# Effects of sustainable HRM practices on productivity: Insights from Italian Small Enterprises

Samuele Maccioni<sup>1</sup>, Gianfranco Ennas<sup>2</sup>, Cristiano Ghiringhelli<sup>3</sup>, Francesco Virili<sup>4</sup>

<sup>1</sup>University of Milano-Bicocca, Department of Human Sciences for Education; Milan, Italy
<sup>2</sup>University of Sassari, Department of Business & Economics; Sassari, Italy
<sup>3</sup>University of Milano-Bicocca, Department of Human Sciences for Education; Milan, Italy
<sup>4</sup>Catholic University of the Sacred Heart, DISES; Piacenza, Italy

samuele.maccioni@unimib.it gennas@uniss.it cristiano.ghiringhelli@unimib.it francesco.virili@unicatt.it

Abstract. Sustainability and Human Resources Management (HRM) are increasingly important concerns for small and medium-sized enterprises (SMEs). Our study focuses on the intersection between sustainability, HRM, and Small enterprises analysing that through the lens of performance in terms of average added value per employee (AAV). This study aims to address two research questions: (1) How do HRM practices and sustainable practices impact performance in terms of AAV in Small Enterprises in Italy? (2) Do Italian Small Enterprises driven by activities aimed at promoting employee welfare and sustainability have a higher AAV? Datasets from the Italian Institute of Statistics (ISTAT) - including the Permanent Business Census and the periodic "Labor and Wages" dataset - have been utilized to provide insights into the relationship between sustainable HRM practices and productivity in Italian Small Enterprises. As expected, our findings revealed that certain HRM practices are associated with a higher AAV, such as incentives based on results, worker skill assessments, and activities promoting physical and psychological well-being. However, surprisingly, some sustainability practices, such as flexibility of working time, work performance flexibility, initiatives enhancing employee equal opportunities and parenting, reducing environmental impact, and mobility between functions and job rotation, were linked to a lower AAV. The results highlight the complexity of the relationship between sustainability, HRM practices, and performance in small enterprises. While certain HRM practices seem to contribute positively to AAV, some sustainability practices may not have the same impact, leading to only partial confirmation of hypotheses H1 and H2. We discuss these results and provide a possible interpretation from which we derive opportunities for future studies. The inherent limitations of the study, in particular those related to the databases utilized, are declared and debated.

Keywords: Sustainability; Welfare; HRM; Performance; Small Enterprises

### 1 Introduction

Sustainability, especially when linked to the areas of Human Resources Management (HRM), is becoming a topic of particular interest and concern for organisations worldwide. This dynamic stems from an increasing awareness of the environmental and social impacts that economic activities generate not only as producers of goods but as major social laboratories. As key players in shaping the future, both public and private sectors are called upon to respond to the environmental, social and economic issues that characterise today's scenario. Within this context, small and medium-sized enterprises (SMEs) have been identified as the key actors in charge of actively participating in the economic transition towards a more sustainable scenario, considering the fundamental role they play within the global economy [33]. Indeed, according to Eurostat [29], SMEs represent the backbone of the EU economy. Moreover, due to their flexibility, agility and proximity to local communities, they play a key role as agents of change within the path towards a sustainable economy [53]. In addition to this, weaving networks with local actors can facilitate regional transitions by promoting the innovativeness and resilience of local communities [21]. However, considering also the dark side of the matter, SMEs are also indicated as directly responsible for about 60 per cent of all carbon dioxide emissions and about 70 per cent of global pollution [3; 67]. If this is true in the global scenario, such dynamics are exacerbated for the scenario examined in the following study, i.e. the Italian one. Indeed, examining the Italian context, we see how SMEs represent more than 99% of all enterprises and employ almost 80% of the workforce<sup>1</sup>.

If therefore, as we have said, Sustainability and HRM are two fundamental research topics in today's scenario, as they are respectively devoted to improving the well-being of people and the environment, and SMEs are the primary context in which to observe them for their incidence, in our study we are going to investigate the intersection of these three directions through the lens of performance, using, in particular, a figure of efficiency, namely the average added value per employee (AAV). This figure in fact fits perfectly into the intersection investigated. From an HRM perspective, it indicates the ability of a company to effectively utilise the human value it has at its disposal [42]. Furthermore, from a sustainability perspective, it is an indicator of the efficient utilisation of resources and overall environmental impact. Through this indicator, companies can in fact monitor their social and environmental performance to identify potential opportunities for improvement [79]. Cross-referencing these two concepts provides a better understanding of which alignment of them can lead to the best value creation for organisations [25]. Although at a theoretical level, we have considered SMEs in their complexity, in our analyses we have focused on small enterprises, in particular, both for reasons of verticality of analysis and for reasons of representativeness of the sample within the investigated context: the Italian one. Therefore, in light of these considerations, the research questions that guided the analysis are the following:

<sup>&</sup>lt;sup>1</sup> Please refer to: http://dati-censimentipermanenti.istat.it/?lang=en

RQ1: How do HRM practices and sustainable practices impact performance in terms of AAV of Small Enterprises in Italy?

RQ2: Do Italian Small Enterprises driven by activities aimed at promoting employee welfare and sustainability have a higher AAV?

To explore these research directions, we made use of two datasets in particular. The first is a dataset made available relatively recently by the Italian Institute of Statistics (ISTAT) called the Permanent Business Census<sup>2</sup>. In particular, it is a periodic questionnaire that aims to investigate a large number of strategic projects and initiatives of Italian companies, having as a representative sample the totality of Italian companies. The second dataset is the periodic ISTAT "Labor and Wages" data set, from which we derive our analysis of the average value added per employee. The results we reach in our study, although they do not fully confirm the hypotheses, open up the debate and provide interesting insights for future research by further emphasizing the importance of studying and further exploring this topic.

Starting therefore from these assumptions, the paper is organised as follows. First, the theoretical background underpinning our research question and our investigative hypothesis will be presented; Second, the methods used to analyse the data sets and test the hypotheses will be introduced; Third, the results that have emerged will be presented; Fourth, the discussion of the results will be presented, the limitations of the study will be made explicit, and future research steps will be presented. We believe that this work explores an interesting intersection that can address in depth some of the hot topics that today's scenarios require.

## 2 Theoretical Background

Starting from the stated research questions, we considered it essential to analyse the theoretical background behind the analysed macro-topics and then focus on their intersection. Indeed, we believe that this approach is fundamental when approaching the issue of sustainability as it touches and influences the organisation at different levels in a relationship of mutual interdependence between it and the surrounding environment [89].

#### 2.1 SMEs in Modern Scenario with a Focus on Italian Small Enterprises

SMEs are an important and fundamental part of the global economy. They play a significant role in creating jobs, generating economic growth and ultimately fostering innovation. SMEs are defined as enterprises characterised by a workforce of up to 249 employees; a definition that today leads them to represent 90% of global enterprises [63]. According to the World Bank [92], SMEs globally contribute to employing more than 50% of the entire workforce as well as generating about 33% of GDP. Looking at SMEs, apart from the reported representativeness figure, is interesting because they are unique and face specific challenges very different from those of large organisations. To give an example relevant to the study, they have to perform

<sup>&</sup>lt;sup>2</sup> Please refer to: http://dati-censimentipermanenti.istat.it/?lang=en

with limited resources and capacities, using them to innovate and adapt to changes in the market [17]. In addition, their ubiquity and close ties with the territory in which they are embedded allow them to analyse the impact not only of the internal practices they adopt [78] but also the mutually influential relationships they have with the territory in which they are embedded [31].

In Italy, they play a vital role in the country's economy by contributing to economic growth, employment and, finally, innovative capacity. Despite their importance and centrality, therefore, they face many challenges and obstacles that prevent them from expressing their full potential [35]. One of the main problems they face is access to finance. Italian banks have traditionally been hesitant to lend to small enterprises due to concerns about credit risk and limited collateral [40]. Moreover, during the financial crisis of 2008-2009, Italian banks were hit hard, and the resulting credit crunch further reduced small enterprises' access to financing [75]. Another major challenge they face is the administrative and regulatory burdens that are known to characterise the Italian context. Italian bureaucracy is notoriously complex and time-consuming, with regulations often overlapping and conflicting [10]. This fact, together with the scarcity of resources, only further complexifies the existence of these realities. Despite these challenging assumptions, they still manage to create products and services of such quality that they are recognised with reverence globally [57]. For these reasons, we believe that as agile organisations are capable of performing despite the constraints and highly challenging environment in which they operate, they embody the resilient spirit that must be interpreted in today's scenario.

#### 2.2 Sustainability

Sustainability, as a concept, has evolved over the years to become an increasingly important and debated topic. One of the key milestones in the history of the concept is covered by the Brundtland Commission report, "Our Common Future" in 1987 [91]. This milestone is important because it provides one of the best and most holistic definitions of sustainability, defining sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [91, p. 43]. Although, this definition has been widely used and quoted, it has also been the subject of fervent debate and constant adjustment by scholars and practitioners interested in the subject. However, while taking it as a reference within the study, it is necessary to emphasize how the definition provided by the Brundtland Commission in its simplicity and effectiveness has attracted as much support as criticism. Indeed, inherent in the simplicity of the definition is an undeniable and obvious ambiguity [51]. This is understandable since it implicitly refers to three macro pillars that must necessarily be considered in reflections on the subject: environmental, economic and social [27]. These dimensions, are evidently interrelated by links of mutual interdependence [34], requiring a comprehensive approach to recognize and handle the complexity of the subject. The three-pillar model [27] usually used to approach the topic, has in fact been criticized precisely for oversimplifying the complex relationships that exist between these dimensions.

Above all, it is criticized for the dangerous implicit assumption that economic growth can continue indefinitely without causing irreversible damage to the environment [77]. Understanding the complexity of the subject matter, we feel it is our duty to make explicit the concept of sustainability to which we adhere, namely the definition provided by the Brundtland Commission. As simple as it is, we believe it is holistically capable of guiding and holding together the many dimensions involved in organisational issues. Although we, therefore, agree that there is still much work to be done to arrive at a definition, we believe that this definition is the best available today.

Despite the strategic and current importance of sustainability, there is a significant gap between the perceived importance of sustainability performance measurement and its implementation in practice. While a majority of CEOs believe in the need to measure and quantify sustainability impacts, only a fraction believes they can adequately measure the impact of their sustainability activities [83]. Furthermore, stakeholders are dissatisfied with current measures of sustainability performance [83]. Indeed, a diversity of barriers exists, including lack of customer interest, poor information on sustainability practices, technical difficulties, bureaucracy, and time and labour intensity. Notably, the abuse of the sustainability concept, also known as greenwashing, is considered a major barrier [18]. Despite this, sustainability information is frequently collected for sustainability reports, indicating its importance for stakeholders and stakeholder relationships [83].

Sustainability, indeed, today is a main issue for all kinds of organizations, including SMEs. The complexity and multidimensionality of sustainability, encompassing economic, environmental, and social principles, pose significant challenges to SMEs [18]. In particular, SMEs face unique challenges in achieving sustainability due to resource limitations. According to Hsu et al. [41], SMEs need to incorporate sustainable development into their strategic analysis and effectively utilize their limited resources. Despite the challenges, sustainability development can offer significant benefits to SMEs, including firm development and growth, enhanced corporate reputation, improved labour relations, and mitigation of stakeholder pressure [41]. However, both academia and industry have noted the lack of structure in integrating sustainability into business decisions as a critical challenge. The Triple Bottom Line (TBL) approach, encompassing the societal, environmental, and economic dimensions, or the Sustainable Balance Scorecard (SBSC), are frequently suggested as a guide for developing sustainable policies [27; 79]. However, implementing these principles in a balanced and effective way remains a challenge for SMEs. Nonetheless, the sustainability approach, although it may initially represent a high cost for SMEs to overcome, can lead to significant benefits in the long run. Achieving sustainability in SMEs thus requires overcoming a variety of barriers, improving performance measurement, and effectively utilizing limited resources towards sustainable development.

#### 2.3 HRM

HRM practices play a crucial role in the success of organisations, including SMEs. The debate concerning HRM practices in SMEs has been the subject of a considerable amount of research and discussion, especially in recent years. Indeed, coupled with the unique challenges they face, SMEs often lack formalised and institutionalised HRM practices, unlike, for instance, larger organisations [14]. This scenario further outlines the importance of establishing HRM practices that can help SMEs in gaining a competitive advantage and build long-term success [85]. Indeed, there is substantial evidence in the literature that supports the positive relationship between HRM practices and SMEs' performance. For example, many studies have shown how the adoption of specific HRM practices, such as recruitment, selection, training, and people development, together with performance appraisal and designed forms of compensation can lead to significant improvements in productivity, financial performance and employee satisfaction in SMEs [5; 36; 46].

However, it is interesting to note that this stream is opposite to that of some scholars who claim instead that the relationship is neither so linear nor so direct. Indeed, this relationship undergoes important variations based on context, industry, and firm characteristics [11; 13].

In this regard, we consider it appropriate to report on a dichotomous debate currently present in the literature that sees two opposing approaches: 'best fit' versus 'best practice'. The 'best practice' approach postulates that there are universal HRM practices that can be applied to all organisations, regardless of size or context, and that still lead to improved performance [70]. In contrast, the 'best fit' approach, the one we adopt in this study, argues that HRM practices should be tailored to the individual needs and characteristics of organisations [80]. In fact, the latter approach is more suitable for approaching SMEs, especially considering the Italian context, as it is able to consider the uniqueness of organisational contexts and the unique and particular challenges that each organisation faces [69]. By adopting this approach, SMEs can in fact develop HRM practices that are better suited to their individual needs in order to achieve better-performing outputs [82].

The influence of contingent and contextual factors is indeed something that must necessarily be taken into account when talking about SMEs. The national context, organisational culture, leadership and industry are all factors that strongly influence HRM practices as well as their subsequent outcome [15]. Alignment with cultural values [20], the leadership's ability to reshape working methods [39], and industry and national characteristics [38] are indeed dimensions that these types of organisations, despite the limitations they face, must necessarily take into account.

Another point that must be considered is the role of digital technologies. The emergence of digital technologies has brought a paradigm shift in the way businesses operate. This shift has been particularly evident in the human resources (HR) departments of small and medium-sized enterprises (SMEs), as they grapple with the unique challenges posed by digital transformation [88]. Digital maturity in HR management is not just about the adoption of new technologies; rather, it encompasses a holistic change in business processes, strategies, and underlying organizational structures. Indeed, the role of information technology (IT) departments has evolved from being mere service providers to becoming the drivers of innovative business models and strategic decision-making [74]. This shift is particularly evident in SMEs, where the degree of digitization has been found to correlate positively with the age of management, indicating a generational divide in embracing digital technologies [87]. Howev-

er, the intersection of digital technologies, HR management, and sustainability is a relatively unexplored area with significant research gaps [52]. In the context of sustainability, the digitization of work and HR processes can lead to the creation of more sustainable and ethical organizations [48]. This is seen in the potential for remote work and digitalized processes to free workers from the constraints of time, location, and social circumstances. However, this shift also brings advanced monitoring possibilities, raising concerns about worker surveillance and freedom. As Kostera [45] suggests, building a sustainable, humanistically managed organization necessitates creating a positive impact on individuals, groups, and the environment. The literature is replete with evidence that the effective implementation of digital HR processes, from recruitment to management, is critical to the functioning of an organization [48]. Yet, it remains uncertain whether the confluence of the ongoing pandemic and digitalization processes will lead to the achievement of sustainable development goals. Current societal, economic, institutional, and organizational structures are being tested for their capacity to adopt a global perspective on justice and responsibility. This calls for a careful consideration of the use of modern technologies in creating a sustainable organization and society, while also remaining cognizant of the potential risks associated with these technologies [48].

#### 2.4 HRM and Sustainability Effects on Average Added Value per Worker

The relationship between HRM practices and sustainability is increasingly emerging as an area of interest within organisations.

HRM plays an important role in the actual implementation of corporate sustainability agendas. A recent extensive analysis of HRM academic and practice literature [73], shows how employees' experience of sustainable HR will lead to positive organizational and individual outcomes. Positive organizational outcomes of sustainable HR practices include sustainability climate, and enhanced reputation, attractiveness and retention; positive individual outcomes include commitment, satisfaction, identification, pride, and loyalty. The existence of a nexus between a sustainability agenda and HRM is evidenced also by the fact that to translate sustainability agendas into practice and to produce the expected outcomes the HRM function plays a determinant role.

Combining HRM and sustainability results in what is referred to in the literature as the sustainable HRM framework, an approach that aims to achieve both economic and social goals in a balanced way through HRM practices aimed at sustainability [25]. Using this theoretical lens, sustainable HRM practices can be seen as divergent from a classical approach to economic productivity, as they give priority to employee development, motivation and well-being [26]. As an example, training and development (HRM) programmes with sustainability principles at their core can empower workers to develop the necessary skills so that they can contribute to the achievement of corporate sustainability goals while also improving overall performance [81]. This intersection, however, is still little explored, so by adopting it in the study we aim to refine our knowledge in this regard.

Juxtaposing these areas of interest with the performance indicator used within the study, i.e. the average value added per employee (AAV), it is necessary to make a few preliminary remarks by first juxtaposing each of the constructs individually and then finally connecting the intersection of the three directives. The association between HRM practices and AAV has already been supported in the literature by several empirical studies, which indicate that effective HRM can lead to significant improvements in both worker productivity and organisational performance [42]. Other scholars, on the other hand, emphasise the importance of strategically aligning organisational strategies and modes with HRM practices in order to ensure the development of workers [7].

While the connection between HRM practices and AAV is almost intuitive, it is certainly more challenging to reconstruct the red thread that links AAV to sustainability. Some studies suggest that sustainability reflects an organisation's commitment to taking responsibility for the impacts of its actions on the environment, society and the economy [27] and that this is perceived positively by workers, motivating them to perform better [23; 64]. Indeed, it would appear that these practices significantly impact workers' motivation and well-being [60].

Therefore, in light of the theoretical background exposed, the following hypotheses were derived:

H1: There is a positive relationship between HRM practices and sustainability, which in turn positively influences the AAV of Small Enterprises in Italy.

H2: Italian Small enterprises that implement activities directed towards employee welfare and sustainability have a higher AAV.

## 3 Methodology and Analysis

For our research, we have used two data sets, both provided by the Italian Institute of Statistics (ISTAT)<sup>3</sup>. The first dataset is known as the "Business Census" or "Censimento permanente delle imprese". This periodic survey is conducted on a representative sample of Italian firms and covers a wide range of strategic initiatives and projects. While the ISTAT's implementation of the survey ensures scientific rigour and integration with the European framework of statistical registers, researchers have no direct control over the survey design and administration. From this database we have selected the independent variables; in particular from section 2 entitled "Human Resources Practice" the following variables:

- HRP1: incentives based on results or on individual worker productivity;
- HRP2: periodic assessment of workers' skills;
- HRP3: mobility between functions and job rotation agreed with the workers and with their representatives;
- HRP4: flexibility of working time;

<sup>&</sup>lt;sup>3</sup> Please refer to: http://dati-censimentipermanenti.istat.it/?lang=en

- HRP5: flexibility in the way work is performed (remote working, on project, offsite, etc.);
- HRP6: communication between workers and ownership/management to promptly intercept signs of dissatisfaction or inefficiency;
- HRP7: systematic collection of opinions on production processes and suggestions for improvement;
- HRP8: activities promoting the physical, psychological and social well-being of workers (sports, cultural, solidarity initiatives, etc.).

From section 9 sustainability initiatives, titled "Environmental and social sustainability" we have selected the following variables:

- S1: reduce the environmental impact of their activities;
- S2: improve employee well-being, equal opportunities, parenting, and workfamily balance;
- S3: support or implement initiatives of collective interest outside the company;
- S4: support or carry out initiatives for the benefit of the productive fabric of the territory in which the company operates.

The second dataset utilized in our study is the periodic "Added value per worker" dataset also provided by ISTAT<sup>4</sup>. From this dataset, we were able to extract the dependent variable: Added Value per employee.

The combination of sustainability action with the AAV aligns with the widely acknowledged concept of sustainability [27], encompassing not only the conventional economic dimension but also encompassing the additional dimensions of social and environmental concerns.

The combination of these two datasets allowed us to construct a comprehensive database containing data on 166.000 organizations grouped into 63 out of 77 Nomenclature of Economic Activities (NACE) divisions. The NACE is an integrated classification system for products and economic activities commonly used in Europe, similar to the North America Industry Classification System (NAICS) utilized in the USA.

In order to focus on small enterprises, the selected data set was limited to companies where the number of persons employed was in the range from 10 to 49. This measure of analysis was adopted because it represents the majority of Italian companies within which the investigated dimensions can be meaningfully analysed.

The congruence of all NACE divisions and the data referring to the same year, 2018, presented no difficulties in combining the two datasets. NACE divisions with one or more missing values were excluded from our sample, resulting in a sample size of 166.000 companies grouped into 63 NACE divisions.

In order to test the two hypotheses, a weighted linear regression analysis was employed. The dependent variable in this analysis is the AAV, while the independent

<sup>&</sup>lt;sup>4</sup> Please refer to: http://dati.istat.it/?lang=en

variables consist of the HRMP measures (HRMP1-HRMP7) and sustainability measures (S1-S5) as previously illustrated.

Specifically, multiple frequencies weighted linear regression was conducted to examine the hypotheses. This approach represents an extension of ordinary regression, incorporating knowledge of observation variances into the regression model. The dependent variable, denoted as "y," corresponds to the AAV, a continuous variable expressed in euros, while the independent variables, denoted as "xs," are expressed as percentages based on NACE division classifications. Each NACE division comprises a varying number of companies, ranging from 54 to 19.695, resulting in a total of 166.000 observations (number of firms). Therefore, it is necessary to incorporate weights proportional to the number of companies in the regression model.

To accomplish this, the percentage impact of each variable on the total number of companies within a specific sector was calculated. By applying this weighting methodology to each variable, the data become comparable, and the varying number of companies across different NACE sectors does not affect the robustness of the regression model. Similarly, when considering the AAV, the number of companies within each division is also used as a frequency weight.

In this case, the number of companies in each division is used as a frequency weight.

AAV	Coef.	St.	t-	P>	[95% Conf. Interval]		Sig
		Err.	value	t			
HRP1	119,1903	0,930265	128,13	0,000	117,367	121,0136	***
HRP2	-1,46238	1,071913	-1,36	0,172	-3,56331	0,638545	no
HRP3	-90,4895	2,726224	-33,19	0,000	-95,8328	-85,1462	***
HRP4	-100,942	0,591428	-170,67	0,000	-102,101	-99,7825	***
HRP5	-139,061	0,875098	-158,91	0,000	-140,776	-137,346	***
				•			
HRP6	3,631566	1,221117	2,97	0,003	1,238204	6,024928	***
HRP7	80,01118	1,448513	55,24	0,000	77,17212	82,85023	***
HRP8	455,5167	2,689676	169,36	0,000	450,245	460,7884	***
S1	-108,521	0,775434	-139,95	0,000	-110,041	-107,002	***
S2	-329,224	1,918831	-171,58	0,000	-332,985	-325,464	***
S3	7,022736	0,713979	9,84	0,000	5,623353	8,42212	***
S4	370,4148	1,998093	185,38	0,000	366,4985	374,331	***
Con-	36,99238	1,008194	36,69	0,000	35,01634	38,96842	***
stant							
R-	0,6752					Numb. of	obs.
squared						166.000	
F(12,165987)= 28757,11 Prob > F 0,00							)
Mean VIF 4,66						*** p <0,01	

Table 1. Regression results

### 4 Results

The results of the regression are shown in Table 1; the analysis model fitted the data well, demonstrating a significant relationship between HRM practices, sustainability and AAV (indicated by an R-square of over 67 per cent). We feel it should be emphasised that the sign generated by the regression serves to attest to the nature of the relationship between the variables. If positive, it attests that the growth of one variable corresponds to the growth of the corresponding one, if negative vice versa. Furthermore, we report how the variables are all significant at 1% and how there is no significant collinearity within the model (VIF 4,66). Taking the dependent variable y used in the study, i.e. AAV, as a reference, results with a positive sign will attest to an improvement in this value, and vice versa, results with a negative sign will indicate a decrease in this respect. Therefore, according to the hypotheses reported, we would expect the signs of the areas analysed to be positive, however, not all results confirm this hypothesis. On a methodological level, it is fair to point out that the data are extrapolated from a questionnaire referring to the year 2018, thus before the advent of the disruptive Covid-19 pandemic, this data will obviously be discussed and taken into account in the next section. To help us in the presentation, the positive-sign data will be reported first, followed by the negative-sign data.

The positive-sign results are as follows: HRP1 (+119,190); HRP6 (+3,631); HRP7 (+80,011); HRP8 (+455,516); S3 (+7,022); S4 (+370,414).

While, conversely, the data with a negative sign are as follows: HRP2 (-1,462); HRP3 (-90,489); HRP4 (-100,941); HRP5 (-139,061); S1 (-108,521); S2 (-329,224).

In light of the results presented, we can begin to argue that both hypotheses of study H1 (*There is a positive relationship between HRM practices and sustainability, which in turn positively influences the financial performance of Small Enterprises in Italy*) and H2 (*Italian Small Enterprises that implement activities directed towards employee welfare and sustainability have a higher AAV*) are only partially confirmed.

### 5 Discussion

As mentioned in the previous section, with respect to the assumptions made, the results only partially confirm them. However, the questionnaire analysed refers to data from 2018, and this, despite the fact that only five years have passed on an organisational level, is the equivalent of referring to two different eras [84]. In the discussion, we will take this fact into account and open the reflections towards the next questionnaire of the same type to be published so as to generate a longitudinal analysis that can also analyse the watershed that the Covid-19 pandemic has constituted in generating awareness and openness towards flexible forms of work, sustainability and attention to the well-being of workers. Furthermore, as the aggregated data refer to two different sections of the questionnaire, we will use this division to organise the discussion.

#### 5.1 HRM and AAV

Treating the HRM practices section of the questionnaire and linking it to the dependent variable of AAV, we can draw the following observations. Performance-based incentives (HRP1) appeared to be positively related to employee productivity, this is because they create a direct link between individual performance and rewards, motivating employees to work better and more efficiently [49]. This result is certainly not surprising and is in line with the present literature on the subject. On the other hand, when analysing the relationship between employees' ability ratings (HRP2) and AAV, we could trace that weakly negative sign back to a debate in the literature. Indeed, some studies suggest that evaluations that identify areas for improvement and provide feedback to employees can increase employee performance [61]; while others argue that such evaluations can lead to negative consequences such as increased stress and reduced motivation [71].

Turning to the analysis of the negative relationship between job rotation (HRP3) and AAV, we can intuitively assume that this result is due to the fatigue and disruption that such initiatives can bring in the short term, especially if we consider the time workers need to adapt to new roles and acquire new skills [65]. Another interesting result, however, is that which shows that there is a negative relationship between implementing actions aimed at flexibility in both working hours (HRP4) and the way work is performed (HRP5) with AAV. Regarding this result, we can make different reflections. The first is that this result aligns with other findings already in the literature that support the fact that flexibility can lead to inefficiencies and reduced productivity [1]. The second, in contrast, would open up the need for further analysis as other studies show that flexibility can instead act positively on worker satisfaction which in turn positively affects productivity in the long run [44]. Furthermore, these results must be read using the lens of the period in which the questionnaire was carried out, i.e. years in which agile forms of work were not as widespread in the Italian context as they are now, and in addition to this there is the fact that the questionnaire brings together and groups together all Italian companies regardless of the reference sectors, and this could be a further lens through which to read this result.

Finally, the positive relationship between communication between workers and management (HRP6), the systematic collection of opinions on production processes (HRP7), the promotion of activities aimed at improving the physical and psychological well-being of workers (HRP8) and AAV suggest that all these factors positively influence worker satisfaction and productivity. This last result in this section is in line with studies that emphasise the importance of implementing these practices as they positively affect organisational performance [2; 93].

#### 5.2 Sustainability and AAV

Regarding the results emerging from the data extracted from the second section of the questionnaire, we can state that the findings are in line with previous research on corporate social responsibility (CSR), sustainable business practices and their effect on organisational performance.

12

The positive relationship between activities aimed at improving safety (S4) and AAV is in line with previous studies showing that a safe workplace generates more productive workers, reduces turnover and lowers operating costs [50].

On the other hand, analysing the low positive relationship between companies supporting initiatives of interest outside the organisation (S3) and AAV we could trace this back to the fact that organisations engaged in philanthropic activities may face higher costs in terms of both resources and time spent, which are inevitably reflected in lower short-term performance [12]. However, it should be emphasised that these activities can enhance an organisation's reputation, thereby achieving better long-term performance and attracting more talented employees and young people [32].

From the model, it emerges that activities aimed at reducing environmental impact (S1) are linked to a lower AAV. This relationship could be explained by the fact that organisations that invest in environmentally friendly practices often face higher initial costs, which obviously leads to lower initial profitability [30]. However, other studies show how these investments can instead lead to attractive long-term benefits such as improved efficiency, reduced regulatory risks and, above all, a better reputation [37; 56].

Moving on, it is interesting to note that the model shows that improving work wellbeing, equal opportunities, parenting and work-family balance (S2) is associated with a lower AAV. This result is certainly counterintuitive since other research shows instead that improving worker well-being leads to better productivity and reduced turnover [24; 66]. A possible explanation, to be verified in subsequent studies, could be traced back to the choice of considering AAV as a performance indicator. Among work well-being, equal opportunities, parenting and work-family balance (S2) we can find a wide range of practices that may include flexible daily in/out, shift exemption, flexible shifts and customised schedules, and even prolonged absences from work, time bank, part-time, parental leave, training and support when returning from leave, or the introduction of a work-family balance coordinator. These practices usually imply a reduction of the time allocated to work or a relocation to working hours other than those normally scheduled. The impact of these practices may differ depending on the characteristics of the organisation and the type of activities carried out in it. It is greater for SMEs that involve work activities that cannot be performed in locations and/or times other than normal production, or activities that require 24/7 coverage. It is also greater for SMEs that, at the time of the introduction of these practices, show a high level of efficiency in staffing and thus a low surplus of personnel compared to the needs imposed by production activities. Reducing the amount of time allocated to work activities, or relocating it to working hours other than those normally scheduled, may therefore imply an increase in the staffing requirements necessary to guarantee the performance of work activities. Thus, if the calculation of the average added value returns the number of employees to the denominator, as this value increases, there will be a consequent decrease in the final result obtained. In light of the above considerations, it can be expected that the organisational and staffing impact will be lower for organisations (i.e. consultancy companies or software houses), which provide for the possibility of carrying out work activities in spaces and times other than traditional ones. In this case, apart from coordination requirements, an absence from work in the afternoon can be compensated for by working in the evening hours. Another consideration led us to look again at the year in which the questionnaire was carried out, whereas there were few forms of agile working, devoting time to these practices would have meant not being able to make up the working hours in any way. It will be interesting to observe the same results in the light of the new questionnaire coming out, which takes into account the forms of agile work implemented after Covid.

### 6 Conclusions: implications, limitations and future research

In summary, the study proposes an initial analysis of the data made available by the datasets of the permanent census of enterprises in Italy and Labor and Wages. Starting from the hypotheses used as guidelines by the study, we can state that, given the high level of significance and the high variance explanation value (over 60%), there is a strong positive relationship between HRM practices, sustainability initiatives and a higher average value added per worker.

*Performance-based incentives (HRP1; HRP2).* The positive relationship between performance-based incentives and employee productivity suggests that organizations should consider implementing such incentive programs. This aligns with previous research that highlights the importance of performance-based incentives in motivating employees to perform better [49]. However, the weak negative relationship between employee ability ratings and AAV suggests that organizations should carefully consider the design and implementation of evaluation systems. While evaluations that identify areas for improvement and provide feedback can enhance employee performance, there is also a risk of negative consequences such as increased stress and reduced motivation. It is important to strike a balance between constructive feedback and avoiding detrimental effects.

Job rotation (HRP3). The negative relationship between job rotation and AAV suggests that organizations should be cautious when implementing job rotation initiatives. While job rotation can offer benefits such as skill development and increased job satisfaction, it can also lead to short-term fatigue and disruption. Organizations should provide sufficient support and training to help employees adapt to new roles and acquire the necessary skills to minimize any negative impacts on productivity.

*Flexibility in working hours and work methods (HRP4; HRP5).* The negative relationship between flexibility in working hours and work methods with AAV indicates that flexibility may have inefficiencies and significant costs. However, we stress that these results should be interpreted considering the period in which the questionnaire was conducted, which may not reflect the current widespread adoption of agile work forms. Further analysis is needed to understand the long-term effects of flexibility on worker satisfaction and productivity, as other studies suggest positive relationships between flexibility, worker satisfaction, and productivity.

*Communication, opinion collection, and well-being initiatives (HRP6; HRP7; HRP8).* The positive relationships between communication between workers and management, systematic collection of opinions on production processes, promotion of activities for worker well-being, and AAV suggest that these factors positively influ-

ence worker satisfaction and productivity. Organizations should prioritize effective communication channels, engage workers in decision-making processes, and invest in initiatives that enhance worker well-being [2; 93]. These practices have been shown to have a positive impact on organizational performance.

Sustainability (S1; S2; S3; S4). While activities aimed at improving safety are positively associated with AAV, investments in reducing environmental impact and improving worker well-being, equal opportunities, parenting and work-family balance show a negative relationship. These findings echo the existing literature, which suggests that organizations prioritizing safety create a conducive environment that enhances worker productivity and reduces costs associated with turnover [50]. On the other hand, investments in environmental sustainability may initially lead to lower profitability due to higher costs but can yield long-term benefits such as improved efficiency, reduced regulatory risks, and enhanced reputation [37; 56]. The negative relationship between improving work well-being, equal opportunities, parenting and work-family balance and AAV, although counterintuitive, may be attributed to resource allocation, more staffing (for most SMEs), and the absence of agile working practices during the time of the study. Further research is needed to explore these relationships in more depth and consider contextual factors such as the type of organizations analyzed and the impact of the Covid-19 pandemic.

Role of technology in Sustainable HRM. Although the database surveyed does not allow for a deep exploration of the role of digital technologies within sustainable HRM practices we felt it was incumbent on us to address this, even at a theoretical level, as it is certainly something that the next steps of the study will focus on. Although the data examined by the study, referring to a pre-pandemic period, does not fully capture the digital and cultural shift that the pandemic caused, the role played by technologies should certainly be taken into account in the considerations we conducted as well. Indeed, workplaces are experiencing radical transformations due to digital technology [55; 94; 16]. The shift towards digitization has driven intense changes across society and industry, even as it has introduced new uncertainties and challenges, such as job polarization and non-standard employment [72; 54; 58; 59; 63]. This digital transformation underscores the need for a sustainable approach to HRM that can mitigate the adverse impacts of digitalization in the workplace and contribute to the achievement of the United Nations' Sustainable Development Goals [4; 47]. Leading in this direction Sustainable HRM could represent a valuable response since it aims to strike a balance between environmental integrity, social equity, and economic prosperity, namely, the triple bottom line [25]. However, it must be taken into account that achieving this balance may entail managing tensions, paradoxes, and contradictions [43; 9; 47]. Therefore, the intersection of digital technologies, sustainability, and HRM is a fertile ground for scholarly exploration.

Finally, although the insightful results, given the exploratory nature of the study and given the contradictory data that emerged, we think that these results should be taken with caution. Indeed, the datasets used, although valuable and rich in information, bring together a large number of companies from highly diverse industries and ways of working, and this must necessarily be taken into account when reading the results. Moreover, as the questionnaire refers to a period prior to the advent of the Covid-19 pandemic, a game-changing event in Italy, the analyses and considerations made must be understood in light of that historical period. These limitations can be addressed, as we intend to do, by more in-depth analyses, trying for instance to unpack the dataset by type of organisations analysed. In addition, once the new version of the questionnaire, which is submitted to Italian companies on a periodic basis, has been published, the latter could be analysed using the same lens as the present study in order to carry out longitudinal analyses to understand how the pandemic [22; 68] has affected the awareness of the issues dealt with in this study. Finally, it would also be interesting, by conducting sample interviews, to place these quantitative data alongside qualitative data that can certainly help to further colour the interesting results that have emerged.

### References

- Amadeo, E. J., & Horton, S. (1997). Labour flexibility and productivity: an overview. *Labour productivity and flexibility*, 1-35.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). Manufacturing advantage: Why high-performance work systems pay off. Cornell University Press.
- Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. *Journal of environmental management*, 86(1), 88-103.
- Aust, I., Matthews, B., & Muller-Camen, M. (2020). Common Good HRM: A paradigm shift in Sustainable HRM? *Human Resource Management Review*, 30(3), 1–11.
- Barrett, R., & Mayson, S. (2007). Human resource management in growing small firms. Journal of small business and enterprise development.
- Bag, S., Dhamija, P., Pretorius, J. H. C., Chowdhury, A. H., & Giannakis, M. (2022). Sustainable electronic human resource management systems and firm performance: an empirical study. *International Journal of Manpower*, 43(1), 32-51.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of management journal*, 39(4), 779-801.
- Becker, W., Schmid, O., & Botzkowski, T. (2018). Role of CDOs in the Digital Transformation of SMEs and LSEs An Empirical Analysis. *In Proceedings of the 51st Hawaii International Conference on System Sciences*.
- Berman, E. M., Bowman, J. S., West, J. P., & Van Wart, M. R. (2021). Human resource management in public service: Paradoxes, processes, and problems. *CQ Press*.
- Bertoni, F., & Tykvová, T. (2015). Does governmental venture capital spur invention and innovation? Evidence from young European biotech companies. *Research Policy*, 44(4), 925-935.
- 11. Boxall, P., & Purcell, J. (2000). Strategic human resource management: where have we come from and where should we be going?. *International Journal of management reviews*, 2(2), 183-203.
- Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic management jour*nal, 29(12), 1325-1343.
- 13. Brewster, C., Houldsworth, E., Sparrow, P., & Vernon, G. (2016). *International human resource management*. Kogan Page Publishers.

- Cardon, M. S., & Stevens, C. E. (2004). Managing human resources in small organizations: What do we know?. *Human resource management review*, 14(3), 295-323.
- Cooke, F. L., Cooper, B., Bartram, T., Wang, J., & Mei, H. (2019). Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in China. *The International Journal of Human Resource Management*, 30(8), 1239-1260.
- Dabić, M., Maley, J. F., Švarc, J., & Poček, J. (2023). Future of digital work: Challenges for sustainable human resources management. *Journal of Innovation & Knowledge*, 8(2), 100353.
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: effects of environment, organization and top managers 1. British Journal of Management, 17(3), 215-236.
- De Steur, H., Temmerman, H., Gellynck, X., & Canavari, M. (2020). Drivers, adoption, and evaluation of sustainability practices in Italian wine SMEs. Business Strategy and the Environment, 29(2), 744-762.
- Delery, J. E., & Doty, D. H. (1996). Theoretical frameworks in strategic human resource management: Universalistic, contingency, and configurational perspectives. *Academy of Management Journal*, 39(4), 802-835.
- Denison, D. R., Haaland, S., & Goelzer, P. (2003). Corporate culture and organizational effectiveness: is there a similar pattern around the world?. In *Advances in global leadership* (Vol. 3, pp. 205-227). Emerald Group Publishing Limited.
- DiBella, J., Forrest, N., Burch, S., Rao-Williams, J., Ninomiya, S. M., Hermelingmeier, V., & Chisholm, K. (2023). Exploring the potential of SMEs to build individual, organizational, and community resilience through sustainability-oriented business practices. Business Strategy and the Environment, 32(1), 721-735.
- Dimson, J., Mladenov, Z., Sharma, R., & Tadjeddine, K. (2020). COVID-19 and European small and medium-sized enterprises: How they are weathering the storm. *McKinsey & Company*.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835-2857.
- 24. Edmans, A. (2012). The link between job satisfaction and firm value, with implications for corporate social responsibility. *Academy of Management Perspectives*, *26*(4), 1-19.
- 25. Ehnert, I. (2014). Sustainability and Human Resource Management Developing Sustainable Business Organizations. Springer.
- Ehnert, I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2016). Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world's largest companies. *The International Journal of Human Resource Management*, 27(1), 88-108.
- Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st-century business, Capstone.
- Ernst, R. A., Gerken, M., Hack, A., & Hülsbeck, M. (2022). SMES'reluctance to embrace corporate sustainability: The effect of stakeholder pressure on self-determination and the role of social proximity. *Journal of cleaner production*, 335, 130273.
- European Commission. (2021). Annual report on European SMEs 2020/2021: SMEs as drivers of the green and digital transition. Retrieved from https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review en
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61(11), 2549-2568.

- Friedman, A. L., & Miles, S. (2002). SMEs and the environment: evaluating dissemination routes and handholding levels. *Business Strategy and the Environment*, 11(5), 324-341.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of management review*, 30(4), 777-798.
- Graafland, J., & Smid, H. (2017). Reconsidering the relevance of social license pressure and government regulation for environmental performance of European SMEs. *Journal of Cleaner Production*, 141, 967-977.
- Haila, Y. (2009). Mutual interdependence of humanity and the rest of the nature. *Perspec*tives to global social development, 165-176.
- Hall, B. H., Lotti, F., & Mairesse, J. (2009). Innovation and productivity in SMEs: empirical evidence for Italy. *Small business economics*, 33, 13-33.
- Harney, B., & Dundon, T. (2006). Capturing complexity: developing an integrated approach to analysing HRM in SMEs. *Human resource management journal*, 16(1), 48-73.
- Hart, S. L., & Ahuja, G. (1996). Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance. *Business Strategy and the Environment*, 5(1), 30-37.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioural research. *Entrepreneurship theory and practice*, 26(4), 33-52.
- Hornsby, J. S., & Kuratko, D. F. (2003). Human resource management in US small businesses: A replication and extension. *Journal of developmental entrepreneurship*, 8(1), 73.
- Howorth, C., & Moro, A. (2012). Trustworthiness and interest rates: an empirical study of Italian SMEs. *Small Business Economics*, 39, 161-177.
- Hsu, C. H., Chang, A. Y., & Luo, W. (2017). Identifying key performance factors for sustainability development of SMEs-integrating QFD and fuzzy MADM methods. *Journal of cleaner production*, 161, 629-645.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, 38(3), 635-672.
- Keegan, A., Brandl, J., & Aust, I. (2019). Handling tensions in human resource management: Insights from paradox theory. *German Journal of Human Resource Management*, 33(2), 79–95.
- Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *Journal of vocational behaviour*, 68(2), 347-367.
- Kostera, M., & Glinka, B. (2016). New directions in organization and management. Organizations, contexts, management processes. *Wolters Kluwer*.
- 46. Kotey, B., & Slade, P. (2005). Formal human resource management practices in small growing firms. *Journal of small business management*, 43(1), 16-40.
- Kramar, R. (2022). Sustainable human resource management: Six defining characteristics. Asia Pacific Journal of Human Resources, 60(1), 146–170.
- Kuzior, A., Kettler, K., & Rąb, Ł. (2021). Digitalization of work and human resources processes as a way to create a sustainable and ethical organization. *Energies*, 15(1), 172.
- 49. Lazear, E. P. (2000). Performance pay and productivity. *American Economic Review*, 90(5), 1346-1361.
- Leigh, J. P. (2011). Economic burden of occupational injury and illness in the United States. *The Milbank Quarterly*, 89(4), 728-772.
- Lélé, S. M. (1991). Sustainable development: a critical review. World Development, 19(6), 607-621.

- Li, L., Su, F., Zhang, W., & Mao, J. Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6), 1129-1157.
- 53. Lüdeke-Freund, F. (2020). Sustainable entrepreneurship, innovation, and business models: Integrative framework and propositions for future research. *Business Strategy and the Environment*, 29(2), 665-681.
- Majchrzak, A., Markus, M. L., & Wareham, J. (2016). Designing for digital transformation. *MIS Quarterly*, 40(2), 267–278.
- Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative science quarterly*, 48(2), 268-305.
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642-656.
- 58. McKinsey. (2017). Jobs lost, jobs gained: Workforce transitions in a time of automation. *McKinsey Global Institute*.
- 59. McKinsey. (2022). Future of work. McKinsey & Company.
- Mirvis, P. (2012). Employee engagement and CSR: Transactional, relational, and developmental approaches. *California management review*, 54(4), 93-117.
- Murphy, K. R., & Cleveland, J. N. (1995). Understanding performance appraisal: Social, organizational, and goal-based perspectives. Sage.
- Neumayer, E. (2003). Do human rights matter in bilateral aid allocation? A quantitative analysis of 21 donor countries. *Social Science Quarterly*, 84(3), 650-666.
- 63. OECD, O. (2019). Social Impact Investment 2019 The Impact Imperative for Sustainable Development. OECD.
- Orlitzky, M., Siegel, D. S., & Waldman, D. A. (2011). Strategic corporate social responsibility and environmental sustainability. *Business & Society*, 50(1), 6-27.
- 65. Ortega, J. (2001). Job rotation as a learning mechanism. Management Science, 47(10), 1361-1370.
- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of labor* economics, 33(4), 789-822.
- Parker, C. M., Redmond, J., & Simpson, M. (2009). A review of interventions to encourage SMEs to make environmental improvements. *Environment and Planning C: Government and policy*, 27(2), 279-301.
- Penco, L., Profumo, G., Serravalle, F., & Viassone, M. (2022). Has COVID-19 pushed digitalisation in SMEs? The role of entrepreneurial orientation. *Journal of Small Business* and Enterprise Development.
- 69. Perrini, F. (2006). SMEs and CSR theory: Evidence and implications from an Italian perspective. *Journal of business ethics*, 67, 305-316.
- 70. Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Harvard Business Press.
- Pfeffer, J., & Sutton, R. I. (2006). Evidence-based management. *Harvard business review*, 84(1), 62.
- Pinney, C. (2014). Economic growth and inequality: Why it matters and what's coming next. *Journal of Applied Corporate Finance*, 26(2), 30–39.
- Podgorodnichenko, N., Edgar, F., & Akmal, A. (2021). An integrative literature review of the CSR-HRM nexus: Learning from research-practice gaps. *Human Resource Management Review*, 100839. https://doi.org/10.1016/j.hrmr.2021.100839

- 74. Prahalad, C. K., & Krishnan, M. S. (2002). The dynamic synchronization of strategy and information technology. *MIT Sloan management review*, *43*(4), 24.
- Quaglia, L., & Royo, S. (2015). Banks and the political economy of the sovereign debt crisis in Italy and Spain. *Review of International Political Economy*, 22(3), 485-507.
- Raworth, K. (2012). A safe and just space for humanity: can we live within the doughnut?. Oxfam.
- Redclift, M. (2005). Sustainable development (1987–2005): an oxymoron comes of age. Sustainable development, 13(4), 212-227.
- Santos, M. (2011). CSR in SMEs: strategies, practices, motivations and obstacles. *Social Responsibility Journal*, 7(3), 490-508.
- Schaltegger, S., & Burritt, R. (2017). Contemporary environmental accounting: issues, concepts and practice. Routledge.
- Schuler, R. S., & Jackson, S. E. (1987). Linking competitive strategies with human resource management practices. *Academy of Management Perspectives*, 1(3), 207-219.
- Schuler, R., & Jackson, S. E. (2014). Human resource management and organizational effectiveness: yesterday and today. *Journal of Organizational Effectiveness: People and Performance*, 1(1), 35-55.
- 82. Sheehan, M. (2014). Human resource management and performance: Evidence from small and medium-sized firms. *International Small Business Journal*, *32*(5), 545-570.
- Silva, S., Nuzum, A. K., & Schaltegger, S. (2019). Stakeholder expectations on sustainability performance measurement and assessment. A systematic literature review. Journal of Cleaner production, 217, 204-215.
- Spicer, A. (2020). Organizational culture and COVID-19. *Journal of Management Studies*, 57(8), 1737-1740.
- 85. Storey, D. J. (2016). Understanding the small business sector. Routledge.
- Strömmer, K., & Ormiston, J. (2022). Forward-looking impact assessment–An interdisciplinary systematic review and research agenda. *Journal of Cleaner Production*, 134322.
- Teng, X., Wu, Z., & Yang, F. (2022). Research on the relationship between digital transformation and performance of SMEs. *Sustainability*, 14(10), 6012.
- Thomas, G. (2021). Digital maturity of HR in SMEs. *European Journal of Economics and Business Studies*. (6)1, 56-61.
- Victor, B., & Blackburn, R. S. (1987). Interdependence: An alternative conceptualization. Academy of Management Review, 12(3), 486-498.
- Wackernagel, M., & Rees, W. (1998). Our ecological footprint: reducing human impact on the earth (Vol. 9). New society publishers.
- 91. WCED, S. W. S. (1987). World Commission on Environment and Development. *Our common future*, 17(1), 1-91.
- 92. World Bank. (2020). *Poverty and shared prosperity 2020: Reversals of fortune*. The World Bank.
- 93. Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of occupational health psychology*, *5*(1), 84.
- Xin, W. E. I., & VincentKow, C. L. (2022). Sustainability of ICT Implementation on Small and Medium-Sized Enterprise in the Middle East. *Journal of Positive School Psychology*, 781-792.
- Zhou, S. (2023). Environmental justice. In *Dictionary of Ecological Economics* (pp. 203-204). Edward Elgar Publishing.