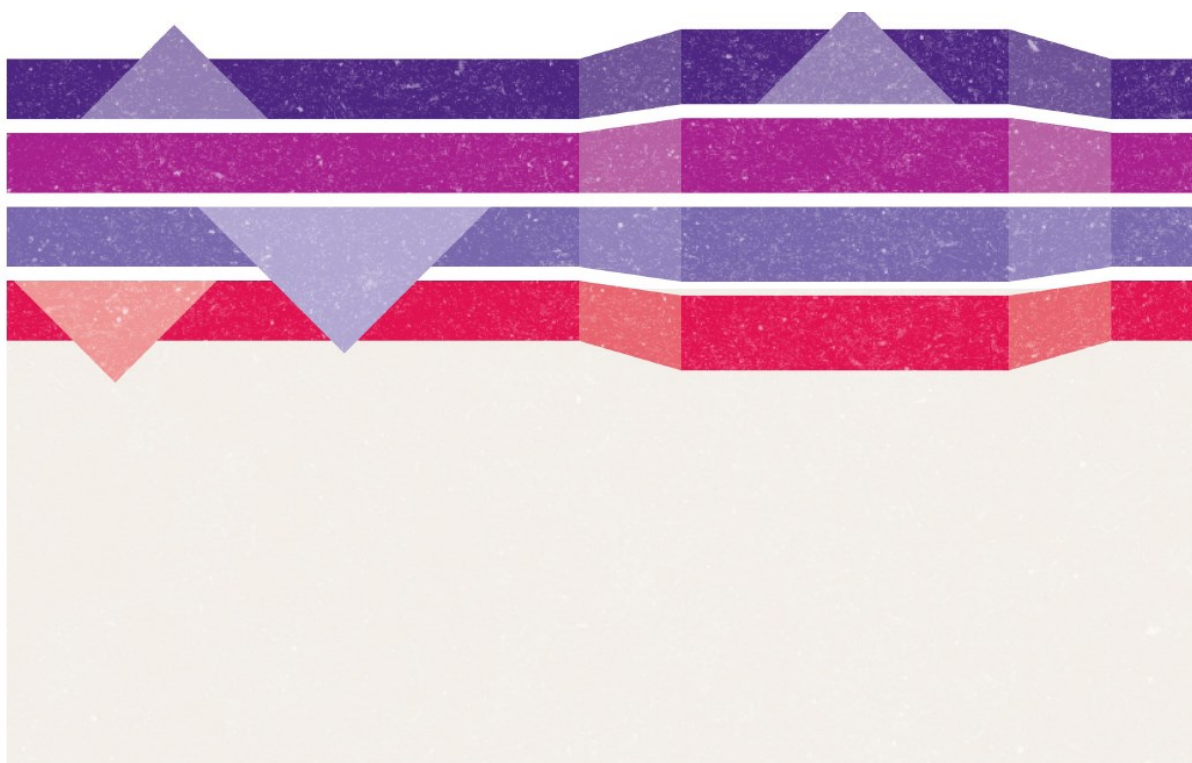


Catalyst Report - Summary and Growth Perspectives

II Edition, December 2013



Introduction

During the four years of its operations, the Catalyst bond market opened by Warsaw Stock Exchange has become an important element of the Polish securities market structure. As of September 30, 2013 a total of 465 series of bonds from 182 issuers were listed and authorized on Catalyst, with a total value exceeding PLN 624.3bn. The value of State Treasury bonds quoted on Catalyst exceeded PLN 565bn¹.

Among others, the following factors have contributed to the growth of the Catalyst market in 2013:

- increasing interest among companies, banks and local governments with financing their business development through issuance of bonds, as well as increasing interest among issuers with having these instruments listed on organized markets. As at the end of September 2013, capitalization of bonds issued by banks and listed on Catalyst represented 87% of the value of all domestic bonds issued by this group of entities, while capitalization of listed bonds issued by companies represented 42% of all domestic bonds issued by companies²,

- increasing popularity of bonds as an opportunity not only translates to a higher number of primary market issues but also higher trading liquidity on the secondary market. The value of trading in non-Treasury bonds on Catalyst in 2012 was PLN 2.47bn, while after three quarters of 2013, it exceeded PLN 3.09bn,

- macroeconomic factors — during the last year, we have witnessed a series of interest rate cuts, resulting in reduction of the reference rate by 2.25 percentage points, to the current level of 2.5%. Lower interest rates on bank deposits encourage investors to seek higher returns, inter alia on the Catalyst market.



Adam Maciejewski
WSE President

With the market conditions and related increase of attractiveness of financing in the form of debt issue, more and more businesses, banks and local governments decide to issue bonds and have them listed on the Catalyst market. Catalyst's prior growth history confirms that this platform meets the expectations of both issuers and investors. The market is still in its early phase of development, but there are good grounds to anticipate its continued rapid growth.

"During the four years of its operations, the Catalyst bond market opened by Warsaw Stock Exchange has become an important element of the Polish securities market structure."

¹ As of October 02, 2013

² As of the end of August 2013, based on WSE data and Fitch Poland reports (excluding short-term instruments up to 365 days, structured instruments and Eurobonds issued by Polish companies and local governments on foreign markets)

Grant Thornton

summary

A year ago, we delivered the first edition of Grant Thornton's report - "Catalyst - Summary of Growth". The publication turned out to be an outstandingly valuable source of information for all parties interested in the bonds market in Poland. Considering the extensive interest in our Report last year, we hereby present the 2nd Edition of the Report, summarizing the 4 years of operations of the WSE Catalyst bond market, with special consideration of municipal bonds, cooperative bonds and corporate bonds.

Last year was a special period on the Catalyst market. Both issuers and bondholders were facing a decrease of interest rates. For issuers, this involved higher attractiveness of financing with bank loans and bonds issue. For investors, it was a time of decreasing interest rates on floating interest rate bonds with simultaneous increase of fixed rate instruments. At the same time, as a result of decreasing interest on bank deposits, Catalyst had the opportunity of attracting a new group of investors who have not yet invested in a debt market.

The above factors fostered a very rapid growth of the market during the last 12 months. As many as 51 new companies debuted on Catalyst, and a very significant group of 50 companies previously existing on the market decided to pursue new issues of bonds. The aggregate value of instruments issued by both these groups was PLN 11.6bn*. This value corresponds to as much as 41.6% of total capital already obtained by issuers on the Catalyst market. The average value of issue was PLN 48.2m, which does not in any way suggest that only large entities are able to gain capital on this market. The smallest issue was by Kancelaria Medius, which earned only PLN 400k.

Issuers allocated 26.7% of the capital acquired to finance their operating activities and 23.3% to investments. However, issuers would most commonly (33.7% of cases) not specify the purpose of their issue.



Przemysław Hewelt
Grant Thornton Capital Markets Team

Apparently, a strong majority of bond issues were not secured (66% of issues). Securing their debts would not guarantee better issue terms to issuers. We believe that for most companies that decided to provide collateral against their bonds, additional collateral was a prerequisite for success of their issues.

A challenge for Catalyst shall be to improve its trading liquidity, which is currently at a level typical for a market in its early stage of growth. This is due to two reasons: method of offering distribution, and coupon structure. Private offerings are still very popular among issuers, which is largely a result of high costs and complex procedure for a public offering. Private offerings limit the accessibility of offers for a broad range of investors, particularly individual investors who are usually more willing to trade bonds on the secondary market. Around 80% of all issues are still floating interest rate bonds, which strongly distinguishes the Catalyst market from other bond trading platforms in Western Europe. Floating coupon does not encourage bondholders to trade bonds on the secondary market.

A significant growth in the volume of listed instruments and the increasing value of trading on that market supports growth of popularity of bonds as a way to raise capital and an investment instrument. These factors lead to a positive outlook on Catalyst's future growth perspectives.

*issues of municipal bonds, cooperative bonds and corporate bonds, excluding EIB, BGK and Eurobonds issues.

Opinions of issuers

Polskie Górnictwo Naftowe i Gazownictwo SA

[The Polish Oil & Gas Company]

On July 30, 2012, PGNiG's debut on the Catalyst market. This issue, within the five-year bonds issue programme allowing the company to raise PLN 2.5bn, is the largest corporate bond issue since on that market.

Slawomir Hinc, Vice-President of the Management Board of PGNiG SA at that time:

"PGNiG SA is among those companies in which financial institutions invest readily. As one of the largest business operators in Poland and a trustworthy borrower, which is confirmed by our high investment rating, we believe that referral of PGNiG bonds to the alternative trading system BondSpot will contribute to its higher liquidity. A bonds trading platform in Poland has a high growth potential, but it needs this kind of stimulus for rapid growth, and PGNiG as a leading national organization intends to participate in this undertaking as well."

Funds from the issue were allocated to covering ongoing financial needs related to pursuance of PGNiG Group's strategy, particularly in exploring shale gas, oil and gas from conventional sources, construction and extension of production sites, underground gas storage and distribution network.



Admiral Boats SA

Admiral Boats is a rapidly growing manufacturer of boats. In July 2011, the Company entered the New-Connect market and less than 3 weeks later, it brought its first series of bonds for quotation on Catalyst. The value of this issue executed as a public offering was PLN 5 m and was redeemed after one and a half years.

Andrzej Bartoszewicz, President of the Management Board of Admiral Boats:

"Our debut on the Catalyst market is the next step in pursuing the company's plans for growth. With the capital thus raised, we will be able to increase our production capacity by nearly 40%, which in turn merits broader expansion to West European markets."



Zamość

Zamość is among the first towns to decide to enter its bonds on the Catalyst market. On December 16, 2009, two series of its bonds were admitted to trading, with a total value of PLN 4m. The funds thus acquired were allocated to financing participation in programs and projects executed with non-returnable foreign funds.

Marcin Zamoyski, Town President, emphasizes that:

"The bonds will also give our town good publicity. We will reach the places we were not present before. This is important as well."

To ensure the town's growth through investments, local authorities need funding that can be obtained from a bank loan or through issue of bonds. Resources from bonds issue offer greater flexibility in financing and do not affect financial liquidity.

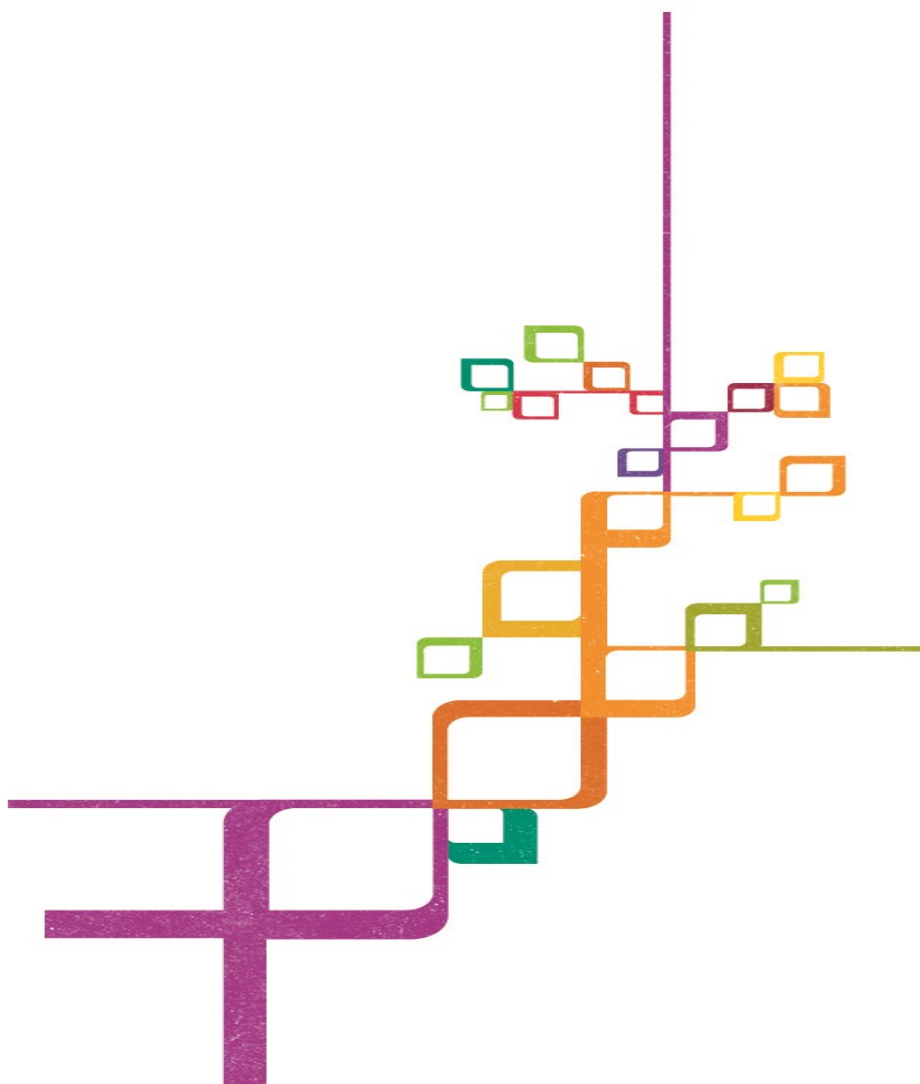
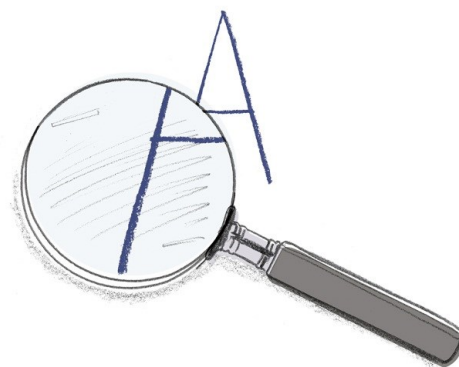


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Report methodology

Period of analysis

The analysis covers data concerning issues of bonds admitted to Catalyst during the period from September 30, 2009 to September 30, 2013 (hereinafter the period under review). For analysis based on issue dates, it does not include issues that took place during Q3 2013, as most of them were not admitted to Catalyst as of September 30, 2013. Selected studies do not include the initial quarters of the period under review because excessively low volume of data during that period, due to insignificant number of issues, would distort the study results.

Sources of data

The report was produced on the basis of issue documents available to the public, for specific issues of bonds. Moreover, the authors of the Report worked on the basis of databases of the Warsaw Stock Exchange, the National Court Register, the National Bank of Poland, the Central Statistical Office, Federation of European Securities Exchanges (hereafter FESE) and sector news sites.

Topical structure

Summary of Catalyst growth - comprises qualitative and quantitative analysis of the entire Catalyst market.

Issuer's perspective and **Investor's perspective** — summary of significant conclusions for issuers and investors

Specific analysis of bond issues - detailed analysis of issues of corporate, cooperative and municipal bonds, except for bond issues by the European Investment Bank, Bank Gospodarstwa Krajowego, and issues of mortgage bonds and Eurobonds. These chapters introduce a classification into the following types of issuers: commercial banks, cooperative banks, local governments, and businesses (companies).

Statistical data

Dates of bond issues were taken into account while reviewing the specific issues in time, unless otherwise specified.

In the comparisons and analysis of bond interest rates, values of applicable base rates were taken as of the date of preparation of the Report.

Quarterly consumer price growth index values based on data from the Polish Central Statistical Office (GUS) where the base level is the rate of inflation of the equivalent period of the previous year.

Study of issue values accounts for values of individual issues as at the effective date of admission to trading.

Analysis of the volume of issues includes the number of issues admitted to trading, notwithstanding that selected issues by certain issuers were assimilated after the date of admission.

Diagrams and tables

The data presented in diagrams and tables were prepared on the basis of Grant Thornton research, according to source data for 529 issues, unless otherwise specified.

The data presented in diagrams and tables refers to the period from September 30, 2009 to September 30, 2013 unless otherwise specified.

Issuer's perspective

For the company, issuance of bonds constitutes mainly a new source of financing. Practice shows that bonds are becoming increasingly popular as a source of capital. Bonds are issued both by large entities with a significant share held by the State Treasury, such as PKN Orlen, PGNiG or the WSE as well as by companies with lower capitalization, with issue values not exceeding PLN 5m.

Results of our analysis prove that bonds have gained significant flexibility as financial instruments. Series of bonds admitted to Catalyst are becoming more and more "interesting", confirming the degree of possible adaptation of that instrument to the issuer's current needs.

◆ Scale of issues

The smallest issue listed on Catalyst is the issue by Kancelaria Medius, worth PLN 400k, and the largest is the issue by PGNiG, with a value of PLN 2.5bn, which corroborates the assumption that all kinds of bonds are able to find a group of buyers.

◆ Coupon structure

An issuer is able to offer zero-coupon bonds to investors, as well as fixed or floating rate bonds. Furthermore, issuers may match the rate of interest to cash flows in the given financial year. A very interesting case is the issue by Poznańska 37, which determined the rate of interest on the basis of its developer project through offering different rates of interest to bondholders during the consecutive years of bonds issuance.

◆ Purpose of issuance

Companies tend to issue bonds more and more frequently for funding their operating activities (26.7% of all issuers). It supports the assumption that bonds are becoming an interesting alternative not only for investment credits but also for revolving loans.

◆ Redemption of bonds

Apart from defining the maturity dates for bonds, issuers tend to suggest repayment of bonds in installments, according to the anticipated cash flows. With such an arrangement, par value of bonds is decreasing period after period, followed by lower amounts of interest payable to bondholders. It is also easier to redeem the bonds at the end of their maturity period. Repayment of bonds by installments has been used by such companies as: WSiP, JW Construction, or Granit-Color, which referred its issue to trading at the end of October 2013.



Agnieszka Ambrożewicz
(maiden name Tucholska)
Grant Thornton Capital Markets Team

◆ Convertible bonds

Issue of convertible bonds offers a very interesting perspective for acquisition of funds. It involves an increase of share capital which is distributed in time. Issuance of such bonds is an attractive option for companies listed on WSE Main List or NewConnect, offering the option of converting the bonds into the company's shares in the future. Interest rates on convertible bonds are usually lower than those of ordinary bonds. Apart from lower interest rates, another advantage is the opportunity to acquire more debt and at the same time less diluted shareholding structure, as an investor intending to convert bonds into stocks will execute such conversion at a higher value of the company. 10 companies have already placed such bonds for trading on Catalyst.

◆ Collateral

We should point out that collateral has developed in forms typical for specific types of business: debt collection and lending companies use security on debt baskets, manufacturing companies - on inventories and machinery; developers, on the other hand, due to the need to change the secured object during the issue process, would often issue unsecured bonds first and pledge the real estate on general terms outside the terms of issue.

◆ Introduction of bonds to Catalyst

Introduction of issued bonds on the Catalyst market opens the way for issuers to reach a broader group of investors. Presence of bonds on the Catalyst market further contributes to building the company's reputation as a reliable business, through appearance of the company name in industry media and at conferences related to the bond market.

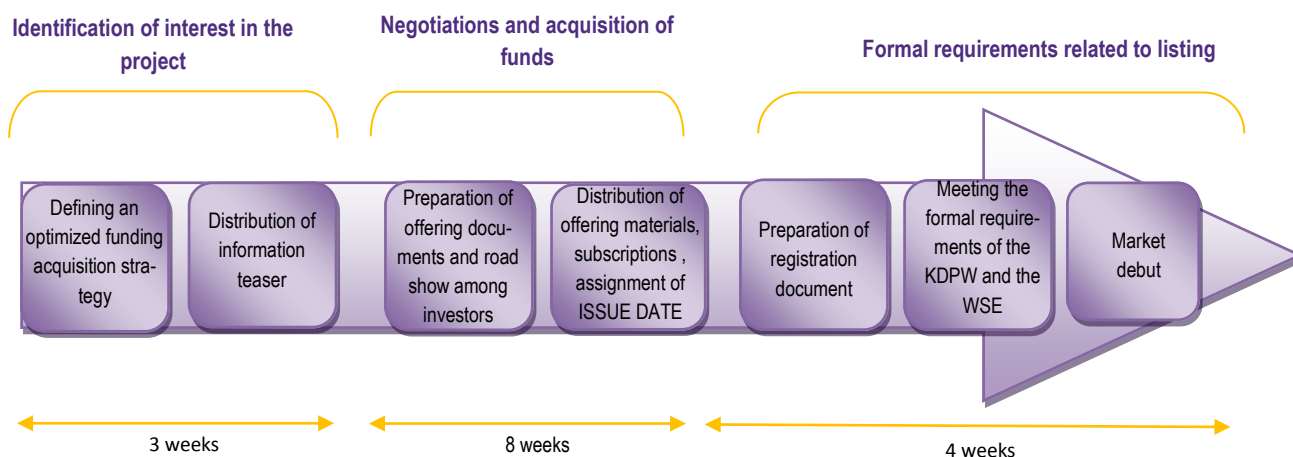
Issuance of bonds through Private Placement and Public Offering

Bonds can be issued in one of two ways, as a public and non-public offering, the latter being commonly referred to as private placement.

A private placement of bonds is a proposal to buy securities, targeted at not more than 149 named investors. In such case, neither a prospectus nor an information memorandum must be prepared.

The issuer is obliged to prepare the terms of issue according to the Bonds Act and then make them available to potential investors. An offer is accepted as soon as the buyer makes a relevant binding statement and payment to the appropriate account. Unless the bonds are dematerialized, they will not be admitted to trading. A deposit of dematerialized bonds is operated by the custodian bank or the National Depository for Securities in Poland (KDPW). Dematerialized bonds are recorded on the investor's investment account.

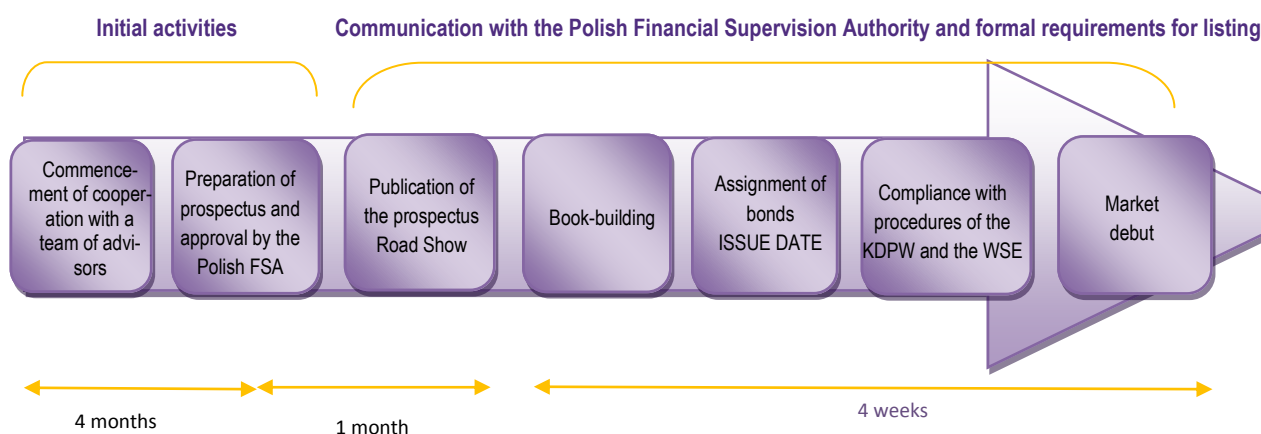
Diagram 1. Average framework timeline for a private placement



Source: the presented timeline was prepared on the basis of Grant Thornton's experience; timing of specific issues may be shorter or longer, according to the specific characteristics of a given project

Public offering of bonds involves presentation of information about the bonds and conditions of purchase to at least 150 persons or an indefinite number of investors, in any manner and format, and such presentation shall constitute a sufficient basis for taking a buying decision. Apart from certain exceptions envisaged in the Offering Act, it is necessary to prepare a public information document — a prospectus or information memorandum, and to have it approved by the Polish Financial Supervision Authority, followed by its presentation to the public. Bonds issued according to this procedure can be offered in the territory of the European Union.

Diagram 2. Average framework timeline for a public offering



Source: the presented timeline was prepared on the basis of Grant Thornton's experience; timing of specific issues may be shorter or longer, according to the specific characteristics of a given project

Table 1. Comparison of a public offering and private placement

Criteria	Public issue	Private placement
Average length of the process	3-6 months	1-4 months
Issuing costs	optimized for medium and large issues	optimized for small and medium issues
Investors	access to an unlimited number of investors	limited number of potential investors
Method of communication with potential investors	formal	informal negotiations

The strong advantages of a private placement over a public offering are: fast execution and lower costs. Nevertheless, public offering gives the opportunity to reach a broad group of investors, particularly individual investors; therefore, this option is preferred for large issues of bonds.

Issuers' reporting obligations

Issuers whose financial instruments are listed on a regulated market are obliged to provide information in accordance with the rules of that market. Issuers of bonds listed on the alternative market called Catalyst are obliged to provide information in the form of current reports regarding all circumstances and events that may affect their financial standing, economic situation, assets, or may have a significant impact on the value of listed instruments. In addition, issuers are obliged to submit periodical reports, comprising:

- semi-annual reports and consolidated semi-annual reports, covering the period of the first 6 months of the financial year (there is no requirement for an audit or review by a chartered accountant);
- annual reports and consolidated annual reports with chartered accountant's opinion.

Local government units are obliged to present an annual budget implementation report together with opinion of the Regional Chamber of Auditors only.

"With the increasing liquidity of instruments listed on Catalyst, supported by public offerings of State Treasury-owned companies' bonds, the bonds market is becoming interesting to an increasingly large group of investors."



Investor's perspective



Paweł Duszek
Grant Thornton Capital Markets Team

During the last 12 months, the Catalyst market was growing rapidly and offering more and more interesting investment options to investors. The following factors were of special importance for investors:

◆ **Decline in interest rates**

Declining interest rates led to decreasing interest on fixed or variable rate bonds, as well as increasing prices of bonds from issuers paying a fixed coupon. They would also contribute to higher competitiveness of bonds against investment instruments offered by banks.

◆ **Investment instruments**

Catalyst offers a broad range of investing opportunities to investors, according to their tolerance to risk, period or scale of investment. Rates of interest on bonds range from less than 3% to over 18% per annum. The rates will not only vary according to WIBOR fluctuations but may as well be determined as floating rates, depending on the interest-bearing period. In addition, there are already 10 issues of convertible bonds on Catalyst. Maturity periods for bonds range from 100 days to over 20 years.

◆ **Defaults**

The last year on the Catalyst market would also involve more frequent problems with fulfillment of commitments by certain issuers, which shows the importance of reading the issue documents published by the given company thoroughly. The average proportion of the number of issues at risk of default to the overall number of corporate issues during the last three years was 4.44% (at the moment, this ratio is 9.39%). Nonetheless, it is not related to deterioration of issuers' standing but to the early stage of market operation, where first redemptions of bonds begun to occur.

When investing in bonds, one should therefore consider the quality of collateral and its selling potential in case of default. The main problem faced by investors having to pursue their security claims is the long time (sometimes even a few years) passing until the secured asset is liquidated. This is particularly the case for real estate. Bonds redeemed in installments can be an interesting option as well. They offer the option of verifying the issuer's liquidity more frequently and thoroughly, along with higher probability of the issuer's ability to buy out the bonds at the time of final redemption.

◆ **Liquidity of financial instruments**

Liquidity on Catalyst is low, but a significant growth is noticeable in the value of trading on that market. During Q3 2013, the value of session trading in the group under consideration reached its historical maximum of PLN 216.4m, which is a major increase compared to the PLN 34.7m in Q1 2010. Largest turnovers are generated on bonds of companies from such sectors as banking, financial services, real estate development, and local governments, which is directly related to the number of issues in the given sectors. Importantly, the market for shares of the given bond issuer affects trading. As much as 57% of trading would be generated on bonds of companies whose shares are not listed on any market. It is also worth noticing that floating rate bonds represented more than 82% of trading, which is directly related to prevalence of such instruments on the market. Bondholders would more often trade in bonds issued through a public offering, which are characterized by higher liquidity and availability.

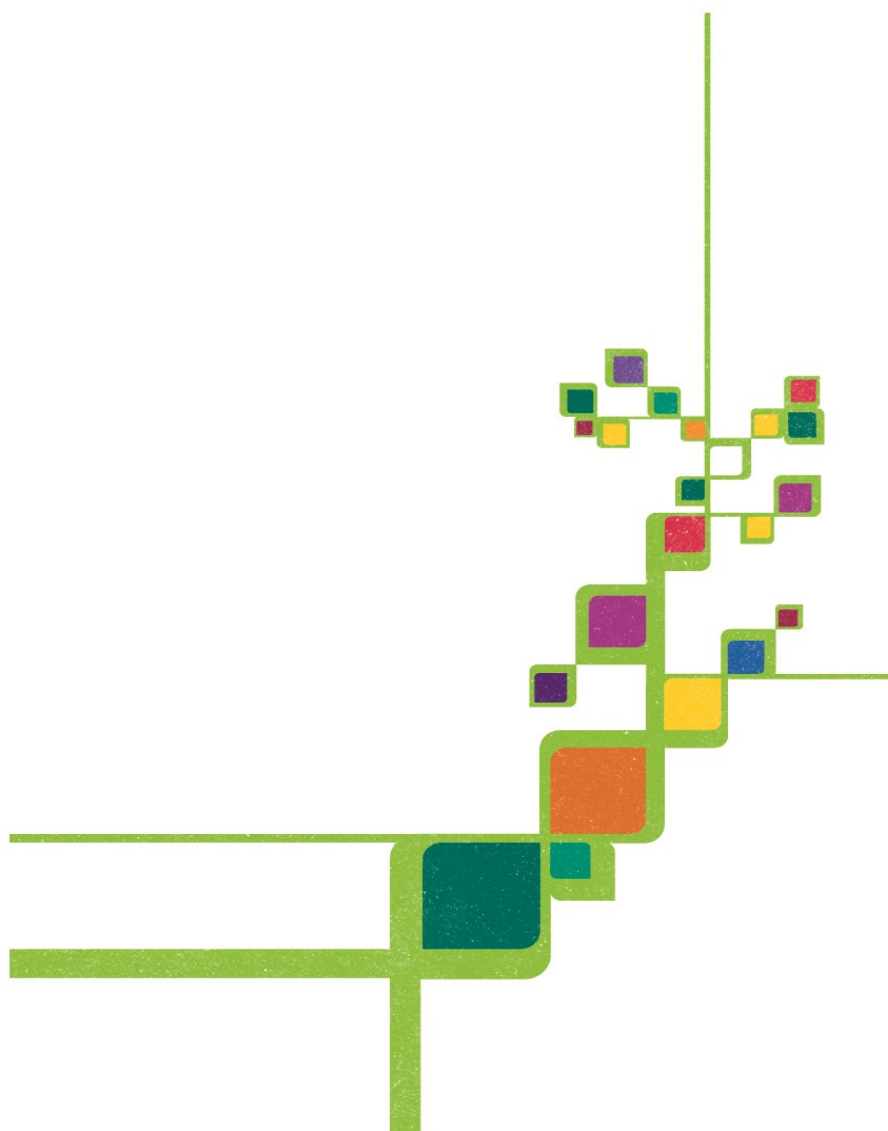
Amendments of the Bonds Act

Anticipated amendments of the Bonds Act may have an impact on investors' safety. On April 16, 2013 the Council of Ministers adopted the assumptions for the draft Act on Amending the Bonds Act and the Act on Sureties and Guarantees Granted by the State Treasury and Certain Other Legal Persons. Apart from more transparency and resolving doubts regarding certain current regulations, new arrangements presented in the assumptions for the draft Act may be very interesting for investors and issuers.

The most important of the proposed changes is the introduction of the institution of a bondholders' meeting, which would represent all the holders of bonds of the given series towards the issuer. This should allow issuers to match the bonds issuing conditions to the market situation, and enable bondholders to protect their interests.

The draft Act further envisages an extension of the range of instruments available to issuers. The first of these would be perpetual bonds. Such bonds are not redeemed, and interest earnings are paid to investors in the form of perpetuity. Another instrument mentioned in the draft Act by the Council of Ministers is a subordinated bond, where in the case of the issuer's bankruptcy, due payments are effected in the order specified in the terms of issue.

Apart from adoption by the Council of Ministers of the assumptions for draft amendments of the Act, further legislative process has not yet been presented.



Summary of Catalyst growth



Barbara Mitoraj
Grant Thornton Capital Markets Team

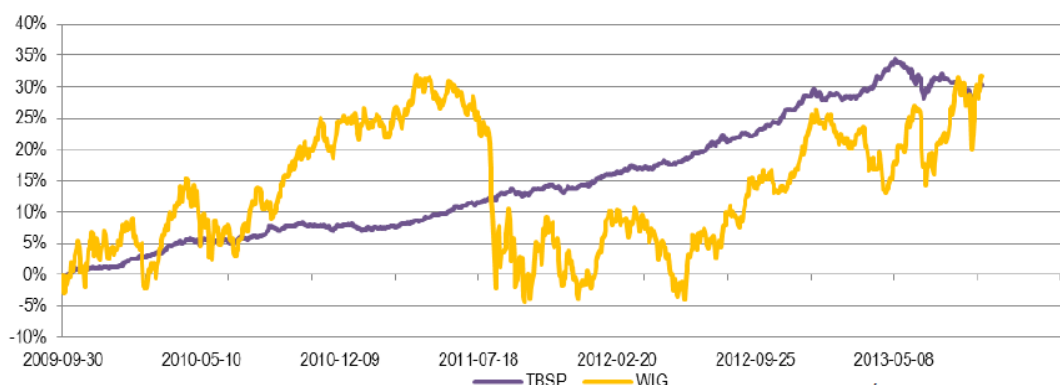
The developments on the Catalyst market since last year were mainly determined by declining interest rates. Since Q3 2012, the Monetary Policy Council has been systematically lowering the interest rates, from 4.75 to 2.5 in Q2 2013. Declining interest rates had their impact on the financial market - WIBOR 6M and 3M rates would decrease during the same period to 2.71 and 2.67, respectively.

Interest rate changes had a significant impact on valuation of instruments listed on Catalyst. Floating rate bonds, which are more frequent among all bonds issues in Poland than in other European countries, have become less attractive than they used to be the year before. However, one may not study the situation of the bond market without pointing to alternative ways to allocate capital.

Decreasing interest rates have an enormous effect on profitability of investing cash in bank deposits, which are becoming less attractive for investors, due to declining interest rates. Current bond interest rates are usually much higher than the rates for bank deposits. In addition, investors can buy fixed rate bonds which may become a certain and stable source of income, particularly in the current macroeconomic situation.

With declining interest rates, investors would more frequently decide to invest on the stock market, which is considered competitive to the bonds market. This relation is illustrated by the rate of return of the WIG index and TBSP.Index, the Treasury bond index. The rates of return from Treasury bonds were higher than the rates from WIG index, however this tendency has begun to reverse recently - TBSP.Index return rate equaled the WIG return rate at the end of Q3 2013.

Diagram 3. TBSP.Index compared to WIG index



Source: www.gwpinfostrefa.pl

Size of the Market

At the moment, 443 series of securities issued by 182 issuers, including Treasury bonds, are listed on the Catalyst. The value of the entire market at the end of September 2013 was almost PLN 624.3bn. Excluding treasury bonds, 407 issues are traded on the market, worth over PLN 59bn. Moreover, 22 issues by 7 market issuers have acquired the status of authorized instruments, i.e. instruments which are not listed but their issuers are still obliged to meet certain reporting requirements.

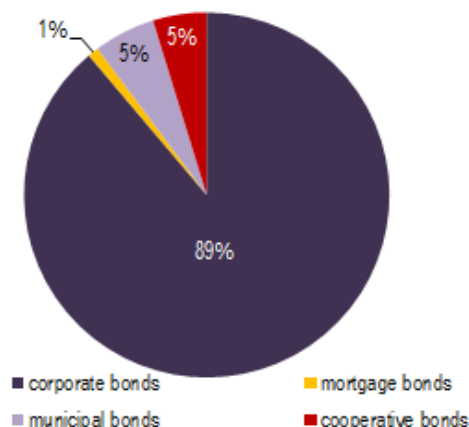
Catalyst is dominated by issues of treasury bonds, representing over 89% of the value of the whole market. Within the group of other bonds, corporate bonds prevail in terms of value, including issues by BGK and EIB, with a total value of almost PLN 52.5bn. The value of listed non-treasury bond issues was increasing rapidly quarter by quarter, exceeding PLN 59bn as of September 30, 2013, compared to PLN 49bn as of September 30, 2012.

The largest corporate issues include those of PGNiG, with the value of PLN 2.5 bn, of PKO BP - over PLN 1.6bn, and of Multimedia Polska - almost PLN 1.04bn. However, Catalyst was not created only for large corporations and issues. 36 series of bonds with issued value above 1 million PLN have already been listed on Catalyst.

Eurobonds

Until September 30, 2013, almost all the instruments listed on Catalyst were denominated in Polish zlotys. Issues of instruments denominated in Euro by PKO Finance AB, BRE Bank Hipoteczny and PEKAO Bank Hipoteczny, who jointly raised EUR 854.5m, were an exception to the above rule. They would probably be followed in the future by PKN Orlen, which - after a public offering that raised enormous public interest - have been planning for an issue of Eurobonds.

Diagram 4. Value structure of instruments quoted on Catalyst in PLN, by type (except Treasury bonds)



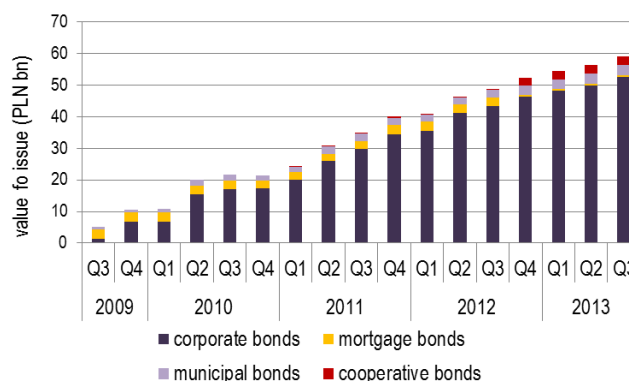
Source: www.gpwcatalyst.pl

Diagram 5. Value of instruments quoted as of the end of particular quarters of years (except Treasury bonds)



Source: www.gpwcatalyst.pl

Diagram 6. Volumes of instruments quoted as at the end of particular quarters of years (except Treasury bonds)



Source: www.gpwcatalyst.pl

Market liquidity

The value of session trading during the 4 years of operations of Catalyst was almost PLN 5.9bn, and the value during the last 12 months was PLN 2.5bn.

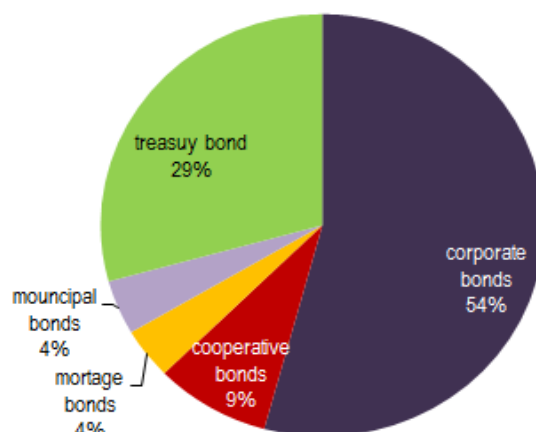
Despite that treasury bonds represent 89% of the value of the Catalyst market, corporate bonds were the ones to generate the highest turnover: 54% of the total trading value. Total turnover value until September 2013 amounted to more than PLN 3.19bn, which is almost twice as high as the value at the end of September 2012 (increase from the original amount of PLN 1.5bn). Second in this rank are treasury bonds, representing 29% of total turnover; their combined trading value was PLN 1.72bn (previously PLN 1.1bn). Bonds issued by cooperative banks have a relatively high share in trading, at 9%, corresponding to the value of PLN 0.5bn (0.37bn as at September 30, 2012).

The total value of block trading exceeded PLN 9.3bn. Therefore, as at the end of September 2013, the total value of block transactions was in excess of PLN 1.7bn. Corporate bonds strongly prevailed in block trading, at 88% of all trading. 9% of block trading would be generated by mortgage bonds, where the value of trading until September 2012 was nearly PLN 60.5bn, and as much as PLN 826.4bn until September 2013. The remaining types of would generate 1% of block trading each.

Market liquidity - quarterly analysis

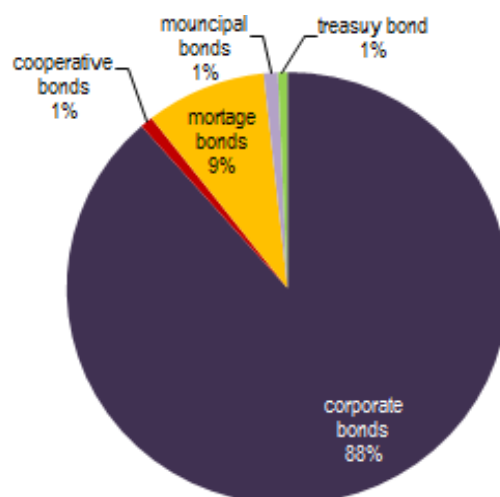
Quarterly analysis of session trading values confirms the prevalence of trading in corporate bonds on the Catalyst market, apart from 2011 when treasury bonds were the dominant trading item. Highest turnover on corporate bonds, of almost PLN 779m, would be generated in Q1 2013, mainly through trading on BGK bonds. During the initial period of the market's functioning, bonds trading was also significantly focused on municipal bonds.

Diagram 7. Value structure of session trading in bonds quoted on Catalyst, by type of instrument



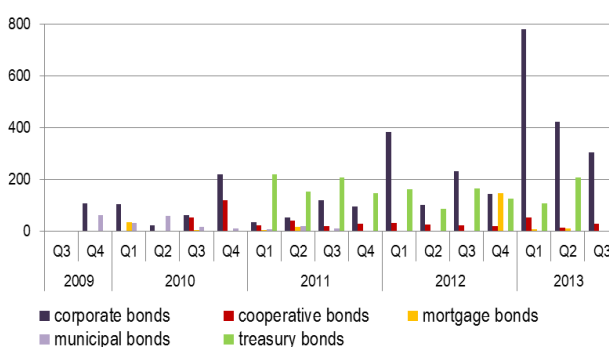
Source: www.gpwcatalyst.pl

Diagram 8. Value structure of block trading in bonds quoted on Catalyst, by type of instrument



Source: www.gpwcatalyst.pl

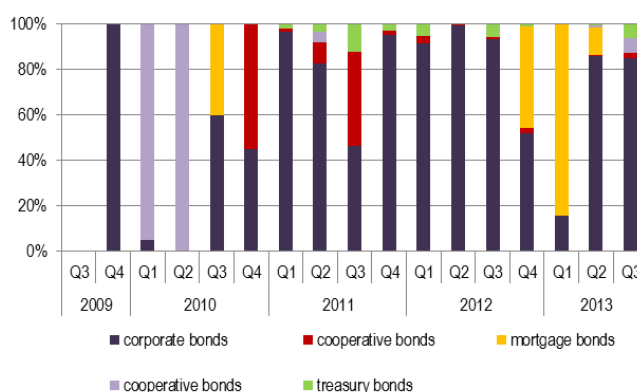
Diagram 9. Value of session trading, by quarter of year (PLN m)



Source: www.gpwcatalyst.pl

In terms of value, the largest block transactions were executed during Q4 2009 when two series of BGK bonds were transacted for a total value exceeding PLN 4.9bn. In addition, major transactions with a total value of PLN 1.2bn and PLN 1.0bn, respectively, occurred during Q4 2011 and Q2 2012, accordingly. During the last 12 months, block trading turnover would exceed PLN 1.7bn. During the remaining quarters, values of block transactions would not exceed PLN 60m. Throughout the entire period, corporate bonds prevailed in trading, with the exception of the first two quarters of 2010 when almost 100% of trading involved municipal bonds of the City of Warsaw, Q4 2010 with predominant trading in cooperative bonds, and Q1 2013 where as much as 84% turnover was generated by mortgage bonds issued by mortgage banks.

Diagram 10. Structure of block trading, by quarter of year (%)



Source: www.gpwcatalyst.pl

Liquidity of the Catalyst market is one of the key challenges faced by the Polish bond market since the beginning of its operation. One of the main reasons of the present situation is the market being in its initial phase, and only now increasing awareness of investors regarding investment in bonds. Unlike on Western European markets, floating rate bonds prevail in Poland, securing bondholders against interest rate fluctuations and favoring long-term investment strategies, which strongly impairs willingness to trade in bonds. Nevertheless, the value of trading on Catalyst is increasing continuously, providing grounds for positive evaluation of that market's liquidity perspectives during the upcoming years.

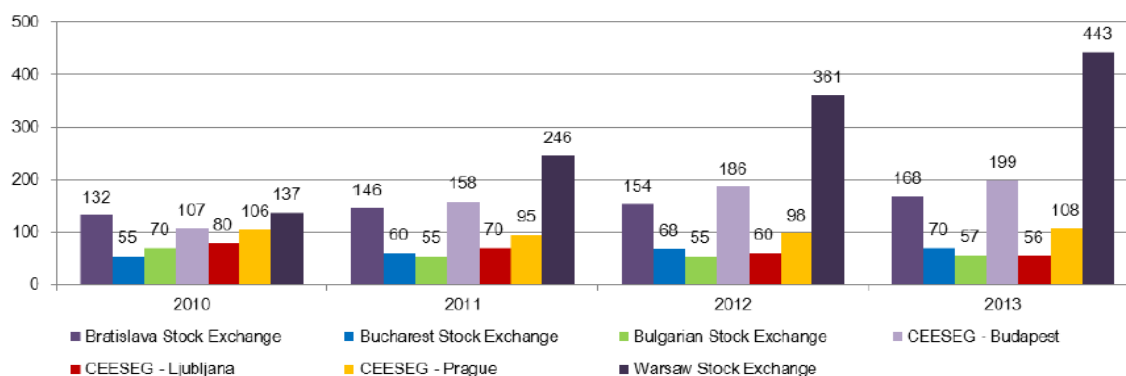


Catalyst compared to other bond markets of Central and Eastern Europe

The Warsaw market is characterized by the highest growth rate among the markets of bonds in Central and Eastern European countries, including Slovakia, Romania, Bulgaria, Hungary, Slovenia, Czech Republic, and Poland. According to FESE data, the volume of instruments listed on Catalyst would increase by 49.7% y/y since 2010 on average, which rate is twice as high as that of the Hungarian market, ranking second, which was growing at 24.1% on average.

In a comparison of the quantity of bonds listed on the Warsaw market from 2010 to Q3 2013, the volume of instruments increased by as much as 223.4%. The Budapest market, ranked second in this classification, exhibits "only" 86% growth. This difference illustrates the enormous potential faced by the Catalyst market and bonds trading in Poland.

Diagram 11. Number of bonds listed on the markets of Central and Eastern Europe (CEE) during 2010-2013

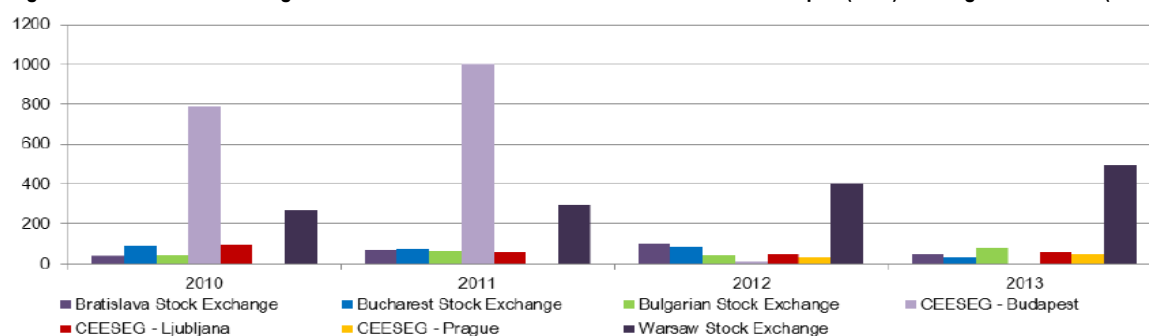


Source: www.fese.eu

In an analysis of session trading on bonds markets of Central and Eastern Europe countries during 2010-2011, dominant position of the Hungarian market is particularly conspicuous, as it was strongly ahead of competitors in this respect. However, in terms of lowering the proportion of trading generated by the national public sector in Hungary, the Polish bonds market would take the leading position from 2012 to Q3 2013. Since 2010, it would generate over €365m in trading on average, thus significantly overtaking other markets from the region (apart from the Hungarian market).

Since 2010, the value of session trading in Polish bonds increased by almost 86%, from €267.4m in 2010 to €496m in Q3 2013. In this comparison, the Bulgarian market ranked second, with an average growth of turnover at approximately 55% y/y. During the same period, average increase/decrease of trading among the countries of this group ranged around -5.16%. This data illustrates significant improvement of liquidity on the Polish debt market, and this market's leading position in Central and Eastern Europe.

Diagram 12. Session trading on bond markets of Central and Eastern Europe (CEE) during 2010-2013 (EUR m)



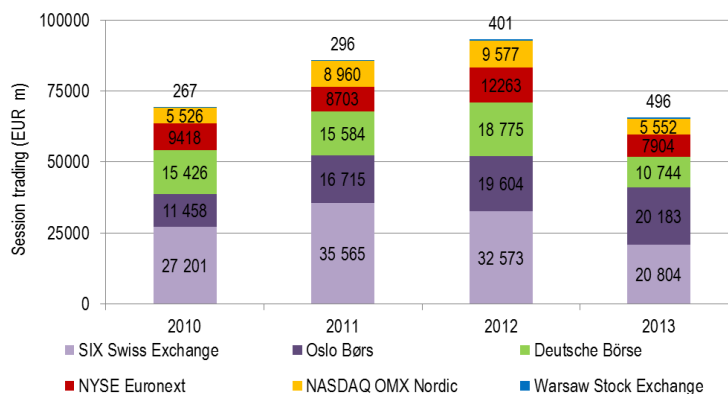
Source: www.fese.eu

Catalyst compared to mature bond markets

The comparison with bond markets in developed economies shows the early stage of development of Catalyst. Both in terms of the instruments admitted to trading and, first of all, in terms of value of session trading during 2010-2013, the Warsaw market has a lot of catching up to do. The largest European bond markets would generate several tens of times higher turnovers than the Warsaw market.

After four years of operation of WSE Catalyst, we may conclude that this market is growing into a regional leader; however, it still has a long way to go in order to be able to compete with other European markets. Nevertheless, rapidly increasing volume of listed instruments and the value of trading gives a positive outlook on future growth of the market.

Diagram 13. Value of session trading on selected European bond markets during 2010-2013



Source: www.fese.eu



"The last 12 months broke the record in Catalyst's history, as 192 series of bonds were admitted to trading and the value of instruments listed during that period reached PLN 11.6bn."

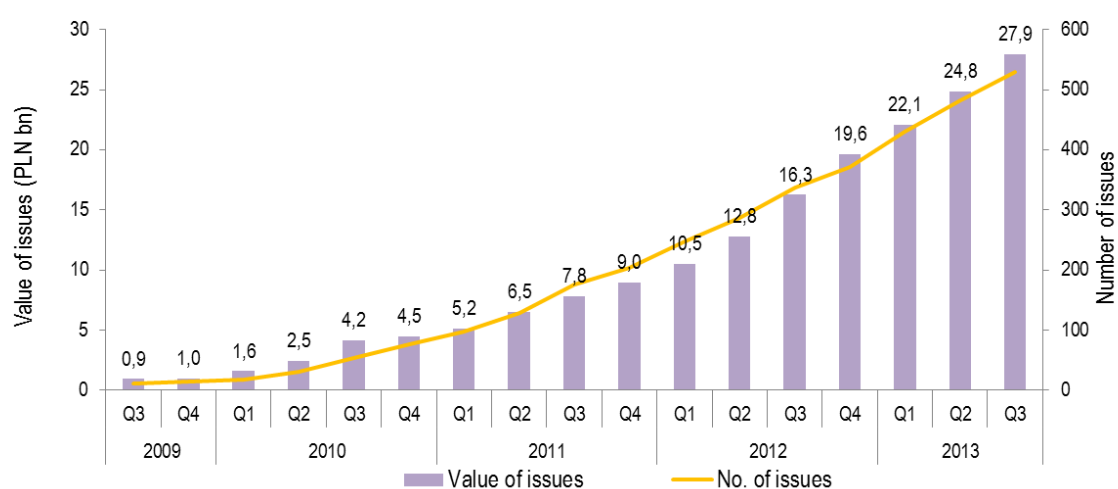


Detailed analysis of bond issues

Summary of issues

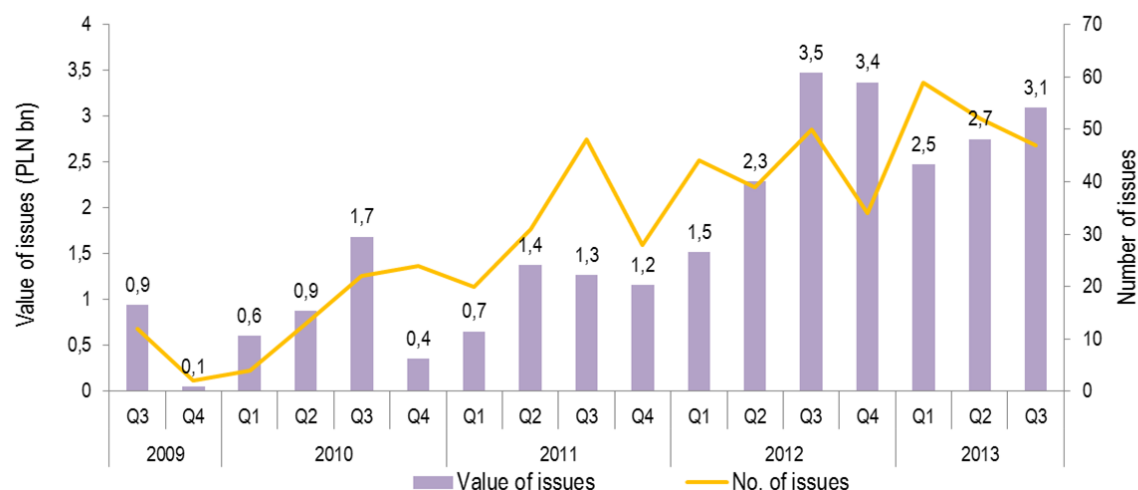
The last 12 months broke the record in Catalyst's history, as 192 series of corporate, cooperative and municipal bonds were introduced to trading during that period, and the value of newly listed instruments was PLN 11.6bn, which represents as much as 41.6% of capital raised.

Diagram 14. Value and volume of bond issues (accrued, by first listing date)



During four years of operation of the Catalyst market, 205 entities decided to have their bonds listed, and they issued a total of 529 series of bonds with a total value exceeding PLN 27.9bn. Since October 01, 2012, 51 new issuers appeared on the market and 50 entities decided to issue additional series of bonds. In a quarterly perspective, a growing tendency is visible with regard to the number of issues referred for trading on Catalyst. The most, i.e. 59 series of bonds were referred for trading in Q1 2013, despite that their value was relatively low (PLN 2.5bn). The highest total value of issues was recorded during Q3 2012, comprising the PGNiG issue with the value of PLN 2.5bn. The total value of referred issues during that period exceeded PLN 3.5bn.

Diagram 15. Value and volume of issues within the group under consideration (quarterly, by first listing date)



The most active issuers introduced their instruments for trading on Catalyst were issuers of corporate bonds - there were 163 such issuers, including 43 that made their debut on Catalyst in or after October 2012. Issuers of municipal bonds and cooperative bonds would much less frequently use financing acquired through issuance of bonds. 21 issuers from the local government sector made their debut on Catalyst (7 new local governments until October 2013), along with 21 cooperative banks (only one new cooperative issuer during the last 12 months).

The largest group of bond issuers on Catalyst were companies, represented by 155 issuers (40 new businesses appeared on the market in or after October 2012). Apart from that, there were 21 cooperative banks on Catalyst (the same as the year before), 21 local governments (7 new entities) and 8 commercial banks (3 new entities).

Average values of bond issues

In terms of scale of business, the largest issues on average were those by commercial banks: PLN 155 m per issue on average, corresponding to 22.1% growth of average value as of October 2012. The average offering by a business operator was worth nearly PLN 47.0m (increase by PLN 3m beyond the previous year's value), almost a million less than the average issue by a local government unit (PLN 47.9m, compared to PLN 68.0m the year before). Out of 35 series of bonds issued by cooperative banks, the average value per issue was PLN 9.3m (PLN 3m less than in September 2012).

Diagram 16. Structure of bond issues, in terms of quantity

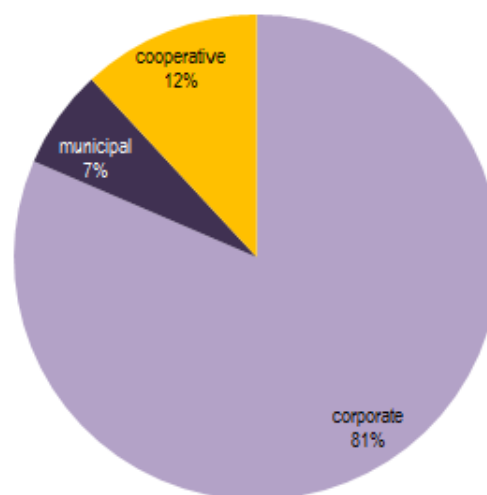


Diagram 17. Bond issuers by type of issuer

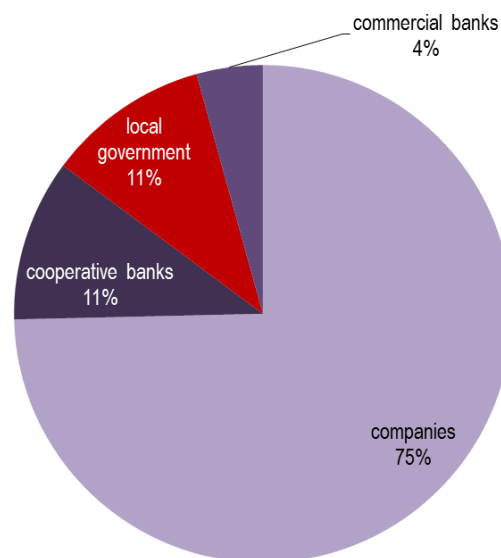
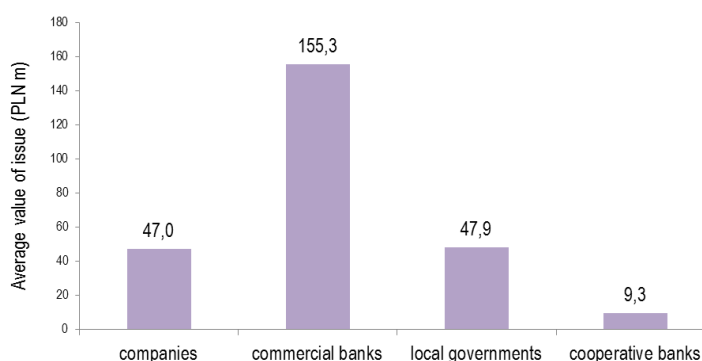


Diagram 18. Average value of issue by type of issuer



Characteristics of issuers

Analysis of types of issuers' business indicates that the sector of financial services (excluding banks) is the most strongly represented on the Catalyst market, by almost one in five issuers on Catalyst, followed by real estate developers (15%) and banks (14%). Local government units also represented a major part of issuers (10.2%).

Through issuance of corporate bonds on the Catalyst market, issuers raised PLN 24.3bn (including over PLN 11bn in or after October 2012). For local governments, this value was PLN 3bn (over PLN 0.5bn during the last year), and for cooperative banks - PLN 563.5m (with around 27% of that amount, i.e. PLN 151m, during the last 12 months).

Table 2. Biggest issuers on the Catalyst market

No.	Issuer	Value of issue (PLN bn)
1	PGNiG	2,5
2	Miasto Warszawa	2,1
3	Multimedia Polska	1,8
4	Getin Noble Bank	1,6
5	PKO BP	1,6

Table 3. Smallest issuers on the Catalyst market

No.	Issuer	Value of issue (PLN k)
1	Kancelaria Medius	400,0
2	GPF Causa	420,0
3	Blue Tax Group	500,0
4	Cash Flow	515,0
5	LST Capital	690,0

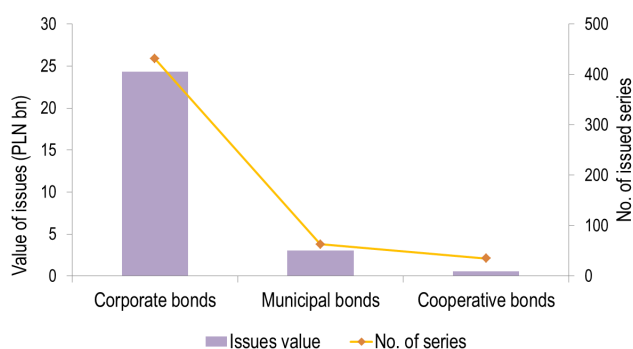
PGNiG was the company to raise the most money of all the issuers of bonds issued in PLN, namely PLN 2.5bn. The second largest issuer was the local government of the city of Warsaw, which raised PLN 2.1bn. Multimedia Polska also belongs to the first five largest issuers on Catalyst, with PLN 1.8bn acquired through issuance of 4 series of bonds. Getin Noble Bank recorded the largest increase of capital from bonds issuance among commercial banks. It was the largest issuer of its type of entities that issued as many as 20 series of bonds with a total value exceeding PLN 1.6bn.

Least money was raised on Catalyst by Kancelaria Medius - only PLN 400k. Issues under PLN 700k were also carried out by GPF Causa, Blue Tax Group, Cash Flow oraz LST Capital.

Table 4. Structure of issuers by type of business activity

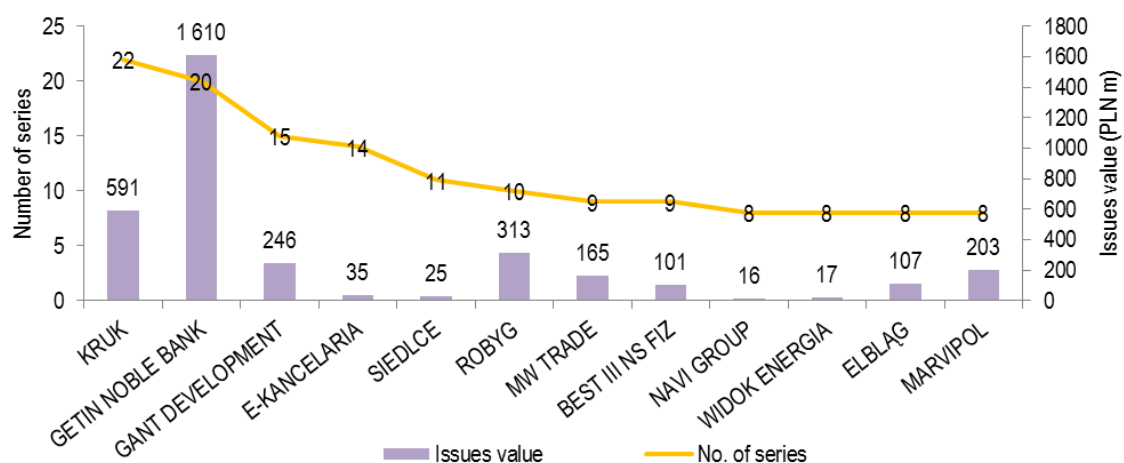
Type of activity	No. of issuers	Percentage
financial services	39	19.4%
developers	31	15.0%
banks	29	14.1%
local governments	21	10.2%
other	13	6.3%
construction	8	3.9%
IT	7	3.4%
retail	6	2.9%
energy	5	2.4%
chemical	4	1.9%
wood	4	1.9%
wholesale	4	1.9%
healthcare	4	1.9%
food & beverage	4	1.9%
closed investment funds	3	1.5%
construction materials	3	1.5%
technologies	3	1.5%
transport	3	1.5%
pharmaceutical	2	1.0%
hotels and restaurants	2	1.0%
media	2	1.0%
real estate	2	1.0%
fuel	2	1.0%
recycling	2	1.0%
papermaking	1	0.5%
capital market	1	0.5%
Total	205	100.0%

Diagram 19. Value of raised capital, by type of bond



As at September 30, 2013, Kruk was the company to pursue the most issues among all issuers of corporate, co-operative and municipal bonds; it earned PLN 591m through issuing 22 series of bonds. Getin Noble Bank, on the other hand, raised as much as PLN 1.61bn through issuing 20 series of bonds, of which 10 were referred for trading since October 2012. During the same time, at least 10 series of bonds were issued by four issuers, namely Gant Development, E-kancelaria, Robyg, and the town of Siedlce. The latter issued the most, i.e. 11 series of bonds during the last 12 months. During the same time, Getin Noble Bank introduced 10 series for trading.

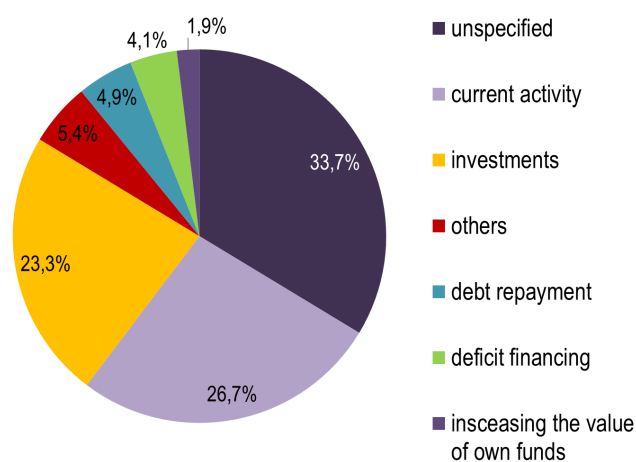
Diagram 20. Issuers that issued the most series of bonds



Purposes of bond issues

Issuers' goals in acquiring funds have changed slightly since October 2012. 33.7% of the issues under consideration did not present the purpose of issue (38.0% of bonds issued during the last 12 months). Issuers would also often define the purpose of issue in very general terms, as financing current activity, representing 26.7% of issues on Catalyst (and as many as 41.7% of last year's issues). Notwithstanding, 23.3% issues were allocated to investments (13% in the past year). The above implies that issuers consider the Catalyst market as an alternative source of financing and use it to acquire funds for development. 4.9% of issues were designed for repayment of existing debt (only 0.4% of last year's issues).

Diagram 21. Purpose of bonds issue



Location of issuers

Issuers listed on the Catalyst market have their registered seats in most regions of Poland (except Lubuskie Voivodeship). The most issuers of corporate bonds, cooperative bonds and municipal bonds are headquartered in Mazowieckie Voivodeship. In terms of value of issue, these issuers represented almost 62% of issues on Catalyst. Pomorskie Voivodeship ranks second with 13.8% of issues, followed by Dolnośląskie with 7.2% of issues.

Municipal bonds would be issued most frequently in Mazowieckie Voivodeship (16 series), Śląskie and Zachodniopomorskie (9 series each), totaling 54% of all series of such bonds issued. Issues of cooperative banks also originate from Mazowieckie Voivodeship (nearly 46% of all issued series).

Three foreign companies are also present in the group of issues under review: Warimpex Finanz und Beteiligungs AG, Ronson Europe N.V., and Polkomtel Finance AB. They raised a total of almost PLN 1.3bn. All the three entities would issue the bonds in the Polish currency. Foreign companies that issued bonds listed on Catalyst were mostly daughter companies financing their operations within their respective groups. It is worth emphasizing that as of October 2012, Warimpex Finanz and Ronson Europe decided to follow with more bonds on the Catalyst market; each of them referred 2 series of bonds for trading, with a combined value of nearly PLN 197m. Issuance of bonds on the Polish market and listing them on Catalyst helped these companies to reach a broader group of investors.

Eurobonds issued by PKO FINANCE AB, with a total value of PLN 800m, are outside the scope of this report.

Diagram 22. Bond issues by geographic location - number of series and value of issue (PLN m)

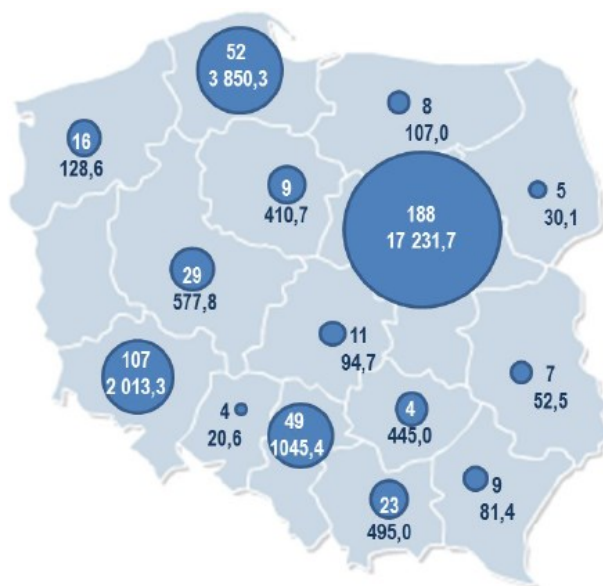


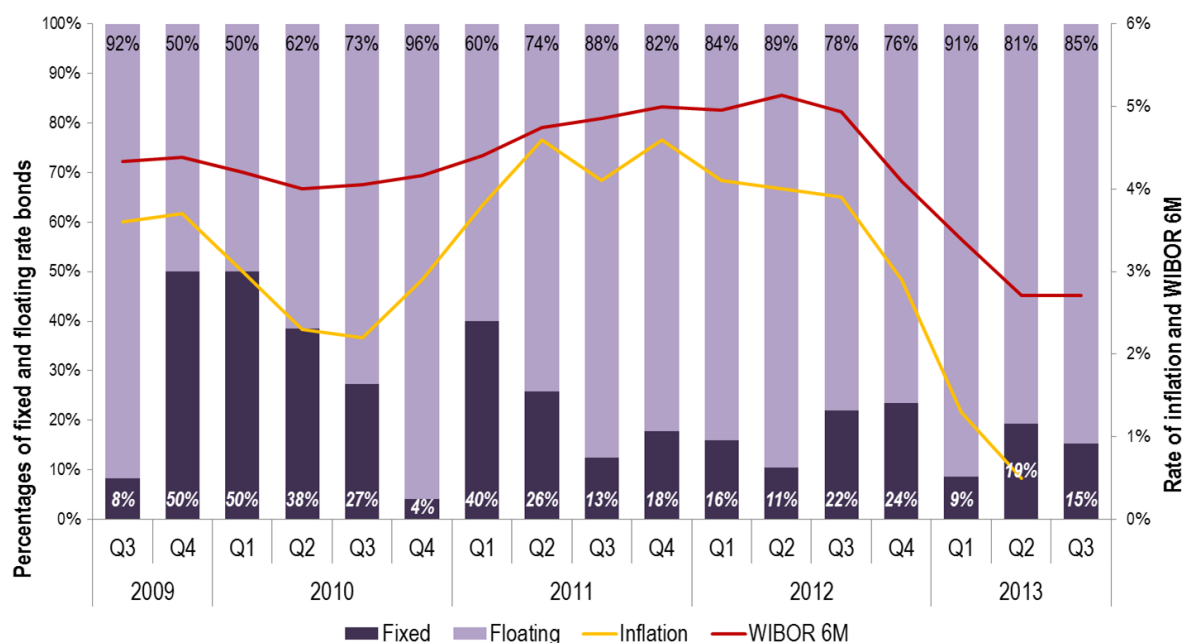
Table 5. Issues of bonds by foreign companies

Issuer	Country	Number of series	Value of issue (PLN m)
Warimpex Finanz	Austria	3	155,8
Polkomtel Finance	Sweden	1	1 000,0
Ronson Europe	The Netherlands	4	194,6



Coupon structure

Diagram 23. Structure of new issues of coupon bonds

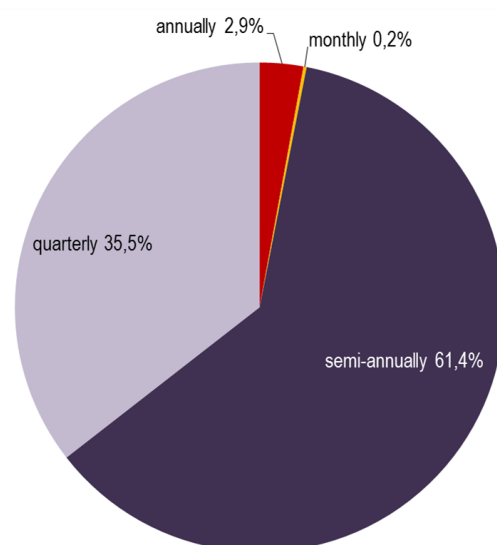


Of all the 529 bond issues on Catalyst covered by this report, only three were discounted issues by Lokaty Budowlane S.A., CI Games S.A. and Midas S.A., meaning that 99.4% of all issues were coupon issues. Floating rate bonds prevailed among coupon issues by entities on the Catalyst market, representing almost 82% of the issues under consideration. Fixed rate issues represented the remaining 18%.

In a comparison of issue structure with inflation rate and WIBOR 6M, there is a visible tendency for increasing share of fixed rate bonds during periods preceding a drop of inflation; however, this is not a permanent rule. Since September 28, 2012, the percentage of fixed rate bonds has been ranging from 9% to 24% of all issues. Issuers prefer floating rate bonds, allowing them to adjust the costs of interest repayment to general economic conditions.

In terms of coupon payment frequency, issues with semi-annual coupon strongly prevailed; this was the case for more than 61% of all issues. 35.5% of all issues would offer quarterly coupon payments. There was only a marginal proportion of bonds with coupon gains paid out once a year - they represented less than 2.9% of all issues of this type of bonds on the Catalyst market. The issue of Miraculum S.A., repaid in March 2013, was the only series listed for which coupon payments were received by investors each month, and at the same time it was the only series with WIBOR 1M as the base rate.

Diagram 24. Structure of coupon bonds by frequency of coupon payments



"Issuers prefer floating rate bonds, allowing them to adjust the costs of interest repayment to general economic conditions."

Analysis of the classification of issuers by frequency of coupon payments clearly indicates that almost all coupons from commercial and cooperative banks' bonds were paid twice a year. Among local governments, 9 series of bonds would pay interest to bondholders once a year and 5 series - once in a quarter. The remaining 46 issues were coupons paid semi-annually. Among corporate issues, both quarterly and semi-annual payments were popular, constituting a prevailing part of issue during the period under review. Bonds of 5 issues offered coupons paid yearly and one bond - monthly.

Bond Rates

Until 30 September 2013, highest interest rates applied to bonds of already redeemed issues by Onico and Green House Development, with fixed rates at 18% and 17% p.a., respectively. High rates of interest on these bonds were due to their short-term character - Onico's issue was scheduled for redemption after 3 months and Green House Development's issue - after 2 months.

At the end of March 2013, an issue of Poznańska 37 bonds appeared on Catalyst as a private offering, with average rate of interest offered to investors at 18.8% p.a. Interest on the issued series of this company's bonds until March 31, 2012 was at 12.5%, then from April 2012 to the end of 2012 - 24%, and the current rate of interest until redemption of these bonds before the end of 2013 shall be 20%. The company issued the bonds for execution of a real estate development project in Warsaw, and the level of interest rates in the particular interest periods was strongly related to the timing of that project's implementation.

The issue by Poznańska 37 shows the flexibility available for issuers to determine interest terms for their instruments, and for investors to acquire a specific financial instrument at a convenient time, taking account of the potential benefits and risks.

"At the end of March 2013, an issue of Poznańska 37 bonds appeared on Catalyst, with average rate of interest offered to investors at 18.8% p.a."

Table 6. Issues of bonds with highest interest rates

Issuer	Issue code	Issuer's sector	Date of issue	Date of redemption	Value of issue (PLN)	Bonds interest rate
POZNAŃSKA 37	PZN1213	developers	2011-12-29	2013-12-29	14 000 000	18,8%
ONICO	ONT0110	wholesale	2009-10-07	2010-01-15	1 700 000	18,0%
GREEN HOUSE DEVELOPMENT	GHA0411	developers	2010-02-10	2011-04-11	600 000	17,0%
GREEN HOUSE DEVELOPMENT	GHB0411	developers	2010-02-17	2011-04-18	600 000	17,0%
GREEN HOUSE DEVELOPMENT	GHC0411	developers	2010-02-24	2011-04-25	600 000	17,0%
ORZEŁ	ORL0412	retail	2010-04-27	2012-04-27	7 260 000	15,0%
POLSPORT GROUP	PSG0512	retail	2011-05-19	2012-05-30	1 280 000	15,0%
E-KANCELARIA	EKA1213	financial services	2011-11-25	2013-12-22	1 000 000	15,0%
GPF CAUSA	GPF0214	other	2012-02-01	2014-02-23	420 000	15,0%
MURAPOL	MUR0711	developers	2010-05-19	2011-07-14	8 000 000	14,0%

Table 7. Issues of bonds with lowest interest rates

Issuer	Issue code	Issuer's sector	Date of issue	Date of redemption	Value of issue (PLN)	Interest Rates on Bonds
POZNAŃ	POE1011	local governments	2006-10-23	2011-10-09	116 500 000	2,86%
POZNAŃ	POD0610	local governments	2005-07-18	2010-06-23	101 500 000	3,11%
PGE	PGE0618	energy	2013-06-27	2018-06-27	1 000 000 000	3,41%
TCZEŹ	TCZ0817	local governments	2010-08-25	2017-08-25	2 000 000	3,50%
ELBLAŃ	ELG0319	local governments	2012-03-08	2019-03-08	5 000 000	3,56%
ING BANK ŚLĄSKI	ING1217	banks	2012-12-06	2017-12-06	565 000 000	3,61%
ELBLAŃ	ELG0320	local governments	2012-03-08	2020-03-08	5 500 000	3,66%
ELBLAŃ	ELG0321	local governments	2012-03-30	2021-03-30	9 000 000	3,86%
GPW	GPW0117	capital market	2011-12-23	2017-01-02	245 000 000	3,88%
OSTRÓW WIELKOPOLSKI	OST1011	local governments	2000-10-11	2011-10-11	12 000 000	3,95%

As of September 28, 2012, the list of issuers with lowest interest rates on bonds comprised only local governments and the issue of bonds of the Warsaw Stock Exchange. A year later, apart from redeemed bonds of the city of Poznań, lowest rates of interest on Catalyst existed for PGE's bonds, as PGE issued bonds at 3.41% per annum. PGE is among the largest companies in Poland with a major share of the State Treasury; therefore, it is considered as a safe investment by investors. This allows the company to raise capital on Catalyst at relatively low costs, comparable to those of local governments. After a year, bonds of ING Bank Śląski appeared on the list as well, with the interest rate of 3.6% p.a. Relatively low interest rates are also offered by the above mentioned local governments, e.g. instruments issued by towns: Elbląg, Tczew and Ostrów Wielkopolski currently offer interest returns to bondholders at 3.50% to 3.95% p.a.

It should be pointed out that distribution of interest rates on bonds listed on Catalyst is very broad, ranging from 2.86% to 18.8%. This demonstrates an increase of the range of interest rates on bonds listed on the market after September 28, 2012, particularly lower-rate instruments - during the past year, the values ranged from 4.8% to 18%. In terms of interest rates on bonds, the largest concentration can be seen within the range of 4-11%, comprising 457 series of bonds, i.e. 87% issues under consideration. Only for 5 series of bonds, interest rates would exceed 15%. Only 16 series of bonds offer rates of interest lower than 4% per annum. The primary cause of these changes is the rate on floating coupon bonds. After significant reductions of interest rates by the Monetary Policy Council, WIBOR values on interbank market declined, resulting in automatic decrease of interest on floating rate bonds, which prevail on the Catalyst market.

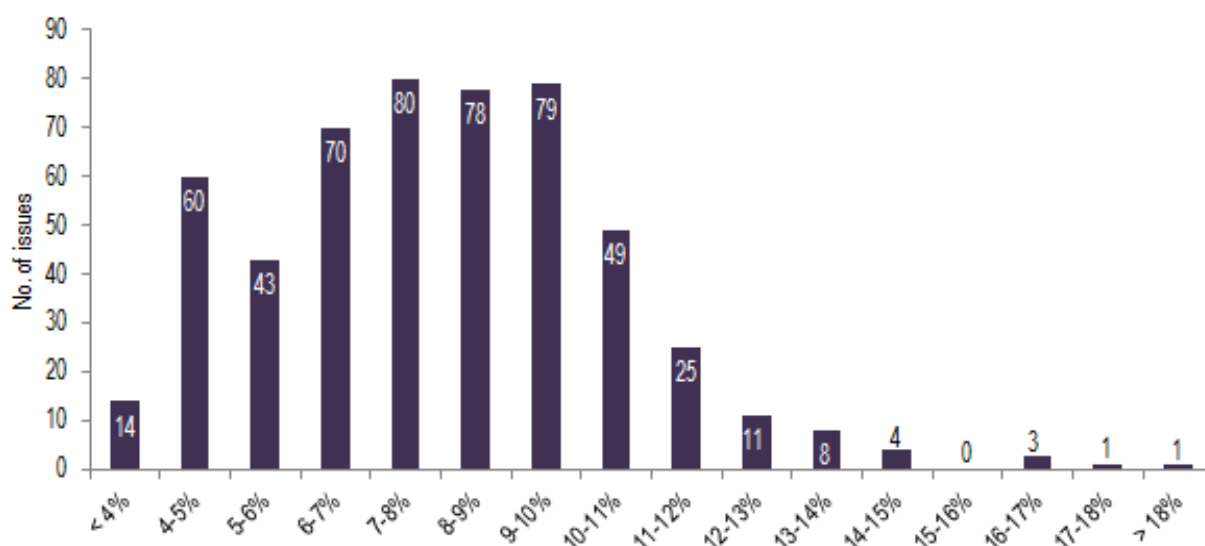
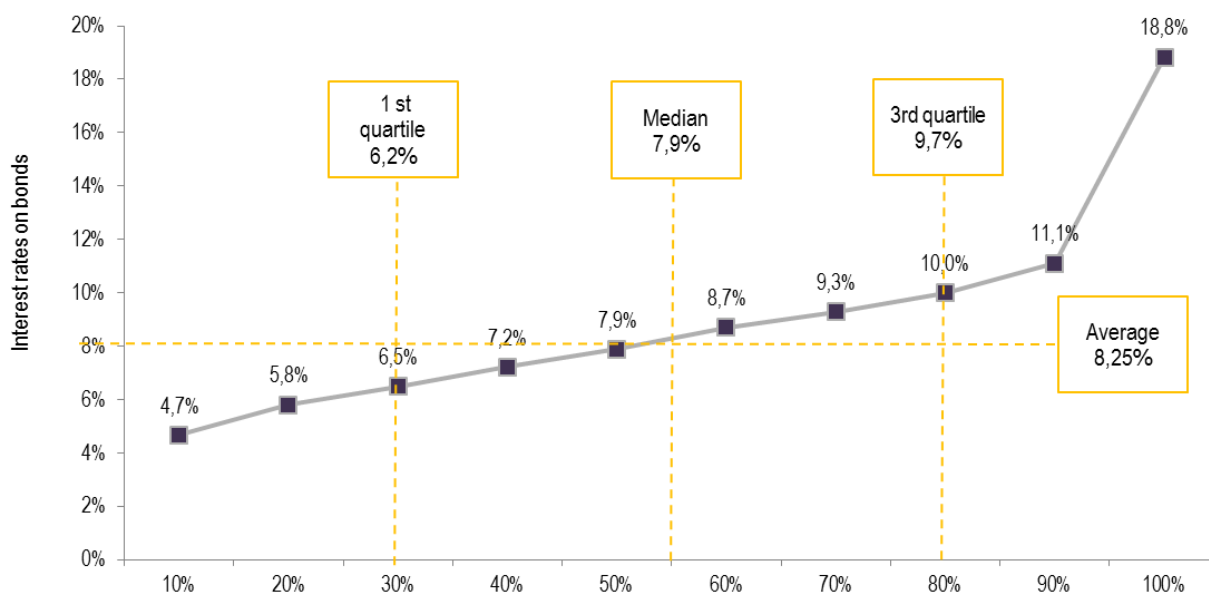
Diagram 25. Number of issues of bonds within a given range of interest rates


Diagram 26. Distribution of interest rates on bonds listed on Catalyst



The average rate of exchange for issues of bonds listed on Catalyst is 8.25%, which is 1.85 pp lower than the average of the first three years of that market's operation. The median of bonds interest distribution equals 7.9%. Last September, it was 10.4%, which is a significant decrease.

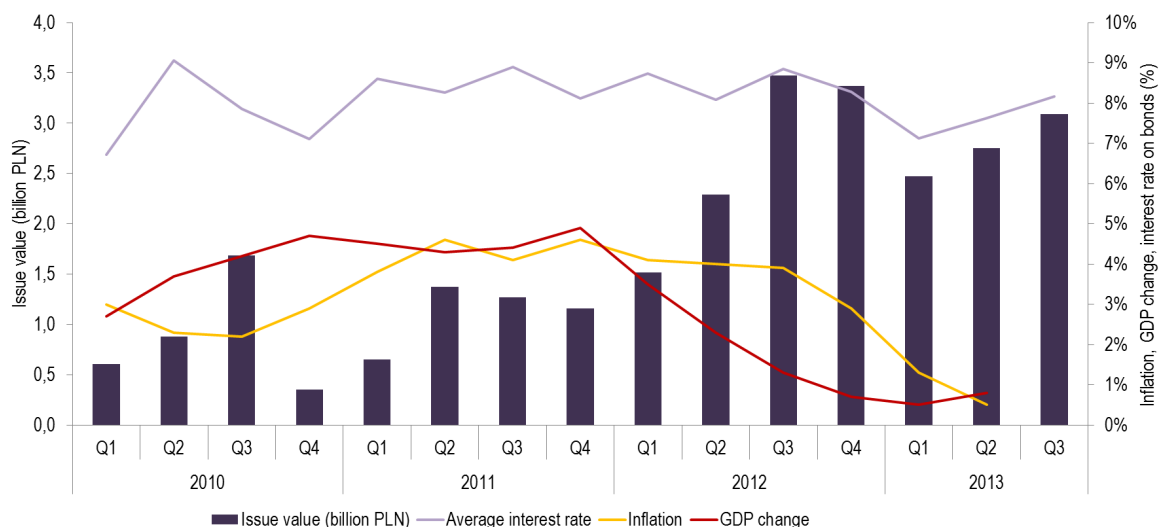
On the basis of decile analysis of the distribution of interest rates on bonds, one can notice inter alia that the 10% bonds with lowest interest rates were under 4.6% (until 2012: 6.9%). These are mainly bonds issued by local governments and larger public companies, typically with a high share of the State Treasury. The 10% issues with highest rates of interest were over 11.1% (12.9% until last December), which value is typical of higher risk issues.

All these changes, compared to the first three years of the Catalyst market operation, indicate a major decline of bond interest rates during the past year, which is associated directly with decreasing interest rates.

"The average rate of interest for bonds is 8.25%, i.e. 1.85 pp lower than the average of the first three years of Catalyst market operation."



Diagram 27. Average rates of interest for bonds compared to inflation, GDP increase/decrease, and value of issues



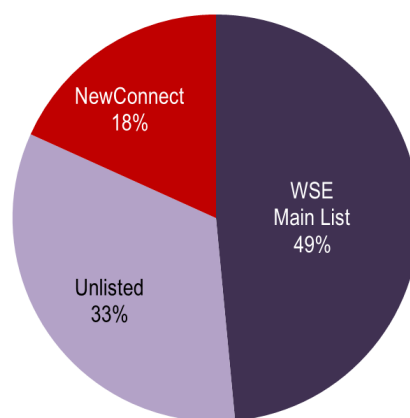
The average rates of interest on issues that took place in 2010 were subject to significant fluctuations. With the increasing rate of inflation and number of corporate bonds issues, average rates of interest for new issues continued to grow until 2012. It reached the highest level in Q3 2012 (8.9%). This coincided with the highest value of issues on the Catalyst market.

Bond rates determining factors

Bond rates vs. stock markets for issuers' shares

Companies who are already familiar with the characteristics of the capital market, whose shares are already listed on stock exchanges, would readily use an alternative source of financing such as issue of bonds. The prevalent instruments among corporate bonds on Catalyst are those issued by companies quoted on the WSE Main List (49%). Over 33% of all issues were pursued by companies not listed on any stock market. The remaining 18% of issues were executed by companies listed on the alternative market NewConnect. These values have remained unchanged since September 28, 2012.

Diagram 28. Structure of bonds issues by stock market (in the corporate and commercial banks groups)



"The prevalent instruments among corporate bonds on Catalyst are those issued by companies quoted on the WSE Main List (49%)"

There is a visible relation between the stock market for the shares of a corporate issuer or commercial bank and the average rate of exchange for the issue.

Companies listed on NewConnect would offer interest rates which are 45% higher on average than those offered by issuers quoted on the WSE Main List. The average rate of interest on bonds from NewConnect issuers is 10.9%, which is 1.7pp lower than the average rate as of the end of September 2012. The average rate of interest on bonds from WSE Main List issuers is 7.5% (2.2pp less than the average of the first three years). Bonds of unlisted companies have average interest rates at 9.3% (11.33% during the first 3 years of Catalyst operations), which is slightly lower than the rates on bonds of companies listed on NewConnect. High interest rates on issues by NewConnect companies should be directly associated with the following qualities of these companies:

- ◆ these are businesses in early stages of development, which often determine high demand for capital and the need to obtain financing with third party capital, followed by increasing investment risks,
- ◆ these companies are characterized by low capitalization which, according to Grant Thornton's report on NewConnect: Summary of Growth, amounted to less than PLN 10m for about 58.7% of issuers listed on the alternative stock market.

Diagram 29. Average interest rate on bonds issued by corporate issuers and commercial banks, by quotation market for the issuer's shares

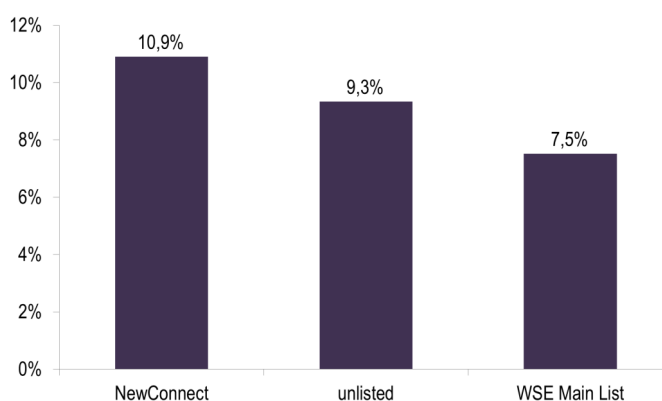
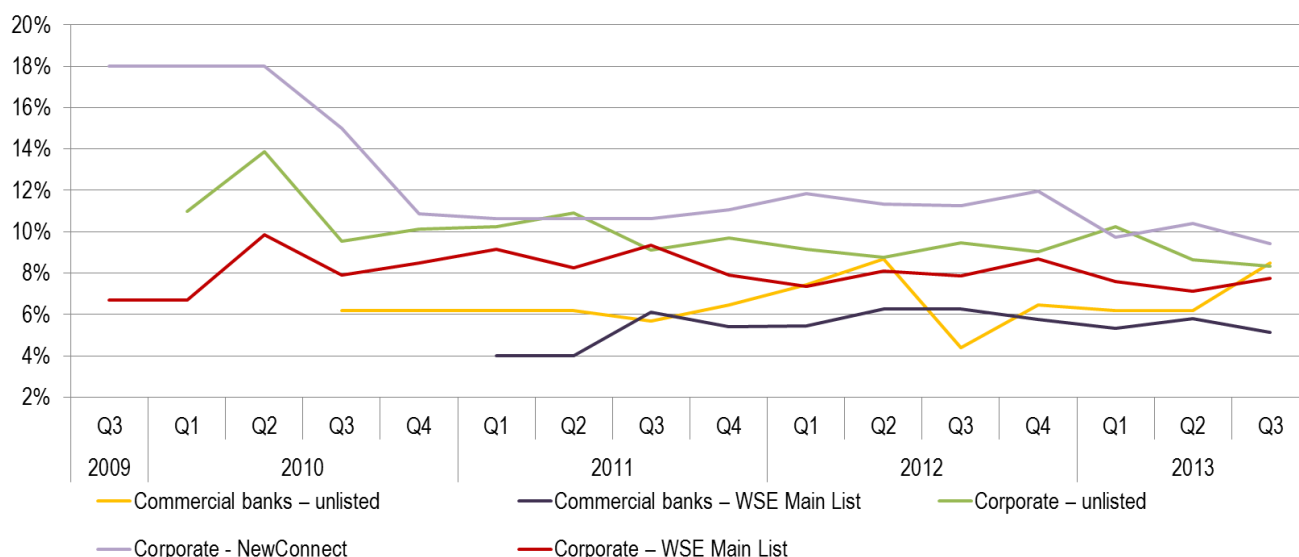


Diagram 30. Average bond rates vs. stock markets for issuers' shares



Within the above group of corporate issuers, highest interest rates were recorded for issuers listed on NewConnect. Lower rates, ranging around 10%, applied to bonds of unlisted companies, and they were lowest for companies listed on the WSE Main List. It should be pointed out that during Q3 2013, each of the bond issues, regardless of the issuer's stock market,

had interest rates within a relatively narrow range, from 5.1% to 9.4%. During all the periods under consideration, rates of commercial banks' bonds were the lowest. For unlisted commercial banks, these values ranged around 4.0% to 8.3%, and for banks listed on the Main List - from 4.0% to 6.1%.

Bond rates vs. type of issuer

From the beginning of Catalyst market operations, lowest average rates for bonds would be offered by local governments at 4.7% (compared to 6.54% until September last year). Investments in local government bonds are considered safe, comparable to State Treasury bonds; therefore, local governments may issue bonds at a significantly lower cost than other Catalyst market players. Cooperative banks and commercial banks would offer 6.0% (8.17% before September 2012) and 5.8% (8.05% until September 28, 2012), respectively, while corporate issuers would offer 9.0% (2pp less than a year ago).

When interest rates are analyzed in time series by type of issuer, it should be pointed out that the most stable rates were those of cooperative banks - around 6%, and of companies which offered average rates around 9% as of Q3 2010. Rates were most variable for new issues of commercial banks, ranging from 4.1% to 7%, and for local governments, from 8.2% to 9.7%. Despite the fluctuating inflation rates, certain stabilization can be noticed with regard to average rates of interest after the end of 2012 among all types of issuers.

Diagram 31. Average rate of interest for bonds by issuer type

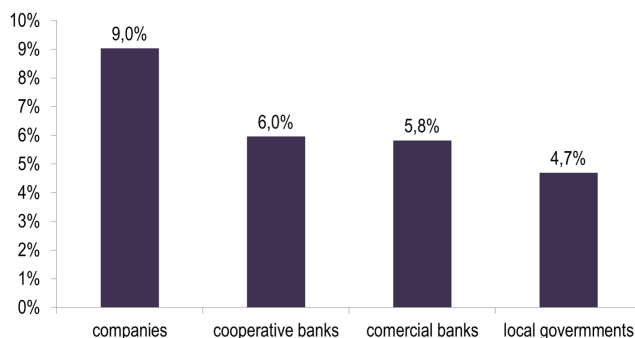
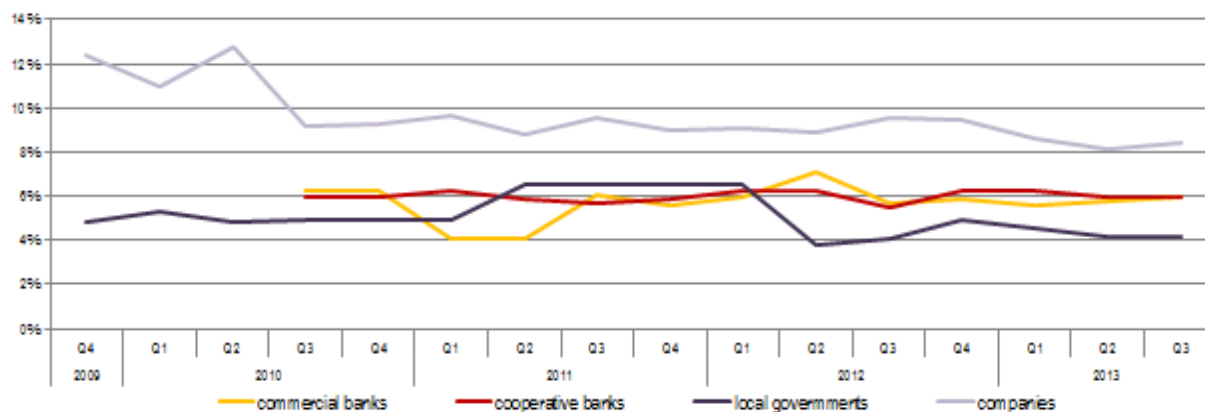


Diagram 32. Change in average rate of interest for bonds by issuer type over time



Interest rates vs. issuer's business sector

Below is a presentation of average bond rates divided into three sectors: financial (commercial banks, cooperative banks and financial service providers), industrial and service sector. According to that classification, interest rates are lowest for bonds issued by the financial sector (7.9%), followed by industry (9.0%) and services (9.7%). Before September 2012, these values were 9.93%, 10.9%, and 11.79%, respectively.

During the preceding quarters, bond rates for issuers from the industrial sector would be within the range from 7% to 11% (except Q2 2010), like for the services sector (except Q2 2010). During most quarters, interest rates for issues of companies from the financial sector tended to be much lower; Q2 and Q3 2012 were an exception to this rule, as new issues of bonds from the financial sector would be remunerated at a slightly higher level than those issued by companies from the services sector.

Diagram 33. Average rates of interest on bonds by issuer's business sector

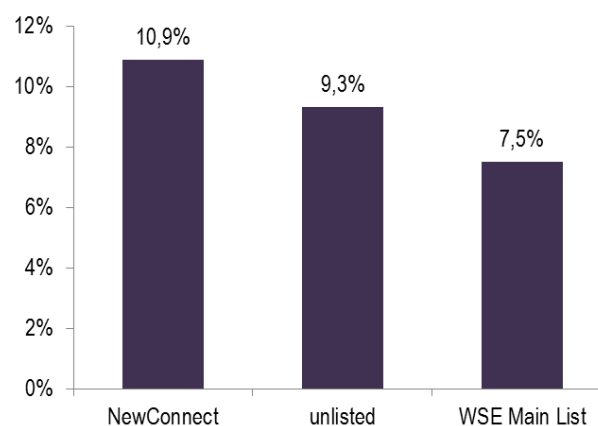
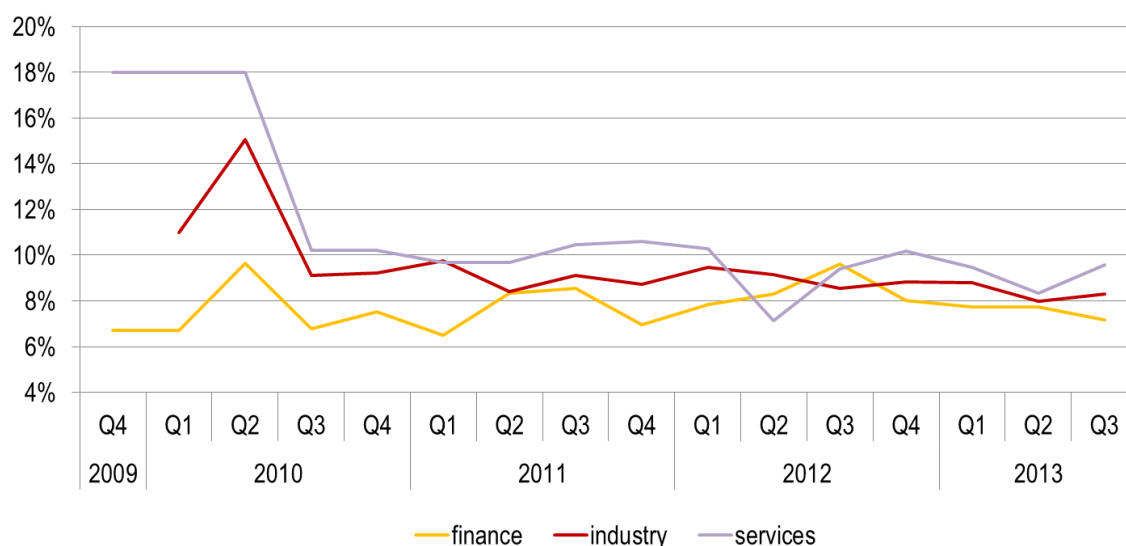


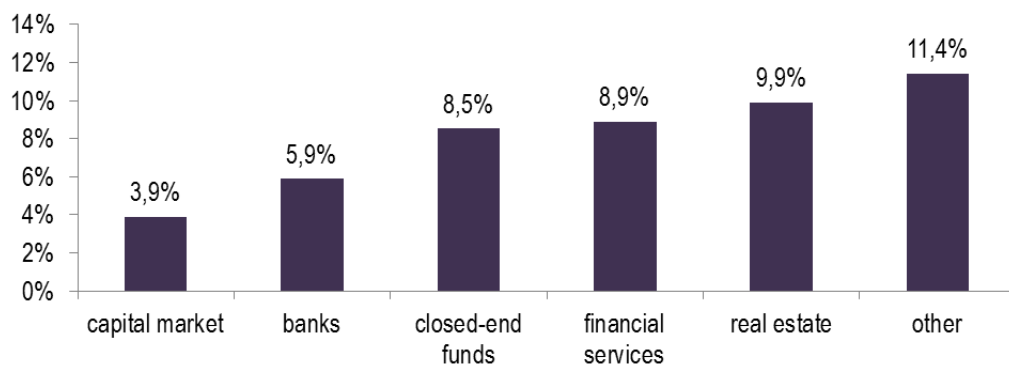
Diagram 34. Average rates of interest on bonds by issuer's business sector



Financial sector

The lowest interest rates in the financial sector pertained to bonds of the Warsaw Stock Exchange; through issuing the bonds, WSE raised almost PLN 245m, offering 3.9% rates to investors. Relatively low interest rates were also offered by corporate and cooperative banks - 5.9% on average. Rates of interest for bonds issued by other issuers involved in provision of financial services, real estate trading and closed investment funds are significantly higher, ranging from 7.9% to 11.4%.

Diagram 35. Average interest rates for bonds in the financial sector



Industry sector

Within the industrial sector, interest rates on securities issued by business operators in the fuel sector were definitely lowest; this group is represented by high capitalization companies, namely PGNiG and PKN Orlen (average interest rate at 4.2%). Average rates of interest on bonds issued by other issuers from the industrial sector were significantly above 4.2, and the highest rates (as much as 10.1%) existed for companies from the pharmaceutical sector, represented by such companies as Hygienika and Miraculum.

Diagram 36. Average interest rates for bonds in the industrial sector

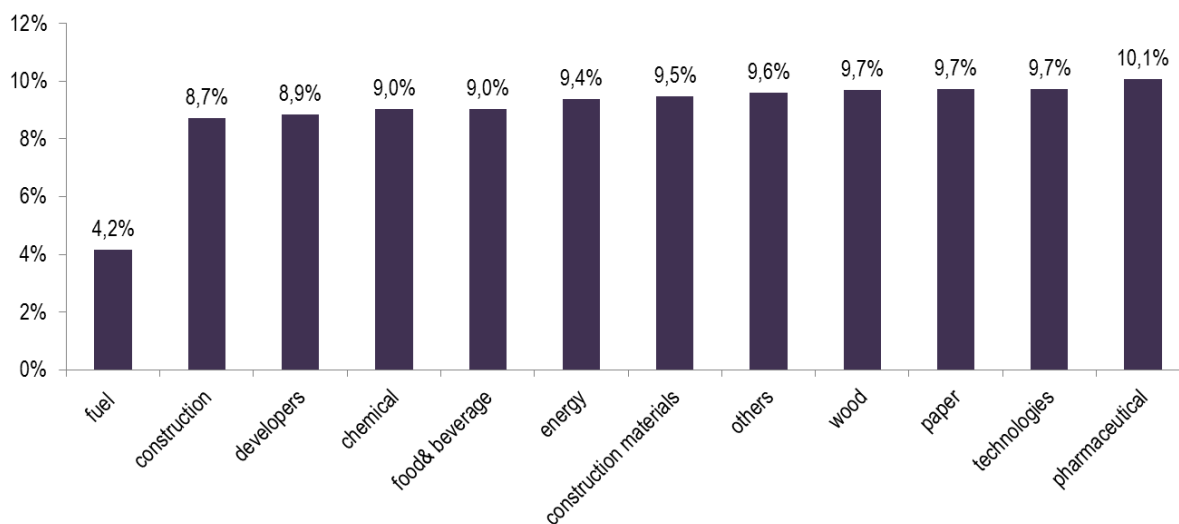
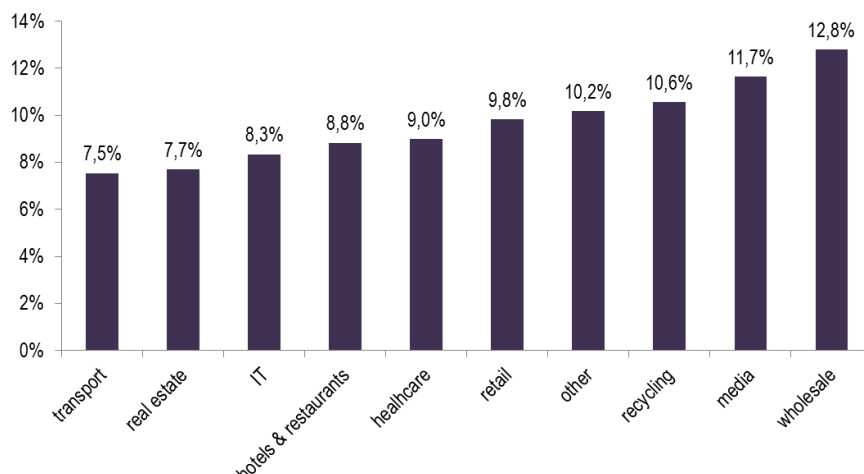


Diagram 37. Average interest rates for bonds in the services sector



In the services sector, average interest rates were the lowest for transport companies - 7.5% on average. The businesses classified in this sector are: OT Logistics, Pawtrans Holding and Siódemka. Rates were slightly higher for bonds of real estate development companies (7.7%), IT companies (8.3%), hotels and restaurants (8.8%) and healthcare (9%).

9.8% rates were offered by retail companies and 10.6% by recycling businesses. The rates were highest, at 11.7% and 12.8%, respectively, for companies from media and the wholesale sectors.

Convertible bonds

Diagram 38. Convertible bonds

Table 8. Issues of convertible bonds				
Issuer	Issue code	Issuer's sector	Stock market for the issuer's shares	Value of issue PLN
MCI MANAGEMENT	MCI0912	financial services	Main List	50,000,000
MARVIPOL	MVP0613	real estate	Main List	39,400,000
GANT DEVELOPMENT	GNT0313	real estate	Main List	26,000,000
MERA	MER0412	construction materials	NewConnect	758,500
RUBICON PARTNERS NFI	RBC0413	financial services	Main List	32,000,000
WARIMPEX	WXF0514	real estate	Main List	66,250,000
MEW	MSA0613	energy	NewConnect	5,060,000
MIRACULUM	MIR0513	pharmaceutical	Main List	4,775,000
MARVIPOL	MVP0914	real estate	Main List	30,791,000
WARIMPEX	WXF0316	real estate	Main List	26,500,000

Only 1.89% of all issues listed on Catalyst within the group under consideration carried the right for the bondholder to convert the bonds into the issuer's shares. Half of the ten issues of this type were by real estate development companies. Considering the stock market, eight out of ten issuers of convertible bonds were listed on the WSE Main List and the other two - on the NewConnect market. Only one issue of convertible bonds has taken place since October 2013, by a foreign compa-

ny Warimpex, with the value of PLN 26.5m.

Convertible bonds offer an added benefit for the bondholder, being the integrated conversion option. Therefore, issuers of convertible bonds can offer lower rates than for issues of bonds on the same terms but without this option.

Collateral

Within the group under review, 66.6% of all bonds listed on Catalyst were unsecured issues. As at the end of September 2012, they represented 69.3% of all issues; therefore, a slight increase of the importance of secured bonds can be observed, resulting indirectly from higher proportion of entities with smaller scale of operations in all listings. One may suppose that without hedging, these companies would encounter problems with attracting investors to their issues, due to increased risk of investing in their instruments. All the analyzed issues of the following types of issuers were unsecured: commercial banks, cooperative banks and local governments; the situation has not changed since last year. Almost 53% of all corporate issues are unsecured, accordingly (nearly 60% before last September).

The most commonly used collateral to secure issues of corporate bonds were real estate properties and pledges, 38% of all issues each. Sureties (11%) and mixed collaterals were used more seldom; their proportions increased during the past year by 4pp and 8pp, respectively. The least common collaterals were those on perpetual leasehold, receivables, and finance freeze.

"66.6% of bonds listed on Catalyst were unsecured issues."

Diagram 38. Structure of overall issues by collateral

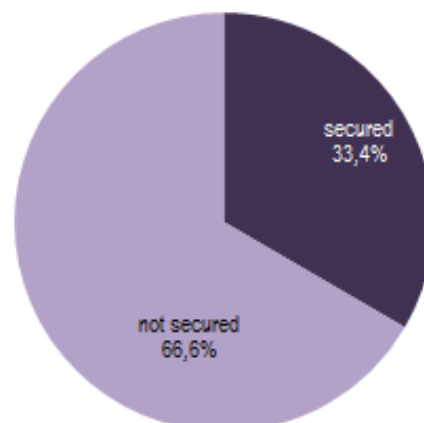


Diagram 39. Percentage of unsecured issues within total issues of specific types of issuers

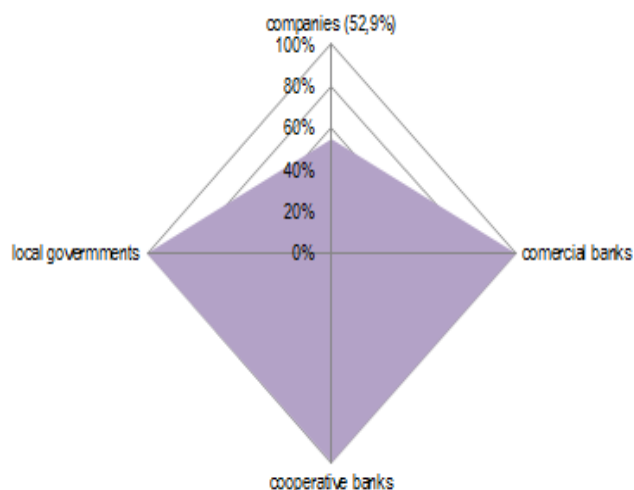
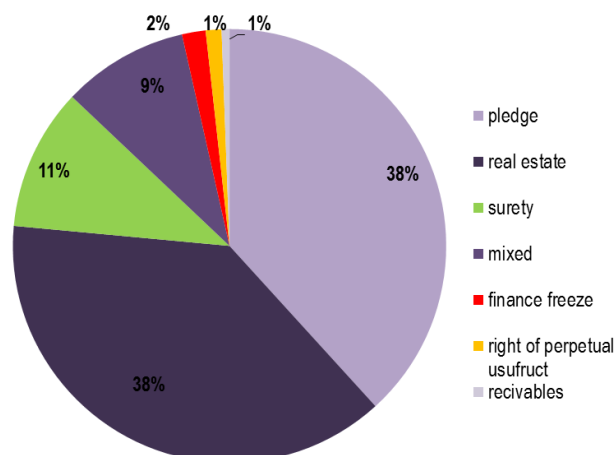


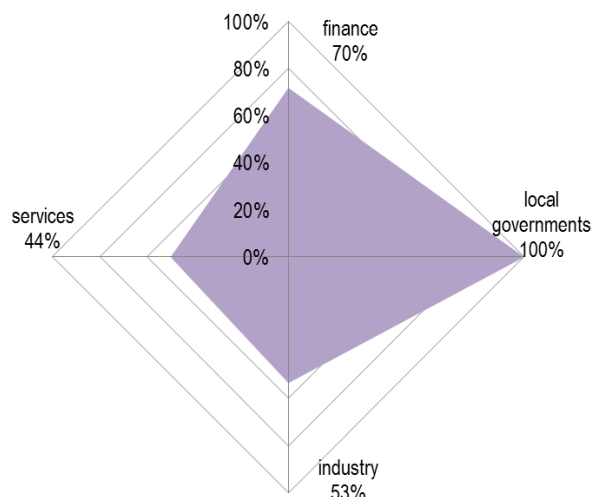
Diagram 40. Structure of corporate bond issue collaterals



In terms of proportion of secured issues within the overall number of issues under consideration, bonds were not secured for 53% of issues by issuers from the industrial sector, 70% - from the finance sector, and 44% - from the services sector.

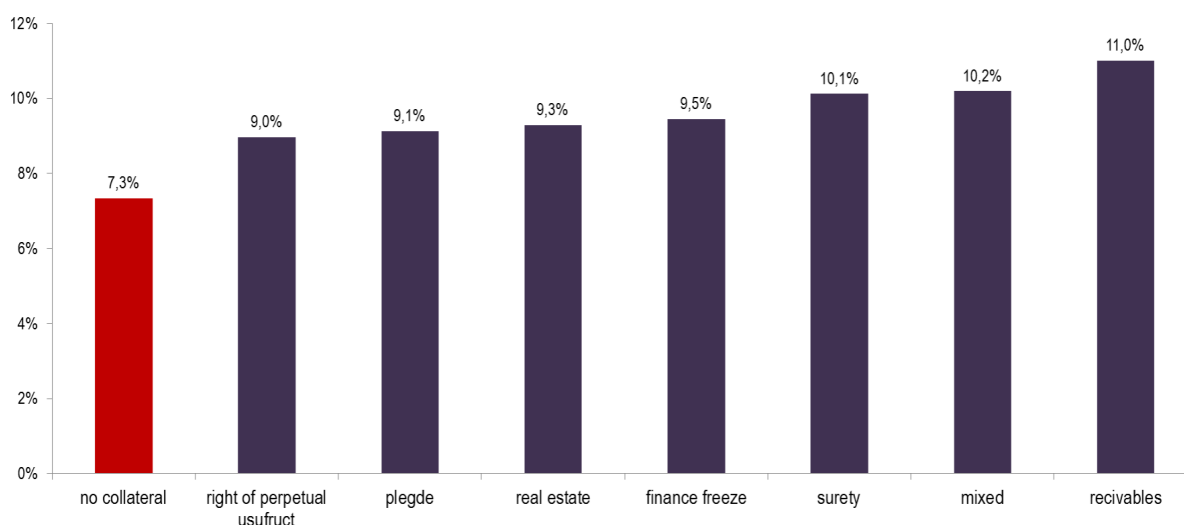
It turns out that lowest rates of interest were available for unsecured issues. This is definitely influenced by issues by local governments and larger issuers listed on the WSE regulated market, such as PGE, PGNiG, or ING Bank Śląski. The financial situation of these entities, as well as investor's confidence, that no collaterals are required in order for them to achieve attractive interest rates. For companies that issue bonds for the first time, such issue will involve the need to establish collaterals. Collaterals will not result directly in lower costs of interest rates, but will determine the success of the issue. Average rates for secured corporate issues range from 9.0% to 11.0%.

Diagram 41. Percentage of non-secured issues in total issues of specific issuers, by sector



"53% of issues from the industrial sector, 70% from the financial sector and 44% from the services sector were not secured."

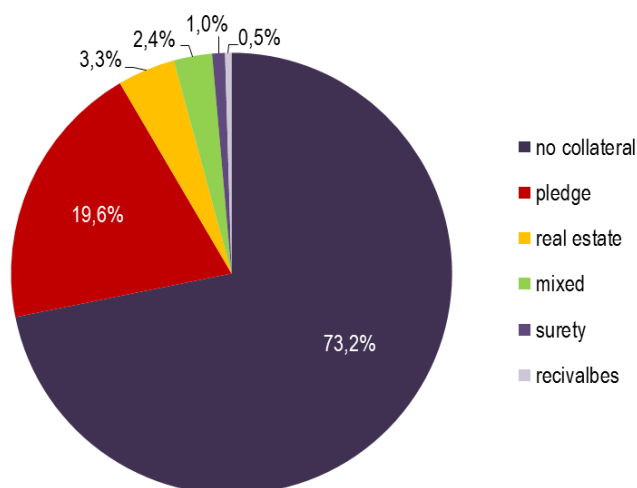
Diagram 42. Relationship of bond rates to type of collateral



Financial sector

Of all the bonds issued by companies from the financial sector, over 73% were not secured. This is primarily the outcome of commercial and cooperative banks' policies, as they tend not to secure their issues. Almost 20% of all issues were secured by pledge, in most cases on a collection of claims receivable. This form of collateral was used by debt enforcement and debt trading companies, such as Pragma Faktoring, e-Kancelaria, or Fast Finance.

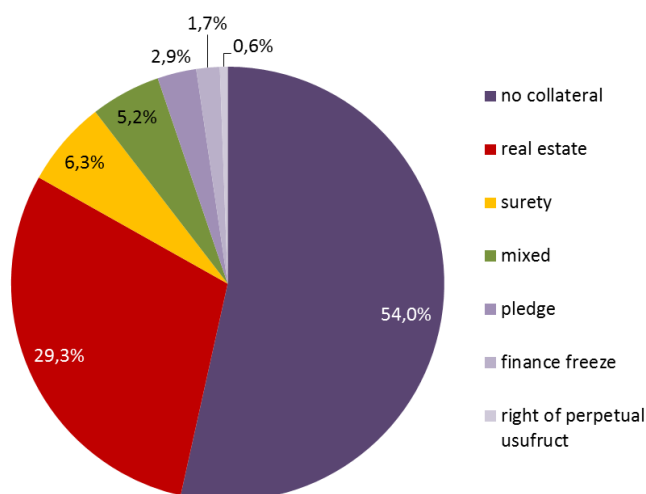
Diagram 43. Finance - preferred collaterals



Industry sector

Unsecured issues (54%) prevailed among issuers from the industrial sector. Most of the remaining issues were secured with a mortgage (29.3%), surety (6.3%), pledge (5.2%), or financial freeze (1.7%).

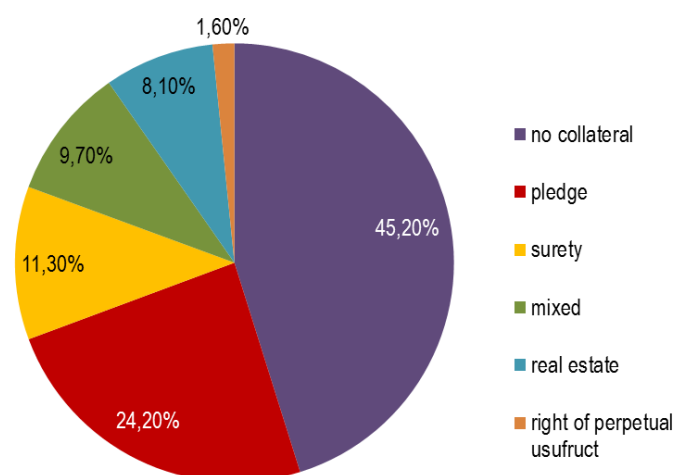
Diagram 44. Industry - preferred collaterals



Services sector

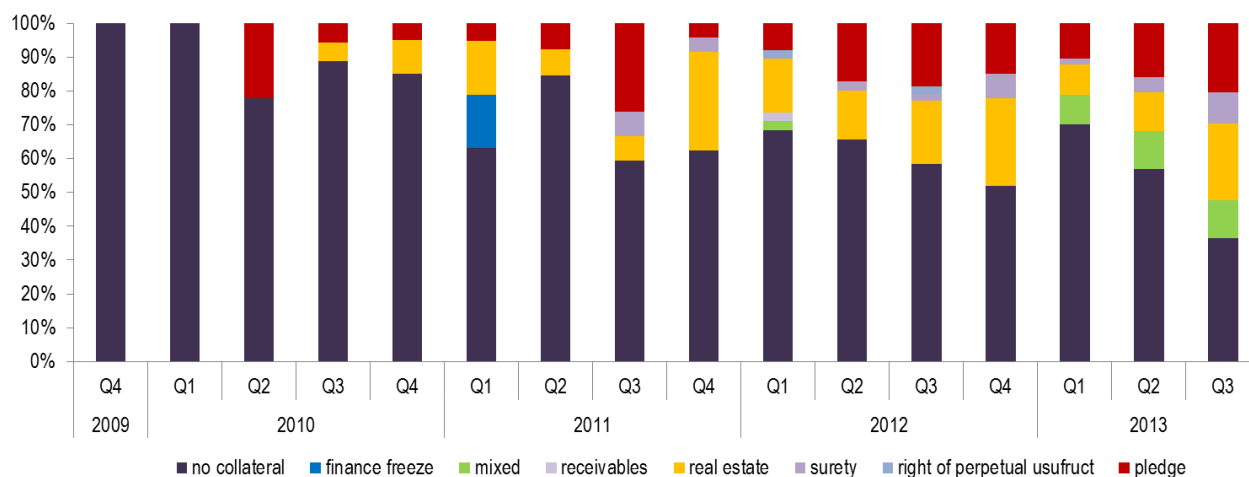
Within the service sector, 45.2% of all issues were not secured, while 24.2% were secured by pledge, established in most cases on trade receivables. Other popular collaterals in this sector are: security on real estate (11.3%) and surety (8.1% of all issues).

Diagram 45. Services - preferred collaterals



Proportions of particular collaterals

Diagram 46. Structure of bond issue collaterals



In the beginning of Catalyst operation, unsecured bonds represented 100% of new issues. This was due to relatively higher activity of issuers from the group of local governments, commercial banks and cooperative banks, i.e. issuers enjoying higher levels of confidence among investors than corporate entities.

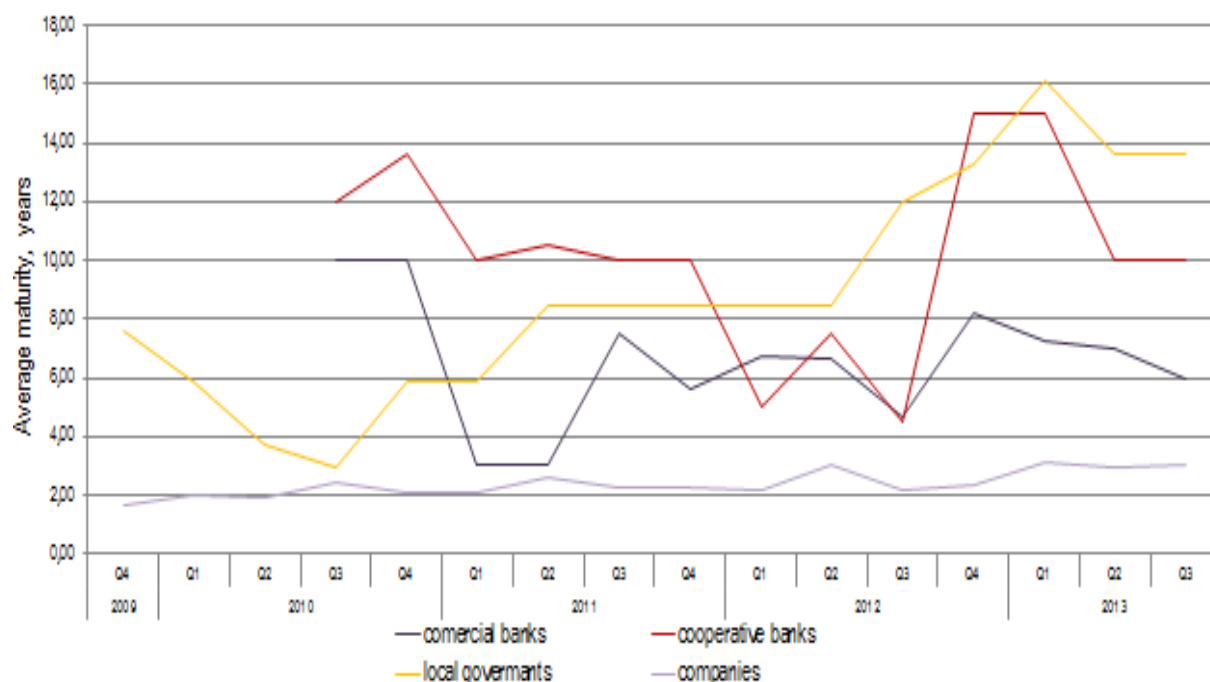
During the recent years, along with increasing activity of businesses, the percentage of secured bonds has been increasing.

Since Q1 2011, issuers have implemented various collaterals, which may be a proof of declining investors' confidence in issuers and trouble-free repayment of their obligations. Another reason behind the increased number of forms of collaterals is the growing number of issues with smaller scale of operations.



Maturity of bonds

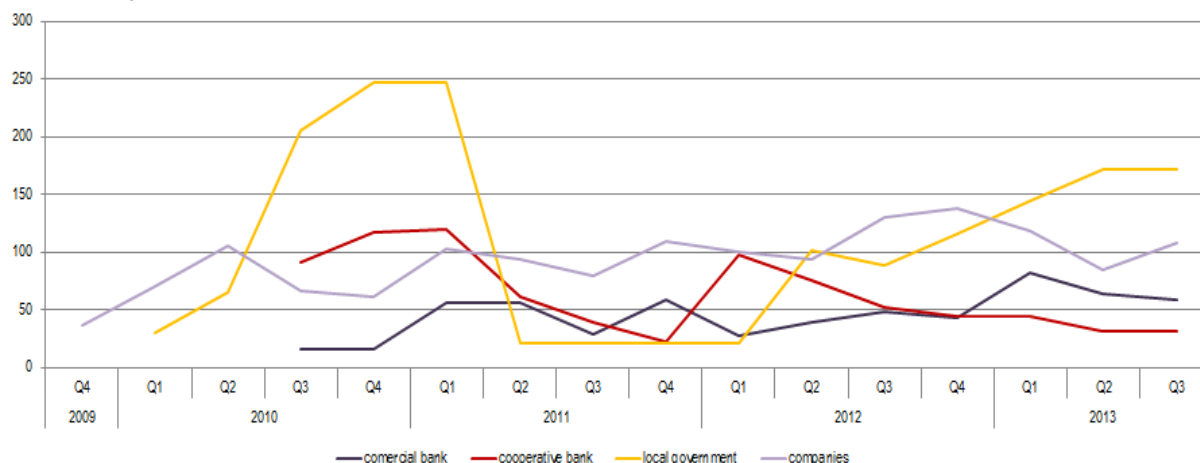
Diagram 47. Average bonds maturity period, by type of issuer



Average maturity of bonds introduced to trading on catalyst before Q3 2013 was about 6 years and 5 months. As at the end of Q3 2013, it is only 4 years and 4 months, meaning that issues of bonds with shorter maturity periods have appeared. Maturity periods are longest for bonds issued by local governments and cooperative bonds, at around 10 years and 5 months on average, followed by commercial banks' bonds at 6 years and 6 months. Average maturity periods are definitely shorter for corporate bonds - 2 years and 7 month.

There is a visible tendency for extending maturity periods for corporate bonds. For new issues, the average period would range from 1 year 7 months to 3 years 2 months. Before Q3 2010, local government bonds were issued for a period of about 3 to 8 years. This period for new issues was much shorter than after September 2012 (15 years on average). Maturity periods for issues by commercial banks and cooperative banks were highly variable. For commercial banks, they would range from 3 to 10 years. In the segment of cooperative banks, it would fluctuate between the values of 4.5 years during Q3 2012 and 15 years during the following two quarters.

Diagram 48. Average length of the process of referring bonds to Catalyst, by type of issuer, during the period from Q4 2009 to Q3 2013 (days)



During the period under review, average time needed for admission of shares to trading on Catalyst, from the date of issue to the date of listing, was 125 days, i.e. 30 days more than the average referral period as at September 28, 2012.

Catalyst referral times were shortest for bonds issued by commercial banks (50 days on average). For cooperative banks, this period was 74 days on average, and 109 days for corporate issuers. Since the last year, the time required for referral of local government bonds to trading has become longer, now at 112 days, compared to 93 days on average as at September 30, 2012 (the scope of analysis of bonds issued by local governments exclude the second half of 2009 as the data of that period is not representative).

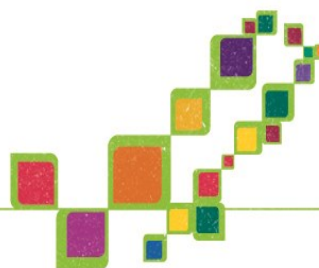


Table 9. Proportion of bonds at risk of default, in terms of quantity and value, within all issues in the group under review and all corporate issues*

Specification	in relation to all issues	in relation to corporate issues
Number of issues not redeemed on time (%)	5.29%	7.11%
Number of issues when issuer went bankrupt before redemption (%)	1.70%	2.28%
Total number of defaulted issues (%)	6.99%	9.39%
Specification	in relation to all issues	in relation to corporate issues
Value of issues not redeemed on time (%)	0.82%	1.24%
Value of issues when issuer went bankrupt before redemption (%)	0.08%	0.12%
Total value of defaulted issues (%)	0.90%	1.36%

* the analysis covers the value of the entire defaulting issue, whether or not any part of such issue was repaid on time

"Default" means any non-compliance with bonds issue terms by the issuer. 38 issues by 26 issuers were listed in the history of Catalyst for which there was a problem with redemption or timely payment of interest. Most defaults occurred on Catalyst after October 2012. Since then, as many as 27 series of bonds issued by 15 organization encountered problems with conforming to the issue terms. The overall value of bonds of defaulting issuers was almost PLN 252m. For 28 issues, investors were unable to recover their interest receivable or the par value at the agreed time. The remaining nine series of bonds of Budostal-5 and Religa Development may not be redeemed pursuant to the petitions for bankruptcy filed by the companies. The analysis further includes the issue of bonds of Konopiska commune, for which interest was paid with two days' delay and the commune was explaining itself with human error.

Outside the scope of analysis is the issue of bonds by Gant Development, for which bankruptcy petitions are to be considered by the court on November 18. At the

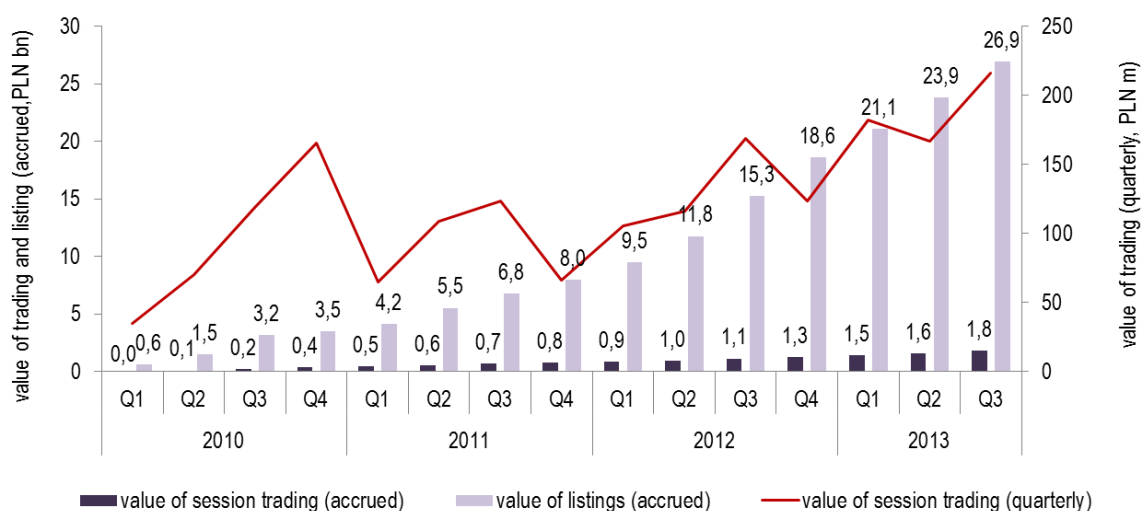
moment, 2 series of bonds by that company are present on Catalyst, with a total value of nearly 48 million PLN.

The proportion of defaulting corporate issues to total volume of bond issues within the group under review is 6.99% and its proportion to overall corporate issues only is 9.39%. Analysis of defaulting corporate issues in terms of value shows that these were mainly issues with an average value of PLN 10.7m. Therefore, their aggregate value is insignificant, representing 0.90% of the value of all issues in the group under consideration, and 1.36% of the value of corporate issues only.

Certainly, the increasing number of defaults on Catalyst is disturbing. The average proportion of the number of defaulting issues to the overall number of corporate issues during the last three years was 4.44% (at the moment, this ratio is 9.39%). Nonetheless, it is not related to deterioration of issuers' standing but to the early stage of market operations, where first redemptions of bonds are just occurring.

Trading volume analysis

Diagram 49. Value of session trading (accrued and quarterly) and value of debuts within the group under review (by first listing date)



Trading analysis supports the claim regarding low but increasing liquidity of instruments listed on the market. Session trading values within the group under review were fluctuating and reached their historical maximum during Q3 2013 at PLN 216.4m, compared to PLN 34.7m in Q1 2010. The accrued value of session trading in the contemplated group exceeded PLN 1.8bn as at the end of Q3 2013.

Within the group of companies and commercial banks, investors would most frequently trade in instruments of companies listed on the WSE Main List (53.9% of all trades, with the value of PLN 689.8m). Bonds of unlisted companies represented 37.2% of total trading, with the value of almost PLN 476m. Investors would most seldom trade in bonds of companies listed on NewConnect. Trading in these instruments represented 8.9% of total trading, with the value of almost PLN 476m.

The most liquid instruments were the bonds of the City of Warsaw, the Warsaw Stock Exchange, cooperative banks: BS-PBS Sanok and BPS Warsaw, a commercial bank: Getin Noble Bank, and corporate issuers: Prime Car Management, Gant Development, Marvipol and PKN Orlen, which together generated almost 50% of all trading on the Catalyst market.

Diagram 50. Percentage share in trading by stock market (in the companies and commercial banks groups)

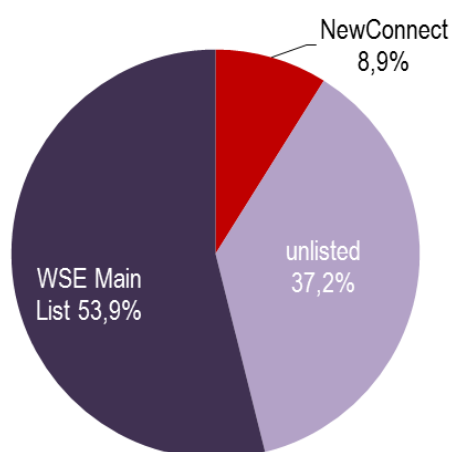


Table 10. Bonds of issuers with highest session turnovers (PLN m)

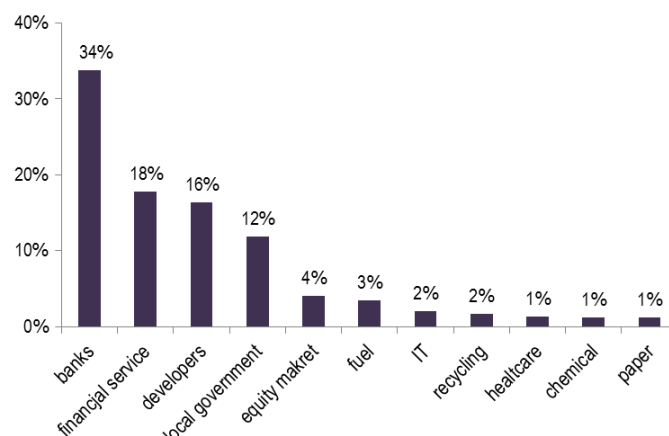
Issuer	Value of issue	Session trading
CITY OF WARSAW	2,100.0	187.2
BS-PBS SANOK	73.0	125.7
BPS WARSAW	265.2	120.1
PRIME CAR MANAGEMENT	534.0	109.9
GANT DEVELOPMENT	245.9	104.7
GETIN NOBLE BANK	1,610.2	88.0
WSE	245.0	79.2
MARVIPOL	203.0	68.3
PKN ORLEN	1,400.0	55.4

Investors present on Catalyst would most often trade in bonds issued by banking sector issuers, with a total trading value of PLN 587.9m. A significant proportion of all Catalyst trading was focused on bonds issued by financial services companies, generating turnover of nearly PLN 309.7m, as well as real estate development companies (PLN 284.9m) and local governments (PLN 206.9m).

Trading in banking sector bonds was mostly generated by debt securities of two cooperative banks, from the Podkarpackie region and from Warsaw, as well as one commercial bank - Getin Noble Bank. The value of trading in bonds issued by these parties was PLN 125.8m, PLN 120.0m, and PLN 88.0m, respectively.

Prime Car Management, a company operating in the vehicle leasing business, prevails in the financial services sector. Through trading in the bonds of that company, investors yielded almost 110 million PLN of turnover. Trading values were also high on bonds issued by Kruk (debt enforcement), amounting to PLN 45.8m.

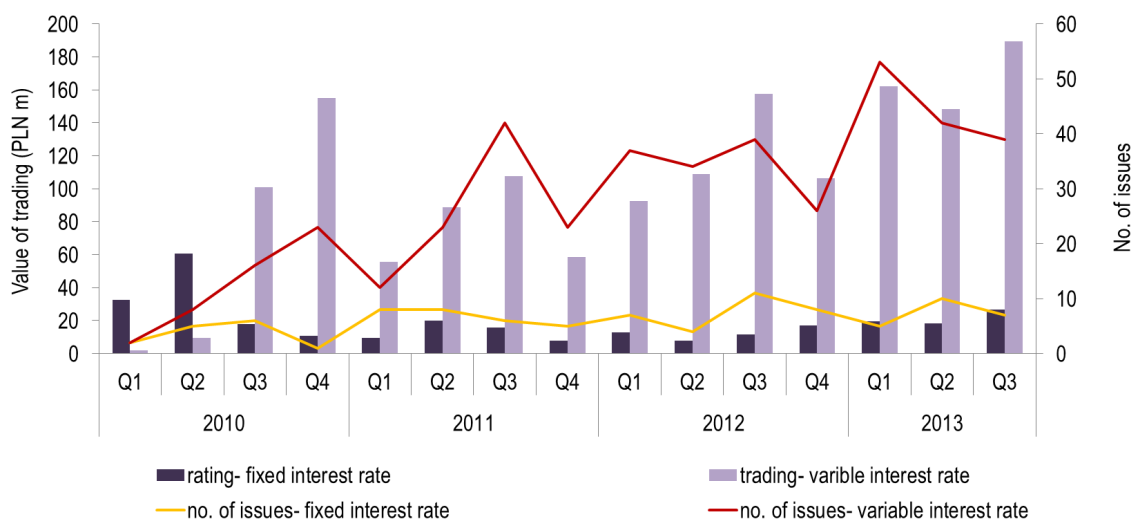
Diagram 51. Percentage shares of corporate bond issues in total trading, by business sector



Within the real estate development sector, most trading was generated by bonds issued by Gant Development - as much as PLN 104.7m, followed by Marvipol (PLN 68.3m) and Ghelamco Invest (PLN 48.4m).

Trading value generated on local government bonds was highest for the securities issued by the city of Warsaw, which are also instruments with highest turnover on the Catalyst market - in excess of PLN 187m.

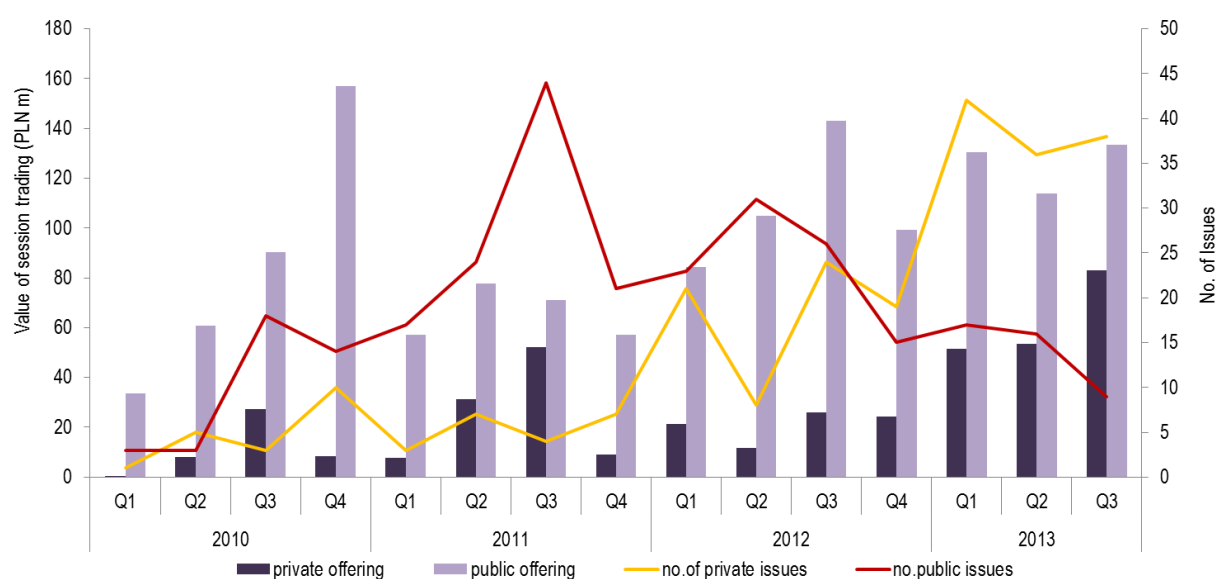
Diagram 52. Value of session trading and number of issues by type of interest



Apart from the first two quarters of 2010 when trading in bonds of the city of Warsaw prevailed on the market together with fixed rate Onico bonds, Catalyst is generally dominated by trading in floating rate bonds. This is because this type of instrument constitutes the definite majority of all instruments on the market.

Highest quarterly turnovers for fixed and variable rate instruments were observed during Q3 2013. During that period, trading in fixed rate bonds was highest on securities issued by BEST (PLN 6.36m) and PCZ (PLN 6.29m). Regarding floating rate bonds, the most significant trades in Q3 2013 were those of bonds of PKN Orlen (PLN 45.47m), Getin Noble Bank (PLN 25.07m) and BPS Warsaw (PLN 16.57m), which generated almost 46% of all trading in such bonds.

Diagram 53. Value of session trading and number of issues by type of offering



Since the very beginning of Catalyst, trading values have been highest for instruments issued through a public offering. In this way, a larger group of investors acquire securities within the given issue, which in turn results in improved liquidity of the listed instruments. Maximum trading in bonds issued through a public offering took place during Q4 2010 due to trading in cooperative banks' bonds.

The maximum value of trading in bonds issued through a private placement occurred during Q3 2013, reaching over 83 million PLN. Despite the increasing volume of private issues and declining number of public issues, investors prefer trading in bonds issued through public offerings, although this tendency is currently reversing due to lower availability of the latter instruments on the market.

Summing up, it should be noticed that highest trading values were generated by relatively low risk bonds where the value of issue is significant. An exception to the above rule is the group of defaults, such as Gant Development, where relatively high turnovers could have stemmed from high supply of these financial instruments. Bonds of companies listed on the WSE Main List were more popular on the secondary market than those of NewConnect listed companies. On the other hand, industry analysis has shown that the most attractive bonds were issued by banks, real estate developers and financial service providers, which is largely due to the fact that these issuers are most strongly represented on Catalyst. At present, no preference can be distinguished among investors towards fixed rate bonds, which is due to the relatively small number of such issues.

Glossary

group under review	Issues of municipal, cooperative and corporate bonds (excluding BGK, EIB and Euro-bond issues) mentioned in the chapters entitled "Issuer's Perspective" and "Investor's Perspective"
period under review	the period from September 30, 2009 to September 30, 2013
BGK	Bank Gospodarstwa Krajowego S.A.
EIB	European Investment Bank
FESE	Federation of European Securities Exchanges
WSE Main List	Regulated market monitored by the Polish Financial Supervision Authority and notified to the European Commission as a regulated market. The following instruments are traded on the WSE Main List: shares, subscription rights, rights to shares, investment certificates, structured instruments and derivatives: futures, options and index participation units.
WSE	Warsaw Stock Exchange
IPO	Initial Public Offering
Local government	Local government unit, issuer of municipal bonds
KDPW	National Depository for Securities in Poland
NewConnect	An organized stock market of WSE ran outside the regulated market in the form of alternative trading system.
FSA	Polish Financial Supervision Authority
corporate issuer	For the purposes of this Report, a "corporate issuer" means all issuers of corporate bonds, other than banks.
RPP	Monetary Policy Council
Bonds Act	Bonds Act of June 29, 1995 (Journal of Laws 1995, no. 83 item 420) with subsequent
Trading Act	Act of July 29, 2005 on Trading in Financial Instruments (Journal of Laws 2005, No. 183, item 1538) with subsequent amendments
Offering Act	Act of July 29, 2005 on Public Offering and Conditions of Admission of Financial Instruments to Organized Trading System, and on Public Companies (Journal of Laws 2005, No. 184, item 1539) with subsequent amendments

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Assistant

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Tax ID: 778-14-76-013, statistical number REGON: 301591100
District Court for Poznań - Nowe Miasto and Wilda in Poznań
VIII Commercial Division of the National Court Register, KRS 369868