**ABSTRACT:** Supply chain risk management has become imperative. Therefore, needs for proactive supply chain risk management continuously is growing. Proactive supply chain risk management is not a great problem in developed countries. The problem is present in transition countries and underdeveloped countries. In those countries has not been built awareness about the importance of networking through supply chains and risk management within the supply chain. One of them is Republic of Serbia. Outside the door of the EU, the Republic of Serbia still retains the characteristics of the old system, and that is the great limitation for implementation of proactive supply chain risk management concept. Basic aim of paper is to research the level of proactive supply chain risk management. By using an adequate statistical methods, in paper will be analysed group of large enterprises from the Republic of Serbia. Besides that, author of paper suggesting the reasons and consequences of lack of proactive supply chain risk management.

**KEY WORDS:** supply chain, risk management, proactive risk management, partnership

**JEL CLASSIFICATION:** L14, M21, D81
1. INTRODUCTION

Companies are no longer able to compete efficiently without their suppliers and other partners. Successful competition in modern business conditions requires that companies establish long-term cooperative relationships between both upstream partners and downstream members of the supply chain. The benefit of the modern, complex environment and of companies’ networking is the impetus to develop partnership through the supply chain. The supply chain is a network of related and interdependent entities, which are organized to achieve the flow of material, final products, information, and money. It represents a set of relationships between all partners involved in the process of transforming raw materials into final products, from suppliers, manufacturers, distributors, and retailers to customers. A supply chain consists of two or more partners entering into a long-term relationship and developing trust and commitment as well as the integration of logistics (Mentzer et al. 2001, p.6). Supply chain management is achieved by realizing values between partners and optimizing the flow of materials/finished goods, information, and money, in order to minimize costs and increase value for consumers.

Global supply chains face many problems. The key problem is unpredictable events that disrupt or interrupt supply chain continuity and other supply chain processes. In the first case, the supply chain requires the immediate action and adaptation of supply chain members, without changing the supply chain structure. In the second case, the supply chain requires permanent or temporary elimination of individual members, changes in the supply chain structure, and re-negotiating or establishing new relationships. Therefore, the difference between the disruption and the interruption of the supply chain is in their range and impact (Greening & Rutherford 2011, p.105). Both disruptions and interruptions in supply chains can lead to ‘ripple effects’ (cascade transfer of risk exposure to other partners in the supply chain) (Kamil 2017, p.130). Thus to maintain profitability, supply chains need to be quick to respond to external and internal unpredictable events (Aqlana and Lamb 2015, p.5640).

In the uncertain and turbulent modern environment, supply chain vulnerability becomes a key issue. Supply chain vulnerability is a function of supply chain characteristics and losses (Fazli and Masoumi 2012, p.2765). The low probability of risk events and the high impact of disruptions can endanger supply chain sustainability (Tadeusz, 2017). Every global supply chain must be able to avoid or eliminate causes of disruption and interruption at any cost, and therefore supply
chain partners must be able to establish an adequate level of proactive supply chain risk management.

The objective of the research presented in this paper is to investigate the importance of a proactive approach to supply chain risk management. Empirical research to establish the connection between a proactive approach to supply chain risk management and supply chain vulnerability was conducted in the Republic of Serbia. The first part of the paper presents a review of the literature on supply chain risk management as a part of supply chain management, and the second part presents the research methodology and results of the empirical research.

2. LITERATURE REVIEW

Supply chain management is one of the most popular operational strategies for improving competitiveness in the 21st century, especially as in modern conditions competition often takes place between supply chains rather than enterprises (Radosavljevic 2015). Supply chain management is the philosophy of managing the distribution channel from suppliers to consumers (Cooper and Ellram 1993). A supply chain includes all partners involved directly or indirectly in adding value for customers (Chopra and Meindl 2009). According to Radosavljevic, Barac, Jankovic-Milic and Andjelkovic (2016, p.850), “in a highly competitive environment, global supply chains are an inexhaustible source of competitive advantage for the enterprises they consist of”. A global supply chain can face unpredictable disruption in any of its entities (partners), and each disruption can result in the loss of production capacity, raw materials, products, and customers as well as delayed delivery, customer dissatisfaction, higher costs, and reputation damage (Paul, Sarker and Essam 2014). The relationship between competitive advantage as a result of networking though the supply chain and the generation of losses as a result of interruption has led to a large number of studies about supply chain risk management (Djalma 2015). However, in practice the frequent interruption of supply chains points to their high level of vulnerability. Under conditions of global competition this vulnerability is the result of both individual partners being unprepared and the whole supply chain failing to respond to changes in the internal and external environment. Christopher and Peck (2004) define vulnerability as exposure to serious disorders, while Barnes and Oloruntoba (2005) describe vulnerability as a propensity for or predisposition to loss due to existing organizational and functional practices (McCormack et al. 2008, p.11). Therefore, vulnerability is a result of weaknesses in the system that
can seriously undermine the operation and process of the whole system, making supply chain risk management of the utmost importance.

Supply chain risk management evolved from the disciplines of risk management and the later supply chain management, which has been an important research area for more than two decades. Its primary purpose is to identify potential sources of risk and provide appropriate suggestions for mitigating them (Singhal, Agarwal and Mittal 2011; Aqlana and Lamb 2015, p.5641). Supply chain risk management (SCRM) is a set of approaches and practices for the effective integration of suppliers, manufacturers, distributors, retailers, and consumers, with the purpose of improving the long-term performance of first the whole supply chain and then the individual companies. SCRM is a formal process that involves identifying potential losses and their probability and importance (Sunjka and Sklar-Chik 2012, p.199/3). Because it minimizes vulnerability, efficient supply chain management has become a critical issue for supply chain managers. Therefore, supply chain management, as part of management, should not ignore the risks and the need to implement an adequate risk management strategy.

Norrman and Lindroth (2002) explain that supply chain risk management stems from cooperation between partners in the chain, using the proper risk management tools to cope with risk events that impact logistics activities and/or other resources (Paulsson 2004 p.80). Juttner (2005) defines supply chain risk management as a coordinated approach between partners, the purpose of which is to reduce the vulnerability of the supply chain. Under supply chain risk management, Tang (2006) and Norman and Jansson (2004) include process management, application of appropriate risk mitigation tools, and cooperation and coordination between partners in order to improve efficiency and financial performance of the supply chain (Enyinda, Ogbuehi and Briggs 2008, p.283).

The term ‘black swan’ originated in 16th century London and was based on the assumption that all swans were white, as indicated in historical documents (Taleb 2007, p.17). Since the Dutch researcher Willem de Vlamingh discovered black swans in Australia in 1697, the term ‘black swan’ has been used as a synonym for something that is considered impossible (CH2M Hill, 2014). ‘Black swan’ events are therefore surprising and are determined by the following attributes: rarity – an event that is beyond the scope of regular expectations, extreme impact, and retrospective - despite being ‘beyond ordinary expectations’ such an event can be explained. Black swan logic is present everywhere.
Risk management has become an integral part of every business. Although most companies are not ready to face uncertain events resulting from supply disruption, delays in the execution of logistic activities, inadequate security, and similar events (Mahendran, Narasimhan, Gopinath and Nagarajan 2011, p.836), supply chain managers face more risk factors than traditional businesses. The trend of increasing supply chain efficiency means that global supply chains are facing expanding risks through their networks. The possibility of mitigating disruption and interruption in the supply chain is limited by implementing ‘Just-in-time’, reducing the supplier base, and outsourcing activities, all of which increase the likelihood of risk spreading faster and more easily: in the case of a risk event, companies have neither the necessary resources nor an action plan to deal with it. For example, dual or multiple sourcing could be used as appropriate ways to minimize supply chain exposure to risk events and the cost of supply disruption (Kamalahmadi and Mellat-Parast 2016; Tadeusz 2017; Zeng and Xia (2015); Meena, Sarmah, and Sarkar 2011). Businesses that focus on a lean approach eliminate a large number of shock absorbers, such as raw material/final product inventories, a larger number suppliers, etc. Thus a lean approach can cause bottlenecks that threaten the whole supply chain (Barac, Andelković–Pešić, Milovanovic and Andelković 2013, p.309). In addition, a high level of outsourcing means losing control of both resources and transparency. Lack of control and transparency could result in the company failing to detect risk events and being unable to create a true picture of the environment (Behdani 2013, p.7). Increasing interdependence of partners in the supply chain as a result of increasing cooperation can rapidly expand indirect risk and supply chain vulnerability (Kersten, Hohrath and Böger 2007). Wagner and Neshat (2010) point out that managerial competence in measuring and managing supply chain vulnerability can reduce disruptions (Ho et al. 2015, 3047). In order to identify and manage supply chain vulnerability, the following questions should be asked: What are the weaknesses in the company? What disruptions has the company faced? What has been the effect of disruptions on the execution of operations and activities in the past?

3. PROACTIVE BEHAVIOUR IN MANAGING SUPPLY CHAIN DISRUPTION

The problem of avoiding unforeseen events is not new, but supply chain managers’ responsibility to manage these events and mitigate their negative

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1 Just in time is inventory management strategy that implies maintaining lower level of inventory, with the purpose to increase efficiency and decrease wastes.
effects is increasingly important and will mark global supply chains of the future. Managers must be aware of the growing number of risks that they face, including those resulting from manufacturing practices such as lean manufacturing, Just-in-Time, and reductions in the supply base. Today, achieving a high degree of supply chain resilience is imperative (Singhal, Agarwal and Mittal 2011, p.16). Jüttner and Maklan find that high levels of flexibility, visibility, velocity, and collaboration are necessary for supply chain resilience (Ho et al. 2015, p.3047). Pettit, Croxton, and Fiksel reveal that increased resilience and high supply chain performance are correlated (Ho et al. 2015, p.3047).

Supply chain resilience is not just the ability to recover from unpredictable risk events, but also a proactive and structured approach to finding opportunities in the supply chain to deal with these events. A proactive approach to supply chain risk management involves the detection of unpredictable events and the prevention of negative consequences (Asbjoørnslett 2009, p.15). It is a preventive process which identifies existing risks and their possible consequences (Paulson 2007, p.93) and presents opportunities for avoiding risk events (Zwißler and Herman 2012). A proactive approach to managing risk includes taking advance action and the company will face the cost of taking action whether or not the risk event occurs (Talluri et al. 2013, p.253). For example, Wal-Mart implemented a proactive approach to supply chain risk management in the case of hurricanes by using historical sales data from previous periods. Wal-Mart has its own meteorologists and relies on the forecasting of hurricanes and other natural disasters. Another major retailer, Home Depot Inc., has a similar proactive response to natural disasters and catastrophes and organizes its facilities based on the types of disaster that happen in different geographical areas (hurricanes in the south, ice storm in the north, forest fires in the west). Home Depot also uses meteorologists, and based on their prognosis makes decisions about working hours, closing times, and which products to stock (Blanchard 2010, p.175).

One of the basic requirements of effective proactive supply chain risk management is educating and training employees about risk event forecasting and increasing their awareness of its importance. Just as many companies have implemented the Total Quality Management (TQM) concept, modern conditions impose the need to build a proactive approach to supply chain risk management, as supply chain risks constitute the most serious threat to business continuity. Thus, as for TQM, a proactive approach to supply chain risk management needs to involve all employees in order to ensure chain management continuity (Christopher and Peck 2004, p.11).
It is essential that all employees are aware of and are involved in identifying supply chain risks and understand their role in the risk management process. The following aspects of proactive supply chain risk management involve employees (Pochard 2003, p.48).

- Acceptance of reality. Interviews conducted in 2003 as part of research conducted on supply chains’ response to global terrorism found that the best-prepared companies had developed plans for identifying potential failures and defined measures to overcome them. Such companies simulate different events and train staff to respond adequately in a given situation. Because of the seriousness of supply chain risk management it is necessary to integrate this part of risk management into a strategic plan.
- Building a system of values. It is very important that there exists a strong value system that helps all employees and all companies involved in the supply chain to operate in order to maintain their supply chain.
- Improvisation of solutions. The ability to improvise solutions helps the supply chain to function after an unexpected and serious event.

Proactive supply chain risk management involves an approach that integrates risk assessment and monitoring of inherent risks (American Bankers Association 2014). Risk management orientation is an integral part of a supply chain which spotlights risk management and provides standards of behaviour in terms of gathering information about possible risks and actions. It involves continuous risk analysis, assessment, and risk-sharing, and the support of top management in carrying out these activities (Ponomarov and Holcomb 2009).

4. RESEARCH METHODOLOGY

Research methodology is the science of studying the process of conducting research and is a systematic way of solving problems (Rajasekar, Philominathan and Chinnathambi 2013). Analysing supply chain risk management requires empirical research. Data was collected via a questionnaire sent to large companies. The first part of the questionnaire contained general questions about the company (name, business address, legal form of the company, the origin of its capital, and the function of the interviewee). The second part consisted of statements related to the level of proactive approach as evaluated by company managers, measured on a Likert scale where 1 means disagreement with the statement and 5 the highest level of agreement. The collection of data gathered by surveying large companies’ managers was conducted between 1st July and 1st October 2016.
The list of the large companies that were subjects of the research was taken from the Agency for Business Registers database and from “100 Best Companies in the Republic of Serbia - Data from financial reports for 2015”. Both successful and unsuccessful companies were chosen according to their achieved profits. The number of companies included in the analysis was 168 (92 large companies ranked by net profit and 76 large companies ranked by net loss).

The total number of companies in the realized sample was 52. The rate of response was 31%; 38% of companies ranked by net profit completed the questionnaire (35 companies) and 22.4% of companies ranked by net loss (17 companies).

The aim of the research was to determine whether there is a connection between a proactive approach to supply chain risk management and supply chain vulnerability. The following hypotheses were formulated:

- \( H_1 \): The level of a company’s success is determined by the degree of proactive approach in the supply chain risk management process.
- \( H_2 \): The number of disruptions or interruptions of a company, as a measure of vulnerability, is higher in those companies with a lower level of proactive supply chain risk management.
- \( H_3 \): The level of proactive approach in supply chain risk management depends on the origin of their capital.

Descriptive statistics, the chi-square test, and cluster analysis were used in order to test the research hypotheses. The analysis was carried out using the SPSS program, version 21.

5. RESEARCH RESULTS AND DISCUSSION

The vulnerability and exposure to risk of Serbian companies could negatively affect the competitive advantage of both individual companies and the whole supply chain. Therefore implementing a proactive approach to supply chain risk management should be recognized as a necessary requirement. Companies with a proactive approach will increase their resilience and the resilience of their supply chain. The following statements were used as variables in assessing the existence of a proactive approach to supply chain risk management:
SUPPLY CHAIN RISK MANAGEMENT

- All employees in the company are acquainted with the problem of risk management (1);
- Training concerning risk management is provided for all employees (2);
- Employees receive instruction on the procedures and their responsibilities in the case of unforeseen events (3);
- The plan for reacting in a risk situation is regularly updated (4);
- Every risky situation is documented (5);
- The company conducts simulations of risky events (6).

The analysis of these variables for assessing proactive supply chain risk management shows a high level of proactive activity, and thus the possibility of developing supply chain resilience. The mean value of all variables is 3.6859, which shows that the companies in the sample have a proactive approach to supply chain risk management.

Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Variance Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>52</td>
<td>3.0000</td>
<td>.20914</td>
<td>1.50815</td>
</tr>
<tr>
<td>2</td>
<td>52</td>
<td>3.6154</td>
<td>.19253</td>
<td>1.38838</td>
</tr>
<tr>
<td>3</td>
<td>52</td>
<td>4.2308</td>
<td>.13625</td>
<td>.98250</td>
</tr>
<tr>
<td>4</td>
<td>52</td>
<td>4.0577</td>
<td>.16571</td>
<td>1.19498</td>
</tr>
<tr>
<td>5</td>
<td>52</td>
<td>4.1538</td>
<td>.14631</td>
<td>1.05505</td>
</tr>
<tr>
<td>6</td>
<td>52</td>
<td>3.0577</td>
<td>.21345</td>
<td>1.53921</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's calculation

The highest mean value is for the variable ‘Employees receive instruction on the procedures and their responsibilities in the case of unforeseen events’ (4.2308), while variable ‘The company conducts simulations of risky events’ has the highest standard deviation (3.0000). Detailed analysis requires an assessment of the variables concerning the performance of companies in the sample. Descriptive statistics of the variables are determined for successful and unsuccessful companies according to achieved profit or loss. There is a noticeable difference between the mean values of the variables for the two groups of companies. However, confirmation of the connection between a proactive approach of supply chain risk management and company performance requires more detailed analysis.

2 Designation of variables
Cluster analysis and descriptive statistics were used to test our hypotheses. Cluster analysis, as a multivariate method, was used to group the objects of research into homogeneous groups (Chakrapani 2006, p.59). Forming a group of objects should show high internal homogeneity within the cluster and high external diversity between clusters. Cluster analysis is used as an objective method of classification. The k-means method was used, with an initial set of centroids as the central starting point for each cluster, followed by Lloyd’s algorithm.

According to the cluster analysis, the companies in the sample formed two clusters according to the marks of the individual variables. Table 3 shows that the first cluster comprises companies with lower marks for the variables indicating

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3 Number of companies ranked by net profit
4 Number of companies ranked by net loss
a proactive approach. Table 4 shows that 12 companies belong to the first cluster, and 40 belong to the second cluster.

Figure 1 shows the number of disruptions/interruptions that the companies in the sample faced. Sixty per cent of companies in the sample faced disruption/interruptions in the observed one-year period. The number of disruption/interruptions indicates the degree of supply chain vulnerability. However, the question is whether the disruptions/interruptions were the result of not having a proactive approach to supply chain risk management.

**Figure 1**: Number of disruptions/interruptions in the analysed sample

<table>
<thead>
<tr>
<th>Disruption Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6%</td>
</tr>
<tr>
<td>1 to 5</td>
<td>40%</td>
</tr>
<tr>
<td>6 to 10</td>
<td>39%</td>
</tr>
<tr>
<td>11 to 20</td>
<td>2%</td>
</tr>
<tr>
<td>More than 21</td>
<td>13%</td>
</tr>
</tbody>
</table>

The results of the relationship between supply chain disruptions/interruptions and a proactive supply chain risk management approach are shown in Table 5. Companies in the second cluster (companies with a high level of proactive supply chain risk approach) were rarely faced with disruption/interruption. Seventy-five per cent of companies in the first cluster faced disruption/interruption, and 55% in the second. This leads to the conclusion that a more proactive supply chain risk approach is a factor in reducing the exposure and vulnerability of both the company and the whole supply chain.
Table 5: Number of disruptions/interruptions and proactive supply chain risk approach

<table>
<thead>
<tr>
<th>Cluster/Number of Cases</th>
<th>0</th>
<th>1 to 5</th>
<th>6 to 10</th>
<th>11 to 20</th>
<th>more than 21</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>18</td>
<td>17</td>
<td>4</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>20</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>52</td>
</tr>
</tbody>
</table>

Source: Author’s calculation

In Table 6 the results of the Chi-Square test confirm the relationship between the number of disruptions/interruptions and the proactive supply chain risk management approach: the p-value is 0.045 (p<0.05). The contingency coefficient shows a high degree of dependence.

Table 6: Chi-Square test

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.737a</td>
<td>4</td>
<td>.045</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.668</td>
<td>4</td>
<td>.070</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>7.571</td>
<td>1</td>
<td>.006</td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.397</td>
<td></td>
<td>.045</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculation

When considering the importance of developing a proactive supply chain risk management approach it is necessary to analyses whether the origin of capital could be a way to promote such an approach. The assumption is that successful foreign companies that transfer production or any other part of their business to another country might also transfer a method of supply chain risk management.
Table 7: Relation of the origin of capital and proactive supply chain risk approach

<table>
<thead>
<tr>
<th>Domestic Cluster Number of Cases</th>
<th>Total Number of Cases</th>
<th>Foreign</th>
<th>Domestic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>22</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>27</td>
<td>52</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculation

However, the results in Table 7 show a completely different picture in the Republic of Serbia. In the total sample, 48% of companies have a predominant share of domestic capital. The same analyses show that 72% of companies with predominantly domestic capital belong to second cluster, as well as 81% of companies with predominantly foreign capital.

Table 8: Chi-Square tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.657(^a)</td>
<td>1</td>
<td>.417</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction(^b)</td>
<td>.232</td>
<td>1</td>
<td>.630</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.659</td>
<td>1</td>
<td>.417</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.517</td>
<td>.315</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.645</td>
<td>1</td>
<td>.422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.112</td>
<td></td>
<td>.417</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.77.

b. Computed only for a 2x2 table

Source: Author’s calculation

The chi-square test was used to check and confirm the results in Table 7. Table 8 shows that there is no relationship between the level of proactive supply chain risk approach and capital origin (p> 0.05). A high coefficient of contingency (0.417) is also confirmed.
6. CONCLUSIONS

Serbian companies are unaware of the importance of the supply chain management concept. In the empirical research it was found that very few companies had a supply chain manager position; therefore finding a person competent to participate in research on supply chain risk management is a huge problem. Managers also have a problem recognizing and identifying supply chain risks, especially those that are transferred from other geographical areas or other partners. This means that their objectivity could be a limitation of the research.

The fact that companies in Serbia are characterized by a great number of disruptions/interruptions demonstrates the high level of vulnerability in both companies and the whole supply chain. The results of the research show that the lack of a proactive supply chain risk management approach could be related to increased vulnerability, as companies that face disruptions/interruptions have a lower level of proactive supply chain risk management approach. Without such an approach, companies are not prepared to predict events that threaten their business and can only respond reactively to disruptions/interruptions, which only mitigates the causes of unforeseen events. The research shows that a greater share of foreign capital does not transfer supply chain risk management practices to domestic companies and employees in Serbia. This points to a high resistance to change in Serbian companies.

Most countries in transition, like the Republic of Serbia, have very rigid attitude to change. Retention of the old system’s characteristics and rejecting change are key disadvantages of Serbian companies. In today’s uncertain market conditions, building a proactive supply chain risk management approach, both in individual companies and in the supply chain itself, is one of the most important factors of competitiveness.

REFERENCES


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