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Corporate Corruption and Soft-law:
the Siemens Case and an empirical Assessment
of non-binding Instruments in Europe

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INTRODUCTION

Over the past decades, corporate corruption has become increasingly important within the international economic, legal, and political debate. In a context characterised by the progressive interconnection of markets, increased media exposure and intensified supranational regulations, companies are faced with complex challenges related to transparency, accountability, and integrity of their behaviour.

This research aims to analyse the dynamics of corporate corruption from a multidisciplinary perspective and with an empirical approach, focusing on the role of soft law in its prevention and contrast.

The research question guiding this work is the following: "Does the adoption of soft law instruments at the national level statistically impact the reduction of perceived corruption in European countries?" Starting from this question, we intend to assess whether and to what extent voluntary codes of conduct, guidelines, recommendations, and standards promoted by international organisations (such as OECD, UN, FATF, EITI) contribute to improving transparency and strengthening integrity mechanisms in the public and private sector.

The objectives of this research are therefore threefold:

1. To offer a theoretical-conceptual overview of the phenomenon of corporate corruption, delving into its causes, forms, and consequences starting from the academic literature and the main interpretative models (primarily the principal-agent theory¹);
2. To empirically examine a paradigmatic case of a corruption scandal - that of Siemens - in order to highlight the organisational and cultural

¹Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360

mechanisms that fostered its emergence and analyse the compliance reforms adopted subsequently;

3. To assess, by means of a linear regression model applied to panel data, the effectiveness of soft law instruments in combating perceived corruption in Europe over the period 2018-2022.

The thesis is divided into three chapters.

The first chapter introduces the phenomenon of corporate bribery, defining its characteristics, typical forms (such as bribery, money laundering, tax evasion), determinants (such as organisational culture, pressure to perform, regulatory structure), and economic and social consequences. Particular attention is paid to the evolution of the scientific debate and the use of the principal-agent theory to interpret corrupt dynamics within companies. This chapter builds the theoretical and conceptual framework necessary to understand the rest of the work.

The second chapter presents an in-depth case analysis of the Siemens bribery scandal, one of the most significant cases of corporate corruption in European economic history. The investigation is developed along three lines: an analysis of the corrupt practices and governance failures that characterised the German group; an evaluation of the post-scandal ethical and organisational reforms; and ethical reflection according to Stakeholder Theory². The chapter ends with a section dedicated to Siemens' economic-financial performance in the period 2022-2024, useful to observe the concrete outcomes of the compliance measures adopted.

Finally, the third chapter introduces the concept of soft law, elaborating on its legal and functional characteristics compared to hard law and illustrating its applications in the fight against corruption. After examining instruments

² Freeman, R. E. (2010). *Strategic Management: A Stakeholder Approach*. Cambridge University Press.

such as the UN Global Compact, the OECD Guidelines, and ISO 37001 standards, the chapter proposes an empirical analysis based on a linear regression model. The model assesses the impact of the adoption of soft law instruments on the change in the corruption perception index (CPI) in a sample of European countries between 2018 and 2022, controlling for socio-economic and institutional variables.

The reference literature is developed along three axes. The first axis concerns studies on corporate corruption and the application of agency theory (Klitgaard, 1988³; Shleifer & Vishny, 1993⁴), which identify information asymmetries and conflicts of interest as the main levers of opportunistic behaviour. The second one analyses the role of organisational culture and compliance strategies in guiding the behaviour of economic actors, referring to studies in business ethics and social responsibility (Ferrell et al., 2021⁵; Freeman, 1984⁶). Finally, the third axis explores the function of soft law in global governance and flexible regulatory mechanisms, with contributions enhancing the ability of these instruments to generate reputational pressures and promote regulatory convergence (Abbott & Snidal, 2000⁷; Senden, 2004⁸; Terpan, 2015⁹).

The originality of the research lies in the attempt to empirically measure the effect of soft law instruments on perceptions of corruption, an area hitherto mainly investigated through qualitative or normative approaches. The employment of a quantitative model makes it possible not only to test theoretical hypotheses, but also to offer operational indications for policy

³ Klitgaard, R. (1988). *Controlling corruption*. University of California Press.

⁴ Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3), 599–617.

⁵ Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2021). *Business ethics: Ethical decision making and cases* (13th ed.). Cengage Learning.

⁶ Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

⁷ Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

⁸ Senden, L. (2004). *Soft law in European Community law: Its relationship to legislation*. Hart Publishing.

⁹ Terpan, F. (2015). Soft law in the European Union: The changing nature of EU law. *European Law Journal*, 21(1), 68–96.

makers, companies, and international organisations engaged in the fight against corruption.

In conclusion, the research seeks to demonstrate that the fight against corruption can no longer rely solely on legal coercion, but must be also based on an integrated set of formal and informal norms, reputational incentives, and ethically inspired organisational practices. In this context, soft law is an indispensable tool for promoting integrity and accountability in the European economic fabric.

UNVEILING CORPORATE CORRUPTION

This chapter will deeply investigate the phenomenon of corporate corruption. In the first place, the definition of corporate corruption will provide a comprehensive grasp of its ramifications and extent. The principal-agent theory will next be presented as a framework for comprehending the forces that propel dishonest practices in companies. Subsequently, the chapter will outline the numerous kinds of corporate corruption and categorize its various forms. Eventually, an examination of the causes and consequences of this practice will be provided, emphasizing the internal and external elements that lead to its occurrence as well as the effects it has on companies, global economies, and society at large.

1.1 – Definition of the phenomenon

Corruption is the most serious injury that can affect an organization, either public or private. Nowadays, corruption, fraud and other unethical practices turn out to be the gravest obstructions to economic, social and civil development, representing one of the most persistent and complex challenges in the global economy.

Transparency International presents corruption¹⁰ as the abuse of entrusted power for private gain, while both the UN Conventions and the Organization for Economic Co-operation and Development (OECD)¹¹ do not define this phenomenon and they only state the felonies for a set of corruptive behaviours.

¹⁰ Transparency International. (2024). Annual report 2023. <https://www.transparency.org/en/publications/annual-report-2023>

¹¹ Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. (2025). OECD Legal Instruments. <https://legalinstruments.oecd.org/public/doc/205/205.en.pdf>

Even while corruption is typically linked to the public domain, it also pertains to private business-to-business dealings. Corruption within the public administration is typically committed by a government official, bureaucrat, or politician engaged in an unethical behavior such as offering or accepting financial or non-financial benefits from other government officials or private individuals¹². This is inconsistent with corporate corruption, which is defined as any dishonest activity carried out by a worker, manager, or organization that involves the provision of benefits to other private or public individuals or organizations.

Corporate corruption refers to unethical or illegal practices conducted by individuals or organizations within the corporate sphere to gain undue advantages, often at the expense of legal, ethical, and societal standards.¹³ In this type of corruption, the so-called relational capital—the social ties that managers and organizations form with key market players, such as other businesspeople and government officials, to support value creation processes—may be utilized unfairly and unethically¹⁴. Moreover, the constant changes within the nature of economies, banks, companies and society must be considered to fully understand the concept of corruption.

¹² Rose-Ackerman, S. (1999). *Corruption and government: Causes, consequences, and reform*. Cambridge University Press.

¹³ Manacorda, S., Centonze, F., & Fortis, G. (2014). *Preventing corporate corruption*. Springer.

¹⁴ La Rocca, M., La Rocca, T., Fasano, F., & Sanchez-Vidal, F. J. (2023). From the top down: Does corruption affect performance?

The existence of an opportunity or incentive is a necessary condition to talk about corruption. According to Centorrino and Lisciandra¹⁵, three elements must be verified in order to speak of corruption:

1. Discretionary power: the power to make a decision by weighing a primary public interest against secondary interests.
2. Economic rents: the greater the economic rent, the greater the interest in corrupting.
3. Disutility of bribery: the utility of bribing or being bribed is greater than the utility of being sanctioned or exposed.

The versatile nature of corporate corruption makes it a critical area of inquiry in economics and management studies. Works on corruption can be found in different areas such as finance, law, accounting and management. It does not only disrupt economic efficiency, but it also erodes institutional integrity and public confidence, hindering sustainable development and equitable growth.

Therefore, from a social and economic point of view, it is widely recognized that corruption is no longer a local matter but a global criminal phenomenon that deeply affects political and administrative structures, as well as the fundamental rights of individuals¹⁶. Moreover, according to the United Nations Development Programme (UNDP), the cost of corruption in 2023 corresponded to nearly 3% of the world's GDP. Taking this fact into account, it is unquestionable that the attention to this phenomenon has increased

¹⁵ Centorrino, M., & Lisciandra, M. (2010). La corruzione fra teoria economica, normativa internazionale, modelli d'organizzazione d'impresa. *Quaderni Europei*.

¹⁶ Tanzi, V., & Davoodi, H. (1997). Corruption, public investment, and growth. IMF Working Paper No. 97/139. International Monetary Fund.

considerably and the United Nations affirmed their commitment to address corruption and illicit financial flows.

Indeed, this phenomenon results in a series of dramatic consequences for the company and society since it ruins its reputation, erodes trust, undermines democracy, hinders economic progress and intensifies inequality, poverty, social fragmentation and environmental challenges.

Due to the remarkable—and likely growing—darkness that envelops such acts, the true objective of corrupt practices remains unclear; in fact, the phenomenon is both pervasive and secret because of the bilateral nature of corrupt agreements. Even though recent court cases have compelled businesses to spend a significant amount of money on fines and settlements, they also amply display the phenomenon's tenacity and dispersion. Furthermore, corruption is becoming more and more unacceptable to corporations and civil society due to its negative social and economic effects, especially in the wake of the 2008 financial crisis.

1.2 – Academic studies on corporate corruption

The academic study of corporate corruption started gaining significant attention in the mid-20th century, as global economies grew and market interconnection exposed weaknesses to unethical behavior.

Early debates¹⁷ mostly focused on corruption in the public sector and its effects on the economy, but as multinational firms grew in popularity in the 1970s and 1980s, the emphasis turned to wrongdoing in the private sector.

¹⁷ Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, 110(3), 681–712.

Using theories like agency theory¹⁸, principal-agent dynamics¹⁹, and behavioral economics²⁰, economists and academics started investigating the effects of corporate corruption on governance, market efficiency, and institutional development. Models for comprehending the factors that stimulate corrupt behavior, including incentives, gaps in monitoring, and enforcement flaws, were first presented in seminal publications like Robert Klitgaard's *Controlling Corruption*²¹.

In the 1990s, corporate crises such as Enron and WorldCom intensified scholarly attention, underscoring the significance of transparency, ethical leadership, and robust regulatory frameworks in addressing corruption.

For decades, corporations have diligently endeavored to mitigate corruption. Commercial bribery continues even after compliance processes have been widely implemented and company ethics have been periodically brought back into the spotlight. It is frequently regarded as a "rational choice strategy"²² for attaining economic success and is typically ascribed to the unethical conduct of those motivated by avarice.

¹⁸ Jackall, R. (1988). *Moral mazes: The world of corporate managers*. New York, NY: Oxford University Press.

¹⁹ Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

²⁰ Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.

²¹ Johnston, M. (1988). *Controlling corruption*. By Robert Klitgaard. Berkeley: University of California Press.

²² Paternoster, R., Jaynes, C., & Wilson, T. (2017). Rational choice theory and interest in the "fortune of others." *Journal of Research in Crime and Delinquency*, 54(6), 847–868. <https://doi.org/10.1177/0022427817707240>

1.3 – The principal-agent theory

Several theoretical frameworks, including agency theory and game theory highlight the incentives and strategic choices that propel corrupt behavior within corporate structures. These structures frequently identify asymmetrical power dynamics, lax regulatory frames, and the desire to maximize profits as contributing factors.

The principal-agent theory provides a valuable framework for understanding corporate corruption, particularly in the context of governance and organizational dynamics.

At its core, the theory describes the relationship between a principal (e.g., shareholders, owners) and an agent (e.g., executives, managers) who is entrusted to act on the principal's behalf.²³ The relationship between the two can be complex and full of challenges, which is why agency theory is so important. The principal relies on the agent to make decisions that align with their best interests, but asymmetries in information, misaligned incentives, and differing objectives can lead to conflicts of interest. The fundamental tenet of this theory is that the agent's actions are not necessarily optimal for capital. This discrepancy gives agents the chance to engage in corrupt practices, prioritizing their gains over the organization's goals or societal norms.²⁴

In the context of corporate corruption, the principal-agent problem often arises when managers (agents) exploit their positions to pursue illicit activities such as bribery, fraud, or embezzlement, often under the guise of organizational success. For example, a manager might engage in bribery to

²³ Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

²⁴ Ross, S. A. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63(2), 134–139.

secure lucrative contracts, benefiting their career or financial position while exposing the organization to legal, reputational, and financial risks. Shareholders, as principals, may remain unaware of such actions due to information asymmetry or the complexity of modern corporate structures, which hinder effective oversight.

The principal-agent approach highlights the significance of systems to align incentives and decrease the potential for corruption in order to address these issues. Among these mechanisms are monitoring and auditing, incentive alignment, governance reforms and transparency and disclosure.

First of all, the systematic check, combined with strong internal controls, compliance initiatives and third-party audits will help identifying and discouraging corrupt activity. Internal and external monitoring and auditing mechanisms are, indeed, critical tools to enhance transparency and accountability. Research confirms that companies who invest in strong monitoring frameworks experience lower levels of corporate fraud and financial mismanagement²⁵.

One of the most effective solutions to soften agency conflicts is the introduction of incentive alignment mechanisms: in this way, agents work and behave in the principals' best interest. Therefore, companies can stimulate agents to maximize shareholder value while minimizing opportunistic behaviour²⁶ by designing compensations structures such as: performance-based compensations, equity ownership²⁷ and long-term

²⁵ La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.

²⁶ Murphy, K. J. (1999). Executive compensation. In O. Ashenfelter & D. Card (Eds.), *Handbook of Labor Economics* (Vol. 3B, pp. 2485–2563). Elsevier.

²⁷ Blasi, J., Freeman, R., & Kruse, D. (2016). *The citizen's share: Reducing inequality in the 21st century*. Yale University Press.

incentive plans²⁸. Stock options²⁹, restricted stock³⁰ and bonuses tied to some key performance indicators (KPIs)³¹ belong to performance-based competitions and they incentivize managers to pursue long-term value creation³². Evidence suggests that companies utilizing stock-based pay schemes generally exhibit increased profitability and reduced instances of fraud, as leaders are more committed to the firm's long-term success³³. Another possible proposal that will relieve the adverse effects of the principal agent theory could be the establishment of an independent board through a governance reforms. By including directors external to the company's leadership team, these boards offer impartial monitoring and mitigate any conflicts of interest. Therefore, the presence of independent directors guarantees that managerial decisions are subject to thorough examination, fostering activities that increase shareholder value.³⁴

The argument emphasizes that corporate corruption is a structural problem caused by faulty incentive systems and inadequate governance, in addition to being the product of individual greed.

Therefore, in order to reduce the dangers of corruption, measures must address both individual conduct and the larger institutional framework. Policymakers and organizations can better understand the root causes of

²⁸ Kaplan, S. N., & Minton, B. A. (2012). How has CEO turnover changed? *International Review of Finance*, 12(1), 57–87.

²⁹ Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats? *The Quarterly Journal of Economics*, 113(3), 653–691.

³⁰ Core, J. E., Guay, W. R., & Larcker, D. F. (2003). Executive equity compensation and incentives: A survey. *Economic Policy Review*, 9(1), 27–50.

³¹ Bebchuk, L., & Fried, J. (2004). *Pay without performance: The unfulfilled promise of executive compensation*. Harvard University Press.

³² Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), 225–264.

³³ Murphy, K. J. (2013). Executive compensation: Where we are, and how we got there. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 2, pp. 211–356). Elsevier.

³⁴ Lv, X., & Liu, Y. (2009). A study of independent director's reputation incentive mechanism based on the principal-agent theory. *iBusiness*, 1(1), 34–39.

corrupt behaviours and create plans to promote moral decision-making and organizational integrity by applying principal-agent theory³⁵.

1.4 – Main activities of corporate corruption

Corporate corruption encloses a wide range of unethical and illegal practices that affect the wholeness of business in many fields and hurt stakeholders. The key corruptive behaviours may include bribery, embezzlement, money laundering, collusion, insider trading and tax evasion.

Bribery consists in the compensation or reward provided for an act or service performed by a public official or private service provider that exceeds their authorized duties or responsibilities. It occurs when a person offers, promises, provides, accepts, or seeks a benefit for persuade someone to do something that either is against the law or unethical. Bribery can be direct or indirect, depending on whether there is a third person involved in the exchange: in the first case, the practice is performed by two parties only; in the second one, instead, there is a third party making the payment that constitutes a bribe.³⁶ An example can be the event of a pharmaceutical firm that corrupts doctors, hospitals, or other healthcare facilities with incentives of making them prescribe its drugs to patients.

Embezzlement is a form of white-collar crime according to which a person deliberately attains the assets he is entrusted with but uses them for undesigned projects. The key concept is that those funds are expected to be employed in accordance with what has been previously established, but

³⁵ Di Donato, V. (2016). La corruzione e l'approccio comportamentale: una nuova prospettiva di ricerca? *Amministrazione in Cammino*.

³⁶ Svensson, J. (2003). Who must pay bribes and how much? Evidence from a cross-section of firms. *The Quarterly Journal of Economics*, 118(1), 207–230.

the embezzler uses these funds for prohibited purposes³⁷. A case of embezzlement takes place when a company's accountant, for instance, creates bills and receipts for activities that did not occur and then uses the money paid for personal expenses.

Money laundering is a crime that entails taking revenues that have been gained illegally ("dirty money") and hiding their source to make them seem as though they came from a legitimate source³⁸. Through this practice, financial assets are concealed through money laundering, which obscures the illicit activities that created them. With the advent of online banking and cryptocurrencies the transfer or withdraw of money without supervision has become easier for criminals. Money laundering is a common practice for criminal organizations, as they manage to clean money coming from drug dealing, for instance, by entering them in the legitimate accounts of the business acting as a laundry: in this way the dirty money is camouflaged and can be safely used. Moreover, this practice can have several effects that may mine the soundness and stability of a nation's financial system as well as its overall external stability. They may lead to unstable "hot money" due to inflows and outflows, alongside banking crises, inefficient revenue collection, overarching governance deficiencies, reputational hazards for international financial hubs, and the deterioration of correspondent banking relationships³⁹.

In the legal scenario, collusion refers to a clandestine agreement among two or more parties to mislead or defraud others. The main pillars of collusion are the following: utmost confidentiality of the agreement,

³⁷ Wells, J. T. (2017). *Corporate fraud handbook: Prevention and detection*. Hoboken, NJ: Wiley

³⁸ Unger, B., & Van der Linde, D. (2013). *Research handbook on money laundering*. Cheltenham, UK: Edward Elgar Publishing.

³⁹ International Monetary Fund (IMF). (2020). *The impact of money laundering on financial stability*. Washington, DC: IMF Publications.

breakdown of the existing equilibrium or status quo and benefits for all parties involved. There can be collusion when a group of companies operating in the same field arranges to fix their products' prices. As a result of it, those companies are capable of setting a minimum price, so they don't suffer from competition, align their advertisement campaigns and share the market equally.

Lastly, tax evasion is the intentional falsification of financial data to evade, in whole or in part, paying taxes that the company is due. Typically, it entails practices like hiding assets, inflating deductions, omitting to record cash transactions, lying about income, or using offshore accounts to avoid paying taxes. The key characteristics of tax evasion are deliberate deception and the contravention of tax regulation. Quantifying the extent of tax evasion is beneficial since it provides policymakers with insights on the credibility of their policy evaluations and the anticipated efficacy of their policy recommendations⁴⁰. European countries lose hundreds of billions of Euros every year because of tax evasion: the most involved countries are Italy, Germany and France⁴¹.

1.5 – Causes

Corruption is a human practice, and as such deserves to be analysed, researching what triggers the corrupt phenomenon and studying its outcomes. The scientific debate on the causes of this crookedness is vast.

Corruption is challenging to quantify; hence, this phenomenon indices typically rely on surveys that assess the perceived extent of corruption

⁴⁰ Richupan, S. (1984). Measuring tax evasion. International Monetary Fund.

⁴¹ OECD. (2021). Tax administration 2021: Comparative information on OECD and other advanced and emerging economies. Organisation for Economic Co-operation and Development.

inside a nation, exemplified by Transparency International's Corruption Perception Index (CPI)⁴².

To better understand corporate corruption, it is necessary to focus the analysis on the so-called "risk factors"⁴³. The following is a concise list of the causes of corruption most frequently reported in studies: governments' structure, regulatory loopholes, corporate culture and profit-driven pressure.

The structure of government reflects inadequate oversight, absence of accountability, or deficient internal controls inside organizations that can facilitate the proliferation of corrupt practices. A weak governance creates an environment where unethical behaviour can thrive. Research⁴⁴ shows that the role of democracy can be crucial in decreasing the level of corruption, but only if it has been established for a long period of time. New democracies lack the resources to regulate this conduct, rendering rent-seeking initially more appealing. However, as democracy gains stability, it becomes easier to enter the free market, increasing competition for rents and resulting in lower individual rents.

Another risk factor can be found in the existence of regulatory loopholes since it may happen that laws and regulations not properly implemented might facilitate corruption without having serious repercussions. Loopholes enable corporations to circumvent legal requirements without technically breaking the law. Companies can maximize profits by taking advantage of

⁴² Transparency International. (2023). 2023 corruption perceptions index: Explore the... <https://www.transparency.org/en/cpi/2023>

⁴³ Transparency International. (2011). Corruption risk assessment topic guide. https://knowledgehub.transparency.org/assets/uploads/kproducts/Corruption_Risk_Assessment_Topic_Guide.pdf

⁴⁴ Enste, D., & Heldman, C. (2017). Causes and consequences of corruption: An overview of empirical results. IW-Report, No. 2/2017.

these gaps, at the expense of moral leadership, fair competition, and the welfare of society. The lack of clear reporting standards allows companies to falsify financial statements and cover illicit transactions⁴⁵. Enron's scandal is emblematic because the company exploited accounting loopholes to hide debt and inflate profits⁴⁶.

A toxic or defective corporate culture can either directly or indirectly encourage corruption, compromising the organization's integrity through the normalization of unethical practices and lack of ethical leadership. It is important to have clearly company regulations and ethical codes so that employees can discern the boundaries between appropriate and inappropriate behaviour. Furthermore, inadequate whistleblower protections may boost the number of deviant conducts since staff people may remain silent and allow wrongdoing to go unchecked out of fear of reprisals if they disclose corrupt practices.

Another possible cause can be the profit-driven pressure, that occurs to employees and executives pushed to participate in unethical or corrupt acts under intense pressure to fulfil financial targets, increase profits, or beat rivals. This pressure finds its origins in high investor expectations, competitive market conditions, or aggressive performance-based compensation structures. It is proven that companies that prioritize short-term financial gains over long-term sustainability create fertile ground for corruption⁴⁷.

⁴⁵ Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.

⁴⁶ Healy, P. M., & Palepu, K. G. (2003). The fall of Enron. *Journal of Economic Perspectives*, 17(2), 3–26.

⁴⁷ Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.

1.6 – Consequences

Corporate corruption has significant consequences both on an economic and social level. This practice may result in a domino effect, harming business, economic system and the community in several ways.

The clandestine nature of corrupt or dishonest conduct disrupts, or at minimum obstructs, the essential flow of information and transparency that ought to define any enterprise. It is logical that organizations with immoral practices will likely exhibit reduced transparency to conceal such conduct. By reducing the quality of managerial choices, undermining trust in the company's knowledge, encouraging inefficiencies, cutting R&D and investments, and ultimately hurting business productivity, corruption makes business management worse⁴⁸.

From a global point of view, it represents a damage to international trade because corrupted companies may face restrictions or bans from international markets and an increasing volatility, especially in developing economies.

Some studies on the effects of corporate corruption have focused their research on the entrepreneurial field, deepening the area of economic growth and corruption, and their results on it are conflicting.

There are two different schools of thought: the “sand-the-wheels” argument and the “grease-the-wheels” viewpoint⁴⁹.

⁴⁸ D. Athanasouli, A. Goujard, 2015, “Corruption and Management Practices: Firm-Level Evidence”, *Journal of Comparative Economics*, 43(4), 1014-1034

⁴⁹ Bardhan, P. (1997). Corruption and development: A review of issues. *Journal of Economic Literature*, 35(3), 1320–1346.

The “sand-the-wheels” theory, on one hand, states that corruption prevents economic development and efficiency, discourages investment and creates trade friction⁵⁰.

In this framework, corruption is linked to sand being thrown into the wheels of an economic or administrative system, causing it to function less effectively. This perspective points out that the main effects of corruption on the economic and social levels are numerous.

Firstly, it results in inefficiency in resource allocation, as those forms of bribery often ends out dislocating resources on unproductive investments instead of productive activities, and erosion of trust, which contributes to a vicious cycle whereby investments are even further disincentivized and therefore economic growth collapses.

Secondly, additional costs can represent a direct consequence of corruption, due to the payment of bribes in order to secure contracts and agreements: those costs are then shifted onto final consumers, businesses and governments⁵¹.

Also, the corruptive phenomenon may cause administrative inefficiency, as a result of misallocation of resources, officials distracted from their duties, proliferation of rules and bureaucracy in order to prevent corruption, loss of motivation and meritocracy in favour to favouritism and delays in processes.

Lastly, the most serious injury of corporate corruption is the rise of inequality, since corruption tends to benefit a small group of individuals

⁵⁰ La Rocca, M., La Rocca, T., Fasano, F., & Sanchez-Vidal, F. J. (2023). From the top down: Does corruption affect performance?

⁵¹ Kaufmann, D., & Vicente, P. C. (2011). Legal corruption. *Economics & Politics*, 23(2), 195–219.

while harming the broader population and leaving marginalized groups further behind⁵².

This thesis emphasizes how corruption impairs long-term development, loses society money and makes it more difficult for economic institutions to operate effectively. It also highlights how crucial it is to fight corruption in order to advance equity, effectiveness, and confidence in government and economic institutions.

According to the “grease-the-wheels” theory⁵³, on the other hand, corruption can work as an economic catalyst by fostering the establishment of new enterprises in nations where conducting business is impeded by several obstacles, like stringent regulations and credit limitations, among others. In accordance with Lui’s studies⁵⁴, bribery facilitates trade and foreign direct investment that would not occur otherwise in some developing countries.

Corruption creates a grease-the-wheel effect by enabling businesses to bypass governmental constraints, hence streamlining commercial procedures and processes. Also, bribery has been demonstrated to foster entrepreneurial innovation and enable residents to obtain services that were previously unavailable owing to inefficient policy⁵⁵.

Therefore, this argument posits that corruption can, in some cases, facilitate economic activity by serving as a lubricant to counteract the flaws brought

⁵² Rose-Ackerman, S. (1999). *Corruption and government: Causes, consequences, and reform*. Cambridge University Press.

⁵³ Kaufmann, D., & Wei, S. J. (1999). Does "grease money" speed up the wheels of commerce? NBER Working Paper No. 7093.

⁵⁴ Lui, F. (1985). An equilibrium queuing model of bribery. *Journal of Political Economy*, 93, 760–781.

⁵⁵ Cooray, A., & Schneider, F. (2018). Does corruption throw sand into or grease the wheels of financial sector development? *EconPapers*, 177(1), Article 6.

on by a rigid and bureaucratic system that restricts business activity. For example, in poorly governed situations, bribery may expedite processes or guarantee access to essential resources.

Ayaydn and Hayaloglu's research (2014)⁵⁶ on the effect of corruption on firms' growth, with a modest sample of 41 manufacturing firms from Turkey, confirm the existence of a positive correlation between corruption levels and business development.

However, Kaufman and Wei (1999) state that while in a partial equilibrium framework, where bureaucratic load and delay are exogenous, the payment of bribes may assist enterprises in alleviating the effective burden and delay encountered, in a more general equilibrium more bribe payment will not be associated with less delay and lower burden. Their studies and data provide no evidence to substantiate the "grease" hypothesis and no evidence that bribery inside the corporate sector contributes to a reduction in time wastage or capital expenditures.

Although the "grease-the-wheels" hypothesis recognizes possible short-term advantages in certain situations, most economists and policymakers prefer the "sand-the-wheels" perspective⁵⁷. Any short-term benefits, indeed, are outweighed by the long-term consequences of corruption, which include inequity, inefficiency, and a decline in confidence.

⁵⁶ Ayaydin, H., & Hayaloglu, P. (2014). The effect of corruption on firm growth: Evidence from firms in Turkey. *Asian Economic and Financial Review*.

⁵⁷ Méon, P. G., & Sekkat, K. (2005). Does corruption grease or sand the wheels of growth? *Public Choice*, 122(1-2), 69-97

CASE STUDY: SIEMENS

This chapter will examine the Siemens corruption scandal, one of the most important corporate ethical violations in modern European business history. It seeks to explore the origins, scope and consequences of the scandal by examining how systematic laps in governance, compliance and culture allowed extensive bribery. The chapter investigates Siemens' change after the incident and evaluates the success of its post-crisis compliance measures by using both internal corporate papers and outside legal actions. Moreover, thanks to a focus on the Argentine landscape, the stakeholder theory will try to assess the ethical repercussions of Siemens' activities there. Eventually, the study will also cover Siemens' financial performance in the recent years (2022-2024).

2.1 – Company overview

Siemens AG is a German multinational conglomerate headquartered in Munich and renowned for its contributions to automation, digitization, and electrification as well as its technological innovations. Founded in Berlin in 1847⁵⁸ by Werner von Siemens and Johann Georg Halske, Siemens constructed Germany's first long-distance telegraph line between Berlin and Frankfurt in 1848. The discovery of the dynamo-electric principle in 1866 by Werner von Siemens paved the way for innovations in electrical engineering⁵⁹. This led to the development of power generation and distribution technologies, solidifying Siemens' role in electrification. In 1966, Siemens & Halske AG, Siemens-Schuckertwerke and Siemens-Reiniger-Werke merged to form Siemens AG, unifying their expertise in

⁵⁸ La Storia di Siemens in Italia, Siemens Italia, n.d., Retrieved from <https://www.siemens.com/it/it/azienda/chi-siamo/storia.html>

⁵⁹ Encyclopaedia Britannica. (n.d.). Siemens AG. Britannica Money. Retrieved April 2, 2025, from <https://www.britannica.com/money/Siemens-AG>

telecommunications, power engineering, and medical technology.⁶⁰ The company has then grown to become one of the world's largest industrial manufacturing firms, operating in various sectors including automation, energy, healthcare, infrastructure, and digital industries.⁶¹

Siemens provides a wide range of products and services, from power generation and distribution systems to medical diagnostic equipment and industrial automation solutions.⁶² With a varied portfolio that includes energy solutions, medical technology (via Siemens Healthineers), industrial automation, and mobility systems including trains and rail infrastructure, the corporation is present in more than 190 countries, investing heavily in research and development, ranking among the largest patent holders globally⁶³. In the last years, Siemens has prioritized digital transformation, industry 4.0, technology adoption and sustainability.

2.2 – Outbreak of the scandal in 2006

The Siemens misconduct of the 1990s and 2000s stands as one of the most significant corporate scandals in modern European history.⁶⁴ It involved systemic bribery practices that spanned continents, top-tier executives and entire divisions within the company. Siemens AG, a German multinational conglomerate and one of the world's foremost engineering firms, became the subject of a multi-jurisdictional

⁶⁰ Power Magazine. n.d., The Big Picture: Siemens Corporate History, Retrieved from <https://www.powermag.com/the-big-picture-siemens-corporate-history>

⁶¹ Bloomberg, n.d., Siemens AG - Company profile and news. Bloomberg, Retrieved 5/3/2025 from <https://www.bloomberg.com/profile/company/SIE%3AGR>

⁶² Siemens Energy. (n.d.). History. Retrieved March 20, 2025, from <https://www.siemens-energy.com/global/en/company/about/history.html>

⁶³ Siemens AG. (n.d.). History. Siemens. Retrieved March 20, 2025, from <https://www.siemens.com/global/en/company/about/history.html>

⁶⁴ Press Release, Dept.of Justice, Siemens AG and Three Subsidiaries PleadGuiltytoForeign Corrupt Practices Act Violations and Agree to Pay \$450 Millionin Combined Criminal Fines (Dec.15, 2008), available at http://www.usdoj.gov/criminal/jpr/press_releases/2008/12/12-15-08siemans-guilty.pdf (discussing the U.S. Department of Justice (DOJ) terming the Siemens case as "unprecedented in scale and geographic scope").

investigation involving German and United States authorities. In 2006, the Siemens corruption scandal emerged, culminating in 2008 with an unprecedented fine. The exposure of the wrongdoing not only exposed extensive bribery and financial misconduct but also illuminated systemic weaknesses in corporate governance, internal controls and ethical culture. Siemens was eventually compelled to pay \$1.6 billion in fines and disgorgement—the largest penalty for corporate bribery until the fall of 2016.⁶⁵

The scandal erupted publicly on November 15, 2006, when around 200 German police officers conducted raids at Siemens' headquarters in Munich and other facilities. The Munich Public Prosecutor was investigating substantial illicit cash transfers intended for bribing foreign authorities following the receipt of an anonymous letter, perhaps from a dissatisfied employee.⁶⁶ The investigation was prompted by an anonymous whistleblower's letter, which eventually led to the exposure of widespread off-the-books cash deposits used to corrupt foreign officials. The investigation, originally targeting alleged misappropriation of funds, soon uncovered systemic bribery schemes involving more than €1.3 billion in illegal payments between the mid-1990s and 2006. These payments were not incidental or isolated: rather, they were part of a deliberate and organized system of off-the-books accounts, shell companies, and intermediaries, often operating through Siemens' regional subsidiaries and international offices. Authorities later found that Siemens had made over 4,200 separate corrupt payments to secure contracts in countries such as Venezuela, Nigeria, Russia, China and Greece.⁶⁷

⁶⁵ Berghoff, H. (2018). "Organized irresponsibility"? The Siemens corruption scandal of the 1990s and 2000s. *Business History*, 60(3), 423–445.

⁶⁶ Leyendecker, Hans. *Die Große Gier: Korruption, Kartelle, Lustreisen: Warum unsere Wirtschaft eine neue Moral braucht* [Endless Greed: Corruption, Pleasure Trips. Why our Economy Needs new Moral Standards]. Reinbek: Rowohlt, 2009.

⁶⁷ Blanc, R., Castelo Branco, M., Cho, C. H., & Sopt, J. (2013). *In search of disclosure effects of the Siemens AG's corruption scandal* (Working Paper No. 15). OBEGEF – Observatório de Economia e Gestão de Fraude.

At the beginning, Siemens' responses were dismissive and the company attributed the allegations to "mishaps of individuals" and described those involved as a "gang" of rogue actors. However, the scope of the malfeasance soon became impossible to ignore. The U.S. Securities and Exchange Commission (SEC) alleged that from 2001 to 2007, Siemens had made at least 4,283 payments worth \$1.4 billion to bribe foreign officials, with a further 1,000+ payments potentially linked to other unlawful purposes.⁶⁸

Ultimately, Siemens agreed in 2008 to a plea deal in which it admitted to violations of the Foreign Corrupt Practices Act (FCPA)—not explicitly bribery, but the misrepresentation of accounting practices—and paid \$800 million to U.S. authorities and another €800 million to German authorities.⁶⁹

In this scandal, there are several causes and enabling conditions, such as economic and competitive pressure, cultural framework and weak governance.

The major cause of Siemens' corruption problem has its roots in the economic pressure. The company, particularly its Communications (COM) division, faced declining profitability because of globalization, market liberalization, and increasing competition in the 1990s⁷⁰. Once protected by national monopolies and cartels, the telecommunications sector became fiercely competitive. This department by itself accounted for about 60% of all bribery payments found from 1999 to 2006. In tough

⁶⁸ US District Court for the District of Columbia, *SEC v. Siemens* (case 1:08-cv-02167), Complaint, 12 December 2008, 13–14, accessed 20 March 2025, <https://www.sec.gov/litigation/complaints/2008/comp20829.pdf>.

⁶⁹ DoJ, *US v. Siemens*, Court Docket Number: 08-CR-367-RJL, Information, 19–20, accessed 28 February 2014.

⁷⁰ Siemens AG, Annual Report for 2008/09, part 2, 201–202.

markets where public procurement processes were opaque and vulnerable to political influence, corruption was used to secure contracts. Sometimes, contracts were only given after foreign officials were paid under meticulously planned schemes. The pressure to maintain market share and general dominance in emerging economies incentivized corruption and immoral methods. For example, bribes were paid to win contracts in countries such as Nigeria and Greece, where margins were described as “simply fabulous”. In total, COM accounted for 58% of the dubious payments uncovered by authorities.⁷¹

The German judge in charge of the case, Peter Noll, coined the catchy phrase “organized irresponsibility”⁷², whereby accountability was diffused and systemic misconduct was effectively tolerated by senior leadership. The term implies that management had conspired to prevent efficient controls and therefore facilitated and promoted corruption. Therefore, this scandal is the result of a systemic widespread behaviour and it’s not the consequence of an individual action. Perhaps the most systemic failure was the absence of effective internal controls and oversight mechanisms. Siemens operated more than 2,000 legal entities worldwide, with over 6,000 separate bank accounts. These structures provided ideal conditions for the concealment of illegal transactions and made it difficult for auditors or regulators to track funds. Furthermore, Siemens had no centralized register for external consultants the company board repeatedly declined proposals for compliance audits.

Siemens’ internal culture played a crucial role in enabling the scandal because a strong emphasis on performance, combined with hierarchical structures and opaque reporting systems, fostered a compliance-blind environment. In the decades following World War II, Siemens operated in

⁷¹ OECD, OECD Foreign Bribery Report, 21.

⁷² Peter Noll, quoted in Frankfurter Allgemeine Zeitung, 28 July 2008.

markets where bribery was normalized. By the 1990s, 30 of the 35 most corrupt countries accounted for nearly 38% of Siemens' sales.⁷³

Managers who participated in illicit transactions were often seen as trustworthy and committed, a by-product of Siemens' tightly knit and opaque organizational culture. Internally, many employees, particularly in the sales and procurement departments, viewed bribery as an expected practice. These beliefs were further reinforced by norms of silence and loyalty within the company. Whistleblowing was discouraged, and those who engaged in unethical practices were often perceived as loyal to Siemens' interests. Compliance systems were understaffed and largely symbolic. As Judge Peter Noll later noted, the compliance department was akin to "firefighters fighting a blaze with toothbrush mugs".⁷⁴ The ethical failure was not simply about individual behaviour but reflected broader governance failures at the board level. The supervisory board failed to ask critical questions, ignored red flags and lacked the independence necessary to hold management accountable. This failure of oversight contributed significantly to the persistence and scale of the misconduct.

Siemens' senior leadership was deeply implicated in the culture that enabled the scandal. While a significant number of Siemens' mid-level managers and regional executives were involved in the bribery schemes, the company's top leadership bore ultimate responsibility. The approach at the top was ambiguous: not a single employee was fired for compliance-related issues before 2006, and even after infractions, implicated workers were often given generous severance packages and re-hired later.

Heinrich von Pierer, who served as former CEO until 2005 and then as

⁷³ Transparency International, Corruption Perception Index 1996; SAA 24906, Erweiterte Landesberichterstattung 1996/97 – Europa; SAA 24908, Erweiterte Landesberichterstattung 1996/97 – Asien/Pazifik; SAA 24909, Erweiterte Landesberichterstattung 1996/97 – Afrika/übrige Länder; SAA 24950, Eckdatenblätter 1997.

⁷⁴ Peter Noll, quoted in Leyendecker, Gier, 147.

chairman of the supervisory board, resigned in 2007 amid public and legal pressure. Klaus Kleinfeld⁷⁵, his successor, also stepped down but was not formally implicated in any wrongdoing.

However, responsibility was not confined to the executive suite. A significant portion of Siemens' middle management, particularly in sales and regional offices, was involved in setting up and maintaining slush funds and bribery networks. These networks relied on mutual trust and secrecy, making them difficult to detect.

Within the company, the scandal was initially portrayed as the result of rogue employees or isolated violations.⁷⁶ However, as investigations proceeded, it became clear that the bribery schemes were part of an institutionalized system with the knowledge, if not direct involvement, of high-ranking officials.⁷⁷

Siemens initially attempted to downplay the severity of the scandal.⁷⁸ But after arrests, public outcry, and international investigations—including by the U.S. Department of Justice (DoJ)—the company shifted course.⁷⁹ In December 2006, Siemens' audit committee hired the U.S. law firm Debevoise & Plimpton, supported by Deloitte, to conduct a full-scale internal investigation. Over 200 lawyers and forensic accountants reviewed 100 million documents, conducted over 2,000 interviews, and analysed 10 million bank records.⁸⁰

⁷⁵ Klaus Kleinfeld, in Siemens AG, Annual Report 2005, 9.

⁷⁶ Berghoff, H. (2018). "Organized irresponsibility"? The Siemens corruption scandal of the 1990s and 2000s. *Business History*, 60(3), 423–445.

⁷⁷ Transparency International. (2009). *Transparency in corporate reporting: Assessing the world's largest companies*.

⁷⁸ Sidhu, K. (2009). Anti-corruption compliance standards in the aftermath of the Siemens scandal. *German Law Journal*, 10(8), 1343–1350.

⁷⁹ U.S. Department of Justice. (2008). *Siemens AG and three subsidiaries plead guilty to Foreign Corrupt Practices Act violations and agree to pay \$450 million in combined criminal fines*.

⁸⁰ Blanc, R., Castelo Branco, M., Cho, C. H., & Sopt, J. (2013). *In search of disclosure effects of the Siemens AG's corruption scandal* (Working Paper No. 15). OBEGEF.

Although Siemens adopted compliance reforms after 2000, they were half-hearted. The board rejected efforts to audit consultants, despite knowing that many served as bribery intermediaries. Siemens had over 2,000 legal entities and 6,000 bank accounts globally, which made it easy for mid-level managers to hide illicit transactions.⁸¹

By mid-2007, Siemens had replaced most of its executive board. A new CEO, Peter Löscher, became the first external appointee in the company's 160-year history. He prioritized compliance, stating that only "clean business is Siemens business". Peter Y. Solmssen, an American legal expert formerly with General Electric, was appointed General Counsel. Together with Löscher, he led the transformation from within, earning the trust of U.S. and German authorities.

Siemens introduced a robust compliance system based on the three pillars: "prevent, detect, respond."⁸² It established an independent compliance department, implemented rigorous training and encouraged whistleblowing via protected channels.

On December 15, 2008, Siemens reached a landmark settlement with U.S. and German authorities. The company admitted to five FCPA violations, agreed to pay \$1.6 billion, and avoided criminal charges for bribery.⁸³

Crucially, Siemens was not barred from government contracts, which preserved its access to essential markets. The company also avoided further legal battles that could have stretched over a decade.

⁸¹ U.S. Securities and Exchange Commission (SEC). (2008). *Litigation release No. 20829: SEC charges Siemens AG for engaging in worldwide bribery.*

⁸² Siemens AG. (2023). *Annual Report 2023.*

⁸³ SEC. (2008). *Litigation Release No. 20829.*

2.3 – Compliance system of Siemens

The company had a five-factors compliance model which enabled the spread of corruption and, as a consequence, the outbreak of the scandal. These five factors include bribery as a “standard operating procedure”⁸⁴, sophisticated schemes, involvement of senior management, broad coverage of operating groups and amount of bribe payments⁸⁵.

First of all, bribery appeared to be quite common and widespread at Siemens: it has been proved that the company’s employees could get up to one million Euros from the cash desks and use post-it notes to sign payment authorizations.

The second key factor in the Siemens’ compliance landscape is the use of several methods⁸⁶, such as shell companies and off-the-books “slush funds”, to conceal the intention behind and final beneficiary of illegal payments. Also, the company frequently employed consultants and agents as middlemen to convey illegal payments to the final recipients in addition to slush cash.

The involvement of senior management, up to the board level, is closely linked to bribery as a “standard operating procedure”: as Post-it notes confirm, senior managers were directly involved in the policy of making illicit payments.

⁸⁴ Press Release, Dept. of Justice, Siemens AG and Three Subsidiaries Plead Guilty to Foreign Corrupt Practices Act Violations and Agree to Pay \$450 Million in Combined Criminal Fines (Dec. 15, 2008), available at http://www.usdoj.gov/criminal/jpr/press_releases/2008/12/12-15-08siemens-guilty.pdf (discussing the U.S. Department of Justice (DOJ) terming the Siemens case as “unprecedented in scale and geographic scope”).

⁸⁵ Sidhu, K. (2009). *Anti-corruption compliance standards in the aftermath of the Siemens scandal*. German Law Journal, 10(8), 1343–1350.

⁸⁶ *Statement of Siemens Aktiengesellschaft: Investigation and Summary of Findings with respect to the Proceedings in Munich and the US*, SIEMENS, Dec. 15, 2008, available at <http://wl.siemens.com/press/pool/delevents/2008-12-PK/summary-e.pdf>

The fourth characteristic is the broad coverage of operating groups, since corruption schemes was not isolated to some business but widespread, due to the type of Siemens' businesses⁸⁷ and the country in which the company operated.

Lastly, the amount of bribe payments is approximately 1.36 billions U.S. dollars, including the money to corrupt foreign officials. This sum is the largest ever found out as bribe payments.

These factors contribute to render the Siemens' case one-of-a-kind, both for the widespread corruption within the company's procedures and for the amount of bribe paid.

Following the high-profile corruption scandal that engulfed Siemens AG, the company underwent a significant and transformative overhaul of its compliance system. The scandal forced Siemens to not only settle legal proceedings with fines totalling more than €2 billion, but also to confront systemic flaws in its corporate culture and oversight mechanisms. In response, Siemens developed a comprehensive, robust compliance framework that has since been considered a benchmark for anti-corruption standards in the corporate sector.

The foundation of Siemens' post-scandal compliance strategy was a thorough internal investigation, which allowed the company to fully understand the breadth and structure of the corrupt practices it had previously enabled. This investigation involved 1,750 employee interviews

⁸⁷ Complaint at 14, *U.S. Sec. and Exch. Comm'nv. Siemens Aktiengesellschaft* (D.D.C. 2008) (No.1:08-cv-02167), available at <http://w1.siemens.com/press/pool/de/events/2008-12-PK/SEC.pdf> (finding low ranked countries pursuant to the Corruption Perception Index (CPI) like Nigeria, China, Venezuela, Russia, Vietnam, Bangladesh are countries were according to findings of the SEC Siemens paid bribes)

and the review of over 14 million documents, indicating the depth of the inquiry and the company's commitment to reform.⁸⁸

A cornerstone of the new compliance system was the establishment of a global compliance organization staffed by more than 500 full-time officers. Siemens also created a dedicated compliance investigation unit headed by a former Interpol official, reinforcing its intention to integrate law enforcement expertise into corporate governance. This structural change was complemented by extensive employee training: over one-third of Siemens' global workforce received education on anti-corruption policies, equipping staff with both the knowledge and ethical standards necessary to identify and avoid illicit conduct.⁸⁹

In addition to human resources and training, Siemens implemented a suite of internal controls and technological solutions, together with setting rigorous internal audit and reporting mechanisms.

Leadership played a crucial role in this transformation: Siemens embraced a new tone at the top by replacing senior executives involved in corrupt practices, signalling a break from the past and a commitment to ethical leadership. Furthermore, Siemens appointed a general counsel with board-level responsibility for compliance matters, ensuring that ethics and legal oversight were central to corporate decision-making.

The Siemens compliance model drew heavily on U.S. legal standards, particularly those outlined in the U.S. Federal Sentencing Guidelines (USSG)⁹⁰, which emphasize the need for a structured, actively

⁸⁸ Sidhu, K. (2009). *Anti-corruption compliance standards in the aftermath of the Siemens scandal*. German Law Journal, 10(8), 1343–1350.

⁸⁹ Sidhu, K. (2009). *Anti-corruption compliance standards in the aftermath of the Siemens scandal*. German Law Journal, 10(8), 1343–1350.

⁹⁰ Stuart H. Deming, *The foreign corrupt practices act and the new international norms* 350 (2006); Christoph Partsch, *the foreign corrupt practices act (fcpa) der USA* 41 (2007).

implemented compliance program with internal controls, training, and anonymous reporting channels. While German legal requirements, are less prescriptive, Siemens' adoption of U.S.-style measures ensured alignment with both jurisdictions and set a high compliance bar for multinational corporations.

In conclusion, Siemens' response to its corruption crisis has not only helped the company restore its reputation but also influenced global corporate compliance standards.⁹¹ Though some of its practices may be considered excessive for certain firms, Siemens' model demonstrates the depth of transformation required to rebuild credibility and ensure legal and ethical accountability in international business.

2.4 – Siemens' violation of business ethics in Argentina based on Stakeholder Theory

Business ethics is the implementation of ethical principles in commercial endeavours: it refers to moral principles, policies and values that govern the way companies and individuals engage in business activity.^{92,93} It can be defined as the set of values that goes beyond legal requirements to establish a code of conduct that drives employee behaviour at all levels and helps build trust between a business and its customers.

The growing awareness that a company, in order to survive in the long period, cannot only generates profits, combined with the rising interest in the social impact, have led to a new approach, more focused on ethics and business values.

⁹¹ See Peter von Blomberg, *Siemens Gnadenlos*, DIE WELT ONLINE, Jan.6, 2009, http://www.welt.de/die-welt/article1854420/Siemens_gnadenlos.html.

⁹² Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2021). *Business ethics: Ethical decision making and cases* (13th ed.). Cengage Learning.

⁹³ Crane, A., & Matten, D. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization* (5th ed.). Oxford University Press.

Bribery is one of the most dramatic violations of business ethics because it undermines fairness and transparency and distorts decision-making processes, often leading to inefficient allocation of resources, loss of public trust and damage to a company's reputation.⁹⁴

The Stakeholder Theory (Freeman, 1984) represents the theoretical foundation for the study of business ethics since it argues that corporations should consider the interests of all stakeholders when making decisions, not only the shareholders' profit.⁹⁵ Stakeholders can be defined as those who have a direct influence over the company's existence because they impact the organization's scope, success and business actions.⁹⁶ The stakeholders have a close relationship with the enterprise's development, share the operation risk, pay a portion of the business's operating expenses, oversee and limit the business, and require that decisions made by the enterprise take their interests and limitations into account.⁹⁷ The amount of stakeholder goes together with the size of the company: therefore, the biggest the company's size, the more the stakeholders involved. According to Freeman, businesses should take into account not only stockholders, but also those whose stake is more representational of public than direct. His theory serves as an attempt to address the "Principle of who or what really counts". Many studies believe that the Stakeholder Theory can be propaedeutic to the study of CSR: Carroll (1991) argues that it can be used to identify the orientation of

⁹⁴ Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2021). *Business ethics: Ethical decision making and cases* (13th ed.). Cengage Learning.

⁹⁵ Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

⁹⁶ Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. Yale University Press.

⁹⁷ Carroll, Buchholtz (2002). "Business & Society: Ethics and Stakeholder Management". Mason. Thomson Learning.

CSR and by the recognition of each relevant stakeholder group the range of CSR can be identified.⁹⁸

Stakeholders can be divided into two groups, according to the environment they belong.⁹⁹ Internal stakeholders include employees, managers and owner; external stakeholders are suppliers, customers, society, government, creditor, shareholders, competitors, communities, academics and NGOs.

The Siemens's violation of business ethics in Argentine offers an interest insight for analysing the impact of bribery on the stakeholders involved.¹⁰⁰

When in the early 1990s, Argentine government, ruled by Menem, intended to implement all electronic Documentos Nacionales de Identidad for the whole citizenship, Siemens bribed Argentine government officials with 70 million U.S. dollars in order to secure the contract, for a total of 1.26 billion U.S. dollars.¹⁰¹ While the Menem government signed the contract, the situation appeared to change when De La Rúa became president, since it turned out that the price of the electronic national IDs was double the government's estimation and De La Rúa cancelled the contract. However, because of the economic and political crisis, a new president succeeded and the contract with Siemens was secured again, with additional bribes for more than 27 million U.S. dollars paid until 2004. Moreover, during an arbitration procedure to recover costs and

⁹⁸ Carroll, A. B. (1991). *The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders*. *Business Horizons*, 34(4), 39–48.

⁹⁹ O'Dwyer, B. (2005). Stakeholder democracy: Challenges and contributions from social accounting. *Business Ethics: A European Review*, 14(1), 28–41.

¹⁰⁰ Zhu, W., & Fu, L. (2012). *A case study of Siemens' violation of business ethics in Argentine based on stakeholder theory*. *Global Journal of Management and Business Research*, 12(13), 1–9. Global Journals Inc. (USA).

¹⁰¹ Blanc, R., Castelo Branco, M., Cho, C. H., & Sopt, J. (2013). *In search of disclosure effects of the Siemens AG's corruption scandal* (Working Paper No. 15). OBEGEF – Observatório de Economia e Gestão de Fraude

profits from a terminated contract, Siemens made payments to suppress evidence of corruption.

According to Freeman, the stakeholders impacted by Siemens' misconduct are its shareholders, employees, suppliers, competitors, local community, Argentine government and society.¹⁰² With the bribery, Siemens' close environment would benefit but only in the short term: its shareholders would see an increase in profit and so in their market shares, its employees would expect a higher salary, its suppliers would grow in terms of orders and profit, and ultimately the local community would have more jobs and employment, together with additional tax revenues. While all of them would experience an improvement in the short run, Argentine government and local community were negatively affected by the bribery. It would lower the freedom of choice and if the cost of each electronic ID reported by Siemens is twice what the government estimated, the government will have to settle up for the hidden payment through increased expenditure, resulting in a larger loss of money.¹⁰³ Certainly, the bribery would weaken the authority and effectiveness of laws and regulations and it undermines government efforts, harms the image of the government and erodes public trust. From the local community side, this corruptive action would result as a failure because the higher costs of the contract would move resources from a more desirable alternative and it would lead to an increase in the cost of transaction, causing higher prices for the citizens. Moreover, as the bribery destroys public trust, it would rot the social conduct and discourage businesses with good compliance to regulations. The greater expenditure on electronic national IDs would harm taxpayers as well as undermine public support for governments and,

¹⁰² Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. Yale University Press.

¹⁰³ Zhu, W., & Fu, L. (2012). *A case study of Siemens' violation of business ethics in Argentina based on stakeholder theory*. *Global Journal of Management and Business Research*, 12(13), 1-9. Global Journals Inc. (USA).

in the long period, once the contract is over, it would also damage Siemens' employers, suppliers and shareholders.¹⁰⁴

In conclusion, business ethics serves as a moral compass for corporate action that goes beyond simply legal compliance, building trust and long-term viability. The Siemens case in Argentine exemplifies how ethical transgressions, including as bribery, can produce short-term profits for parties while causing greater damage. Siemens jeopardized the integrity of public institutions, eroded stakeholder trust and distorted the competitive landscape by putting profit ahead of ethics.

2.5 – Financial Health and Performance Evolution (2022-2024)

This section aims to give an analysis of Siemens' financial health in the last three years, from 2022 to 2024.

In the context of financial performance and business strategy, the three most significant KPIs are: total revenue, net income and ROE (or ROCE).

Total revenue represents the total income generated from the sale of goods and services before deducting any expenses. It is the most fundamental indicator of a company's market position and competitive strength. The key drivers of revenue growth are market demand, product and service diversification, geographic expansion, pricing strategy and mergers and acquisitions.¹⁰⁵

¹⁰⁴ Zhu, W., & Fu, L. (2012). *A case study of Siemens' violation of business ethics in Argentine based on stakeholder theory*. Global Journal of Management and Business Research, 12(13), 1–9. Global Journals Inc. (USA).

¹⁰⁵ White, G. I., Sondhi, A. C., & Fried, D. (2003). *The analysis and use of financial statements* (3rd ed.). John Wiley & Sons.

Net Income is the bottom-line profit remaining after all expenses (including operating costs, taxes, and interest) have been deducted from revenue.¹⁰⁶

Net Income = Total Revenue – Operating Expenses – Interest – Taxes

Revenue growth, cost efficiency, tax strategy and financial leverage are the key drivers of net income.

ROE is an index that measures how effectively a corporation is generating profits from shareholder equity. It reflects the company's ability to convert investments into profits.¹⁰⁷

$$\text{ROE} = \frac{\text{Shareholder Equity}}{\text{Net Income}} \times 100$$

According to its strategic implications, a high ROE reflects strong profitability and effective capital management. A consistently improving ROE suggests successful cost-cutting, strategic market focus and efficient use of shareholder capital.¹⁰⁸

The following table will provide a summary of Siemens' overall performance in the last three years.¹⁰⁹¹¹⁰¹¹¹

¹⁰⁶ Investopedia. (n.d.). *Net income: Definition, how to calculate, examples*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/n/netincome.asp>

¹⁰⁷ Investopedia. (n.d.). *Return on equity (ROE): Definition and formula*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/r/returnonequity.asp>

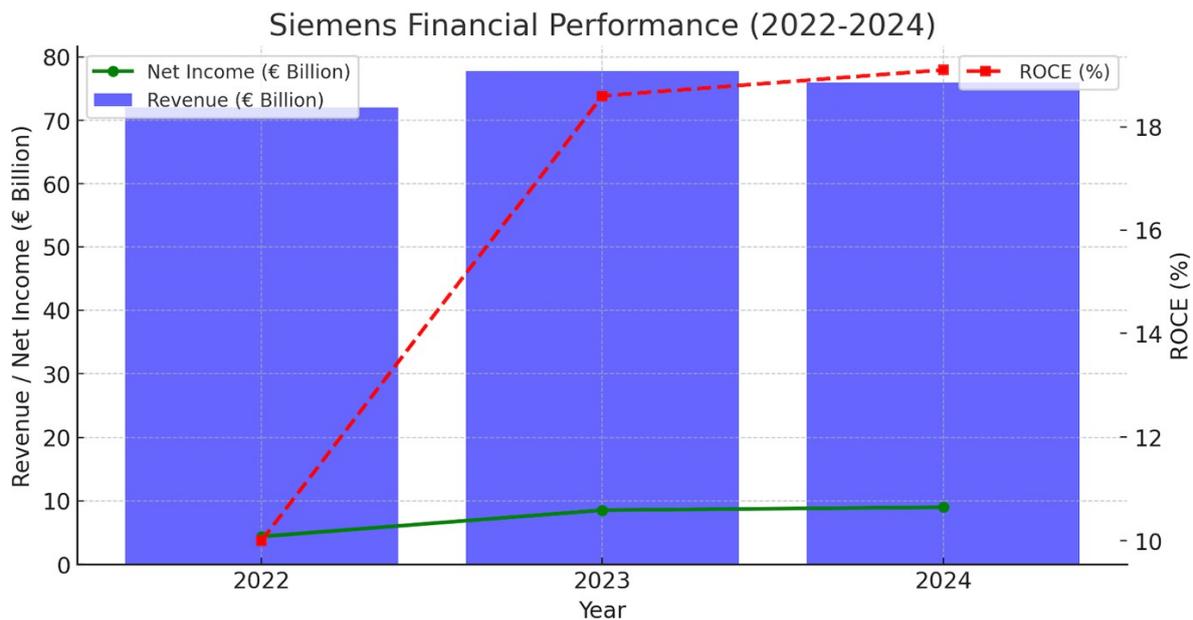
¹⁰⁸ Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2022). *Fundamentals of corporate finance* (13th ed.). McGraw-Hill Education.

¹⁰⁹ Siemens AG. (2022). *Siemens Annual Report 2022*.

¹¹⁰ Siemens AG. (2023). *Siemens Annual Report 2023*.

¹¹¹ Siemens AG. (2024). *Siemens Annual Report 2024*.

Fiscal Year (FY)	Total Revenue (€ Billion)	Net Income (€ Billion)	ROE (%)
2022	71.98	4.39	10.0
2023	77.77	8.53	18.6
2024	75.93	8.99	19.1



The graph above, together with the table, show that Siemens AG has demonstrated steady revenue growth over the three years, with revenue increasing from €71.98 billion in FY2022 to €77.77 billion in FY2023 and maintaining at around €75.93 billion in FY2024. In 2024, revenue slightly declined to €75.93 billion due to weaker automation market demand in Europe and China. Siemens' ability to maintain stable profitability despite modest revenue fluctuations reflects cost leadership and market discipline.

Net income showed a sharp rise, from €4.39 billion in FY2022 to €8.53 billion in FY2023, and further to €8.99 billion in FY2024, indicating strong profitability improvements.

Return on Equity (ROE) improved from 10.0% in FY2022 to 18.6% in FY2023, further increasing to 19.1% in FY2024, reflecting better capital utilization, strong profitability gains, operational efficiency and higher dividend payouts. Siemens' combination of organic growth (revenue) and operational efficiency (net income) supports a rising ROE. ROE improvements without excessive debt indicate that Siemens is investing efficiently and generating returns above the cost of capital.

Growing ROE and Net Income reflect Siemens' strategic shift toward digitalization, AI-driven automation and smart infrastructure.

The other Key Performance Indicators (KPIs) from 2022 to 2024 will be deeply summarized in the table below and will give a more accurate overview of Siemens' financial and business performance.

FY	Operating Profit (€ Billion)	Profit Margin (%)	Earnings Per Share (€)	Free Cash Flow (€ Billion)	Debt Ratio (%)	Equity Ratio (%)	R&D Expenses (€ Billion)	Dividend Per Share (€)
2022 ¹¹²	10.28	14.3	4.65	8.2	64	36	5.6	4.25
2023 ¹¹³	11.43	15.4	10.04	12.2	63	37	6.2	4.70
2024 ¹¹⁴	11.39	15.5	10.53	11.9	62	38	6.3	5.20

Profit margin is a common measure of the degree to which a company or a particular business activity makes money. Expressed as a percentage, it represents the portion of a company's sales revenue that it gets to keep

¹¹² Siemens AG. (2022). *Siemens Annual Report 2022*.

¹¹³ Siemens AG. (2023). *Siemens Annual Report 2023*.

¹¹⁴ Siemens AG. (2024). *Siemens Annual Report 2024*.

as a profit, after subtracting all its costs. It indicates how many cents of profit have been generated for each dollar of sales.¹¹⁵

$$\text{Profit Margin} = \frac{\text{Operating Profit}}{\text{Total revenue}} \times 100$$

Profit margins (FY 2022-2024) improved from 14.3% to 15.5%, supported by cost efficiencies and business focus on high-margin sectors.

Earnings per share (EPS) measures the company's profitability, as it indicates how much profit each outstanding share of common stock has earned. Therefore, the higher a company's EPS, the more profitable it is.¹¹⁶

$$\text{EPS} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{End-of-Period Common Shares Outstanding}}$$

EPS more than doubled from €4.65 (2022) to €10.53 (2024), showing strong profitability growth benefiting shareholders. The rise in EPS is the result of high net income growth and capital efficiency (stable or reduced share count, strong margins). High EPS also enables higher dividend distributions without harming reinvestment or liquidity. Siemens is converting its operating success directly into shareholder value—a core goal in any value-driven management strategy.

Free cash flow (FCF) represents the cash that a company generates after accounting for cash outflows to support its operations and maintain its capital assets. Unlike other measures that are used to analyze cash flow in a company, such as earnings or net income, free cash flow is a measure of profitability that excludes the non-cash expenses of the income

¹¹⁵ Investopedia. (n.d.). *Profit margin: Definition, types, formulas, and impact*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/p/profitmargin.asp>

¹¹⁶ Investopedia. (n.d.). *Earnings per share (EPS): Definition, formula, and example*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/e/eps.asp>

statement. It also includes spending on equipment and assets, as well as changes in working capital from the balance sheet. Strong FCF signals healthy operations, tight working capital management and efficient capital expenditure planning.¹¹⁷ Siemens' FCF peaked at €12.2B in 2023, demonstrating strong liquidity management and it means Siemens has a self-funding engine for growth and shareholder returns. In fact, it gives the company the flexibility to pay growing dividends, fund R&D and strategic acquisitions and lower the debt.

The term debt ratio refers to a financial ratio that measures the extent of a company's leverage. The debt ratio is defined as the ratio of total debt to total assets, expressed as a decimal or percentage.¹¹⁸ It can be interpreted as the proportion of a corporation's assets that are financed by debt. A ratio greater than 1 shows that a considerable amount of a company's assets is funded by debt, which means the firm has more liabilities than assets. A high ratio indicates that a corporation may be at risk of default on its loans if interest rates suddenly rise. A ratio below 1 means that a greater portion of a company's assets is funded by equity.¹¹⁹ On the other side, the equity ratio is a financial metric that measures the amount of leverage used by a company.¹²⁰ It uses investments in assets and the amount of equity to determine how well a company manages its debts and funds its asset requirements.

$$\text{Debt Ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

$$\text{Equity Ratio} = \frac{\text{Total equity}}{\text{Total assets}}$$

¹¹⁷ Lombardi Stocchetti, G., D'Alessio, I., & Colombo, S. (2023). *Analisi di bilancio*. Guerini e Associati.

¹¹⁸ Investopedia. (n.d.). *Debt ratio: Definition, formula, and example*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/d/debtratio.asp>

¹¹⁹ Lombardi Stocchetti, G., D'Alessio, I., & Colombo, S. (2023). *Analisi di bilancio*. Guerini e Associati.

¹²⁰ Investopedia. (n.d.). *Equity ratio: Definition, formula, and example*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/d/equityratio.asp>

Siemens reduced its debt ratio from 64% to 62%, improving its risk profile and strengthening financial stability. Siemens is demonstrating disciplined capital management, not overextending through borrowing. The rise in equity ratio (from 36% in 2022 to 38% in 2024) also reflects the retention of profits to strengthen the balance sheet. This creates room for strategic debt use in the future without threatening solvency, which is important during high-interest or recessionary periods.

Research and development (R&D) expenses are direct expenditures relating to a company's efforts to develop, design and enhance its products, services, technologies or processes. R&D offers companies a way to improve how they do business and what they offer customers.¹²¹ Since Siemens has invested in R&D even during uncertain economic periods, now R&D represents a larger share of revenue, indicating a deliberate pivot toward innovation-led growth. Siemens increased R&D expenses to €6.3B (2024), investing in automation and AI (Through Digital Industries), electrification and smart infrastructure and medical technology and digitalization (through Siemens Healthineers).

Dividend Per Share (DPS) is the total amount of dividends attributed to each individual share outstanding of a company. Calculating the dividend per share allows an investor to determine how much income from the company he or she will receive on a per-share basis. Dividends are usually a cash payment paid to the investors in a company, although there are other types of payment that can be received.¹²²

DPS= EPS x Dividend Payout Ratio

¹²¹ Investopedia. (n.d.). *Research and development (R&D) expenses: Definition and example*. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/r/research-and-development-expense.asp>

¹²² Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2022). *Fundamentals of corporate finance* (13th ed.). McGraw-Hill Education.

Siemens increased dividends per share from €4.25 in 2022 to €5.20 (proposed) in 2024, reflecting strong earnings growth. The increase in its dividend follows the rise in its earnings. Dividend payout is backed by strong FCF and net income and it reflects a financial maturity and a commitment to reward long-term shareholders.

In 2024, Siemens' operations were organized into five main reportable business segments: Digital Industries, Smart Infrastructure, Mobility, Siemens Healthineers, and Siemens Financial Services (SFS).¹²³ These segments, collectively referred to as Siemens' "Industrial Business," play a crucial role in driving the company's innovation and financial performance.

Digital Industries provides automation systems, industrial software, and digital solutions to discrete and process industries. Despite long-term growth drivers like digitalization and the shift to SaaS (Software as a Service) models, the segment faced challenges in 2024. Orders dropped by 12% to €17.0 billion, and revenue fell by 10% to €18.5 billion, largely due to destocking trends in the automation business and weakened global demand. However, its software business showed resilience with a 24% revenue increase. Segment profit decreased by 28% to €3.5 billion, and its profit margin dropped from 23.4% to 18.9%, reflecting a weaker revenue mix and reduced capacity utilization.¹²⁴

Smart Infrastructure integrates energy systems and building technologies, supporting the global transition to electrification and smarter buildings. This segment posted robust performance in FY2024. Orders grew by 8% to €24.0 billion, and revenue rose by 7% to €21.4 billion, driven by strong demand in electrification and electrical products, particularly from data center and energy sectors. Profit increased by 21% to €3.7 billion, with the profit margin improving from 15.4% to 17.3%. Growth was strongest

¹²³ Siemens AG. (2024). *Siemens Annual Report 2024*.

¹²⁴ Siemens AG. (2024). *Siemens Annual Report 2024*.

in the Americas and Europe, while China showed subdued activity. Smart Infrastructure's balanced portfolio across long- and short-cycle markets contributed to its resilience and growth.¹²⁵

Mobility focuses on rail transport solutions, including rolling stock, rail infrastructure, and related services. While orders declined by 23% to €15.8 billion from a record level in the prior year, revenue increased by 8% to €11.4 billion. This growth was supported by strong execution of existing projects and increased demand in all sub-segments, including services, which grew by 16%. Profit improved by 15% to €1.0 billion, with a profit margin of 8.9%. The segment continued to benefit from long-term global trends such as urbanization and decarbonization, supported by public investments in transportation infrastructure.¹²⁶

Siemens Healthineers, of which Siemens holds a majority stake, is a leading provider of medical technology and healthcare services. In FY2024, the segment generated orders of €24.8 billion (up 1%) and revenue of €22.4 billion (up 3%). Profit surged by 26% to €3.2 billion, with a profit margin increase from 11.7% to 14.2%. Growth was mainly driven by the Imaging and Varian businesses, while the Diagnostics segment declined due to reduced COVID-19 testing. Siemens Healthineers remains well-positioned in stable, recurring markets supported by demographic trends and the need for healthcare transformation.

Siemens Financial Services provides tailored financing solutions to Siemens' customers and business units. In 2024, SFS recorded earnings before taxes of €637 million, up from €563 million the previous year, reflecting strong results in both the debt and equity businesses.¹²⁷

¹²⁵ Siemens AG. (2024). *Siemens Annual Report 2024*.

¹²⁶ Siemens AG. (2024). *Siemens Annual Report 2024*.

¹²⁷ Siemens AG. (2024). *Siemens Annual Report 2024*.

SOFT LAW AND ANTI-CORRUPTION GOVERNANCE: CONCEPTUAL FOUNDATIONS AND EMPIRICAL EVIDENCE FROM EUROPE

The purpose of this chapter is to analyse the concept of soft law and examine its role in preventing and combating corruption, with a focus on the corporate context. In the first part, the legal and functional nature of soft law is clarified, distinguishing it from binding law (hard law) and illustrating its main characteristics: flexibility, the absence of formal constraints, and the ability to adapt quickly to dynamic contexts. These instruments, although not legally binding, exert significant normative influence through their impact on the expectations, reputation, and behaviour of states, companies, and international institutions. The second part of the chapter delves into the concrete use of soft law in the field of anti-corruption, highlighting how guidelines, codes of conduct, recommendations, and voluntary standards have been used by international organisations such as the OECD, UN, FATF, and EITI to promote integrity, transparency, and accountability. Relevant examples of soft instruments adopted by companies and governments are analysed, highlighting how such instruments contribute to both the prevention of corrupt phenomena and their indirect detection and sanctioning. In this framework, soft law is conceived as an essential complement to traditional regulation, offering more agile and cooperative solutions in an area - that of corruption - often eluding jurisdictional boundaries and regulatory rigidity.

In light of the growing use of non-binding regulatory instruments in global governance, this chapter introduces an empirical investigation into the actual impact of soft law on anti-corruption outcomes. This study tries to fill this vacuum by looking at whether using soft law tools leads to a big drop in the perception of corruption in a few European countries. The study's goal is to explore the idea that soft law might make the national government better off by utilizing panel data to build a regression model, thanks to tools

like voluntary standards, peer evaluations, and reputational incentives. The study looks at both numerical measures of how people think about corruption, and information about how agencies like the OECD, FATF, EITI, and the UN have officially adopted and used soft law techniques. In this way, it goes beyond simply describing things and adds to the discussion benefits and drawbacks of soft law in the fight against corruption through the use of evidence.

3.1 – Definition of soft law

In recent decades, international soft law has arisen throughout globalization, driven by the prevalence of global issues and supported by the expansion of international organizations, thanks to the advantages it offers over hard law.¹²⁸ The traditional dichotomy of law into binding (hard law) and non-binding (soft law) instruments has been increasingly nuanced in the context of supranational governance. This is particularly evident in the European Union (EU), where "soft law" instruments—such as recommendations, guidelines, and communications—have gained significant prominence in steering policy, shaping behaviour, and even influencing legal interpretations.

Most of the soft law instruments emerged at the end of the Cold War, with the dissolution of the Soviet bloc and the ascendance of Western countries. In this framework, soft law necessarily embodies the concepts and priorities advocated by Western governments and would be further reinforced within institutions dominated by the West.¹²⁹ The rise of soft law in modern global governance has significantly altered the processes of norm creation, dissemination, and enforcement.

¹²⁸ Jiang, K. (2010). The origin and influence of international soft law. *Contemporary World*, 2010(8), 49–50

¹²⁹ Voeten, E. (2021). *Ideology and international institutions*. Princeton University Press.

The term "soft law" generally refers to rules of conduct that are not legally binding, yet nonetheless affect behaviour, expectations, and decision-making: a system defined by the absence of the most typical legal features: inclusion in a legal system and binding force.¹³⁰

Soft law, however, resists a single, universally accepted definition. The concept has evolved in multiple legal and political contexts, each of which provides a nuanced view of what constitutes "softness" in legal norms. The most cited definition in European Union law is provided by Francis Snyder, who describes soft law as "rules of conduct which, in principle, have no legally binding force but which nevertheless may have practical effects" (Snyder, 1994)¹³¹ and explains that this concept produces tangible effects through political pressure, reputational concerns, or anticipatory compliance.¹³² Linda Senden refines this by highlighting the capacity of soft law to produce indirect legal and practical effects despite lacking binding force.¹³³

In international law, the distinction was famously articulated by Baxter (1980), who referred to soft law as non-treaty norms often formulated in vague language, adopted by non-binding procedures, or emanating from bodies without law-making authority. The emergence of soft law is frequently linked to the limitations of hard law in coping with globalization, complexity, and the involvement of non-state actors.¹³⁴

¹³⁰ Treccani. (n.d.). Soft law. In *Lessico del XXI Secolo*. Treccani. https://www.treccani.it/enciclopedia/soft-law_%28Lessico-del-XXI-Secolo%29/

¹³¹ Snyder, F. (1994). Soft law and institutional practice in the European community. In S. Martin (Ed.), *The construction of Europe* (pp. 197–225). Kluwer Academic Publishers

¹³² Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN. <https://ssrn.com/abstract=3346629>

¹³³ Senden, L. (2004). *Soft law in European Community law*. Hart Publishing.

¹³⁴ Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN. <https://ssrn.com/abstract=3346629>

The term "soft law" itself has provoked debate. Baxter referred to it as "law in her infinite variety"¹³⁵, while Chinkin (1989) emphasized its normative role despite its non-binding nature.¹³⁶ As explained in Zhu & Tang (2023), soft law "has no legally binding force but embodies mainstream values and influences the formation of hard law".¹³⁷ French and German scholars have suggested terms such as "droit mou," "droit souple," or "weiches Völkerrecht" to capture the regulatory and normative flexibility of soft law, indicating both its strengths and limitations.¹³⁸

The conceptual core of soft law lies in its position of a continuum of legal norms. Abbott and Snidal's (2000) influential framework describes "legalization" through three dimensions: obligation, precision, and delegation.¹³⁹ Hard law scores high on all three, while soft law exhibits low intensity in at least one. Soft law instruments are therefore characterized by weak obligation (non-binding), vague or broad terms (low precision), and the absence of a third-party enforcement mechanism (low delegation).¹⁴⁰

Terpan (2015) and the SoLaR project build upon this by incorporating enforcement as a separate and defining criterion.¹⁴¹ In this view, soft law is not only "non-binding", but also lacks coercive enforcement mechanisms. Instruments may carry moral or political obligations, rely on peer pressure

¹³⁵ Baxter, R. (1980). International law in her infinite variety. *International and Comparative Law Quarterly*, 29(4), 549–566.

¹³⁶ Chinkin, C. M. (1989). The challenge of soft law: Development and change in international law. *International and Comparative Law Quarterly*, 38(4), 850–866.

¹³⁷ Zhu, M., & Tang, X. (2023). Soft law and global fisheries governance: Status and prospects. *Marine Policy*, 148, 105441

¹³⁸ Wellens, K. C., & Borchardt, G. M. (1989). Soft law in European Community law. *European Law Review*, 14(3), 267–321.

¹³⁹ Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

¹⁴⁰ Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

¹⁴¹ Terpan, F. (2015). Soft law in the European Union: The changing nature of EU law. *European Law Journal*, 21

or reputational incentives, and exert influence through monitoring and reporting mechanisms.¹⁴²

Soft law manifests in numerous forms across international and EU governance, among which are: recommendations and opinions (Art. 288 Treaty on the Functioning of the European Union¹⁴³)¹⁴⁴; communications, white papers, and green papers by the European Commission; guidelines and frameworks issued by regulatory agencies; codes of conduct, declarations, and memoranda of understanding; and international plans of action, such as those adopted by the FAO (e.g., IPOA-IUU).¹⁴⁵

These instruments are often adopted through consensus, *id est* without formal legislative procedures, and are typically directed towards both public and private actors. In the EU, soft law operates within a multi-level governance framework, contributing to policy harmonization in fields like environmental regulation, competition, and employment.¹⁴⁶

Soft law is generally non-binding in a formal legal sense: indeed, it is typically characterized by the absence of sanction; conditional or vague language, such as non-mandatory terminology; lack of procedural formalism, since they are not usually adopted via formal legislative processes stipulated in treaties; flexibility and adaptability, because their

¹⁴² Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN. <https://ssrn.com/abstract=3346629>

¹⁴³ European Union. (2012, October 26). Consolidated version of the Treaty on the Functioning of the European Union (Art. 288). Official Journal C 326, 47–390. Retrieved May 23, 2025, from EUR-Lex

¹⁴⁴ Treaty on the Functioning of the European Union (TFEU), Oct. 26, 2012, OJ C 326.

¹⁴⁵ Zhu, M., & Tang, X. (2023). Soft law and global fisheries governance: Status and prospects. *Marine Policy*, 148, 105441.

¹⁴⁶ Dermine, P. (2021). The instruments of Eurozone fiscal surveillance through the lens of the soft law/hard law dichotomy: Looking for a new approach. *Journal of Banking Regulation*, 23, 7–18.

informal nature allows rapid modification and responsiveness to evolving contexts.¹⁴⁷

Soft law may also produce legal effects such as creating legitimate expectations or guiding judicial interpretation, thus blurring the hard/soft distinction. Hard law is formal, legally binding, and enforceable through judicial or institutional mechanisms, whereas soft law depends on persuasion, peer pressure, monitoring, and reputational accountability. As discussed in the SoLaR Literature Review, soft law is "located between informal policy and hard legislation".¹⁴⁸

Soft law does not stand in opposition to hard law; rather, they are interdependent and interact dynamically.¹⁴⁹ As observed in global fisheries governance and fiscal coordination in the Eurozone,¹⁵⁰ soft law frequently precedes hard law, acting as a complement¹⁵¹, or is incorporated by reference into binding legal instruments.¹⁵² For instance, despite not being legally binding, the FAO's Code of Conduct for Responsible Fisheries incorporates UNCLOS principles and serves as a framework for interpreting legally binding standards.¹⁵³

¹⁴⁷ Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN. <https://ssrn.com/abstract=3346629>

¹⁴⁸ Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN.

¹⁴⁹ Shelton, D. L. (2017). Normative hierarchy in international law. *American Journal of International Law*, 100(2), 291–323.

¹⁵⁰ Zhu, M., & Tang, X. (2023). Soft law and global fisheries governance: Status and prospects. *Marine Policy*, 148, 105441.

¹⁵¹ Kirton, J., & Trebilcock, M. (2004). Introduction: Hard choices and soft law in sustainable global governance. In J. Kirton, & M. Trebilcock (Eds.), *Hard choices, soft law: Voluntary standards in global trade, environment and social governance* (1st ed., pp. 24–25). Routledge.

¹⁵² Dermine, P. (2021). The instruments of Eurozone fiscal surveillance through the lens of the soft law/hard law dichotomy: Looking for a new approach. *Journal of Banking Regulation*, 23, 7–18.

¹⁵³ Zhu, M., & Tang, X. (2023). Soft law and global fisheries governance: Status and prospects. *Marine Policy*, 148, 105441.

Soft law has been essential to the development of the Open Method of Coordination (OMC) and the European Semester in EU governance.¹⁵⁴ Although the suggestions made in these frameworks are not legally obligatory, they set expectations and have the power to affect national policy by reputational or conditional means (e.g., funding availability).¹⁵⁵

Dermine (2021) demonstrates that EU fiscal governance is predominantly dependent on soft law: Country-Specific Recommendations (CSRs), Commission Opinions, and fiscal surveillance reports possess no formal enforceability, yet they significantly influence national budgets through reputational and market pressure, funding conditionality, and procedural integration within the European Semester.¹⁵⁶

In the realm of Business and Human Rights, Joseph & Kyriakakis (2023) elucidate that the UN Guiding Principles (UNGPs)—a non-binding legal framework—articulate expectations for business due diligence and governmental accountability without imposing obligatory requirements. Although non-binding, the UNGPs have been widely institutionalized and impact legislation, CSR efforts, and litigation across several jurisdictions.¹⁵⁷

¹⁵⁴ Dermine, P. (2021). The instruments of Eurozone fiscal surveillance through the lens of the soft law/hard law dichotomy: Looking for a new approach. *Journal of Banking Regulation*, 23, 7–18.

¹⁵⁵ Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN.

¹⁵⁶ Dermine, P. (2021). The instruments of Eurozone fiscal surveillance through the lens of the soft law/hard law dichotomy: Looking for a new approach. *Journal of Banking Regulation*, 23, 7–18.

¹⁵⁷ Joseph, S., & Kyriakakis, J. (2023). From soft law to hard law in business and human rights and the challenge of corporate power. *Leiden Journal of International Law*, 36, 335–361.

3.2 – The role of soft law instruments in preventing and combating corporate corruption

Soft law exerts normative influence and shapes expectations among stakeholders.¹⁵⁸ These devices address governance deficiencies, especially in contexts where hard legislation is politically impractical or excessively inflexible to promptly adapt to new challenges. In the field of anti-corruption, soft law has been crucial for establishing international norms and fostering a culture of integrity.¹⁵⁹ As international awareness of transnational corruption increased in the 1990s, soft law tools for anti-corruption governance appeared, and organizations like the OECD, FATF, EITI, and UNODC started issuing frameworks, guidelines, and recommendations in order to encourage openness, honesty, and responsibility, and to shape domestic reforms.¹⁶⁰

The United Nations Convention Against Corruption (UNCAC), a hard law treaty, is deeply intertwined with soft law approaches. Several of its chapters on preventive measures advocate for the development of voluntary codes of conduct, transparency mechanisms, and public reporting practices that lack strict legal enforceability but exert significant practical influence¹⁶¹. Similarly, the OECD Guidelines for Multinational Enterprises promote responsible business conducts, including anti-bribery measures, through a non-binding yet globally endorsed framework.¹⁶² Other examples of organisations using soft law instruments to address corruption can be found in FATF's Forty Recommendations¹⁶³, which have *de facto* become

¹⁵⁸ Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN.

¹⁵⁹ Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

¹⁶⁰ Rose, C. (2015). *International Anti-Corruption Instruments: Viewed through the Lenses of Soft Law and Legitimacy*. Oxford University Press.

¹⁶¹ UNODC. (2004). *United Nations Convention Against Corruption*.

¹⁶² OECD. (2011). *Guidelines for Multinational Enterprises*.

¹⁶³ Financial Action Task Force (FATF). (2012). *Annual report 2011–2012*. <https://www.fatf-gafi.org/publications/fatfgeneral/documents/fatfannualreport2011-2012.html>

global standards for anti-money laundering (AML) and counter-terrorism financing (CTF), largely due to FATF's peer review and naming-and-shaming enforcement mechanisms; and in the OECD's anti-bribery recommendations, which preceded the 1997 Anti-Bribery Convention.

The link between soft law and corruption also emerges through the normative diffusion of best practices. Non-binding standards can evolve into binding norms over time, as seen with whistleblower protection, conflict of interest policies, and transparency standards that first emerged through soft law instruments and later crystallized into legislation in several jurisdictions.¹⁶⁴¹⁶⁵

Soft law serves as a preventive function by embedding ethical principles within organizational cultures. Corporate codes of conduct, generally derived from international soft law treaties, establish internal guidelines that delineate standards for legal and ethical behaviour. International corporations are extensively embracing the ICC Rules on Combating Corruption (2011) to implement anti-bribery policies and employee training programs.¹⁶⁶

Such rules are increasingly regarded as obligatory by stakeholders and investors, in spite of their non-binding character. In fact, they provide preventive benefits by diminishing uncertainty over appropriate conduct and promoting internal reporting.¹⁶⁷ Studies indicate that organizations with strong ethical codes and compliance processes are statistically less prone to corrupt behaviours.¹⁶⁸

¹⁶⁴ Chinkin, C. M. (1989). The challenge of soft law: Development and change in international law. *International and Comparative Law Quarterly*, 38(4), 850–866

¹⁶⁵ Terpan, F. (2015). Soft law in the European Union: The changing nature of EU law. *European Law Journal*, 21(1), 68–96.

¹⁶⁶ ICC. (2011). ICC Rules on Combating Corruption. <https://iccwbo.org>

¹⁶⁷ OECD. (2019). OECD Working Group on Bribery: Annual Report. <https://oecd.org>

¹⁶⁸ Transparency International. (2020). Corruption Perceptions Index. <https://transparency.org>

Multi-stakeholder initiatives (MSIs) represent a unique soft law mechanism involving cooperation between governments, businesses, and civil society. The Extractive Industries Transparency Initiative (EITI), for instance, promotes transparency in resource revenue flows by requiring companies and states to publicly disclose financial data.¹⁶⁹

Even though participation in EITI is voluntary, the reputational pressure and market incentives have driven broad compliance. The initiative has contributed to significant improvements in financial disclosure in countries like Nigeria and Mongolia, where corruption in the natural resources sector has historically been predominant.¹⁷⁰

Another preventive tool is voluntary reporting, often guided by frameworks such as the Global Reporting Initiative (GRI), which includes disclosures on anti-corruption programs.¹⁷¹ By publicly reporting their anti-corruption efforts, not only do firms meet investor expectations, but they also subject themselves to public scrutiny. Voluntary disclosures, therefore, enhance transparency and function as deterrents against illicit conduct. Moreover, public availability of such reports facilitates benchmarking and sector-wide learning, thereby fostering a culture of integrity.

Global compacts and soft law initiatives like the United Nations Global Compact (UNGC) require signatories to commit to ten principles, including one explicitly focused on anti-corruption.¹⁷² Though lacking enforcement mechanisms, the UNGC's principles have been internalized by over 12,000 companies across more than 160 countries.

¹⁶⁹ EITI. (2019). The EITI Standard 2019. <https://eiti.org>

¹⁷⁰ Gillies, A. (2010). Reputational concerns and the emergence of oil sector transparency as an international norm. *International Studies Quarterly*, 54(1), 103–126.

¹⁷¹ GRI. (2016). GRI 205: Anti-corruption 2016. <https://globalreporting.org>

¹⁷² UNGC. (2000). The Ten Principles of the UN Global Compact. <https://unglobalcompact.org>

Firms that violate these principles risk expulsion but, more importantly, they suffer reputational damage. The UNGC thus serves as a moral compass and mobilizer of collective business action against corruption.¹⁷³

Soft law also aids in the detection and remediation of corruption through whistleblower support mechanisms. Instruments like the G20 High-Level Principles for the Effective Protection of Whistleblowers (2019) have inspired legislative reforms in numerous countries, including Japan, Italy, and South Korea.

Although these principles are not legally binding, they provide normative guidance that shapes national laws and corporate policies. The encouragement of whistleblowing thus contributes to early detection of wrongdoing and complements internal audit functions.¹⁷⁴

Monitoring systems embedded in soft law frameworks function as quasi-enforcement tools. The OECD Working Group on Bribery, for instance, conducts periodic peer reviews of member countries, assessing their compliance with anti-bribery recommendations.¹⁷⁵

These peer reviews create political and reputational pressure on governments and companies, inciting reforms and enhanced enforcement. In this context, soft law connects voluntary standards with concrete behavioural transformation (Abbott & Snidal, 2000).

The influence of soft law can be seen in alliances such as the International Consortium of Investigative Journalists (ICIJ), whose efforts correspond with soft transparency standards. Reports like the Panama Papers expose

¹⁷³ Rasche, A. (2009). "A necessary supplement": What the United Nations Global Compact is and is not. *Business & Society*, 48(4), 511–537.

¹⁷⁴ OECD. (2019). OECD Working Group on Bribery: Annual Report. <https://oecd.org>

¹⁷⁵ OECD. (2021). Phase 4 Monitoring Reports. <https://oecd.org>

systemic corruption facilitated by weak regulatory environments and poor corporate governance.¹⁷⁶

Despite not being legal institutions, these organisations function in soft law environments, are accountable to the public, and their revelations often catalyse legislative and corporate changes.¹⁷⁷

Soft law also works through certification schemes such as ISO 37001, the Anti-Bribery Management System standard offering companies a compliance benchmark for developing internal anti-corruption controls. Although not compulsory, ISO 37001 certification has been adopted by multinational corporations and public agencies require it in procurement processes.¹⁷⁸

Such standards contribute to uniform expectations and provide tools for legal defence or mitigation in enforcement scenarios.

In light of the various applications of soft law in the battle against corruption, it is possible to qualitatively assess its efficiency and effectiveness.

In terms of flexibility¹⁷⁹, administrative load, and negotiation time, soft law methods are frequently more effective than treaties. The OECD's use of non-binding instruments such as Good Practice Guidance (2010) exemplifies how states can incorporate international standards into domestic legal systems without lengthy legislative procedures. The flexibility that characterises soft law tools also enables rapid updates that allow a more timely response to crimes¹⁸⁰: for this reason the FATF adjusted its recommendations several times to respond to new forms of financial

¹⁷⁶ ICIJ. (2016). Panama Papers. <https://www.icij.org>

¹⁷⁷ Zucman, G. (2015). The hidden wealth of nations: The scourge of tax havens. University of Chicago Press.

¹⁷⁸ ISO. (2016). ISO 37001: Anti-bribery management systems. <https://iso.org>

¹⁷⁹ Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

¹⁸⁰ Aust, A. (2000). *Modern treaty law and practice*. Cambridge University Press.

crime and to reflect the evolving nature of norms and situations.¹⁸¹ Likewise, the EITI Standard has been subjected to continuous revisions that made it possible to keep pace with changing agreements among EITI stakeholders.¹⁸² The form and manner of implementation of soft law affects the degree of efficiency: the adoption of executive regulation or judicial interpretation without formal ratification, for instance, enhances speed and institutional efficiency.¹⁸³ Furthermore, deferred prosecution agreements (DPAs) in many countries include soft law, further integrating anti-corruption standards into legal practice without the need for legislative intervention.¹⁸⁴

As far as the effectiveness of soft law is concerned, it lies in the ability to shape domestic legal reform, influence corporate behaviour, and simplify international cooperation. Even if the OECD Guidelines for Multinational Enterprises¹⁸⁵ and the UN Global Compact¹⁸⁶ are non-binding tools, they have had a significant impact on editing and changing behaviour in corporate governance. Similarly, the FATF Recommendations have provided extensive domestic legislation changes, given that non-compliance leads to financial and political repercussions and countries that do not abide by the FATF standards risk to be “blacklisted” or “grey-listed”, which would eventually limit their access to global financial markets.¹⁸⁷ The most important factors that lead to effectiveness are transparency and

¹⁸¹ Financial Action Task Force (FATF). (2012). *International standards on combating money laundering and the financing of terrorism & proliferation: The FATF recommendations*. FATF/OECD.

¹⁸² Rose, C. (2015). *International Anti-Corruption Instruments: Viewed through the Lenses of Soft Law and Legitimacy*. Oxford University Press.

¹⁸³ Rose, C. (2015). *International Anti-Corruption Instruments: Viewed through the Lenses of Soft Law and Legitimacy*. Oxford University Press.

¹⁸⁴ United States District Court for the Southern District of Texas, Houston Division. (2010, November 4). *Deferred Prosecution Agreement: United States v. Panalpina World Transport (Holding) Ltd, No. 10-CR-769, Attachment C*. U.S. Department of Justice.

¹⁸⁵ Organisation for Economic Co-operation and Development. (2011). *OECD guidelines for multinational enterprises* (2011 ed.). OECD Publishing.

¹⁸⁶ United Nations Global Compact. (2000). *The ten principles of the UN Global Compact*. United Nations.

¹⁸⁷ Rose, C. (2015). *International Anti-Corruption Instruments: Viewed through the Lenses of Soft Law and Legitimacy*. Oxford University Press.

stakeholder participation, factors further enhanced through peer review mechanisms.

After taking everything into account, soft law represents a highly flexible and influential tool in the fight against corruption, particularly within the corporate sector. Soft law plays a crucial and complementary role in global anti-corruption governance while lacking the enforcement of hard legislation because of its moral power, procedural flexibility, and ability to mobilize political and reputational pressure.

3.3 – Empirical analysis and methodology

The following research aims to fill the knowledge gap in the current literature on the relationship between regulatory governance and anti-corruption performance, and on the impact of soft law instruments in the fight against corruption. That being said, the question guiding the work is: “Does the adoption of soft law instruments at the national level have a statistically significant effect on the reduction of perceived corruption?”

The objective of this study is to empirically analyse whether and, if so, to what extent does the adoption of soft law instruments affect the reduction of perceived corruption in European countries. In particular, the research intends to test the effectiveness of soft law measures (such as guidelines, recommendations, codes of conduct, and voluntary standards) promoted by supranational institutions (e.g. OECD, UN, FATF, EITI) in enhancing transparency and integrity in the public and private sector. Then, the thematic scope of the research is limited to soft law instruments related to preventing and combating (corporate and public) corruption, excluding other areas (e.g. environment, taxation, human rights).

The theoretical relevance of the topic is linked to the significant increase in the use of soft law instruments in global governance, while the practical relevance stems from the need for flexible and effective tools to counter corruption in democratic contexts. The originality of the work lies in the

attempt to empirically quantify the impact of soft instruments in a field in which only legislative (hard law) reforms are usually analysed.

The boundaries of the research can be classified into the following groups and are used in order to substantiate the scope and extent of the study. The sample includes 11 countries (Italy, Spain, France, Germany, United Kingdom, Denmark, Poland, Romania, Sweden, Netherlands, and Hungary) and the analysis time window provides for a five-year period (from 2018 to 2022). Those countries have been selected because they meet precise methodological criteria aimed at ensuring representativeness, institutional variety and analytical relevance in the study of the relationship between soft law instruments and perceived corruption. Firstly, the sample covers all major macro-regions of the European continent - South, North, East, West, and Centre - thus providing a balanced geographical basis for the comparative analysis. Moreover, the selected countries present different levels of perceived corruption according to Transparency International's CPI, making it possible to observe whether and how soft law instruments affect contexts with different institutional vulnerabilities: ranging from high scores in countries such as Denmark and Sweden to the lowest values recorded by Hungary and Romania. A further element of heterogeneity concerns the degree of adherence to and implementation of international soft law instruments, such as the OECD Recommendations, the FATF Principles, the EITI Guidelines, and adherence to the UN Global Compact. This variability makes it possible to analyse the effect of these instruments on a solid and differentiated empirical basis. Finally, the availability of reliable and up-to-date data for all necessary variables (CPI, GDP per capita, political stability index, participation in soft law instruments) made these countries particularly suitable for the construction of the proposed linear regression model.

The main tool of this research will be an econometric model (i.e. the mathematical representation of relationships between certain variables,

which uses statistical tools to analyse, test, and predict phenomena)¹⁸⁸ based on a linear regression. This one *is defined as an algorithm that provides a linear relationship between an independent variable and a dependent variable to predict the outcome of future events*. There are two different variables in the model: the dependent and the independent. The first one is the variable being studied and to be explained; the independent variable, on the other hand, is the one used to predict the value of the other.¹⁸⁹

The hypotheses to be tested are:

- H_0 : the adoption of soft law instruments has no impact on perceived corruption.
- H_1 : the adoption of soft law instruments is associated with a reduction in perceived corruption.

Hypothesis testing is the procedure that allows us to determine whether the hypothesis is “true or false”. The null hypothesis is that of “equality or lack of effect” (and can be defined as the negation of the research hypothesis), while the alternative hypothesis is that of “difference and diversity”.¹⁹⁰ The p-value approach to hypothesis testing uses the calculated probability to determine whether there is evidence to reject the null hypothesis. Therefore, the p-value emphasises whether the values of the sampled set are more or less consistent with the hypothesis formulated to describe a population of reliable values. If the p-value is greater than 0.05, then the sampled hypothesis is null; conversely, a p-value less than 0.05 suggests that the hypothesis of the observed data is statistically significant.

¹⁸⁸ Buttignol, M. (2003, November 17). Econometrics: Definition, models, and methods. Investopedia. Retrieved May 20, 2025, from <https://www.investopedia.com/terms/e/econometrics.asp>

¹⁸⁹ IBM. (n.d.). *Linear regression*. Think|IBM. Retrieved May 20, 2025, from <https://www.ibm.com/it-it/think/topics/linear-regression>

¹⁹⁰ PublicHealth.it. (2020, October). Test di ipotesi: parte 1 [PDF]. Retrieved May 22, 2025, from <https://www.publichealth.it/wp-content/uploads/2020/10/test-di-ipotesi-parte-1.pdf>

The full model is:

$$CPI_{it} = \beta_0 + \beta_1 \cdot GDP_per_Capita_{it} + \beta_2 \cdot Political_Stability_{it} + \beta_3 \cdot FATF_Adoption_{it} + \beta_4 \cdot OECD_Adoption_{it} + \beta_5 \cdot EITI_Adoption_{it} + \beta_6 \cdot UNGC_Companies_{it} + \epsilon_{it}$$

As it can be seen, all variables in this model are panel variables, i.e. indexed by country (i) and year (t), as is typical in panel datasets. The dependent variable is represented by the CPI, which measures the level of perceived corruption (0 = high corruption, 100 = no corruption). The table below shows the CPI for each country in the study and allows us to measure whether, and to what extent, the adoption of soft law instruments in each country and year is associated with improvements in the CPI, i.e. less perceived corruption.

Country	2018	2019	2020	2021	2022
Italy	52	53	53	56	56
Spain	58	62	60	61	60
France	72	69	69	71	72
Germany	80	80	80	80	79
United Kingdom	80	77	77	78	73
Denmark	88	87	88	88	90
Poland	60	58	56	56	55
Romania	47	44	44	45	46
Sweden	85	85	85	85	83
Netherlands	82	82	80	82	80
Hungary	46	44	44	43	42

Moving on to the independent variables of the model, these are: GDP per capita, Political stability index, adoption of FATF, adoption of OECD Recommendations, adoption of EITI, and number of companies adhering to the UNGC.

The prospect below displays the GDP per capita expressed in current US dollars and it is used to take into account each country's level of economic development and whether the effect of soft law on perceived corruption is independent of economic well-being. The GDP per capita is calculated by dividing a country's gross domestic product (GDP) by its total population.

Country	2018	2019	2020	2021	2022
Italy	\$34,824	\$35,997	\$31,666	\$35,551	\$35,657
Spain	\$30,570	\$30,861	\$27,142	\$30,115	\$32,426
France	\$41,463	\$41,982	\$38,680	\$43,519	\$44,408
Germany	\$48,469	\$46,668	\$45,372	\$51,203	\$51,204
United Kingdom	\$43,647	\$42,580	\$41,017	\$46,510	\$46,510
Denmark	\$63,829	\$63,578	\$61,065	\$74,357	\$75,733
Poland	\$15,962	\$15,751	\$15,688	\$18,125	\$18,417
Romania	\$12,482	\$12,919	\$12,701	\$14,858	\$15,891
Sweden	\$54,479	\$51,474	\$52,110	\$62,122	\$58,466
Netherlands	\$54,311	\$52,449	\$52,018	\$58,061	\$58,061
Hungary	\$16,332	\$16,502	\$16,050	\$18,728	\$18,728

The variables on the adoption of FATF, OECD Recommendations, and EITI are known as “dummy” variables because they are used to represent qualitative or categorical information in numerical form. More specifically, these variables can only take on two values: 1, if a certain condition is present (in this case, therefore, whether or not the countries in question have adopted soft law instruments), or 0 in the absence of this condition. In the model, the coefficients associated with the dummy variables indicate by how many points the expected value of the dependent variable (CPI) changes when the condition changes from 0 to 1, all other variables being equal. The table below shows whether or not the countries in the sample have adopted the instruments indicated in the relevant columns.

Country	FATF	OECD	EITI
Italy	YES	YES	NO
Spain	YES	YES	NO
France	YES	YES	NO
Germany	YES	YES	YES
United Kingdom	YES	YES	YES
Denmark	YES	YES	NO
Poland	YES	YES	NO
Romania	NO	NO	NO
Sweden	YES	YES	NO
Netherlands	YES	YES	YES
Hungary	NO	YES	NO

Finally, the last dummy variable concerns the number of companies in each country adhering to the UNGC: this is such an important parameter because it measures the private involvement in anti-corruption soft law. The table

shows the number of companies actively participating in the UNGC and, since this is a dummy variable, a minimum threshold (300) has been identified on a discretionary basis (therefore, if a country has at least 301 companies sticking to UNGC principles, the value of the variable will be 1).

Country	Companies adhering to UNGC
Italy	400
Spain	1300
France	1100
Germany	1000
United Kingdom	800
Denmark	300
Poland	100
Romania	60
Sweden	200
Netherlands	300
Hungary	70

The last term, the error (ε_{it}), stands for all other unobserved or random variables that may influence perceived corruption, but which are not included in the model.¹⁹¹

This dataset has been estimated using Python through its statsmodel tool, which outputs estimated coefficients for each independent variable, p-values to test significance and overall model statistics.¹⁹²

Since there are 11 countries and a five-year observation time window, the total number of observations is 55. The following table illustrates the final panel for the test.

¹⁹¹ Corradi, F. (2016). *Statistica* (E-book ed.). EGEA. ISBN: 9788823878501

¹⁹² Agresti, A., & Franklin, C. (2017). *Statistics: The Art and Science of Learning from Data* (4th ed.). Pearson. ISBN: 9780134507101

Country	Year	CPI	GDP per Capita	Political Stability	FATF Adoption	OECD Adoption	EITI Adoption	UNGC Participation
Italy	2018	52	34824	0,33	1	1	0	1
Italy	2019	53	35997	0,34	1	1	0	1
Italy	2020	53	31666	0,28	1	1	0	1
Italy	2021	56	35551	0,31	1	1	0	1
Italy	2022	56	35657	0,3	1	1	0	1
Spain	2018	58	30570	0,55	1	1	0	1
Spain	2019	62	30861	0,57	1	1	0	1
Spain	2020	60	27142	0,5	1	1	0	1
Spain	2021	61	30115	0,52	1	1	0	1
Spain	2022	60	32426	0,51	1	1	0	1
France	2018	72	41463	0,69	1	1	0	1
France	2019	69	41982	0,67	1	1	0	1
France	2020	69	38680	0,62	1	1	0	1
France	2021	71	43519	0,6	1	1	0	1
France	2022	72	44408	0,58	1	1	0	1
Germany	2018	80	48469	0,83	1	1	0	1
Germany	2019	80	46668	0,81	1	1	0	1
Germany	2020	80	45372	0,79	1	1	0	1
Germany	2021	80	51203	0,77	1	1	0	1
Germany	2022	79	51204	0,75	1	1	0	1
UK	2018	80	43647	0,52	1	1	1	1
UK	2019	77	42580	0,51	1	1	1	1
UK	2020	77	41017	0,49	1	1	1	1
UK	2021	78	46510	0,48	1	1	1	1
UK	2022	73	46510	0,47	1	1	0	1
Denmark	2018	88	63829	1,23	1	1	0	1
Denmark	2019	87	63578	1,22	1	1	0	1
Denmark	2020	88	61065	1,21	1	1	0	1
Denmark	2021	88	74357	1,2	1	1	0	1
Denmark	2022	90	75733	1,18	1	1	0	1
Poland	2018	60	15962	0,42	1	1	0	0
Poland	2019	58	15751	0,41	1	1	0	0
Poland	2020	56	15688	0,35	1	1	0	0
Poland	2021	56	18125	0,33	1	1	0	0
Poland	2022	55	18417	0,3	1	1	0	0
Romania	2018	47	12482	0,13	0	0	0	0
Romania	2019	44	12919	0,15	0	0	0	0
Romania	2020	44	12701	0,12	0	0	0	0
Romania	2021	45	14858	0,1	0	0	0	0
Romania	2022	46	15891	0,09	0	0	0	0
Sweden	2018	85	54479	1,16	1	1	0	0
Sweden	2019	85	51474	1,15	1	1	0	0
Sweden	2020	85	52110	1,1	1	1	0	0
Sweden	2021	85	62122	1,08	1	1	0	0
Sweden	2022	83	58466	1,06	1	1	0	0
Netherlands	2018	82	54311	1,03	1	1	0	1
Netherlands	2019	82	52449	1,01	1	1	0	1
Netherlands	2020	80	52018	0,97	1	1	0	1
Netherlands	2021	82	58061	0,95	1	1	0	1
Netherlands	2022	80	58061	0,92	1	1	0	1
Hungary	2018	46	16332	0,06	1	1	0	0
Hungary	2019	44	16502	0,05	1	1	0	0
Hungary	2020	44	16050	0,02	1	1	0	0
Hungary	2021	43	18728	0,01	1	1	0	0
Hungary	2022	42	18728	-0,01	1	1	0	0

As already said, the p-value analysis makes it possible to assess the statistical significance of each explanatory variable with respect to the dependent variable, namely the CPI. The model obtained a coefficient of determination R^2 of 0.963, indicating that 96.3% of the observed variance in the Corruption Perceptions Index (CPI) is explained by the independent

variables considered. The F-test ($F = 257.2$, $p < 0.001$) confirms that the model is globally significant.

The results shows that the p-value associated with GDP per capita is 0.015, which is below the conventional threshold of 0.05, indicating that there is a probability of less than 1.5% that the observed effect is due to chance. Therefore, it can be said with high confidence that an increase in average income is significantly associated with an improvement in the perception of corruption.

Among the predictors, political stability is confirmed as the most relevant factor: with a coefficient of 30.61 and a p-value of less than 0.001, it is shown that a one-point increase in the political stability index is associated with a marked increase in the CPI, i.e. a lower perception of corruption. The variable EITI Adoption, which identifies participation in the multilateral EITI reporting process, is also highly significant (coefficient = 13.32, $p < 0.001$), suggesting that multilateral mechanisms based on transparency and shared monitoring have a real impact on perceptions of governance.

The variable GDP per Capita shows a positive and statistically significant effect (coefficient = 0.0002, $p = 0.015$), indicating that, other things being equal, an increase in average national income is correlated with a better perception of institutional quality. In contrast, the dummy variables associated with the adoption of the FATF and OECD recommendations are statistically insignificant ($p = 0.265$ for both), despite positive coefficients, probably due to the high level of saturation of the sample (almost all countries are active members).

In conclusion, this analysis may offer an original empirical contribution to the soft law literature, filling a previously neglected methodological gap. As a matter of fact, most previous studies have focused on the normative or theoretical dimension of soft law instruments, while this model shows that certain soft law mechanisms - particularly those that promote multi-level

transparency (EITI) and are embedded in politically stable contexts - can have concrete, measurable and statistically significant effects. This gives rise to a new perspective on soft law as an active and relevant component of anti-corruption strategies, capable of producing verifiable results even in the absence of legal compulsoriness.

CONCLUSION

This thesis addressed the topic of corporate corruption with a theoretical, applied, and empirical approach in order to assess the role and effectiveness of soft law instruments in preventing and combating corruption at a European level. The research path was divided into three complementary chapters: the first one reconstructed the conceptual framework of corporate bribery; the second one provided an applicative analysis through the Siemens case; the third one empirically verified, through a linear regression model, whether there is a relationship between the adoption of soft law instruments and improved anti-corruption performance.

The first chapter outlined the notion of corruption in the corporate context, with reference to both the economic literature (principal-agent theory, collective action theory) and international normative references. It was clarified how corruption is not just an individual deviation, but a systemic phenomenon, rooted in the structure of organisational relations, corporate culture, and the information asymmetries that condition relations between public and private actors. The main consequences of corruption at macro and micro level, including market distortions, increased country risk, loss of trust, and reputational damage, were also analysed, with reference to the main international studies.

The second chapter delved into the Siemens case, one of the most significant corruption scandals in recent history. The choice of this case was very conscious since it represents a turning point in the understanding of the internal dynamics of corporate corruption and the institutional responses activated in the non-coercive sphere. The analysis showed how the company was able to react through a radical rethinking of its internal culture and compliance systems, implementing voluntary tools, such as codes of ethics, whistleblowing channels, training programmes, that are now considered paradigmatic examples of internal soft law. Precisely for this reason, the Siemens case offered a direct and concrete connection

between the theoretical framework of the first chapter and the empirical investigation of the third: it allowed us to observe in a real context how soft law instruments can not only prevent, but also correct widespread corrupt behaviour.

Lastly, in the third chapter, the concept of soft law was presented, highlighting its fundamental characteristics, such as flexibility, formal non-bindingness, adaptability, and the comparison with hard law. Then, a linear regression model was further developed based on panel data from eleven European countries covering the period 2018-2022. The objective was to empirically test whether the adoption of soft law instruments by governments and companies is correlated with a reduction in perceived corruption, as measured by Transparency International's Corruption Perceptions Index (CPI). The results of the model show that political stability (coefficient = 30.61) is the most relevant and statistically significant variable ($p < 0.001$), confirming that the institutional environment is a key enabling condition for the effectiveness of anti-corruption strategies. The involvement in the EITI mechanism, although limited to the UK, turned out to be highly significant (coefficient = 13.32; $p < 0.001$), proving the concrete impact of multilateral initiatives combining transparency, peer review and multi-actor participation. GDP per capita also showed a positive and statistically significant relationship with CPI (coefficient = 0.0002; $p = 0.015$), suggesting that economic development fosters institutional environments less vulnerable to corruption.

On the contrary, the variables related to formal adherence to FATF and OECD recommendations, while registering positive coefficients, did not reach statistical significance ($p = 0.265$ for both), indicating that mere membership in international organisations does not necessarily lead to an improvement in perceptions of integrity, especially in the absence of actual implementation. Along the same lines, the membership of the UNGC, measured in terms of the size of the adhering corporate base, did not reveal

significant effects on ICC ($p = 0.776$), suggesting that private sector involvement in soft law instruments needs enabling conditions and accountability mechanisms to produce any tangible impact.

These results contribute to bridging a methodological gap in the literature on the topic: whereas numerous studies have dealt with soft law from a normative, symbolic, or procedural perspective, only a few have attempted to systematically measure its actual effects. The present study provides evidence that not all soft law instruments are equally effective: those that promote operational transparency, multi-stakeholder involvement, and shared evaluation mechanisms, such as the EITI, perform better than those based on formal, non-binding memberships. This leads to an important theoretical and practical implication: soft law can be a strategic governance lever, provided it is supported by a stable framework, genuine commitment and adequate monitoring structures.

To conclude, the thesis illustrates how soft law, far from being a weak alternative to classical regulation, can emerge as an effective and measurable tool in building institutional systems resilient to corruption, especially when applied in a credible and transparent manner. At the policy level, these results suggest the need to strengthen voluntary mechanisms through incentives, verification, and public legitimacy, promoting a culture of integrity that does not depend solely on the threat of sanctions, but on the convergence of ethics, transparency, and shared responsibility.

BIBLIOGRAPHY

Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.

Adeyeye, A. O. (2012). Anti-corruption as a CSR standard. In *Corporate Social Responsibility of Multinational Corporations in Developing Countries* (pp. 41–74). Cambridge University Press. <https://doi.org/10.1017/cbo9781139005067.007>

Agresti, A., & Franklin, C. (2017). *Statistics: The Art and Science of Learning from Data* (4th ed.). Pearson. ISBN: 9780134507101

Annual Financial Report for fiscal 2024. (n.d.).

Aust, A. (2000). *Modern treaty law and practice*. Cambridge University Press.

Basel Institute on Governance. (2009). *Siemens: A case study on compliance system transformation*. Basel Institute on Governance.

Baxter, R. (1980). International law in her infinite variety. *International and Comparative Law Quarterly*, 29(4), 549–566.

Berghoff, H. (2018). “Organised irresponsibility”? The Siemens corruption scandal of the 1990s and 2000s. *Business History*, 60(3), 423–445. <https://doi.org/10.1080/00076791.2017.1330332>

Besson, S., & D’Aspremont, J. (2018). The oxford handbook of the sources of international law. In *The Oxford Handbook of the Sources of International Law*. Oxford University Press. <https://doi.org/10.1093/law/9780198745365.001.0001>

Blanc, R., Castelo Branco, M., Cho, C. H., & Sopt, J. (2013). *In search of disclosure effects of the Siemens AG’s corruption scandal* (Working Paper No. 15). OBEGEF – Observatório de Economia e Gestão de Fraude.

Blanc, R., Cho, C. H., Sopt, J., & Castelo Branco, M. (2019). Disclosure Responses to a Corruption Scandal: The Case of Siemens AG. *Source: Journal of Business Ethics*, 156(2), 545–561. <https://doi.org/10.1007/>

Bloomberg, n.d., Siemens AG - Company profile and news. Bloomberg, Retrieved 5/3/2025 from <https://www.bloomberg.com/profile/company/SIE%3AGR>

Buttignol, M. (2003, November 17). Econometrics: Definition, models, and methods. Investopedia. Retrieved May 20, 2025, from <https://www.investopedia.com/terms/e/econometrics.asp>

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.

Carroll, Buchholtz (2002). "Business & Society: Ethics and Stakeholder Management ". Mason. Thomson Learning.

Chinkin, C. M. (1989). The challenge of soft law: Development and change in international law. *International and Comparative Law Quarterly*, 38(4), 850–866.

Corradi, F. (2016). *Statistica* (E-book ed.). EGEA. ISBN: 9788823878501

Crane, A., & Matten, D. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization* (5th ed.). Oxford University Press.

Deming, S. H. (2006). The Foreign Corrupt Practices Act and the new international norms (p. 350). American Bar Association.
DoJ, *US v. Siemens*, Court Docket Number: 08-CR-367-RJL, Information, 19–20, accessed 28 March 2025.

Dermine, P. (2021). The instruments of Eurozone fiscal surveillance through the lens of the soft law/hard law dichotomy: Looking for a new approach. *Journal of Banking Regulation*, 23, 7–18.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.

EITI. (2019). The EITI Standard 2019. <https://eiti.org>

Encyclopaedia Britannica. (n.d.). Siemens AG. Britannica Money. Retrieved March 11, 2025, from <https://www.britannica.com/money/Siemens-AG>

European Union. (2012, October 26). Consolidated version of the Treaty on the Functioning of the European Union (Art. 288). Official Journal C 326, 47–390. Retrieved May 23, 2025, from EUR-Lex

Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2021). *Business ethics: Ethical decision making and cases* (13th ed.). Cengage Learning.

Financial Action Task Force (FATF). (2012). International standards on combating money laundering and the financing of terrorism & proliferation: The FATF recommendations. FATF/OECD.

Financial Action Task Force (FATF). (2012). Annual report 2011–2012. <https://www.fatf-gafi.org/publications/fatfgeneral/documents/fatfannualreport2011-2012.html>

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman.

Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). Managing for stakeholders: Survival, reputation, and success. Yale University Press.

Gillies, A. (2010). Reputational concerns and the emergence of oil sector transparency as an international norm. *International Studies Quarterly*, 54(1), 103–126.

GRI. (2016). GRI 205: Anti-corruption 2016. <https://globalreporting.org>

IBM. (n.d.). Linear regression. Think|IBM. Retrieved May 20, 2025, from <https://www.ibm.com/it-it/think/topics/linear-regression>

ICIJ. (2016). Panama Papers. <https://www.icij.org>

Investopedia. (n.d.). Earnings per share (EPS): Definition, formula, and example. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/e/eps.asp>

Investopedia. (n.d.). Equity ratio: Definition, formula, and example. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/d/equityratio.asp>

Investopedia. (n.d.). Debt ratio: Definition, formula, and example. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/d/debtratio.asp>

Investopedia. (n.d.). Net income: Definition, how to calculate, examples. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/n/netincome.asp>

Investopedia. (n.d.). Profit margin: Definition, types, formulas, and impact. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/p/profitmargin.asp>

Investopedia. (n.d.). Research and development (R&D) expenses: Definition and example. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/r/research-and-development-expense.asp>

Investopedia. (n.d.). Return on equity (ROE): Definition and formula. Retrieved April 2, 2025, from <https://www.investopedia.com/terms/r/returnonequity.asp>

ISO. (2016). ISO 37001: Anti-bribery management systems. <https://iso.org>

Jiang, K. (2010). The origin and influence of international soft law. *Contemporary World*, 2010(8), 49–50

Joseph, S., & Kyriakakis, J. (2023). From soft law to hard law in business and human rights and the challenge of corporate power. *Leiden Journal of International Law*, 36, 335–361.

Kirton, J., & Trebilcock, M. (2004). Introduction: Hard choices and soft law in sustainable global governance. In J. Kirton, & M. Trebilcock (Eds.), *Hard choices, soft law: Voluntary standards in global trade, environment and social governance* (1st ed., pp. 24–25). Routledge.

Klaus Kleinfeld, in Siemens AG, Annual Report 2005, 9.

La Storia di Siemens in Italia, Siemens Italia, n.d., Retrieved from <https://www.siemens.com/it/it/azienda/chi-siamo/storia.htm>

Leyendecker, H. (2009). *Endless greed: Corruption, pleasure trips. Why our economy needs new moral standards*. Reinbek: Rowohlt.

Lombardi Stocchetti, G., D'Alessio, I., & Colombo, S. (2023). *Analisi di bilancio*. Guerini e Associati.

Manuel, Branco, C., Charles, ;, Cho, H., & Sopt, J. (n.d.). *IN SEARCH OF DISCLOSURE EFFECTS OF THE SIEMENS AG'S CORRUPTION SCANDAL FICHA TÉCNICA >> autores: renata Blanc*. <http://www.gestaodefraude.eu>

O'Dwyer, B. (2005). Stakeholder democracy: Challenges and contributions from social accounting. *Business Ethics: A European Review*, 14(1), 28–41.

OECD, OECD Foreign Bribery Report, 21.

Organisation for Economic Co-operation and Development. (2011). OECD guidelines for multinational enterprises (2011 ed.). OECD Publishing.

OECD. (2021). Phase 4 Monitoring Reports. <https://oecd.org>

OECD. (2019). OECD Working Group on Bribery: Annual Report. <https://oecd.org>

Peter Noll, quoted in Frankfurter Allgemeine Zeitung, 28 July 2008.

Peter Noll, quoted in Leyendecker, Gier, 147.

PublicHealth.it. (2020, October). Test di ipotesi: parte 1 [PDF]. Retrieved May 22, 2025, from <https://www.publichealth.it/wp-content/uploads/2020/10/test-di-ipotesi-parte-1.pdf>

Rasche, A. (2009). "A necessary supplement": What the United Nations Global Compact is and is not. *Business & Society*, 48(4), 511–537.

Rocca, M. la, Rocca, T. la, Fasano, F., & Javier Sanchez-vidal, F. (n.d.). *From the Top Down: does Corruption affect Performance?*

Rose, C. (2015). *International Anti-Corruption Instruments: Viewed through the Lenses of Soft Law and Legitimacy*. Oxford University Press.

Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2022). *Fundamentals of corporate finance* (13th ed.). McGraw-Hill Education.

Senden, L. (2004). *Soft law in European Community law*. Hart Publishing.

See Peter von Blomberg, Siemens Gnadenlos, DIE WELT ONLINE, Jan.6, 2009, http://www.welt.de/die-welt/article1854420/Siemens_gnadenlos.html.

Sidhu, K. (2009). Anti-Corruption Compliance Standards in the Aftermath of the Siemens Scandal. *German Law Journal*, 10(8), 1343–1354. <https://doi.org/10.1017/S207183220000167X>

Shelton, D. L. (2017). Normative hierarchy in international law. *American Journal of International Law*, 100(2), 291–323.

Siemens AG. (2022). *Siemens Annual Report 2022*.

Siemens AG. (2023). *Siemens Annual Report 2023*.

Siemens AG. (2024). *Siemens Annual Report 2024*.

Siemens Aktiengesellschaft. (2008, December 15). Statement of Siemens Aktiengesellschaft: Investigation and summary of findings with respect to the proceedings in Munich and the US. Siemens. Available at <http://wl.siemens.com/press/pool/delevents/2008-12-PK/summary-e.pdf>

Siemens AG, Annual Report for 2008/09, part 2, 201–202.

Siemens AG. (n.d.). History. Siemens. Retrieved March 12, 2025, from <https://www.siemens.com/global/en/company/about/history.html>

Siemens Energy. (n.d.). History. Retrieved March 12, 2025, from <https://www.siemens-energy.com/global/en/company/about/history.html>

Snyder, F. (1994). Soft law and institutional practice in the European community. In S. Martin (Ed.), *The construction of Europe* (pp. 197–225). Kluwer Academic Publishers

Stefan, O., Avbelj, M., Eliantonio, M., Hartlapp, M., Korkea-aho, E., & Rubio, N. (2019). EU soft law in the EU legal order: A literature review. SoLaR Working Paper. SSRN. <https://ssrn.com/abstract=3346629>

Terpan, F. (2015). Soft law in the European Union: The changing nature of EU law. *European Law Journal*, 21

The Economic Times. (2013, July 28). Siemens to replace CEO Peter Loescher after fifth forecast cut. *The Economic Times*.

Transparency International. (2020). Corruption Perceptions Index. <https://transparency.org>

Transparency International, Corruption Perception Index 1996; SAA 24906, Erweiterte Landesberichterstattung 1996/97 – Europa; SAA 24908, Erweiterte Landesberichterstattung 1996/97 – Asien/Pazifik; SAA 24909, Erweiterte Landesberichterstattung 1996/97 – Afrika/übrige Länder; SAA 24950, Eckdatenblätter 1997.

Transparency International. (2009). *Transparency in corporate reporting: Assessing the world's largest companies*.

Treaty on the Functioning of the European Union (TFEU), Oct. 26, 2012, OJ C 326.

Treccani. (n.d.). Soft law. In *Lessico del XXI Secolo*. Treccani. https://www.treccani.it/enciclopedia/soft-law_%28Lessico-del-XXI-Secolo%29/

United States District Court for the Southern District of Texas, Houston Division. (2010, November 4). Deferred Prosecution Agreement: United States v. Panalpina World Transport (Holding) Ltd, No. 10-CR-769, Attachment C. U.S. Department of Justice.

UNGC. (2000). The Ten Principles of the UN Global Compact. <https://unglobalcompact.org>

UNODC. (2004). United Nations Convention Against Corruption.

US District Court for the District of Columbia, SEC v. Siemens (case 1:08-cv-02167), Complaint, 12 December 2008, 13–14, accessed 20 March 2025, <https://www.sec.gov/litigation/complaints/2008/comp20829.pdf>.

U.S. Department of Justice. (2008, December 15). Siemens AG and three subsidiaries plead guilty to Foreign Corrupt Practices Act violations and agree to pay \$450 million in combined criminal fines [Press release]. Available at http://www.usdoj.gov/criminal/jpr/press_releases/2008/12/12-15-08siemans-guilty.pdf

U.S. Securities and Exchange Commission (SEC). (2008). Litigation release No. 20829: SEC charges Siemens AG for engaging in worldwide bribery. Wenzhong, Z., & Limin, F. (2012). A Case Study of Siemens' Violation of Business Ethics in Argentine Based On Stakeholder Theory. *Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Inc, 12*.

U.S. Securities and Exchange Commission v. Siemens Aktiengesellschaft, No. 1:08-cv-02167 (D.D.C. 2008), Complaint at 14. Available at <http://w1.siemens.com/press/pool/de/events/2008-12-PK/SEC.pdf>

Voeten, E. (2021). *Ideology and international institutions*. Princeton University Press.

Wellens, K. C., & Borchardt, G. M. (1989). Soft law in European Community law. *European Law Review*, 14(3), 267–321.

White, G. I., Sondhi, A. C., & Fried, D. (2003). *The analysis and use of financial statements* (3rd ed.). John Wiley & Sons.

Zhu, W., & Fu, L. (2012). A case study of Siemens' violation of business ethics in Argentine based on stakeholder theory. *Global Journal of Management and Business Research*, 12(13), 1-9. Global Journals Inc. (USA).

Zhu, M., & Tang, X. (2023). Soft law and global fisheries governance: Status and prospects. *Marine Policy*, 148, 105441

Zucman, G. (2015). *The hidden wealth of nations: The scourge of tax havens*. University of Chicago Press.