

Article

# Historical lessons for facilitating organizational recovery from crises

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Copyright © 2024 by author(s). Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/by/4.0/ Abstract: Our study is based on the premise that every crisis has historical precedents and antecedents. First, we analyze past crises, beginning with the experiences of the Dutch tulip bulb crisis. Then, we review major cataclysms, such as World War I, the Spanish flu crisis, the Great Depression of 1929-1933, World War II and the subsequent transition to socialism, the 1973 oil shock, the regime change of 1989, and the 2008–2009 global financial crisis from both general and corporate perspectives. Throughout history, periods of crisis have alternated with phases of development. During times of crisis, people's behavior changes as they search for solutions and support. This pattern is evident across all levels of economic activity, where governments, organizations, and individuals do their utmost to achieve a quick recovery. Sometimes, they look to external aid, forgetting that lessons from the past may provide guidance for crisis management. Without claiming to be exhaustive, we have identified points worthy of consideration. Our goal is to offer guidance for business organizations, complemented by thoughts addressed to individuals and governments alike. Organizations must pay attention to the first signs of crises and either proceed according to a pre-developed fitting strategy or revise it according to specific circumstances. They cannot avoid the consequences, but they can mitigate the negative effects.

**Keywords:** crises; emergencies; major cataclysms; historical lessons; twin crises

### 1. Introduction

The success and development of business organizations are not without interruptions. Crises and emergencies disrupt production and service processes. In this article, we demonstrate through historical events and the lessons derived from them the assertion by Diamond (2019) that we can effectively prepare for future challenges by using our intelligence and setting aside subjectivity to understand all we can from the past. Every crisis holds the potential for growth, positive transformation, and recognition and utilization of opportunities arising from adversity (Herr, 2011; Simenuovic, 2018). Research emphasizes that employee engagement is critical for retention (Gelencser et al., 2024). In times of crisis, employee retention can be even more challenging, but organisations can reduce turnover and strengthen organizational stability by taking proactive measures such as increasing employee engagement and satisfaction and creating a supportive work environment (Gelencsér et al., 2022; Kőmüves et al., 2020). We gather insights worthy of consideration at both national and corporate levels. We recognize that these crises have shattered lives and taken many, and we honor the victims with respect. However, our article focuses on the resilience techniques and renewal-based recovery opportunities for business entities. The prosperity of business organizations is important to all of us, as it reduces unemployment, raises wages and benefits, and enables the enrichment and advancement of society. The availability of services enhances quality of life, allowing us to plan for future generations in a well-functioning national economy. Our historical review begins with two medieval cases, followed by an examination of the crises that impacted Hungary in the 20th and 21st centuries, highlighting their causes and corporate implications. Alongside two wars, two global financial collapses, and two public health crises that caused economic disruptions, we cannot overlook the damages caused by the failed communist system's unrealistic restructuring. Crises have appeared repeatedly in world history. To align with our objectives, we mention two earlier events, then narrow the analysis to post-1900 crises that impacted Hungary. At the article's conclusion, we present our developed theory of twin crises and provide a table summarizing findings that remain relevant as lessons today.

## 2. Crisis experiences up to 1918

### 2.1. Ancient crises and lessons

When studying the crises of the distant past, it is worthwhile to begin with the following instructive case. Carolus Clusius, of Flemish descent, is considered one of the most prominent botanists of the Middle Ages (Bobory, 2004). At the end of the 16th century, he introduced the first tulip bulbs to Europe. These unique bulbs were planted in the "study garden" of Leiden University (Universiteit Leiden in Dutch, Rijksuniversiteit Leiden until 1998), founded in 1575 (Dhondt, 2014). These rare specimens were sold at increasingly higher prices, with some bulbs valued as fortunes at the time (Muraközi, 2016).

An anomaly can be noted in the vast difference between tulip bulbs' value and selling price. A single bulb could be worth 4000 or even 5500 Dutch florins, six times the average annual salary (Hayes, 2022). Entrepreneurs, traders, and investors misjudged their economic opportunities. Economic speculators failed to foresee that continuous profits could be followed by collapse and a sudden price drop (Nordhaus and Samuelson, 2012). The resulting market crash marked the first modern financial crisis (Bolyki, 2021).

The causes of financial crises remain the same today: unpredictability, gambling, and the desire for wealth (Moelling, 2016). The citizens eager to get rich on the New York Stock Exchange before 1929 could have learned from the tulip bulb example. Similarly, today's cryptocurrency traders might consider the potential economic consequences (Low and Teo, 2017). Corruption and its impact on financial stability also play a critical role in such collapses, as suggested by studies linking perceived corruption levels to economic vulnerabilities (Kálmán et al., 2024a). Learning from past mistakes and exercising caution is crucial, as trouble has already emerged in the recent collapses of Silicon Valley Bank (SCV) and other American banks (Pénzcentrum, 2023; Royal, 2023). Moreover, the alignment of sustainable financial practices and lessons from crises has been highlighted as essential in navigating economic risks (Kálmán et al., 2024b). The following historical facts, along with associated dates and explanations, aid in understanding the upcoming discussion.

- The plague, which ranged between 1347 and 1353, claimed 50 million lives across Europe, marking the continent's first encounter with the epidemic (Andrews, 2016).
- Lorenzo de' Medici (Lorenzo il Magnifico), ruler of Florence, amassed great wealth during his lifetime from 1449 to 1492 (Fergusson, 2021).
- Jakob Fugger and Anton Fugger, members of a family that rose to prominence in Augsburg, southern Germany, held such immense wealth between 1459 and 1560 that they influenced the election of emperors (Lentner, 2021; Ogger, 2009).
- Leonardo da Vinci, between 1452 and 1519, designed previously unimaginable machines as a secondary pursuit (Isaacson, 2018).
- The plague swept across Italy from 1629 to 1630 (Andrews, 2016).
- In London, between 1665 and 1666, the plague claimed 100,000 lives (Andrews, 2016).

Capital concentration and technical knowledge were not yet prominent at the time of the first plague outbreak in Europe. By the time of the tragic events of the 1600s, however, wealth had started to accumulate, and Leonardo da Vinci's technical design capabilities had already begun to flourish. This raises a valid question, as posed by Romsics (2020): Why was the labor shortage due to population loss not addressed through technological advancements? Why did the aftermath of the plague result in greater freedom and respect for farmers and a significant rise in wages similar to today's standards? The demand for 17th-century manufactured goods did not come from artisans and farmers. Land cultivation still required human labor, but the workforce had dwindled due to the epidemic. This resulted in reduced burdens on serfs and relative stagnation in technological progress. Hungarian economist Jánossy (1979) also addressed the topic of technological development and the emergence of capitalism but did not specifically link it to the labor shortages caused by epidemics. The key question worth analyzing is why technological advancement and capital concentration did not begin sooner.

The answer lies in the fact that manufacturing operations catering solely to the needs of the aristocracy had no vested interest in eliminating labor waste through technical means. However, once external traders entered the production world as clients, a wave of "faster and cheaper" production began.

An acceleration in robotics did not accompany Hungary's recent pandemic—a point we analyzed using statistical calculations and in-depth interviews (Poór et al., 2022a). It can already be observed that one immediate consequence of today's public health crisis is a greater appreciation of labor. Geoparks, serving as a tool for sustainable tourism, demonstrate that innovation can also emerge from environmental preservation efforts, linking cultural and economic advancements (Kálmán et al., 2024c). In crises, cultural heritage and sustainable tourism often serve as resilient strategies, supporting recovery and conservation efforts (Mousazadeh et al., 2023). Instead of rapid robotization, there has been a shift toward work relationships that are more attentive to the needs of vaccinated employees, those less at risk from long illnesses or unfortunate fatalities. Additionally, dual perspectives on financial security have highlighted the importance of adaptability in times of crisis, as seen in the 2023 OECD survey results (Németh et al., 2024). An accumulation wave will eventually

begin, though the starting point is uncertain—whether driven by the defense industry, household needs, or the electric vehicle-focused transformation of the automotive industry. The impetus for change will likely center around artificial intelligence, now coming to the forefront, needing only to be combined with other technological advancements. These two lessons are based on distant past events and applied to employment relations and assets without intrinsic value, like gold or goods. The following sections will focus specifically on insights applicable to organizations.

# 2.2. Companies in the "Great War"

The first global international war conflict, which broke out in 1914, was not simply the result of geopolitical and strategic tensions but a clash of nations and cultures involving not only the soldiers of warring parties but also the civilian population (Purseigle, 2014). The industrialized nature of World War I meant that the outcome of the battles depended heavily on the performance of companies operating on the home front. The war brought significant changes to the economic and social status of women in many ways (Dékány and Takács, 2014). We begin examining the corporate sector's involvement with the case of the American Ford Motor Company. Initially, Ford's owner was pacifist-minded and refrained from supplying products to the warring parties.

This stance later changed: in 1914 and 1915, various American charities sent 16,000 vehicles across the ocean, and by 1916, 80,000 vehicles were supporting the European front. In addition to cars and trucks, Ford supplied many other products to the military, including helmets, gas masks, submarine listening devices, aircraft engines, and field kitchens. It remains unclear whether Ford's personal attitude changed or if business considerations outweighed his prior stance, but along with ambulances, command vehicles, and trucks, stripped-down Ford cars equipped with machine guns also joined the ranks (Ocskay, 2020).

In the context of the Russian Ukrainian conflict, the Hungarian government's position remains unchanged. While it supports humanitarian aid, it refrains from trading or donating items that can take the lives of the Ukrainians (MTI, 2022).

Several lessons can be drawn from the above for today's corporate management. Referring to the case of the Ford Motor Company, it is important to note that businesses responding flexibly to current demand can find success. During the COVID-19 crisis, our research suggests a significant increase in demand for educational software and security equipment alongside masks and sanitizers. Several domestic companies increased their revenues by responding flexibly to this situation (Poór et al., 2022b). During the first global conflict that erupted in 1914, the "agribusiness" functioned with interruptions. The food sent to the frontlines and the scarcity of raw materials changed the eating habits on the home front. Undoubtedly, there were some terrible substitutes for food. Hunger, long lines, and ration cards made daily life more challenging. However, many reports of crisis measures proved to be successful. Margarine, whole-grain baked goods, and grain products other than wheat were introduced during the war. These products received significant attention, and marketing supported their branding, resulting in well-known products such as Frank, a real coffee substitute. Among frontline foods, canned goods were a forward-looking

innovation (Balogh, 2018).

Fortunately, during the crisis of the 2020s, border closures only complicated but did not prevent freight traffic. Nevertheless, food self-sufficiency has become a matter of national security. The food industry must be prepared for potential shortages of certain raw materials due to climate change, livestock diseases, or international trade challenges. Food safety is a critical issue during crises, influencing supply chain resilience and recovery efforts (Zsarnoczky et al., 2019). In such cases, concrete plans for innovation are essential, as the first producer can gain an unbeatable market advantage. It was not unique to Hungary that women were employed in factory work after 1914. In August 1916, Edwin Samuel Montagu, the British Minister of Munitions, praised the role of women working in munitions factories before the British Parliament. He noted that women's labor and ideas were valuable, as the ministry's workforce grew to 30,000 during the war, with 14,000 women (Montague, 1916). Similar developments occurred in Hungary, where, on 12 July 1918, MP Albrich Herman noted in a parliamentary session that half of the women now belonged to the income-generating class. This shift did not happen automatically, as on 14 December 1915, the government instructed industrial plants to release men fit for the military to join the army, filling their positions with women for auxiliary and skilled work (Molnár, 2020).

Nurses went to the front with romantic ideals but were met with inhumane conditions. Thanks to their dedication, they persevered amid the horrors of war. Numerous Hungarian aristocratic women served in healthcare roles, among whom Countess Gyuláné Erdődy, née Emília Széchenyi, stood out. From the beginning of the war in August 1914, she operated a private hospital under the Red Cross, serving as head nurse (Kelbert, 2014). Women took on voluntary work and service to alleviate the hardships of war. Most women who remained on the home front believed in the legitimacy of the fight. "But our fight is just, and therefore, it is impossible for us not to be victorious," said one patriotic woman (Kérchy, 2015). A lesson from the role of women is that in a crisis, even social groups with previously minimal social and economic roles are willing to contribute to problem-solving. Medical students have played a crucial role in fighting for life during our current health and economic crisis. In Slovakia, the government expected similar support from fifth-year medical students and third-year nursing students, as more than 3000 doctors and over 10,000 nurses were missing from hospitals (Ma7 News Portal, 2022).

In the event of a new crisis, healthcare could rely on reserve labor. The role of part-time employment would become especially valued. Such employment can be either mandatory or voluntary. In Hungary, the number of people working part-time voluntarily is low. This solution could ensure continuity in career building for highly educated female or male employees when family responsibilities temporarily increase (Oborni, 2019). Volunteering is not a widespread employment solution in Hungary. In contrast, volunteering is common in Austria and Great Britain due to different motivations. This type of workforce expansion could be relied upon in climate crises or disasters, given that environmental awareness is a defining feature of the 21st century (Sloane and Pröbstl-Haider, 2019). Expanding the workforce requires addressing issues such as deep poverty, ethnic segregation, and job creation. Many families in Hungary's "dead-end villages" struggle with deep poverty, where

unemployment is generational.

Social segregation is one of the most pressing issues in Central and Eastern Europe, both in urban and rural areas. Such segregation often coincides with ethnic segregation (Balogh et al., 2018). Overcoming it requires substantial investment in quality education, support from dedicated civil organizations, and active participation from those affected. Unemployment should be countered not with aid but with job creation.

# 2.3. The emergence and impact of the Spanish flu in Hungary

At the end of World War I, Hungary's situation became politically, socially, and economically unstable. The arrival of the Spanish flu—a pandemic claiming lives across the globe—was a foreboding factor in this turmoil. Due to the disintegration of the Austro-Hungarian Empire and the political and economic losses caused by the Treaty of Trianon (signed on 4 June 1920), the Hungarian government lacked the strength to address the gaps emerging in domestic policy. In these chaotic circumstances, weak initiatives and attempts proved insufficient. Schools and hospitality venues were closed in response to the Spanish flu outbreak. However, these preventive measures failed to yield the expected results, partly because restrictions were lifted too soon to meet the demands of the population. Contemporary newsreels and historical articles suggest that the publicity of these measures may also have been insufficient, as only a few media sources covered them. Valuable insights on this issue were provided by a Slovak author's work (Bödők, 2021).

Authorities worldwide, fearing mass hysteria, were reluctant to reveal the true death toll from the Spanish flu to a war-weary and disillusioned public. The press of the time shared only the most essential information with the general public. In Hungary, state authorities hesitated to impose long-term restrictions on people's freedom of movement. Considering the advent of modern public transportation in large cities, this would have required significant effort. People were forced to queue for hours outside shops, exposing themselves to a heightened risk of infection. New restrictive measures led to protests (Géra, 2015). The pandemic claimed an estimated 60,000 to 65,000 lives, including many prominent public figures and artists. The lesson from this devastating pandemic is that the lack of political stability in post-World War I Hungary hindered the enforcement of defensive measures. From an economic policy perspective, it is essential to pay greater attention to conflict-ridden countries, which could become epicenters for future waves of pandemics, triggering public health crises. This macroeconomic insight suggests that organizations may sometimes need to consider restricting foreign relations.

### 3. Crisis experiences and lessons from 1929

### 3.1. The economic situation of companies during the Great Depression

Between 1929 and 1933, the nominal GDP of the United States fell by 29%. Prices dropped by 25%, unemployment reached 25%, and over 9000 banks ceased operations. This economic crisis swept through the U.S. and the world, severely impacting Hungarian companies as well (Eigner and Umlauft, 2014). Domestic data

is available for scientific comparison. In the 1920s, researchers began studying economic cycles, requiring quantitative data, and thus data collection started. Although the concept of GDP did not exist at the time, the published data is closely linked to what we understand as GDP today. In Hungarian economic history, the period from 1929 to 1934 is marked as one of recession, with the economic low point occurring in 1931. Hungary, a predominantly agrarian country, faced significant challenges as its key agricultural sector struggled. Agricultural output, which was at 99.3% in 1928, dropped to 50% by 1933. The economic crisis was further exacerbated by a decline in industrial production and minimal stock market activity (Bella et al., 2022).

The economic "snowball" that rolled out from the U.S. was capable of triggering an avalanche in vulnerable economies (Andor, 2009). Hungary was among these due to its outdated large-estate-based agriculture and the reorganized industry within a smaller territory. From another perspective, the decline in perceived quality of life was considered less severe in the Carpathian Basin than in France, where the standard of living was higher in 1929. However, the already low standard of living among agricultural workers in Hungary continued to deteriorate, creating a catastrophic situation (Szilágyi, 2019). Economically, it is clear that when revenue is low and debt remains, peasant farms teeter on the brink of bankruptcy. The agrarian sector needed development, but investment plans were lacking, leading to a lack of progress. This negatively impacted fertilizer production and agricultural machinery manufacturing. The decreasing demand from impoverished and unemployed groups also affected other sectors (Domonkos, 2021).

Even industries focused on producing essential medications were not safe during the Great Depression. The Chinoin pharmaceutical company, established in 1910, saw both domestic and international sales decline during the 1929–1933 economic crisis. Chinoin lost its place in international markets. Lacking working capital, it could not extend trade credits, leading to the loss of the Bulgarian market. In Czechoslovakia, a ban on foreign goods imports launched a "tariff war" (Simon, 2021), while the Greeks' strict import quotas were a form of protectionism that, in effect, equated to border closures for Hungarian pharmaceuticals (Domonkos, 2021).

Between 1929 and 1935, the net value of goods traffic at the Chinoin company fluctuated annually between 3.5 and 4.3 million pengős, with exports accounting for about 40%. Profits, which had reached 500,000 pengős before the crisis, dropped significantly, falling to 40,544 pengős in 1928 and not exceeding 50,000–60,000 pengős between 1929 and 1931. Chinoin's financial reserves dwindled, and it accumulated significant debt. Loan repayments consumed its working capital, forcing the company to lay off part of its workforce. Nonetheless, Chinoin avoided bankruptcy and, after 1933, revived itself through product development and the support of commercial partners (Sípos et al., 1996). Trade-restrictive policies from countries like Czechoslovakia and Greece, which imposed import restrictions and quotas, also contributed to the company's struggles. A key lesson from these events is that border closures may delay financial and health crises but cannot entirely prevent them, and closures, quotas, and tariffs can create significant challenges for companies. Furthermore, research and development (R&D) during critical periods promotes faster recovery.

The Hungarian Wagon and Machine Factory Ltd. (Magyar Waggon-és Gépgyár Rt.), a key economic force in Győr since the 19th century, saw a dramatic decrease in railway car, freight wagon, and vehicle production during the 1929–33 economic crisis. During World War I, the factory employed between 3000 and 4000 people, but by 1932, the workforce had dropped to 465 and 224 in 1933. A later merger eventually supported the company's revival (Honvári, 2014). Economic collaboration proved to be a viable path in the past and remains relevant today. Successful synergy occurs when two companies unable to operate profitably on their own can create the conditions for economic recovery by combining resources and expertise. Unfortunately, this is rarely observed among SMEs. Some adjacent businesses shut down despite the potential for shared resources, such as a typical warehouse, preferred suppliers, and fewer shared managers, which could ensure ongoing operations.

Statistics indicate that heavy industry production (iron, metal, and construction) fell by more than 50% between 1929 and 1933, while the light industry was less affected. Specific sectors, such as textiles and clothing manufacturing, even saw growth (Domonkos, 2021). A similar phenomenon occurred during the COVID-19 pandemic, with sectors like construction, security technology, online commerce, and furniture manufacturing emerging as "winners" (Dajnoki et al., 2023; PWC, 2020). The causes of the crisis were the same across countries, though with varying degrees of impact: overproduction, the agricultural price scissors effect, and financial products lacking real backing. While the crisis originated in the banking sector overseas, it began in the agricultural sector in Hungary. The cycle of production declines, layoffs, and reduced demand could only be broken with state support. The same was true in other Danube-region countries, where domestic market protection sometimes functioned almost as an economic measure against neighboring countries, though there were also efforts toward cooperation (Domonkos, 2015). Today, political and economic leaders face significant challenges in deciding how, when, and with what restrictive or intensive measures to intervene during crises.

### 3.2. Companies during World War II

We have already analyzed one war from a corporate perspective, but it is essential also to acknowledge the horrors it caused. Rather than a detailed description of events, consider the fact that civilians living in war zones or regions of terror continued to suffer from severe depression and anxiety disorders for many years after peace was restored (Frounfelker et al., 2018). In the case of domestic profit-oriented organizations, the focus was not on psychological impact but on bankruptcy or business success. Once again, the issues of wartime profits and business ethics arise, with an added layer: Is it justifiable to profit from war? The Lincoln Electric Company, one of the leading U.S. suppliers of welding equipment, earned substantial profits from the surge in demand caused by the war. Shipbuilders, aircraft manufacturers, and other contractors ordered more welding machines and electrodes. Importantly, Lincoln's extra profits were domestic, yet the government, burdened by wartime sacrifices, deemed these high-profit margins unethical (Wilson, 2010). Some German companies also supplied their own country but were criticized for supporting the political and economic agendas of the fascist, far-right government. This association has been used

against them since. The primary issue was not that a weapons manufacturer engaged in its core activity but that it exploited the forced labor of camp prisoners for this purpose (Leitz, 1998).

After reviewing these foreign extremes, it is worth examining Hungarian companies. Hungarian firms fulfilled domestic market demands and orders from the German military. This foreign trade orientation toward Germany largely arose from necessity. Szávai (2013) explains how trade plans with Danube-region countries, former Allied states, and the Soviet Union failed, leaving Germany as the only viable partner. In 1939 negotiations, the German partner demanded that Hungary's economy align with German objectives. They criticized Hungary's industrial support policies and demanded open access for German imports. Roles were designated, with Hungary tasked with supplying grain and raw materials. Hungary faced supply shortages by 1942 due to forced exports, and its arms industry primarily met German needs. The German side, however, frequently delayed compensation. Although few businesses became wealthy from trade with Nazi Germany, even this imperfect exchange increased Hungary's prosperity. Some military suppliers to the Hungarian army violated the ethical norms of business agreements. Some viewed contracts as not an honest business but an opportunity for fraud. Soldiers returning from the front reported boots with cardboard soles and blankets made from rags (Kincses and Mészáros, 2014). Kaposi (2020) provides a comprehensive industrial history of the World War II period for the city of Pécs. The local machine factory, designated as a military plant, shifted its focus, and its workforce grew slightly. The tobacco and leather factories also received large state orders. Although the state did not contract the champagne and beer factories, clever management led to growth during the war years. Capital concentrated, and many military suppliers and wholesalers became wealthy. Meanwhile, companies that met civilian consumption needs saw a decline in production due to shifts in demand and shortages of raw materials or energy. Crises often give rise to exploitation, a practice that continues today. Those in power may delay payments or exploit their position. For example, during Hungary's transition period, many farmers waited for delayed payments from large trading companies, and early mail-order companies sold products at exorbitant prices. Are we certain today that all purchased disinfectants are effective? Another essential lesson is that partnerships formed out of necessity are not always beneficial. The final lesson applies beyond our region: International businesses that exploit slave labor, child labor, and vulnerable workers will lose consumer trust and will need to implement fair trade practices and adhere to regulations to regain it.

# 3.3. Occupation instead of recovery: inflation, nationalization, and collectivization

At the end of World War II, Hungarians hoped for a return to everyday life, although most were aware that occupation, not liberation, was coming. The world's fastest inflation accompanied the Soviet army's measures and deportations. Researchers cite three main causes: the supply shock, indexed old pengő deposits, and the government's intention to direct investments into the real economy rather than banks. A combination of these factors likely led to the massive inflation that struck

Hungary, rendering investments pointless (Hartwell, 2019). The introduction of the forint in 1946 provided only brief stability for businesses. Following the shift in political and administrative elites, private property holdings above a certain value were nationalized. This economic trauma remains deeply rooted in family memories, and compensations after the regime change could not fully offset it (Mihályi, 2018).

Nationalization often brought leadership changes, with expertise playing no role in appointments. Though some skilled professionals did appear within the socialist-led framework over the years, the technical and managerial shortcomings inflicted irreversible economic damage, with the effects becoming fully apparent in the long term. Privatization offered little relief; artificially sustained, poorly managed enterprises failed, leading to a wave of bankruptcies after the regime change. Companies with centuries of history (e.g., Goldberger, Mauthner, Wolfner) vanished almost without a trace (Mihályi, 2018). Key lessons from these events include:

Today, we are contending with high inflation, but perhaps less drastic measures can control escalating prices and keep them in check. A decline in investment is likely, raising the question of whether tools exist to stimulate it. The sanctity of private property remains precarious in some contexts, as exemplified by the treatment of private pension funds. Inept leadership lacks the interest or purpose to establish and maintain competitive enterprises, an issue faced by Hungary's emerging market economy. Owners seek growth, working with managers who deliver results and receive appropriate bonuses. The state sector's continued presence is necessary, though private ownership is predominant today.

### 3.4. Distorted development and the ripple effect of oil prices

Following decades marked by cults of personality, revolution, repression, and new economic mechanisms, in the so-called "happiest barrack," we both scorned and envied Western standards of living. However, we undeniably owed the 1973 oil crisis to the West. The OPEC alliance, comprised of oil-producing countries—some underdeveloped, others on the path of development—took a stance. The United States, always driven by economic interests and geopolitical goals, never anticipated that these seemingly weaker nations would oppose it. However, in 1973, the supposedly weak OPEC organization quadrupled oil prices and imposed embargoes on several countries. Developed nations, heavily reliant on oil, suddenly faced both "rising prices and a drastic reduction in supply" (Tarján, 1973). This conflict did have a silver lining, as it sparked a shift toward green energy and more efficient resource management in advanced regions. Nuclear energy, a controversial topic, also gained prominence (Szabó, 2022). In Europe, unusual scenarios unfolded. Cars with even-numbered and odd-numbered plates were allowed on the roads on alternating days, and in some places, Sunday driving was banned. These measures received significant media attention at the time, which we even noticed as children. The media perhaps overemphasized these policies to distract from domestic challenges (Inke, 2022).

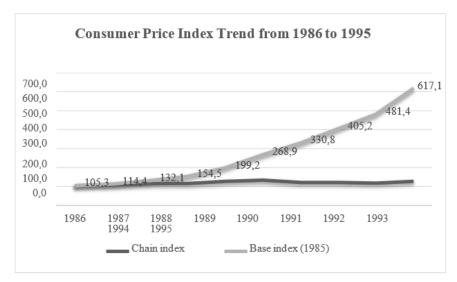
Hungary also faced difficulties, lacking its own energy resources. In hindsight, the economic policy response could confidently be called flawed. Instead of addressing structural reforms, policymakers attempted to support producers through increasing subsidies. Maintaining the standard of living was a critical concern for the

regime that had suppressed the 1956 revolution, leading to the start of loan-taking and eventual debt accumulation. State television expanded the narrative by suggesting that, with Soviet support, Hungary would experience minimal losses in the economic crisis (Barát, 2008). Today, there is a sense of déjà vu, as current media also emphasize problems in other countries while domestic issues, like high heating costs leading to pool closures and challenges in education, loom. Hungary treads carefully regarding the Russian Ukrainian conflict, as it has minimal oil and gas reserves, and the mentioned superpower has twice stifled its desire for freedom. Twain's (1957) relevant quote applies here: "History does not repeat itself, but it often rhymes." The economic policy decisions of today cannot yet be thoroughly assessed; without analytical tools, we can only judge from a decades-long perspective. Recall the Boross package—once cursed, now recognized as a prudent measure.

# 3.5. The economic shock of the regime change

With idealistic leadership and like-minded citizens, the regime changes in our region occurred peacefully, without bloody conflicts. Many people became entrepreneurs; unfortunately, some used their connections to profit unfairly, while others lacked the skills or training for business. Societies undergoing regime change experienced an unprecedented institutional transformation (Kávássy, 2021). The economic and political shift to a "competitive state" model happened swiftly. Some citizens who had lost social support and financial security turned toward populism and extremes (Vigvári, 2022). Following the regime change, news of privatization and renationalization appeared. The latter aimed to correct poor or failed privatizations and, at times, to organize new sales (e.g., the Diósgyőr and Ózd metallurgy plants, Postabank, Polgári Bank). The goal was to transfer valuable, viable entities to financially robust foreign investors. In such cases, some employees were retained, while others were laid off (Mihályi, 2018). Unemployment rose significantly after the regime change but began to decline gradually from 1998 onward (Lipták, 2014). Hungary implemented an incentive system to attract foreign investments and channel them by sector and region. Hungarian leaders also recognized that the economic impact of foreign direct investment (FDI) on growth depended on its origin. Such investments brought advanced technologies and productivity-enhancing organizational practices, and foreign-owned companies radically transformed the traditional "socialist" system of personnel management (Lewis, 2005; Tőkés, 2021). The groundwork for this transition was already laid, as the first foreign-owned joint venture in socialist Hungary was established by the German company Siemens in 1973 (Poór, 2013). Around 700 Hungarian individuals who had amassed wealth during socialism gained ownership stakes in companies after the regime change (Brückner, 2018). However, due to continuous turbulent changes, Hungary's GDP initially declined significantly during these years. The need for intervention, adjustment, and restrictions was not solely due to GDP decline; high unemployment was also accompanied by high inflation (Figure 1). In 1991, inflation reached 35%, and the prices of goods and services increased sixfold within a decade, prompting strict and effective economic intervention. Changes in political and trade partners brought temporary setbacks, which the United Kingdom recently experienced following

Brexit. Hungary lost access to the then-prosperous Soviet market, severely impacting its food industry. Hungarian companies' survival depended on their involvement in early privatization (Kürthy et al., 2016).



**Figure 1.** The impact of the regime change on the consumer price index. Source: Own compilation based on KSH A2021 data.

Twin crises serve as a cautionary signal for corporations and other organizations. In recent times, many business entities have endured the hardships brought on by the COVID-19 pandemic, and upon emerging from it, they implemented measures that would only be advisable in the event of a certain economic recovery. However, the simultaneous occurrence of war, inflation driven by demand, an energy crisis, and shortages of raw materials and components has led to numerous bankruptcies. These complex challenges necessitate a cautious and strategic approach to ensure organizational resilience and adaptability in the face of multi-faceted global crises. It is imperative for organizations to develop and refine their strategies to effectively manage and mitigate the impacts of such crises, fostering a sustainable path forward in uncertain times. The topic of interventions remains relevant today, and we currently encounter a portfolio of restrictive and expansionary measures. In society, some can bear the burdens, while others cannot. For economic management, achieving targets while protecting vulnerable groups and sustaining the middle class, which has strengthened in recent years, is a formidable task.

### 3.6. The 2007–2008 global financial crisis

The 2007–2008 economic crisis originated in the U.S. financial markets, similar to the 1929–33 Great Depression analyzed earlier. The global economy sank into depression despite the fact that the secondary mortgage-backed securities responsible for the initial crisis were not prevalent worldwide. In addition to international financial markets, the real economy suffered globally, with the impact especially severe in developed countries within the European Union (EU), where the recession was deeper than in the United States. The crisis spread from country to country like a virus, crossing borders (Tomczak, 2022). With its relatively open economy, Poland managed to receive foreign assistance, and its lack of eurozone membership prevented the crisis

from deepening further. The financial anomalies triggered the crisis, but preceding factors, such as high inflation, the dollar's devaluation, and falling long-term U.S. interest rates, increased the likelihood of the 2007–2008 financial crisis (Napiórkowski, 2014). The identification of "bear market" phases during the 2007–2008 crisis is possible for all Visegrad Group countries (Olbrys and Majewska, 2015). In Hungary, households were particularly hard-hit, facing several shocks:

- The head of the family became unemployed.
- A family member lost their job.
- One partner in the household received delayed wages or no pay.
- The household lost a previously regular source of income for other reasons.
- Due to delayed payment, utilities (gas, water, and electricity) were cut off.
- TV, phone, internet, or mobile services were disconnected.
- Loan installments could not be paid on time.
- Eviction occurred (Tóth and Branyiczki, 2018).

The shockwaves primarily originated from the corporate and banking sectors. Households had taken on foreign currency loans, which became one of the economy's most severe social and financial issues. Before the crisis, the risks of foreign currency loans were obscured by the stability of the Hungarian forint. False optimism also spread among companies, nonprofit organizations, and local governments (Király, 2016). By this time, large international corporations were already present in Hungary. Multinational companies can generally have three types of impacts on a country's economy: stabilizing, neutral, or crisis-deepening. Fortunately, during the crisis, the closure and relocation of subsidiaries did not accelerate (Rugraff and Sass, 2012). Until the crisis, the Hungarian labor market faced only minor issues. Trends had been improving until 2006, with an increase in the proportion of economically active individuals aged 15-74, a rise in employment, and a decline in unemployment. 2008, the unemployment rate stood at 7.9% (KSH, 2009). When the crisis hit, Hungarian businesses aimed to cut labor costs. Due to production declines, significant layoffs occurred in export-oriented regions, especially in large companies in Komárom-Esztergom, Fejér, Győr-Moson-Sopron, and Vas counties, as well as in traditional industrial centers. The crisis led to a sudden rise in unemployment in these developed regions, though these areas soon began to recover. In service-oriented rural areas, negative and positive effects gradually appeared (Egedy, 2012). After the crisis, it became clear that companies that had chosen alternative crisis-management strategies—aiming to retain the human capital embedded in their organizational culture rather than resorting to layoffs—had a more stable footing (Fodor et al., 2011; Hezam et al., 2017). This lesson remains deeply ingrained in the minds of leaders, guiding them as they navigate subsequent contemporary crises.

## 4. Contemporary crises

### 4.1. The COVID-19 pandemic and economic crisis

We hope the crisis caused by the COVID-19 virus has ended. Although there are still cases and unfortunate deaths, its impact on our economy is now minimal. The corporate sector was deeply affected by the negative impacts, which forced innovation

in work arrangements. Border closures, supply chain disruptions, and fluctuating demands from a population confined to their homes required measures, and sometimes, strategic changes were necessary (Kőmüves et al., 2024). Certain economic sectors became winners or losers in the crisis. However, analyzing the events of the crisis is not the same as seeking lessons. It still seems too early to make general conclusions. The reasons for this include:

In December 2022, attention turned to China. The state intended to maintain strict lockdowns despite the disease becoming less dangerous over successive waves. The one-party state did not respond with retaliation to protests, as many had feared; if it had, the lessons would have changed. Before the Russian-Ukrainian armed conflict and the ensuing energy crisis, we would have advised struggling service providers to hold on and take out support loans. We know that many businesses, economically weakened by the pandemic, were forced to close due to rising energy costs (EU-EB, 2024). Progress in automation was not prominent during the pandemic (Kiss, 2022), but we do not know whether current issues or the arrival of peace will shift trends.

Several researchers are currently examining the impact of reducing regional economic disparities (Poór et al., 2024). It is still uncertain what the specific causes of the observed quantitative results are and whether the discovered trend will be lasting. The hybrid work model is popular among employees. Many improvements in the work environment, including remote work and telecommuting, will continue after COVID-19 (Stolz, 2024). We cannot predict whether employers will ultimately recognize the efficiency of this or continue to insist on in-person presence over the next five years. Are our businesses, healthcare system, and state strategically prepared for new health crises?

# 4.2. The Russian Ukrainian conflict and its consequences

With the end of the health crisis, we hoped for economic recovery. However, the first factor that disrupted these expectations was the rise in oil prices, driven by increased demand and limited supply. Much like post-World War II Hungary, we now see a significant market anomaly. As expected, higher fuel prices increased product costs due to rising transportation expenses. Perhaps this imbalance could have been resolved with economic mechanisms, but a threatening conflict emerged on Europe's borders. Hostilities disrupted trade in rare metals and Ukraine's vast grain-producing regions, while restrictive measures hindered trade with Russia. We condemn the aggression, but it is unclear whether Russia or the European Union will suffer more from the lack of trade. Once again, we face a clash between ethics and interests, as seen repeatedly in history. At the time of writing, we anticipate either freezing or paying higher costs—yet this is the lesser problem. The service sector, already weakened by the COVID-19 crisis, continues to suffer. Educational efficiency declined due to online solutions, and the healthcare sector was unable to focus on prevention due to urgent demands. We are now hearing about the closures of pools, spas, hotels, and restaurants During the COVID-19 lockdowns, service providers aimed to retain their workforce, but now, due to rising costs, they cannot do so. Alongside high inflation, we can also expect rising unemployment. When these two factors increase simultaneously, it creates a difficult-to-manage crisis. Our negative expectations only amplify these effects. This gives rise to concerns that misguided diplomatic steps and irresponsible state leadership decisions may further escalate the conflict. As we close this chapter, international organizations and reputable media forecasts are far from optimistic. JP Morgan expects a severe recession across Europe following 2022. Rising natural gas prices and higher interest rates pose challenges for the continent's countries. Russia has reduced energy supplies to Europe, causing energy import costs to quadruple in recent months. These high prices only compound the challenges facing the European Central Bank. With the deepening energy crisis, JPMorgan anticipates a full-scale European recession in 2023 (Rosen, 2022). As central banks worldwide raise interest rates to combat inflation, the world faces a global crisis in 2023, with emerging markets and developing economies potentially approaching financial collapse. The damage could be long-lasting (Rogoff, 2023).

Germany, the eurozone's largest economy, is struggling due to its dependence on Russian gas. Its industries rely on a stable supply of energy resources, and the Berlin executive appears anxious and indecisive due to the bleak outlook. According to Eurostat data, inflation is soaring, exceeding 10% in September. Fears of an almost certain recession are escalating (Escalonilla, 2022). At the 60th Hungarian Economic Association Conference in Szeged, Sándor Csányi, CEO of OTP Bank, assessed the country's situation. According to his analysis, Hungary's high energy intensity is problematic, with one of the EU's highest energy dependency levels. Hungarian growth aligns with Europe's trajectory, meaning we share Europe's fate. Csányi emphasized the critical need for withheld EU funds, adding that he believes the Hungarian government is actively working to secure access to these resources again (Járdi, 2022).

# 5. The phenomenon of twin crises and summary table

In this study, when examining current crises, we frequently addressed past events based on the guidance used by Diamond (2019) as a motto. Pandemic history, the development of hygiene conditions, the historically changing treatment of human resources, the evolution of management methods, and, naturally, past crises were examined. Meanwhile, it became apparent that crises often appear in pairs. The following facts can be observed from recent events: Democracy is accompanied by the struggle for power between political parties. Decision-makers from various political sides sometimes face financial crises. Since they do not want to lose the trust of voters, they cautiously take the painful measures necessary to manage crises. Therefore, crises tend to strike societies in two waves. An example is the fact that there were two waves of financial recessions in 1929–33 and 2007–2008.

Hygiene conditions deteriorate significantly during armed conflicts, which can allow an epidemic to spread. The Great War and the Spanish flu provide examples of this, as well as, to a lesser extent, sexually transmitted diseases due to the violence accompanying World War II.

Fortunately, the historical tensions between the people living in Western and Central Europe have eased. However, the changing and uncertain circumstances during the regime change exacerbated these tensions up to the outbreak of the Yugoslav War. The isolation caused by the COVID-19 virus may also have played a

role in the Russian Ukrainian conflict. Leaders could not find solutions to the health crisis and sought to demonstrate their strength through combat. During the "lockdown", residents' animosities also increased, and viewpoints did not converge. Thus, the warring parties went into battle with an unshakable belief in their own cause despite being brother nations. After wars and health crises, increased demand and decreased supply jointly cause inflation. If misguided measures accompany this, hyperinflation may emerge. Based on all this, it is hazardous not to find a way out of the crisis. Crises will inevitably reach us, but those responsible for handling them must act cautiously and prepare to face the remaining problems. In conclusion, we present the collected lessons worth considering in **Table 1** below.

**Table 1.** The examined crises and their lessons.

Past Crises	Lessons and Thoughts Useful Today
Plague Outbreak	The consequences of labor shortages may lead to signs of automation or greater attention to employees.
Holland, Tulip Crisis	Speculation on overpriced products can lead to financial collapse.
The Great War	Women entering the workforce, expanding labor resources. It's possible to profit as a defense industry supplier, but there are ethical considerations.
	Flexible response to changing demand is necessary. There are still reserves!
	Dual training is possible: part-time workers (alongside children or retirement), volunteer work. Eliminating "inherited" unemployment.
	Raw materials from new partners serve as sources of innovation. Long-term market advantage for innovators.
Spanish Flu Pandemic	Government measures are less intense during instability.
	We need to pay attention to war zones.
	Maintaining international business relations is essential.
Great Economic Depression	There are levels of crisis where market mechanisms do not lead to balance; state intervention is necessary.
	Border closures are not suitable for excluding financial and health crises.
	Mergers can sustain companies. Not every sector is a loser.
World War II	The use of "slave labor" results in loss of reputation.
	USA-even profiting by supporting its own war efforts is not ethical.
	War-driven prosperity affects only a few. Profiteering is an accompanying phenomenon of the crisis.
	Dependence on a single partner state can be harmful to the economy, especially leading to vulnerability during a crisis.
Occupation, Inflation, and Nationalization	There are levels of inflation that completely halt investments.
	Rapidly increasing inflation can only be stopped by drastic measures.
	State intervention in ownership relations causes lasting grievances.
	Incompetent and interest-free leadership does not create competitive companies.
Oil Price Shock	Media techniques are unchanged; both then and now, the "bigger problems elsewhere" approach is used to calm discontent.
	Russia remains powerful and too close. Borrowing only delays problems.
	Closing unviable economic units leads to healthy cleansing. We cannot yet evaluate today's economic policy measures; judgment requires decades of hindsight.

Table 1. (Continued).

Past Crises	Lessons and Thoughts Useful Today
Regime Change	It is not necessary to cling to national capital; FDI can bring growth. The development level of the issuing state is essential.
	Nationalization can be a temporary step to correct bad decisions.
	If multiple main macro indicators are unfavorable, intervention is needed.
	Changes in political and trade partners bring temporary declines.
	Restriction proved effective then; today, a combination of restrictive and expansive measures is attempted.
2007 Financial Crisis	Openness facilitates access to resources.
	Having one's own currency prevents the crisis.
	Multinational companies that remain locally can help.

Source: own editing.

Twin crises serve as a cautionary signal for corporations and other organizations. In recent times, many business entities have endured the hardships brought on by the COVID-19 pandemic, and upon emerging from it, they implemented measures that would only be advisable in the event of a certain economic recovery. However, the simultaneous occurrence of war, inflation driven by demand, an energy crisis, and shortages of raw materials and components has led to numerous bankruptcies. These complex challenges necessitate a cautious and strategic approach to ensure organizational resilience and adaptability in the face of multi-faceted global crises. It is imperative for organizations to develop and refine their strategies to effectively manage and mitigate the impacts of such crises, fostering a sustainable path forward in uncertain times.

### 6. Conclusion

To conclude our article, we would like to share four thought-provoking quotes that offer perspectives on the future. The first quote from the late world-renowned English writer Huxley (2022) reminds us, "The only thing we know about the future is that we do not know what it will be." Our second closing thought is drawn from António Guterres's speech at the World Economic Forum in Davos on 24 January 2019, where he stated, "It is true that globalization has brought remarkable development to the world, but along with the associated technological advancements, it has also increased inequalities at the level of countries, regions, and individuals." Our third conclusion is encapsulated by Masala (2023) in his book published in Munich: "It was an illusion to think that globalization would automatically lead to the spread of democracy."

Finally, Harari (2024), one of today's most prominent thinkers, warns, "If not properly managed, AI may not only end human dominion on Earth but could also extinguish the very light of consciousness itself." Relating to the thought expressed above, historian Romsics (2024) writes, "Such reflections are excellently suited to prompt us to ask ourselves questions and to ponder the fundamental issues of our past, present, and future."

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### References

- Andor, L. (2009). Hungary in the financial crisis: A (basket) case study. Debatte. Journal of Contemporary Central and Eastern Europe, 17(3), 285–296. https://doi.org/10.1080/09651560903457907
- Andrews, E. (2016). Devastating plagues. Take a look back at six of the most infamous outbreaks of the disease once known as the "Great Mortality." History. Retrieved from https://www.history.com/news/6-devastating-plagues (Accessed: 2022.12.20).
- Balogh, A., Bajmócy, P., & Ilcsikné, M. Z. (2018). Social and ethnic segregation amongst the smallest Hungarian villages. Geographica Pannonica, 22(3), 208–218. https://doi.org/10.5937/gp22-16641
- Balogh, G. (2018). Frontline in the hinterland: The history of the First World War (in Hungarian). Retrieved from http://www.elsovilaghaboru.com/tortenete/cikk/frontvonal a hatorszagban (Accessed: 2022.12.20).
- Barát, M. (2008). The thirty-five-year oil crisis (in Hungarian). Világgazdaság. Retrieved from https://www.vg.hu/vilaggazdasag-magyar-gazdasag/2008/12/a-harmincot-eves-olajvalsag (Accessed: 2022.12.21).
- Bobory, D. (2004). Qui me unice amabat: A chapter in the history of botany: Carolus Clusius and Boldizsár Batthyány (in Hungarian). Iskolakultúra, 14(10), 94–110.
- Bödők, G. (2021). The 1918–19 Spanish flu epidemic in Hungary (in Hungarian). Új Szó. Retrieved from https://ujszo.com/szalon/az-1918-19-es-spanyolnathajarvany-magyarorszagon? (Accessed: 2023.01.20).
- Bolyki, V. (2021). A luxury palace for a single tulip? The story of the Dutch tulip mania (in Hungarian). Unilive. Retrieved from https://unilife.hu/szabadon/20210213-a-holland-tulipanlaz-tortenete.html
- Botos, J. (2016). The destruction of the Pengő, the birth of the Forint, 1938–1946 (in Hungarian). Múltunk-Politikatörténeti Folyóirat, 61(1), 160–206.
- Brückner, G. (2018). The entrepreneurial spirit that existed during the regime change has disappeared among Hungarians (in Hungarian). Index. Retrieved from
  - https://index.hu/gazdasag/2018/09/25/a\_rendszervaltas\_idejen\_megvolt\_mara\_eltunt\_a\_vallalkozoszellem\_a\_magyarokbol/ (Accessed: 2022.12.20).
- Dajnoki, K., et al. (2023). Impact of the three waves of COVID-19 pandemic on the HR practices of Hungarian organizations: Experience from an empirical study. PLOS ONE, 18(6), e0283644. https://doi.org/10.1371/journal.pone.0283644
- Dékány, S., & Takács, Á. (2014). The home front in the Great War (in Hungarian). Retrieved from https://mnl.gov.hu/mnl/ol/virtualis kiallitas/a hatorszag a nagy haboruban (Accessed: 2023.01.10).
- Dhondt, P. (2014). University jubilees and university history writing: A challenging relationship. Leiden–Boston: Brill. https://doi.org/10.1163/9789004265073 002
- Diamond, J. (2019). Wars, epidemics, techniques: The fates of societies (in Hungarian). Budapest: Akkord Kiadó.
- Domonkos, E. (2015). Attempts to cooperate among Danube states during the Great Depression (1929–1933) (in Hungarian). Grotius-Tanulmányok. Retrieved from http://www.grotius.hu/publ/displ.asp?id=KNOQKY (Accessed: 2022.12.13).
- Domonkos, E. (2021). The impacts of the Great Depression 1929-33 on Hungary's economy (in Hungarian). Multidiszciplináris Kihívások, Sokszínű Válaszok, 2021(1), 4–23. https://doi.org/10.33565/mksv.2021.01.01
- Egedy, T. (2012). The effects of the economic crisis on and beyond the city (in Hungarian). Területi Statisztika, 52(4), 334–352.
- Eigner, P., & Umlauft, S. T. (2014). The great depressions of 1929–1933 and 2007–2009: Parallels, differences, and policy lessons. MTA-ELTE Crisis History Working Paper, (2). Retrieved from https://www.researchgate.net/publication/314506282 The Great Depressions of 1929-1933 and 2007-
  - 2009\_Parallels\_Differences\_and\_Policy\_Lessons#fullTextFileContent https://doi.org/10.2139/ssrn.2612243
- Escalonilla, Á. (2022). Europe facing energy crisis: soaring prices "well into 2023." The International Energy Agency (IAEA) recommends that the European Commission adopt measures to reduce energy consumption by more than 13%. Economy and

- Business. Retrieved from https://atalayar.com/en/content/europe-facing-energy-crisis-soaring-prices-well (Accessed: 2022.12.10).
- EU-EB. (2024). Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions: Report on European energy prices and costs (in Hungarian). EU-European Commission, 1–20.
- Fergusson, N. (2021). The ascent of money: The financial history of the world (in Hungarian). Budapest: Scolar Kiadó.
- Fodor, P., Kiss, J., & Poor, J. (2011). Focus on the impact of the economic and financial crisis on the human resource function: Four Eastern European countries in the light of empirical research in 2009. Acta Polytechnica Hungarica Journal of Applied Sciences, 8(1), 81–104.
- Frounfelker, R., Gilman, S. E., Betancourt, T. S., Aguilar-Gaxiola, S., Alonso, J., Bruffaerts, R., Evelyn, de Girolamo, Giovanni és Gluzman, Semyon és Gureje, Oye és Karam, Elie G. és Lee, Sing és, Lépine, Jean-Pierre és Ono, Yutaka és Pennell, Beth-Ellen J. és Popovici, Daniela G. és Ten Have, Margreet & Kessler, R. C. (2018). Civilians in World War II and DSM-IV mental disorders: Results from the World Mental Health Survey Initiative. Social Psychiatry and Psychiatric Epidemiology, 53(2), 207–219. https://doi.org/10.1007/s00127-017-1452-3
- Gelencsér, M., Kőmüves, Z. S., Hollósy-Vadász, G., & Szabó-Szentgróti, G. (2024). Modelling employee retention in small and medium-sized enterprises and large enterprises in a dynamically changing business environment. International Journal of Organizational Analysis. https://doi.org/10.1108/IJOA-09-2023-3961
- Gelencsér, M., Végvári, B., & Szabó-Szentgróti, G. (2022). A munkaerő-megtartás és a well-being kapcsolatának elemzése nemzetközi kutatásokban. Vezetéstudomány, 53(6), 40–51. https://doi.org/10.14267/VEZTUD.2022.06.04
- Géra, E. (2015). Death arrived by tram: Everyday life in Budapest under the shadow of the Spanish flu (in Hungarian). In I. Majoros (Ed.), Fates, fronts, ideologies: Studies for the centenary of the First World War (pp. XX-XX). Budapest: ELTE BTK.
- Guterres, A. (2019). Read the UN Secretary-General's Davos address in full. World Economic Forum. Retrieved from https://www.weforum.org/agenda/2019/01/these-are-the-global-priorities-and-risks-for-the-future-according-to-antonio-guterres/ (Accessed: 2024.10.23).
- Harari, Y. N. (2024). Nexus (in Hungarian). Budapest: Animus.
- Hartwell, C. (2019). Short waves in Hungary, 1923 and 1946: Persistence, chaos, and (lack of) control. Journal of Economic Behavior & Organization, 163, 532-550. https://doi.org/10.2139/ssrn.3203764
- Hayes, A. (2022). Tulipmania: About the Dutch Tulip Bulb Market Bubble. Investopedia. Retrieved from https://www.investopedia.com/terms/d/dutch\_tulip\_bulb\_market\_bubble.asp (Accessed: 2022.12.06).
- Herr, H. (2011). Making an unstable financial system work Reform options. International Journal of Labour Research, 3(1), 133-155. Retrieved from https://search.proquest.com/openview/246310ba8b7c8b53633118b2db897ce9/1?pq-origsite=gscholar&cbl=226543 (Accessed: 2022.12.06).
- Hezam, L. M., Pataki, L., & Tóth, R. J. (2017). The role of human capital in corporate life cycle stages in rural areas of Hungary (in Hungarian). Pro Sciencia Ruralis, 2(1), 48–67.
- Honvári, J. (2014). Drivers of development in Győr: The automotive district of Győr as a new direction and tool for regional development research monographs (in Hungarian). Universitas-Győr Nonprofit Kft, Területi Statisztika, 4, 399–400.
- Huxley, A. (2022). Brave New World (in Hungarian). Budapest: Cartaphilus Kiadó.
- Inke, B. (2022). "The future will be late" How the first oil crisis shocked the Western world and what it meant for everyday life (in Hungarian). 24.hu. Retrieved from https://24.hu/kultura/2022/07/23/a-jovo-kesni-fog-hogyan-sokkolta-a-nyugati-vilagot-az-elso-olajvalsag-es-mit-jelentett-a-mindennapi-eletben/ (Accessed: 2024.10.23).
- Isaacson, W. (2018). Leonardo da Vinci The genius up close (in Hungarian). Budapest: Helikon Kiadó.
- Jánossy, F. (1979). The start of the accumulation avalanche (in Hungarian). Budapest: Magvető Kiadó.
- Járdi, R. (2022). Interview with Sándor Csányi: Hungarian economy; it is almost certain that a recession is coming in Hungary (in Hungarian). Világgazdaság. Retrieved from https://www.vg.hu/vilaggazdasag-magyar-gazdasag/2022/09/csanyi-sandor-szinte-biztos-hogy-recesszio-jon-magyarorszagon (Accessed: 2022.12.09).
- Kálmán B. G., Dávid L., & Malatyinszki Sz. (2024c). The Role of Geoparks in Sustainable Tourism Development: A Case Study Approach. Geojournal of Tourism and Geosites (GTG), 17(4spl)
- Kálmán B. G., Malatyinszki Sz., Bárczi J., & Zéman Z. (2024a). Corrupción e Inclusión Financiera en Hungría y México [Corruption and Financial Inclusion in Hungary and Mexico, in Spanish]. Revista Mexicana de Economía y Finanzas Nueva

- Época // Mexican Journal of Economics and Finance (REMEF), 19(2). ID: e1015. http://doi.org/10.21919/remef.v19i2.1015
- Kálmán B. G., Malatyinszki Sz., Zugor Zs., & Szőke B. (2024b). Perceived Corruption in Light of Green Transition Indicators. Revista de Gestão Social e Ambiental // Environmental and Social Management Journal (RGSA), 18(3). ID: e07855. http://doi.org/10.24857/rgsa.v18n3-166
- Kaposi, Z. (2020). Economic changes in Pécs during the First World War. Central European Papers, 13(3), 99-122.
- Kávássy, J. E. (2021). Path to regional regime change: Eastern European changes in the context of global power structures (in Hungarian). Regime Change Review, 6(4), 88-95.
- Kelbert, K. (2014). Women's roles during the First World War: Countess Emília Sz. Széchenyi, wife of Count Erdődy Gyula, as a mother, nurse, and artist (in Hungarian). Vasi Szemle, 68(4), XX–XX.
- Kérchy, A. (2015). From reckless girl to dutiful patriot: Changes in women's image in the magazine Magyar Lányok during the First World War (in Hungarian). Media Researcher, 16(2), 81–95.
- Kincses, K. M., & Mészáros, K. (2014). Scholar and soldier: The memoirs of Árpád Markó II (in Hungarian). Budapest: HM Hadtörténeti Intézet és Múzeum.
- Király, J. (2016). Comparative analysis of the U.S. subprime mortgage crisis and the Hungarian foreign currency loan crisis (in Hungarian). In R. I. Gál & J. Király (Eds.), Simonovits 70 (pp. 326–350).
- Kis, M. (2022). The impact of the COVID-19 pandemic on human-robot relationships in the future (in Hungarian). Performa, 13, 1-12. ISSN 2498-731X (Accessed: 2024.10.23).
- Kőműves, Z. S., Poór, J., Mura, L., Tóth, A., Varga, E., & Hollósy-Vadász, G. (2024). Labour shortage and labour retention as a possible strategy in a difficult economic situation based on empirical data of a transitioning economy. Central European Business Review, 13(4), 103–121. https://doi.org/10.18267/j.cebr.367
- Kőműves, Z., Pora, G., & Szabó-Szentgróti, G. (2020). Nők munkaerő-piaci helyzete a koronavírus-járvány kitörése előtt az esélyegyenlőség szempontjából. Lépések: A Fenntarthatóság Felé, 25(2/No. 80), 6–9.
- KSH. (2009). Labor Market Review. Statistical Mirror, 2009, 3(12), 1-3.
- KSH. (2021). Consumer Price Index (1985–) (in Hungarian). Retrieved from https://www.ksh.hu/docs/hun/xstadat/xstadat\_eves/i\_qsf001.html (Accessed: 2022.12.20).
- Kürthy, Gy., Radóczné, K. T., & Székelyhidi, K. (2016). The current situation and future of the Hungarian food industry. In G. Kürthy, G. Dudás, & B. O. Felkai (Eds.), Agricultural Economic Studies (pp. 17–31). Budapest: Agrárgazdasági Kutató Intézet.
- Leitz, C. M. (1998). Arms exports from the Third Reich, 1933–1939: The example of Krupp. Economic History Review, 51(1), 133–154. https://doi.org/10.1111/1468-0289.00086
- Leveleki, M. (2010). Unstable labor market equilibrium in areas dominated by multinational companies in Hungary (in Hungarian). Economic Ethics, 2010/2.
- Lewis, P. C. (2005). How the East won. New York: Palgrave Macmillan.
- Lipták, K. (2014). Unemployment or joblessness? The state of the Hungarian labor market (in Hungarian). Acta Carolus Robertus, 4(2), 57–69.
- Low, K. F. K., & Teo, E. G. S. (2017). Bitcoins and other cryptocurrencies as property? Law, Innovation and Technology, 9(2), 235–268. https://doi.org/10.1080/17579961.2017.1377915
- Ma7 News Portal. (2022). Medical students join the ranks in hospitals (in Hungarian). Retrieved from https://ma7.sk/aktualis/omikron-mar-az-orvostanhallgatok-csatasorba-allnak-a korhazakban? (Accessed: 2022.12.15).
- Masala, C. (2023). World Disorder: Global Crises and Western Illusions. Munich: C.H.Beck.
- Máténé, B. K., Ritzlné Kazimir, I., Anwar, K., & Cseh, T. (2022). The history of Hungarian short-term economic statistics: From the "economic dashboard" to quarterly sector accounts (in Hungarian). Statistical Review, 100(2), 167–203. https://doi.org/10.20311/stat2022.2.hu0167
- Mihályi, P. (2018). Regime Change and Elite Exchange: Nationalization of Hungarian Industry 70 Years Ago (in Hungarian). Budapest: Centre for Economic and Regional Studies, Hungarian Academy of Sciences.
- Moelling, K. (2016). Tulipomania the First Financial Crisis by Viruses. Revue Roumaine De Chimie, 61(8-9), 637–645.
- Molnár, Z. (2020). The role of women in the Hungarian home front during World War I (in Hungarian). Military Science Review, 13(2), 143–154. https://doi.org/10.32563/hsz.2020.2.11
- Montague, E. (1916). UK Parliament Speeches. Retrieved from https://api.parliament.uk/historic-hansard/people/mr-edwin-montagu/1916 (Accessed: 2022.12.20).

- Mousazadeh, H., Ghorbani, A., Azadi, H., Almani, F. A., Zangiabadi, A., Zhu, K., & Dávid, L. D. (2023). Developing sustainable behaviors for underground heritage tourism management: The case of Persian Qanats, a UNESCO World Heritage Property. Land (Basel), 12(4), 1–17. https://doi.org/10.3390/land12040808
- MTI. (2021). The NATO enlargement discussed by the chair of the alliance's military committee (in Hungarian). Retrieved from https://www.portfolio.hu/global/20220412/a-nato-boviteserol-beszelt-a-szovetseg-katonai (Accessed: 2022.12.09).
- Muraközy, L. (2016). In 20 Years (in Hungarian). Budapest: Akadémiai Kiadó.
- Napiórkowski, T. M. (2014). Internationalization of the Polish economy and its susceptibility to the global crisis after 2007. International Journal of Management and Economics, 37(1), 214–232. https://doi.org/10.2478/ijme-2014-0011
- Németh, E., Kálmán, B. G., & Malatyinszki, Sz. (2024). Pénzügyi biztonság Magyarországon: a 2023-as OECD-felmérés eredményeinek kettős nézőpontú elemzése [Financial security in Hungary: A dual perspective analysis of the 2023 OECD survey results, in Hungarian]. Statisztikai Szemle // Hungarian Statistical Review, 102(9), 896–915. https://doi.org/10.20311/stat2024.09.hu0896
- Nordhaus, W. D., & Samuelson, P. A. (2012). Economics (in Hungarian). Budapest: Akadémiai Kiadó.
- Oborni, K. (2019). On the role of part-time work in supporting careers among highly educated women (in Hungarian). Sociological Review, 28(3), 87–113. https://doi.org/10.51624/szocszemle.2018.3.5
- Ocskay, Z. (2020). Ford vehicles in World War I (in Hungarian). Military Technology, 54(2), 64–69. https://doi.org/10.23713/ht.54.2.12
- Ogger, G. (2009). The Fuggers Imperial and Royal Bankers (in Hungarian). Budapest: Kelly Kiadó.
- Olbryś, J., & Majewska, E. (2015). Bear market periods during the 2007–2009 financial crisis: Direct evidence from the Visegrad countries. Acta Oeconomica, 65(4), 547–565. https://doi.org/10.1556/032.65.2015.4.3
- Pénzcentrum. (2023). Another major bank filed for bankruptcy: emergency anti-crisis measures may come (in Hungarian). Retrieved from https://www.penzcentrum.hu/gazdasag/20230313/ujabb-nagybank-jelentett-csodot-rendkivulibankvalsagellenes-lepesek-johetnek-1134943 (Accessed: 2023.03.24).
- Poór, J., Dajnoki, K., Szabó, Sz., Módosné, Sz. Sz., & Jenei, Sz. (2022). Recovery Reopening Growth: Expected changes in corporate/institutional management and administration in the shadow of the coronavirus (in Hungarian). Gödöllő: Hungarian University of Agriculture and Life Sciences.
- Poór, J., Kosár T. Sz., Huszárik, S. E., Zsigmond, T., Kálmán, B. G., Szabó-Szengróti, G., & Tóth, Zs. (2024). The impact of the difficult economic situation on the operation of Slovak companies in the shadow of war. Journal of Ecohumanism, 3(7), 213–230. https://doi.org/10.62754/joe.v3i7.4372
- Poór, J., Kovács, I. É., Szeiner, Zs., Tóth, A., Pató, G., Kunos, I., Szabó, K., Szabó, Sz., & Dajnoki, K. (2022). Challenges and HR responses to the COVID-19 crisis in six Central and Eastern European countries (in Hungarian). Gödöllő: Hungarian University of Agriculture and Life Sciences. https://doi.org/10.55413/9789635940615
- Purseigle, P. (2014). The First World War and transformations of the state. International Affairs, 90(2), 249-264.
- PWC. (2020). Overtime instead of forced breaks Who are the COVID-19 winners? (in Hungarian). Budapest: PWC.
- Rogoff, K. (2023). The world economy faces a huge stress test. The Guardian. Retrieved from https://www.theguardian.com/business/2023/jan/05/world-economy-stress-test-2023-inflation-interest-rates-crisis (Accessed: 2023.01.05).
- Romsics, I. (2020). From the plague to the coronavirus (in Hungarian). In P. J. Kőrösi & K. Zsimbó (Eds.), The World after the Virus (pp. 5–14). Budapest: Noran Libro Kiadó–Szépírók Társaság.
- Romsics, I. (2024). From Herodotus to Harari (in Hungarian). Budapest: Helikon.
- Rosen, P. (2022). JP Morgan expects a European recession by 2023 as the energy crisis worsens: An economist explains how the continent could avoid a downturn. Business Insider. Retrieved from https://www.businessinsider.com/economist-explains-europe-recession-eu-central-bank-fed-policy-inflation-2022-8
- Royal, J. (2023). Bitcoin is surging during a financial crisis What's going on? Bankrate. Retrieved from https://www.bankrate.com/investing/bitcoin-is-surging-whats-going-on/ (Accessed: 2023.03.24).
- Rugraff, E., & Sass, M. (2012). Crisis and relocation threat in emerging countries: The case of the Hungarian automotive industry (in Hungarian). Foreign Economy, 66(September-October), 4–29.
- Simeunovic, D. (2018). Borders as political, security, and cultural phenomena (in Hungarian). Acta Humana, 3, 7–18.
- Simon, A. (2021). History of Slovakia 1918-1945 (in Hungarian). Komárno: Selye János University.
- Sípos, A., et al. (2022). The Glorious and Tragic Story of a Hungarian World Company: Chinoin (in Hungarian). Budapest:

- Chinoin Pharmaceutical and Chemical Products Manufacturing Co. Ltd, Communications Department. Retrieved from https://kepmas.hu/hu/chinoin-magyar-gyogyszergyar-wolf-emil-kereszty-gyorgy-gyogyszervallalat-distol-inzulin (Accessed: 2022.12.01).
- Sloane, G. M. T., & Pröbstl-Haider, U. (2019). Motivation for environmental volunteering: A comparison between Austria and Great Britain. Journal of Outdoor Recreation and Tourism, 25, 158–168. https://doi.org/10.1016/j.jort.2019.01.002
- Stolz, R. (2024). Remote Work Trends in 2024: Impact, Effectiveness, and Future Outlook of Working from Home. Retrieved from https://www.workhuman.com/blog/remote-worktrends/?gad\_source=1&gclid=Cj0KCQjwz7C2BhDkARIsAA\_SZKaZyNvAuYDXBFrYIdBSH3ujUmzq\_1FRQqzCRYBnr8OUblDfiwmjzzkaAuzmEALwwcB&gclsrc=aw.ds (Accessed: 2024.10.23).
- Szabó, G. (2022). Historical examples show that the world has never found a solution to the oil crisis (in Hungarian). Index. Retrieved from https://index.hu/gazdasag/2022/05/21/olajvalsag-energiavalsag-1973-tortenelmi-pelda (Accessed: 2022.12.20).
- Szávai, F. (2013). Additions to the history of Hungarian-German economic relations, with special regard to the implementation of the Győr Program (in Hungarian). Central European Communications, 6(4), 151–164.
- Szilágyi, Z. (2019). Regional Differences in Development and Quality of Life in Hungary During the First Third of the Twentieth Century. The Hungarian Historical Review, 8(1), 121–152.
- Tarján, M. T. (1973). The first oil crisis breaks out (in Hungarian). Rubicon online. Retrieved from https://rubicon.hu/kalendarium/1973-oktober-17-kirobban-az-elso-olajvalsag
- Tőkés, L. (2021). The impact of foreign direct investment on the Hungarian economy: Heterogeneity by the country of origin (in Hungarian). Foreign Economy, 65(9-10), 3–31. https://doi.org/10.18414/ksz.2022.3.339
- Tomczak, K. (2023). Transmission of the 2007–2008 financial crisis in advanced countries of the European Union. Bulletin of Economic Research, 75(1), 40–64. https://doi.org/10.1111/boer.12338
- Tóth, I. G., & Branyiczki, R. (2018). Shocks caused by financial crises and views on social mobility (in Hungarian). Sociological Review, 28(2), 89–109. https://doi.org/10.51624/SzocSzemle.2018.2.5
- Twain, M. (1957). The Gilded Age (in Hungarian). Budapest: Európa Könyvkiadó.
- Vigvári, G. (2022). Transformation and populism in the Visegrad countries (in Hungarian). Economic Review, 669(3), 339–366. https://doi.org/10.18414/ksz.2022.3.339
- Wilson, R. M. (2010). "Taking a Nickel Out of the Cash Register": Statutory Renegotiation of Military Contracts and the Politics of Profit Control in the United States during World War II. Law and History Review, 28(2), 343–383. https://doi.org/10.1017/s0738248010000039
- Zsarnoczky, M., Zsarnoczky-Dulhazi, F., Adol, G. F. C., Barczak, M., & Dávid, L. D. (2019). Food safety challenges in the tourism processes. Rural Sustainability Research, 41, 26–31. https://doi.org/10.2478/plua-2019-0005