

## The review of the financial strategies of Polish pulp and paper companies listed on the Warsaw Stock Exchange

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**Abstract:** *The review of the financial strategies of Polish pulp and paper companies listed on the Warsaw Stock Exchange.* The main purpose of this paper is to evaluate the financial strategy undertaken by the Polish pulp and paper companies listed on Warsaw Stock Exchange in 2018 - 2020. In this paper three most frequently used indicators characterising company's financing strategy were analysed, namely: equity capital share in total capital, equity capital share in fixed assets and long-term debt share in total debt. The calculations used data from publicly available quarterly financial statements of the analysed enterprises for the period from 1<sup>st</sup> quarter of 2018 to 3<sup>rd</sup> quarter of 2020. The calculations showed that Kompap has a more moderate policy of financing its activity. The second company, Arctic Paper, was characterized by a more risky approach to the financing strategy.

*Keywords:* pulp and paper companies, financial strategy, Warsaw Stock Exchange

### INTRODUCTION

As shown by statistical data, the pulp and paper industry can be classified as one of the largest industries in the world and, despite many challenges, it is a dynamically developing branch of industry in the world (Brunnhöfer *et al.* 2020, Przybysz 2010). The most significant countries for the pulp and paper industry are those located in North America (the United States and Canada), Europe (Finland and Sweden) and Asia (Japan). In addition to the above-mentioned countries, the countries of Latin America and Australasia are also important in the development of the pulp and paper industry. It is expected that India and China will also gain increasing importance of their pulp and paper industry in the coming years (Bajpai 2018).

According to CEPI Statistics European pulp and paper industry provides 180000 jobs and has a turnover of EUR 83 billion. It is worth to mention that it adds EUR 18.5 billion to the European Union GDP. European pulp and paper industry total pulp production reaches slightly over 36 million tonnes per year, but its consumption is over 38 million tonnes, which means that demand is met by imports (in 2020 trade balance reaches around -2 million tonnes). CEPI statistics suggests that there has been an increasing trend in pulp production since the 1990s, amounting to +0.2% per year. When it comes to paper and board production of European pulp and paper industry, it produces over 85 million tonnes; consumption in the local market is lower and reaches 71 million tonnes, of which 5.2 million tonnes are imported. European pulp and paper industry exports 19.4 million tonnes of paper and board (CEPI Statistics 2020).

One of the many factors influencing the importance of the paper processing industry in the world is the high position of paper, which, despite the development of digital technologies, is still a willingly used information carrier (Małachowska *et al.* 2020a). The growing importance of paper is also the result of European Union legislation to prohibit the sale of disposable products made of standard plastics (COM/2018/340 final—2018/0172 (COD)) - these products are expected to be substituted with biodegradable products, such as paper-based products (Małachowska *et al.* 2020b).

The pulp and paper industry has recently struggled with many problems. European producers are facing increased competition from Asia, which is driven not only by innovation, competition and a strong and well-functioning single market, but also output and employment

targets. The growing competition of developing countries such as Brazil or Indonesia, as well as the aforementioned European Union environmental policy and the outbreak of the coronavirus, have led to a slowdown in growth and a decline in profitability in recent years in the industry, which in turn resulted in a 30% decrease in the number of companies between 2000 and 2017 in Europe. Another symptom of the pulp and paper industry difficulties is the decline in employment, which has been estimated at 37% since 2000 (Biernacka *et al.* 2019).

In the face of market difficulties, it should be expected that the enterprises management will make a number of difficult decisions, for example related to limiting expenses. It seems justified to assume that the actions taken by the managers are reflected in the economic and financial results of entities. Therefore, it seems reasonable to verify whether enterprises are changing their financing strategy facing the problems.

**MATERIALS AND METHODS**

The aim of the research was to define the financial strategy of the pulp and paper industry companies listed on the Warsaw Stock Exchange (WSE) in the face of difficulties on the world markets.

It was assumed that in the face of increasing difficulties with the sale of products, causing an increase in receivables, companies will apply an appropriate policy of financing the entity's activity. It was also assumed that the adopted financing strategy would leave a mark on the enterprises capital and liabilities structure. In this paper two representatives of pulp and paper industry enterprises listed on the WSE were analysed. In calculations the data contained in quarterly financial statements of analysed companies from years 2018-2020 were used. Table 1 shows business profiles of pulp and paper companies listed on Warsaw Stock Exchange.

Table 1. Business profiles of pulp and paper enterprises listed on Warsaw Stock Exchange

<b>Name of company</b>	<b>Business profile</b>	<b><i>Year of debut on Warsaw Stock Exchange</i></b>
KOMPAP	Pulp and paper company	1996
Arctic Paper	Pulp and paper company	2009

Source: Authors' own study based on Warsaw Stock Exchange data.

Selected pulp and paper industry companies location on the map of Poland are shown in Figure 1.



Source: Authors' own elaboration  
Figure 1. Pulp and paper companies location on the map of Poland

Both of pulp and paper enterprises are listed on main WSE market (GPW Podstawowy) and their quotations, among others, are used to calculate WIG – the Warsaw Stock Exchange General Index (Infostrefa 2021).

## FINANCIAL STRATEGIES CHARACTERISTICS

There are many ways to finance entity's operations. The primary source of information about company's capital structure are financial statements. They contain information not only about the company's assets, but also about equity and foreign capital involved in financing its activity (Bień 2005). In particular, information about entity's capital structure allow to estimate entity's financial strategy (Kołosowska *et al.* 2019).

Three types of business financing strategy, for example: aggressive, moderate and conservative, are presented in the literature. Aggressive strategy is based on the assumption that fixed assets and part of the current assets are financed by short-term foreign capital. Aggressive strategy is associated with higher level of financial risk (Michalak 2013). Characteristic feature of the aggressive strategy is low company's liquidity, which may cause threat to the enterprise solvency. It is risky strategy but, on the other hand, gives the chance of higher profits.

The conservative strategy assumes that the equity and foreign long-term capital cover not only fixed assets, but also part of the current assets. In this strategy the share of short-term financing is low, which reduces financial risk. The conservative strategy is a safe strategy. It strengthens enterprise's financial stability, but results in high engagement of equity capital and foreign long-term capital and increase in financial costs (Tokarski 2006).

The last way of financing strategy is moderate strategy. This strategy assumes that the fixed assets are financed by equity capital and long-term debt, and the current assets from short-term debt. A moderate financial risk, equity capital profitability and absorbing average financial costs are main features of this strategy.

Table 2 characterises the moderate, aggressive and conservative strategies indicators.

Table 2. Characteristics of company financing strategy indicators

Feature	Financing strategy		
	Moderate	Aggressive	Conservative
Equity capital share in total capital	medium	low	high
Foreign capital share in total capital	medium	high	low
Equity capital share in fixed assets	around 1	below 1	above 1

Source: Authors' own study.

The following indicators were used to characterise the financial structure of pulp and paper companies listed on WSE:

1. equity capital share in total capital, calculated as equity capital/total capital [%],
2. foreign capital share in total capital, calculated as foreign capital/total capital [%].

Another measure used to estimate the financial strategy of pulp and paper companies was equity capital share in fixed assets.

To complete the information on the companies' debt structure the following measures were used:

1. Long-term liabilities share in total liabilities, calculated as long-term liabilities/total liabilities
2. Short-term liabilities share in total liabilities, calculated as short-term liabilities/total liabilities.

## RESULTS

Figure 2 shows values of equity capital share in total capital indicator characterising the financing structure of pulp and paper companies listed on Warsaw Stock Exchange.

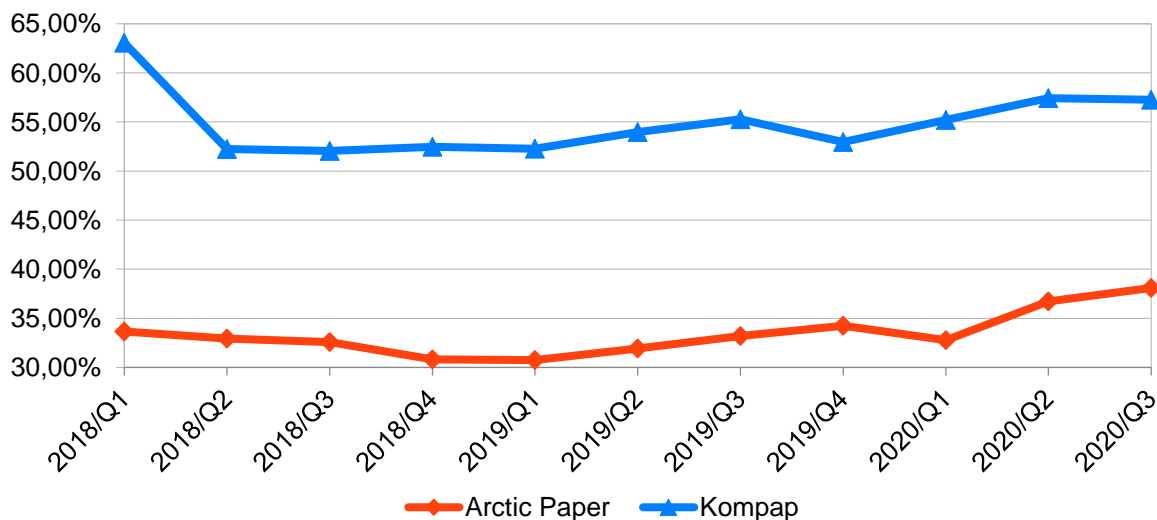


Figure 2. Equity capital share in total capital in subsequent quarters of 2018-2020 for pulp and paper companies listed on Warsaw Stock Exchange

The analysis of Figure 2 shows that the lowest values of equity capital share in total capital indicator were noted for Arctic Paper. The indicator values for this company fluctuate in the analysed period from 30% to 40%, with an increase in the measure values being observed in the last quarters of the analysed period. In the case of the second of the analysed companies listed on WSE, the values of the equity capital share in total capital indicator ranged from 53% to 63%. The values obtained by Kompap indicate that the company pursues a more conservative policy of financing its activity compared to Arctic Paper. In the case of this enterprise, the increase in the equity capital share in activity financing is also visible in the last quarters of the period under review.

The calculation results of the equity capital share in fixed assets are shown in Figure 3.

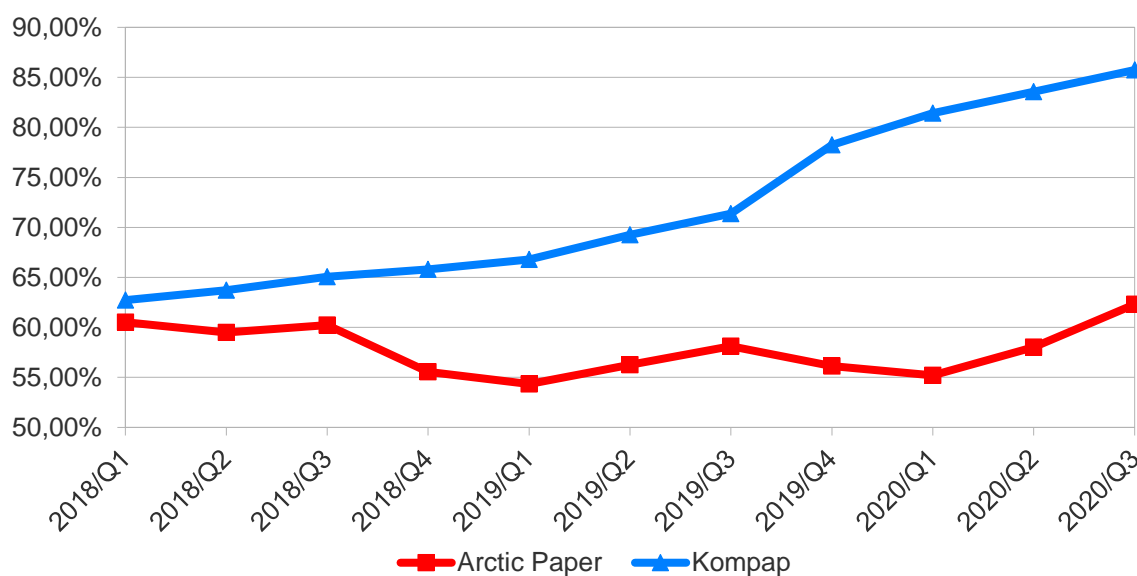


Figure 3. Equity capital share in fixed assets in subsequent quarters of 2018-2020 for pulp and paper companies listed on Warsaw Stock Exchange

The share of equity capital in fixed assets of the surveyed entities in 2018-2020 ranged from slightly above 55% to around 86%. The analysis of Figure 3 shows that the level of the measured values for Arctic Paper does not show any major fluctuations and is within the range of 55-63%, while in the case of Kompap throughout the analysed period allows to notice a stable growth. Initially, the values of the equity capital share in fixed assets ratio amounted to approx. 63%, and in the last analysed quarter reached 85.74%. The fact that the financing of fixed assets is based on the company's equity capital may be a factor pointing to the growing uncertainty in global markets caused by the COVID-19 pandemic.

Figure 4 shows a graphic illustration of changes in the share of long-term liabilities of the analysed enterprises in relation to their total liabilities.

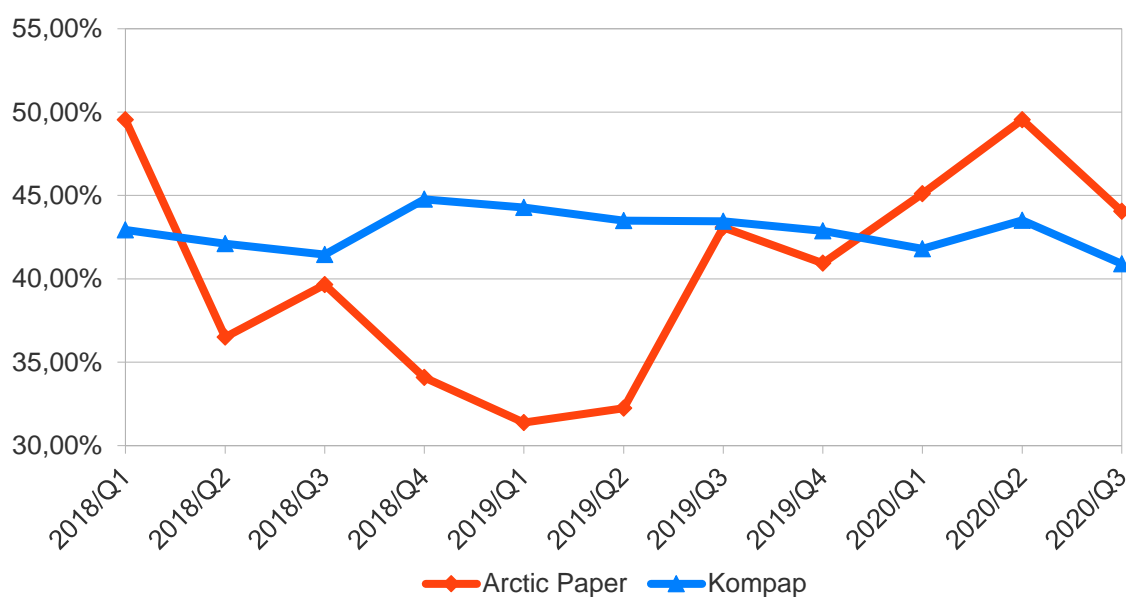


Figure 4. Long-term liabilities share in total liabilities in subsequent quarters of 2018-2020 for pulp and paper companies listed on Warsaw Stock Exchange

The future uncertainty and its influence on the decisions of enterprises management is also visible in the analysis of enterprises' debt. The analysis of Figure 4 shows that the share of long-term liabilities in the activity financing is different in the case of mentioned companies. The indicator values for Arctic Paper are characterized by variability. In the first analysed quarter, the company's long-term debt accounted half of the company's debt. In subsequent periods to mid-2019 a downward trend in the measure values can be observed (lowest level of long-term debt was reached at around 32%). Starting from the 2<sup>nd</sup> quarter of 2019, a renewed increase in the company's long-term debt can be observed. In the last, 3<sup>rd</sup> quarter of 2020, the share of long-term debt in enterprise financing amounted to 44%. Analysing the values of Arctic Paper long-term liabilities, it can be noted that in the last analysed quarter they reached a level similar to the one recorded at the beginning of the analysed period.

A different situation in the share of long-term debt in the total debt of Kompap can be observed. The values of the company's long-term debt throughout the analysed period are at a similar level, ranging from approximately 41% to 45%. It is worth noting that the company recorded the lowest value of long-term debt in the last quarter of analysed period. The values of long-term company's debt analysis shows that in the last quarter it reached a half of the value recorded in the first analysed quarter.

## CONCLUSIONS

The economic lockdowns and slowdowns caused by the COVID-19 epidemic have had an impact on the EU communities and economies, as well as its industries and companies. The companies listed on Warsaw Stock Exchange belonging to the pulp and paper industry were not spared of the difficulties. The analysis carried out with the three indicators showed that Kompas was characterized by a moderate or even conservative financing strategy. This is indicated by the values of the equity capital share in total capital and a degree of equity capital coverage in fixed assets. Also, the auxiliary index used in the analysis, which was the share of long-term debt in total debt and the level of the company long-term debt itself, indicates a careful policy of financing the company's activity. The Arctic Paper's financial policy seems to be more riskier. This is evidenced by the values of the equity capital in total capital obtained by the enterprise and the low level of equity capital coverage of the company's fixed assets. Despite relatively high levels of Arctic Paper long-term debt, in the last analysed quarter, company's long-term liabilities decreased by about 10% compared to the previous quarter. The activities of the analysed companies in the field of debt reduction and the increase in the share of companies' equity capital in financing their activity allow to conclude that the enterprises noticed the upcoming economic slowdown.

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**Streszczenie:** *Przegląd strategii finansowych polskich spółek papierniczych notowanych na Gieldzie Papierów Wartościowych w Warszawie.* Głównym celem artykułu jest ocena strategii finansowej podjętej przez spółki należące do branży celulozowo-papierniczej notowanych na Gieldzie Papierów Wartościowych w Warszawie w latach 2018-2020. W niniejszym opracowaniu przeanalizowano trzy najczęściej stosowane wskaźniki charakteryzujące strategię finansowania działalności przedsiębiorstwa, a mianowicie: udział kapitału własnego w kapitale ogółem, udział kapitału własnego w aktywach trwałych oraz udział długoterminowego zadłużenia w zadłużeniu ogółem. W obliczeniach wykorzystano dane z publicznie dostępnych kwartalnych sprawozdań finansowych analizowanych spółek z okresu od pierwszego kwartału 2018 do trzeciego kwartału 2020. Z obliczeń wynika, iż Kompap prowadzi bardziej umiarkowaną politykę finansowania swojej działalności. Drugą ze spółek, Arctic Paper charakteryzowało bardziej ryzykowne podejście do strategii finansowania.

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