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# FINANCIAL MANAGEMENT AND RISK AMONG POLISH DEVELOPERS IN THE PERIOD OF COVID-19 PANDEMIC

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**Purpose:** The paper aims to examine the effectiveness of financial management in business activities conducted by property development enterprises, seen as participants of investment and construction processes in Poland, in the period of the COVID-19 pandemic. The discussions outlined in the paper are underpinned by the category of risk in the construction business and refer to the developers whose operations are based predominantly in the south of Poland.

**Design/methodology/approach**: In its basic part the paper deals with the property development companies in the period of time spanning from December 2019 to December 2020. The empirical research was carried out using case studies. It also takes advantage of some elements of comparative analysis, as well as the method of synthesis and the concept of deduction. In their discussions the authors also draw on their own expertise and the experience gained from the studies they have carried out in the area of risk management in construction organisations for many years now. The conclusions the publication arrives in result also from the knowledge extracted from the literature on the subject matter.

**Findings:** The paper offers an empirical verification of the theoretical contents found in the scholarly literature.

**Research limitations/implications**: The paper addresses a limited range of issues only, selected from the vast area of financial and risk management in property development enterprises which operate on the residential real-estate market.

**Practical implications:** The paper presents some practical insights (the utilitarian dimension of knowledge), verified empirically by means of analyses and evaluations.

**Originality/value:** The deliberations in the paper are hoped to cast some light onto the conditions in which property development enterprises conduct their business during the COVID-19 pandemic and look at their financial standing by analysing the risks encountered in the construction industry. The discussions reviewed in the paper refer to the notion of a so-called black swan, i.e. a category addressed by risk management publications.

**Keywords:** Financial management, construction risk, property development enterprises, real-estate market, case study analyses.

**Category of the paper:** Research paper.

## 1. Introduction

The pandemic brought about by the SARS-CoV-2 virus, causing a contagious COVID-19 disease, has provoked the need for the science to take a new look at the altered conditions in which the construction business operates but also to address a new category of risk connected with a global pandemic (the epidemiological risk). The scholarly literature on the construction business did not use to devote much thought to that threat, which may be reviewed here by using the universal risk mechanism (Flanagan, and Norman, 1993; Palmer et al., 1993; Smith, et al., 2006). When applied to the coronavirus pandemic and its impact on the construction sector the mechanism may be used to investigate the causes of risk, its types and the consequences it may lead to (Kochański & Partners, 2020; Oksiński, 2020; Rybarczyk, 2020). From the scientific perspective, the concept of black swans may be employed, i.e. an unprecedented and unpredictable phenomenon which has occurred in the present economic environment, changing the rules of social and business lives, leading to the collapse of previously established standards and challenging the perception of reality (Taleb, 2021). It poses some questions about the nature of the risk and its impact on the economic condition of the entities participating in investment and construction processes.

The key aim of the publication is to present the effectiveness of financial management, taking into account the risks the property development enterprises are exposed to when conducting their business activities in the period of the COVID-19 pandemic. In particular, the paper shows how the developers have adapted to the strict sanitary regime under which they have to operate and how this has affected their management and financial condition in late 2020. The deliberations focus on the analysis and the evaluation of the situation during so-called first and second waves of coronavirus infections. The empirical illustration of this issue are the Polish property development companies, comprised in a portfolio of Silesian Cooperative Bank (Śląski Bank Spółdzielczy „Silesia”) in Katowice, which finances their operations. The developers and financial data presented in the paper are anonymised by using the consecutive letters of the alphabet, from A to K, as names of the organisations. These property development companies carry out projects on the residential real-estate market, mostly in the south of Poland. They include mainly small and medium-sized enterprises acting as developers-investors and developers-contractors. As the evaluations given in the paper concern 11 developers, case studies are used. The discussions, however, are embedded in the general condition of the construction industry in Poland, which is reflected by stock exchange indices such as WIG-Construction and WIG-Developers.

As the theoretical and practical views on these issues can be found in the scholarly literature (Socha, 2000; Dąbrowski, and Kirejczyk, 2001; Gawron, 2006; Siewiera, 2008; Śmietana, and Tworek, 2011; Sitek, 2014; Tworek, and Myrczek, 2015, 2016, 2017), the authors here have chosen to focus on the empirical layer. Nevertheless, the paper is underpinned by the theory of financial and risk management in the (residential) construction business. It provides an outline of the selected issues in this field, based on a prior review of the literature on the subject matter.

## 2. Financial management and risk in property development enterprises – case study analyses

All the enterprises which work on real estate development projects are commercial law companies. Four of them are joint-stock companies (spółka akcyjna), while seven have the status of limited liability companies (spółka z ograniczoną odpowiedzialnością). Table 1 presents a list of the developers surveyed, with the general evaluation of their financial standing, provided by banking analysts and controllers working for Silesian Cooperative Bank in Katowice.

**Table 1.**
*A list of analysed real estate development enterprises as of the end of 2020, presenting their general financial standing*

| Developer | Legal status | Economic condition | Timely payments |
|---|---|---|---|
| A | Sp. z o.o. | + | + |
| B | Sp. z o.o. | +- | + |
| C | Sp. z o.o. | +- | +- * |
| D | Sp. z o.o. | + | + |
| E | S.A. | + | + |
| F | S.A. | + | + |
| G | Sp. z o.o. | +- | + |
| H | S.A. | + | + |
| I | Sp. z o.o. | + | + |
| J | S.A. | + | + |
| K | Sp. z o.o. | + | + |

Note. Economic condition: + means good, +- means a deteriorating condition which needs to be monitored (temporary difficulties that pose no threat of going out of business), - means a poor condition which may pose a threat of the developer going out of business. Timely payments: + means good, +- means delays but no threat of debts not being finally repaid, - means the suspension of payments, a potential threat of the debt remaining unrepaid, - *means a delayed repayment of all the debt after the sale of flats in January 2021, past the end of the analysed period. Source: Silesian Cooperative Bank in Katowice, Poland.

As can be seen in Table 1, as many as 75% of the property development companies find themselves in a good or a very good economic condition. Only three of the developers went through some temporary difficulties which, however, posed no threat of those companies going out of business. More importantly, every developer here was able to make timely repayments of their debts which meant the absence of any financial liquidity risk. One developer repaid its loan instalments after due dates but they settled all their liabilities in late January 2021. None of the organisations surveyed experienced any risk of going bankrupt. Furthermore, none of the companies used any government aid, in form of the anti-crisis shield, which is another proof for their sound financial standing. It should be added that the financial condition of the reviewed enterprises is largely affected by the fact that they operate in the residential real-estate market. This sector had quite successfully gone through the difficult period of adaptation to the execution of projects in the first months of the SARS-CoV-2 pandemic, and the decisions made by the Monetary Policy Council and the National Bank of Poland (the Polish Central Bank) on a significant reduction in interest rates triggered a buying spree on the real-estate market which, in turn, encouraged the developers to start new construction undertakings (Ptaszyński, 2021). These issues should be analysed through the category of interest rate risk (Palmer et al., 1993; Merna, and Al-Thani, 2001; Bunni, 2003; Dallas, 2006; Pike, and Neale, 2003; Burtonshaw-Gunn, 2009). To complete the picture presented above, Table 2 provides some financial performance figures.

**Table 2.**
*A list of selected data on the financial condition of property development enterprises in 2020, in the wake of the second COVID-19 wave*

| Developer | Original financing | Net profit | | | | Net profit margin (NPM) | | | | Current ratio (CR) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Nov 2019 | Jun 2020 | Sep 2020 | Dec 2020 | Nov 2019 | Jun 2020 | Sep 2020 | Dec 2020 | Dec 2019 | Jun 2020 | Sep 2020 | Dec 2020 |
| A* | 10-20 | 10-20 | 218% | 336% | 187% | 18% | 41% | 47% | 40% | 3.5 | 2.0 | 2.3 | 3.8 |
| B | 5-10 | (-)0 | (-)0 | (-)0 | (+)0 | <0 | <0 | <0 | 3% | 1.0 | 1.0 | 1.0 | 1.0 |
| C | 0-5 | (-)0 | (-)0 | (-)0 | - | <0 | <0 | - | - | 1.1 | 1.1 | - | - |
| D | 5-10 | (+)0 | (+)0 | (+)0 | 230% | 7% | 11% | 13% | 14% | 0.7 | 1.2 | 2.4 | 1.3 |
| E* | 5-10 | 20-100 | 17% | 43% | - | 5% | 2% | 3% | - | 1.7 | 1.9 | 1.7 | - |
| F* | 5-10 | 10-20 | 25% | 25% | - | 7% | 6% | 4% | - | 1.3 | 1.5 | 1.4 | - |
| G* | 5-10 | (-)0 | (-)0 | (-)0 | (+)0 | <0 | <0 | <0 | 44% | 1.9 | 3.8 | 4.6 | 3.7 |
| H* | 5-10 | 10-20 | 9% | 64% | 85% | 24% | 7% | 18% | 14% | 11.4 | 12.4 | 23.7 | 14.0 |
| I* | 5-10 | >100 | 81% | 81% | 89% | 3% | 6% | 3% | 4% | 0.9 | 1.0 | 1.0 | 1.0 |
| J* | 10-20 | >100 | 48% | 63% | 130% | 15% | 9% | 10% | 13% | 3.2 | 2.3 | 2.3 | 2.2 |
| K* | 10-20 | 10-20 | 55% | 83% | 121% | 13% | 15% | 14% | 15% | 4.4 | 6.0 | 4.7 | 4.5 |

Note. * means that a profit is given in comparison to Dec 2019 figure (2019 profit figures in the given period are shown in PLN million); (-)0 and (+)0 means a small loss or a small profit, compared respectively to the previous data; - means no data available. Source: Silesian Cooperative Bank in Katowice, Poland.

When analysing the figures given in Table 2, showing the net profit generated by the developers in the analysed period, it should be noted that in all the cases where such data were available they are at least satisfactory, and sometimes the result is actually quite high. This applies, in particular, to enterprises A, I, J and K. In general, they started with a high amount of owner equity, and they closed December 2019 with a good result which, for organisations I and J, exceeded PLN 100,000,000, allowing them to continue to operate also in the difficult period of spring 2020 (a lockdown). Developers E, F and H, however, look slightly worse in comparison but made up for that by generating a healthy net profit margin and maintaining a good level of financial liquidity. In particular, company H stands out in terms of a strategic approach to management over its financial liquidity (the rate is much higher than 1). The current ratio it generated is a few times as high as the ones reported by the other developers. Developer K also ranks quite well in Table 2. However, a clear leader here is developer A. During the COVID-19 pandemic this organisation reported a net profit which is almost twice as high as the figure they earned in 2019. They achieved the highest net profit margins, coupled with a very good current ratio, which proves the high effectiveness of their business operations.

Summing up, when looking at the figures given in Table 2 we can see that the vast majority of developers generated positive financial results when closing 2019, in the following three calendar quarters and at the end of 2020. The losses made by some of the entities surveyed were relatively low, compared to their own equity figures or balance-sheet totals and posed no threat to their future existence. The net profit margin, defined in the literature (Brigham, and Gapenski, 2000; Dallas, 2006; Gitman, 2006; Brealey et al., 2007; Hartman, 2007; Minasowicz, 2009; Burtonshaw-Gunn, 2009) as part of revenue from sales, makes a net profit for an enterprise and it is positive for the majority of the enterprises reviewed here; developers A, D, H, J and K reported high or very high values. Their current ratios amounted to 1 or more, which makes their current assets sufficient to cover all their existing accounts payable. Even when faced with temporary losses due to their investment cycle or the materialisation of endogenous or exogenous risks, every developer had enough resources to settle the payments owed to their business partners, employees, to pay their taxes and financial costs. Another important thing here is the fact that no one of the organisations surveyed was subject to any debt collection proceedings or was listed in any Polish debtor databases such as Krajowy Rejestr Długów (KRD), Biuro Informacji Kredytowej (BIK) – BIK-Przedsiębiorca register.

When it comes to the risks which occurred in the analysed period of time, the developers listed in Table 2 had a number of challenges to overcome, i.e. they had to deal with investment and project risks (Boothroyd, and Emmett, 1996; Godfrey, and Halcrow, 1996; Edwards, and Bowen, 2005; Sitek, 2014; Smith et al., 2006; Loosemore et al., 2006). In particular, after March 24, 2020 the following sources of risk were identified as likely to affect their budgets and timely performance of construction projects: first of all, delays in administrative decision-making and in obtaining building or occupancy permits; secondly, a temporary shortage of staff due to COVID-19, e.g. staff being ill or quarantined, foreign workers, mainly construction workers from Ukraine, who had to return to their home country; thirdly, delays in supplies of raw materials, construction materials, prefabricated goods and subassemblies; fourthly, a risk related to the maintenance of high quality levels (the need to find substitutes to replace the materials which were not supplied, time pressure due to the need to deal with the backlog caused by delays); fifthly, a rise in costs of construction projects, resulting from the implementation of guidelines to comply with the sanitary requirements stipulated in the Regulation on COVID-19 pandemic (disinfecting agents, additional protective clothing, keeping social distance, additional sanitary facilities, transport of workers to construction sites) (Regulation, 2020); sixthly, a risk of the failure to meet agreed project delivery dates; seventhly, the difficulties to obtain funds, encountered by the developers as well as potential buyers of flats on the real-estate market; eighthly, more difficult access to notarial services, problems in customer mobility due to quarantines or social contact limitations (Kochański & Partners, 2020; Oksiński, 2020; Rybarczyk, 2020).

Table 3 below shows a summary of the figures for all the property development companies surveyed, in terms of their net profit and revenue, derived predominantly from sales of flats, and of their funds, such as owner equity.

**Table 3.**
*Summarised financial data for the developers surveyed (in PLN million)*

| **Net financial result** | | | | | **Revenue** | | | | | **Owner equity** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dec 2019 | Mar 2020 | Jun 2020 | Sep 2020 | Dec 2020 | Dec 2019 | Mar 2020 | Jun 2020 | Sep 2020 | Dec 2020 | Dec 2019 | Mar 2020 | Jun 2020 | Sep 2020 | Dec 2020 |
| 190 | 52 | 83 | 136 | 216 | 1664 | 416 | 890 | 1305 | 1765 | 1035 | 1086 | 1115 | 1162 | 1217 |
| % compared to Dec 2019 | | | | | | | | | | | | | | |
| 100% | 27% | 44% | 72% | 114% | 100% | 25% | 53% | 78% | 106% | 100% | 105% | 108% | 112% | 118% |

Note. In cases when data for December 2020 were not available (C, E, F) the calculations are based on November 2020 figures. Source: Silesian Cooperative Bank in Katowice, Poland.

The net financial result, generated by the entire group of the property development enterprises surveyed in the first calendar quarter of 2020, was 27%, compared to the figure for 2019 (Table 3). An important thing here is the fact that the SARS-CoV-2 pandemic in Poland started to gain its full momentum in the last days of March 2020, i.e. after March 24, and the sanitary restrictions imposed on the construction sector were not as harsh at that time. In the second quarter of 2020 the net profit dynamics weakened slightly; the year-to-date figure was 44%, compared to the entire 2019, but the volume of sales of flats remained at the previous year's level. It may be assumed that a drop in net profit arose from a slight decrease in flat prices. The following calendar quarter of 2020 brought about a notable improvement in the organisations covered by the research. Revenue from sales, from January to September 2020, amounted to 78% of the total value of 2019 sales and the net financial result generated by the companies reviewed here was 72%, compared to the level reached a year before. These data allow us to conclude that the developers managed to maintain their high dynamics of sales of flats and even further intensify their sales on the real-estate market in late 2020. At the same time, they increased their portfolio of projects in the residential real-estate market, with frequent cases of flat prices going up. What's also important here is the value of their owner equity (Table 3). Property development enterprises possess significant financial resources, which totalled more than PLN 1 billion at the end of 2019 for all developers combined. Together with revenues and current ratios reported by the organisations surveyed this constitutes strong evidence that most of the entities enjoyed a healthy financial standing. This also explains why they are so resilient to the materialisation of risks and able to cover their temporary losses. Attention should also be drawn here to healthily balanced financial management policies, pursued by these companies as regards profit retention. Their owner equity figures went up by 18% in 2020. It seems that when faced with a growing uncertainty on the market, property development enterprises, rather than paying out dividend to their shareholders, are more likely to use their net profit to increase their capital instead. Such accumulation of funds will make it easier for them to scale up their operations in the future, even if the market conditions deteriorate or some temporary losses are made, thus allowing them to continue property development activities. A high level of owner equity, frequently invested in land banking, i.e. parcels of land for potential future investment, makes such organisations still more attractive for lenders.

## 3. Conclusion

When evaluating the financial condition of the organisations covered by the paper and looking at this issue through the prism of financial and construction risks it should be kept in mind that we will only be able to see a complete picture of the impact that the COVID-19 pandemic has had on the Polish construction industry after a number of years. This is, first of all, due to the very nature of construction and investment processes, as well as the specific characteristics of the real-estate market in Poland but also worldwide. In the period of time under review developers carried out contracts which had been added to their portfolios some two or three years earlier. Nevertheless, in the conditions of the SARS-CoV-2 pandemic, the managerial results achieved by the property development enterprises surveyed show that the economic health and the financial standing of property developers operating on the residential real-estate market after the two waves of the pandemic are surprisingly good, and this market segment also appears to be potentially stable. The current situation in the Polish financial market and an increased risk of inflation, as well as social and mentality changes triggered by the need to work from home offices and limit mobility and social contacts, made the population still more desirous of having their own flats (Kochański & Partners, 2020). This trend is also reinforced by low interest rates set by the Central Bank and a housing packet signed by the President of Poland (Ministerstwo, 2021). Its aim is to intensify the residential construction business and support the industry, which has been affected by the ongoing pandemic, by increasing the funding for council housing projects and for the digitalisation of construction processes (Kochański & Partners, 2020). All these things seem to strengthen and enhance the positive factors in the financial and economic environment of the property development sector in Poland, and contribute to a relatively low business risk (Brigham, and Gapenski, 2000; Young, and Tippins, 2001), when compared to other forms of business activity. Irrespective of that, however, the global COVID-19 pandemic made developers aware of the volatile environment they will be operating in the nearest future, facing a high degree of unpredictability. Here we should also look at the findings of the empirical studies provided by the Polish Association of Construction Industry Employers, which show that in November 2020 as many as 70% of employees worked at their workstations while in April of the same year this figure was just 50% (Koronawirus, 2021). At the same time, 20% of employees worked remotely, compared to 25% earlier on (Koronawirus, 2021). Employees absent from work due to illness or other reasons accounted for approx. 10%, while earlier that figure was 20% (Koronawirus, 2021). On average, 1 employee in every company was quarantined, while previously it used to be 2 employees per company (Koronawirus 2021). There was also a drop in employment of foreign workers – it is about 40%, and in early April 2020 this figure was also 40%; this mainly applies to subcontractors and may have an adverse impact on timely performance of construction projects (Koronawirus, 2021). A problem in finding foreign workers is connected with the procedures related to mobility and accommodation during the pandemic (Koronawirus, 2021).

Therefore, the epidemiological risk is another category which should always be considered when doing research into risks experienced by the construction sector. In many countries worldwide the sudden outbreak of the pandemic made their economies grind to a halt and crippled the entire construction industries. Besides, the predictions about the possible following waves of the COVID-19 pandemic added to the uncertainty of what the future may bring for the projects which are underway. In Poland activities in the residential construction sector continued, with the required sanitary regime having been put in place and the sanitary restrictions being complied with. This does not mean, however, that the construction industry, including property development, has not been affected by an economic crisis caused by the SARS-CoV-2 pandemic. The development of vaccines against COVID-19 and the launch of a vaccination programme have improved the mood among entities operating in the construction sector, allowing the sector to stay optimistic about their nearest future in Poland.

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