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The series is available online at www.bancaditalia.it .

ISSN 1972-6643 (online)

Designed by the Printing and Publishing Division of the Bank of Italy

SOURCING GOVERNANCE AND DE-RISKING STRATEGIES IN EUROPE: A COMPARATIVE STUDY OF GERMANY, ITALY AND SPAIN

by Marco Bottone[*], Michele Mancini[*], Albachiara Boffelli[†], Diletta Pegoraro[††], Ambre Kutten[#], Irina Balteanu[##] and Javier Quintana[##]

Abstract

The risks associated with conducting business internationally have increased significantly in the recent years due to escalating geopolitical tensions. In this context, extremely long and complex supply value chain configurations are unlikely to hold in the event of a disruption, pushing firms to engage in de-risking strategies. Using a common set of questions in the national business surveys conducted in Germany, Italy and Spain in 2023, this paper aims to test whether and to what extent the type of governance mode in sourcing inputs from abroad influences the decision to engage in de-risking activities. Our findings indicate that relations perceived as more complex and less substitutable are typically the first targets of derisking efforts. This finding contrasts with the notion that arm's length transactions are more likely to be revised due to their lower cost and ease of reconfiguration.

JEL Classification: F23, F05, D22.

Keywords: geopolitical tensions, global supply chains, de-risking strategies, sourcing governance.

DOI: 10.32057/0.QEF.2024.880

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1. Introduction[1]

The contemporary global landscape is marked by increasing geopolitical disorder, manifesting in trade disputes, sanctions, and political instability (Fjellström et al., 2023; Ghauri et al., 2021). Four major events since the beginning of the millennium have slowed international economic integration and trade for European firms (Pillich, 2024): (i) the Global Financial Crisis, (ii) inward-looking policies in advanced economies leading to trade barriers, such as the US-China trade war, (iii) the Covid-19 Pandemic, and (iv) rising geopolitical risks near the European Union, including the Russia-Ukraine War and the Israel-Palestine Conflict.

In this context, this paper examines the influence of governance modes in international sourcing on Multinational Enterprises' (MNE) decisions to engage in derisking strategies, i.e. those actions undertaken to reduce firms' dependencies from foreign suppliers located in geopolitically distant countries. Geopolitical volatility increases uncertainty in business environments, leading to a reliance on legally binding contracts to manage risks and ensure accountability. Regulatory changes, such as restrictions to trade and sanctions, can disrupt established supply chains, necessitating reconfiguration and exploration of new markets. Despite these risks, geopolitical shifts can also present new opportunities for businesses to adapt by seeking more politically and economically favorable locations or diversifying their supplier strategies.

The determinants of firms' internationalization strategies have been widely studied in the international business field. The Internalization Theory specifically addresses why and how firms expand internationally and choose to internalize their operations across borders rather than engaging in arm's-length transactions like exporting or licensing (Buckley & Casson, 1976; 1988; Hennart, 1977; 1982; Narula et al., 2019). The analysis of internationalization choices and the management of firms' foreign presence during turbulent times has received relatively less attention. The decision to adjust firms' international exposure by implementing derisking strategies is shaped by various factors such as managerial capabilities, the perceived duration of foreign shocks, and the attributes of inputs procured from overseas. This study focus on a specific factor which might influence this decision, that is the governance mode that firms adopts to interact with their suppliers.

The aim of this paper is to show how the governance mode regulating the foreign sourcing relationships influences the decision to implement derisking strategies. This choice is driven by (i) the replaceability of suppliers, and (ii) the type of relationship with the foreign counterpart established to manage the supply of key inputs. In doing so, we specifically contribute to the International Business literature by following the research directions suggested

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[1] Marco Bottone and Michele Mancini are co-leads. The views expressed in this paper are solely those of the authors and do not necessarily reflect those of Banca d'Italia, Deutsche Bundesbank and Banco de España. We thank Alessandro Borin, Concetta Rondinelli, Massimiliano Affinito, and Raffaela Giordano for their insightful comments.

by prominent scholars (De Marchi et al., 2020; Boschma, 2022; Narula et al., 2019). To the best of our knowledge, the relationship between governance mode and the adoption of derisking strategies is still largely unexplored in the literature. Thus, this paper enriches International Business literature by integrating risk perception during turbulent times into Internalization Theory (Xing et al., 2023).

Our analysis utilizes data from comprehensive and representative national business surveys, based on a probabilistic sampling method, conducted in 2023 in Italy, Germany, and Spain, focusing on sourcing critical inputs from China and derisking strategies, a crucial supplier for these countries (Attinasi et al., 2023). Overall, our core sample consists of over 2,000 firms that source critical Chinese inputs, from an initial pool of approximately 14,000 surveyed firms.

This study test whether and how different governance modes affect the probability of engaging in derisking strategies. In addition, it provides descriptive evidence on firms' exposure to critical Chinese inputs, their derisking strategies, and the potential disruptions that rising geopolitical tensions could cause to their activities.

According to the classification proposed by Fernandez-Stark and Gereffi (2016), four distinct governance structures can be identified. Hierarchical governance occurs when parties are integrated vertically within the same multinational enterprise. Relational governance involves collaborative partnerships characterized by high levels of trust and mutual dependence. Modular governance is defined by standardized and flexible interactions, allowing for the easy substitution or recombination of components or services. Market governance revolves around transactions based on price and competition within open markets. Our results suggest that firms with market or modular governance are less likely to engage in derisking strategies compared to those with relational or hierarchical governance. Instead, we find that firms engaged in more complex and less codifiable transactions – i.e., those with relational or hierarchical governance - are more inclined to promptly revise their sourcing strategies despite high commitments to foreign suppliers. One possible explanation of this result, supported by the empirical evidence, is that these firms expect a much higher negative impact on their activity from increased geopolitical tensions. Thus, the potential for higher losses drives them to act proactively to secure the supply of their most critical inputs.

This novel evidence contrasts with the notion that market-based relations involving simpler arm's-length transactions are easier to revise and, therefore, more likely to be cut to increase resilience. In fact, several studies suggest that relations between firms which entail a high fix cost – as those regulated by relational and hierarchical governances – are much more persistent than simpler and less costly relations – as market-based ones.[2]

[2] For instance, Martin et al. (2023) analyze the relationship between long-lasting firm-to-firm linkages – those with a high degree of specificity, as those regulated by relational or hierarchical governance – and uncertainty shocks. They conclude that these linkages are significantly more persistent than those with a lower degree of specificity, such as with market or

The remainder of the paper is structured as follows. First, we formulate the research question leading our study. Then, the method is explained, starting with a comparative analysis of the three surveys we leverage on, introducing the sampling method and the adopted measures. The empirical results are then presented and discussed. The conclusions end the paper.

2. Research question

The implementation of derisking strategies has become crucial in a world characterized by escalating geopolitical tensions, which have the potential to disrupt established supply chains. We aim to explore whether the adoption of derisking strategies is correlated with the governance mode and, if so, which governance mode is more likely to prompt the adoption of these strategies.

In an environment where firms traditionally adhere to a market governance approach, relying on mechanisms like contracts and transactions to coordinate activities with suppliers and partners, operations typically exhibit low tacit knowledge and a low degree of information asymmetry. Consequently, suppliers and partners are often considered replaceable entities subject to market dynamics. Within such frameworks, firms and suppliers tend to operate with a high degree of decision-making autonomy, usually decentralized. Firms in this setup may capitalize on market opportunities and given the fluid nature of market-based relations, adjustments are expected to be less costly and occur more readily. Therefore, according to this line of reasoning, in the current context cutting ties with foreign suppliers located in high risk countries should be more often seen for firms adopting market or modular governance modes.

Conversely, operations tend to possess high tacit knowledge and significant information asymmetry in environments where the firm is deeply entrenched in GVCs through relationships built on trust, equitable collaboration, and long-term commitments. Consequently, suppliers and partners are less easily replaceable. In this context, suppliers are considered integral partners in the lead firm's operations, and decision-making processes are intertwined with mutual dependencies across the value chain. Extensive information exchange is regulated and safeguarded against potential risks within these relationships. Firms often invest substantial resources in fostering trust, collaboration, and mutual dependencies with

modular governance. Antràs (2020) explored the persistence and resistance to change in offshoring decisions. Establishing production facilities abroad involves substantial investments in physical assets, acquiring local knowledge, drafting new contracts within a different legal framework, and navigating bureaucratic procedures. Setting up long-lasting and complex relationships with suppliers also entail relatively high fix cost. In fact, relation-specific investments in product customization, designed to align incentives and mitigate contract enforcement issues with commercial partners, often hold little to no value outside of the relationship. As a result, closing plants or reshoring operations entail significant additional costs and are rarely undertaken, even amidst high uncertainty, as also showed empirically by Di Stefano et al. (2023) in the aftermath of the Covid-19 outbreak. Conconi et al. (2016) also emphasize that when internationalization decisions are only partially irreversible, uncertainty enhances the option value of waiting for more information before proceeding with changes.

foreign suppliers over time. Thus, there might be a strong inertia against substituting suppliers with alternatives in less risky countries. However, during turbulent times, firms might want to act promptly to secure the supply of their most critical inputs, which are typically sourced through relational or hierarchical governance modes according to Internalization Theory.

Our research question aims to shed light on these aspects:

What is the probability of engaging in a derisking strategy for firms adopting relational or hierarchical governance, and how does it differ from the probability of derisking for firms adopting a market or modular governance?

3. Research methods

3.1. A comparative analysis of Germany, Italy, and Spain

Our analysis focuses on firms in Germany, Italy, and Spain that use Chinese inputs deemed critical to their activity, since these three countries are both significant EU economies and vulnerable to potential supply disruptions caused by geo-economic fragmentation. Indeed, they are the main European counties in terms of exposure, as measured by imports of key inputs from high-risk countries (Figure 1). [3] We focus on Chinese inputs as China is the most relevant foreign supplier of key inputs for these countries (Figure 2), and represents the most prominent source of supply chain risk for leading European multinationals in the current context of high geopolitical tensions. Indeed, according to a business survey conducted by the European Central Bank among leading European multinationals (Attinasi et al., 2023), two-thirds of all survey respondents cited China as a country that posed – or could pose – a general risk to supply chains in their sector, while the United States, Taiwan, India, Turkey, and Russia were each cited by just 10% of respondents.

Figure 1. Imports of key inputs from high-risk countries
(share of total imports)

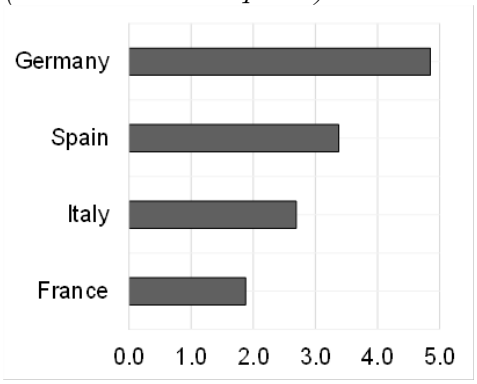
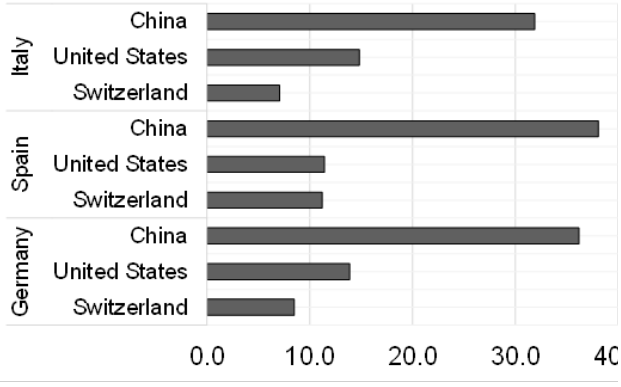


Figure 2. Imports of key inputs by top 3 extra-EU country of origin
(share of imports from extra-EU countries)



[3] We define key inputs following the EU commission classification (Arjona et al., 2023), and integrating it with the US Census list of Advanced Technology products, and with a list of scarce raw materials and inputs key for the green transition. High-risk countries are defined as those with strong economic and political ties with China and Russia, following Capital Economics (2023).

Source: own elaboration based on CEPII BACI 2022 data, EU Commission, US Census, OECD.

Source: own elaboration based on CEPII BACI 2022 data, EU Commission, US Census, OECD.

3.2. Sampling of Italian, German, and Spanish firms

We sampled 13,586 industrial and service firms with more than 20 employees by introducing a set of common questions in the national business surveys conducted in 2023 in Italy, Germany, and Spain by Banca d'Italia (INVIND – Banca d'Italia Survey of Industrial and Service Firms), Deutsche Bundesbank (BOP-F – Bundesbank Online Panel for Firms Survey) and the Banco de España (EBAE - Banco de España Business Activity Survey).[4] This joint effort aimed to better understand the level of exposure of these economies to the sourcing of critical Chinese inputs and the potential risk of disruption associated with it. Some methodological details for each survey are provided in Appendix A.

The role of these surveys in all the Central Banks is crucial since they are extensively used as granular complements to aggregate data for economic analyses and support the decision-making process. Given their relevance, significant efforts are dedicated to guaranteeing high data reliability by implementing several quality controls and data correction strategies. For all surveys, several plausibility rules are implemented in the questionnaire; moreover, microdata from each company is compared with past values and the same data collected by other firms in the same strata, allowing immediate outlier detection.[5] Furthermore, immediate checks with those obtained from external administrative archives are also implemented for the main variables. Compared to other international business empirical studies–as surveyed in Yang et al. (2006) – our sample has three main advantages. First, the surveys involved in this study are based on a probabilistic sampling method that, compared to non-probabilistic sampling, which is much more common in the international business field, provides a superior approximation of the population of interest and offer better assurance against sampling bias. Specifically, all the surveys are based on a stratified sampling method, which increases the estimates' precision compared to simple random sampling (Kish, 1995). Second, while most empirical studies in the field are based on evidence from a single country, this work is built on a set of harmonized questions from three different countries. Third, the sample size used in the empirical analysis (see Table 3) is about nine times larger than the average sample size of international business empirical studies based on probability sampling. In addition, the surveys have relatively low non-response rates, guaranteeing the minimization of possible distortions due to partial or total non-response.[6]

[4] Due to the harmonisation of all three surveys, some descriptive statistical results may slightly differ from already published analyses at national level.

[5] For example, in the case of the Spanish data, cross-checks led to the exclusion of a few firms with inconsistent answers on de-risking strategies across similar questions.

[6] Non-response rates are equal to about 40% for INVIND, which is based on a mixed mode sampling technique, namely Computer Assisted Telephone Interviewing, and Computer Assisted Web Interviewing. For EBAE and BOP-F, which are

3.3 Descriptive evidence based on harmonized business surveys

The harmonized questions from the questionnaires of the surveys mentioned above were used to operationalize the concepts of derisking and governance modes. Table 1 shows, for each country, the distribution of responses to the harmonized questions, while further elaborations showing the joint distribution by country and broad economic sector are available in Table B1 in Appendix B.

The first question measures firms' exposure to critical inputs from China. Critical inputs are defined in the questionnaire as those whose shortage would lead to a reduced quality of the good or service produced, or without which a significant part of the production process would not be completed or cause considerable delays. The second and third questions were addressed only to those firms declaring to be exposed to critical inputs, and respectively measure the inputs' substitutability and the strategy adopted to reduce dependency from China. Finally, one last question was posed to all firms: How would they be affected by a sudden escalation in geopolitical tensions between Western economies and China, leading to barriers to trade or foreign investments? These four questions were included with substantially the same wording – except for some minor differences due to the translation process – in the surveys conducted by each Central Bank in 2023.[7]

Table 1: Distribution of the harmonized questions by countries (percentage)

Questions	Italy	Spain	Germany
Q1: In the last 12 months, has your firm purchased inputs from China, which are critical for its production/business activity?			
Yes, imported directly from a producer located in China	9.7	4.1	10.1
Yes, imported directly from our firm's facilities located in China	0.4	0.7	1.8
Yes, purchased indirectly through a foreign or domestic distributor	4.2	5.5	25.3
No	85.7	89.7	62.9
Total	100	100	100
For those answering 'Yes' in Q1			
Q2: If these inputs were suddenly no longer available, how easy would it be to replace them with inputs not produced in China?			
Very easy	4.1	1.6	2.1
Easy	19.0	6.1	18.3
Difficult	49.5	11.7	42.4
Very difficult	16.4	11.9	37.3
Don't know	11.0	68.7	0.0

conducted exclusively online, the non-response rate is higher, around 60% and 80% respectively, but still lower than the average of other Computer Assisted Web Interviewing-only surveys.

[7] A preliminary descriptive analysis based on the answers to these questions, for manufacturing firms only, is provided in Balteanu et al. (2024).

Total	100	100	100
For those answering 'Yes' in Q1			
Q3: Has your firm adopted strategies to reduce purchases of inputs from China that are critical for your production/business activity?			
No, we haven't adopted nor we haven't planed to adopt some strategies	57.7	83.1	46.4
No, but we're thinking of doing so by the end of next year	15.6	6.8	17.6
Yes, mainly replacing these inputs with others from our country or produced in-house	6.4	2.5	4.4
Yes, mainly replacing these inputs with others from EU countries	9.9	2.7	17.0
Yes, mainly replacing these inputs with others from non-EU countries	6.3	1.9	7.8
Yes, but we've adopted strategies other than those listed above	4.1	3.0	7.0
Total	100	100	100
Q4: If the economic and geopolitical tensions between China and the western economies (including the EU) get worse over the next few months, leading to the introduction of new barriers to the trade of goods and services (tariff and non-tariff) and/or to limitations on foreign investment, how would this affect your firm's business?			
It wouldn't be affected much	71.3	48.9	29.9
Mostly in a negative way, mainly because our firm uses inputs from China	9.3	7.3	15.4
Mostly in a neg. way, mainly because our firm sells prod./ser. to Chinese firms or consumers	2.9	1.8	6.9
Mostly in a neg. way, mainly bec. of the increase in uncertainty over future econ. developments	14.0	35.2	44.4
Mostly in a neg. way, mainly bec. part of our firm's/group's production takes place in China	0.9	0.7	1.7
Mostly in a positive way	1.6	6.2	1.8
Total	100	100	100

Sources: Banca d'Italia (INVIND – Banca d'Italia Survey of Industrial and Service Firms), Deutsche Bundesbank (BOP-F – Bundesbank Online Panel for Firms Survey), and the Banco de España (EBAE - Banco de España Business Activity Survey.

According to all three national business surveys, a significant portion of the economy is potentially exposed to a sudden halt in the sourcing of Chinese critical inputs. Over one-third of German companies rely on Chinese inputs deemed critical for their activities. The exposure of the Spanish and Italian companies, although lower than Germany's, remains relatively high (above 10% of firms in both cases). The share of exposed companies is about twice as high in manufacturing as in services. The survey evidence on firms' exposure aligns with the indications from aggregate trade data, suggesting that Germany imports a higher share of key inputs from China (Balteanu et al., 2024). In addition, most Italian and German companies relying on critical Chinese inputs consider them difficult to replace.

According to the national survey results, some firms have already implemented derisking strategies to reduce their trade dependence on Chinese critical inputs. With over one-third of firms, Germany shows the highest share of firms already implementing derisking measures, compared to 27% of Italian firms and 10% of Spanish firms. Manufacturing firms are derisking more than the average (44% in Germany, 32% in Italy, and 13% in Spain). A relevant share of firms in Germany and Italy are considering taking derisking actions by the end of 2024, while only 7% of Spanish firms plan to do so. Among all three economies, the most common derisking strategy is a replacement of Chinese suppliers with those from the EU ("EU-shoring"). Additionally, a notable proportion of companies in Germany and Italy are shifting their sourcing of critical inputs from China to non-EU countries.

Finally, the hypothesis of a subbed escalation of trade tensions between China and Western countries leading to trade and investment barriers could significantly harm European companies' operations. Respectively, about 30% and 50% of Italian and Spanish companies expressed concerns about the adverse effects of heightened tensions on their activities. This share is notably higher for Germany (70%). The primary channel through which these tensions would negatively impact all three economies would be the increase in uncertainty regarding future economic trends. This result implies that many companies, even those without direct trade ties with China, would anticipate negative repercussions on their operations due to heightened uncertainty resulting from geopolitical tensions between China and the West. This channel is especially important, as it could amplify throughout the whole economy, disrupting the downstream production stages and raising risks for the financial system. As anticipated, a secondary –yet highly relevant – channel of disruptions for business operations would be the potential loss of access to Chinese intermediate inputs.

3.4 Measures

To operationalize the concept of governance mode, and following the conceptualization by Fernandez-Stark & Gereffi (2016), we leveraged the abovementioned questions. In particular, assuming that all the inputs considered are critical, as explicitly stated in the question, we rely on the *sourcing mode* established to import these inputs. This includes sourcing from an owned facility, from a foreign supplier, or through a distributor. In addition, we also rely on the degree of *replaceability* of the input.

We define market and modular governance modes as those associated with sourcing either from foreign suppliers or distributors inputs with a relatively high replaceability (very easy or straightforward to replace).[8] These two governance modes are analyzed together because firms can more readily exit such relationships due to their lower level of commitment.

[8] The "Don't know" answers to the replaceability question were assimilated to the easy and very easy answers, as we assumed companies would be aware of cases in which replaceability is challenging to achieve.

When an input is difficult to replace, it is often because the details and specifications of the transaction are not easily codified or standardized.[9] These transactions typically require more customized, complex, or tacit knowledge, making it harder to find alternative suppliers who can meet the specific needs and requirements without significant adjustments. Therefore, we define relational governance modes as those associated with outsourcing inputs that have a low degree of replaceability (difficult or very difficult to replace). Exiting this type of supplier relationship is challenging due to the high level of prior commitment. Lastly, when the chosen sourcing mode is insourcing (importing from the firm's facility), regardless of the degree of replaceability, the governance mode is hierarchical. As for market-modular governance modes, we considered the relational-hierarchical governance modes together, as we expect the same behavior when engaging in derisking strategies.

Therefore, based on the common set of questions, we created the following two variables to address our research question empirically:

- "Governance", is a dummy variable based on the questions related to the sourcing mode of critical inputs and their replaceability (Q1 and Q2). A graphical representation is shown in Table 2, where the light grey area refers to a "Relational-Hierarchical" governance, while the dark grey refers to a "Market-Modular" one. The share of firms with Relational-Hierarchical governance represents the majority in all three countries, ranging from 66 to 83% (Table 3).
- "Derisk", is a dummy variable taking value 0 if the company has not adopted nor plan to adopt any derisking strategy and 1 if it has or has already planned to do it by the end of 2024 (based on Q3).

Table 2: Definition of governance of the sourcing relationship based on survey questions

<table>
<tr><td></td><td></td><td colspan="5">If these inputs were suddenly no longer available, how easy would it be to replace them with inputs not produced in China?</td></tr>
<tr><td></td><td></td><td>Don't know</td><td>Very easy</td><td>Easy</td><td>Difficult</td><td>Very difficult</td></tr>
<tr><td rowspan="3">In the last 12 months, has your firm purchased inputs from China, which are critical for its production/business activity?</td><td>Yes, imported directly from our firm's facilities located in China</td><td colspan="5">Relational-Hierarchical governance</td></tr>
<tr><td>Yes, imported directly from a producer located in China</td><td colspan="3" rowspan="2">Market-Modular governance</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Yes, purchased indirectly through a foreign or domestic distributor</td></tr>
</table>

[9] A caveat to this assumption is that low repleacability could be also in principle due to other factors, such as market concentration (low number of suppliers).

Table 3 Share of firms with a Market-Modular or Relational-Hierarchical governance

	Country		
Governance	**Italy**	**Spain**	**Germany**
Relational - Hierarchical	344	224	1140
	(66%)	(74%)	(83%)
Market - Modular	179	78	232
	(34%)	(26%)	(17%)
Total	**523**	**302**	**1372**

Source: own elaboration based on INVIND, BOP-F, and EBAE.

4. Empirical analysis

We empirically test whether the type of governance affect the decision to engage in derisking activities using the following model:

$$\Pr(derisk_i=1) = \Lambda(\alpha + \beta\ governance_i + \boldsymbol{\omega}\ Z_i + u_i),$$

Where $\Lambda(.)$ is the logistic function, $derisk_i$ is equal to 1 if firm i has implemented or planned to implement a derisking strategy; $governance_i$ is equal to 0 if firm i is adopting Market-Modular governance (MM hereafter) or 1 if firm i is adopting a Relational-Hierarchical (RH hereafter) governance, and Z_i is a matrix of firms' characteristics (economic sector in which it operates, number of employees and geographical within country area).

The model was run and tested separated in the three countries due to confidentiality requirements for which none of the Central Banks were allowed to share the underlying data. In contrast, they were allowed to run the same models on their own data.

After having estimated the logit model and retrieved its coefficients $(\hat{\alpha}, \hat{\beta}, \hat{\boldsymbol{\omega}})$ - see the full results reported in Appendix C Table C1 - we estimate the average marginal effect of having a RH governance with respect to an MM governance on the probability of engaging in derisking strategies, i.e.:

$$\hat{\gamma} = \frac{1}{N}\sum_{i=1}^{N}\left[\Lambda(\hat{\alpha} + \hat{\beta} + \hat{\boldsymbol{\omega}}\ Z_i) - \Lambda(\hat{\alpha} + \hat{\boldsymbol{\omega}}\ Z_i)\right],$$

where the first (second) term is the estimated probability for firm i when adopting an RH (MM) governance. The average marginal effect $\hat{\gamma}$ represents the percentage points change in probability of derisking when, all else equal, firms' governance is RH rather than MM.

Results are shown in Table 4, where we report the estimated average probabilities to derisk for RH and MM firms for the three countries, as well as their difference, i.e. the average marginal effects of RH governance vs MM governance, $\hat{\gamma}$.

For all countries, when an RH governance is in place compared to an MM governance, the average probability of derisking is higher, i.e. $\hat{\gamma}$ is positive. More specifically, as reported in column (1), the average probability of derisking for MM governance is equal to approximately 30% in Italy and Spain and 47% for Germany, compared to average probabilities equal to 40% for Spain, 50% for Italy, and 57% for Germany when an RH governance is

adopted. Therefore, the difference in the probability of implementing derisking strategies for RH governance compared to MM governance equals approximately ten percentage points for Germany and Spain and 16 for Italy. In all countries, these estimates remain overall unchanged when controlling for the economic sector of the companies, number of employees, and geographical area (column 2).

Separating the manufacturing and service subsamples, in the Italy and in Spain service firms with RH governance show a lower - and even not statistically different from zero - increase in the probability of derisking, while in Germany the results are similar for manufacturing and services (columns 3 and 4).

Splitting the sample according to firms' size, it emerges that the RH governance is associated with a much higher probability of derisking compared to the MM governance for firms with more than 250 employees. In fact, for larger firms $\hat{\gamma}$ is equal to 21 percentage points for Germany, 30 for Italy, and 48 for Spain, compared to considerably lower values for smaller companies (columns 5 and 6).

As a robustness check, we estimate the model only on firms that have already implemented derisking strategies or are not considering derisking at all, excluding from the sample firms that plan to derisk in the near future (column 7). Results are qualitatively similar, as in Italy $\hat{\gamma}$ remains substantially unchanged (equal to approximately 16%) and highly significant; in Germany, it reduces from 10% to 7%, remaining significant; in Spain, it reduces from 13% to 7.5% and becomes less precise.

Finally, in column (8) we exploit the information regarding the expected impact of a potential escalation of geopolitical tensions between China and Western economies, leading to trade and investment restrictions, i.e. question four in the questionnaire. This information is used to create a new dependent variable that takes value 1 for companies that expect to be negatively affected and 0 in the remaining cases[10]. The results show that the probability of being negatively affected by an escalation in geopolitical tensions is significantly higher for RH governance compared to MM governance, by about 16 percent points in Spain and around 30 percent in Italy and Germany. This result could be interpreted in the following way: as firms adopting an RH governance expect a much higher negative impact on their activity from increased geopolitical tensions, they tend to derisk with a higher probability (as found in columns 1 to 7).

Overall, these results highlight that governance modes characterized by low to medium complexity of transaction, high to medium ability to codify transactions and capabilities in the supply base are usually less involved in derisking strategies. Vice versa, governance modes that show medium to high transaction complexity and medium to low ability to codify transactions and capabilities in the supply base, till the extreme of the hierarchical

[10] Since the answers to this question were not tied to the previous variables in the questionnaire, the response rates could be slightly different, resulting in a slightly different number of observations between columns 1 and 8.

governance, are more subject to derisking strategies. These results are confirmed across the three European countries considered in this paper, independently of their dependence on China or the specific inputs traded.

These findings contribute to the standard Internalization Theory (Narula et al., 2019) by adding empirical evidence of a somewhat counterintuitive result. Companies that structured their governance modes in line with what the Internalization Theory predicts, when facing turbulent times, react by cutting more promptly the relationships that are more difficult to replace, namely relational and hierarchical ones. This may be due to the higher losses that firms adopting relational or hierarchical governance would suffer from a change in the institutional context (Sturgeon, 2008), as our results also suggest. This result is innovative in the International Business literature. It puts the suitability of the standard Internalization Theory into discussion when firms have to deal with situations that make them more risk-averse than usual, such as the many unexpected disruptions that the global economy faces nowadays.

Table 4 Governance structure and derisking strategy in Italy, Spain, and Germany, regressions results

Dependent variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Pr(*derisk*$_i$=1)							Pr(*loss*$_i$=1)
Sample	*Full sample*	*Full sample*	*Manuf. only*	*Services only*	*Large firms*	*Small firms*	*Exclude planned derisking*	*Full sample*
	Italy							
Market-Modular	0.341***	0.346***	0.360***	0.293***	0.245***	0.379***	0.244***	0.520***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.007)*	*(0.000)*
Relational-Hierarchical	0.506***	0.503***	0.540***	0.343***	0.551***	0.483***	0.404***	0.829***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.007)*	*(0.000)*
Difference	0.165***	0.156***	0.180***	0.050	0.306***	0.104**	0.160***	0.309***
	(0.000)	*(0.001)*	*(0.000)*	*(0.597)*	*(0.000)*	*(0.048)*	*(0.000)*	*(0.000)*
N	523	519	414	101	139	376	438	537
	Spain							
Market-Modular	0.295***	0.278***	0.277***	0.282***	0.150	0.282***	0.104**	0.69***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.256)*	*(0.000)*	*(0.007)*	*(0.000)*
Relational-Hierarchical	0.402***	0.408***	0.454***	0.373***	0.631***	0.385***	0.179***	0.854***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Difference	0.107*	0.13**	0.178*	0.092	0.481***	0.103	0.075	0.164***
	(0.081)	*(0.032)*	*(0.055)*	*(0.250)*	*(0.004)*	*(0.116)*	*(0.130)*	*(0.004)*
N	302	302	125	175	25	271	217	310
	Germany							
Market-Modular	0.466***	0.468***	0.535***	0.419***	0.412***	0.472***	0.388***	0.591***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*
Relational-Hierarchical	0.572***	0.570***	0.630***	0.514***	0.625***	0.549***	0.456***	0.916***
	(0.000)	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*	*(0.000)*

Difference	0.106***	0.101***	0.095*	0.095**	0.213***	0.077*	0.068*	0.325***
	(0.003)	*(0.005)*	*(0.086)*	*(0.045)*	*(0.005)*	*(0.052)*	*(0.070)*	*(0.000)*
N	1.372	1368	642	695	369	997	1.098	1.365
Controls	NO	YES	YES	YES	YES	YES	YES	YES

Notes: The table reports marginal effects. Robust standard errors. P-values in parentheses. *: $p < 0.1$; **: $p < 0.05$; ***: $p < 0.01$. Complete tables with logit coefficients for all the model parameters are reported in the appendix. Source: own elaboration based on INVIND, BOP-F, and EBAE. Columns (1) and (2) show estimation results for the full sample with and without controls (*Zi*), respectively. Columns (3) to (6) show the results based on different sub-samples: manufacturing firms (3), service firms (4), firms with more than 250 employees (5), and firms with less than 250 employees (6). Column (7) reports the results when excluding from the sample firms just *planning* derisking strategies. Column (8) employs as dependent variable a dummy equal to 1 if the firm expects to be negatively affected by an escalation in geopolitical tensions between Western economies and China leading to trade and investment restrictions, and 0 otherwise.

5. Conclusions

This study aims to provide empirical insights into the governance nuances that influence the pace of derisking from Chinese suppliers or partners. Our findings suggest that activities perceived as more complex and less substitutable are typically the initial targets for derisking efforts, implying that firms promptly act to secure the supply of the most critical inputs.

From a geographical standpoint, it is noteworthy that in all three countries, a consistent derisking strategy can be observed. However, the extent of this derisking varies, influenced by the pre-existing level of dependence on China.

Policymakers should carefully consider that the lower propensity to derisk in market-based relationships might indicate a market failure that requires attention. Individually, firms may perceive arms-length transactions as easily substitutable and thus prioritize revising high-cost transactions (relational and hierarchical ones). However, this assumption may not hold in the event of synchronized and pervasive shocks, such as during the pandemic. In such circumstances, inputs sourced through market or modular governance modes could become as difficult to replace as those sourced through relational or hierarchical governance modes, due to global market tightness for such inputs.

The paper has some limitations, that leave room for future research. First, the cross-country analysis was carried out separately for the three samples. Having a unified sample would have allowed us to test more elaborate models. However, the three samples were large enough to allow parallel analyses, and the sample was designed to be representative of the population of companies in the three countries. Second, the theoretical foundation of this paper is the Internalization Theory, which should be suitable in explaining the sourcing decisions but lacked the conceptualization of derisking, which is one of this paper's contributions. Finally, the findings were only able to grasp the surface of a complex phenomenon: governance reconfiguration in turbulent times. Hence, future studies should explore the role of the context in more detail at multiple levels, including firm-, industry- and country-level.

An open research avenue concerns the role of the institutional context in driving derisking strategies and changes in governance modes, which was overlooked in this study.

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APPENDIX A - Background on business surveys

Deutsche Bundesbank Online Panel – Firms

The Bundesbank Online Panel – Firms ("BOP-F") is a dataset based on a representative online survey of firms prepared and conducted by the Research Centre and the Research Data and Service Centre (RDSC) of the Deutsche Bundesbank (Boddin and Köhler, 2023). The BOP-F contains quarterly survey data collected monthly by an external company over three-month cycles from July 2021 onwards. The survey data for each month represent a cross-sectional data set, while their combination within each quarter constitutes an unbalanced panel dataset. On average, around 9,000 firms from all sectors, regions, and sizes participate in the survey every quarter. The sample for the survey is drawn from the universe of firms based in Germany with a taxable turnover of more than €22,000 or at least one employer subject to social security contributions, which includes roughly 1 million firms. Participation in the survey is voluntary. The drawing is a proportional random sample stratified according to industry (6 classes, based on IAB's Establishment Panel classification, which is similar to NACE Rev. 2), region (4 classes, i.e., North, South, East, and West), and size (3 classes based on employment, i.e., 1-10, 11-200, more than 200, and turnover, i.e., 1,000-1,000,000, 1,000,001-34,000,000, more than 34,000,000) so that the selection probability is equal for all firms within each stratum but unequal between different strata. Firms' weights are created accordingly to make the results representative of the universe of German firms. Weights are produced in a two-step procedure, where in the first step, design weights are created using the inverse of the inclusion probabilities. Then, sampling weights for each stratum are iteratively adjusted using an iterative proportional fitting procedure. This procedure aims to change the sum of weights for each marginal dimension of the target variables to the distribution of the population until a predefined convergence criterion is achieved.

The survey consists of recurring core questions as well as special questions. The formers are mainly about the economic situation of firms and their expectations. The topics of the latter usually vary from quarter to quarter, but they often aim to collect data that would help address current economic issues. Harmonized questions on China were carried out in 2023 Q2 (the official questionnaire is available online).

Banca d'Italia survey on Industrial and Service firms

Italian data comes from the Banca d'Italia annual survey on industrial and service firms (INVIND), administrated since 1984 (Banca d'Italia, 2023). The survey initially only covered industrial processing firms with at least 50 workers, but the target population and the sample size have progressively grown over the years. From 2002 onward, the sample consists of about 4,000 firms, of which around 3,000 belong to the industrial sector and the remaining to the service sector. The survey uses stratified random sampling, where strata consist

of combinations of the branch of activity (11 classes, according to ATECO 2007 classification derived from NACE Rev. 2), size class (in terms of the number of employees, i.e. 20-49, 50-99, 100-199, 200-499, 500-999, 1,000-4,999) and region in which the firm's head office is located; firms with more than 5,000 employees are included in a separate fully sampled stratum as they are considered self-representative units.

As for the German case, the weighting procedure is performed in two stages, where design weights are created in the first step by using the inverse of the inclusion probabilities, and an iterative proportional fitting procedure is then implemented to adjust final weights to some marginal distributions of the reference population.

Banca d'Italia's regional branches conduct the interviews between February and April. The questionnaire usually comprises two parts: a core part collecting quantitative information on the firm's structural characteristics (employment, turnover, and investment) and a monographic section for conjunctural analysis, where harmonized questions on China were included in 2023.

Banco de España Business Activity Survey

The Banco de España Business Activity Survey (EBAE) is a quarterly online survey sent to approximately 15,000 non-financial firms based in Spain. Around one-third of the sample comprises companies cooperating regularly with the Banco de España's Central Balance Sheet Data Office (CBBE). The rest is drawn from a random sample of non-financial firms to get a final sample by size and sector.

The drawing is a proportional random sample according to size (9 classes based on the number of employees, i.e., 0, 1-2, 3-5, 6–9, 10–19, 20–49, 50–99, 100–199, >200), and industry (81 classes, defined at the two-digit level of the NACE Rev. 2 classification). Participation is voluntary, and the response rate is around 40% (i.e., around 6.000 firms).

The survey tends to over-represent large firms and the manufacturing sector, so weights are created along the size and sector dimensions (four size groups, i.e., 0-9, 10-49, 50-249,>250, and 15 sectors) to make results representative of the universe of Spanish firms.

The survey compiles qualitative information on firms' turnover, employment, business investment, costs, and prices. "Special modules" on topics of particular interest are regularly included in the survey.

APPENDIX B – Additional tables

The following table reports the questions from the survey used in this study and the distribution of the responses per country and sector.

B1. Distribution of answers by country and sector

	Country					
	Italy		Spain		Germany	
Questions	Manuf.	Serv.	Manuf.	Serv.	Manuf.	Serv.
(1) In the last 12 months, has your firm purchased inputs from China, which are critical for its production/business activity?						
Yes, imported directly from a producer located in China	13.6	6.9	10.8	3.5	18.6	7.3
Yes, imported directly from our firm's facilities located in China	0.9	0.1	0.5	0.7	4.3	0.8
Yes, purchased indirectly through a foreign or domestic distributor	5.3	3.5	9.4	5.2	32.8	22.7
No	80.3	89.5	79.3	90.6	44.2	69.1
Total	100	100	100	100	100	100
(2) If these inputs were suddenly no longer available, how easy would it be to replace them with inputs not produced in China?						
Very easy	2.3	6.8	1.6	1.6	2.2	2.0
Easy	23.8	11.5	8.5	5.9	17.7	19.0
Difficult	49.9	49.1	20.9	10.8	40.1	43.7
Very difficult	18.3	13.1	16.9	11.4	40,0	35.4
Don't know	5.6	19.5	52.1	70.3	0.0	0.0
Total	100	100	100	100	100	100
(3) Has your firm adopted strategies to reduce purchases of inputs from China that are critical for your production/business activity?						
No, we haven't adopted /we plan to adopt some strategies	47.4	73.6	77.7	83.5	37.4	52.0
No, but we're thinking of doing so by the end of next year	21.0	7.4	9.3	6.5	18.2	17.1
Yes, mainly replacing these inputs with others from your country or produced in-house	7.3	4.7	3.3	2.4	4.3	4.5
Yes, mainly replacing these inputs with others from EU countries	12.4	6.3	3.7	2.7	21.7	14.0
Yes, mainly replacing these inputs with others from non-EU countries	7.4	4.7	0.8	2.0	10.1	6.4
Yes, but we've adopted strategies other than those listed above	4.6	3.4	5.2	2.8	8.3	6.1
Total	100	100	100	100	100	100
(4) If the economic and geopolitical tensions between China and the western economies (including the EU) get worse over the next few months, leading to the introduction of new barriers to the trade of goods and services (tariff and non-tariff) and/or to limitations on foreign investment, how would this affect your firm's business?						
It wouldn't be affected much	62.0	78.1	35.9	50.1	19.9	33.7
Mostly in a neg. way, mainly bec. our firm uses inputs from China	14.1	5.9	15.1	6.5	21.7	13.0
Mostly in a neg. way, mainly bec. our firm sells prod./ser. to Chinese firms or consumers	4.7	1.5	2.6	1.7	14.3	4.2
Mostly in a neg. way, mainly bec. of the increase in uncert. over future econ. develop.	15.4	12.8	36.2	35.1	37.3	46.8
Mostly in a neg. way, mainly bec. part of our firm's production takes place in China	0.8	1.1	1.1	0.6	3.3	1.1
Mostly in a positive way	3.1	0.5	9.1	5.9	3.5	1.2
Total	100	100	100	100	100	100

APPENDIX C – Additional results

C1. Complete logit regression coefficients for Italy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Relational-Hierarchical	0.683***	0.676***	0.764***	0.237	1.404***	0.445*	0.788***	1.587***
	(0.000)	(0.001)	(0.001)	(0.600)	(0.001)	(0.051)	(0.001)	(0.000)
North East		0.249	0.194	0.512	0.221	0.293	0.253	0.547*
		(0.337)	(0.506)	(0.388)	(0.648)	(0.360)	(0.402)	(0.088)
Centre		-0.069	-0.162	0.230	-0.588	0.065	-0.033	-0.257
		(0.787)	(0.570)	(0.716)	(0.250)	(0.830)	(0.913)	(0.385)
South and Islands		0.140	0.075	0.464	-0.169	0.196	0.328	-0.219
		(0.597)	(0.804)	(0.419)	(0.786)	(0.515)	(0.287)	(0.440)
50-250 employees		0.085	-0.005	0.379			0.133	-0.238
		(0.707)	(0.984)	(0.462)			(0.618)	(0.342)
>250 employees		0.001	-0.064	-0.124			0.087	0.399
		(0.998)	(0.828)	(0.837)			(0.770)	(0.206)
Chemicals, rubber, plastics		0.967**	0.973**		1.141	0.845*	1.786***	-0.624
		(0.016)	(0.016)		(0.119)	(0.081)	(0.001)	(0.167)
Basic metals and engineering		1.144***	1.152***		1.169*	1.137***	1.802***	0.067
		(0.000)	(0.000)		(0.060)	(0.003)	(0.000)	(0.851)
Other manufacturing		0.614	0.639		0.766	0.554	1.165**	0.011
		(0.120)	(0.106)		(0.402)	(0.222)	(0.039)	(0.979)
Energy and extraction		0.936			0.000	0.193	1.924*	0.139
		(0.361)			(.)	(0.877)	(0.077)	(0.877)
Trade, hotels, restaurants		0.256			0.463	0.256	0.942*	0.131
		(0.508)			(0.543)	(0.571)	(0.086)	(0.755)
Transport, storage, IT		0.156		-0.281	0.000	0.338	0.825	-0.817
		(0.784)		(0.639)	(.)	(0.576)	(0.273)	(0.150)
Other business services		1.035		0.876	0.938	1.131	1.470	-1.327
		(0.288)		(0.433)	(0.490)	(0.400)	(0.239)	(0.254)
Constant	-0.660***	-1.553***	-1.511***	-1.296**	-2.048***	-1.387***	-2.809***	0.117
	(0.000)	(0.000)	(0.000)	(0.025)	(0.003)	(0.001)	(0.000)	(0.780)
Controls	NO	YES	YES	YES	YES	YES	YES	YES
Sample	Full	Full	Manuf.	Services	Large	Small	Derisked	Damage
N	523	519	414	101	139	376	438	537

Notes: The table reports logit coefficients. Robust standard errors. P-values in parentheses. *: $p < 0.1$; **: $p < 0.05$; ***: $p < 0.01$.

C2. Complete logit regression coefficients for Germany

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Relational-Hierarchical	0.428***	0.419***	0.397*	0.394**	0.908***	0.324*	0.289*	2.100***
	(0.003)	(0.005)	(0.081)	(0.048)	(0.006)	(0.053)	(0.075)	(0.000)

Western Germany	-0.171	0.115	-0.369	0.560	-0.379*	0.023	0.501*
	(0.332)	(0.671)	(0.106)	(0.129)	(0.057)	(0.910)	(0.053)
Eastern Germany	-0.535**	-0.750**	-0.439	0.894*	-0.892***	-0.422*	0.057
	(0.012)	(0.023)	(0.109)	(0.090)	(0.000)	(0.083)	(0.853)
Southern Germany	-0.252	-0.031	-0.435*	0.704*	-0.565***	-0.054	0.164
	(0.152)	(0.909)	(0.061)	(0.051)	(0.005)	(0.789)	(0.528)
50-249 empl	0.003	0.161	-0.109			-0.024	-0.156
	(0.984)	(0.456)	(0.534)			(0.870)	(0.431)
> 249 empl	0.198	0.070	0.449**			0.095	0.158
	(0.198)	(0.761)	(0.039)			(0.576)	(0.517)
Food ad beverages	0.206			1.397	-0.305	0.478	-0.085
	(0.657)			(0.112)	(0.602)	(0.364)	(0.902)
Non-durable. consumer	0.430	0.218		0.436	0.438	0.712	0.435
	(0.324)	(0.566)		(0.517)	(0.431)	(0.153)	(0.542)
Producer goods	0.394	0.209		0.721	0.281	0.616	0.562
	(0.306)	(0.511)		(0.222)	(0.570)	(0.171)	(0.355)
Capital and durable	0.397	0.211		1.021*	0.115	0.459	0.591
	(0.305)	(0.512)		(0.085)	(0.818)	(0.313)	(0.336)
Construction	-0.155			0.728	-0.548	-0.069	0.010
	(0.704)			(0.291)	(0.287)	(0.886)	(0.987)
Wholesale trade, sale	-0.376		-0.206	0.153	-0.662	-0.379	0.466
	(0.347)		(0.399)	(0.819)	(0.190)	(0.423)	(0.455)
Retail trade	-0.136		0.002	0.382	-0.400	0.037	-0.045
	(0.756)		(0.994)	(0.593)	(0.465)	(0.941)	(0.948)
Transport and storage	-0.286		-0.180	0.720	-0.852	-0.303	1.709
	(0.587)		(0.671)	(0.385)	(0.215)	(0.631)	(0.120)
Info and IT services	0.197		0.361	1.726*	-0.237	0.241	0.388
	(0.664)		(0.264)	(0.076)	(0.668)	(0.649)	(0.579)
Accommodation and food	0.352		0.564	0.000	0.009	0.400	-0.639
	(0.562)		(0.276)	(.)	(0.990)	(0.554)	(0.391)
Financial and insurance	0.618		0.843	0.107	0.867	1.152	-1.122
	(0.499)		(0.343)	(0.944)	(0.455)	(0.222)	(0.422)
Business supporting activities	0.067		0.254	-0.031	-0.090	0.095	0.758
	(0.891)		(0.496)	(0.983)	(0.878)	(0.869)	(0.405)
Human health and social	-0.151		-0.034	1.191*	-0.822	-0.004	-0.370
	(0.733)		(0.914)	(0.094)	(0.153)	(0.994)	(0.572)
Other services	0.228		0.398	0.689	-0.019	0.346	-0.251
	(0.577)		(0.128)	(0.383)	(0.970)	(0.469)	(0.692)
Activities of members	-0.142		0.227		-0.417	0.000	0.000
	(0.923)		(0.874)		(0.780)	(.)	(.)
Public administration	1.783		1.903*	0.000	1.335	2.068	0.485

		(0.146)		(0.098)	(.)	(0.309)	(0.105)	(0.671)
Constant	-0.138	-0.109	-0.092	-0.144	-1.719**	0.471	-0.688	-0.147
	(0.294)	(0.796)	(0.828)	(0.633)	(0.017)	(0.368)	(0.165)	(0.821)
Controls	NO	YES	YES	YES	YES	YES	YES	YES
Sample	Full	Full	Manuf.	Services	Large	Small	Derisked	Damage
N	1372	1368	642	695	369	997	1098	1365

Notes: The table reports logit coefficients. Robust standard errors. P-values in parentheses. *: $p < 0.1$; **: $p < 0.05$; ***: $p < 0.01$.

C3. Complete logit regression coefficients for Spain

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Relational-Hierarchical	0.474*	0.616**	0.825*	0.454	2.726**	0.487	0.666	1.143***
	(0.095)	(0.044)	(0.075)	(0.272)	(0.047)	(0.134)	(0.179)	(0.002)
Cataluna		0.394	0.030	0.559	0.508	0.537	0.527	0.927*
		(0.324)	(0.966)	(0.312)	(0.786)	(0.235)	(0.444)	(0.086)
Andalcia		0.640	0.206	0.920	-0.825	0.872*	-0.094	0.747
		(0.141)	(0.784)	(0.109)	(0.577)	(0.071)	(0.909)	(0.169)
Castillia		-0.291	-1.374	0.543	-2.451*	0.130	0.664	0.957*
		(0.547)	(0.106)	(0.390)	(0.071)	(0.808)	(0.345)	(0.082)
Aragon		-0.182	-0.712	0.144	0.000	0.115	0.752	2.468***
		(0.667)	(0.352)	(0.789)	(.)	(0.807)	(0.236)	(0.000)
50-250 employees		-0.093	-0.009	-0.152			-0.443	0.237
		(0.728)	(0.983)	(0.672)			(0.295)	(0.523)
>250 employees		0.619	0.300	1.346**			0.734	-0.375
		(0.127)	(0.604)	(0.042)			(0.231)	(0.420)
Energia y residuos		-0.068				-0.172	2.581	-1.965
		(0.963)				(0.906)	(0.112)	(0.191)
Construccion		0.128			-0.301	-0.036	0.050	0.030
		(0.783)			(0.850)	(0.943)	(0.958)	(0.965)
Comercio		-0.435		-0.393	0.023	-0.472	-0.215	0.717
		(0.152)		(0.441)	(0.986)	(0.133)	(0.645)	(0.118)
Transporte		-0.986		-1.059		-1.110	0.081	-1.425
		(0.368)		(0.372)		(0.318)	(0.941)	(0.205)
Hosteleria		-0.899		-0.832		-0.974	0.000	0.125
		(0.331)		(0.411)		(0.298)	(.)	(0.901)
Inf y Comunic		0.006		0.016		-0.029	1.179	-1.665**
		(0.995)		(0.986)		(0.972)	(0.186)	(0.047)
Act prof. cientif y tecnicas		0.619		0.483		0.375	0.398	-1.464**
		(0.249)		(0.477)		(0.511)	(0.622)	(0.040)
Otros servicios		0.819		0.847		0.577	1.293*	-0.889
		(0.160)		(0.218)		(0.338)	(0.057)	(0.122)

Constant	-0.872***	-1.095**	-0.773	-1.278*	-1.434	-1.188**	-2.710***	-0.162
	(0.000)	(0.022)	(0.308)	(0.085)	(0.388)	(0.022)	(0.000)	(0.789)
Controls	NO	YES	YES	YES	YES	YES	YES	YES
Sample	Full	Full	Manuf.	Services	Large	Small	Derisked	Damage
N	302	302	125	175	25	271	217	310

Notes: The table reports logit coefficients. Robust standard errors. P-values in parentheses. *: $p < 0.1$; **: $p < 0.05$; ***: $p < 0.01$.