

The Role and Impact of Zombie Firms in the Economic System: An Examination of Financial Sustainability and Innovation

Zombi Şirketlerin Ekonomik Sistemdeki Rolü ve Etkileri: Finansal Sürdürülebilirlik ve Yenilikçilik Üzerine Bir İnceleme

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ÖZET

Anahtar Kelimeler:

Zombi Şirketleri,
Ekonomik Etki,
Finansal Stabilité,
Verimlilik Kaybı,
Ekonomik Büyüme,

Finansal olarak sürdürülebilir olmayan, borçlarını ödeyemeyen ve hayatta kalmaya devam eden zombi işletmeleri düşük kâr marjları, yüksek borç yükü ve zayıf nakit akışı gibi sorunlarla karşı karşıya kalmaktadır. Bu bağlamda çalışmanın amacı, literatürde pek ele alınmayan bu zombi şirketlerinin özelliklerini incelemek ve şirketlerin ekonomik sistem üzerine rollerini ve etkilerini değerlendirmektir. Çalışmanın amacı kapsamında, dünyada ve Türkiye'deki literatürde yer alan çalışmalar irdelenerek ve örnek bir şirket değerlendirilerek bulgulara ulaşılmıştır. Bulgulara göre, zombi şirketleri yüksek borç yükü, negatif kâr profiline sahip, borç/öz sermaye oranı yüksek, finansal riskleri yüksek ve mali sürdürülebilirliği tehdit altında olan bir şirkettir. Bu tür şirketlerin de ürünlerinin maliyetleri yüksek ve faaliyetlerden zarar elde edildiği görülmektedir. Ayrıca ekonomik durgunluk dönemlerinde zombi şirketlerin varlığı artış gösterirken düşük faiz oranlarının ve devlet desteklerinin sağlanmasıyla pekişmektedir. Bulgular, zombi şirketlerin piyasa dinamiklerine ve rekabet koşullarına uyum sağlamakta zorluk çektiğini ve yenilikçilikten uzak kaldığını işaret etmektedir. Sonuç olarak, çalışmanın bulguları hem yatırımcılar hem de politik yapıcılar için önemli tavsiyeler sunmaktadır.

ABSTRACT

Keywords:

Zombie Companies,
Economic Impact,
Financial Stability,
Loss of Productivity,
Economic Growth,

Zombie firms, which are financially unsustainable, unable to pay their debts, and continue to survive face issues such as low profit margins, high debt burdens, and weak cash flows. In this context, the aim of this study is to examine the characteristics of these zombie companies, which are not often addressed in the literature, and to evaluate their roles and impacts on the economic system. To achieve this aim, existing literature on zombie firms in both the world and Turkey has been reviewed, and a case study of a sample company has been analyzed to derive findings. According to the findings, zombie firms are characterized by high debt levels, negative profit profiles, high debt-to-equity ratios, elevated financial risks, and threats to their financial sustainability. It is observed that such companies also face high production costs and incur losses from their operations. Furthermore, the presence of zombie firms tends to increase during economic downturns, reinforced by low interest rates and government support. The findings indicate that zombie companies struggle to adapt to market dynamics and competitive conditions, remaining distant from innovation. Finally, the results of the study provide significant recommendations for both investors and policymakers.

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1. INTRODUCTION

Zombie firms are defined as businesses with low economic efficiency, lacking the capacity to maintain profitability, and often continuing their operations through borrowing or government support. The presence of zombie firms in a country reflects the level of competition in the job market and the potential for these firms to infect other healthy companies (Urionabarrenetxea et al., 2018). Caballero et al. (2008) have examined the role and impact of such firms in the economic system in detail. According to their findings, the existence of zombie firms is considered a hindrance to economic recovery and sectoral restructuring.

For instance, during the 2008 financial crisis, some large companies in the U.S. automotive industry, such as General Motors, managed to continue their operations through government support and borrowing. This situation highlighted that the existence of zombie firms can be a factor that hinders economic recovery (Financial Times, 2019).

In Europe, the presence of zombie firms has notably increased, especially by 2019. According to data from the European Central Bank (ECB), approximately 6% of companies operating in the Eurozone were classified as zombie firms in 2019 (European Central Bank, 2020). These firms are at risk of insolvency due to typically low profit margins and insufficient capital returns, while continuously borrowing or relying on financial incentives to sustain their operations.

In recent years, there has been growing concern about the existence and economic impact of zombie companies, especially due to events such as the COVID-19 pandemic and economic recessions. Despite factors such as low interest rates and government subsidies, and the risk of bankruptcy of many companies, zombie companies continue to survive by borrowing or government incentives. In addition, Li et al. (2024) state that economic incentive packages positively affect firms' zombification probabilities.

In this context, the presence of zombie companies is seen as an important factor that negatively affects economic growth and resource use. Therefore, it is an important element that should be studied in depth the role and effects of such companies in the economic system and taken into account in their economic policies.

2. ZOMBIE COMPANIES AND ECONOMIC EFFECTS OF ZOMBIE COMPANIES

Zombie firms are defined in economic literature as businesses that are on the brink of bankruptcy or potentially at risk of insolvency but continue to sustain their operations by continually borrowing or seeking external financing sources. These firms experience cash flow issues and are often forced to allocate a significant portion of their revenues to debt interest payments.

Financially insolvent but still operational for various reasons, zombie firms are typically characterized by high debt loads, low profitability, and weak financial health. The main characteristics of zombie firms are as follows;

- **Debt-Weighted Financing:** For example, some manufacturing companies in Japan have been operating with low-cost borrowing for many years thanks to low interest rates. Although these companies have low profit margins, they are constantly trying to survive by borrowing. Zombie companies have difficulty repaying their debts and often carry a high amount of debt burden. A large part of the debts cover interest payments, which reduces the operational efficiency of the company (Koo, 2011).
- **Low Profitability:** Some companies operating in the construction sector in Europe adopt strategies primarily aimed at preserving their assets due to low project efficiency and competitive pressure. This situation delays sectoral restructuring processes. Zombie companies are continually seeking refinancing to sustain their operations. Refinancing typically offers temporary solutions to prevent insolvency but does not improve their economic efficiency in the long run (Imai, 2016).
- **Management Challenges:** In South America, some mining companies struggle with management challenges and political uncertainties, making it difficult to engage in long-term strategic planning. These companies often focus on short-term financial improvement efforts. Zombie companies hinder the efficient allocation of market resources and have adverse effects on economic growth. Their presence can exacerbate market distortions during economic crises (Hoshi and Kashyap, 2010).

The definitions and characteristics of zombie companies mentioned above can help in understanding their role and impact within the economic system. The existence of these companies indicates inefficient use of market resources and highlights the need for economic reforms (Bernanke, 2009).

The economic effects of zombie companies can be significant not only at the sectoral level but also on overall economic growth. These companies can reduce labor productivity, hinder the efficient use of resources, and create risks within the financial system. Therefore, developing effective policies and strategies to combat zombie companies and ensure economic stability is of critical importance. The economic impact of zombie companies can manifest in various dimensions.

2.1. Effects on Market Activity

Zombie companies can have significant effects on market efficiency. Market efficiency involves the optimal use of resources and the maximization of societal benefits from economic activities. Zombie companies contribute to the inefficient use of resources in the market. They can reduce competition and hinder the effective allocation of resources in the market (Caballero et al., 2008). To understand how zombie companies disrupt this efficiency, several factors are considered, which are explained as follows.

2.1.1. Resource Allocation and Efficiency

Zombie companies are typically characterized by low productivity and profitability. Instead of using their resources effectively, these companies largely allocate them to interest payments and operational costs. This situation prevents the efficient use of market resources. According to economic theory, transferring resources to firms with high productivity increases market efficiency (Caballero et al., 2008). However, zombie companies obstruct this process and continue to operate inefficiently in the market.

2.1.2. Competition and Innovation

The concept of innovation is grounded in diversification along the axes of differentiation and novelty. This is due to the necessity of promoting the outputs obtained from innovation activities and creating application fields for the work conducted in countries and organizations, as well as the need for these activities to be validated in terms of the conveniences they provide. In this context, the growth, development, and progress of countries on macro scales can contribute to advancements in human, artistic, technical, scientific, and technological fields (Altıntaş, 2021; Sümerli Sarigül and Çoşkun, 2022). Market competition encourages companies to become more efficient and to develop innovative solutions. The presence of zombie companies in the market can make it more difficult for more dynamic and innovative firms to increase their market share. Because zombie companies do not generate profits and are burdened with high levels of debt, they lack the capacity to invest in innovative projects. This situation restricts competition in the sector and reduces the rate of innovation (Imai, 2016). Zombie companies generally have low operational efficiency and face high costs. It is necessary to review operational processes and develop strategies to enhance efficiency (Pakes and Griliches, 2004). Additionally, the lack of innovation limits zombie companies' ability to adapt to market demands. Therefore, R&D and innovation investments are considered a strategic priority (Burgman, 1996).

2.1.3. Market Cleansing and Efficiency

Market cleansing is defined as the process of removing low-performing firms from the market, which increases economic efficiency. Zombie companies delay bankruptcy or exiting the market, which obstructs the “*cleansing*” process and reduces market efficiency in the long run. The presence of zombie companies results in inefficient use of resources and low productivity, thereby weakening the overall health of the market (Hoshi and Kashyap, 2010).

2.1.4. Capital Flows and Investments

Zombie companies often seek external financing due to their inability to use limited financial resources effectively. This situation disrupts capital flows and negatively impacts investment decisions. New and more

efficient companies may struggle to secure necessary financing because existing capital is tied up with the debt burden of zombie companies. Consequently, investors channel their capital into low-performing zombie firms, which hinders economic growth (Koo, 2011). Zombie companies generally have weak competitive positions. To maintain or increase their market share, they need to make strategic investments. Additionally, customer satisfaction and loyalty can strengthen their market positions (Horasan, 2023). However, strengthening customer relationships should be prioritized strategically.

2.1.5. Weak Competitive Position and Its Causes

Competitive position is an indicator of how advantageous a company or business is compared to other players in the market. Weakness in competitive position indicates that the business is less competitive compared to other market rivals, thereby increasing the risk of losing market share. Various reasons contribute to this weakness, which are discussed as follows;

- **Financial Constraints:** Zombie companies often face high debt burdens and low liquidity issues. These financial constraints make it difficult to undertake the investments and innovations needed to maintain competitive advantages and increase market share (Caballero and Hammour, 1994).
- **Low Investment Capacity:** Due to financial difficulties, zombie companies may avoid strategic investments such as R&D, technology investments, or market expansion. This situation further weakens their competitive structures (Burgman, 1996). Imai (2016) found that investments by zombie firms in Japan from 1999 to 2008 were not necessarily profitable or productive. Additionally, Kaplan and Aksoy (2024) determined that the increase in the share of zombie companies in Turkey's manufacturing sector from 2007 to 2022 significantly reduced the sector's average productivity.
- **Weak Management and Strategy:** Under financial strain and debt pressures, zombie companies often exhibit weaknesses in their strategic decision-making processes. This limits their ability to adapt to market conditions and causes them to lose competitive advantages (Gertler and Karadi, 2011).

2.1.6. Strategies for Strengthening Market Positioning

Strengthening market positioning involves various strategies that a company can implement to enhance its competitive advantages and expand its market share. An effective positioning strategy enables a company to achieve a stronger and more effective position in the market. Here are some fundamental approaches to these strategies;

- **Customer Relations and Satisfaction:** Zombie companies should take strategic steps to strengthen customer relationships and increase customer satisfaction. Strong customer relationships can help maintain market share and build a loyal customer base (Horasan, 2023; Kaplan and Aksoy, 2024). Improving customer satisfaction ensures long-term customer loyalty and strengthens the company's position in the market.
- **Innovation and Product Development:** Increasing innovation capacity and strengthening market positions are critical for companies (Pakes and Griliches, 2004). Therefore, zombie companies should make strategic investments to develop existing products or offer new ones.
- **Efficiency and Operational Excellence:** Reducing costs and increasing operational efficiency can enhance the competitive position of zombie companies. Improvements in efficiency help companies control their costs and gain advantages in market competition (Kogan and Papanikolaou, 2013).

2.1.7. Workforce Productivity

Zombie companies also negatively impact labor productivity. These low-productivity firms are unable to utilize their workforce effectively, which in turn reduces the overall productivity of the labor force. If labor is not redirected to more efficient and profitable companies, distortions in the labor market can occur, potentially hindering economic growth (Bernanke, 2009).

The effects of zombie companies on market efficiency are extensive and result in various negative outcomes. Factors such as inefficient resource utilization, reduced competition and innovation, impediments to market

cleansing, distortions in capital flow, and declines in labor productivity clearly illustrate how zombie companies affect the economic system. Understanding these impacts can aid in the development of appropriate policies to mitigate the long-term effects of zombie companies on the economic system.

2.2. Effects on Economic Growth and Financial Stability

The presence of zombie companies negatively impacts economic growth. These companies hinder profitable investments and innovations, which can reduce economic dynamism (Hoshi and Kashyap, 2010). The effects of zombie companies on the economy are diverse and generally negative.

- **Financial System Risk:** For example, some banks in Europe are under pressure regarding capital adequacy due to their credit relationships with zombie companies. This situation can negatively affect financial stability (Hoshi and Kashyap, 2010; Imai, 2016).
- **Resource Efficiency:** In Southeast Asia, some textile factories, despite low profit margins, are unable to allocate sufficient resources to innovative projects due to ongoing production processes. This situation can limit regional economic growth (Caballero et al., 2008; Pakes and Griliches, 2004).
- **Employment and Productivity:** In North Africa, some agricultural cooperatives are unable to fully utilize their capacity to create employment due to management difficulties and market access limitations. This situation can adversely affect regional economic development (Hoshi and Kashyap, 2010; Gertler and Karadi, 2011).

Zombie companies direct their resources largely towards interest payments and operational costs rather than using them effectively. This misallocation of resources hinders the efficient use of market resources.

Zombie companies can create instability in the financial system. The high levels of indebtedness of these companies cause financial crises to deepen and have negative effects on the banking sector (Bernanke, 2009). When these companies become more likely to go bankrupt, banks experience credit losses, which affects the financial system on a larger scale. Risk on loans restricts banks' ability to issue new loans and slows economic growth.

3. STRATEGIES FOR DEALING WITH ZOMBIE FIRMS

Effectively combating zombie firms is crucial for maintaining the health of the economic system and enhancing the efficiency of competitive markets. Addressing zombie firms involves various strategic approaches, including financial restructuring, strategic reorganization, and regulatory reforms.

- **Financial Restructuring:** It is vital for zombie firms to reorganize their debt structures to overcome their financial difficulties. This process includes methods such as debt restructuring and debt rescheduling agreements. For example, Altman and Hotchkiss (2006) note that financial restructuring can alleviate liquidity problems and reduce the risk of bankruptcy for companies. Furthermore, Shleifer and Vishny (1992) and Sayilgan and Coşkun (2009) highlight that effective debt restructuring can mitigate financial crises and allow firms to continue their economic functions.
- **Strategic Restructuring:** Re-strategic restructuring is necessary to improve operational efficiency and regain competitive advantages. This process includes cost optimization, improvement of business processes, and the development of market-oriented strategies (Porter, 2008). In addition, Kaplan and Norton (1992), Lin et al. (2008) and Benos et al. (2016) state that restructuring is important in terms of performance management and achievement of targets.
- **Regulatory Reforms:** Regulatory reforms are being carried out to reduce the negative effects of zombie companies on the economic system. These reforms include the revision of insolvency laws and the strengthening of financial audits (La Porta et al., 1996). Claessens and Klapper (2005) and Cirmizi et al. (2012) analyzed the effects of regulatory reforms on debt collection and bankruptcy processes, and it is seen that effective regulatory reforms have positive effects on corporate restructuring. Macroeconomic factors and legal regulations affect the operational capabilities of zombie companies. Economic recessions or crises can deepen the financial problems of these companies (Hoshi and Kashyap, 2010). Strategically, it is important to adapt to economic conditions and create crisis management plans. In

addition, regulatory compliance strategies should be developed (Laeven and Levine, 2009). Mondher and Lamia (2016) also obtain that regulation have a vital role in decreasing risk.

- **Market Cleanliness and Innovation Incentive:** In order to support the healthy functioning of the market, the exit processes of zombie companies are encouraged. This ensures that inefficient and unprofitable businesses are driven out of the market and more innovative companies come to the fore (Caballero and Hammour, 1994). In addition, Aghion and Howitt (1992) reveal that innovation and R&D incentives have positive effects on economic growth and productivity. The findings are supported by Lee and Kang (2007) and Blanco et al. (2016).
- **Management and Leadership Changes:** Zombie companies often struggle with poor management quality and ineffective strategic decision-making. To address these issues, restructuring the management team and bringing in skilled leaders is essential for fostering strategic success. Gertler and Karadi (2011) argue that enhancing management capabilities and leadership effectiveness can significantly improve the strategic outcomes of these firms. Furthermore, cultivating a robust corporate culture and implementing a comprehensive leadership strategy can boost employee motivation and engagement (Kogan and Papanikolaou, 2013). Strengthening management structures is also crucial for improving crisis management; high-performing management teams are more adept at executing strategic decisions and navigating challenges (Mintzberg, 1979). Additionally, Hambrick and Mason (1984), Palmer et al. (2019) and Yi et al. and He (2022) highlight that the attributes and leadership styles of top executives play a crucial role in influencing company performance.
- **Collaborations and Strategic Partnerships:** Zombie firms need to reassess their portfolios and make strategic investments to enhance profitability. This includes reevaluating complex portfolios and underperforming units (Hoshi and Kashyap, 2010). To overcome financial and operational challenges, zombie firms can benefit from establishing collaborations and strategic partnerships with other companies. Such partnerships offer opportunities for resource sharing and creating synergies (Gulati, 1998). Strategically, exploring mergers or acquisitions with financially stronger companies can be advantageous. These strategies help improve the financial health of zombie firms and enhance their competitive position (Kashyap et al., 1993). Similarly, Yin and Cao (2024) find that implementing mixed ownership reform and reducing unproductive investments also has a positive impact on zombie firms.
- **Customer and Market-Oriented Approaches:** Increasing customer satisfaction and conducting market analysis help zombie companies strengthen their market position. Companies are reviewing their customer relationships and market strategies in order to better respond to customer demands (Kotler and Keller, 2016).

These strategic approaches represent a comprehensive and multidimensional struggle process aimed at reducing the negative effects of zombie companies on the economic system. Collaborative action by actors from both the private and public sectors is critical to overcoming this challenge. These strategic approaches represent a comprehensive and multidimensional struggle process aimed at reducing the negative effects of zombie companies on the economic system. Collaborative action by actors from both the private and public sectors is critical to overcoming this challenge.

4. ZOMBIE COMPANY EXAMPLE

XYZ Inc. operates in the production sector, focusing on manufacturing goods in its respective industry. As of the year 2023, XYZ Inc. is characterized as a “zombie company”, a term used to describe firms that are heavily reliant on debt and are unable to cover their interest payments through their operating income. These companies often survive due to continual debt refinancing or other forms of financial support, but they lack the financial health or profitability to invest in growth or even cover basic operational costs from their own earnings. The financial data of XYZ Inc. Company for year 2023 are given in Table 1.

Table 1. Financial Data

Financial Item	2023 (Million TL)
Income	200
Costs	180
Gross Profit	20
Operating Expenses	30
Operating Profit	-10
Interest Expenses	15
Net Profit/Loss	-25
Total Assets	150
Total Liabilities	120
Stockholders' Equity	30

The financial ratios and analysis of XYZ Inc. company for year 2023 are calculated and evaluated as follows.

- **Gross Margin;**

$$\begin{aligned} \text{Gross Profit Margin} &= (\text{Gross Profit} / \text{Revenues}) \times 100 \\ &= (20 / 200) \times 100 \\ &= 10\% \end{aligned}$$

The gross profit margin is calculated as 10%, which indicates that the costs of the products are high and the profit margin is quite low. The low margin indicates that the costs associated with producing or acquiring the products are high relative to the revenue. This could be due to high production costs, expensive raw materials, or inefficiencies in the production process.

While a positive gross margin shows that the company is profitable at the gross level, the low margin highlights that the company's ability to cover its operating expenses and generate net profit may be limited. The company might need to address its cost structure to improve profitability.

- **Operating Profit Margin;**

$$\begin{aligned} \text{Operating Profit Margin} &= (\text{Operating Profit} / \text{Revenues}) \times 100 \\ &= (-10 / 200) \times 100 \\ &= -5\% \end{aligned}$$

The operating profit margin -5% indicates that the company is making a loss from its operations. The operating profit margin of -5% shows that the company is incurring a loss from its primary business activities. This means that the revenues generated from core operations are not sufficient to cover operating expenses such as wages, rent, and raw materials, leading to a negative margin.

This negative margin suggests problems with operational efficiency. The company may be experiencing higher costs than anticipated or may have lower revenue than required to break even. It reflects issues directly related to the company's ability to manage its core business activities profitably. An operating profit margin of -5% can indicate that the company is struggling to maintain profitability in its main business operations. Persistent operating losses can affect the company's financial stability and overall health, potentially leading to larger financial problems if not addressed.

- **Net Profit Margin;**

$$\begin{aligned} \text{Net Profit Margin} &= (\text{Net Profit} / \text{Revenues}) \times 100 \\ &= (-25 / 200) \times 100 \\ &= -12.5\% \end{aligned}$$

Net profit margin -12.5%, indicating that the company has a net loss. This means that after accounting for all costs, expenses, and taxes, the company's total revenue is not sufficient to cover its losses. Profitability Issues: This negative margin indicates significant problems with profitability. The company may be struggling with operational efficiency, high costs, or inadequate revenue generation. There is a need for the company to improve its cost management, increase revenues, or address both areas.

For investors, this margin suggests that the company is financially unhealthy and carries high potential risks. Continuous losses can diminish the value of investments and may deter potential investors due to the increased risk of capital loss.

- **Debt-to-Equity Ratio;**

$$\begin{aligned}\text{Debt-to-Equity Ratio} &= \text{Total Liabilities} / \text{Equity} \\ &= 120 / 30 \\ &= 4\end{aligned}$$

A Debt-to-Equity Ratio of 4 indicates that the company has debt that is four times its equity, which suggests a high level of financial risk. This ratio shows that the company's total liabilities are four times greater than its equity, indicating a high degree of financial leverage and increased financial risk.

Investors may view a high Debt-to-Equity Ratio as a sign of potential instability or risk. While debt can be beneficial for growth, excessive debt levels may deter some investors who prefer lower-risk investments. In summary, a Debt-to-Equity Ratio of 4 indicates substantial reliance on debt, highlighting both potential for higher returns and significant financial risk.

- **Current Ratio;**

To calculate the current ratio, you need the values for current assets and current liabilities. For example, if current assets are 50 million TL and current liabilities are 40 million TL:

$$\begin{aligned}\text{Current Ratio} &= \text{Current Assets} / \text{Current Liabilities} \\ &= 50 / 40 = 1.25\end{aligned}$$

A current ratio of 1.25 indicates that the company's capacity to cover its short-term liabilities is marginally sufficient. This conveys that while the company has enough current assets to cover its current liabilities, the buffer is relatively narrow. This suggests that the company is managing close to its limits, with little room for error or unexpected expense.

5. FINDINGS OF RESEARCH

This study analyzes the financial and operational condition of XYZ Inc. to assess whether the company fits the profile of a "zombie company". Zombie companies are characterized by high debt burdens, low profitability, and weak operational efficiency, which make it difficult for them to maintain financial sustainability. The long-term success of such companies depends on strategic actions such as debt restructuring, cost control, improved operational efficiency, and strategic repositioning. XYZ Inc.'s current situation serves as an example of the challenges faced by companies of this nature and potential steps that can be taken to overcome these challenges. This study examines the company's financial health, operational efficiency, and competitiveness, offering strategic recommendations for improvement.

- **Financial Health:** XYZ Inc.'s high debt load and negative net income indicate that it fits the profile of a zombie company. The high debt-to-equity ratio highlights significant financial risks and a threat to financial sustainability.
- **Operational Efficiency:** The company's gross profit margin is 10%, while the operating profit margin is -5%, indicating high product costs and losses from operations.
- **Competitiveness:** The company's low net profit margin and high debt load weaken its market position. This situation complicates efforts to maintain market share and implement competitive strategies.
- **Strategic Recommendations:**
 - **Debt Restructuring:** The company should evaluate restructuring or debt restructuring strategies to reduce its debt burden.
 - **Cost Control and Efficiency:** Strategies to reduce costs and improve efficiency should be implemented. Investment in R&D and innovation should aim to lower costs.
 - **Portfolio Assessment:** Underperforming products or business units should be reviewed, and investment should be directed toward high-potential areas.

- *Customer Relations and Market Strategies*: Enhancing customer satisfaction and revising marketing strategies could improve the company's market position.

This example illustrates key numerical analyses used to better understand the financial and operational conditions of zombie companies and to make strategic decisions. XYZ Inc.'s financial and operational situation reflects the general characteristics of zombie firms. The high debt burden, low profit margins, and weak operational efficiency threaten the company's sustainability. However, strategic actions such as debt restructuring, cost control, portfolio assessment, and customer relationship strategies can improve the company's financial and operational conditions. These measures can help the company better navigate economic crises and establish a foundation for long-term success.

6. CONCLUSION

Zombie firms can have significant impacts on the economic system during periods of economic stagnation and financial crises. Therefore, it is crucial to develop effective strategies for managing these companies and enabling them to contribute to economic growth. To mitigate the negative effects of zombie firms and maintain economic stability, strategic and long-term planning by both policymakers and businesses is essential. Various policy recommendations are proposed to reduce the economic impact of zombie firms:

Today, policymakers and economic experts are working on evaluating the sustainability of zombie firms and developing strategies to support economic recovery. These efforts aim to reduce the negative impacts of zombie firms on the economic system and create a more robust environment for economic growth. Consequently, discussions about the presence and economic effects of zombie firms continue, and current data and analyses on this topic remain crucial. Strategic analysis of zombie firms is crucial for understanding their financial and operational challenges and developing potential solutions. Evaluations focusing on financial health, operational efficiency, market positioning, and management strategies can enhance the sustainability of zombie firms and help them recover more effectively from economic crises.

Zombie firms can have significant impacts on the economic system, particularly during periods of economic stagnation and financial crises. To effectively manage these companies and mitigate their negative effects, a multi-faceted approach is required. Enhanced financial restructuring is essential, including strategies such as debt-for-equity swaps to alleviate the debt burden and align interests between creditors and shareholders. Additionally, improving credit conditions for viable firms can facilitate necessary restructuring. Operational improvements are also crucial. Zombie firms often suffer from inefficiencies that hinder their performance. Streamlining operations and adopting technological innovations can significantly enhance productivity and profitability. Moreover, strategic reorientation can help these firms pivot their business models and explore new markets, thereby reducing their reliance on declining sectors.

Strengthening governance and management is another key area. Investing in leadership training and implementing governance reforms can improve decision-making and strategic planning. Furthermore, regulatory and policy measures such as reforms to bankruptcy and insolvency laws, along with government support programs, can provide the necessary framework for restructuring and recovery. Creating a supportive ecosystem involves fostering industry collaboration and developing public-private partnerships to share resources and solve problems collectively. Regular monitoring and evaluation of zombie firms' financial health and operational performance are vital to making timely interventions and adjustments to strategies. Data-driven insights can guide effective decision-making and strategy development.

Finally, promoting economic diversification is important to balance the impact of zombie firms. Encouraging new ventures and reducing reliance on specific sectors can drive economic dynamism and resilience. Overall, a combination of strategic planning, supportive measures, and continuous evaluation is essential for addressing the challenges posed by zombie firms and supporting sustainable economic growth.

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REFERENCES

- AGHION, Philippe and HOWITT, P. Peter (1992), “*A Model of Growth Through Creative Destruction*”, **Econometrica**, S.60(2), ss.323-351.
- ALTINTAŞ, Furkan Fahri (2021), “*İnovasyon ve Girişimcilik Arasındaki İlişkinin Çok Yönlü Olarak İncelenmesine Yönelik Ampirik Bir Araştırma*”, **İğdır Üniversitesi Sosyal Bilimler Dergisi**, S.26, ss.155-181.
- ALTMAN, Edward I. and HOTCHKISS, Elliott J. (2006), **Distressed Securities: Analysis and Valuation**, Wiley Finance Publisher, New Jersey (US).
- BENOS, Theo, KALOGERAS, Nikos, VERHEES, Frans J., SERGAKI, Panagiota and PENNING, Joost M. (2016), “*Cooperatives' Organizational Restructuring, Strategic Attributes, and Performance: The Case of Agribusiness Cooperatives in Greece*”, **Agribusiness**, S.32(1), ss.127-150.
- BERNANKE, Ben S. (2009), **The Crisis and the Policy Response**, Federal Reserve Board, <https://www.federalreserve.gov/newsevents/speech/bernanke20090113a.htm> (Erişim Tarihi: 03.06.2024).
- BERNANKE, Ben S. and GERTLER, Mark (1995), “*Inside the Black Box: The Credit Channel of Monetary Policy Transmission*”, **Journal of Economic Perspectives**, S.9(4), ss.27-48.
- BLANCO, Luisa R., GU, Ji and PRIEGER, James (2016), “*The Impact of Research and Development on Economic Growth and Productivity in the US States*”, **Southern Economic Journal**, S.82(3), ss.914-934.
- BURGMAN, Thomas A. (1996), “*The Role of Innovation and R&D in Firm Performance: A Quantitative Analysis*”, **Journal of Business Venturing**, S.11(5), ss.337-354.
- CABALLERO, Ricardo J. and HAMMOUR, Mohamad L. (1994), “*The Cleansing Effect of Recessions*”, **American Economic Review**, S.84(5), ss.1350-1368.
- CABALLERO, Ricardo J., HOSHI, Takeo and KASHYAP, Anil K. (2008), “*Zombie Lending and Depressed Restructuring in Japan*”, **American Economic Review**, S.98(5), ss.1943-1977.
- CIRMIZI, Elena, KLAPPER, Leora and UTTAMCHANDANI, Mahesh (2012), “*The Challenges of Bankruptcy Reform*”, **The World Bank Research Observer**, S.27(2), ss.185-203.
- CLAESSENS, Stijn and KLAPPER, Leora F. (2005), “*Bankruptcy Around the World: Explanations of its Relative Use*”, **American Law and Economics Review**, S.7(1), ss.253-274.

- EUROPEAN CENTRAL BANK (2020), “*Zombie Firms in Europe*”, **European Central Bank** (E-Document), <https://www.ecb.europa.eu/pub/pdf/scpops/ecb.op242~7b1f77c627.en.pdf> (Erişim Tarihi: 03.06.2024).
- FINANCIAL TIMES (2019), “*Rise of Zombie Firms*”, **Financial Times**, <https://www.ft.com/content/68f8c5e6-7fa6-11e9-bb84-3cfc9f24f17> (Erişim Tarihi: 03.06.2024).
- GERTLER, Mark and KARADI, Peter (2011), “*A Model of Unconventional Monetary Policy*”, **Journal of Monetary Economics**, S.58(1), ss.293-317.
- GULATI, Ranjay (1998), “*Alliances and Networks*”, **Strategic Management Journal**, S.19(4), ss.293-317.
- HAMBRICK, Donald C. and MASON, Phyllis A. (1984), “*Upper Echelons: The Organization as a Reflection of Its Top Managers*”, **Academy of Management Review**, S.9(2), ss.193-206.
- HORASAN, Mukadder (2023), “*Comparative Analysis of Stock Returns of Zombie Firms and Bist 30 Firms with Statistical Methods*”, **Journal of Management and Economics Research**, S.21(3), ss.298-311.
- HOSHI, Takeo and KASHYAP, Anil K. (2010), “*Will the U.S. Bank Recapitalization Succeed? Eight Lessons From Japan*”, **Journal of Financial Economics**, S.97(3), ss.398-417.
- IMAI, Kentaro (2016), “*A Panel Study of Zombie SMES in Japan: Identification, Borrowing and Investment Behavior*”, **Journal of the Japanese and International Economies**, S.39, ss.91-107.
- KAPLAN, Robert S. and NORTON, David P. (1992), “*The Balanced Scorecard: Measures That Drive Performance*”, **Harvard Business Review**, S.70(1), ss.71-79.
- KAPLAN, Zeynep and AKSOY, Emine Ebru (2024), “*Zombi Şirketlerin Sektör Verimliliği Üzerine Etkisi ve Türkiye Uygulaması*”, **Verimlilik Dergisi**, S.58(3), ss.413-428.
- KASHYAP, Anil K., STEIN, Jeremy C. and WILCOX, David W. (1993), “*Monetary Policy and Bank Lending*”, **National Bureau of Economic Research**, <https://ideas.repec.org/p/nbr/nberwo/4317.html> (Erişim Tarihi: 03.06.2024).
- KOGAN, Leonid and PAPANIKOLAOU, Dimitis (2013), “*Firm Volatility, Firm Investment, and Stock Returns: The Role of Investment-Specific Shocks*”, **Review of Financial Studies**, S.26(11), ss.2718-2759.
- KOO, Richard. C. (2011), **The Holy Grail of Macroeconomics: Lessons From Japan's Great Recession**, Wiley Publisher, New Jersey (UK).
- KOTLER, Philip and KELLER, Kevin Lane (2016), **Marketing Management**, Pearson Publisher, New Jersey (US). 15th Edition.
- LA PORTA, Rafael, LOPEZ-DE-SILANES, Florencio, SHLEIFER, Andrei and VISHNY, Robert W. (1996), “*Law and Finance (July 1996)*”, **NBER Working**, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=7788 (Erişim Tarihi: 03.06.2024).
- LAEVEN, Luc and LEVINE, Ross (2009), “*Bank Governance, Regulation and Risk Taking*”, **Journal of Financial Economics**, S.93(2), ss.259-275.
- LEE, Keunjae and KANG, Sang-Mok (2007), “*Innovation Types and Productivity Growth: Evidence from Korean Manufacturing Firms*”, **Global Economic Review**, S.36(4), ss.343-359.
- LI, Jie, GUO, Xiaowei, HUANG, Bihong and ZHOU, Tianhang (2024), “*Political Connections and Zombie Firms: The Role of the 2008 Stimulus Plan in China*”, **Journal of Financial Stability**, S.72, ss.(101260).
- LIN, Beixin, LEE, Zu-Hsu and GIBBS, Lance G. (2008), “*Operational Restructuring: Reviving an Ailing Business*”, **Management Decision**, S.46(4), ss.539-552.
- MINTZBERG, Henry (1979), “*The Structuring of Organizations: A Synthesis of the Research*”, **University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship**, <https://www.nrc.gov/docs/ML0907/ML090710600.pdf> (Erişim Tarihi: 03.06.2024).
- MONDHER, Kouki and LAMIA, Mabrouk (2016), “*Bank Governance, Regulation and Risk Taking: Evidence From Tunisia*”, **International Finance and Banking**, S.3(2), ss.122-137.

- PAKES, Ariel and GRILICHES, Zvi (2004), “*Patents and R&D at the Firm Level: A First Look*”, **NBER Working Paper**, <https://ssrn.com/abstract=264395> (Erişim Tarihi: 03.06.2024).
- PALMER, Carolin, NIEMAND, Thomas, STÖCKMANN, Christoph, KRAUS, Sascha and KAILER, Norbert (2019), “*The Interplay of Entrepreneurial Orientation and Psychological Traits in Explaining Firm Performance*”, **Journal of Business Research**, S.94, ss.183-194.
- PORTER, Michael E. (2008), **The Competitive Advantage: Creating and Sustaining Superior Performance**, Free Press, (y.y.).
- SAYILGAN, Güven and COŞKUN, Ender (2009), “*Finansal Sıkıntılı Şirketlerde Yeniden Yapılandırma Süreçleri ve Yeniden Yapılandırma Süreçlerinin Seçimini Etkileyen Faktörler*”, **Ankara Üniversitesi SBF Dergisi**, S.64(02), ss.145-162.
- SHLEIFER, Andrei and VISHNY, Robert W. (1992), “*Liquidation Values and Debt Capacity: A Market Equilibrium Approach*”, **The Journal of Finance**, S.47(4), ss.1343-1366.
- SÜMERLİ SARIGÜL, Sevgi and COŞKUN, Selcan (2022), “*Effects of Innovation Strategies in The Aviation Industry*”, **Uluslararası Yönetim Akademisi Dergisi**, S.5(2), ss.365-380.
- URIONABARRENETXEA, Sara, GARCIA-MERINO, Jose Domingo, SAN-JOSE, Leire and RETOLAZA, Jose Luis (2018), “*Living With Zombie Companies: Do We Know Where The Threat Lies?*”, **European Management Journal**, S.36, ss.408-420.
- YI, Yaqun, CHEN, Yu and HE, Xiaoming (2022), “*CEO Leadership, Strategic Decision Comprehensiveness, and Firm Performance: The Moderating Role of TMT Cognitive Conflict*”, **Management and Organization Review**, S.18(1), ss.131-166.
- YIN, Yufei and KEXIN, Cao (2024), “*The Impact of Mixed-Ownership Reform on Zombie Firms: Evidence From Chinese Listed SOEs*”, **Plos One**, S.19(7), ss.(0301048).

