

INDIVIDUAL TYPES OF CORPORATE RISKS: INDUSTRY DISTRIBUTION IN THE CASE OF SLOVENIA¹

ПОЈЕДИНАЧНЕ ВРСТЕ КОРПОРАТИВНИХ РИЗИКА: СЕКТОРСКА
ДИСТРИБУЦИЈА У СЛУЧАЈУ СЛОВЕНИЈЕ

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Abstract: *The contribution deals with individual risks in the Slovenian business environment. We encompassed eighteen different corporate risks in our research. The companies were asked to assess their exposure to the individual risk type in 2023. They have chosen their exposure rate from very little to significant on a Likert four-point scale. The results presented are based on answers from 120 large and middle-sized companies and are analysed according to their economic activity. We explored the research question of whether exposure to a particular type of risk differs among industries. This risk assessment is part of a broader annual Slovenian Corporate Risk Monitor 2023 project.*

Keywords: *risk, corporate risks, risk types, economic activity, industry, Slovenia.*

Сажетак: *Прилог се бави појединачним ризицима у словеначком пословном окружењу. У нашем истраживању обухватили смо осамнаест различитих корпоративних ризика. Од компанија је затражено да процене своју изложеност појединачном типу ризика 2023. године. Одабрале су своју стопу изложености од веома мале до значајне на Ликертовој скали од четири тачке. Приказани резултати су засновани на одговорима 120 великих и средњих предузећа и анализирани су према њиховој економској делатности. Истражили смо истраживачко питање да ли се изложеност одређеној врсти ризика разликује међу индустријама. Ова процена ризика део је ширег годишњег пројекта словеначког корпоративног надзора ризика 2023.*

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JEL classification: *G00, G32, M40.*

INTRODUCTION

All organizations, regardless of type, industry, size or ownership structure, private or public, nowadays face an extremely complex and constantly changing environment. The three most important topics impacting the recent risk landscape are the 2008 financial crisis, which challenged regulators to harness the financial sector, the Covid pandemic, the changing climate and the Russian-Ukrainian war. Political instability in many parts of the world only adds to the complexity and perplexity of new non-economic events having economic consequences, where the only thing in everyday life is not solely constant change. It has to deal with financial and economic uncertainties at every social and economic level. These significant events have sped up risk perception, risk-defining, measuring, managing, and mitigating. Entities must meet the highest stakeholder expectations in these increasingly challenging and uncertain environments. They are pressed to achieve the maximum possible profit and, at the same time, adjust to the new paradigm of social, environmental and governmental responsibilities. Climate change and crises have taken off globally, and natural catastrophes occur daily. All these recent events have brought the acknowledgement even of additional and new risks and risk management, to a whole new level. Some new risks have emerged.

Moreover, the risk importance perception might be forever changed, although (Dionne, 2016) risk management has been studied since the end of World War II, and is a relatively recent addition to corporate functions plethora. Hopkin (2018) argues that failure of adequate risk management can be caused by inadequate risk recognition, analysis and inappropriate risk response, which might cause inadequate risk management. Insufficient risk management, as it is commonly known, might lead to financial distress for an entity. In this regard, Fatemi and Luft (2002) stated that the most important argument for establishing risk management is the avoidance of the unfavourable financial state of an entity. They also argue that there are some offsetting costs to consider, and their mere existence makes it crucial that shareholders understand the risk management process.

Managing routine risks is insufficient (Kaplan et al., 2020). Novel risks must be foreseen in new circumstances, not before seen, thought of and dealt with (ibid.). There is no comprehensive, unified, typical list of

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risks that have to be paid attention to in a specific entity. Each of them sets its own specific risk list, or routine risks list. Nevertheless, there are some generally accepted risk categorisations. Sarvaes et al. (2009, 61-62) divide the wide range and variety of risks faced by entities into three main risk fields: market, commercial, and external events, while (Kaplan et al., 2020, 4) offer a slightly different categorisation: operational and compliance, strategy execution, and external risk. The latter has been in recent events, in Slovenia and globally, regarding climate change and rough weather occurrences, proven to be one of the most important fields of risk since they need not be entity-specific. However, they significantly impact the entity's operations, risk management process organisation, and related costs.

The purpose of the paper is to look into Slovenian entities' risk perception and exposure, that is, middle- and large-sized non-financial companies. We provided them with a comprehensive individual risk type list and asked them to rate their exposure to a specific risk. Further, the paper aims to present the survey results regarding risk rank according to perceived exposure estimate and look at the listed risk distribution over industries. The research question is therefore two-folded. First, which risks Slovenian entities concerned to be most present in their day-to-day business and are most exposed to them? Second, how most exposed risks, as decided by the Slovenian entities, are materialised in specific sectors? This risk assessment dealt with in this paper is part of a broader annual Slovenian Corporate Risk Monitor 2023 project and is conducted within the frame of time-context research on risk management in Slovenia that has been in course from 2020 onwards. The project scans Slovenian risk management practices.

The limitations of our paper are several. We are limiting the paper content-wise regarding risks taken into consideration and encompassing the selected point of view of individual risk types that were perceived in Slovenian entities' business landscape to the industry distribution of risks. In the questionnaire, we listed 18 individual risk types. Given the paper's title, we limit ourselves geographically to Slovenia. We also limit ourselves regarding company size to middle- and large-sized and non-financial entities. We should emphasise that when talking about Slovenian entities in the following paragraphs, we refer to middle- and large-sized companies and use these terms as synonyms for entities included in our research. We are time-wise limited to the year 2023. Research architecture is given in a separate part of this paper. The primary presumption is that the data received in the survey gives insight into included entities' daily risks and the intensity of exposure to an individual type of listed risk.

In the section on individual types of risk analysis concerning industry distribution, we have limited ourselves to the three most important

risks with the highest average exposure as decided by Slovenian entities. Although the survey as a whole dealt with specific risk types from the perspective of entities' size, region of operation and industry in the following paragraphs, we offer an in-depth analysis regarding different types of risks and their connection to the industry in which an entity is active. Detailed information on the included sectors is given in the section about methodology and data.

The paper is structured as follows. After the introduction, the methodology and data are described. We continue with the overall risk exposures of Slovenian entities, where the statistical centre values are calculated for assessing which risks Slovenian entities perceive as most important and think they are most exposed to in 2023. In the third content part of the paper, we address the title dilemma and look into how risks were distributed through industries. We were discovering which risks were most present or not dealt with in specific sectors, from which respondents to our survey are active. In conclusion, we deal with the introduced research question and point out the further possible research venues.

1. METHODOLOGY AND DATA

A survey and research presented in the paper are carried out in the context of broader annual Slovenian research on risk behaviour in Slovenian entities Corporate Risk Monitor project 2023. As already mentioned, our faculty, the Department for Finance and the Institute for Finance and Artificial Intelligence annually conduct research on corporate risk management practices in Slovenia from 2020 onwards.

In the survey on risk management and risks in Slovenian middle- and large-sized non-financial entities, we received 120 responses. The survey gathered answers from entities' employees dealing with risk management issues and activities. The answers were mainly given by chief financial officers (CFOs), chief risk officers (CROs), and managing directors. The questionnaire itself offered nine possible answers. Those are the person responsible for finance, the finance department, the person responsible for accounting, the accountancy department, the person responsible for risk management, the risk management department, the executive director, the entity's consultant, or others.

We base the decision about the sample on the literature body, which researches the risk taking according to many factors: for example, board size and composition (Younas et al., 2019), ownership structure (Paligorova, 2010), shareholder structure (Facchio et al., 2011), performance (Bromiley, 1991), culture (Li et al., 2013) and entity size

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because the complexity of risk management and variability of risk exposures are very different in small compared to large entities, where the literature body looks into small and medium-sized companies risk management specialties (see for example, Blanc Alquier & Lagasse Tignol, 2006; Brustbauer, 2016). Even from the investors' point of view, the company size definitely plays a role in the investment decision-making process because it potentially impacts expected returns and expected volatility, and portfolio diversification according to size bears different levels of risk and different growth potential, last but not least, also impacts dividend policy (more ProfileFinancial, 2015; Hargreves Lansdown, 2023). Martín-Reyna et al. (2012) argue that, in theory, larger business entities offer more assurance than smaller ones, lowering the uncertainty level.

Plus, the structure of the Slovenian economy corresponds to the respondent structure, where middle-sized entities prevail over large-sized entities (see SURS, 2020). Financial institutions were omitted from the survey due to their unique risk management and reporting demands, plus financial institutions are highly regulated and supervised by central banks. In the Slovenian Companies Act (ZGD-1), entity size is dealt with in Article 55. Several size categories, foreseeing different classification factors (number of employees, yearly net turnover and value of assets), are described: micro, small, medium-sized and large entities (the legislation uses the term company). A medium entity, according to this law, is described as medium when it is not attributed to any other size group of companies, when: "*average number of employees in a financial year does not exceed 250; it has a net turnover of less than EUR 40,000,000; and the value of its assets does not exceed EUR 20,000,000.*" A large entity fulfils all the highest values of categorisation factors and is classified as such when it does not belong to any other group stated before, meaning it is not a micro, small or medium-sized company.

Hence, the results presented in this paper are based on answers from 120 large and middle-sized companies and are analysed according to their economic activity based on a specific industry or sector. Of the 120 entities, 78 middle-sized entities and 42 large entities answered the 12th question in the questionnaire, "How exposed were you to a listed individual type of risk in 2023?". We also give an insight into the overall individual risk types perception of the included Slovenian entities. All tables and graphs in the following section are those with a frequency of 120, except the ones based on the most presentable industry regarding the number of entities. That is industry manufacturing, where forty-three answers are taken into consideration.

Likert scale offered in the questionnaire was a four-point scale. The possible exposures were listed from 1 to 4. Value 1 is attributed to a very small exposure, value 2 to somewhat exposure, 3 to moderate exposure and value 4 to significant exposure.

The types of risks included in the survey to be assessed by the strength of exposure are credit risk, interest risk, liquidity risk, currency risk, price risk, natural disaster risk, digital security risk, regulatory risk, ESG, operational risk, risk of qualified staff shortage, obligation default risk of counterparties, the risk of supply chains interruptions, country risk, legal risk, reputational risk, the risk of new technologies, and market competition development risk.

In the section regarding individual types of risks according to industry analysis, we have chosen, based on calculated central values, three risks by the Slovenian entities perceived as most important. Meaning they were exposed to them to the most significant extent.

In the survey, respondents were offered to choose from different listed industries. We used the Slovenian standard classification of economic activities (SURS, 2008) and, for translations, the European Union (from now on, EU.) Statistical classification of economic activities (EUROSTAT, 2008).

Table 1. Respondents to the survey according to industry

| Industry | Description of industry | Number of entities | Percentage of respondents |
|-----------------|--|---------------------------|----------------------------------|
| A | Agriculture | 2 | 1.67% |
| C | Manufacturing | 43 | 35.83% |
| D | Electricity, gas, steam and air conditioning supply | 11 | 9.17% |
| E | Water supply; sewerage; waste management and remediation activities | 6 | 5.00% |
| F | Construction | 10 | 8.33% |
| G | Wholesale and retail trade; repair of motor vehicles and motorcycles | 17 | 14.17% |
| H | Transporting and storage | 7 | 5.83% |
| I | Accommodation and food service activities | 4 | 3.33% |
| J | Information and communication | 6 | 5.00% |

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|--------------|---|------------|----------------|
| L | Real estate activities | 2 | 1.67% |
| M | Professional, scientific and technical activities | 2 | 1.67% |
| N | Administrative and support service activities | 3 | 2.50% |
| Other | Listed below | 7 | 5.83% |
| Total | | 120 | 100.00% |

Source: Authors' survey data (2023), SURS (2008), EUROSTAT (2008).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

The respondent entities came from several sectors. The distribution across industry sectors is shown in the table above. The industries are listed according to alphabetical order from A to U.

For our responders, we can see that sectors B, mining and quarrying, and K, financial and insurance activities, are not applicable, and the entities from these sectors did not participate in this survey. At the same time, sectors from classification O to U are described for the purpose of this survey as others. The absence of financial and insurance is justified by the decision that this survey deals with the topic of Slovenian corporate risks, which has already been dealt with above.

The respondents regarding the sector of their activities mostly come from sector C, different products' manufacturing, that is forty-three entities, 35.81%. The second sector that stands out a little is sector G, and according to the statistical classification of economic activities, this sector is active in wholesale and retail trade and repair of motor vehicles and motorcycles. Seventeen responding entities are in our survey active in this field. That makes 14.17%. Sectors that follow in the number of entities are D and F. In sector D, electricity, gas, steam and air-conditioning supply, we find eleven entities (9.71%); in F, construction, we find ten entities (8.33%).

Other sectors with not so many representatives in our survey, with only seven respondents, are (SURS, 2008; EUROSTAT, 2008):

- Public administration and defence; compulsory social security,
- P – Education,
- Q - Human health and social work activities,
- R - Arts, entertainment and recreation,
- S - Other services activities,
- T - Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use,
- U - Activities of extraterritorial organizations and bodies.

2. OVERALL RISK EXPOSURES OF SLOVENIAN ENTITIES

In the table below, we can see the calculated central values for individual types of risks that responders were asked to assess according to their exposure to the individual risk. They marked their answers with given exposure strengths: 1 - very little, 2 - somewhat, 3 – moderate and 4 – significant. The data gives an overview of the respondents of all enterprises answering the survey question concerning exposure to individual types of risk.

Table 2. Individual types of risks data central values and ranks

| Risk | Mean | Rank | Mode |
|---|-------------|-------------|-------------|
| Currency risk | 1,41 | 1 | 1 |
| Country risk | 1,45 | 2 | 1 |
| Reputational risk | 1,48 | 3 | 1 |
| Legal risk | 1,61 | 4 | 1 |
| New technologies risk | 1,62 | 5 | 1 |
| Natural disaster risk | 1,83 | 6 | 1 |
| Market competition development risk | 1,90 | 7 | 2 |
| ESG risk | 1,95 | 8 | 2 |
| Credit risk | 1,97 | 9 | 1 |
| Operational risk | 1,99 | 10 | 2 |
| Interest risk | 2,01 | 11 | 1 |
| Obligation default risk of counterparties | 2,05 | 12 | 2 |
| Liquidity risk | 2,16 | 13 | 1 |
| Supply chain interruptions risk | 2,22 | 14 | 2 |
| Digital security risk | 2,29 | 15 | 2 |
| Regulatory risk | 2,45 | 16 | 2 |
| Qualified staff shortage risk | 2,51 | 17 | 2 |
| Price risk | 2,98 | 18 | 3 |

Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

These results are given regardless of the entity's specifics, for example, its size, industry of its activities or region of its operation. The figures can give us a vague idea of which risks are present in Slovenian entities' business environment and which risks they are exposed to the most significant or most minor extent. Based on the mean value, we accredited ranks to a specific individual type of risk.

Because the mean is the mathematical average or expected value and shows a central tendency in a set of values (CFI, 2022), calculated means give us an orientation point around which gathered data about

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individual types of risk exposure seem to be clustered. In the context of this research, the calculated mean, typical value, is used to calculate respondents' typical exposure to individual risk types. Hence, Slovenian enterprises are exposed to currency risk to the most minor extent (mean 1,41) and, to the greatest extent (mean 2,98), to price risk.

3. RESEARCHED TYPES OF INDIVIDUAL RISKS IN SLOVENIA ACCORDING TO INDUSTRY

In this section, we first see the results for the selected individual type of risk on the Slovenian level. We selected the risks closely presented in this paper based on *Table 2*, which shows which risks Slovenian entities were most exposed to and, therefore, find them to be the most important. Hence, we emphasised the three most essential risks from our 2023 survey, as they seem to be the most significant risks to be handled by Slovenian entities' risk management (see *Table 1*). We also try to explain the results with contemporary economic and non-economic events.

Secondly, we look into those risks' distribution across the industry. We provide tables and graphs for better insight into the topic.

Thirdly, for each selected risk, we also look into the most presented industry, the manufacturing industry, C, and its exposure to selected risks. In general, this paper's selected research point of view concerns the perception of individual risk types in different sectors. Forty-three entities indicated they came from the manufacturing industry, which makes up roughly 36% of all respondents.

The following sections are content-wise organised in the same order: Slovenian overview, sector distribution and detailed insight into industry C.

3.1. THE THREE MOST IMPORTANT RISKS IN SLOVENIA ACROSS INDUSTRIES

Regulatory, qualified staff shortage risk and price risk are three individual types of risks to which Slovenian entities were most significantly exposed to in the year 2023 according to calculated centred values in *Table 1*.

3.1.1 THE PRICE RISK EXPOSURE

Looking closer at the price risk exposure perception in Slovenia calculated average of 2.89, we can say the following: the most frequent answer in that individual type of risk was that entities thought they were moderately exposed to that risk. Forty-five entities answered that they were

moderately, and 42 were significantly exposed to that risk. That makes up roughly 73% of all respondents (120 entities). Interestingly, a more significant portion of large-sized entities have chosen level 4 exposure (35.71%), and 11.54% of middle-sized entities thought they were very little exposed to that risk. The percentage here is two times higher than in the group of large companies.

The results in this risk category are due to the timely component of the survey expected. The year 2023 is just a few years away from the COVID-19 health emergency and health crises that evolved into economic crises (for example, Maital & Barzani, 2020) and just a good year from the start of the Russian-Ukrainian war with huge European, if not global, economic consequences (Mbah & Wasum, 2022). These countries are crucial raw materials, affecting energy supply (Cui et al., 2022) and wheat exporters, which impacts prices due to the price growth effect down the supply chain and the food supply as one of the crucial goods (Jegtap et al., 2022). Given both facts, the price uncertainty and derived price risk are even more remarkable. The EU faces price volatility in energy and raw materials, which does not correspond with the EU's energy independence and energetic supply safety goals. The price of raw materials is listed in US dollars, which is seen as an even greater threat to greater business exposure than the raw material price (Lado-Sestayo, 2023).

Table 3. Slovenian entities' exposures to price risk regarding the industry

| Exposure/ Industry | Very little | Somewhat | Moderate | Significant | Total | Average weighted exposure |
|-------------------------------|------------------------|-----------------|-----------------|--------------------|--------------|--|
| A | 0 | 1 | 1 | 0 | 2 | 2.50 |
| C | 1 | 5 | 20 | 17 | 43 | 3.23 |
| D | 0 | 2 | 2 | 7 | 11 | 3.45 |
| E | 0 | 2 | 1 | 3 | 6 | 3.17 |
| F | 1 | 1 | 2 | 6 | 10 | 3.30 |
| G | 2 | 6 | 8 | 1 | 17 | 2.47 |
| H | 0 | 0 | 4 | 3 | 7 | 3.43 |
| I | 0 | 1 | 1 | 2 | 4 | 3.25 |
| J | 4 | 0 | 1 | 1 | 6 | 1.83 |
| L | 0 | 2 | 0 | 0 | 2 | 2.00 |
| M | 0 | 0 | 2 | 0 | 2 | 3.00 |
| N | 1 | 1 | 0 | 1 | 3 | 2.33 |

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|--------------|--------------|---------------|---------------|---------------|----------------|------|
| Other | 2 | 1 | 3 | 1 | 7 | 2.43 |
| Total | 11 | 22 | 45 | 42 | 120 | 2.50 |
| % SLO | 9.17% | 18.33% | 37.50% | 35.00% | 100.00% | |

Source: Authors' survey data (2023).

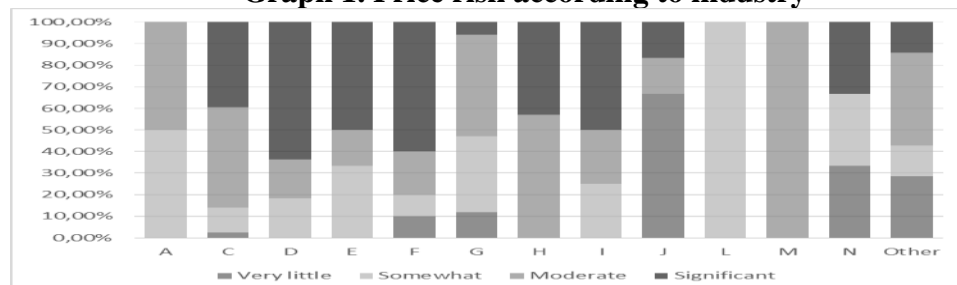
Note: Frequency is 120 survey replies regarding individual types of risk exposure.

Table 3 shows the frequencies of entities from various industries defining their exposure to price risk. Entities from seven sectors (A, D, E, H, I, L and M) thought they were very little exposed to the price list. Only three sectors (A, L and M) thought their exposure was insignificant. Most respondents are from the manufacturing industry. The majority of 43 entities from this industry marked that their exposure to price risk was moderate, 17 that it was significant, five were somewhat exposed and one exposure was very small.

The last column of *Table 3* shows the average weighted exposure to price risks in a specific sector. Industry D was, in this case, the most exposed (weighted average of 3.45). Since this is the industry according to standard classification covering electricity, gas, steam and air conditioning, supply price risks are expected due to the recent geo-political situation in Europe most presented in this industry. Sector H is regarding average risk exposure very close with 3.43. The industry of transporting and storage is vulnerable to price risk for the same reason as stated above.

Graph 1 shows the percentage of entities that have attributed the particular exposure to the price risk. The industry representing most respondents, C, attributed most answers to a category of moderate exposure to price risk (46.51%) and 39.53% to significant exposure to this risk. That makes up about 31 % (30.83%; 37 entities) of the 120 entities. Industries D and F were the ones with the highest percentage of significant exposure to price risk, decided by 63.64% and 60% of entities in those industries. On the other hand, most entities in sector J were very little exposed to that risk. Two-thirds of entities have chosen that option.

Graph 1. Price risk according to industry



Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

Looking closer to manufacturing, industry C, which has the most respondents, we can say that industry C18 and C27 representatives were all significantly exposed to price risk, while those from industry C10 in C29 were significantly exposed to price risk. The rest of the results in this regard are shown in *Table 4*.

Table 4. Manufacturing industry price risk exposures

| Exposure/ Industry | Description of industry | Very little | Somewhat | Moderate | Significant | Total |
|---------------------------|---|--------------------|-----------------|-----------------|--------------------|--------------|
| C – not sub-classified | Manufacturing | 5.56% | 22.22% | 50.00% | 22.22% | 100.00% (18) |
| C10 | Manufacturing of food products | 0.00% | 0.00% | 33.33% | 66.67% | 100.00% (6) |
| C16 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials | 0.00% | 0.00% | 100.00% | 0.00% | 100.00% (3) |
| C18 | Printing and reproduction of recorded media | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% (1) |
| C22 | Manufacture of rubber and plastic products | 0.00% | 0.00% | 50.00% | 50.00% | 100.00% (2) |
| C25 | Manufacture of fabricated metal products, except machinery and equipment | 0.00% | 16.67% | 33.33% | 50.00% | 100.00% (6) |
| C27 | Manufacture of electrical equipment | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% (3) |
| C28 | Manufacture of machinery and equipment n.e.c. | 0.00% | 0.00% | 50.00% | 50.00% | 100.00% (2) |
| C29 | Manufacture of motor vehicles, trailers and semi-trailers | 0.00% | 0.00% | 100.00% | 0.00% | 100.00% (2) |

Source: Authors' survey data (2023). SURS (2008). EUROSTAT (2008).

Note: Frequency is 43, corresponding with respondents in the industry C.

3.1.2. THE QUALIFIED STAFF SHORTAGE RISK

The results for Slovenia as a whole, with 120 entities responding to question 12, are the following: 10% thought their exposure to qualified staff shortage risk was very small. 40.83% have chosen to be somewhat exposed to it in 2023 just under 38% were moderately exposed, and only one-tenth

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(11.67%) were significantly exposed to qualified staff shortage risk. Qualified staff risk is a considerable risk in the Slovenian business environment. Based on the calculated mean, it is the second most important risk perceived by Slovenian entities and has ranked 17 among 18 risks according to the strength of exposure, from minor to significant. On average, the calculated mean is 2.51, and the exposure to qualified staff shortages was between somewhat and moderate exposure (roughly 80% of entities belonged to this group of answers). However, the most frequent answer in this risk category was 2, and the entities were, in the majority, somewhat exposed to this risk (see *Table 5*).

Results in this risk type are due to the post-COVID-19 pandemic and economic crises fully expected. Arpaia and Halasz (2023) explain that a labour shortage might be a consequence of various factors, also because of previous crises. It is a situation in the labour market when not enough qualified candidates are available to fill all open positions. It could be on behalf of uncertainty, the business cycle, or wage problems. Often, new industries demanding a specific qualification and a growing economy face such a problem. The global economy faces employee shortage problems after the COVID-19 pandemic (European Commission. 2023; OECD. 2021; ILO. 2019). EU admits there are skill shortages and problems of this nature and is working on solutions to labour and skill shortages (European Commission. 2023). Hence, a problem is also present in Slovenia (more. UMAR. 2023), where it is recommended to improve the labour shortage situation by undertaking various to facilitate the recruitment of foreign workforce.

Table 5. Slovenian entities' exposures to qualified staff shortage risk regarding the industry

| Exposure / Industry | Very little | Somewhat | Moderate | Significant | Total | Average weighted exposure |
|---------------------|-------------|----------|----------|-------------|-------|---------------------------|
| A | 0 | 2 | 0 | 0 | 2 | 2.00 |
| C | 1 | 11 | 24 | 7 | 43 | 2.86 |
| D | 1 | 7 | 2 | 1 | 11 | 2.27 |
| E | 0 | 1 | 3 | 2 | 6 | 3.17 |
| F | 1 | 4 | 4 | 1 | 10 | 2.50 |
| G | 6 | 8 | 3 | 0 | 17 | 1.82 |
| H | 1 | 1 | 3 | 2 | 7 | 2.86 |
| I | 0 | 1 | 2 | 1 | 4 | 3.00 |
| J | 1 | 4 | 1 | 0 | 6 | 2.00 |
| L | 0 | 2 | 0 | 0 | 2 | 2.00 |
| M | 0 | 1 | 1 | 0 | 2 | 2.50 |
| N | 1 | 1 | 1 | 0 | 3 | 2.00 |

| | | | | | | |
|--------------|---------------|---------------|---------------|---------------|----------------|------|
| Other | 0 | 6 | 1 | 0 | 7 | 2.14 |
| Total | 12 | 49 | 45 | 14 | 120 | |
| % SLO | 10.00% | 40.83% | 37.50% | 11.67% | 100.00% | |

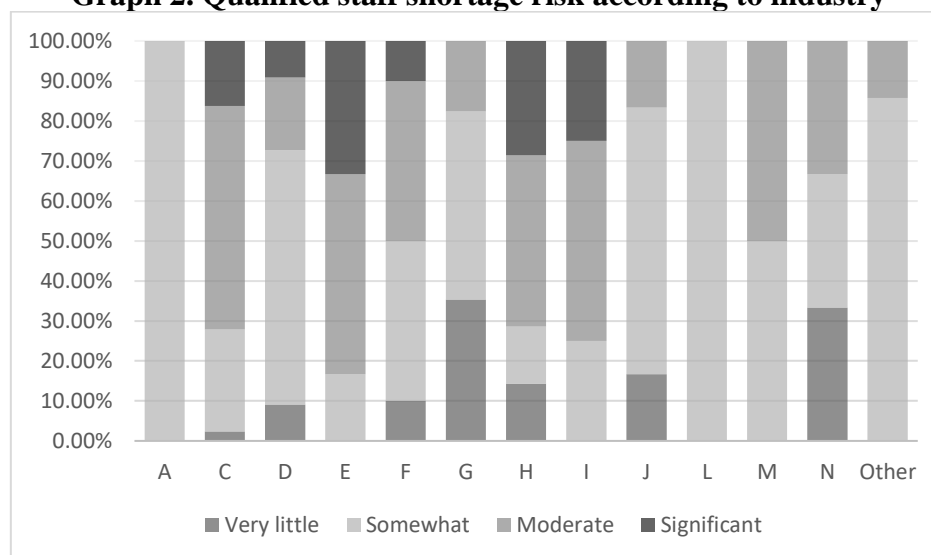
Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

Table 5 shows the frequencies of entities from various industries defining the exposure to qualified staff shortage risk. Entities from seven industries (A. G. J. L. M. N and others) thought they were not significantly exposed to this risk. In most industries, results show that they were at least very little exposed to qualified shortage risk. Most respondents are from the manufacturing industry, as already mentioned above, where 11 entities thought they were somewhat and 24 were moderately exposed. One entity marked that they were very little, and seven entities that their exposure was significant. In the following rows, we look into percentages of qualified staff shortage risk exposure and offer a detailed look at the most responded industry, that is, manufacturing (C).

The last column of Table 5 shows the average weighted exposure to qualified staff shortage risks in a specific sector. Industry E was the most exposed to risk (weighted average of 3.17). This industry covers water supply, sewerage, waste management, and remediation activities. The result is somehow expected, while this is a traditional sector that faces the problem of blank employment post fulfilment.

Graph 2. Qualified staff shortage risk according to industry



Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

Individual types of corporate risks industry distribution in the case of Slovenia

The industry representing most respondents, C, attributed most answers to a category of moderate exposure to price risk (55.81%) and roughly under 26% to moderate qualified staff shortage risk exposure. That makes up over 80% within this category and just under 30% of the 120 entities. Industries I and H were the ones with the highest exposure to this risk. On the other hand, most entities in sectors G and N were very little exposed (see *Graph 2*).

A closer look at industry C reveals (see *Table 6*) that entities from sub-classification representatives of C18 and C28 industries were all moderately exposed to price risk. The highest percentage for significant exposure is in C22, for somewhat exposure in C22. C25 and C29. Only in a non-sub-classified group 5.56% of entities thought their exposure to qualified staff shortage risk was small. None of the respondents perceived their exposure as small in all other sub-classes.

Table 6. Manufacturing industry qualified staff shortage risk exposures

| Exposure/ Industry | Description of industry | Very little | Somewh at | Moderat e | Significa nt | Total |
|----------------------------|---|----------------|--------------|--------------|-----------------|-----------------|
| C – not sub- classified | Manufacturin g | 5.56% | 22.22% | 61.11% | 11.11% | 100.00% (18) |
| C10 | Manufacturin g of food products | 0.00% | 16.67% | 50.00% | 33.33% | 100.00% (6) |
| C16 | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials | 0.00% | 33.33% | 66.67% | 0.00% | 100.00% (3) |
| C18 | Printing and reproduction of recorded media | 0.00% | 0.00% | 100.00% | 0.00% | 100.00% (1) |
| C22 | Manufacture of rubber and plastic products | 0.00% | 50.00% | 0.00% | 50.00% | 100.00% (2) |
| C25 | Manufacture of fabricated metal products, except | 0.00% | 50.00% | 33.33% | 16.67% | 100.00% (6) |

| | | | | | | |
|-----|---|-------|--------|---------|--------|-------------|
| | machinery and equipment | | | | | |
| C27 | Manufacture of electrical equipment | 0.00% | 0.00% | 66.67% | 33.33% | 100.00% (3) |
| C28 | Manufacture of machinery and equipment n.e.c. | 0.00% | 0.00% | 100.00% | 0.00% | 100.00% (2) |
| C29 | Manufacture of motor vehicles, trailers and semi-trailers | 0.00% | 50.00% | 50.00% | 0.00% | 100.00% (2) |

Source: Authors' survey data (2023). SURS (2008). EUROSTAT (2008).

Note: Frequency is 43, corresponding with respondents in the industry C.

3.1.3. THE REGULATORY RISK EXPOSURE

On the Slovenian level, 15% of entities marked their exposure to regulatory risk as very small, and just under 40% have chosen to be somewhat exposed to it in 2023. just under 32% were moderately exposed, and 14.7% were significantly exposed. Regulatory risk is based on these results and is also defined as a significant risk by entities included in our survey. Based on the calculated mean, 2.45, it is the third most important risk perceived by Slovenian entities in general. Hence, the most frequent answer in this risk category was 2; the entities were in the majority somewhat exposed to this risk (see *Table 7*). and the second most frequent (31.67%) was moderate exposure.

Regulatory risk exposure frequencies according to various industries are given in *Table 7*. Entities from four industries (A, E, H, and M) thought they were not very little exposed to the price list. On the other side, six industries thought they were significantly exposed to regulatory risk. The majority of 43 entities within the most numerous industries thought they were somewhat or moderately exposed.

Table 7. Slovenian entities' exposures to regulatory risk regarding the industry

| Exposure/ Industry | Very little | Somewhat | Moderate | Significant | Total | Average weighted exposure |
|-----------------------|-------------|----------|----------|-------------|-------|---------------------------------|
| A | 0 | 1 | 1 | 0 | 2 | 2.50 |
| C | 5 | 21 | 13 | 4 | 43 | 2.37 |

Individual types of corporate risks industry distribution in the case of Slovenia

| | | | | | | |
|--------------|---------------|---------------|---------------|---------------|----------------|------|
| D | 2 | 1 | 2 | 6 | 11 | 3.09 |
| E | 0 | 2 | 3 | 1 | 6 | 2.83 |
| F | 2 | 5 | 3 | 0 | 10 | 2.10 |
| G | 3 | 8 | 4 | 2 | 17 | 2.29 |
| H | 0 | 0 | 4 | 3 | 7 | 3.43 |
| I | 1 | 2 | 1 | 0 | 4 | 2.00 |
| J | 2 | 2 | 2 | 0 | 6 | 2.00 |
| L | 1 | 0 | 1 | 0 | 2 | 2.00 |
| M | 1 | 1 | 0 | 0 | 2 | 1.50 |
| N | 0 | 2 | 0 | 1 | 3 | 2.67 |
| Other | 1 | 2 | 4 | 0 | 7 | 2.43 |
| Total | 18 | 47 | 38 | 17 | 120 | |
| % SLO | 15.00% | 39.17% | 31.67% | 14.17% | 100.00% | |

Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

Since this risk is content-wise bound to changes of laws and regulations within a country or, in our case, the most pressure in this regard comes from EU common legislation, the results are somehow expected. Sector D, electricity, gas, steam and air-conditioning supply is lately due to various external threats and changes, very sensitive in regard to price risk and also in this regard.

Changes in demand structure for certain kinds of energy are relevant (Zeniewski et al., 2023) and were recently caused by the Russian invasion of Ukraine, which changed the oil and gas landscape (Korosteleva, 2022). Climate changes with milder winters, EU's energy efficiency (see Dunlop & Völker, 2023) and independence plans (more Miočić et al., 2022) and, last but definitely not least, EU climate-related goals (European Commission, 2023), are influence factors forcing policymakers to implement new policies regarding renewable energy (Márquez-Sobrinó et al., 2023). Many changes, of course, usually lead to regulatory changes and then, especially in this sector or regulated prices, also to price changes.

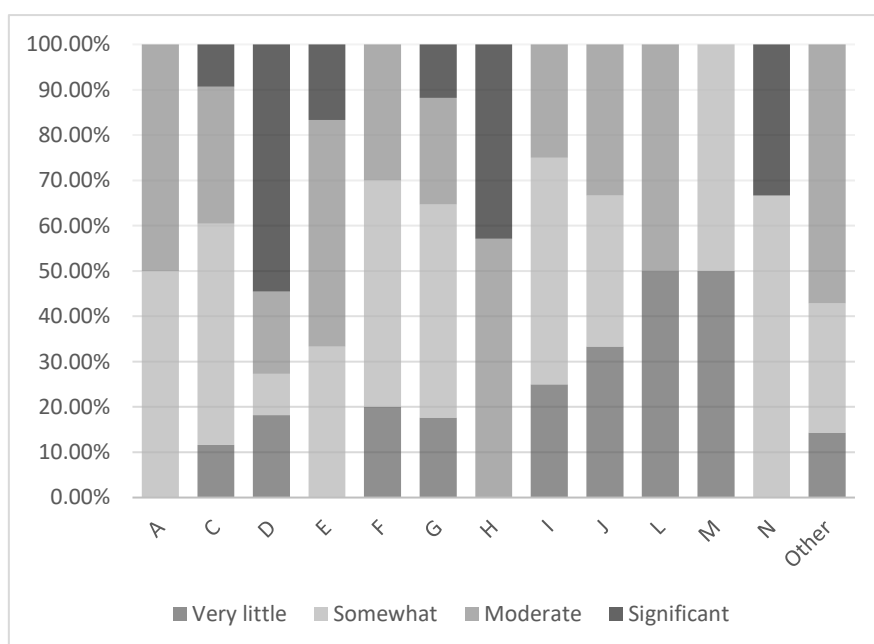
Graph 3 gives us an insight into this risk's strength perception in different sectors, assessed from 1 (very little exposed) to 4 (significantly exposed). The risk was most significant in sectors D, H and N, and at the least present, very small exposure was perceived in sectors L, M and J.

The last column of *Table 7* shows the average weighted exposure to regulatory risk in a specific sector. Industry H, transporting and storage, was the most exposed to risk (weighted average of 3.43).

The 54.55% of respondents in industry D thought they were significantly exposed to regulatory risk. On the other hand, 50% in sectors

L, real estate activities, and sector M, professional, scientific and technical activities, thought the explosion was very low. We must emphasise here that there are only two respondents, which is merely 1.67% of the sample.

Graph 3. Regulative risk according to industry



Source: Authors' survey data (2023).

Note: Frequency is 120 survey replies regarding individual types of risk exposure.

In the most represented sector in the structure of our respondents, sector C, the distribution among given options of risk exposure are as follows: 11.63% (5 entities) were very little exposed. 48.84% (21 entities) were somewhat exposed. 30.23% (13 moderately, and 9.30% (4 entities) were significantly exposed to regulatory risk. A closer look at that industry is in *Table 8*.

Table 8. Manufacturing industry qualified staff shortage risk exposures

| Exposure/ Industry | Description of industry | Very little | Somewhat | Moderate | Significant | Total |
|------------------------|--------------------------------|-------------|----------|----------|-------------|--------------|
| C – not sub-classified | Manufacturing | 22.22% | 38.89% | 38.89% | 0.00% | 100.00% (18) |
| C10 | Manufacturing of food products | 16.67% | 66.67% | 16.67% | 0.00% | 100.00% (6) |
| C16 | Manufacture of wood | 0.00% | 66.67% | 33.33% | 0.00% | 100.00% (3) |

Individual types of corporate risks industry distribution in the case of Slovenia

| | | | | | | |
|-----|---|-------|---------|---------|---------|-------------|
| | and of products of wood and cork. except furniture; manufacture of articles of straw and plaiting materials | | | | | |
| C18 | Printing and reproduction of recorded media | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% (1) |
| C22 | Manufacture of rubber and plastic products | 0.00% | 100.00% | 0.00% | 0.00% | 100.00% (2) |
| C25 | Manufacture of fabricated metal products. except machinery and equipment | 0.00% | 50.00% | 16.67% | 33.33% | 100.00% (6) |
| C27 | Manufacture of electrical equipment | 0.00% | 33.33% | 33.33% | 33.33% | 100.00% (3) |
| C28 | Manufacture of machinery and equipment n.e.c. | 0.00% | 100.00% | 0.00% | 0.00% | 100.00% (2) |
| C29 | Manufacture of motor vehicles. trailers and semi-trailers | 0.00% | 0.00% | 100.00% | 0.00% | 100.00% (2) |

Source: Authors' survey data (2023). SURS (2008). EUROSTAT (2008).
 Note: Frequency is 43, corresponding with respondents in the industry C.

The in-depth analysis of C reveals that respondents from sub-classified representatives of industry C18 were all significantly exposed to regulatory risk. The same goes for C22 and C28. where all thought that they were somewhat exposed to regulatory risk. while entities from C29 were all moderately exposed. The greatest portion of C10 and C16 entities. Two birds were also somewhat exposed to regulatory risk. Only in the non-sub-classified group and C 10. a minor portion thought they were little exposed to regulatory risk.

CONCLUSION

The corporate risk landscape is becoming exponentially complex regarding new risks arising and developing efficient risk management tools to detect and mitigate risks.

The research question set out in the introduction is two-fold. First, which risks Slovenian entities concerned to be most present in their day-to-day business and are most exposed to them? Given the list of eighteen possible risks that might affect the business day-to-day of respondents to the Risk Monitor 2023 survey, the entity's risk management responsible person has chosen a value to decide the exposure of their entity to an individual type of risk. The possible values vary from 1 (very small exposure) to 4 (significant exposure). Based on the gathered data and calculated statistical central value, we established that the three most important Slovenian corporate risks are price risk, qualified staff shortage risk and regulation risk.

Second, how most exposed risks, as decided by the Slovenian entities, are materialised in specific sectors? Looking at price risk, we found that it was, to the greatest extent, present corresponding to calculated weighted exposure to a specific risk type in industry D, qualified staff risk in industry E and regulatory risk in industry H.

Given the actuality of that field and growing attention to novel risks, many further research directions arise, theoretically and empirically. The possible research venues in corporate risk and corporate risk management, based on the acquired data in Slovenian, are, for example, the impact of specific industries on the risk perception connection between risk management organization and perception of risks.

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