

# External audits and official controls – what’s the difference in their usefulness and credibility?

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## Abstract

**Purpose** – The study aims to determine whether audited organizations experience differences between external audits and official controls.

**Design/methodology/approach** – A survey among 100 organic food producers was conducted to explore differences regarding the usability of external audits and official controls. The survey was conducted in 2020 using the computer-assisted telephone interview (CATI) method supplemented by the computer-assisted web interview (CAWI) method. Organizations processing organic farming products in Poland were chosen for the study.

**Findings** – Three primary benefits associated with external audits and official controls were identified, i.e. (1) enabling and initiating activities related to the improvement of the organization, (2) improving the financial performance of the organization and (3) enhancing credibility. For most organizations, the assessment of these features was at the same level for both external audits and official control. However, if these assessments differed, commercial audits were assessed at a higher level than official controls.

**Research limitations/implications** – The study is limited to only one specific type of manufacturing organization and one European country.

**Originality/value** – The literature review shows some conceptual differences between audits and official controls, but the results of this study show that the business environment does not perceive these differences as significant. Thus, the value of the study is reflected in the conclusion that both external audits and official controls are considered useful and credible approaches to monitoring the quality within the organization, which allows us to state that external evaluation is generally seen as an opportunity to improve the performance of the organization.

**Keywords** External audit, Official control, Management system, Food industry, Organic food

**Paper type** Research paper

## 1. Introduction

Management audit is a tool commonly used in many organizations worldwide. Its popularity has been greatly influenced by the development of various management standards such as International Organization for Standardization (ISO) 9001, ISO 14001, SA 8000, etc. [Asif, Searcy, Zutshi, and Ahmad \(2011\)](#), [Bugdol and Jedynek \(2015\)](#), [Nagyova, Balazikova, Markulik, Sinay, and Pacaiova \(2018\)](#) and [Rogala and Wawak \(2021\)](#). Conducting internal audits is usually one of the requirements included in these documents ([Wolniak, 2021](#)).

**JEL Classification** — L29, L66, M11, M42, Q13

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Certification audits are used to determine whether a given organization operates following the requirements set out in these standards (Romano, 2002).

In the literature on the subject, an audit is most often presented following the definition in the International Standard ISO 19011, where it is defined as a systematic, independent and documented process for obtaining objective evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled (ISO, 19011, 2018). There are two main types of audits. Internal audits are usually carried out by the employees of the audited organization. External audits are carried out by people outside the organization – professional auditors or customer representatives (Kettunen, 2012).

Generally, the competent authorities in organizations also carry out official controls where external audits are present to verify the compliance of products, services, working conditions and processes with the requirements set out in legislation. The competent authorities must have procedures, arrangements and adequate and appropriately maintained facilities and equipment in place to carry out official controls and other official activities efficiently and effectively. Official controls should be carried out to minimize the disruption and administrative burden for the organizations without adversely affecting the effectiveness of those controls (van der Meulen, 2019).

For the scope of this research, external audits/official controls are viewed as activities carried out to assess the conformity of the product, process and service to specific requirements based upon professional judgments or primary criteria.

External audits and official controls are similar in many aspects. The core similarity is that they both focus on assessing compliance (of activities, processes, products, etc.) with specific criteria (Al-Twaijry, Brierley, & Gwilliam, 2004; Svrčinová & Janout, 2018). However, in the case of official controls, these criteria arise directly from the law; therefore, their fulfillment is mandatory. Enterprises cannot refuse official controls but do not have to bear the costs of it.

The evaluation criteria used during external audits do not arise directly from the law. They are usually formulated by customers, stakeholders, or specialized non-governmental standardization organizations. Enterprises comply with these criteria to meet customer expectations and improve the organization's processes or image. The enterprises bear the costs related to the audits. The results of external audits and official controls are used to improve the quality of products and the performance of enterprises. Several authors (Poksinska, Dahlgard, & Eklund, 2006; Castka, Zhao, Bremer, Wood, & Miroso, 2021) indicate these strengths of audits, and they justify incurring the related costs. However, the literature on the subject lacks empirical studies comparing external audits and official controls. Therefore, it is not known whether the companies audited perceive any effective difference between audits and official controls.

Answering this question can be important for theoretical and practical reasons. In the former case, it will provide arguments for a strict distinction between external audits and official controls or demonstrate that the distinction between the two terms is unreasonable. Applying "Occam's razor" to reduce unnecessary diversity (Baker, 2007) should also be considered. In the latter case, if the answer to a research question is positive, the results obtained may become the starting point for improving external audits and official controls by transferring good practices between them.

This study aims to determine whether audited organizations experience tangible differences between external audits and official controls. Based on the literature review, the following research questions were formulated:

*RQ1.* Are external audits more useful (in terms of organizational improvement) than official controls?

- RQ2. Are external audits more useful in improving financial performance than official controls?
- RQ3. Are external audits more credible than official controls?
- RQ4. What factors influence the assessment of external audits and official controls?

The remainder of the article is organized as follows: [Section 2](#) presents a review of the literature. [Section 3](#) describes the methodology applied. [Section 4](#) discusses the results of the study.

## 2. Literature review

### 2.1 External audits and official controls

The literature on various types of external audits and official controls is extensive. The issues discussed in it focus on two leading topics. The first one is to propose optimal ways to conduct external audits/official controls. The second topic is the assessment of the effectiveness of these activities.

The studies belonging to the first group propose various types of models, methods and rules for conducting external audits/official controls or describe tools that can be used during external audits/official controls ([Karapetrovic & Willborn, 2002](#); [Pivka, 2004](#); [Gacoń, 2013](#); [Lenning & Gremyr, 2017](#); [Miszczyk \*et al.\*, 2018](#); [Daniel, Hoetzer, McCombie, & Grob, 2019](#); [Abuazza, Labib, & Savage, 2019](#); [Algabry, Alhabshi, Soualhi, & Alaeddin, 2020](#); [Puławska, Dobija, Piotrowska, & Kravchenko, 2021](#)). This group also includes studies on the methods of conducting external audits/official controls in specific conditions, e.g. when the audit concerns integrated management systems ([Bernardo, Casadesus, Karapetrovic, & Heras, 2011](#)).

The second leading research topic is the assessment of the effectiveness of external audits/official controls ([Dobija, 2019](#)). In different studies, there is no consensus on the effectiveness of these activities. Many researchers emphasize the usefulness of external audits/official controls in the processes of organizational evaluation and improvement ([Beckmerhagen, Berg, Karapetrovic, & Willborn, 2004](#); [Alič & Rusjan, 2011](#); [Lueckl, Weyermair, Matt, Manner, & Fuchs, 2019](#); [Martelli \*et al.\*, 2019](#)). Some authors point out numerous problems with the effectiveness and credibility of external audits/official controls ([Manning, 2018](#)). In the case of audits, it is noted, for example, that there is a phenomenon known as “ceremonial conformity” (or “ceremonial certification”). This concept is understood as conducting external audits in such a way that they do not lead to a reliable image of the organization ([Biazzo, 2005](#); [Nurcahyo, Kristiningrum, & Sumaedi, 2019](#)). An extreme manifestation of this phenomenon is “fake certification” ([Heras-Saizarbitoria & Boiral, 2019](#)).

Researchers indicate three types of actual or potential (assumed) benefits associated with external audits/official controls:

- (1) Enabling and initiating activities related to the improvement of the organization ([Karapetrovic & Willborn, 2001](#); [Alič & Rusjan, 2011](#); [Domingues, Mufato Reis, Fonseca, Avila, & Putnik, 2019](#)). Research questions 1a and 1b were formulated on this basis.
- (2) Improving the financial performance of the organization ([Sharma, 2005](#); [Lenning & Gremyr, 2017](#); [Chiarini, Castellani, Rossato, & Cobelli, 2020](#)). The financial utility is understood as the impact of audits and controls either on reducing costs or increasing revenues. This effect formed research questions 2a and 2b.
- (3) Increase in credibility ([Dekhili & Akli Achabou, 2014](#); [Song-Turner & Polonsky, 2016](#)). Credibility can be defined as the reliability of a source, and it is mainly based on

perceptions of the veracity and expertise of the information source as commented by the evidence receiver (Hovland, Janis, & Kelley, 1953). According to Metzger and Flanagan (2013), this definition concentrates on source credibility, usually conceptualized as the reliability of speakers, or on the credibility of data, where the emphasis is put on the believability of information rather than speakers. These perspectives can be used to investigate the credibility of certification. Behaviors related to trust and credibility can be divided into interpersonal and institutional ones (Misztal, 1996). In the context of external audit/official control results, trust can be defined as the general expectation of individuals or groups that oral or written promises and commitments will be respected and implemented (Rotter, 1980; Bugdol, 2010). The results of external audits/official controls, e.g. a certificate of compliance, can be regarded as a promise made by the organization and confirmed by an external organization. The need to ensure the credibility of audits and official controls or elements directly related to them (such as reliability, impartiality, fair presentation of results, professional diligence, etc.) is studied in many publications (ISO 19011, 2018; van der Meulen, 2019). However, very little research has been devoted to recognizing this issue. The few studies that have been carried out indicate many problems with the credibility of audits and official controls. For example, concerning financial audits, Funnell, Wade, and Jupe (2016) stated that the actual credibility of the results of such audits is significantly reduced by the lack of independence and relevant technical competence of auditors. Research questions 3a and 3b were formulated on this basis.

One of the best-known sets of guidelines for conducting this type of inspection has been published by the ISO. The following principles are contained in the ISO 19011:2018 *Guidelines for Auditing Management Systems* standard (ISO 19011, 2018):

- (1) Integrity.
- (2) Fair presentation.
- (3) Due professional care.
- (4) Confidentiality.
- (5) Independence.
- (6) Evidence-based approach.
- (7) Risk-based approach.

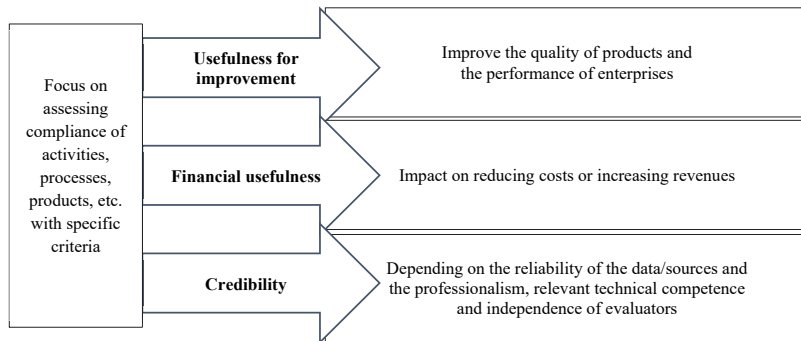
Describing the main similarities of both evaluation procedures, it can be pointed out that external audits and official controls have similar focus and results. Both procedures ensure credible processes of an organization or system evaluation and lead to valuable results and continuous improvement (see Figure 1).

Similar methods are often used and carried out for both procedures with the same overarching goal – to improve the organization’s performance and results and reduce its risks. However, the procedures cannot be considered identical.

The comparison and main differences between external audits and official controls have been summarized in Table 1. Their type determines the main difference between the two procedures - an external audit is a quality assessment and assurance procedure, while an official control is a conformity assessment procedure. Another significant difference is in the origin of the evaluation criteria and the mandatory or voluntary nature of the procedures.

In industries (for example, food production), the official control procedure is mandatory to receive a permit to operate; legal regulations usually determine it. At the same time,

**Figure 1.**  
Similarities of external  
audit and official  
control



**Source(s):** Authors' own elaboration

	External audits	Official controls
Type of procedure	Quality assurance	Conformity assessment
Necessity or prescription of procedure	Voluntary Action that should lead to some benefits	Compulsory Obligation to be performed
Overall description of procedure - main goal, object and process of evaluation	Systematic, independent and documented process for obtaining objective evidence and evaluating it objectively to determine the extent to which the criteria are fulfilled	Verify the compliance of products, services, working conditions and processes with the requirements set out in the legislation
Evaluators	Professional auditors or customer representatives	Competent authorities or inspectors
Evaluation criteria, requirements and guidelines	Formulated by customers and stakeholders or by specialized non-governmental standardization organizations	Prescribed in legal acts and compulsory national or international regulations
Main assumption	Evaluation of effectiveness and efficiency	Detection of errors and inconsistencies
Findings confidentiality	All results are confidential and are reported only to the audit client and auditee. There are no penalties	Results are used by official authorities and could be the basis for penalties

**Table 1.**  
Comparison of the  
procedures – external  
audit vs official control

**Source(s):** Authors' own elaboration

organizations choose the audit procedure voluntarily in order to evaluate and improve their performance. Many companies choose to implement both procedures.

## 2.2 Organic farming

According to European Union (EU) regulation 848/2018 (EU, 2018), organic production is defined as: *an overall system of farm management and food production that combines best environmental and climate action practices, a high level of biodiversity, the preservation of natural resources and the application of high animal welfare standards and high production standards in line with the demand of a growing number of consumers for products produced using natural substances and processes.* The EU regulation is also in line with the organic production principles at an international level, e.g. in Codex Alimentarius guideline GL 32–1999, published by Food and Agriculture Organization (FAO) and World Health

Organization (WHO) (Codex Alimentarius, 1999). Mondelaers, Aertsens and Van Huylenbroeck (2009) performed a meta-analysis that demonstrated the existence of measurable benefits associated with organic farming. Most of the soils in organic farming systems have, on average, a higher content of organic matter and organic farming contributes positively to agrobiodiversity (breeds used by the farmers) and natural biodiversity. Recently, sales of organic food products have been increasing faster than the sales of any other category of food (Bryła, 2017). Azam and Shaheen (2019), identifying critical success factors for organic farming, found, among other things, that there is a need for constant monitoring (certification) of organic products. Organizations need to strengthen the control systems for organic certification to standardize the production, processing and marketing of organic products and the government, with the help of non-governmental organizations, should assist in the certification processes.

The labeling of organic products requires official controls by authorized organizations. In EU countries, these controls should be done in accordance with Article 9 of Regulation (EU) 2017/625. These processes can be performed by the country's official authorities or delegated to independent certification bodies (EU, 2007, 2018). In Poland, these processes are made by independent third-party product auditing organizations. In literature, there is a wide range of descriptions considering the consumers' perception and knowledge of organic farming principles and labels (Zander, Padel, & Zanoli, 2015) as well as profiles of organic food consumers (Jensen *et al.*, 2019; Rodríguez-Bermúdez *et al.*, 2020). Organic food certification is also linked with sustainability (Whelan, 2015) or has an impact on organizational performance (Ahearn, Liang, & Goetz, 2018; Khanal, Mishra, & Honey, 2018). According to Kononets and Treiblmaier (2021), bio inspections are not a good tool to eliminate or mitigate unfair trading practices in the food supply chain. In the studies, there is still a gap in value-added and the credibility of organic certification inspections for food organizations.

### 3. Methodology

A research questionnaire was developed for the study. It contains six research questions related to the purpose of the paper:

- 1.a To what extent are the external audit's findings useful for the organization (in improving product or process quality, increasing customer satisfaction, etc.)?
- 1.b To what extent are the official control's findings useful for the organization (in improving product or process quality, increasing customer satisfaction, etc.)?
- 2.a To what extent do the external audit's findings contribute to the financial benefits?
- 2.b To what extent do the official control's findings contribute to the financial benefits?
- 3.a To what extent can the external audit's findings be considered credible (reflect the actual state of the organization)?
- 3.b To what extent can the results of the official control's findings be considered credible (reflect the actual state of the organization)?

The survey was conducted in 2020 using the computer-assisted telephone interview (CATI) method supplemented by the computer-assisted web interview (CAWI) method as a quantitative study (Balan, 2006). There were 5 rounds of phone contact attempts. In the case of companies that did not agree to the telephone survey (35 companies), a valid e-mail address was obtained, and a questionnaire was sent with an individual token that allowed for tracking not only questionnaires but also whether the questionnaires were opened at all.

For the study, organizations processing organic farming products in Poland were chosen. This industry was selected because it is characterized by a relatively high number of audits

and official controls carried out. Due to the implementation of organic requirements within the inspection procedure indicated in EU regulations 834/2007 and 848/2018, all official controls are performed by third-party certification bodies.

The respondents were asked to express their opinions using a seven-point scale, where “1” was the lowest assessment and “7” was the highest. In addition, information was collected describing the surveyed organizations, i.e. the number of employees, market range, revenues and implemented and certified management systems. The interviews were conducted with persons responsible for the management systems in the organization, who directly participated in the control and audit processes. These were usually senior managers or owners of the organization.

A total of 109 questionnaires were completed. Out of this number, 100 valid questionnaires were included for further analysis, while 9 were excluded due to incomplete or incorrect data. According to the official database obtained from the national organic farming regulator, there were 1104 certified organic food processors in 2020 in Poland – thus, the number of answers constitutes 9 % of the whole population (IJHARiS, 2021).

The study only covered enterprises where at least one external audit and at least one official control were carried out in 2018–2020. Only 4 large enterprises were among the survey participants (see Table 2).

Sixty-four enterprises operate on the international market, 24 on the national market and 15 on the local market. The sample was dominated by enterprises (47) with annual revenues not exceeding EUR 2 million. Fourteen organizations generate revenues of between EUR 2 and 10 million, and 10 organizations have reported more than EUR 10 million in revenues. Just under 30 respondents did not answer this question because they either did not know it or did not want to reveal such information.

Many of the surveyed organizations had implemented a voluntary management system other than those required by organic regulations. Most of them declared that they met the requirements of the suppliers’ food safety requirements IFS (International Featured Standard) (33 organizations) and BRC (British Retail Consortium) (25). A total of 12 producers were ISO 9001 certified, 12 were ISO 22000 certified and 4 were ISO 14001 certified. Thirteen organizations had implemented other management systems (such as Global GAP). There are indisputable differences between the mentioned management systems. Nevertheless, they all have common roots and main principles, such as the Deming cycle or risk assessment. Therefore, all voluntary systems were treated as similar for the purpose of this study.

Due to the type of data collected, the Mann-Whitney *U* test was used in the analysis. It compares differences between two independent groups when the dependent variable is ordinal or continuous but not normally distributed.

#### 4. Results

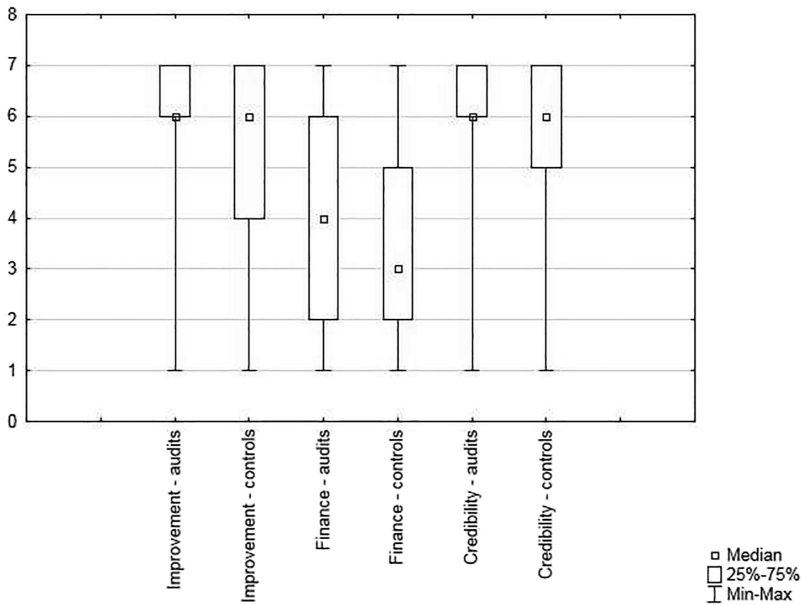
Figure 2 describes the distribution of ratings of external audits and official controls. For all the studied variables, the obtained results are relatively high. Only in the case of financial usefulness of official controls was the median value 3 and below 3.5 (middle of the scale).

**Table 2.**  
Structure of the  
research sample in  
terms of the number of  
employees

Number of employees	Number of organizations
1–9	37
10–49	20
50–249	39
250 and more	4

**Source(s):** Authors’ own elaboration





**Figure 2.**  
Ratings for the  
usefulness of external  
audits and official  
controls

Source(s): Authors' own elaboration

In all cases, some respondents claimed that there is either no actual usefulness for improvement, no financial usefulness, or no credibility of external audits/official controls, so for all the studied variables, the lowest grade was 1.

Most respondents (see Table 3) saw no difference between official controls and external audits. Over 60 % of organizations' assessments for all three variables (usefulness for improvement, financial usefulness and credibility) were the same. It means that on the 7-point scale, they assess variables at the same level – it could be either “1” or “7”, but it was the same score for official controls and external audits. On the other hand, if the assessment was different for both external audits and official controls, external audits were usually assessed higher than official controls.

In order to verify the difference between the awarded grades, the Mann-Whitney *U* test was used. Table 4 shows the results of the tests regarding usefulness for improvement, financial usefulness and credibility.

In both cases, there are statistically significant differences between official controls and external audits regarding the variables “usefulness for improvement” and “financial usefulness” in favor of audits. No statistically significant differences were found in the case of credibility.

Variables	No difference in assessment (%)	Higher assessment of external audits (%)	Higher assessment of official controls (%)
Usefulness for improvement	63	32	5
Financial usefulness	66	33	1
Credibility	75	19	6

Source(s): Authors' own elaboration

**Table 3.**  
Distribution of  
assessments related to  
the examined types of  
external audits and  
official controls



In order to analyze the relationships between the chosen groups of variables, Spearman's rank-order correlations were used (see Figure 3).

For all the studied variables presented in Figure 3 the correlations are statistically significant with a *p*-value below 0.05. Moreover, for all the main studied variables, i.e. (1) usefulness for improvement, (2) financial usefulness and (3) credibility, between external audits and official controls, the correlation value was higher than 0.6 and statistically significant. Also, all the other correlations shown in Figure 2 were statistically significant, with a *p*-value lower than 0.05. The highest correlation value (0.81) has been noted between the credibility of official controls and the credibility of external audits. On the other hand, the lowest one was between financial usefulness and credibility variables, both measured in official controls.

Additionally, two more analyses were carried out. First, the relationships between assessing the three types of benefits related to external audits were examined. Second, the same analysis was done for official controls. The data presented confirms that the studied organizations treat the results of external audits and official controls similarly. In this group, the strongest correlation (0.51) was obtained for the variables "usefulness for improvement" and "financial usefulness" regarding official controls. The weakest correlation was observed between the variables "financial usefulness" and "credibility" (0.30) regarding official controls.

The studied variables were correlated with the main characteristics of organizations in the sample, such as market range, organization size, income, ISO management systems and the number of voluntary management systems within the organization. The conducted analysis shows that some of the characteristics of the surveyed organizations have an impact on the auditors/controllers' assessment:

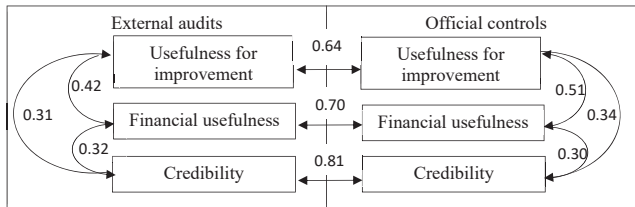
- (1) There is a positive correlation between the assessment of the financial benefits of audits and (1) the market range, (2) the size of the organization, (3) having ISO-compliant management systems and (4) the number of voluntary management systems.
- (2) The assessment of the financial benefits related to audits depends on (1) the size of the organization and (2) the existence of management systems compliant with ISO standards.

**Table 4.**  
Differences between external audits and official controls

Variables	Mann-Whitney <i>U</i> test		
	<i>U</i>	<i>Z</i>	<i>p</i>
Usefulness for improvement	3877.5	-2.74148	0.006117
Financial usefulness	3808.0	-2.91130	0.003600
Credibility	4632.0	-0.89795	0.369215

Source(s): Authors' own elaboration

**Figure 3.**  
Spearman's rank-order correlations within the studied variables where the *p*-value is below 0.05



Source(s): Authors' own elaboration

- (3) The assessment of the usefulness for improvement related to audits is influenced by (1) the market range and (2) the existence of management systems compliant with ISO standards.
- (4) There is a positive correlation between the rating of the controls' usefulness for improvement and the organization's size.

The obtained results are presented in [Table 5](#).

Thus, it can be concluded that the factors that influenced the assessment of external audits and official controls in the most significant number of cases are (1) the size of the organization and (2) having an implemented management system compliant with the selected ISO standard.

However, it should be noted that although each of the discussed relationships was positive and statistically significant, their strength was not high. On the other hand, the obtained data do not indicate any significant correlations between credibility and the measured characteristics of the organizations. This could lead to the conclusion that there are factors other than market range, size, income, or implemented management systems that affect the perception of the credibility of audits and controls.

### 5. Discussion

**RQ1:** Are external audits more useful (in terms of organizational improvement) than official controls?

Based on the collected information, it can be concluded that the usefulness for improvement (of the organization) of both external audits and official controls was assessed highly. Effective control means auditing in a way that maximizes the detection of non-compliance. The results of various studies allow us to conclude that adequate control is one that is accurate, current, objective, precise, anticipative, indicative of corrective action, flexible, focused on the core areas of the organization and linked to the objectives of the organization, transparent and efficient, as well as helps to understand the risks associated with the processes, improves the organization's self-control system (Kleboth, Luning, & Fogliano, 2016; Kettunen, Pesonen, Lundén, & Nevas, 2018).

The usefulness is related to benefits resulting from the outcomes of the controls and audits as Kafel and Rogala (2021):

- (1) Recorded in the audit/control reports' observations and non-conformities,
- (2) Unrecorded observations and other information that is generated during the controlling/auditing processes,

Variables	Characteristics of the organizations				
	Market range	Size	Income	ISO systems (yes/no)	Number of voluntary management systems
Improvement – audits	0.201*	0.144	0.086	0.235*	0.179
Improvement – controls	0.057	0.199*	0.131	0.172	0.115
Finances – audits	0.201*	0.255*	0.064	0.232*	0.237*
Finances – controls	0.114	0.262*	0.161	0.198*	0.203*
Credibility – audits	-0.028	-0.010	0.045	-0.088	-0.060
Credibility – controls	-0.049	0.017	0.027	0.030	0.020

**Note(s):** \* $p < 0.05$

**Source(s):** Authors' own elaboration

**Table 5.** Results of Spearman's rank-order correlations between the studied variables and characteristics of the organizations

- (3) Auditors/controllers' suggestions and opinions beyond the audit's scope but still treated as a high risk for the organization.

Based on the results of the performed statistical test, it can be concluded that, in general, external audits are considered more valuable than official controls. However, it should be noted that as many as 63 % of the respondents stated that they experience a difference in the usefulness of external audits and official controls.

**RQ2:** Are external audits more useful in improving financial performance than official controls?

The financial usefulness of external audits and official controls was assessed lower than their usefulness related to the possibilities of improving the organization. As many as 66 % of respondents assessed both types of audits the same in this respect. However, based on the results of the performed statistical test, it can be concluded that, in general, external audits are considered more beneficial than official controls. Comparing the usefulness of improving controls and audits with financial usefulness, it could be clearly indicated that the added value of the discussed activities is outside the financial area.

It should be noted that other authors have concluded in their research that some reasons for non-compliance may be related to the economic burden of achieving and maintaining compliance. Thus, some organizations may consider the impact of external audits and official controls on financial performance to be negative. The elimination of any non-compliance is often financially challenging for the organization, and the deadlines set by the control authorities for the elimination of the non-compliance are too short (Kettunen *et al.*, 2018).

**RQ3:** Are external audits more credible than official controls?

The credibility of both external audits and official controls was highly rated. In this case, as many as 75 % of respondents rated external audits and official controls at the same level. As a result, based on the performed statistical test, there are no significant differences in the assessment of the credibility of external audits and official controls.

The high value or correlation rank in the credibility of external audits and official controls can lead to the conclusion that there are other factors related to the quality of these activities that are essential in the organization's perception of credibility. According to Newell and Goldsmith (2001), credibility in a corporate perspective consists of two dimensions – trustworthiness and expertise. In the context of these, trustworthiness can refer to perceiving the information presented by the external audits/official controls to be believable, whereas expertise means that organizations perceive external audits/official controls to be technically capable and competent. The two dimensions of credibility can be highly influenced by the trustworthiness of information presented by the organization's representatives to the auditors/controllers. In the case of fabricating external audits/official controls' evidence or "spoofing the facts", organizations can assume that all other organizations operate similarly and in the conference, assess the trustworthiness as low for the outcomes of both official controls and audits. The second dimension refers to the assessment of the auditors'/controllers' judgment. In such a case, the experience and knowledge of the organization's personnel can highly influence how the auditors/controllers are assessed in the organization.

At the same time, the human factor influencing the auditors/controllers' judgment must be taken into consideration, as it can also be subjective, so the external audits and official controls can be biased, and some of the influencing factors cannot be controlled, such as the health and mood of the external audits/official controls staff (Johnson, Almanza, & Nelson, 2014).

**RQ4:** What factors influence the assessment of external audits and official controls?

The general assessment of the credibility of the external audits and official controls was also very high, and the median value for both these activities was 6. Similar to assessing usefulness for improvement and financial usefulness, some organizations assessed credibility at the lowest possible level. It means that those organizations, after experiencing the official controls or audits, do not trust the final results of such external audits/official controls. Considering the importance of trust in management systems verification, it is essential to identify such adverse judgments. The motivations and attitudes of organizations can explain that. Some organizations perceive official controls as a “sad duty” that should be done to run the business. In this case, the usefulness and credibility are assessed lower than in the case of external audits.

The conducted test did not indicate differences in the perception of credibility assessment between official controls and external audits.

It is unforeseen that many respondents do not appreciate or trust the results of external audits. This attitude could be understood in the case of official controls which are forced by law and could be treated as a disturbance and seen as a valueless requirement hindering business activity. This perspective has been confirmed in other studies. According to Kettunen *et al.* study (2017), official food controls are essential for food safety, but small-sized organizations are particularly critical of the relevance of control actions. Some explanation of these results could be that, on the one hand, the status of organic farming certification is voluntary, but on the other hand, it is still, according to 848/2018 EU regulation, a “must-have” for producers that are willing to produce, label and sell organic products (EU, 2007, 2018). The lack of trust and appreciation of the results of external audits may also result from the improper implementation and lack of involvement in the functioning of the voluntary management system, as well as some unethical practices that might occur during its implementation. This approach is a contradiction of the ideas related to management systems and their certification. Unfortunately, it is still a common problem with voluntary management systems.

## 6. Conclusions

Quality monitoring is a strategic tool for achieving the efficiency of companies to improve business performance. Within the framework of quality management, a system of reference points is established, thus helping to define clear requirements, policies, procedures and ways to monitor the implementation of the processes. An audit is an essential element of quality monitoring, the proper and correct implementation of which can provide the management of the company with a lot of useful information about the quality system in the company and areas for improvement.

According to the purpose of the study, trying to fill the gap in this research area and evaluating the opinions of various authors and the data collected in this study, it can be concluded that despite numerous similarities, external audits and official controls are two different activities. During official controls, inspectors are mainly concerned about compliance and control of the risks. However, external auditors are mainly concerned about standards, procedures and processes, whereas the business organization’s primary concern is about how to achieve its goals, which include making a profit. This leads to differences in perceptions of usefulness and credibility when organizations compare the results of external audits and official controls. The legal framework used in the case of official controls focuses on what the process or product must be or should not be. Accordingly, there is a declarative picture regarding the quality of the product or aims of the process, to which the quality or process should correspond. The use of the regulatory framework language to model business processes may not be able to provide comprehensive and valuable results for the business organization. In turn, in the case of external audits, it is more oriented to business

processes and management. Thus, the organization as a whole is developing through the process and business strategy improvement, identifying the market or customer needs and creating a way to meet them. As a result, those organizations who see the difference usually rate the audits higher than official controls, as external audits could provide process improvement specifications to determine what activities a business should perform.

The literature review shows some conceptual differences between external audits and official controls, but the results of this study show that the business environment does not perceive these differences as significant. Thus, the value of the study is reflected in the conclusion that both external audits and official controls are considered useful and credible approaches to monitoring the quality within the organization, which allows us to state that external evaluation is generally seen as an opportunity to improve the performance of the organization.

The obtained results may be of particular interest to managers of organizations conducting external audits. Their clients bear the costs associated with conducting the audits and do not see significant differences between audits and official controls (which are free). This should be an evident impulse to undertake improvement actions to increase these services' usability and credibility. Managers should maximize the effects of the audits by encouraging auditors to greater cooperation, commitment and openness. They should also improve their communication policy with clients and emphasize the benefits of audits. The communication should also emphasize the fact, that the information from the audits is confidential and may not be used to harm the organization - for example, by handing them over to official control representatives. Managers of organizations conducting external audits may also consider providing support (based on the knowledge and experience of auditors) to the audited companies in using the audit results for improvement.

The research results may also be helpful for managers of manufacturing companies. The differences and similarities between external audits and official controls discussed in the article enable conscious decision-making regarding the auditing process. Based on the information presented in the article, they can more easily decide whether, in their case, it is rational to bear the costs related to external audits.

One of the main limitations of this study is that organic farming certification processes were assigned to external audits. This approach can be found in literature studies (Lim, Priyono, & Ming, 2020). The scope of organic farming certification has some elements of management requirements, but the inspection within the official control is also mentioned in the product certification scheme and specific requirements in Poland. Moreover, food safety is a crucial criterion for market success in the organic food industry, and every source of findings supporting it (e.g. external audits) is valuable and worth keeping and considering. Organic food production is a specific type of food business, so it needs attention when extrapolating the results to other sectors. Therefore, the sample size can also be considered as a limitation. Another limitation is the range of official controls and certifications limited to Poland. Some researchers recognize and discuss the differences between countries in food control effectiveness (Rostron, 2011). Due to this fact, the extension of the studies to compare the official controls' results in different countries is recommended.

## References

- Abuazza, O. A., Labib, A., & Savage, B. M. (2019). Development of a conceptual auditing framework by integrating ISO 9001 principles within auditing. *International Journal of Quality and Reliability Management*, 37(3), 411–427. doi: [10.1108/IJQRM-06-2018-0154](https://doi.org/10.1108/IJQRM-06-2018-0154).
- Ahearn, M. C., Liang, K., & Goetz, S. (2018). Farm business financial performance in local foods value chains. *Agricultural Finance Review*, 78(4), 470–488. doi: [10.1108/AFR-08-2017-0071](https://doi.org/10.1108/AFR-08-2017-0071).

- Algabry, L., Alhabshi, S. M., Soualhi, Y., & Alaeddin, O. (2020). Conceptual framework of internal Shari'ah audit effectiveness factors in Islamic banks. *ISRA International Journal of Islamic Finance*, 12(2), 171–193. doi: [10.1108/IJIF-09-2018-0097](https://doi.org/10.1108/IJIF-09-2018-0097).
- Alić, M., & Rusjan, B. (2011). Managerial relevance of internal audit. *TQM Journal*, 23(3), 284–300. doi: [10.1108/17542731111124343](https://doi.org/10.1108/17542731111124343).
- Al-Twaijry, A. A. M., Brierley, J. A., & Gwilliam, D. R. (2004). An examination of the relationship between internal and external audit in the Saudi Arabian corporate sector. *Managerial Auditing Journal*, 19(7), 929–944. doi: [10.1108/02686900410549448](https://doi.org/10.1108/02686900410549448).
- Asif, M., Searcy, C., Zutshi, A., & Ahmad, N. (2011). An integrated management systems approach to corporate sustainability. *European Business Review*, 23(4), 353–367. doi: [10.1108/09555341111145744](https://doi.org/10.1108/09555341111145744).
- Azam, M. S., & Shaheen, M. (2019). Decisional factors driving farmers to adopt organic farming in India: A cross-sectional study. *International Journal of Social Economics*, 46(4), 562–580. doi: [10.1108/IJSE-05-2018-0282](https://doi.org/10.1108/IJSE-05-2018-0282).
- Baker, A. (2007). Occam's razor in science: A case study from biogeography. *Biology and Philosophy*, 22(2), 193–215. doi: [10.1007/s10539-006-9027-9](https://doi.org/10.1007/s10539-006-9027-9).
- Balan, C. (2006). CATI: Telephone interviewing technique. *Management and Marketing*, 1(1), 81–92.
- Beckmerhagen, I. A., Berg, H. P., Karapetrovic, S. V., & Willborn, W. O. (2004). On the effectiveness of quality management system audits. *TQM Magazine*, 16(1), 14–25. doi: [10.1108/09544780410511443](https://doi.org/10.1108/09544780410511443).
- Bernardo, M., Casadesus, M., Karapetrovic, S., & Heras, I. (2011). Relationships between the integration of audits and management systems. *The TQM Journal*, 23(6), 659–672. doi: [10.1108/17542731111175266](https://doi.org/10.1108/17542731111175266).
- Biazzo, S. (2005). The New ISO 9001 and the problem of ceremonial conformity: How have audit methods evolved?. *Total Quality Management and Business Excellence*, 16(3), 381–399. doi: [10.1080/14783360500054145](https://doi.org/10.1080/14783360500054145).
- Bryła, P. (2017). Creating and delivering value for consumers of healthy food – a case study of organic Farma Zdrowia S.A. *Journal of Management and Business Administration. Central Europe*, 25(4), 55–74. doi: [10.7206/jmba.ce.2450-7814.207](https://doi.org/10.7206/jmba.ce.2450-7814.207).
- Bugdol, M. (2010). Zaufanie jako element systemu wartości organizacyjnych. *Współczesne Zarządzanie*, 2, 11–25.
- Bugdol, M., & Jedynak, P. (2015). *Integrated management systems*. Cham: Springer International Publishing. doi: [10.1007/978-3-319-10028-9](https://doi.org/10.1007/978-3-319-10028-9).
- Castka, P., Zhao, X., Bremer, P., Wood, L. C., & Miroso, M. (2021). Supplier audits during COVID-19: A process perspective on their transformation and implications for the future. *The International Journal of Logistics Management*, 33(4), 1294–1314. doi: [10.1108/IJLM-05-2021-0302](https://doi.org/10.1108/IJLM-05-2021-0302).
- Chiarini, A., Castellani, P., Rossato, C., & Cobelli, N. (2020). Quality management internal auditing in small and medium-sized companies: An exploratory study on factors for significantly improving quality performance. *Total Quality Management and Business Excellence*, 32(15-16), 1–21. doi: [10.1080/14783363.2020.1776101](https://doi.org/10.1080/14783363.2020.1776101).
- Codex Alimentarius (1999). *Guidelines for the production, processing, labelling and marketing of organically produced foods*. CAC/GL 1–52. Geneva: FAO/WHO. Available from: <https://www.fao.org/fao-who-codexalimentarius/codex-texts/codes-of-practice/tr/>
- Daniel, J., Hoetzer, K., McCombie, G., & Grob, K. (2019). Conclusions from a Swiss official control of the safety assessment for food contact polyolefins through the compliance documentation of the producers. *Food Additives and Contaminants: Part A*, 36(1), 186–193. doi: [10.1080/19440049.2018.1556405](https://doi.org/10.1080/19440049.2018.1556405).
- Dekhili, S., & Akli Achabou, M. (2014). Eco-labelling brand strategy. *European Business Review*, 26(4), 305–329. doi: [10.1108/EBR-06-2013-0090](https://doi.org/10.1108/EBR-06-2013-0090).



- Dobija, D. (2019). Institutionalizing corporate governance reforms in Poland: External auditors' perspective. *Central European Management Journal*, 27(3), 28–54. doi: [10.7206/cemj.2658-0845.2](https://doi.org/10.7206/cemj.2658-0845.2).
- Domingues, J. P., Mufato Reis, A., Fonseca, L. M., Ávila, P., & Putnik, G. (2019). The added value of the ISO 9001:2015 International Standard from an auditors' perspective: A CB-SEM based evaluation. *International Journal for Quality Research*, 13(4), 967–986. doi: [10.24874/IJQR13.04-15](https://doi.org/10.24874/IJQR13.04-15).
- EU (2007). Council Regulation (EC) 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. Official Journal of the European Communities, (No. L 189).
- EU (2018). Regulation 2018/848 of the European Parliament and of the Council of 30 May 2018 on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007. Official Journal of the European Union, L 150.
- Funnell, W., Wade, M., & Jupe, R. (2016). Stakeholder perceptions of performance audit credibility. *Accounting and Business Research*, 46(6), 601–619. doi: [10.1080/00014788.2016.1157680](https://doi.org/10.1080/00014788.2016.1157680).
- Gacoń, T. (2013). The professionalization of internal auditing. *Management and Business Administration. Central Europe*, 21(4), 55–68. doi: [10.7206/mba.ce.2084-3356.80](https://doi.org/10.7206/mba.ce.2084-3356.80).
- Heras-Saizarbitoria, I., & Boiral, O. (2019). Faking ISO 9001 in China: An exploratory study. *Business Horizons*, 62(1), 55–64. doi: [10.1016/j.bushor.2018.08.008](https://doi.org/10.1016/j.bushor.2018.08.008).
- Hovland, C. I., Janis, I. L., & Kelley, H. (1953). *Communication and persuasion; psychological studies of opinion change*. New Haven: Yale University Press.
- IJHARiS (2021). *Data on organic farming - 31.12.2020*, Warsaw: Agricultural and Food Quality Inspection (IJHARiS). Available from: <https://www.gov.pl/web/ijhars/dane-o-rolnictwie-ekologicznym>
- ISO 19011 (2018). *Guidelines for auditing management systems*. Geneva: International Organization for Standardization.
- Jensen, J. D., Christensen, T., Denver, S., Ditlevsen, K., Lassen, J., & Teuber, R. (2019). Heterogeneity in consumers' perceptions and demand for local (organic) food products. *Food Quality and Preference*, 73, 255–265. doi: [10.1016/j.foodqual.2018.11.002y](https://doi.org/10.1016/j.foodqual.2018.11.002y).
- Johnson, A. C., Almanza, B. A., & Nelson, D. C. (2014). Factors that influence whether health inspectors write down violations on inspection reports. *Food Protection Trends*, 34(4), 226–236.
- Kafel, P., & Rogala, P. (2021). Auditing management systems in digital transformation era. *International Journal for Quality Research*, 16(1), 193–206. doi: [10.24874/IJQR16.01-13](https://doi.org/10.24874/IJQR16.01-13).
- Karapetrovic, S., & Willborn, W. (2001). Audit system: Concepts and practices. *Total Quality Management*, 12(1), 13–28. doi: [10.1080/09544120020010066](https://doi.org/10.1080/09544120020010066).
- Karapetrovic, S., & Willborn, W. (2002). Self-audit of process performance. *International Journal of Quality and Reliability Management*, 19(1), 24–45. doi: [10.1108/02656710210413435](https://doi.org/10.1108/02656710210413435).
- Kettunen, J. (2012). External and internal quality audits in higher education. *TQM Journal*, 24(6), 518–528. doi: [10.1108/17542731211270089](https://doi.org/10.1108/17542731211270089).
- Kettunen, K., Lundén, J., Lääkkö-Roto, T., & Nevas, M. (2017). Towards more consistent and effective food control: Learning from the views of food business operators. *International Journal of Environmental Health Research*, 27(3), 215–229. doi: [10.1080/09603123.2017.1332351](https://doi.org/10.1080/09603123.2017.1332351).
- Kettunen, K., Pesonen, S., Lundén, J., & Nevas, M. (2018). Consistency and risk-basis of using administrative enforcement measures in local food control. *Food Control*, 85, 99–211. doi: [10.1016/j.foodcont.2017.09.023](https://doi.org/10.1016/j.foodcont.2017.09.023).
- Khanal, A. R., Mishra, S. K., & Honey, U. (2018). Certified organic food production, financial performance, and farm size: An unconditional quantile regression approach. *Land Use Policy*, 78, 367–376. doi: [10.1016/j.landusepol.2018.07.012](https://doi.org/10.1016/j.landusepol.2018.07.012).
- Kleboth, J., Luning, P. A., & Fogliano, V. (2016). Risk-based integrity audits in the food chain – a framework for complex systems. *Trends in Food Science and Technology*, 56, 167–174. doi: [10.1016/j.tifs.2016.07.010](https://doi.org/10.1016/j.tifs.2016.07.010).



- Kononets, Y., & Treiblmaier, H. (2021). The potential of bio certification to strengthen the market position of food producers. *Modern Supply Chain Research and Applications*, 3(1), 41–55. doi: [10.1108/MS CRA-05-2020-0013](https://doi.org/10.1108/MS CRA-05-2020-0013).
- Lenning, J., & Gremyr, I. (2017). Making internal audits business-relevant. *Total Quality Management and Business Excellence*, 28(9-10), 1106–1121. doi: [10.1080/14783363.2017.1303891](https://doi.org/10.1080/14783363.2017.1303891).
- Lim, S. A. H., Priyono, A., & Ming, C. H. (2020). An exploratory study of integrated management system on food safety and organic certifications. *International Journal of Academic Research in Business and Social Sciences*, 10(3). doi: [10.6007/IJAR BSS/v10-i3/7111](https://doi.org/10.6007/IJAR BSS/v10-i3/7111).
- Lueckl, J., Weyermair, K., Matt, M., Manner, K., & Fuchs, K. (2019). Results of official food control in Austria 2010–2016. *Food Control*, 99, 190–201. doi: [10.1016/j.foodcont.2018.12.016](https://doi.org/10.1016/j.foodcont.2018.12.016).
- Manning, L. (2018). Triangulation. *Worldwide Hospitality and Tourism Themes*, 10(3), 297–312. doi: [10.1108/WHATT-02-2018-0009](https://doi.org/10.1108/WHATT-02-2018-0009).
- Martelli, F., Giacomozzi, C., Dragone, R., Boselli, C., Amatiste, S., Brajon, G., . . . Frazzoli, C. (2019). Official control and self-monitoring: Data agreement report in the integrated food safety system of an Italian dairy chain. *International Dairy Journal*, 97, 185–190. doi: [10.1016/j.idairyj.2019.05.006](https://doi.org/10.1016/j.idairyj.2019.05.006).
- Metzger, M. J., & Flanagan, A. J. (2013). Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics*, 59, 210–220. doi: [10.1016/j.pragma.2013.07.012](https://doi.org/10.1016/j.pragma.2013.07.012).
- Miszczyk, M., Płonka, M., Stobiecki, T., Kronenbach-Dylong, D., Waleczek, K., & Weber, R. (2018). Official control of plant protection products in Poland: Detection of illegal products. *Environmental Science and Pollution Research*, 25(32), 31906–31916. doi: [10.1007/s11356-018-1739-2](https://doi.org/10.1007/s11356-018-1739-2).
- Misztal, B. (1996). Trust in modern societies: The search for the bases of social order. *Choice Reviews Online*, 34(2). doi: [10.5860/CHOICE.34-1248](https://doi.org/10.5860/CHOICE.34-1248).
- Mondelaers, K., Aertsens, J., & Van Huylenbroeck, G. (2009). A meta-analysis of the differences in environmental impacts between organic and conventional farming. *British Food Journal*, 111(10), 1098–1119. doi: [10.1108/00070700910992925](https://doi.org/10.1108/00070700910992925).
- Nagyova, A., Balazikova, M., Markulik, S., Sinay, J., & Pacaiova, H. (2018). Implementation proposal of OH&S management system according to the standard ISO/DIS 45001. In P. Arezes (Ed.), *Advances in Safety Management and Human Factors. AHFE 2017. Advances in Intelligent Systems and Computing* (Vol. 604). Cham: Springer. doi: [10.1007/978-3-319-60525-8\\_49](https://doi.org/10.1007/978-3-319-60525-8_49).
- Newell, S. J., & Goldsmith, R. E. (2001). The development of a scale to measure perceived corporate credibility. *Journal of Business Research*, 52(3), 235–247. doi: [10.1016/S0148-2963\(99\)00104-6](https://doi.org/10.1016/S0148-2963(99)00104-6).
- Nurchahyo, R., Kristiningrum, E., & Sumaedi, S. (2019). ISO 9001-certified public healthcare center's efficiency and re-certification. *International Journal of Productivity and Performance Management*, 69(4), 794–812. doi: [10.1108/IJPPM-11-2018-0406](https://doi.org/10.1108/IJPPM-11-2018-0406).
- Pivka, M. (2004). ISO 9000 value-added auditing. *Total Quality Management and Business Excellence*, 15(3), 345–353. doi: [10.1080/1478336042000183406](https://doi.org/10.1080/1478336042000183406).
- Poksinska, B., Dahlgaard, J. J., & Eklund, J. A. E. (2006). From compliance to value-added auditing - experiences from Swedish ISO 9001:2000 certified organisations. *Total Quality Management and Business Excellence*, 17(7), 879–892. doi: [10.1080/14783360600595294](https://doi.org/10.1080/14783360600595294).
- Puławska, K., Dobija, D., Piotrowska, K., & Kravchenko, G. (2021). Audit committee formation: The case of Poland. *Central European Management Journal*, 29(2), 169–212. doi: [10.7206/cemj.2658-0845.50](https://doi.org/10.7206/cemj.2658-0845.50).
- Rodríguez-Bermúdez, R., Miranda, M., Orjales, I., Ginzo-Villamayor, M. J., Al-Soufi, W., & López-Alonso, M. (2020). Consumers' perception of and attitudes towards organic food in Galicia (Northern Spain). *International Journal of Consumer Studies*, 44(3), 206–219. doi: [10.1111/ijcs.12557](https://doi.org/10.1111/ijcs.12557).

- Rogala, P., & Wawak, S. (2021). Quality of the ISO 9000 series of standards-perceptions of quality management experts. *International Journal of Quality and Service Sciences*, 13(4), 509–525. doi: [10.1108/IJQSS-04-2020-0065](https://doi.org/10.1108/IJQSS-04-2020-0065).
- Romano, P. (2002). Impact of supply chain sensitivity to quality certification on quality management practices and performances. *Total Quality Management*, 13(7), 981–1000. doi: [10.1080/0954412022000017067](https://doi.org/10.1080/0954412022000017067).
- Rostron, K. (2011). Strengthening national food control systems. *Worldwide Hospitality and Tourism Themes*, 3(5), 402–412. doi: [10.1108/17554211111185773](https://doi.org/10.1108/17554211111185773).
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35(1), 1–7. doi: [10.1037/0003-066X.35.1.1](https://doi.org/10.1037/0003-066X.35.1.1).
- Sharma, D. (2005). The association between ISO 9000 certification and financial performance. *The International Journal of Accounting*, 40(2), 151–172. doi: [10.1016/j.intacc.2005.01.011](https://doi.org/10.1016/j.intacc.2005.01.011).
- Song-Turner, H., & Polonsky, M. (2016). Enviropreneurial marketing in greening corporate activities. *European Business Review*, 28(5), 506–531. doi: [10.1108/EBR-12-2014-0087](https://doi.org/10.1108/EBR-12-2014-0087).
- Svrčinová, P., & Janout, V. (2018). Comparison of official food safety control systems in member states of the European Union. *Central European Journal of Public Health*, 26(4), 321–325. doi: [10.21101/cejph.a4940](https://doi.org/10.21101/cejph.a4940).
- van der Meulen, B. M. J. (2019). Enforcement of EU agri-food law. *ERA Forum*, 19(4), 623–641. doi: [10.1007/s12027-018-0532-5](https://doi.org/10.1007/s12027-018-0532-5).
- Whelan, T. (2015). Trade and aid: How certification helps improve sustainability. *International Trade Forum*, 3, 18–19. doi: [10.18356/f8967158-en](https://doi.org/10.18356/f8967158-en).
- Wolniak, R. (2021). Internal audit and management review in ISO 9001:2015. Silesian University of Technology Scientific Papers. *Organization and Management Series*, 151, 711–723. doi: [10.29119/1641-3466.2021.151.49](https://doi.org/10.29119/1641-3466.2021.151.49).
- Zander, K., Padel, S., & Zanolli, R. (2015). EU organic logo and its perception by consumers. *British Food Journal*, 117(5), 1506–1526. doi: [10.1108/BFJ-08-2014-0298](https://doi.org/10.1108/BFJ-08-2014-0298).

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