting rights	11.8% via State of Lower Saxony, 20% voting rights ¹⁰

Affiliation: Qatar Holdings

Name	Title	Years on the board as of Sept. 2015	Ownership in Porsche SE	Ownership in VW
Dr. Hussain Ali Al- Abdulla	Minister of State and Board Member of Qatar Investment Authority	5	0%, 0% voting rights ¹¹	14.6%, 17% of voting rights ¹²
Akbar Al Baker	Minister of State and Group Chief Executive of Qatar Airways	>1	0%, 0% voting rights ¹³	14.6%, 17% of voting rights ¹⁴

Employees and Unions of Volkswagen and Subsidiaries

Ownership in VW: n/a, 0% control rights but control through Co-Determination Laws

Ownership in Porsche SE: n/a, 0% voting rights

- 9. Shareholder Structure, supra note 1.
- 10. *Id*.

11. Qatar Holdings held a 10% stake in Porsche SE until 2013. Dinesh Nair & Andreas Cremer *Qatar Sells Back 10 Percent Porsche Stake to Founding Families*, Reuters (June 17, 2016), http://www.reuters.com/article/us-qatar-porsche-volkswagen-idUSBRE95G0 8E20130617.

- 12. Shareholder Structure, supra note 1.
- 13. Qatar Holdings held a 10% stake in Porsche SE until 2013. Nair, supra note 11.
- 14. Shareholder Structure, supra note 1.

Name	Title	Years on the board as of Sept. 2015	Ownership in Porsche SE	Ownership in VW	Affiliation
Dr. Jur. Klaus Liesen	Honorary Chairman of the Supervisory Board of Volkswagen AG	28	n/a	n/a	Volkswagen
Berthold Huber	Deputy Chairman (during crisis)	5	n/a	n/a	IG Metall ¹⁵
Hartmut Meine	Director of the Lower Saxony and Saxony-Anhalt Regional Office of IG Metall	6	n/a	n/a	IG Metall
Babette Fröhlich	Department head for coordination of Executive Board duties and planning	7	n/a	n/a	IG Metall
Jürgen Dorn	Chairman of the Works Council at the MAN Truck & Bus AG Munich plant, Chairman of the General Works Council of MAN Truck & Bus AG and Chairman of the Group Works Council and the SE Works Council of MAN SE (until May 31, 2015)	1 (left June 30, 2015)	n/a	n/a	VW Work Councils
Stephan Wolf	Deputy Chairman of the General and Group Works Councils of Volkswagen AG	2	n/a	n/a	VW Work Councils
Thomas Zwiebler	Chairman of the Works Council of Volkswagen Commercial Vehicles	5	n/a	n/a	Volkswagen
Dr. Jur. Hans- Peter Fischer	Chairman of the Board of Management of Volkswagen Management Association	2	n/a	n/a	Volkswagen
Uwe Fritsch	Chairman of the Works Council at the Volkswagen AG Braunschweig plant	3	n/a	n/a	VW Work Councils
Uwe Hück	Chairman of the General and Group Works Councils of Dr. Ing. h.c. F. Porsche AG	1<	n/a	n/a	Porsche AG
Peter Mosch	Chairman of the General Works Council of AUDI AG	9	n/a	n/a	Audi AG
Bernd Osterloh	Chairman of the General and Group Works Councils of Volkswagen AG	10	n/a	n/a	VW Work Councils

^{15.} A large German union. *See IG Metall* https://www.igmetall.de/0161455_Leistungen _Aug2008_gesamt_Englisch_28c4f7286cd82fa03678012a851a6f0c8131a413.pdf.

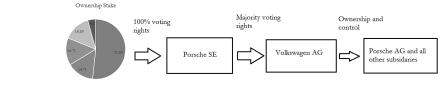
Affiliation: Independent/Institutional Investors

Ownership in VW: 42.8% ownership across all institutional and foreign investors, 10.8% control rights

Ownership in Porsche SE: n/a, 0% control rights

Name	Title	Years on the board as of Sept. 2015	Ownership in Porsche SE	Ownership in VW
Annika Falkengren	President and Group Chief Executive of Skandinaviska Enskilda Banken AB	4	n/a	n/a

Below: a summary of the indirect ownership of VW^{16}



Familie Possche Beteiligung GmbH
 HMP Vermögensverwaltung GmbH
 Alsomer GmbH

Ferdinand Piech GmbH
 Porsche Gesellschaft mit

^{16.} Bilderstrecke zu: Familien Porsche und Piëch: So verteilt sich die Macht bei Volkswagen, Frankfurter Allgemeine, http://www.faz.net/aktuell/wirtschaft/familien-porscheund-piech-so-verteilt-sich-die-macht-bei-volkswagen-13559209/die-familien-piech-und-pors che-13544086.html.