10. FEJEZET

CRISIS MANAGEMENT TRENDS IN THE XXI. IN 20TH CENTURY HUMAN RESOURCE MANAGEMENT

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Abstract

The history of the first quarter of the 21th century was characterized by a succession of crises following each other faster and faster. The reason for this is partly economic (2008) and partly non-economic (2020). However, the result is the same: recession, job losses, income decline. The employee is the basis of both macroeconomic growth and corporate performance. Therefore, human resource management (HRM) has a key

role in crisis management. The study is based on a Hungarian-organized but international survey assessing the corporate effects of Covid-19 and the Russian-Ukrainian conflict. Authors examines the similarities and differences between domestic and foreign-owned private sector companies in the field of HRM crisis management strategies, measures and approach. Based on the results, the approach and measures do not fundamentally differ, although foreign ownership theoretically involves more resources. The cause of the crisis is a stronger determinant of HRM responses than company characteristics.

Keywords: crises management, HRM

1. Introduction

The 21st century is a Janus-faced period of history. On the one hand, we can talk about a century of accumulating crises. Think about the 2008 credit crisis, the impact of Covid-19, the Russian-Ukrainian conflict or the events taking place in Israel today. Crises follow each other faster and faster, the economic cycles described by Kondratieff & Stolper (1935) are getting shorter (Chen et al., 2022; Olkhov, 2022). Inhumanity and violence are increasing. The cause of crises can be economic or non-economic, the consequences are the same (Li et al., 2021; Veric et al., 2022), recession, unemployment, loss of income. At the same time, the 21st century is also a period of dizzyingly rapid technical development. Bitcoin was born as a response to the credit crisis (Zhang, 2022), we already have a Nobel Prizewinning vaccine against the coronavirus (Bansal, 2023) and experts predict the technological singularity by 2045, i.e. the point when the performance of artificial intelligence is enhanced by human intelligence (Modis, 2006).

2. Literature background

The concept of innovation was introduced into economic theory by Schumpeter (1939). By now it has also become evident that the basic condition of competitiveness is not the investment of additional money into the economy, but the development of human capital, as already described by Fogel (1994) and Schultz (1961) in the second half of the 20th century. Schultz explained that economic growth can only progress if physical capital and human capital develop together. Countries that do not have adequate human capital cannot manage their physical capital efficiently either. Schultz also found that human capital is the factor that most

limits growth. In other words, starting from a certain level of economic development, increasing the amount of money spent on growth stimulates economic growth with increasingly poor efficiency, while the development of human capital accelerates it. The theory is also supported by the findings of Fogel (1994), who showed that in the long term there is a direct correlation between the improvement of the health status of the population and the increase in competitiveness.

The importance of human capital is indicated by the fact that human resource management has now become an independent science (Boudreau, & Ramstad, 2004). This process started parallel to industrialization. The initial goal was to improve working conditions, which was helped by the first HRM professionals, the "caring secretaries" (Appleby, 2018). The beginning of scientific HRM was the publication of books by Fayol (1916) and Taylor (1919). Since then, there have been many paradigm shifts. When József Galamb introduced the assembly line at the Ford car factory in 1913 (Ford, 1943), the company management saw the worker as a spare part. The next turning point occurred after the Second World War, when the administrative nature came to the fore (Torrington, & Hall, 1987). Initially, the task of HRM was to provide administration, labor supply and the development of employee management methods. Today the situation has changed. Current and future trends include TOM (Total Quality Management), business process re-engineering or partnership in organizational learning (Al-Angoudi et al., 2021; Ooi, 2014).

The global financial crisis of 2008 can be traced back to financial reasons, so the main task of solving it fell on the respective chief financial officers (CFOs). However, the primary impact of Covid-19 was on human resources. This has led to an appreciation of the role (skills, flexibility) of HRM managers (CHRMOs) (Economist, 2020). The primary goal of HRM specialists and experts was to increase employee morale, motivation and commitment. In the absence of this, significant negative effects (dissatisfaction, lower work performance, turnover) must be expected (Nutsubidze, & Schmidt, 2021). He examined practical measures in the accommodation and hospitality sector, which is one of the areas most affected by the crisis (Agarwal, 2021). According to his study, the most common responses to the crisis were training and development, employer flexibility, promotion of work-life balance and social support, as well as intra-organizational communication and the introduction of the home office.

During the Covid-19 crisis, HRM became one of the main tools of organizational support. The practice of strategic HRM came to the fore (Ichsan et al., 2020). HRM supported employees in the transition to remote work by creating flexible working hours and adopting less strict performance management rules (Gigauri, 2021). He also examined the impact of the pandemic on human resource management in another study (Gigauri, 2020), focusing on digitalization and the balance between work and private life. He found that telecommuting also has a negative side, as many workers tend to work after hours, which in some cases leads to family problems. Therefore, the role of communication between management and employees becomes particularly important. Similar results are reported by other authors who highlighted the need to transform the HRM policy. In parallel with this transformation, it is important to mention that the involvement of employees in decision-making also indicates a paradigm shift (Mwita, 2020).

The epidemic brought the area of socially responsible HRM (SRHRM – socially responsible HRM) to the fore. Its methods focus on a significant amount of psychological and social support, and they are primarily able to significantly mitigate the impact of high-impact events (He et al., 2021). The development and spread of SRHRM clearly illustrates the paradigm shift taking place in HRM. The essence of this is that the employee is no longer treated as a workforce, but as a human being, with a holistic approach. This is illustrated by Ngoc Su et al. (2021) research among Vietnamese companies. According to their results, even before the epidemic, companies placed increased emphasis on the development of health protection and hygiene, as well as the application of positive psychology. This was supplemented with bonuses and allowances supporting employee welfare during the lockout. After the first wave of the epidemic, talent management and renewed performance management also played a prominent role.

Balawi and Wachira (2021) analyzed the practices of Hungarian multinational companies from the perspective of international HRM. Globalization, increasing generational differences, and a focus on innovation and sustainability were found to be the most significant challenges for HRM departments in multinational companies. Our research presented here is based on the results of a questionnaire survey by the research group (KoronaHRM team) led by Prof. József Poór. Initially, the research assessed the impact of certain phases of the coronavirus pandemic on HRM, and the impact of the conflict in Ukraine is currently

being analyzed. From the many information, the current study focuses on what transformational trends characterize HRM in the light of responses to crises.

3. Emprical research

At the beginning of the research, only Hungarian companies filled out the questionnaire, but from 2021, the investigation will take place on an international level. The researchers made the questionnaire available both offline and online. The number of people filling in has grown from the initial 500 to over 1,000. Sampling was done using respondent-driven time-space sampling (Heckathorn, 1997; Parsons et al., 2008). This procedure is mainly used when surveying hidden populations, in this research we used the advantage that it enables targeted and focused sampling with a low rejection rate. The questionnaire used for the research was self-developed and prepared by the members of the research group. The questionnaire is not validated and the sample is not representative due to the sampling procedure. However, based on the high number of items and the repeated query, the results are also suitable for formulating general conclusions.

From the individual questions of the questionnaire, the authors formed four groups of solution management principles:

I. "Future Orientation"

Statements that see the solution to the crisis situation in expansion, development, and increasing competitiveness are listed here:

- improving organizational efficiency,
- presentation of new technologies and procedures,
- targeting new markets,
- reorganization of business areas,
- strengthening the supply chain,
- more effective/updated marketing,
- reducing labor demand with automation/technical solutions.

II. "Conservative crisis management"

The statements seeking such a solution are represented by the restrictive crisis management solutions (downsizing, cost reduction) that were previously used almost as a "reflex":

- postponement of purchases and expenses,
- general cost reduction,
- dismissal of employees,
- termination of strategic investments,
- termination of innovation projects,
- reduction of communication costs,
- freezing of temporary employment,
- reduction of working hours,
- authorizing/ordering remote work,
- downsizing of temporary employees,
- freezing / reducing salaries,
- reduction of fringe benefits.

III. "Human centric solutions"

They are characterized by the fact that they handle the challenges of a crisis situation in a progressive manner, according to the human- and workforce-oriented principles of the new HRM paradigm (with risk reduction, personal support, training):

- reducing the risk of the epidemic through training,
- reducing labor demand through training and development,
- support for personal development,
- development of social, mental and family support,
- improving labor relations, participation, involvement,
- workforce retention.

IV. General principles of humanity

Here, general humanitarian principles (generational management, equal opportunities) are also included in the HRM toolkit:

- generation management,
- difference management and equal opportunities,
- supporting diversity.

In addition to the above questions, the questionnaires also contained demographic data. The authors of the questionnaire used the term in a broad sense. The questions that enable the (anonymous) characterization of the responding companies and their classification into different groups are listed here. These questions asked about the company's size (number of employees, sales revenue), ownership structure, nationality.

The answers to the returned questionnaires were processed with statistical methods using MS-Excel 360 and Jamovi 2.3.21 software. The first step in the processing was data cleaning and coding. During the data cleaning, we filtered out the data that contained an answer different from the specified format/boundaries, for example a number instead of text, or a value higher than 5 in the case of 5 answer options. If the proportion of such answers in a questionnaire exceeded 10%, then the given questionnaire was omitted from the further analysis. The purpose of coding the data was to make the answers suitable for statistical processing. In the process of coding, we mainly converted the text answers of the questionnaire into numerical form. After data cleaning and coding, 964 evaluable and processable questionnaires remained (10-1. Table).

10-1. Table: Respondents by country

Country	Respondents
Austria	27
Bosnia and Herzegovina	11
Bulgaria	108
Hungary	398
Romania	188
Slovakia	232
All	964

Source: Authors' own research

Based on the size of the company, the majority of the respondents were micro, small and medium-sized enterprises (SMEs) based on the number of employees and sales revenue. This result corresponds to the statistical data according to which more than 99% of Hungarian companies are SMEs with fewer than 250 employees (KSH, 2021). Our respondents came primarily from the private sector, although the proportion of state-owned companies also increased somewhat in the later phases of the research. Foreign ownership occurred primarily in the form of subsidiaries.

4. Conclusions and results

If we examine whether, at least in principle, the respondents consider each strategic option important, we get the following result (10-1. Figure:):

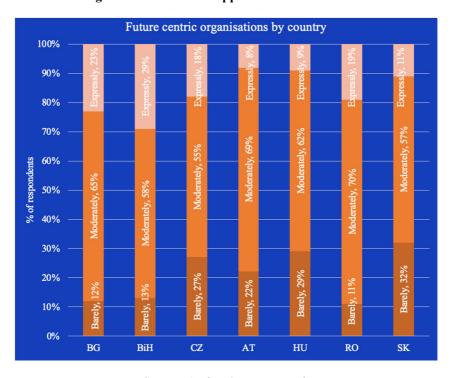
- 76% choose a future-centric solution,
- 72% think conservative tools are important,
- 50% think in terms of people-centered HRM,
- also deals with general human rights: 7%.

Chosen strategies 100% 90% 80% 70% 60% low, 93% 50% 40% 30% low, 50% 20% low, 28% ow, 24% 10% 0% Future centric Conservative People centric Humanity & tolerance HR-strategy

10-1. Figure: Chosen strategies (all respondents)

Source: Authors' own research

Dividing the sample into groups according to nationality, comparing Hungarian and cross-border companies, we can say that 16% of non-Hungarian companies think it is very important to "escape to the front", while only 9% of Hungarian respondents said the same. The ratios among non-Hungarian companies are higher than in Hungary, i.e. it seems that Hungarian HRM managers apply the least modern theoretical foundations in practice (10-2. Figure).



10-2. Figure: Future centric approach in examined countries

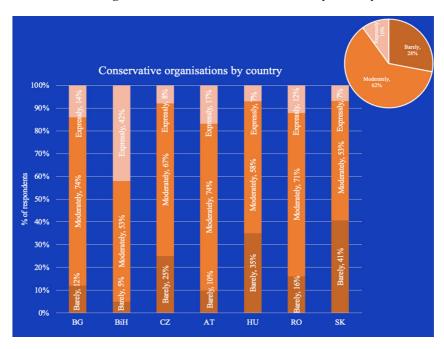
Source: Authors' own research

If we group the respondents on the basis of ownership, we find no significant differences between state- and privately-owned companies, nor according to domestic foreign ownership. This last result indicates that the future-oriented approach is not common among subsidiaries of foreign companies either. What is interesting about this result is that, theoretically, Western, possibly Japanese or Korean, Indian parent companies should be ahead of Central and Eastern European companies in the application of modern HRM principles. Our results can be explained, on the one hand, by the fact that the responding foreign-led companies mostly did not include representatives of Western parent companies. Another possible reason is

that there is no difference between the development of Central European and "Western" HRM. For us, that explanation is more favorable. Therefore, it is worthwhile to focus on this issue in the future phases of the research.

Examining the question according to the size of the company, it can be established that the principle of "escape to the front" was indicated by 14% of the respondents in their answer, regardless of the number of employees. Every fourth of the companies with less than 250 employees (they make up 73% of the sample) nominated this option, while only every fifth of those employing more than 250 people (who make up 27% of the sample) chose this option. However, this result is not significant.

This graph shows the prevalence of conservative solutions. Only 7-17% of companies strongly prefer downgrading, restrictive, cost-cutting solutions (expressly average is 10%).



10-3. Figure: Conservative crisis reactions by country

Source: Authors' own research

The spread of modern HRM is the slowest in Bosnia and Herzegovina (where more than half of the companies are conservative). Hungarian and Slovak companies least prefer the intensive use of conservative strategies in crisis management. Almost a third of Hungarian companies (35%) stated

that they rarely use conservative solutions to deal with HRM problems. This approach is even more typical in Slovakia, where 41% of respondents said the same. They are followed by Czech organizations (25%). In the other countries, the proportion of companies that rarely use conservative response measures is below 20%. Looking at the entire sample, a particularly conservative HRM is characteristic of only one tenth of the companies. At the same time, another 62% of companies use this approach relatively often.

Examining the sample according to company size, we observed that larger companies show a greater willingness to use conservative strategies. One of the possible reasons for this is that in small companies, where almost everyone knows everyone, human aspects are more important than in a large company, where managers often decide to fire employees whom they may never have met in person.

In the next step of the research, we characterized each company with 4 points based on the answers to the questions of the four possible strategies. Based on these, the respondents were classified into clusters using hierarchical cluster analysis. We chose this method because the elements of the sample can be clearly assigned to one of the clusters based on the dendrogram being prepared. The averages of each cluster were also calculated. The four typical types of measures resulted in four clusters in total. We named them based on their typical crisis management strategies. A balanced cluster is characterized by balanced cluster centroids. This includes almost two-thirds of the entire sample (62%). Among the clusters characterized by a dominant strategy, the Future centric type is the most common (n=170). This indicates that a change can already be observed in the approach to HRM. However, the conservative cluster is still not far behind the future centric (n=152), i.e. the solution schemes of the past are still powerful today. The cluster average of people centric strategy is the highest in the people centric cluster (n=47), but the companies belonging to it also use conservative and future centric solutions.

The order of occurrence of the clusters also indicates the correspondence to the degrees of a continuum, which leads from conservative strategies to specifically human-centric solutions. The number of respondents belonging to each grade clearly shows where the long-mentioned and established paradigm shift in the field of HRM stands today in practice.

Clusters of responding organisations (full sample)

The contric, 1.9

The contric, 1.9

Conservative, 2.1

Conservative, 2.5

The contric, 1.9

Conservative, 2.5

The contric, 1.9

Conservative, 2.6

The contric, 1.9

Conservative, 2.6

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Value of cluster centroids

Balanced (n=652)

10-4. Figure: Cluster centroids

Source: Authors' own research

Cluster name

Future centric (n=170)

People centric (n=74)

In the light of our results, we summarize how the HRM performance is developing in each country! 10-5. Figure summarizes the results of the multi-point comparison.

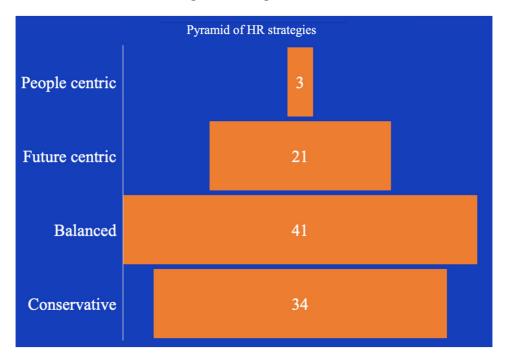
BG HU CZ p<0.001

10-5. Figure: Significant differences in countries HRM performance

Source: Authors' own research

Based on the results, we can say that the performance of HRM activities in each of the examined countries differs significantly from that of other countries. From the point of view of HRM performance, the Czech Republic can be considered a typical country, since there is no significant difference in performance from other countries, only from Hungary. On the other hand, Hungary's performance differs significantly from that of all other countries except Slovakia.

The most important results of our research are summarized in 10-6. Figure. The figure depicts the evolution of the strategic approach to HRM in a pyramid. At the bottom of the pyramid is the initial state, the conservative-restrictive crisis management. The top of the pyramid is the most modern HRM approach, a human-centric strategy focusing on the priority of human resources.



10-6. Figure: Paradigm shift in HRM

Source: Authors' own research

Based on the pyramid, it can be said that the practical implementation of the HRM paradigm shift has begun. 41% of the companies have already broken with the previously almost exclusive conservative crisis

management strategy and are currently in the balanced phase. However, even the proportion of those who do not change is relatively significant, one third of companies (34%) still respond to crisis situations with restrictive measures. One fifth of the sample (21%) has already reached the point where they see a crisis primarily as an opportunity and treat it with such an approach. However, only three percent of the respondents carried out the paradigm shift in practice.

All this clearly indicates that the process has started and is progressing. One of the biggest challenges for HRM professionals is precisely this: in a crisis, to deal with problems in such a way as to find a mutually beneficial (win-win) solution for all concerned by relying on methods that may not have been proven in practice.

5. Closing

The development of HRM has been ongoing since the beginning of the 20th century. Slower evolutionary stages are sometimes replaced by paradigm shifts and, as a result, revolutionary changes. Such a paradigm shift is taking place even today. The fact that the history of the 21st century has been characterized by a series of crises has certainly played a significant role in this. The 2008 credit crisis, the 2020 coronavirus pandemic, and the subsequent Russian-Ukrainian conflict resulted in the loss of jobs and the endangerment of people's financial and life security. These processes made it necessary for the HRM strategy of crisis management to focus on human resources. This paradigm shift was also examined in the present study in the companies of six Central European countries. The results indicate that change has begun and is moving forward. Although today's crises are increasing rather than being solved, the authors hope that the momentum of change taking place in the field of HRM will not be broken and that we will witness the development of a science with a humanistic approach that focuses on the employee.

6. Bibliography to 10 Chapter

Agarwal, P. (2021). Shattered but smiling: Human resource management and the wellbeing of hotel employees during COVID-19. *International Journal of Hospitality Management*, 93, 102765. https://doi.org/10.1016/j.ijhm.2020.102765

Al-Anqoudi, Y., Al-Hamdani, A., Al-Badawi, M., & Hedjam, R. (2021). Using Machine Learning in Business Process Re-Engineering. *Big Data and Cognitive Computing*, *5*(4), Article 4. https://doi.org/10.3390/bdcc5040061

Appleby, K. (2018). From Social Secretaries to HRM Managers: An Analysis of Research on Women in Human Resource Management. *Management Revue*, 29(4), 405–431. https://www.jstor.org/stable/26627644

Balawi, A., & Wachira, E. W. (2021). HRM Practices on Foreign-owned Companies in Hungary. *Modern Management Review*, *26*(4), 7-24. https://doi.org/10.7862/rz.2021.mmr.21

Bansal, A. (2023). From rejection to the Nobel Prize: Karikó and Weissman's pioneering work on mRNA vaccines, and the need for diversity and inclusion in translational immunology. *Frontiers in Immunology*, *14*, 1306025. https://doi.org/10.3389/fimmu.2023.1306025

Boudreau, J. W., & Ramstad, P. M. (2004). *Talentship and the Evolution of Human Resource Management: From "Professional Practices" To "Strategic Talent Decision Science"* (p. 9). Center for Effective Organizations (CEO) – University of Southern California. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=136e06834778c8501a2ed6a-a193fd65904cd8bc3

Chen, N., Vaseei, M., & Peivandizadeh, A. (2022). Forecasting Directions, Dates, And Causes of Future Technological Revolutions concerning the Growth of Human Capital. *Discrete Dynamics in Nature and Society*, 9(2), 517-533. https://doi.org/10.1155/2022/2494916

Economist (2020). The coronavirus crisis tHRMusts corporate HRM chiefs into the spotlight. *The Economist*. https://www.economist.com/business/2020/03/24/the-coronavirus-crisis-tHRMusts-corporate-HRM-chiefs-into-the-spotlight

Fayol, H. (1916). *General and Industrial Management*. New York: Ravenio Books.

Fogel, R. W. (1994). Economic Growth, Population Theory, and Physiology: The Bearing of Long-Term Processes on the Making of Economic Policy. *The American Economic Review*, *84*(3), 369-395. https://doi.org/10.3386/w4638

- Ford (1943). *Short Biography of Ford Motor Company Industrial Designer Joseph A. Galamb, circa 1943 The Henry Ford.* Ford Motor Company. https://www.thehenryford.org/collections-and-research/digital-collections/artifact/361357/
- Gigauri, I. (2020). Effects of Covid-19 on Human Resource Management from the Perspective of Digitalization and Work-life-balance. *International Journal of Innovative Technologies in Economy*, *4*(31). https://doi.org/10.31435/rsglobal ijite/30092020/7148
- Gigauri, I. (2021). Organizational Support to HRM in Times of the COVID-19 Pandemic Crisis. *European Journal of Marketing and Economics*, 4(1), 16-30. https://doi.org/10.26417/492dnl43d
- He, J., Mao, Y., Morrison, A. M., & Coca-Stefaniak, J. A. (2021). On being warm and friendly: The effect of socially responsible human resource management on employee fears of the tHRMeats of COVID-19. *International Journal of Contemporary Hospitality Management*, *33*(1), 346-366. https://doi.org/10.1108/IJCHM-04-2020-0300
- Heckathorn, D. D. (1997). Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations. *Social Problems*, 44(2), 174-199. https://doi.org/10.2307/3096941
- Ichsan, R. N., Santosa, S., Shara, Y., & Liriwati, F. Y. (2020). Investigation of Strategic Human Resource Management Practices n Business After Covid-19 Disruption. *PalArch's Journal of Archaeology of Egypt / Egyptology*, *17*(7), 13098–13110. https://archives.palarch.nl/index.php/jae/article/view/5059
- Kondratieff, N. D., & Stolper, W. F. (1935). The Long Waves in Economic Life. *The Review of Economics and Statistics*, 17(6), 105. https://doi.org/10.2307/1928486
- KSH (2021. November 11.). *Vállalkozások (Enterprises in Hungarian)*. Heti Monitor. https://www.ksh.hu/heti-monitor/vallalkozasok.html
- Li, Z., Farmanesh, P., Kirikkaleli, D., & Itani, R. (2021). A comparative analysis of COVID-19 and global financial crises: Evidence from US economy. *Economic Research-Ekonomska Istraživanja*, 1-15. https://doi.org/10.1080/1331677X.2021.1952640
- Modis, T. (2006). The Singularity Myth. *Technological Forecasting & Social Change*, 73(2), 1-10. https://doi.org/10.31219/osf.io/3m9cn

Mwita, K. (2020). Effects of corona virus pandemic (covid-19) on selected human resource management practices in Tanzania. *East African Journal of Social and Applied Sciences*, 2(2), 252-259.

Ngoc Su, D., Luc Tra, D., Thi Huynh, H. M., Nguyen, H. H. T., & O'Mahony, B. (2021). Enhancing resilience in the Covid-19 crisis: Lessons from human resource management practices in Vietnam. *Current Issues in Tourism*, *24*(22), 3189–3205. https://doi.org/10.1080/13683500.2020.1863930

Nutsubidze, N., & Schmidt, D. A. (2021). Rethinking the role of HRM during COVID-19 pandemic era: Case of Kuwait. *Review of Socio-Economic Perspectives*, *6*(1), 1-12. https://doi.org/10.19275/RSEP103

Olkhov, V. (2022). Why Economic Theories and Policies Fail? Unnoticed Variables and Overlooked Economics. *Arxiv Economics Preprint [Online]*, 2022, 1-26. https://doi.org/10.48550/ARXIV.2208.07839

Ooi, K.-B. (2014). TQM: A facilitator to enhance knowledge management? A structural analysis. *Expert Systems with Applications*, *41*(11), 5167–5179. https://doi.org/10.1016/j.eswa.2014.03.013

Parsons, J. T., Grov, C., & Kelly, B. C. (2008). Comparing the Effectiveness of Two Forms of Time-Space Sampling to Identify Club Drug-Using Young Adults. *Journal of Drug Issues*, *38*(4), 1061–1081. https://doi.org/10.1177/002204260803800407

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, *51*(1), 1-17. https://www.ssc.wisc.edu/~walker/wp/wp-content/uploads/2012/04/schultz61.pdf

Schumpeter, J. (1939). Business cycles. A Theoretical, Historical and Statistical Analysis of the Capitalist Process. New York: McGraw-Hill.

Taylor, F. W. (1919). *The Principles of Scientific Management*. New York: Harper & Brothers. https://dspace.gipe.ac.in/xmlui/bitstream/hand-le/10973/41111/GIPE-191173.pdf?sequence=3

Torrington, D., & Hall, L. (1987). *Personnel Management: A New Approach*. New Yersey: Prentice-Hall. https://books.google.hu/books/abo-ut/Personnel Management.html?id=WmZoQgAACAAJ&redir esc=y

Verick, S., Schmidt–Klau, D., & Lee, S. (2022). Is this time really different? How the impact of the COVID–19 crisis on labour markets contrasts with that of the global financial crisis of 2008–09. *International Labour Review*, *161*(1), 125-148. https://doi.org/10.1111/ilr.12230

Zhang, Y. (2022). The Future of Bitcoins. In F. Balli, A. Y. H. Nee, & S. A. Qalati (Eds.), *Proceedings of the 2022 International Conference on Economics, Smart Finance and Contemporary Trade (ESFCT 2022)* (Vol. 226, pp. 1087–1092). Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-052-7_122