Are debt collection agencies truly acyclical and crisis-proof?

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Abstract	Keywords
This paper examines the resilience of debt collection agencies during economic downturns and financial crises, challenging the notion that the industry is acyclical. The motivation stems from a gap in academic literature assessing how economic cycles impact debt collectors' financial performance. Using a combination of case study analysis and statistical methods, the study evaluates the financial results and stock returns of 13 publicly listed debt collection companies over two major crises: the 2007–2009 financial crisis and the COVID-19 pandemic. Findings reveal that while the industry slows during crises, it is not immune. The contribution lies in providing new insights into the cyclical vulnerability of this under-researched sector.	• debt collection • financial analysis • macroeconomic • economic cycles

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Introduction

Business cycles and the financial condition of enterprises are among the most well-researched areas in literature related to economics and business. The economy's position in either a recession or recovery phase significantly influences the factors that affect the financial health of companies in various sectors. In the literature, this issue has been analysed for a long time, with researchers examining

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how different economic cycles impact revenues, profits, liquidity or the value of businesses. Schumpeter (1939) was one of the pioneers in analysing the issue of business cycles, emphasising that financial crises are an inherent part of the functioning of a capitalist economy, particularly affecting smaller enterprises with fewer reserves and financial resources to survive under less favourable conditions. These studies laid the foundation for many subsequent studies investigating the impact of economic cyclicality on the financial condition of companies.

A new approach to analysing dynamic time series and business cycles was proposed by Hamilton (1989). In his work, he demonstrated that during an economic downturn, companies experience a decline in revenues, an increase in costs and a drop in profitability. Fazzari et al. (1987) focused on the limitations of companies' ability to incur debt, which often leads to reduced investment spending and competitiveness, implying that access to capital is crucial for business survival. Similar conclusions were drawn from the analysis by Bernanke and Gertler (1986), who studied credit shocks and their impact on corporate decision-making, revealing significant problems in maintaining profitability during periods of restricted financing. Oliner and Rudebusch (1992) examined the relationship between business cycles and companies' investment expenditures. They found that companies invest in innovations during economic strength, improving efficiency. During crises, however, due to limited capital, companies struggle with declining profits and loss of liquidity. In their analysis of smaller companies, Bernanke et al. (1994) demonstrated that due to limited access to capital markets, smaller firms are more vulnerable to financial difficulties during downturns than corporations with more extensive reserves. Davis and Haltiwanger (1990) addressed the financial condition of companies from an employment perspective, confirming that in difficult times, businesses tend to reduce staff, which in the long run limits productivity and growth, as it is harder to return to pre-crisis employment levels. Campello et. (2010), analysing the impact of the 2008 financial crisis, found that restricted access to financing during a recession significantly hampers the ability to regain competitiveness during expansion periods.

There are also many analyses focusing on the financial condition of specific industries. Sun et al. (2019) analysed the cyclicality of the construction market and pointed out that companies experience reduced demand for housing and infrastructure investments during recessions. Similar phenomena have been observed in the automotive sector, which is sensitive to supply chain disruptions and decreased demand (Klepper & Graddy, 1990). Aikman et al. (2015), analysing the banking sector, indicated that banks with more diversified loan portfolios cope better with crises. However, systemically, the entire sector loses its ability to generate high margins.

Another popular research trend is analysing stock prices, macroeconomic factors and business cycles. Chen et al. (1986) set the direction for research on an-

alysing macroeconomic phenomena in the stock market. By analysing variables such as inflation, industrial production and interest rates, they demonstrated the relationship between these indicators and stock prices, especially in the construction and financial sectors, which are highly sensitive to changes in financing costs. Fama and French (2015) indicated in their five-factor analysis that inflation and unemployment significantly impact the performance of companies and investments. Rehmann et al. (2021) analysed the impact of the COVID-19 pandemic on stock prices, finding that the crisis had the most significant impact on companies in the service and transportation sectors due to the nature of the crisis. They also showed that companies dependent on individual consumption were more vulnerable to the crisis than high-tech companies. In a cross-sectional study, Bekaert and Harvey (1997) demonstrated that global stock market volatility is significantly related to global interest rates, commodity prices and public debt levels. They indicated that global crises destabilise markets and cause significant declines in stock prices.

In light of the above analysis, it is clear that negative economic conditions negatively affect companies' financial performance and stock prices. Despite their specific nature, debt collection companies also experience problems similar to those of other types of businesses, and these issues can be applied to the financial health of debt collection firms. However, due to the specific and sometimes surprising implications of the debt collection market, it is necessary to devote greater attention to this issue. Detailed qualitative analysis of external and internal determinants and the author's considerations regarding their potential impact on the debt collection sector are presented in section 3.

The debt collection industry is often said to be a counter-cyclical sector that performs well in both good and bad market conditions. However, there is a lack of scientific literature confirming this commonly repeated claim in the debt collection industry and trade press. Generally, the debt collection market is an under-researched financial industry sector. Most studies focus on the technical aspects of portfolio valuation or the public corporate debt market. It is challenging to find analyses that verify the financial condition of debt collection companies and their dependence on the economy.

The primary objective of this article is to verify the resilience of debt collection companies to economic slowdowns and crises. Therefore, an attempt was made to verify this impact by examining the resilience of financial performance to economic slowdowns. A qualitative analysis of internal and external determinants affecting financial results and efficiency was also conducted based on literature, market analysis and financial reports of debt collection entities. A broad case study analysis was carried out. Based on financial data from companies, an attempt was made to examine the relationship between the analysed financial results and the level of inflation and GDP dynamics. In addition to financial performance, companies' market valuations and resilience to economic slowdowns

were also examined – comparing the returns generated by a created weighted index of global debt collection companies with the S&P 500 and S&P 500 Finance indexes. Based on these analyses, an attempt was made to answer the question of how the business models of debt collection companies may may generate or prevent dependencies.

1. Debt collection market literature

The financial academic literature regarding debt collection companies is relatively limited. There are a few studies broadly describing the debt collection market and its selected aspects related to, for example, the collection process (Deville, 2015; Fedaseyeu & Hunt, 2015; Kreczmańska-Gigol, 2013, 2015). Much of the literature also focuses on the legal aspects of debt collection companies' activities (Goldberg, 2006; Hurt, 1964; Leonard, 1982; Stifler, 2017; Zywicki, 2016). The most well-researched area in the academic literature concerns the technical aspects of debt portfolio valuation and credit risk. The primary analyses involve credit risk and modelling credit losses for collection processes or determining the fair value of liabilities (Barbagli & Vrins, 2023; Bluhm & Wagner, 2011; Dos Santos, 2020; Duffie & Garleanu, 2001; Ermolova & Penikas, 2019; Han, 2017; Pineau, 2023).

Analyses related to the debt collection market and macroeconomics or corporate finance are limited. These typically address phenomena related to the banking sector (e.g. capital structure) or indicators concerning social issues (Fonesca et al., 2017; Fonesca, 2023). The relationships between debt collection company activity and the supply of consumer credit are also examined (Fedaseyeu, 2020).

Only a few publications analyse the company's financial condition. Karkuki (2011) verified that better receivables management influences the financial performance of companies in Nairobi. Kitonga (2017) studied the determinants of the effectiveness of collection activities on company performance and stock prices but focused on Kenyan banks rather than debt collection companies. However, there is a lack of studies centred on debt collection companies themselves, which researchers often overlook.

According to the author, the lack of analyses from the debt collection market can be explained by two primary arguments. First, the debt collection market is part of the financial sector, but its size is significantly smaller than that of the banking, leasing or investment sectors. Thus, it is often not analysed due to its lesser economic importance. Another reason is the atypical and non-standardised reporting – due to different regulations in various countries, debt collection investments are reported in different places and formats, creating analytical chal-

lenges and requiring many manual adjustments. Another problem is that many debt-collection companies operate within larger financial groups and do not have separate financial reporting.

Nevertheless, the debt collection industry remains an essential part of the sector, and its significance is growing. Therefore, examining the behaviour of this industry is crucial for researchers, investors, and the business World.

2. Debt collection agencies business characteristics

A debt collection company is an economic entity that professionally deals with recovering receivables and other activities supporting the management of a company's liquidity. The debt collection process is complex, requiring high competence and knowledge. Therefore, a debt collection company strives to acquire the appropriate know-how and maximise recoveries at each collection stage. Barowicz (2009, p. 160) defines debt collection as the totality of legal, procedural and factual activities to ensure the debtor fulfils their obligations to the creditor. The business models of debt collection companies are highly diversified and continue to evolve. The largest debt collection companies often offer comprehensive services, including preventive services, monitoring overdue receivables, amicable and court collection, as well as enforcement.

There are many differences in approaches to debt collection. However, from the perspective of this article, the most important is to highlight the distinction between commissioned collection and purchasing own portfolios. In the case of commissioned collection, there is no actual assignment of rights to the receivables to the entity conducting the collection activities. The collection is carried out on behalf of the client. Consequently, the recovered funds, less the collector's fees and the costs of the collection proceedings, go to the receivables' owner (the collection company's client). In this case, the debt collection company's revenue is usually a success fee defined in advance in the contract, representing a percentage of the recovered receivables and reimbursement of court, enforcement, as well as administrative fees (Fedaseyeu, 2020).

The business model is based on acquiring portfolios for the debt collection company's account, which involves the acquisition of individual receivables or portfolios from the original creditors. The nature of the receivables can vary depending on the strategy of the collection entity. The purchasing process (especially for debt portfolios) usually takes the form of a tender, to which several debt collection companies are invited. The companies receive basic information about the portfolio, based on which analysis departments create forecasts of possible cash

flows generated from the package. Ultimately, the buyer is selected based on the highest offered price.

Both commissioned collection and portfolio acquisition by debt collection companies can be conducted in two ways. The first is one-time contracts – under one agreement (tender), the client transfers a defined, closed catalogue of receivables to the collection company, which then handles them. These types of transactions usually cover more extensive portfolios of receivables, providing the debt collection company with a one-time influx of projects. However, there is no certainty about the future supply of projects. An alternative that allows for a more stable flow of projects is establishing a long-term cooperation agreement between the parties. The debt collection service transfers cases of a predetermined nature to the collection company for a specific period, as defined in the agreement.

Similarly, in the case of acquiring one's portfolio, there is the possibility of long-term cooperation. Although less popular than tenders for receivable packages, long-term contracts for purchasing receivables are becoming increasingly common in the Polish debt collection market. These agreements are most often referred to as forward flow contracts. They involve the regular sale of receivables by a given entity to the debt collection company, usually at specified time intervals (mainly monthly, though other arrangements are possible).

In recent times, the role of debt collectors has evolved, and they are no longer solely associated with the activities traditionally linked to debt collection companies, such as commissioned collection and recovering receivables, to increase

Table 1. Business implications for types of debt collection business models

Type of activity		Capital commitment	Automation potential	Scalability	Investment period
Type of portfolio	B2B collection	no impact	limited	limited	long-term
	B2C collection	no impact	high	high	medium-term
Type of collateral	secured claims	higher	limited	limited	long-term
	unsecured claims	lower	high	high	medium-term
Portfolio fragmentation	large individual claims	significant	limited	limited	long-term
	small mass claims	significant	high	high	medium-term
Type of investment in portfolio	commission-based collection	minimal	high	no differences	short-term
	acquisition of own portfolios	significant	high	no differences	medium/long-term

Source: own analysis.

liquidity for commissioning companies. Increasingly, this sector is seen as an essential part of the investment industry. The largest debt collection companies buy debt portfolios for their accounts to increase the profitability of their business. This is becoming an increasingly popular form of operation for such entities.

A key direction of investment in own portfolios by debt collection companies is the purchase of portfolios from banks, not only those in default – companies are also increasingly engaging in the securitisation of such receivables (Carlson, 1995). Debt collection companies conduct their operations in many ways, often combining various activities. A description of the basic types of debt collection activities, along with the described influence of business implications and significance for each type are presented in Table 1.

This article focuses on publicly traded companies, so the analysis mainly concerns those who base their business on collecting their own portfolios.

2.1. Determinants of debt collection business effectiveness

This subsection will present a qualitative analysis of the factors that may affect the business operations of debt collection companies. This analysis will be conducted qualitatively due to the need for more detailed data on specific areas of business activity, particularly in the context of acquired portfolios and the cash flows they generate. The quantitative analysis was conducted by examining the companies' financial results and basic indicators.

2.1.1. Internal determinants

Costs and management quality
Operational costs and management efficiency are crucial for the effectiveness of virtually all types of businesses (Barney & Hesterly, 2019). In the case of debt collection, the key component is the ability to manage variable costs, which arise as the business scales. Due to the nature of debt collection, many activities can be automated (e.g. sending letters, writing lawsuits, searching for debtor data) or improved through process optimisation. In the case of mass debt portfolios, the potential for optimisation is the greatest. Companies that can optimise their processes by utilising modern technologies and effective management methods achieve better financial results.

Another critical aspect is responding appropriately to market and legislative changes. A good example of responding to market shifts was Kruk S.A. halting purchases in the Polish market during increased portfolio prices caused by ineffi-

cient purchases from Getback. Additionally, skilled collection managers must respond in real time to changes in costs resulting from legislative adjustments, such as increased lawsuit fees, which can be mitigated by developing an appropriate collection strategy.

Economies of scale

Economies of scale increase the investment attractiveness of many types of businesses (Caves & Barton, 1990; Panzar & Willig, 1977). A high level of scalability characterises the debt collection business. The more significant the number of cases handled, the lower the unit costs of handling them, particularly for repetitive tasks like communicating with debtors or preparing lawsuits. Cost advantages are significantly influenced by the debt collection company's experience with similar cases. Different types of portfolios require different optimal collection strategies. A different approach is used for low-value debts compared to high-value nominal debts. The process will also differ for mortgage debts compared to lease debts. Large debt collection companies with experience handling various types of debt can leverage their historical experience and invest in solutions that allow for more universally planned and executed collection activities. This is more challenging for smaller companies, which is why many smaller debt collection firms specialise in a particular type of debt, such as telecommunications debt or fines, to maintain high operational leverage despite a smaller scale than market leaders.

Portfolio valuation accuracy and acquisition potential

Proper valuation of a debt portfolio is an essential aspect of determining the results collectors achieve (Kreczmańska-Gigol, 2015). Incorrectly estimating the recoverability potential of debts can lead to reduced profitability and even losses. Companies with advanced analytical models can better assess the recoverability potential and determine appropriate collection strategies and the associated service costs. The offered price must be the lowest among all bidders while providing a sufficient buffer to ensure profitability. Therefore, accurately estimating all variables is exceptionally challenging.

It is also important to note that due to economies of scale, more significant creditors can achieve better results thanks to their know-how and lower unit costs, giving them more pricing flexibility in portfolio acquisitions than their smaller competitors. Moreover, many types of debt portfolios, such as bank portfolios, are often entirely inaccessible to smaller entities due to capital requirements. Banks typically auction large portfolios, which are too expensive for smaller firms to acquire.

Type of debt financing

All industries utilising external capital can increase their business value through proper management (Harris & Raviv, 1991; Myers, 1984). The cost and type of fi-

nancing are most significant for the most capital-intensive, yet also the most profitable part of the debt collection business – collecting own portfolios. Properly adjusting the financing term (as returns on debt portfolios usually occur 1.5–2 years after acquisition) and its cost is critical to achieving profitability. For this reason, many debt collection companies use financing from their parent company, which is often a bank, allowing for low-cost financing. Most companies, however, have to obtain such financing from the market, e.g. in the form of corporate bonds.

Human capital, know-how and technology
Human capital, know-how and technology generally drive the efficiency of any business (Chen et al., 2012; Lepak & Snell, 1999). In debt collection, highly qualified employees, both in operational and managerial positions, are critical to the success of collection activities. The complex legal aspects of collection activities or the best-fit strategies for each type of debt are crucial for the overall process efficiency. Moreover, a proper history of debt collection and data helps train models for valuations and forecasts. Technology allows for better prediction of debtor behaviour and automation of specific processes. The efficiency of debt collection companies is expected to improve further with the implementation of AI solutions in their operations (Phillips & Moggridge, 2019).

2.1.2 External determinants

External factors also significantly impact debt collection activities, which will be discussed below.

Market competition
Market competition affects margins and shapes how businesses operate (Porter, 1998). Intense competition in the debt collection market often leads to pressure on margins, mainly when many companies compete for the same assets (portfolios). Among the largest firms, the most attractive portfolios, due to their scale, are bank portfolios, the supply of which is limited in some markets. As a result, many large enterprises focus on internationalising their operations to expand portfolio acquisition opportunities. However, this also comes with increased operational expenses and the need to learn or acquire expertise about the specifics of the given market (e.g. legal knowledge). Smaller, local entities try to mitigate this problem by focusing on niche markets that larger firms are not interested in (e.g. fines).

Inflation
High inflation negatively affects most businesses by destabilising their operations (Friedman, 1963). For debt collection companies, inflation increases operating costs

due to rising wages and service costs. However, it also has some benefits for collectors. Firstly, inflation increases the nominal recovery potential of portfolios. As prices rise, wages and the nominal value of debt securities (e.g. real estate) often increase, leading to higher recoverability of entire portfolios. Additionally, higher inflation often leads to an increased supply of debt portfolios on the market, as more significant financial burdens cause companies and consumers to miss payments more frequently.

Unemployment

Unemployment levels, like inflation, have positive and negative effects on the debt collection industry (Hassan & Nassar, 2015; Heer & Schubert, 2012). On the one hand, unemployment can lead to a more excellent supply of debt portfolios on the market, potentially resulting in lower prices at auctions. However, an increased number of unemployed individuals also increases the risk of lower recoverability from previously acquired portfolios and may prolong collection processes.

Social transfers

High levels of social transfers, such as benefits or aid programs, have historically been shown to significantly increase the recoverability of consumer portfolios (Lavinas et al., 2024; Leimer, 2016). A bailiff can immediately seize a one-time, significant cash inflow, especially when no exempt amounts are present, preventing the seizure of more significant sums. Additionally, the overall financial situation of debtors improves, leading to an increase in debt repayment rates.

Legal regulations

Changing regulations can significantly affect the debt collection market (Goldberg, 2006; Zywicki, 2016). Consumer protection regulations, restrictions on collection practices, or changes in the judicial system can substantially alter business operations and impact operating costs. These changes may increase administrative costs and limit the ability to pursue certain debts (e.g. changes in the statute of limitations). They often reduce the efficiency of the process by preventing or hindering specific collection procedures.

A crucial element of debt collection activities is the judicial recovery process, so any changes affecting these processes also reflect on the operations of such firms. Positive changes, like the introduction of electronic lawsuit submissions, can significantly speed up and reduce the cost of the process. However, negative changes, such as shortening the statute of limitations, can also occur.

Interest rates

Changes in interest rates can positively impact the supply of debt portfolios, as higher loan repayments on variable-interest loans increase the likelihood of debt

becoming overdue and entering the market (Fedaseyeu, 2020; Fedaseyeu & Hunt, 2015). However, debt collectors often finance their operations using bonds with variable interest rates, potentially reducing profitability due to rising interest costs.

Economic cycles

Economic cycles affect most businesses, though their impact varies – some sectors are less affected (e.g. the food industry), while others are more sensitive (e.g. construction) (Saviotti & Pyka, 2008). The business cycle also significantly affects the debt collection industry. During periods of economic growth, debt collection companies may see a decrease in the number of insolvent debtors, reducing the demand for their services. Conversely, during recessions or financial crises, the number of debtors increases, raising demand for collection services but potentially hindering the effectiveness of debt recovery efforts.

Thus, while it is commonly believed that the debt collection industry resists economic downturns, the author notes that this still needs to be empirically verified.

The next section of the article will attempt to assess the behaviour of debt collection companies' financial results and stock prices in response to deteriorating economic conditions.

3. Data, variables and method

Financial data for the companies was sourced from the Thomson Reuters Eikon database. The analysis includes information on the basic financial data of companies whose primary business activity was "debt collection" and that were publicly traded. Companies for which debt collection was a secondary activity were excluded from the analysis. Due to operational instability and greater susceptibility to microeconomic factors, companies with total assets less than $1 million in any of the analysed years were eliminated. A total of 13 companies were used for the final analysis. The time series covered 1996 to 2022, although data was unavailable for all companies over such an extended period. For the analysis, all debt collection companies included in the database were selected, provided that their data covered at least 5 years of observations. Table 2 presents primary data on the analysed companies:

For the purpose of this analysis, financial statements from the database were examined, and the following variables were prepared:

– total revenues,
– net profit,

Table 2. Companies included in the analysis

No.	Name of company	Country of incorporation	Timespan
1	Encore Capital Group, Inc	USA	1996–2022
2	Hoist Finance AB	Sweden	2012–2022
3	PRA Group, Inc.	USA	1999–2022
4	KRUK Spółka Akcyjna	Poland	2008–2022
5	Credit Corp Group Limited	Australia	2001–2022
6	Axactor ASA	Norway	2016–2022
7	BEST S.A.	Poland	1997–2022
8	B2 Impact ASA	France	2012–2022
9	JMT Network Services PCL	Thailand	2010–2022
10	Global Service Center PCL	Thailand	2018–2022
11	Kredyt Inkaso S.A.	Poland	2008–2022
12	Chayo Group PCL	Thailand	2014–2022
13	Intrum AB	Sweden	2001–2022

Source: own study based on Thomson Reuters Eikon database (https://eikon.refinitiv.com/).

– cash flows from operating activities,
– investment expenditures on debt portfolios,
– value of assets.

To reflect company behaviour against the backdrop of macroeconomic conditions, inflation rates and GDP growth indicators for the regions where the analysed companies operated were also obtained. This data were sourced from the International Monetary Fund. Additionally, stock prices of the selected companies and relevant stock market indices were obtained from the Thomson Reuters Eikon database to support the analysis.

The primary aim of this article is to verify the resilience of debt collection companies to economic slowdowns and crises. Accordingly, three approaches were adopted to assess this impact:

1. **Verification of the resilience of financial results to economic slowdowns**. This issue will be addressed in two ways:

   a) Case study analysis: Based on financial data, indicators of revenue dynamics, profitability and portfolio purchases were prepared and compared with average values for the industry during crisis periods of 2007–2009 and 2019–2021. This approach aimed to verify whether debt collection companies are internally resilient to crises or their performance deteriorates during more challenging economic times.

b) Statistical analysis: Using simple Pearson correlation, the relationships between the analysed financial results and both inflation and GDP growth levels were examined.

2. **Verification of stock prices' resilience to economic slowdowns**: The returns generated by a constructed balanced index of global debt collection companies were compared with the S&P 500 index and the S&P 500 Finance index.

Based on the above analyses, the article will also present analyses aimed at answering how the business models of debt collection companies can lead to the formation of relationships or their absence.

4. Results

The first issue to be examined in this article is the financial resilience of debt collection companies to challenging economic conditions. For this analysis, the following average financial indicators for the entities in the analysed group were selected for examination:

– revenue dynamics,
– net profit profitability,
– dynamics of portfolio purchases.
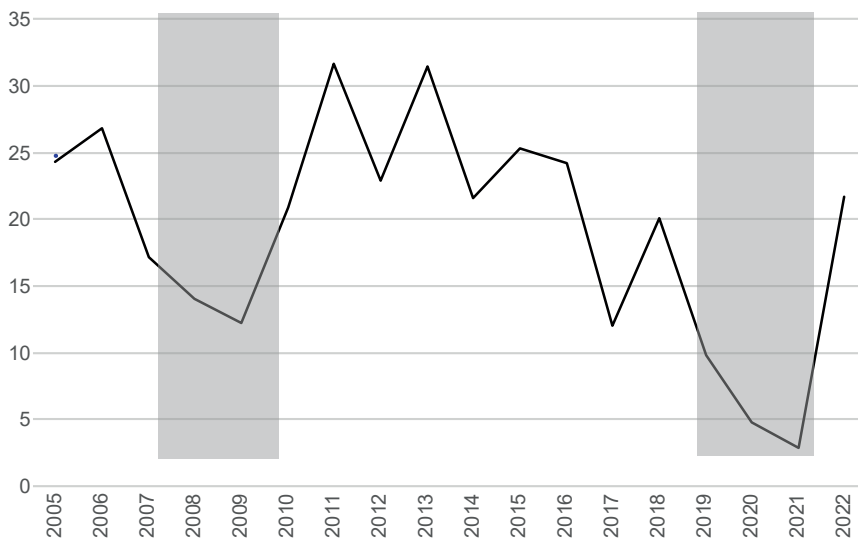
Figure 1. Cumulative revenue dynamics for debt collection companies (in %)
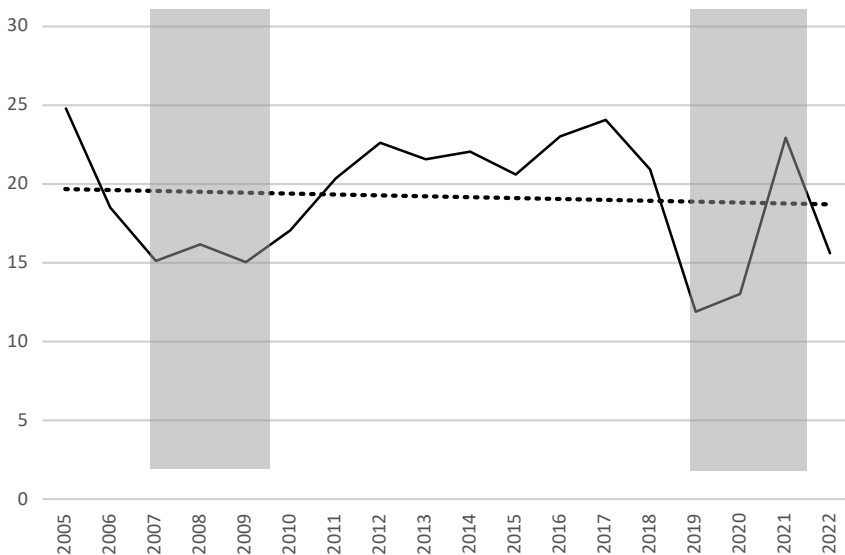
Source: own analysis.

The crisis years were defined as the period from 2007 to 2009 and the SaRS CoV2 pandemic from 2020 to 2021. Figure 1 presents the average revenue dynamics for the analysed entities.

Figure 1 shows that during the crisis years, revenue dynamics significantly declined in the years marked with a grey background indicating crises. Of course, the downward trend is partly due to the base effect and the overall expansion of the analysed companies, but it is evident that the crisis years performed significantly worse than the trend line. Therefore, it cannot be said that crises do not affect the current development of debt collection companies.

It is certainly positive that the analysed group did not report negative revenue dynamics, which can be considered a sign of resilience, as many in the financial sector did experience declines in this area.

However, revenue does not reflect a company's financial health alone; profitability is also a significant indicator of operational effectiveness. Therefore, while debt collection companies may be forced to limit their scale of operations and reduce risk, their margins remain high. Figure 2 presents the profitability of net income in the sector.

On average, debt collection companies in the analysed group exhibited a net profitability of around 20.0% from 2005 to 2022. During the 2007–2009 crisis, profitability dropped significantly, but it began to improve in subsequent years and stabilised between 20.0% and 25.0% for a long time. However, similar to rev-

Figure 2. Cumulative net profit for debt collection companies (in %)

Source: own analysis.

enue, declines in business efficiency are also evident, though they are not as se-
vere as those seen in revenue dynamics.

The analysis of revenue dynamics and net profitability requires some context.
Both crises were somewhat different. The first was related to speculation in the fi-
nancial markets, leading to a general collapse of the financial sector and liquidity in
the market. Securing financing became difficult, and investors withdrew from the
markets. On the other hand, the COVID-19 crisis also had similar effects regarding
general market risk aversion. However, the most severe consequence for the debt
collection market was the significant hindrance to conducting collection activities.
In some countries, legal collections were completely frozen as courts were closed.

However, a notable rebound in profitability was observed in 2021, likely due
to increased portfolio recoveries driven by substantial social transfers. This trend
in 2021 is not visible in revenue dynamics, as many companies were forced to re-
duce their investment expenditures on portfolios. However, for those who already
had portfolios, business efficiency significantly improved. Figure 3 presents the
dynamics of expenditures on debt portfolios and cash flows from financial opera-
tions. Those who did not invest in portfolios during that period did not see corre-
sponding revenue dynamics, which only returned to normal in 2022.

The author's statement regarding the connection between the debt collection
sector and the entire financial market, as well as the performance of companies,
can be attributed to access to financing. The sector's revenues significantly de-

**Figure 3. Cumulative portfolio purchases to assets (left axis) and dynamics of cash
flows (right axis) of debt collection companies (in %)**

Source: own analysis.

pend on the ability to acquire new debt portfolios, which require substantial capital often raised through bond issuance or bank loans. In the absence of access to financing, acquiring portfolios becomes problematic, leading to challenges in maintaining average growth dynamics.

The response is different in terms of profitability. Fortunately, the presented analysis encompasses data concerning financial crises of entirely different natures. During the 2007–2009 crisis, profitability significantly declined throughout the crisis period due to a substantial deterioration in the financial situation of both companies and consumers. The ability to collect debts from portfolios could have been much improved.

In the case of the COVID-19 crisis, the initial situation was caused by restrictions on operational activities. However, there was a noticeable leap in profitability due to the significant role of social transfers, high inflation and improved financial conditions – especially for consumers. However, this was hindered by issues regarding access to financing for debt collection companies.

Another note is that debt collection companies are dependent on growth. The debt collection business exhibits significant economies of scale due to the automation of many processes and the standardisation of specific collection strategies. Thus, the lack of new portfolio purchases and consequently reduced utilisation of potential recoveries (as most recoveries from debt portfolios occur within 3–5 years of purchase) lead to a decrease in operational leverage.

A correlation analysis between the studied and macroeconomic indicators was conducted to verify further how economic conditions influence the financial results of debt collection companies. Due to the number of observations, the correlation analysis was limited to companies operating in the European market, using indicators for EU GDP and inflation in EU countries. The conclusions are presented in Table 3.

Table 3. Variables correlation

Var	GDP growth	CPI
Cumulative revenues	0.19	0.01
Cumulative net margin	0.57**	−0.01
Portfolio purchases dynamics	0.49**	0.30
Portfolio purchases to assets	0.23	−0.00

Note: * *p*-value < 0.1; ** *p*-value < 0.05.
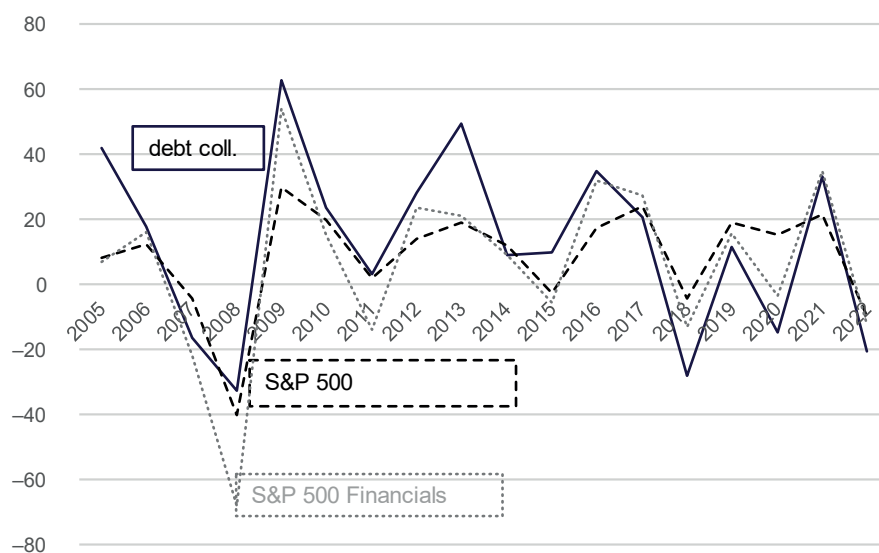
Source: own analysis.

It is evident that the only statistically significant variables are the relationship between the dynamics of portfolio purchases and net profit margins. These are

not very strong correlations, but they exist. This suggests that inflation does not significantly impact debt collection companies; however, this may be because inflation did not change significantly in the analysed period (only towards the end). A significant correlation between margins and GDP is observed in the case of GDP dynamics. This aligns with expectations, as repayment issues are less prevalent during prosperous times, resulting in fewer potential portfolios for purchase, and those acquired tend to perform better. Additionally, access to financing is more accessible, allowing for the acquisition of new portfolios that can scale the business.

Stock market performance
In the next step of this analysis, the focus shifts to an additional issue – investor perception. Since the results show a specific positive correlation with the broader economy, might it be that investors view investments in debt collection companies favourably and seek them out as a haven?

Figure 4. S&P 500 and S&P 500 Financials compared with debt collection avg stock performance (in %)

Source: own analysis.

Unfortunately, the analysis of the chart in Figure 4 leads to entirely different conclusions. During the crisis years, the debt collection industry performed only slightly better than the broad S&P 500 index and the S&P 500 Financials index. This indicates that stock market investors, in a risk-off scenario, retreat from the shares of debt-collection companies to a similar extent as they do in other sectors of the economy. This aligns with the findings from previous analyses focusing

on financial results. In the analysed crisis years, debt collection companies faced problems similar to those encountered by businesses in other sectors: issues with obtaining financing, limitations on operational activities and worse financial situations for both firms and consumers. Therefore, it is not surprising to analyse the correlation between the returns of the examined stock indices and the created index of debt collection companies, the results of which are presented in Table 4.

Table 4. Variables correlation

Pair	GDP
S&P 500 vs S&P 500 Financials	0.95**
S&P 500 vs debt collection index	0.77**
S&P 500 Financials vs debt collection	0.85**

Note: * p-value < 0.1; ** p-value < 0.05.

Source: own analysis.

The correlation between the S&P 500 and S&P 500 Financials and the debt collection industry is statistically significant and strong or very strong. Therefore, this confirms that although the debt collection industry operates under a completely different business model than, for example, the banking sector, macroeconomic issues affect this sector to a very similar degree, both in good times and the bad ones.

Conclusions

The analyses presented in this article demonstrate that the debt collection industry cannot be considered acyclical or fully crisis-proof. Instead, its resilience depends both on the nature of the crisis and the internal characteristics of the companies themselves.

First, the results confirm that during both the global financial crisis of 2007–2009 and the COVID-19 pandemic, debt collection companies experienced a slowdown in revenue growth and a decline in profitability. The evidence shows that while these firms did not collapse as severely as some other financial institutions, they were nevertheless significantly affected by adverse macroeconomic conditions. This finding challenges the popular belief that debt collection is entirely counter-cyclical.

Second, the type of crisis matters. The 2007–2009 financial crisis primarily undermined debt collection through restricted access to financing and weaker recoveries from portfolios, leading to lower profitability. By contrast, the COVID-19

crisis was characterised less by financial market disfunction and more by operational disruptions, such as court closures, which directly limited the ability to conduct enforcement proceedings. At the same time, unprecedented fiscal transfers and inflation created a temporary boost in recoverability. These differences illustrate that resilience is contingent on whether the crisis originates in the financial system or is rooted in broader social and institutional disruptions.

Third, the correlation analysis confirms that debt collection companies' performance is significantly related to GDP dynamics, while the role of inflation appears more nuanced. This suggests that resilience is not absolute but conditional: in times of growth, companies benefit from more efficient recoveries and easier access to financing, whereas in downturns, both revenue generation and portfolio acquisition are constrained.

Finally, the stock market evidence shows that investors perceive debt collection companies similarly to other financial institutions: in periods of heightened risk aversion, their shares decline in line with the broader market. This further undermines the thesis of exceptional counter-cyclicality.

Taken together, the findings lead to three key conclusions. (1) Debt collection companies are partially resilient but not immune to crises. (2) The impact depends strongly on the type of crisis – financial crises weaken profitability through capital access and portfolio performance, while systemic shocks like the pandemic disrupt operations but may create offsetting effects via policy support. (3) Future resilience will depend on the sector's ability to diversify financing sources, adapt to legal and operational disruptions, and leverage technology to sustain efficiency in volatile environments.

Further research should explore how different business models – particularly smaller firms relying on commissioned collection rather than portfolio investment – respond to various crisis types. This would provide a more granular understanding of resilience across the industry and help determine whether certain models are better suited to withstand shocks than others.

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