

INVESTMENT ATTRACTIVENESS OF CONVERTIBLE BONDS TRADED ON THE CATALYST MARKET

Anna Rybka*

Abstract

This paper reflects on the characteristics of convertible bonds as a source of financing for the issuer and as a form of capital investment. The author presents certain factors that influence the investment attractiveness of convertible bonds and indicates opportunities that result from the investor's rights incorporated into these hybrid instruments. The empirical part of the paper contains an analysis of particular features of convertible bonds the are traded on the Catalyst market.

Keywords: *convertible bonds, conversion price, conversion date, conversion premium, Catalyst market.*

1. Introduction

Development of capital and money markets implies the growth of importance of debt instruments. These are used as a source of financing for companies and as a form of capital investments. It is observed that new products appear on the debt market that increasingly meet issuers' requirements and are more attractive for their owners. What has been growing especially dynamically is the corporate bonds market. Corporate bonds are a good source of capital for companies that have limited credit worthiness or do not want to be dependent on one particular business partner.

Among all of the corporate bonds available in a debt market, it is convertible bonds that play a very important role. These are hybrid instruments that combine features of debt and stockholders' equity. Due to their specific structure, convertible bonds offer flexible financing for issuers and an alternative to standard coupon bonds for investors.

The aim of this article is to identify certain factors that decide on the investment attractiveness of convertible bonds from the bondholder perspective and to evaluate these factors for convertibles traded on the Catalyst market.

* PhD student, Faculty of Finance, Cracow University of Economics, email address: ania.rybka@poczta.onet.pl.

The thesis of this work is that the features of convertible bonds traded on the Catalyst market do not allow the investor to fully profit from owner's rights incorporated into the bonds.

The first part of this article deals with the structure of convertible bonds and the role these instruments play as a source of capital for companies. The second part focuses on the features that influence the investment attractiveness of convertible bonds and shows some indicators of conversion's profitability for bond's owner. The third part contains the evaluation of the investment attractiveness of convertibles traded on the Catalyst market. The analysis is based on all series of convertible bonds available on the market on 31 December, 2012.

2. Specification of convertible bonds

Convertible bonds are a specific type of debt instruments. Apart from all features that are typical to standard coupon bonds, these give the investor the right to convert the instruments into the issuers' common shares. M. Poślad, S. Thiel and T. Zwoliński (2006) define convertible bonds as financial instruments that allow the owner to acquire company shares in exchange for the bond's liability. In literature, a conversion right is often identified as the call option, e.g. M. Sierpińska and T. Jachna (2007) note that convertibles can be presented as standard coupon bonds that are being sold with a call option for the issuer's shares (with the exception that this option cannot be sold separately). In Poland the issue of convertible bonds is regulated by the Bonds Act of June 29, 1995 (Dz. U. 1995 Nr 83 poz. 420 ze zm.). According to art. 20, paragraph 1 of the Act, "if this is allowed by the Articles of Association, the company can issue convertible bonds that entitle the owner to acquire company shares in exchange for these bonds".

Because of the conversion option that is an additional owner's right when compared with a standard coupon bond, the convertible bond is characterized by the specific quantities and features. Among these worth noting are (Bień, 2001):

- conversion ratio,
- conversion price,
- conversion date.

The conversion ratio specifies a number of shares of the underlying stock for which the convertible bond can be exchanged when the conversion is effected. The conversion price is the quotient of the bond's face value and conversion ratio. What should be emphasized is that both features are secured against stock dilution. In the case of a split or the issue of a new series of shares, the conversion ratio and the conversion price values are adjusted

accordingly. Calculations of new parameters are defined in the information documents of convertible bonds (Antkiewicz, 2009).

The conversion date informs when the owner of the bond is allowed to convert it into shares. The issuer can define several conversion dates, e.g. on certain days, certain time periods or on the day of maturity. However, according to the Bonds Act, it is forbidden to set the conversion date after the maturity day.

Specification of the features mentioned above in information documents of convertibles is the obligation imposed by Polish legislation directly. According to art. 20, paragraph 4 of the Bond Act “the issuer of convertible bonds is obliged to include details in the information document concerning the following features:

- dates when conversion is permissible,
- method for calculating conversion figures of bonds into shares (...).”

From the issuer’s perspective, convertible bonds are above all a source of financing. The main criterion for capital classification is its origin. Here, two major sources can be identified: internal and external (Iwin-Garzyńska, 2011). Internal capital can come from retained earnings, amortization allowance or decrease in asset value. Hence, these are the financial resources earned or retained by company. The source of external financing are individuals and business entities in a company’s environment. External capital has two basic forms: equity and debt. Internal financing depends on the legal and organizational type of a company. This could be some form of contribution from stakeholders, partners or shareholders. For a public limited company this is the share capital gained from the shares’ issue. Financing by debt is performed through various financial instruments (in a capital market, money market or financial service market), in a commodities market and other specific forms (e.g. leasing).

The choice of the source of capital and determination of capital structure (in terms of proportion between equity and debt) is one of the most significant challenge for managers of a company (Duliniec, 2011). In particular, there are no standardized solutions of how the optimal capital structure should look because both sources of financing have their own advantages and disadvantages.

Convertible bonds are instruments that combine features of debt and stockholders’ equity. Their basic advantage is the possibility to simultaneously manage all negative aspects of both sources of capital (Marszałek, 2008). For the purpose of further analysis, Table 1 illustrates the advantages and disadvantages of financing by debt and equity. Since the structure of convertible bonds is a combination of standard coupon bond and share, data in the table focuses on these two sources of capital.

Table 1. Advantages and disadvantages of the issue of bonds and shares as a source of capital in a company

	Advantages	Disadvantages
BONDS ISSUE	<ul style="list-style-type: none"> • the possibility of obtaining a large quantities of cash from many creditors for a longer time period; • no dispersion of the ownership; • the possibility of benefiting from a tax shelter; • a generally, lower cost of capital when compared to the issue of shares. 	<ul style="list-style-type: none"> • the generation of cash payments (regular coupon payments); • the necessity to meet all requirements with respect to the bonds' issue that are imposed by Polish law; • profits occur usually only when the volume of the issue is large.
SHARES ISSUE	<ul style="list-style-type: none"> • no regular cash payments to the shareholders (apart from any dividends); • a positive influence on financial liquidity; • protection for the company's creditors. 	<ul style="list-style-type: none"> • changes in company's ownership structure; • current shareholders lose some part of the future profits; • a relatively longer period of time is needed for preparing of the share issue; • an increase in the supply of shares supply in the stock market may cause the share value to fall.

Source: compiled by A. Rybka, based on: J. Ostaszewski, T. Ciciorko (2005).

An analysis of the information contained in Table 1 leads to the conclusion that a share issue is characterised by features that are not observed for financing by debt. Similarly, there is a noticeable inverse dependence. So convertible bonds that combine features of bonds and of shares enable the company to take advantage of both sources of financing while simultaneously limiting the number of undesired consequences to the company's financial standing. The issue of convertible bonds can be especially beneficial when shareholders do not want to raise any capital at that specific time, while being aware of the possibility of a necessity in future (Ostaszewski and Ciciorko, 2005). Such a situation may occur in a bear market when the valuation of a company is low and there is a risk that the issue of new shares would fail. In these circumstances the issue of convertible bonds postpones raising the company's capital up to the time of the potential conversion. Hence, compared with the issue of shares, earnings per shares do not decrease. At the same time the company can invest the financial resources obtained from the purchasers of convertible bonds starting from early moments of the issue.

The issue of convertible bonds, as opposed to shares, does not imply the immediate dispersion of the company's ownership. Until the conversion date, the owner of the bond is just a company's creditor without voting rights at the annual general meeting.

The company may benefit from a tax shelter as well. The costs in terms of interest decreases the level of taxation while at the same time leading to lower taxes owed. The result is that the effective cost of the debt is lower. What should be emphasized here is that for a share issue the dividend is paid from the net profit just after taxation.

It is also worth mentioning that convertible bonds are usually a very flexible source of financing. The issuer has a significant influence on the how the bond's offer is designed and can fit the maturity day and conversion dates to his own needs and to the purposes of the issue.

It would be incorrect and misleading to consider convertible bonds as instruments that are appropriate only for the companies with weak financial standing that might have difficulties in issuing shares. S. Antkiewicz (2009) also does not agree with this statement. He gives examples of companies whose financial standing was excellent at the moment of a convertible bonds issue and would have been able to issue new shares without major risks.

In light of the advantages of financing by convertible bonds, literature often presents these instruments as tools for decreasing capital costs in a company. It is not the aim of this paper to investigate such cases. However in further areas of this work the author discusses the possibilities of decreasing payments by using the appropriate parameters of the convertible bonds.

2. Factors that influence the investment attractiveness of convertible bonds

While assessing the investment attractiveness of convertible bonds, investors take into account many various factors. Among them are security of the capital allocation (credit risk), yield to maturity, profitability and the maturity date. What is also meaningful is the size of the turnover on the stock market and the ease in selling the instrument.

Convertible bonds, due to their specific structure, combine advantages of investing in capital instruments (shares) and debt instruments (bonds). Thus they seem to be an interesting option for investors that require stable profits but do not want to abandon the chance of additional premiums during a bull market.

Financial resources invested in convertible bonds, similarly to standard bonds, are protected by a legal agreement. This guarantees that the bondholder will be receiving periodic coupon payments and the promised amount of money on the maturity day (with the exception of the zero-coupon bonds).

The conversion option that is incorporated into convertible bonds allows the investor the possibility of additional profits. The option is performed when this pays off for the bondholder. The indicator dictating the profitability of the

conversion is the conversion value (parity). It indicates the market value of the underlying shares that the bondholder can receive in exchange for the bond. The parity is calculated depending on the conversion ratio and stock price on the conversion date. This is a floating value and it increases together with the increase in the stock price and decreases when stock prices fall.

The conversion is profitable for the bondholder when the parity is higher than the market value of the bond. The difference between the price of the bond and the parity is called a conversion premium. Its negative value indicates that the bondholder will generate profits from the conversion.

In practice, what indicates whether the conversion is profitable, is the so called market price of conversion. This is calculated as a quotient of the market value of the bond and the conversion ratio. It indicates how much in fact an investor pays for one share while acquiring it in exchange for the bond. The bondholder profits from the conversion when the market price of the conversion is lower than the current stock price.

The probability of a profitable conversion depends mainly on the features and parameters of the convertible bond. Here, a really significant role is played by the conversion price. The majority of convertible bonds are issued with a positive conversion premium which means that the conversion price is set at a higher level than the current stock price. Only when an increase in stock price occurs, increasing the parity value, does the bondholder profit from the conversion. Hence, the higher the conversion price is, the larger the increase in stock price is required to enable the investor to convert his bond with a premium.

An inverse dependence is observed between the probability of a profitable conversion and the conversion ratio. The higher the number of shares of an underlying stock, the more likely a profitable conversion will take place. This results from the fact that the higher value of the conversion ratio indicates larger changes in the conversion value, even when changes in stock value are minimal.

The probability of a profitable conversion is also determined by the maturity date and conversion date. The longer the time to maturity, the bigger the chance that the stock value (and the market price of conversion at the same time) will reach the level that guarantees profits from a conversion. Even when the conversion price is relatively low and the stock value is growing, too short a time to maturity may mean an insufficient period allowed to reach the required parity value. Similarly, many conversion dates available for bondholders imply a higher probability that on any one particular date a profitable conversion may be possible.

J. Marszałek (2010) notes that conversion price and conversion dates can strengthen each other, reduce or be substitutable. A high conversion price

and short time to maturity mean that a conversion becomes less probable. A bondholder has a greater probability of profiting from a conversion when either conversion price is high, but bond “lifetime” is long or when time to maturity is short, but conversion price is close to the current stock price. A profitable conversion is most probable when the conversion price is low, time to maturity is relatively far and there are many conversion dates available for the bondholder.

By increasing the attractiveness of convertible bonds the issuer lowers the conversion rate (Nelken, 2000). This means that the perspective of future profits from the conversion means that the investor must be willing to accept lower interest payments. Hence, the bondholder resigns from the current cash inflows and hopes to earn more when the conversion goes into effect. J. Marszałek (2010), while investigating the rate of convertible bonds, analysed the instruments traded on the Stuttgart Stock Exchange – one of the most significant stock markets in Germany specializing in hybrid instruments. He noted that, apart from one exception, in the cases of every emission analysed the interest rate for convertible bonds was lower or significantly lower than the standard bond rate issued by the same company.

A lower convertible bond rate, although acceptable for the investor, decreases the investment attractiveness of convertible bonds. Even when bond’s features are set at the level that makes the profitable conversion more probable, an investor is not guaranteed that the conversion will take place. That is why, apart from the standard payments, issuers often offer to bondholders an additional payment – with no conversion premium. This is cash inflow set as a certain percentage of the bond’s face value that is paid to investor on the maturity day in the case a conversion did not occur. Hence, from the bondholder’s perspective, no conversion premium is a kind of a compensation for a lower payments.

What can be also incorporated into the convertible bond is a call provision. This gives the issuer the right to buy back a bond before its maturity day. This option aims to hedge the issuer from undesired changes in stock prices. On the other hand, such an option limits inventor’s right to the conversion and leads to the danger that the conversion will not be effected in the case when it is preceded by the buy back. This means that in the case that the convertible bond is callable, investors should expect a higher yield to maturity at a higher conversion rate.

These are not the only features of convertibles that have an influence on the conversion’s probability. The volatility of the share price is of vital importance here as well. The higher the volatility is, the more probable the stock price will exceed the market price of conversion making conversion profitable. From this point of view, the state of the market and investors’ expectations for future

trends in shares price are significant. Also worth mentioning is that investors' expectations of future share prices have an impact on the lowest rate they are willing to accept.

For the bondholder who invests his financial resources into convertibles, liquidity in turnover or, in other words, the possibility to buy or sell the instrument (at the current market price) easily and immediately, has specific meaning. In Poland, liquidity in the turnover of convertibles is definitely not perfect. One reason for this is that the primary market of convertible bonds is often dominated by hedging funds and asset management companies (Antkiewicz, 2009). However, what should be emphasized here, is that a low level of liquidity is characteristic of the whole corporate bonds market in Poland. At this phase of market growth the investor must be aware that it is almost impossible to get out of his investment quickly without some loss in terms of interest.

3. Analysis of the certain convertible bonds traded on the Catalyst market

In September 2009 the Warsaw Stock Exchange officially launched the market for debt instruments – a platform where treasury bonds, municipal bonds, corporate bonds, co-operative bonds and covered bonds are traded. Before the Catalyst had been established, bonds were traded mainly on the interbank market and to a very limited extend in a regulated market: the Warsaw Stock Exchange and over the counter (e.g. BondSpot). Moreover, the regulated market was dominated by treasury bonds. Corporate bonds accounted for only a small percentage of the whole turnover.

The main goal of setting up a Catalyst market was to create a platform for the trading of debt instruments, where investors could allocate their capital and issuers could source financing for further growth and investments. It was also a response to the increasing need for capital from entrepreneurs in a situation where the availability of bank credit was limited (Raport Catalyst – podsumowanie rozwoju, 2013).

Among many advantages of introducing instruments to the official market are market valuation and improvement of the issuer's image. While offering instruments on the Catalyst market, the issuer becomes less anonymous, while at the same time becoming more recognizable and appreciated by the investors. What is more, by fulfilling all disclosure obligations, the issuer builds its credibility. When entering a Catalyst market, the issuer should take into account both the costs and the risk that are associated with it. Among them are the costs of the issue and initiating the action as well as costs incurred in fulfilment of obligations. Apart from that, the issuer should be aware of

reputational damage in the case the conditions of the issue agreement are broken, (e.g. late payments or a buy-back).

From the investor's perspective, the Catalyst market has become an interesting alternative to the shares market. This could especially be observed at the time of the bear market when investors' preferences changed and were geared towards safer investments (Raport Catalyst – podsumowanie rozwoju, 2013). Hence, the Catalyst market created an opportunity to widen diversification in investment portfolios and it made transactions faster and easier to perform.

Various financial instruments being traded on the Catalyst market include convertible bonds. Yet, participation of these hybrids in the market is not significant. By the end of 2012, convertible bonds accounted for only 1,54% of the all bonds series traded on the Catalyst market (Raport Catalyst – podsumowanie rozwoju, 2013). Table 2 shows some basic information concerning these series.

Table 2. Convertible bonds traded on the Catalyst market (data of 31 December, 2012)

Issuer	Sector	Market of the bonds trade	Market of the shares trade	Value of the issue [pln]
Gant Development	Developers	GPW ASO BS ASO	GPW Main Market	26 000 000
Marvipol	Developers	GPW ASO BS ASO	GPW Main Market	39 400 000
Marvipol	Developers	GPW ASO BS ASO	GPW Main Market	30 791 000
MCI Management	Finance – others	GPW ASO BS ASO	GPW Main Market	50 000 000
Mera	Construction	GPW ASO	NewConnect	758 500
Rubicon Partners	Finanse i inne	GPW ASO BS ASO	GPW Main Market	32 000 000
Warimpex Finanz und Beteiligungs	Developers	BS ASO	GPW Main Market	66 250 000

Source: compiled by A. Rybka, based on: *Raport Catalyst – podsumowanie rozwoju (2013)*.

By the end of 2012 there were seven series of convertible bonds being traded on the Catalyst market. These were issued by six different public limited companies (two series were issued by Marvipol). Among the issuers there were four developers, two companies from financial sector and one construction company. Shares of five of these issuers were traded on the main market on Warsaw Stock Exchange. The exception was Mera company as its shares were offered on Newconnect. This means that the issuers of convertible bonds

belong to the majority of companies with high capitalization and that meet all the disclosure criteria that are imposed by the GPW. It is also worth noting that all mentioned convertibles were traded in an alternative system – one that required only the preparation and drawing up of an information document. This document, contrary to the document required to offer instruments on a regulated market, does not require the authorization of the Polish Financial Supervisory Authority (Obligacje Korporacyjne na Catalyst, 2011).

Table 3 displays information concerning features and quantities of the previously mentioned convertible bonds. These data will be used for further analysis.

Table 3. Certain features of the convertible bonds

Issuer	Stock price at the moment of bond issue [pln]	Conversion price [pln]	Date of the issue	Maturity date	Time to maturity [years]	Conversion dates
Gant Development	19,55	25,00	30/09/2010	28/03/2013	2,5	30/03/2011 29/09/2011 30/03/2012 28/09/2012 28/03/2013
Marvipol	15,00	12,80	29/06/2010	29/06/2013	3	29/12/2010 29/06/2011 29/12/2011 29/06/2012 29/12/2012 29/06/2013
Marvipol	8,56	11,00 12,00 13,00	16/09/2010	16/09/2013	3	16/03/2011 16/09/2011 16/03/2012 16/09/2012 16/03/2013 16/09/2013
MCI Management	5,00	6,25	11/09/2009	11/09/2012	3	20th business day of each even month starting from 20/02/2010
Mera	4,09	5,00	22/04/2010	23/04/2012	2	23/04/2012
Rubicon Partners	1,25	1,60	26/04/2011	26/04/2013	2	26/04/2013
Warimpex Finanz und Beteiligungs	10,33	12,79	6/05/2011	6/05/2014	3	each business day up to the maturity

Source: compiled by A. Rybka, based on the information documents of the convertible bonds.

In six out of the seven investigated cases, at the moment of the bond's issue, the issuer's stock price was lower than the conversion price. Hence, for the investor to generate profits from the conversion, an increase in market valuation of the stocks was required. The only exception were Marvipol's bonds that were issued in 2010. Here, the conversion price was set at 12,80 pln, while the stock price was 15 pln. In this situation, the investor would profit from the potential conversion even at the moment of issue.

What should be also investigated are dates to maturity of the mentioned convertibles. According to the market statistics, the average time to maturity of all corporate bonds traded on Catalyst is 2,3 years (Raport Catalyst – podsumowanie rozwoju, 2013). Taking into account information presented in Table 3, the time to maturity of five out of the seven convertible bonds was longer than the average.

From the investor's perspective, a relatively long time to maturity of convertible bonds makes a profitable conversion much more probable. The bondholder can expect that there will be enough time for conversion value to exceed convertible bond's price. Less probable, when taking into account time to maturity, was the conversion of the bonds issued by Mera and Rubicon Partners. A profitable conversion could occur only when there was an increase in stock prices of 22% (within two years) and 28% (within one year) respectively.

The probability of a conversion is also affected by the conversion dates that are available to the investor. The most flexible in this case are bonds issued by Waripex Finanz und Beteiligungs. Investors are allowed to convert their instruments every business day up to the maturity date. Taking into account that time to maturity for Warimpex's bonds is three years, the chances of stock prices exceeding market price of conversion are optimistic. Similarly, there were several conversion dates set for bonds issued by MCI Management. These could be converted on each 20th business day of the even month, starting from February 20, 2010. In light of the fact that the instruments would mature in three years' time, the probability that investor would have profited was high.

Less probable was that a profitable conversion could be expected by bondholders of the instruments offered by Gant Development and Marvipol. In spite of relatively long maturity dates (2,5 and 3 years respectively), it was possible to convert bonds only on a few business days. The smallest chances for a profitable conversion could be observed by purchasers of bonds issued by Mera and Rubicon Partners. With their short, two year lifetime, these bonds could be converted into shares only on the maturity day.

For all of the above mentioned convertibles, these instruments were converted into shares after submission of an application by investors on certain days before conversion dates. In practise it means that the investor

made a decision whether to convert his bonds a few (over a dozen) days before the conversion date. Hence, the profitability of the conversion was calculated based on stock and bond prices from the period that preceded the conversion date. Although this period was usually a few days long, there was a risk that parity, which was higher than the bond's price at the moment of the application's submission, would change on the final day of the conversion in an undesirable way for the investor. Similarly, it is possible, that a conversion that did not pay off at the moment of investor's decision to resign from the option, would be profitable on the final conversion date as a result of further changes in stock or bonds prices.

Taking into account this risk, it was established as to whether for these bonds such undesirable changes in value of instruments actually took place. As it turned out, sudden fluctuations did not in fact occur in any of the cases. Hence, Table 4, which will be used for the further analysis of the conversion profitability for investor, presents market data only from the particular conversion dates that were set in the information documents.

Table 4. Stock prices and the market price of conversion on the conversion date

Issuer	Conversion dates	Stock price on the conversion date [pln]	Market price of conversion [pln]
Gant Development	30/03/2011	14,00	25,25
	29/09/2011	7,40	24,74
	30/03/2012	8,17	24,99
	28/09/2012	3,78	24,70
	28/03/2013	1,82	22,40
Marvipol	29/12/2010	10,59	12,83
	29/06/2011	9,44	13,08
	29/12/2011	8,90	12,88
	29/06/2012	10,25	12,98
	29/12/2012	9,6	12,08
	29/06/2013	-	-
Marvipol	16/03/2011	9,00	no turnover of the convertible bonds
	16/09/2011	8,56	
	16/03/2012	9,50	11,43
	16/09/2012	10,20	10,84
	16/03/2013	7,25	-
	16/09/2013	-	-
MCI Management	20th business day of each even month starting from 20/02/2010	-	no transactions made on the bonds
Mera	23/04/2012	2,05	5,00
Rubicon Parnters	26/04/2013	-	no transactions made on the bonds
Warimpex Finanz und Beteiligungs	each business day up to the maturity	-	no transactions made on the bonds

Source: compiled by A. Rybka, based on the stock exchange data [www.gpw.pl and www.catalyst.pl].

Data presented in the Table 4 allows for the comparison of stock price and market price of conversion for the convertible bonds issued by three companies: Gant Development, Marvipol and Mera. It can be observed that in each case the conversion did not bring any profits to the investor. The real price of shares that the bondholder had to pay while performing the option exceeded the current stock price. In fact resigning from a conversion was more profitable for the investor.

It should be also emphasized the turnover of the three out of the seven mentioned series was zero. This refers to the instruments issued by MCI Management, Rubicon Partners and Warimpex Finanz und Beteiligungs. From the time the bonds were offered, there were not any transactions made concerning these instruments. This renders it impossible to calculate the market price of conversion and proves there was very low market liquidity at the same time, a fact confirmed by the values of the transactions made on the remaining instruments. The turnover value of Mera's bonds over the whole period these instruments were traded on Catalyst, was only 120,000.00 pln. For two series of Marvipol's bonds it was 5,6 million and 327,000.00 pln respectively (starting from the first offering up to the one before the last conversion date). The transaction of the largest value was observed for the bonds issued by Gant Development at 18,4 million pln (own calculations based on the market data).

Taking into account a low turnover and no chances for a profitable conversion it can be stated that the so-mentioned convertibles have the same characteristics as the standard coupon bonds. As a result of this, it is mainly a standard coupon rate that decides the instrument's yield to maturity. At the same time, it should be emphasized that a company, by issuing convertible bonds, can decrease the coupon rate. Table 5 presents a comparison of the coupon rate of standard bonds to convertibles. For the purpose of this analysis a series of standard bonds issued at the similar time as the convertibles were used.

Worth noting to start with is that the rates of the majority of convertible bonds is based on the WIBOR 3M or WIBOR 6M rate (the same for the standard bonds). Thus any risks connected with rates is the responsibility of the issuer. This solution is safe for the investors but it also discourages them from the selling the bonds in a secondary market, while at the same time is a cause of a low turnover rate.

It is worth emphasizing that for bonds with a floating rate, a margin above the WIBOR rate is in the most cases lower than the margin for the standard bonds. Keeping in mind a low probability of the conversion, such a dependence decreases the investment attractiveness of the instruments. However, for the purpose of the full analysis, all investor's right that are incorporated into convertibles must be investigated.

Convertible bonds issued by Gant Development, despite the lower coupon rate, guarantee the investor a premium without conversion that compensates the lower payments. Such a premium was also included in one of the convertible bond series issued by Marvipol. At the same time the second bond series of this issuer, that was free of additional payment in case the conversions is not effected, had a higher rate.

Rates for convertibles and standard bonds issued by Mera are set on the similar level. Moreover, the standard bonds of this issuer have a call provision incorporated. This makes the risk of reinvestment higher but at the same time, in case of the earlier buy-back, it awards an additional payment to the bondholder (approx. 0,5% of the bond's face value).

Less attractive, from the investor's perspective compared with standard bonds, are convertibles issued by MCI Management. Despite the similar (but not higher) rates, there is a call provision incorporated into the convertible bond. This option could be activated in a situation where after the day of the bonds issue, the stock price exceeded the conversion price by 50% at least one time, one year before the maturity day at the earliest. By including a call provision, the issuer shielded himself from the selling of shares at a price considerably lower than market value. At the same time the issuer made it less probable that the bondholder would profit from the provision.

The instruments issued without additional options and with lower coupon payments when compared with the standard bonds were convertibles offered by Rubikon Partners NFI. Assuming that the conversion did not occur, the yield to maturity of these instruments was the lowest of all the above mentioned bonds issued by the company.

The only company that issued fixed-rate convertible bonds was Warimpex Fianz und Beteiligungs. However, it is difficult to assess the attractiveness of these instruments because of the lack of the information regarding standard bonds offered by the company.

It is also worth mentioning that the issues of convertible bonds, similarly to standard coupon bonds, were unsecured.

Table 5. Comparison between coupon rates of the convertible bonds and the certain standard bonds

Issuer	Type of bond	Issue date	Coupon rate	No conversion premium	Security
Gant Development	standard	29/03/2010	WIBOR 3M + 6,5%		No
		27/05/2010	WIBOR 3M + 4,5%		No
		02/07/2010	WIBOR 6M + 4%		yes (real estate)
		06/09/2010	WIBOR 3M + 6,5%		No
		23/12/2010	WIBOR 3M + 6 %		No
	05/05/2011	WIBOR 3M + 6,5%		No	
	convertible	30/09/2010	WIBOR 6M + 4%	6,25%	no
Marvipol	standard	01/09/2010	WIBOR 3M + 5,8%		No
		29/10/2010	WIBOR 3M + 5,7%		
		06/12/2010	9,45%		yes (financial stoppage)
		13/12/2010	9,45%		yes (financial stoppage)
		04/01/2011	9,45%		yes (financial stoppage)
	08/04/2011	WIBOR 3M + 5,9%		No	
	convertible	29/06/2010	WIBOR 3M + 3%	6%	No
		16/09/2011	WIBOR3M + 4,29%		No
MCI Management	standard	01/07/2010	WIBOR 6M +4,75%		No
	convertible	11/09/2009	WIBOR 6M + 4%	call provisions	No
Mera	convertible	22/04/2010	WIBOR 3M + 8%		No
	standard	17/06/2011	WIBOR 3M + 7,5%	call provisions	No
		6/12/2011	WIBOR 3M + 8%	call provisions	No
Rubikon Partners NFI	standard	15/09/2010	WIBOR 6M + 7%		No
		16/09/2011	WIBOR 6M + 8%		No
	convertible	26/04/2011	WIBOR 6M + 6%		No
Warimpex Fianz und Beteiligungs	convertible	29/04/2011	8,5%		

Source: compiled by A. Rybka, based on the information documents of he convertible bonds.

4. Conclusions

Convertible bonds are an interesting option for growing companies and for capital holders who are looking for alternative opportunities to invest their financial resources. Because of the specific structure of these instruments, investors are willing to resign from the current cash inflows in hope of increased earnings after bonds are converted into shares. An analysis of instruments traded on the Catalyst market leads us to believe that the Polish bond market does not allow investors to fully profit from the additional rights incorporated into convertible bonds.

One of the reasons for this seem to be relatively high conversion prices of the convertibles when compared to stock prices,. With conversion prices set at such a level, reaching a profitable conversion, which requires a significant increase in stock prices, is highly unlikely. For these bonds where it was possible to compare stock prices with the market price of conversion, the investor was unable to generate any profits in any of the cases.

At the same time, the analysis of the seven bonds' series does not fully prove that coupon rates of convertible bonds are relatively lower than the respective rates offered by standard bonds. A few examples can be cited where a lower margin above the WBOR rate was recompensed by a no-conversion premium. Moreover, the differences that occur between coupon rates are small and fluctuate between 0,5 – 2 percentage points. From the investor's perspective, no differences in yield to maturity between standard and convertible bonds and a small probability of conversion are undesirable. In addition such characteristics make convertible bonds degenerate to the level of standard coupon bonds.

What is still far from ideal is the turnover liquidity of convertible bonds. Minimal activity on the market means the investor tends to hold instruments up to the maturity date.

It must be emphasized that in choosing convertible bonds for analysis, certain market factors were not taken into account nor was the issuer's debt structure. Moreover, while analysing the features of convertible bonds it must be understood that these parameters are a reflection of the issuer's policy concerning its capital structure. By choosing certain conversion prices and the conversion dates, the company influences the probability of future conversion while at the same time deciding whether to buy back the bonds or to raise the company's capital.

References

- Antkiewicz, S. (2009). *Polski rynek obligacji i innych papierów wartościowych*. Gdańsk: Wydawnictwo Uniwersytetu Gdańskiego.
- Bień, W. (2001). *Rynek papierów wartościowych*. Warszawa: Difin.
- Duliniec, A. (2011). *Finansowanie przedsiębiorstwa: strategie i instrumenty*. Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Iwin – Garzyńska, J. (2011). *Finanse przedsiębiorstw: kategorie, wartości*. Szczecin: Uniwersytet Szczeciński. Wydział Nauk Ekonomicznych i Zarządzania. Zakład Finansów Przedsiębiorstw.
- Marszałek, J. (2008). *Charakterystyka czasu konwersji obligacji zamiennych na polskim rynku kapitałowym*. In: *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse, Rynki Finansowe, Ubezpieczenia*. Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego.
- Marszałek, J. (2010). *Efektywność rynkowej wyceny obligacji zamiennych – obserwacje z giełdy papierów wartościowych w Zurychu*. In: *Zeszyty Naukowe Uniwersytetu Szczecińskiego*. Szczecin: Wydawnictwo Uniwersytetu Szczecińskiego.
- Nelken, I. (2000). *Handbook of hybrid instruments*. Chinchester: John Wiley & Sons Ltd.
- Ostaszewski, J., Cikirko T. (2005). *Finanse spółki akcyjnej*. Warszawa: Difin.
- Poślad, M., Thiel, S., Zwoliński, T. (2006). *Akcje i obligacje korporacyjne. Oferta publiczna i prywatna*. Warszawa: Komisja Papierów Wartościowych i Giełd.
- Sierpińska, M., Jachna, T. (2007). *Ocena przedsiębiorstwa według standardów światowych*. Warszawa: Wydawnictwo Naukowe PWN.
- Obligacje Korporacyjne na Catalyst* (2011). Warszawa: Giełda Papierów Wartościowych w Warszawie.
- Raport Catalyst – podsumowanie rozwoju* (2013). Warszawa: Grant Thornton.
- The Bond Act of 29 June, 1995 (Dz. U. 1995 Nr 83 poz. 420 ze zm.).