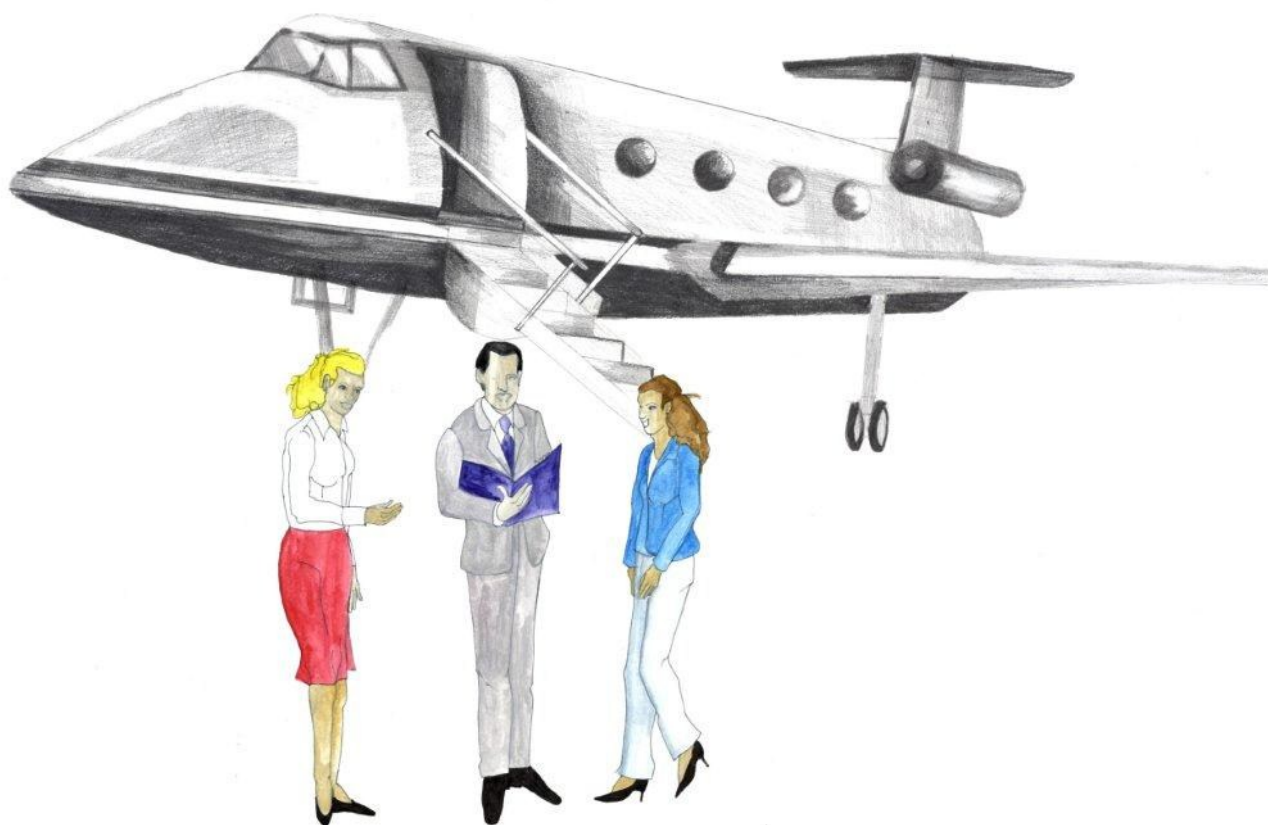




Catalyst Report - development brief

December 2012



CATALYST
AUTHORISED ADVISER



WSE AUTHORISED
ADVISER
for NEW/connect



Introduction

On the September 30, 2009 the Warsaw Stock Exchange launched Catalyst - the organized market of debt financial instruments. During merely three years of operation¹ 161 issuers of non-treasury bonds have acquired over PLN 55 bn through 385 bond issues. At the end of September 2012, the total value of the financial instruments listed on Catalyst including Government Securities and Covered Bonds amounted to PLN 562 bn.

The main purpose of establishment of Catalyst was to create a trading platform for both investors eager to invest on debt market and issuers seeking capital to fund current operations and future growth. Establishment of Catalyst allowed for greater diversification of investment portfolio and profitable capital investing.

Vital factors affecting the establishment of Catalyst were:

- growing demand from entrepreneurs for capital during the tight lending policy era;
- efforts to increase the competitiveness of the Polish capital market;
- undeveloped potential of the debt market in Poland;
- downturn on the stock markets and the low valuation of shares.

The Report prepared by Grant Thornton summarizes three years of operation of Catalyst, the market which during its short history has become an important, complementary platform encompassing the activity of investors and issuers.

The authors of the Report present a detailed analysis of issues introduced on Catalyst since its inception. The Report is dedicated to all stakeholders of Catalyst and focuses primarily on issues of corporate, municipal and cooperative bonds.



Ludwik Sobolewski, Ph. D.
CEO of WSE

„During merely three years of operation 161 issuers of non-treasury bonds have acquired over PLN 55 bn through 385 bond issues”

1. from 30.09.2009 to 28.09.2012

Bonds revealed its potential

In the daily work on bond issues we encounter frequent questions on the market standards regarding preparation of terms of bonds issue. Therefore, we follow the market trends and solutions for this type of projects. Our Report summarizes the collected knowledge and provides important advice not only for the future issuers, but also future investors.

It is worth mentioning that since the establishment of the market, i.e. during the last three years, corporate bonds have become an important source of capital for a number of companies that have limited credit standing at banks or did not want to rely on only one business partner. As many as 31% of the issuers have used the funds derived from issues to finance investments and 17% as a cash injection for current operations. However, 8% of the issuers dedicated funds to repay debt, often to roll over previous issues.

Bonds revealed their potential to investors by generating higher rates of return than many equity portfolios. However, not all securities provided the investors with equal investment return. The most attractive bonds were those issued by the financial sector (loans and debt collection), tempting investors with 11,43% interest rate. The most reliable commercial banks gave an average annual return amounting to 8,05%.

It turns out, that the vast majority of the bond issues were unsecured (69% of issues). Additionally, asset backed bonds did not guarantee better terms of issue for the issuers. Therefore, we claim that for the majority of secured bonds, the extension of liability to creditors was a necessary condition of issue success itself.

The major challenge for Catalyst is to increase the liquidity of listed bonds. The present volume of trade for most issues leaves much to be desired. The main cause of low market liquidity is a variable interest rate,

Damian Atroszczak
Business advisory department
Grant Thornton

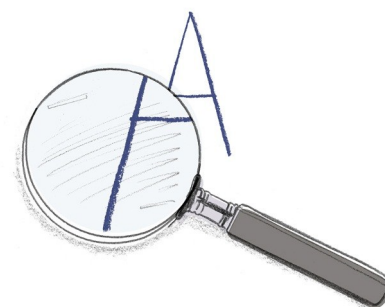


usually on the basis of WIBOR 6M. Shifting the interest rate risk on the issuers discourages investors from selling bonds on the secondary market. It's not surprising, since the percentage of defaults for corporate bonds has been oscillating around 0,23%.

The results of the analysis of bond IPOs success are interesting as well. On average, up to 90% of the corporate bond issues were purchased by investors. In case of most banks and local government units the issues were oversubscribed.

Given the fact that the acquisition of bonds entails long-term relationship between the issuer and the investor, we would like to encourage you to read the report, in which we share our knowledge and experience.

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Methodology of the Report

Analysis period

The subject of analysis are data on bond issues introduced on the Catalyst during the period from 30.09.2009 to 28.09.2012 (analysed period). For the analysis of individual issues based on the date of issue, the analysis did not take into account issues that occurred in the third quarter of 2012, as most of these issues have not been introduced to Catalyst until 28.09.2012. Some analyses do not take into account the initial quarters of the analysed period, if there was an insufficient number of data during this period, resulting from a small amount of issues spoiling the results of the analysis.

Data sources

The Report was based on a detailed analysis of publicly available documents of individual bonds issues. In addition, the authors of the Report derived data from the databases of Warsaw Stock Exchange, the National Court Register, the Polish National Bank, the Central Statistical Office (CSO) and the professional information services.

Structure of topics

Chapter 1: *Development and organization of Catalyst* includes the value and quantity analysis of overall Catalyst market.

Chapter 2: *Issuers' perspective* and Chapter 3: *Investors' perspective* – include a detailed analysis of corporate, co-operative and municipal bonds issues excluding issues of the European Investment Bank, Bank Gospodarstwa Krajowego, covered bonds and Eurobonds of PKO Finance AB. The Issuers are categorized into: commercial banks, co-operative banks, local government units and companies.

Chapter 2 presents the results of the analysis of Issuers listed on the Catalyst market

Chapter 3 provides a summary of listed debt instruments, including a description of the factors affecting the terms of bonds issue.

Presentation of statistical data

Time series analysis of individual issues takes into account bond issues dates, unless stated otherwise.

Comparison and analysis of interest rates of bonds assumes the base rates on the day of preparation of the Report.

Quarterly indicators of increase in prices of goods and services were obtained from the CSO data, the base is the level of inflation in the same period of the previous year.

The analysis of the issues value assumes the value of each issue as of its introduction to Catalyst.

The analysis of the number of issues takes into account the number of the issues introduced to the market, regardless of the fact that selected issues of certain issuers were assimilated after their introduction.

Presentation of graphs and tables

The data presented in charts and tables are based on Grant Thornton studies on the source data, unless stated otherwise.

The data presented in charts and tables covers the period from 30.09.2009 to 28.09.2012 (analysed period), unless stated otherwise.

Development and organisation of Catalyst



Agata Brzyska
Business advisory department
Grant Thornton

Before the establishment of the Catalyst market, secondary bond market was held mainly on the non-regulated interbank market and on a small scale on the regulated markets: stock exchange and OTC (BondSpot, formerly MTS-CeTO). The regulated markets were dominated by treasury bonds and corporate bonds accounted for a small percentage of the total bonds listed on the Warsaw Stock Exchange.

Catalyst was established in September 2009 during the turmoil on the global financial markets. Taking into account the nature of the bond market, it was the optimal time to establish Catalyst. Banks tightened lending requirements, hence obtaining bank financing became more difficult. As a result, companies and local government units sought other sources of financing. Nowadays, after three years this trend still continues, however, we can observe growing interest in investing in bonds not only among financial institutions, but also among individual investors. The establishment of Catalyst allowed investors to diversify their investment portfolios. In particular, individual investors gained access to investments other than Government Securities.

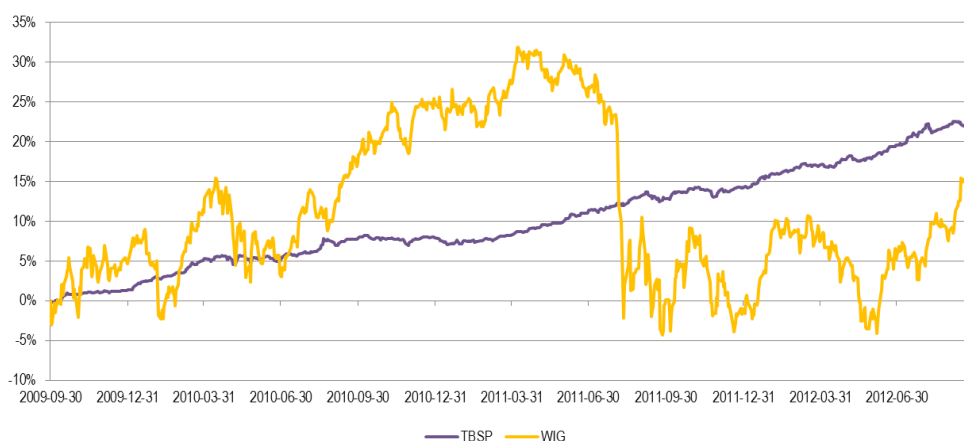
Debt market has become an interesting alternative for the stock exchange, which in the times of economic down-

turn was losing its popularity among investors who associate stock investments with a greater risk and issuers which are discouraged by relatively low valuations in the IPO process.

Preferences of experienced investors have changed in the recent years due to the financial crisis. One may observe a growing trend of investing in fixed income securities. There is greater interest among investors in the dividend shares. WIGdiv - index of dividend paying companies has improved in recent years and performed better compared to WIG income index or the index of the largest companies - WIG20.

These trends are also reflected in the formation of Treasury bonds index TBSP.Index - between the inception of Catalyst and the end of September 2012 it has grown from 1137,8 to over 1401,7 points.

Figure 1. TBSP.Index against WIG



Source: www.gpwinfostrefa.pl

Size of the market

According to FESE data for September 2012 Catalyst is the second after CEESEG Vienna bond market in Central and Eastern Europe in terms of the number of series introduced on the market. Since its establishment, 162 entities including Treasury bonds issued a total of 450 series of debt instruments. Without Treasury bonds the market entered 385 series worth nearly PLN 55 bn. Overall value of the Catalyst market at the end of September 2012 amounted to almost PLN 562 bn. In addition 30 bond series of 8 entities obtained status of authorised instruments. These bonds are not listed on Catalyst, but the issuers are obligated to fulfil Catalyst reporting requirements.

Catalyst distinguishes 5 types of debt instruments:

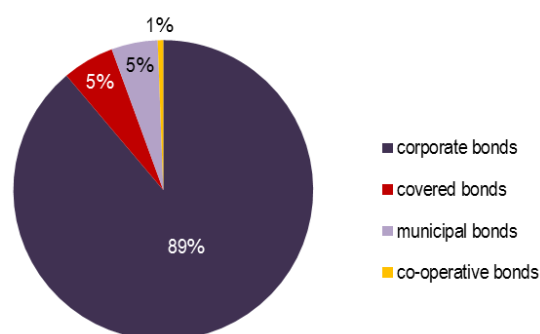
- corporate bonds,
- municipal bonds,
- Treasury bonds,
- co-operative bonds,
- covered bonds.

More than 91% of the overall market value is attributed to Treasury bonds. The second most represented corporate bonds, which include bonds of BGK and EIB of total value of almost PLN 29,7 bn.

The value of listed non-treasury bonds rose quarterly to reach the value PLN 49 bn as of 28th September 2012 compared with PLN 5 bn as of 30th September 2009.

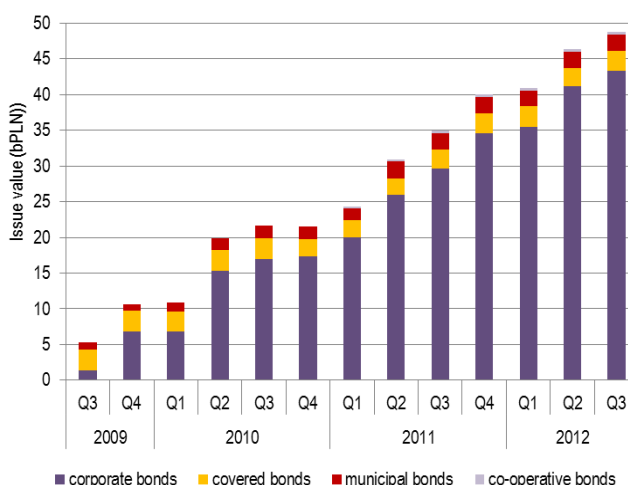
The average increase in the value of listed non-treasury bonds amounted to nearly 27% on quarterly basis.

Figure 2. Value structure of instruments listed on Catalyst (in PLN) by types of instruments as of 28th September 2012 (excluding Treasury bonds)



Source: www.gpwcatalyst.pl

Figure 3 Value of instruments listed at the end of each quarter (excluding Treasury bonds)



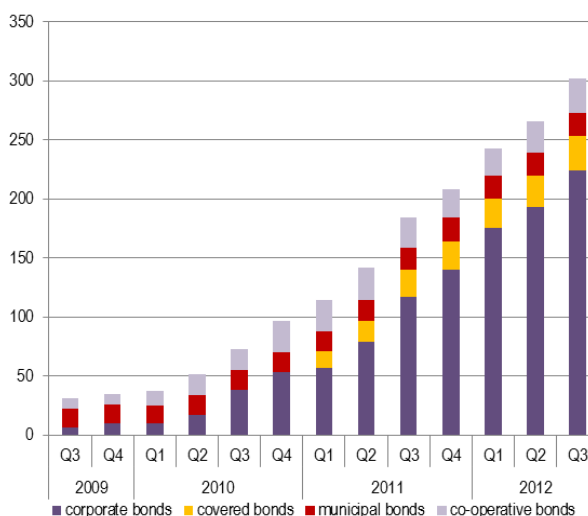
Source: www.gpwcatalyst.pl



In comparison with the end of the third quarter of 2009, the number of listed series rose by 271 to 302 series. Significant increase in the number of issues was observed in 2012 - in the period from January to September there were 94 new series. The biggest issues among companies were PGNiG (PLN 2,5 bn) as well as Polkomtel Finance AB and PKN Orlen, each worth PLN 1 bn. However, Catalyst market is appropriate not only for large companies and large issues. Until now there were over 30 bond series of value less than PLN 1 m listed on Catalyst.

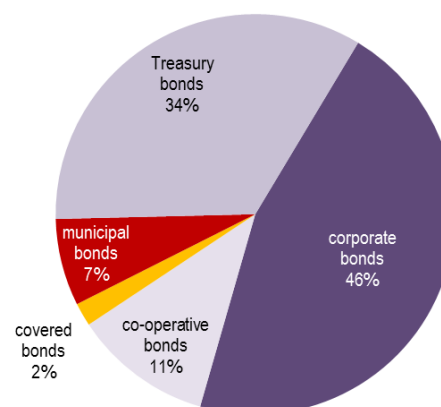
Until 28.09.2012 almost all of the instruments listed on Catalyst were denominated in PLN. The exception was an issue of bonds denominated in EUR issued by PKO Finance AB - the financing company of PKO Polish Bank SA - with a value of EUR 800 m, which had its Catalyst debut on the 22 November 2011.

Figure 4. Number of listed instruments at the end of each quarter



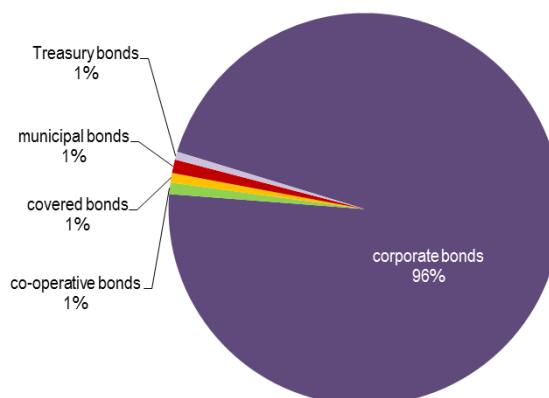
Source: www.gpwcatalyst.pl

Figure 5. The structure of session trade volume value of bonds listed on the Catalyst by the types of instruments



Source: www.gpwcatalyst.pl

Figure 6. The structure of block transactions volume value of bonds listed on the Catalyst by the types of instruments



Source: www.gpwcatalyst.pl

Market liquidity

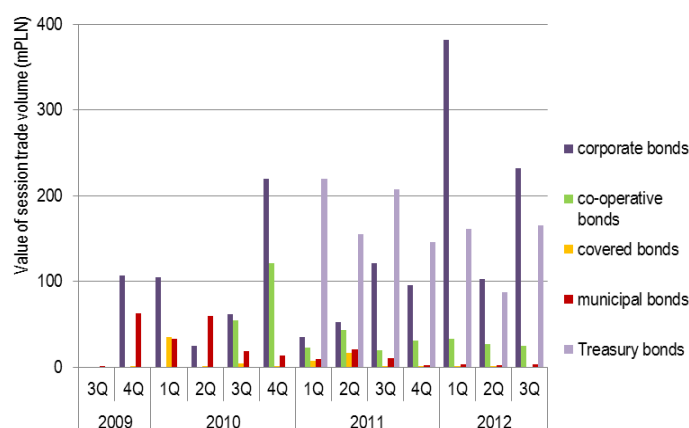
The value of the session volume during the analysed period amounted to nearly PLN 3,4 bn. The highest volume was generated by corporate bonds (46%), for which total volume during the analysed period amounted to over PLN 1,5 bn. Bonds issued by Treasury represent 34% of current volume in the three-year history of the market for which the total volume amounted to PLN 1,1 bn. The relatively large share of the market volume (11%) consists of bonds issued by co-operative banks, despite the fact that these entities obtained the opportunity to issue bonds at the end of 2009 (after changes in the law on the functioning of co-operative banks). This indicates a very strong interest in this type of bonds among investors.

The total value of block trades volume during the analysed period amounted to over PLN 7,6 bn. The block trades volume was strongly dominated by corporate bonds, creating 96% of the overall volume. Other types of debt instruments generated 1% of volume each.

Quarterly analysis of session volume confirms the dominance of corporate bonds during the analysed period except for 2011, in which the volume was dominated by Treasury bonds. The highest volume by value for corporate bonds worth PLN 382 m was carried out in the first quarter of 2012, mainly due to volume of BGK bonds worth PLN 240 m. In the initial market period the volume was also based largely on municipal bonds.

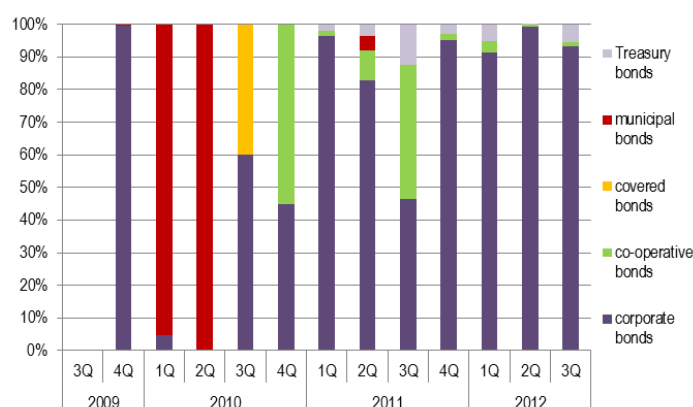
The biggest block trades in terms of value were held in the fourth quarter of 2009, when two BGK bonds series of total value above PLN 4,9 bn were traded. In addition there were also large transactions in the fourth quarter of 2011 and second quarter of 2012 with the total value amounted to PLN 1,2 bn and PLN 1,0 bn respectively. In the other quarters the volume of block trades was not higher than PLN 60 m. During the whole period volume was dominated by corporate bonds, with the exception of the first two quarters of 2010, in which almost 100% of the volume was achieved through transactions on the municipal bonds of the City of Warsaw.

Figure 7. The value of session trade volume (quarterly)



Source: www.gpwcatalyst.pl

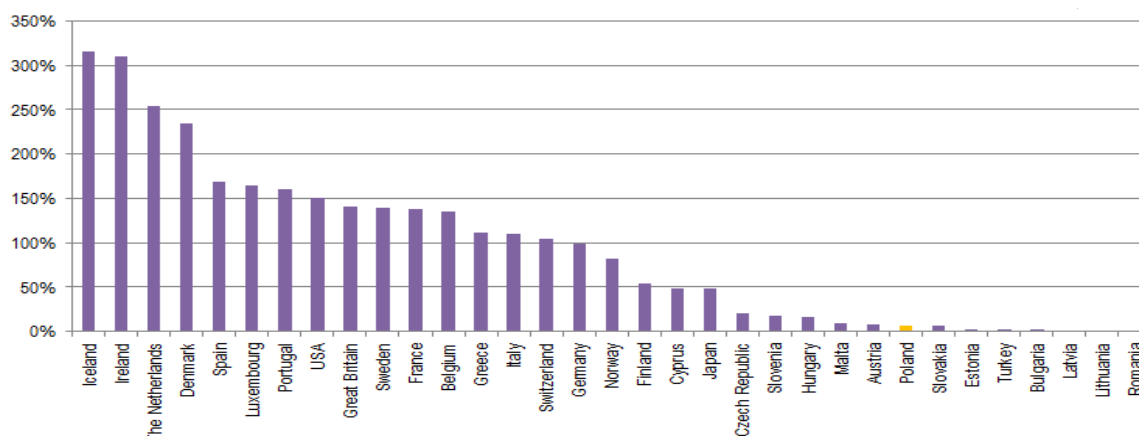
Figure 8. Block trades volume structure (% , quarterly)



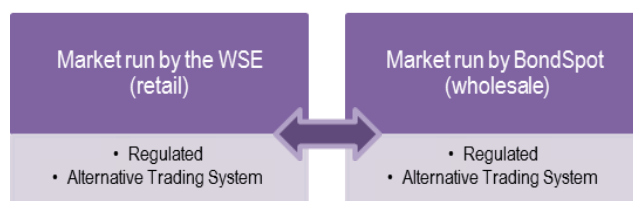
Source: www.gpwcatalyst.pl

The Polish bond market has a great potential for development. Unlike more developed debt markets of Western Europe, both the ratio of the bonds trading volume in relation to equity volume, and the value of issues are much lower. Comparing the value of debt securities issued by companies and financial institutions in relation to GDP, it appears that for Poland that rate amounts to only 6%. It is considerably low percentage compared to Ireland, United States, United Kingdom, or Germany, where that ratio amounts to 310%, 150%, 140% and 100% respectively. This indicates high potential of Polish debt instruments market.

Figure 9. The value of bonds issued by companies and financial institutions in relation to GDP in chosen countries



Source: BIS (data for December 2011, domestic and foreign issues), Fitch (data only for Poland, for June 2012, only instruments above 1 year, domestic and foreign issues), Eurostat (GDP data for the year 2011)



Organization and volume trade structure

Debt instruments on Catalyst are traded on retail and wholesale markets run by the Warsaw Stock Exchange (WSE) and BondSpot (BS) respectively. Each of these markets is divided into two platforms: Alternative Trading System (ATS) and regulated market. Each of debt instruments can be listed on the both of the platforms: WSE and BondSpot.

Transactions are cleared through the National Depository for Securities, which also guarantees their execution. The key document regulating Catalyst market is Catalyst Operating Rules. In addition each of the Catalyst platform is governed by specific rules and regulations:

- WSE Regulated Market - The WSE Rules,
- BondSpot Regulated Market—The Regulated Off-Exchange Trading Rules,
- WSE Alternative Trading System—Alternative Trading System Rules,
- BondSpot Alternative Trading System—Alternative Trading System Rules.

Other laws and regulations related to Catalyst market are Act on Bonds, Act on Public Offering, Act on Trading in Financial Instruments and Ordinance of Ministry of Finance on current and periodic disclosures to be submitted by issuers of securities.

Catalyst debut precedes the submission of an application for the introduction of financial instruments to trading as well as submission of registration document which can be:

- Information Document (for the entry of private placement bonds on WSE Alternative Trading System and/or BondSpot);
- Information Note (when other financial instruments of the issuer are already listed on the Regulated Market or the Alternative Trading System);
- Prospectus or Information Memorandum (in the case of the public offerings and the intro-

duction of financial instruments to the Regulated Market).

Bond listing on Catalyst may be held by the admission or introduction of issue to trading on the market. Furthermore, issuers are able to obtain authorization of financial instruments issues. As a result of authorization series of bond, which doesn't need a dematerialized form, is recorded in a publicly available Catalyst information system. This is a proof of fulfilment of the statutory requirements of the issuer's obligations related to the mandatory disclosures and means a significant increase in the transparency of the issuer.

In addition, if bonds are introduced to an ATS, the issuer may obtain support from an Authorised Adviser (AA) which analyses the issuer's financial standing and draws up and approves the information document.

It is worth mentioning that Market Makers play an important role in the functioning of Catalyst, particularly in supporting the liquidity of the market. The main aim of the Market Maker activity is to support the liquidity of issuers' financial instruments, in particular, the determination of a financial instrument price and providing opportunities for closing the position by an investor at any time.



Private placement and public bonds offering

Polish Act on Public Offering defines two ways of issuing bonds, i.e. public offering and non-public offering commonly called a private placement.

A non-public offering is offering of securities to maximum of 99 specified investors. No prospectus or information memorandum is required in this case.

The issuer is obliged to prepare the terms of issue in accordance with the Act on Bonds, and then make them available to potential investors. Acceptance of an offer occurs at the time when the purchaser makes a declaration of will and makes payment on the appropriate account. If the bonds are not dematerialized, the investor gets the a document of the issue. However, if the bonds do not have a material form, their deposit runs the depository, or the National Depository for Securities. Bonds dematerialized in the National Deposit of Securities are stored on the investment account of the investor.

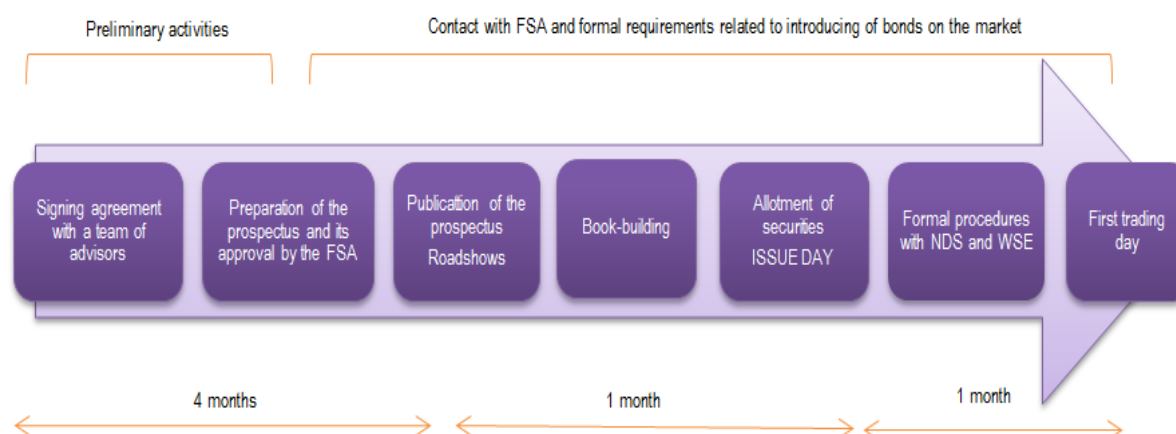
Figure 10. Framework schedule of private placement



Source: the schedule is based on the experience of Grant Thornton, schedules of issues in individual cases may be shorter or longer, depending on the specific project

A public offering of bonds is offering of bonds to at least 100 investors or unspecified number of investors together with information providing sufficient grounds for making purchase decision. For a public offering, a prospectus or an information memorandum approved by the Polish Financial Supervision Authority is required. The prospectus needs to be also disclosed publicly. Bonds issued under such a prospectus may be sold in Poland or in any other EU member state.

Figure 11. Framework schedule of public offering



Source: the schedule is based on the experience of Grant Thornton, schedules of issues in individual cases may be shorter or longer, depending on the specific project

Table 1. Comparison of a public offering and private placement

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

The main advantage of the private offering over public offering is less time consumption and lower costs of the issue. However, the public offering provides the opportunity to reach a wide range of investors, particularly individual investors, therefore is preferred for large bonds issues.

Mandatory disclosures applicable to bond issuers

Issuers whose securities are listed on the regulated market are legally required to provide information defined in the regulations of the market.

Issuers of bonds introduced to the Catalyst Alternative Trading System are obliged to submit information in a form of current reports with all and any information on company's financial and economic situation and on any events which may have an impact on the value of listed securities.

In addition issuers are obliged to disclose periodic reports which includes:

- semi-annual reports and consolidated semi-annual reports, covering the first 6 months of the accounting year (there is no obligation to provide auditor's report on the presented financial statement);
- annual reports and consolidated annual reports with certified auditor's opinion.

Local government units are required to submit annual reports on the implementation of the budget, along with the opinions of the Regional Chamber of Audit.



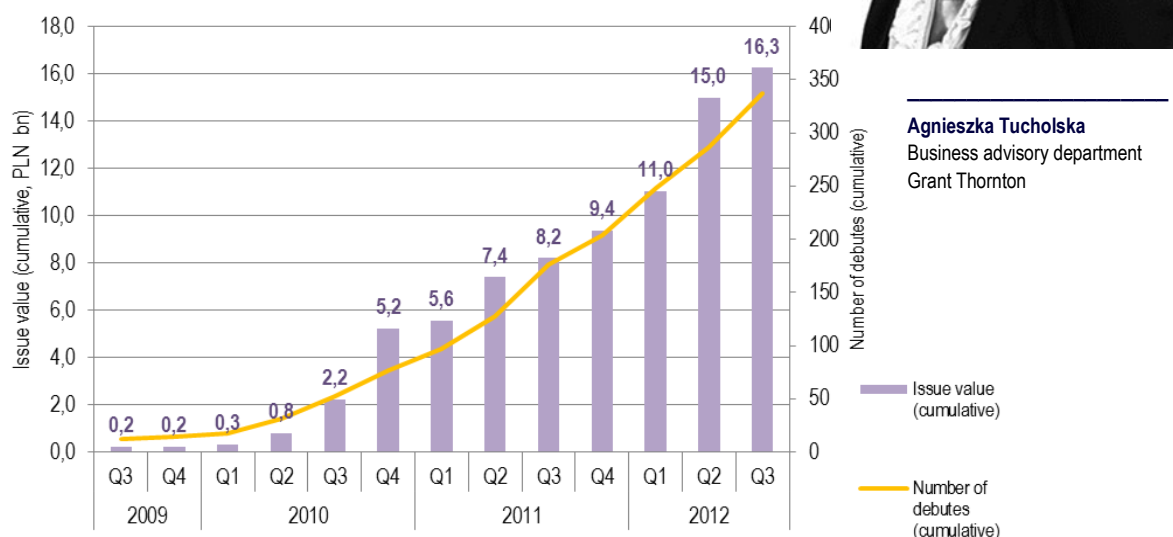
„The bond issue gives businesses the possibility to obtain additional financing for business development, financing of current needs or the repayment of existing liabilities”



Issuers' perspective

Issues summary

Figure 12. Value and quantity of issued bonds in analysed group (cumulative, as of the first day of listing)



Detailed analysis of issues of corporate, co-operative and municipal bonds (excluding BGK, EIB and eurobond issues) indicates that during 3 years of Catalyst's existence 156 entities have been admitted to Catalyst. All entities issued 337 bonds series of total value amounting to nearly PLN 16,3 m. Moreover, 8 entities that issued 30 municipal bonds of total value nearly PLN 73 m decided to apply for Catalyst authorisation for financial instruments. It means, that those issuers accept Catalyst reporting requirements and the issuers are registered in the Catalyst information system. Quarterly analysis shows visible upward trend of issues introduced on Catalyst. The greatest number of issues got listed in 3Q 2012. In the value terms the most bonds was introduced in 2Q 2012, including issues of PGNiG bonds valued PLN 2,5 bn. Total value of introduced issues in that period amounted to over PLN 4,0 bn.

Figure 13. Value and number of issued bonds in analysed group (quarterly, as of the first day of listing)

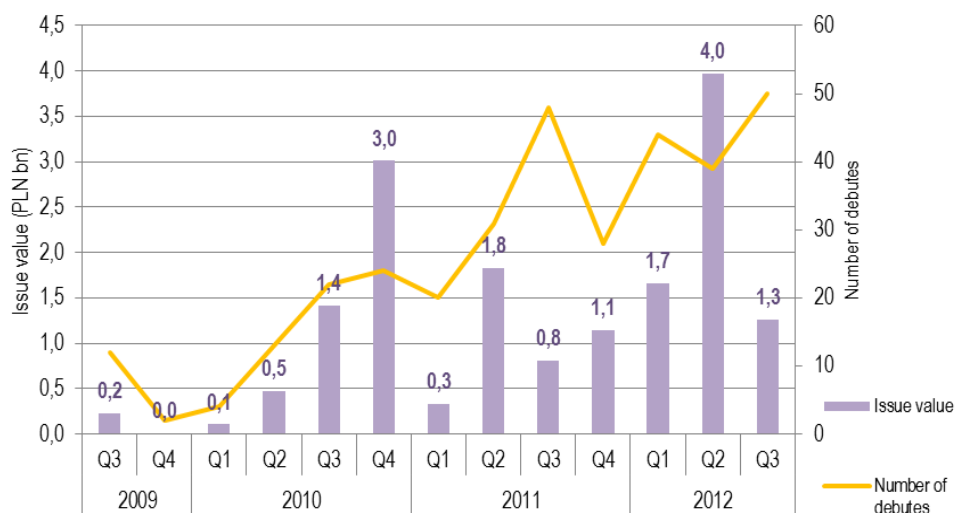


Figure 14. Issues structure by volume

The most active entities in the analysed group were issuers of corporate bonds - 120 companies in the entire Catalyst history (excluding BGK, EIB and eurobonds). Municipal and co-operative bond issuers benefited from financing through bond issue to lesser extent. 14 local government units and 22 co-operative banks introduced their bonds on the Catalyst.

Every consecutive quarter the number of quoted bonds series on Catalyst has been gradually increasing. The dominant position among them was constituted by quoted bonds, only a small number of them (less than 9% of analysed issues) were authorised bonds. All of the authorised bonds were issued by local government units.

The mean value of issues in the analysed group amounted to over PLN 48 m. The value of median was significantly lower than the mean and valued PLN 10 m. The discrepancy between mean and median value was mainly affected by large bonds issues of total value PLN 5,8 bn carried out by PGNiG, capital city of Warsaw and BOŚ. It's worth to mention that 75% of issues had a value below PLN 30 m.

Issue purposes

In accordance with the Act on Bonds, terms of bonds issue can determine specific purpose of bonds issue or not mention it at all. Lack of determination of the purpose gives issuers the ability to allocate funds in any manner. Therefore, 34% of analysed issues did not specify the purpose or defined it in a very general manner as "financing of current operations of company" (17%). Regardless of that, 31% of issues were performed in order to finance investments, and as a consequence were dedicated for a long-term development. It means that entities treat Catalyst as an alternative source of financing to receive needed funds for their development. In 8% of cases funds were raised to repay current liabilities.

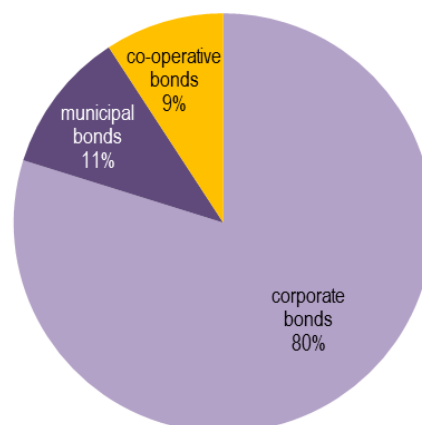


Figure 15. Distribution of bond issue value

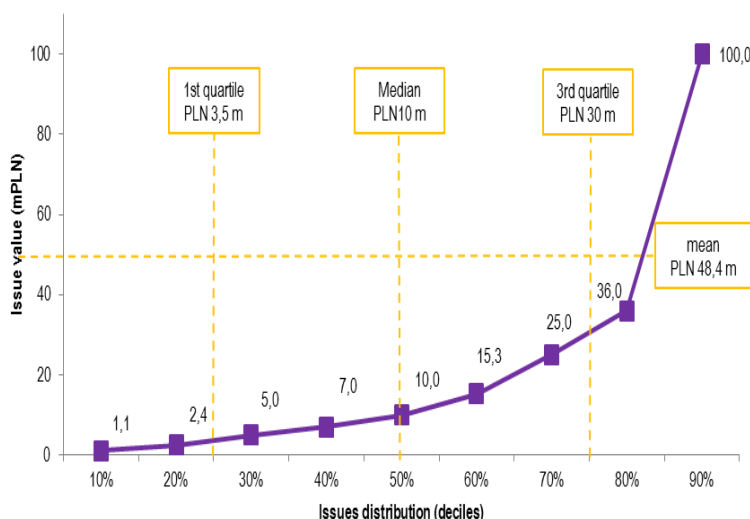
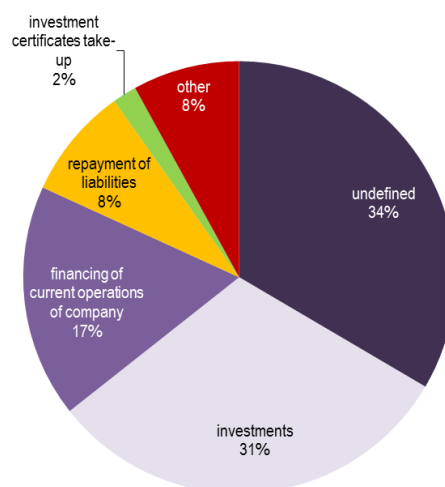


Figure 16. Purposes of bond issues

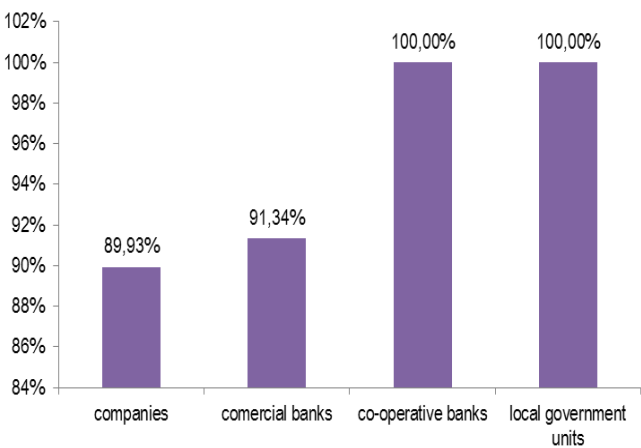


Source: Grant Thornton analysis based on 275 issues in analysed group

Issue success

Analysis of issue success rate measured by the share of issue value covered by investors to its maximum amount (specified in the bond issue resolution) reveals that issues of co-operative banks and local government units were always totally covered by investors. Commercial banks bond placement success rate amounted to approximately 91,3%. Main reason of such a low success rate in that sector was an issue of huge value carried out by corporate banks in 2011, especially by Getin Noble Bank. In the last period banks issues success rate significantly improved and these entities already encounter fewer problems with obtaining financing. Percentage share of issues of corporate bonds covered by investors by average amounted close to 90%.

Figure 17. Issue success rate by issuers type



Source: Grant Thornton analysis based on 228 issues in analysed group



Issuers profile

Corporate, municipal and co-operative bonds sector analysis indicates that the most strongly represented sector on Catalyst is banking sector - almost every fifth Catalyst issuer is a bank. Banks are followed by developers and companies that provide financial services (14% each). Numerous bond market entities are also local government units. Remaining 25 sectors are represented by far lesser group of issuers.

Catalyst market entities obtained PLN 13,3 bn through corporate bond issues. On the other hand local government units gained PLN 2,5 bn. Co-operative banks obtained PLN 0,4 bn. It mainly results from the fact, that co-operative banks got an access to financing through bond issue pursuant to a resolution (National Supervisory Board Commission Resolution no 314/2009) relatively late in comparison to other entities.

Table 2. Largest issuers on Catalyst

	Issuer	Value of issue (bPLN)
1	PGNiG	2,5
2	Warsaw	2,1
3	BOŚ	1,2
4	PKN Orlen	1,0
5	Polkomtel Finance AB	1,0

Table 3. Smallest issuers on Catalyst

	Issuer	Value of issue (tPLN)
1	GPF Causa	420,0
2	Blue Tax Group	500,0
3	Quality All Development	800,0
4	Digate	947,0
5	Nettle	1 255,0
6	East Pictures	1 255,0

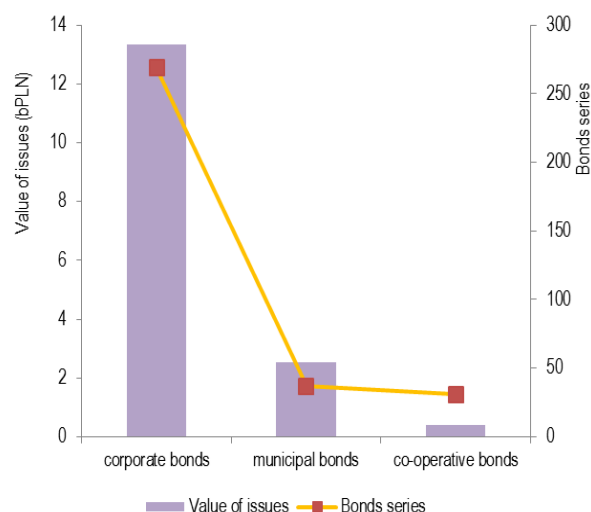
Among issuers of bonds denominated in PLN in terms of raised capital value the leader is PGNiG with total capital raised of PLN 2,5 bn. The second largest issuer was capital city of Warsaw, which obtained PLN 2,1 bn. Among corporate banks the highest capital was raised by BOŚ (PLN1,2 bn). However, the analysis does not cover BGK, which is in fact the largest issuer as through issue of 8 bonds series BGK obtained above PLN 28 bn.

The smallest issue in terms of value was conducted by GPF Causa. Company introduced to Catalyst bond issue of PLN 0,4 m.

Table 4. Issuers sector structure

Sector	Number of issuers	Share
banks	27	17,3 %
developers	22	14,1 %
financial services	21	13,5 %
local government units	14	9,0 %
other	12	7,7 %
retail	6	3,8 %
construction	5	3,2 %
IT	5	3,2 %
financial intermediation	5	3,2 %
energy	4	2,6 %
food	4	2,6 %
chemical	3	1,9 %
wood	3	1,9 %
wholesale	3	1,9 %
transport	3	1,9 %
pharmaceutical	3	1,9 %
close-end funds	3	1,9 %
building materials	2	1,3 %
health care	2	1,3 %
fuel	2	1,3 %
hotels and restaurants	1	0,6 %
light industry	1	0,6 %
media	1	0,6 %
paper	1	0,6 %
recycling	1	0,6 %
technologies	1	0,6 %
investment management	1	0,6 %
Total	156	100 %

Figure 18. Raised capital by bonds type



The most numerous group of issuers on Catalyst were companies, that are represented by 115 entities. Other issuer groups included: 22 co-operative banks, 14 local government units and 5 corporate banks.

As of 28th September 2012 the most issues among corporate, co-operative and municipal bonds issuers were carried out by Gant Development, which obtained PLN 241 m through issue of 14 bonds series. Kruk gained PLN 336 m through issue of 13 bonds series, and Getin Noble Bank acquired PLN 919 m through issue of 10 bonds series. At least 7 bonds series were issued by 9 entities.

In terms of value the largest issues were introduced by commercial banks - by average PLN 127,2 m per issue. Average offer carried out by companies amounted to PLN 43 m and was about PLN 25 m lower than average local government unit issue (PLN 68 m). 31 bond series issued by co-operative banks amounted to PLN 13,3 m.

Figure 19. Bonds issuer structure by issuers type

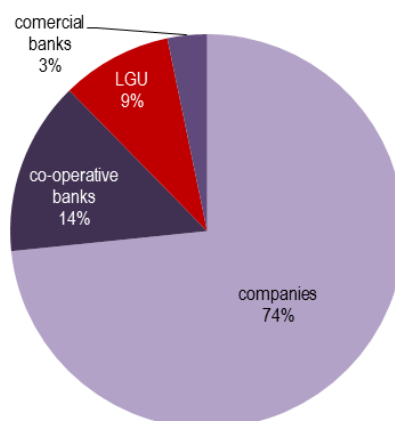


Figure 20. Average value of the issue by issuers type

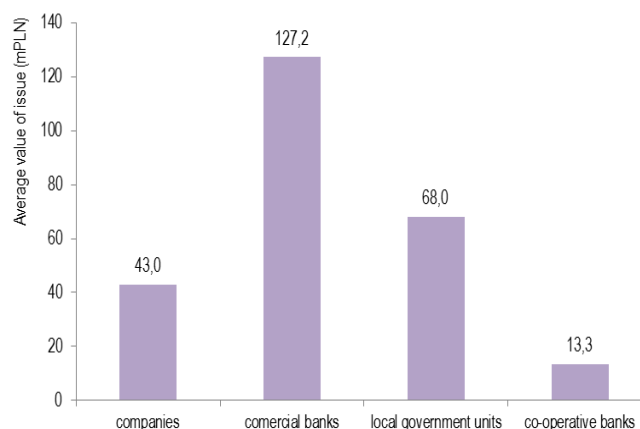
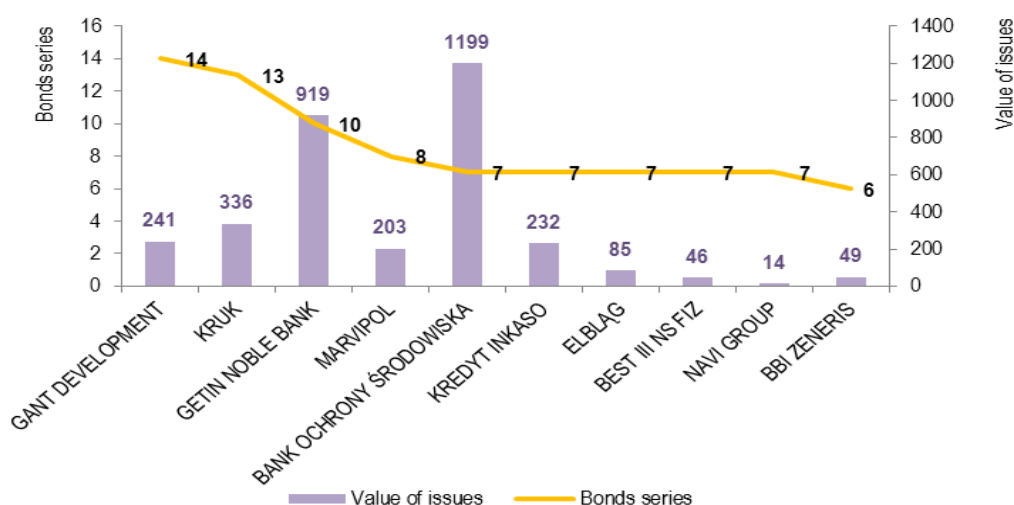


Figure 21. Entities which issued the greatest number of bond series in analysed group of issues



Issuers location

Among the issuers on Catalyst there are entities from the most regions of Poland (without lubuskie voivodeship). The majority of corporate, co-operative and municipal bonds issuers are headquartered in mazowieckie voivodeship. In terms of issue value those entities brought out almost 67% of overall Catalyst bond issues. The next most represented on the list are pomorskie voivodship (9,7%) and foreign issuers (7,1%).

Municipal bonds were issued mostly in śląskie (9 series) and zachodniopomorskie voivodeships (8 series), together bringing out 45% of all issued bond series of that type. Issues of co-operative banks came mainly from mazowieckie voivodship (nearly 40% of all issued bonds).

Among the analysed group of entities there are also three foreign entities: Warimpex Finanz und Beteiligungs AG, Ronson Europe N.V. and Polkomtel Finance AB. Altogether they raised above 1,15 bPLN. Aforementioned entities issued bonds denominated in PLN. Foreign companies that issued bonds on Catalyst were mainly financing companies of their capital groups. Bond issues on the Polish market and its listing on Catalyst enabled these companies with access to a broader group of investors.

Separate bonds group are eurobonds issued by PKO FINANCE AB of total value of EUR 800 m.



Figure 22. Issue value by particular voivodeships and foreign entities

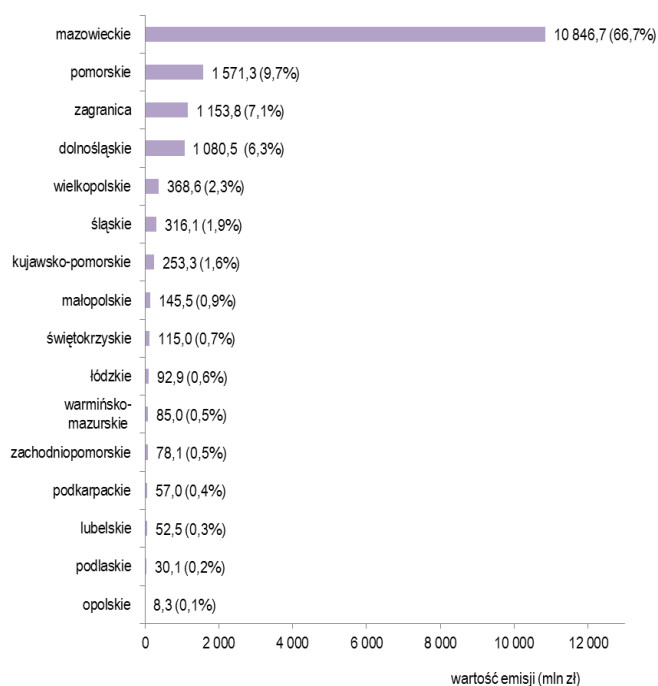


Figure 23. Number of bond issues by voivodeships

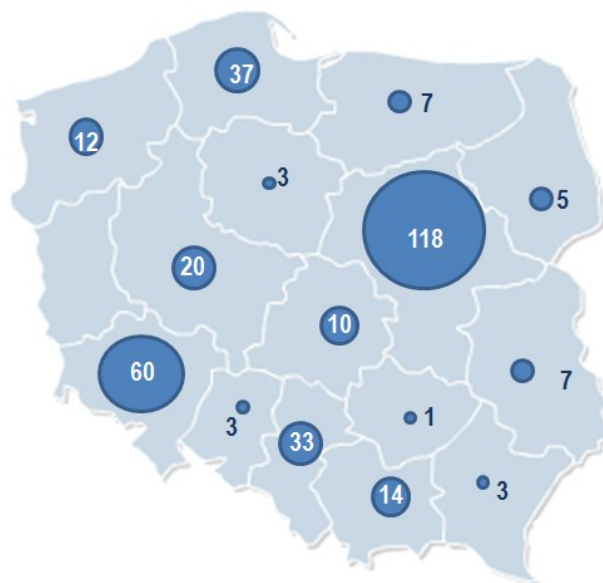


Table 5. Foreign entities issues

Issuer	Country	Issue value (PLN m)
Polkomtel Finance AB	Sweden	1 000.0
Ronson Europe N.V.	Netherlands	87.5
Warimpex Finanz - und Beteiligungs AG	Austria	66.3

„From the point of view of an investor the purchase of bonds on the market allows diversification of the investment portfolio, mitigation of risk and achievement of capital gains.”



Investors' perspective



Paweł Duszek
Business advisory department
Grant Thornton

Catalyst provides investors with investment opportunities in a wide variety of securities of diverse risk and return rate. The trade volume on Catalyst is still much lower than the volume on others more developed debt markets, however growing liquidity allows for positive assessment of its perspectives.

Investment in bonds provides investors with diversification of their portfolio, risk reduction and achievement of capital gains. Analysis presented below provides deep characteristics of securities quoted on Catalyst taking into account corporate, municipal and co-operative bond issue conditions (excluding BGK, EIB and eurobonds).

Types of bonds

Taking into account the interest rate, bonds can be divided into two groups: coupon and zero-coupon bonds. In this respect Catalyst is a homogeneous market. There is only one zero-coupon bond series issued by Lokaty Budowlane S.A. among 337 series listed on the market within the analysed group. It means that 99,7% of listed bonds were coupon bonds. Issue of Lokaty Budowlane S.A. bonds was introduced on 4th of April 2012. Company issued bonds with 11% discount rate and nominal value of PLN 5,5 m.

Vast majority of coupon bonds issued by entities other than the State Treasury, BGK and EIB were floating bonds, that accounted for 81% of analysed issues. The remaining 19% share was constituted by fixed rate bonds.

Sector analysis of coupon bonds shows clear preferences of issuers regarding interest rate terms. Since the inception of the market all commercial and co-operative bank issues had floating rate. Municipal bonds were listed mainly with floating interest rate with exception of four issues which had fixed interest rate. In terms of corporate bonds there was much higher percentage of fixed rate issues.

„Catalyst enables investors with investments in a wide variety of securities of diverse risk and return rate”



Chart 24. Structure of new bond issues in terms of type of interest rate

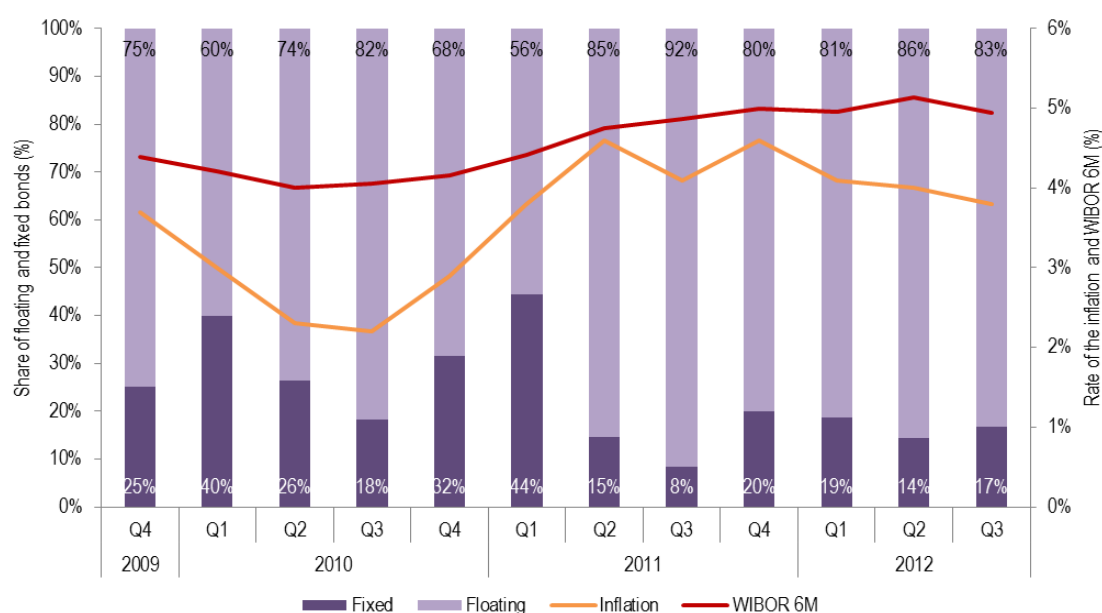
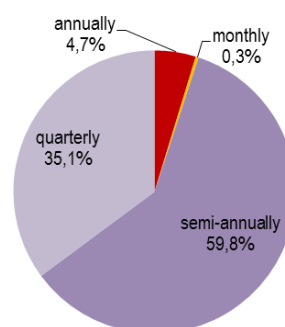


Chart 25. Structure of coupon bonds depending on coupon payments frequency



Source: Grant Thornton analysis based on 296 issues in the analysed group

When comparing structure of issues to inflation and WIBOR 6M it can be observed that in the periods preceding increase of inflation the percentage of fixed rate issues was rising as well. Fixed rate issues constituted between 14 and 20% of total issues in periods with relatively stable underlying inflation rate at the level of 4%.

Taking frequency of coupon payments into consideration we can see that significant share (60%) of coupons was paid semi-annually. 35% of all issues were payable quarterly and interest paid on annual basis were of marginal importance - they accounted for 5% of the total issues. Bond issued by Miraculum S.A. were the only one with interest paid on a monthly basis and the only one which floating rate was based on WIBOR 1M.

„When comparing structure of issues to inflation and WIBOR 6M it can be observed that in the periods preceding increase of inflation the percentage of fixed rate issues was rising as well”

In the group of analysed issues we can clearly observe that nearly all coupons of corporations and co-operative banks were paid on semi-annual basis. Municipal bonds were issued also with annual coupons (3 issues) and quarterly coupons (5 issues). The majority of municipal issuers paid interest semi-annually. Coupons of most of corporate bonds were based on quarterly or semi-annual basis, eight of them paid coupons once a year and one was paid monthly.



Interest rate

So far the highest interest rates were paid by Onico (18%) and Green House Development (17%) and concerned issues already redeemed. High interest rate at the level of 15% is also offered by e-Kancelaria and GPF Causa and the bonds are still available for purchase on Catalyst.

„So far the highest interest rates were paid by Onico (18%) and Green House Development (17%)”

Tabel 7. Bond issues with the highest interest rate

Issuer	Issue's code	Issuer's sector	Date of issue	Redemption date	Issue value (PLN)	Interest rate
ONICO	ONT0110	Wholesale	2009-10-07	2010-01-15	1 700 000	18,00%
GREEN HOUSE DEVELOPMENT	GHA0411	Developer	2010-02-10	2011-04-11	600 000	17,00%
GREEN HOUSE DEVELOPMENT	GHB0411	Developer	2010-02-17	2011-04-18	600 000	17,00%
GREEN HOUSE DEVELOPMENT	GHC0411	Developer	2010-02-24	2011-04-25	600 000	17,00%
E-KANCELARIA	EKA1213	Financial services	2011-11-25	2013-12-22	1 000 000	15,00%
GPF CAUSA	GPF0214	Other	2012-02-01	2014-02-23	420 000	15,00%
ORZEL	ORL0412	Retail trade	2010-04-27	2012-04-27	7 260 000	15,00%
POLSPORT GROUP	PSG0512	Retail trade	2011-05-19	2012-05-30	1 280 000	15,00%
NAVI GROUP	NAV0213	Financial services	2011-02-21	2013-02-21	2 000 000	14,92%
NAVI GROUP	NAV0912	Financial services	2011-06-21	2012-09-18	900 000	14,12%

Source: www.gpwcatalyst.pl

Tabela 7. Bond issues with the lowest interest rate

Issuer	Issue's code	Issuer's sector	Date of issue	Redemption date	Issue value (PLN)	Interest rate
RYBNIK	RYB1117	LGU	2007-11-13	2017-11-13	40 500 000	4,82%
POZNAŃ	POE1011	LGU	2006-10-23	2011-10-09	116 500 000	5,09%
POZNAŃ	POD0610	LGU	2005-07-18	2010-06-23	101 500 000	5,34%
WARSZAWA	WAW1017	LGU	2010-05-06	2017-10-25	300 000 000	5,35%
TCZEW	TCZ0817	LGU	2010-08-25	2017-08-25	2 000 000	5,73%
ELBLĄG	ELG0319	LGU	2012-03-08	2019-03-08	5 000 000	5,79%
ELBLĄG	ELG0320	LGU	2012-03-08	2020-03-08	5 500 000	5,89%
RYBNIK	RYB1213	LGU	2002-12-30	2013-12-30	14 500 000	6,07%
ELBLĄG	ELG0321	LGU	2012-03-30	2021-03-30	9 000 000	6,09%
GPW	GPW0117	others	2011-12-23	2017-01-02	245 000 000	6,11%

Source: www.gpwcatalyst.pl

The group of bonds with the lowest interest rate was mainly formed by issues of local government units. Additionally, issues of strategic companies partially owned by the State Treasury like PGNiG or GPW offered relatively low interest rates. Bonds of City of Rybnik offered the lowest interest rate from among all issues. City of Poznan exhibited low interest rate as well as other bonds issued by local government units like Warsaw, Tczew and Elbląg.

One can note that distribution of interest rates is very wide and falls between 4,8 and 18%. The highest accumulation of issues lies in the range from 8 to 13% and is formed by 242 of analysed issues. Only 4 of the issues had interest rate higher than 15%. Hardly any bond was issued with coupon below the level of 6%. There were only seven such bond issues.

Chart 26. Number of bond issues with a given range of interest rate

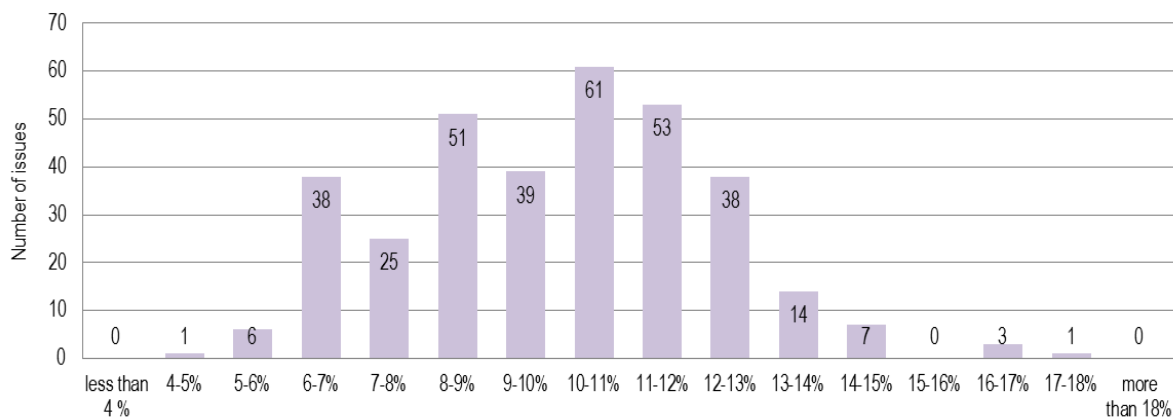
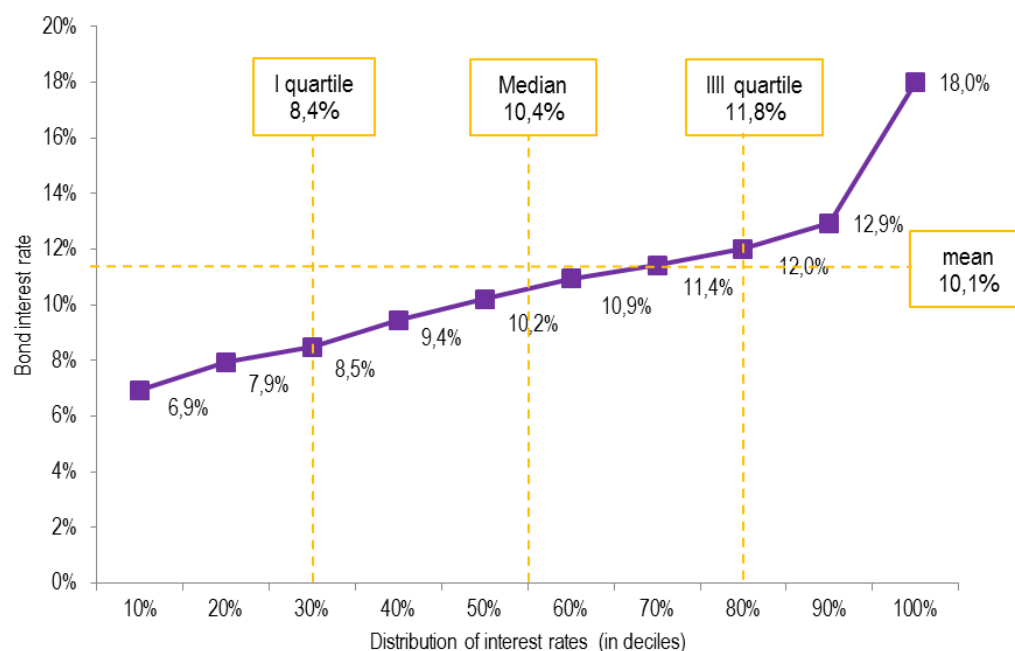


Chart 27. Distribution of interest rate of bonds introduced to Catalyst



Mean interest rate of bonds in the analysed group is 10,1%. Median of interest rates - the number that lies in the middle with an equal amount of interest rate levels on either side of the mean - equals 10,4%.

„Mean interest rate of bonds in the analysed group is 10,1%”

Decile analysis of interest rate levels shows that 10% of bonds with the lowest interest rates have coupon rate at the level below 6,9%. 10% of issues with the highest interest rates have coupon rates at the level higher than 12,9%.

Quartile analysis shows that 25% of bonds with the lowest interest rates have coupons at the level below 8,5% and 25% of bonds with the highest interest rates have coupons at the level higher than 11,8%.

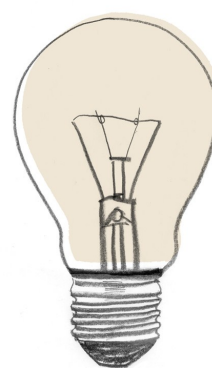
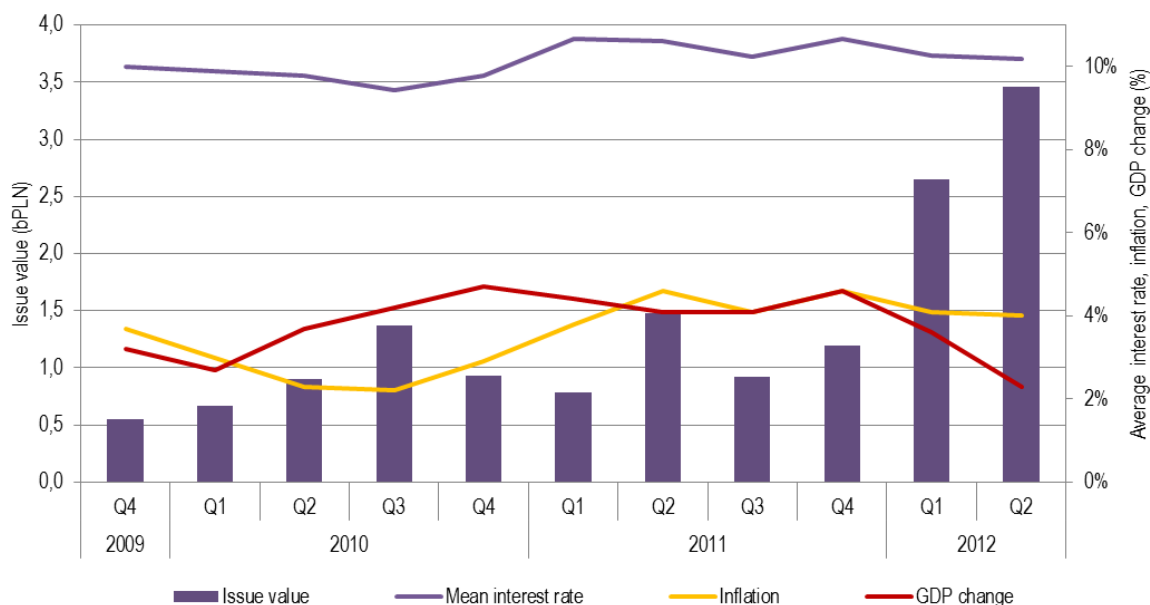


Chart 28. Average interest rate compared to the level of inflation, GDP dynamic and issue value within the period IVQ 2009 - IIQ 2012



Interest rate mean of bonds issued in 2009 and 2010 was relatively low and amounted from 9,43% to 9,99% in compared quarters. The mean interest rate of bonds rose together with rising inflation and increasing number of new issues. The highest level of interest rate amounting to 10,67% was observed in the first and third quarter of 2011. It coincided with the highest level of inflation and increased dynamic of quarterly GDP rate. Since 2012 the average interest rate level experiences downward trend.

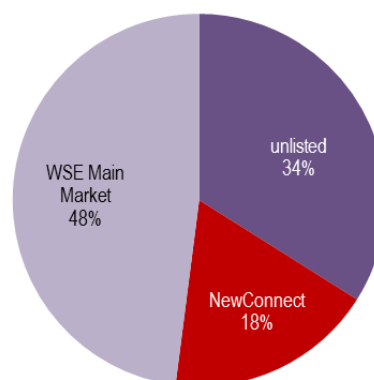
„The highest level of interest rate amounting to 10,67% was observed in the first and third quarter of 2011.”

Determinants of interest rate level

Dependence of bond interest rate and quotation of shares of the issuer

Companies which are familiar with specifics of the capital market and shares of which are already listed on the stock market are much more willing to finance their capital needs by alternative sources of financing like bond issue. The market of corporate bonds is dominated by issuers which shares are listed on WSE Main Market (48%). Almost 34% of new bond issues were issued by entities which shares are not listed on any market. The other 18% of issues were conducted by companies which are listed on the NewConnect market.

Chart 29. Structure of issuers depending on the stock market (within the group of companies and commercial banks)



Analysis of bond issues conducted among companies and commercial banks shows, that there is a clear relationship between the stock market, on which shares are listed, and the interest rate of bonds.

Issuers which are listed on NewConnect offer on average almost 30% higher interest rates than issuers listed on WSE Main Market. Interest rates of bonds listed on NewConnect amount on average 12,63% and for bonds of issuers listed on WSE Main market the average interest rate level amounts to 9,78%. Bonds of unlisted companies have an average interest rate of 11,33%. This level is lower but close to the level of interest rate of companies listed on NewConnect. The high interest rate of issues of companies listed on NewConnect should be associated with following characteristics of these entities:

- Those are mainly companies at early stage of existence with high capital needs and need for debt financing. As a result the investing risk increases. According to Grant Thornton Report *5 years of NewConnect* 52,5% of stock issuers operates for less than 5 years and on average one fifth of the companies is in a start-up phase and operates no longer than one year.
- The companies have low market capitalization, which according to Grant Thornton Report *5 years of NewConnect* amounts below PLN 10 m for 55,7% of issuers listed on alternative trading system NewConnect.

Chart 30. Dependence of average interest rate on quotation market of issuer shares in the group of companies and commercial banks

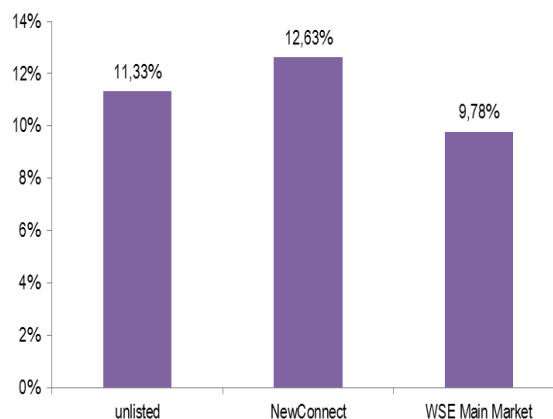
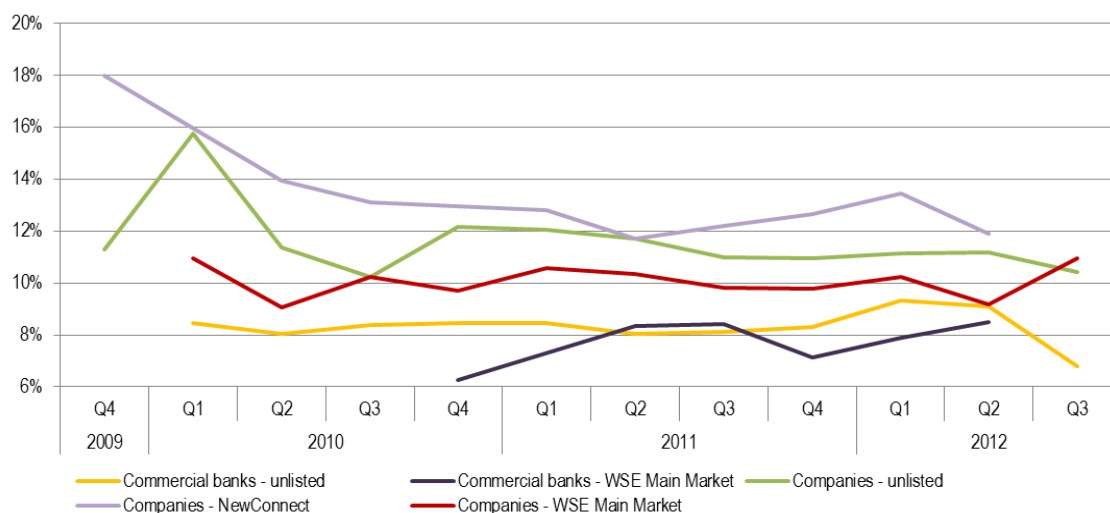


Chart 31. Average interest rate of bonds compared to the stock quotation market of issuer



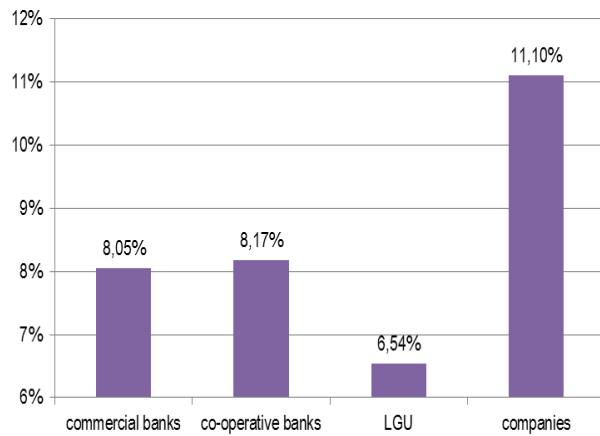
In the analysed period companies quoted on NewConnect had the highest interest rate. Non-public companies had slightly lower interest rate at the level of 11% and the lowest interest rate was offered by companies listed on the WSE Main Market. It should be mentioned, that in the second quarter of 2012, each of analysed bonds, regardless of a stock market quotation, had interest rate in the relatively tight range from 8,5% to 12%. Interest rates of commercial bank bonds offered the lowest interest rate in each of the analysed periods. For the WSE Main Market listed banks interest rate oscillated within the range from 6,3% to 8,5% and interest rate of non-public commercial banks was at the level of 8%.

Interest rate in relation to the type of issuer

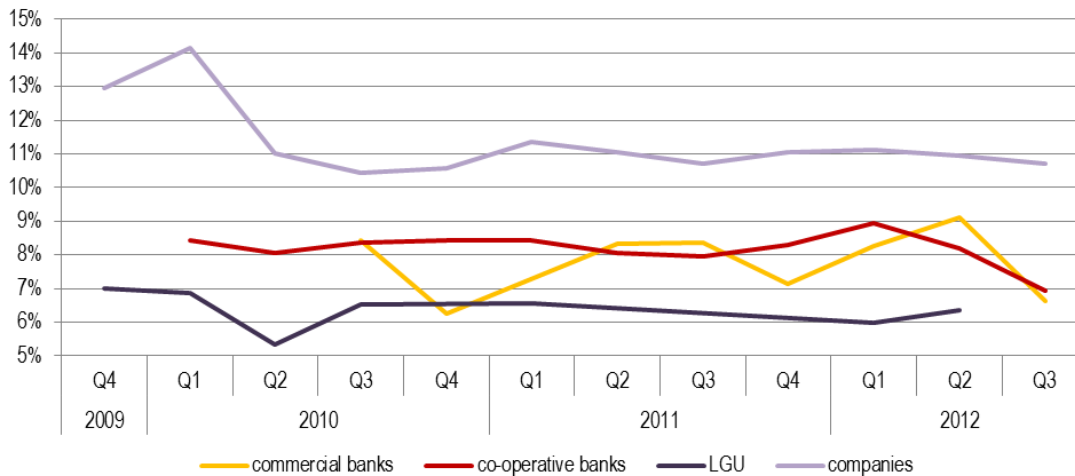
On average, since the beginning of the Catalyst, the lowest interest rate, at the level of 6,54%, was offered by local government units (LGU). Commercial banks and co-operative banks offered 8,17% and 8,05% respectively and companies offered 11,1%.

The interest rate time series analysis of different types of issuers shows, that the most stable was the interest rate of company bonds - since the second quarter 2010 it amounted approximately 11%. Co-operative banks offered interest rate at the level of 8-9% on average in 2010 and 2011. At the beginning of 2012 average interest rate of the new issues had increased to 8,9% and then decreased in subsequent quarters to reach an average level of 6,9% for the new issues in third quarter 2012. Interest rate of commercial banks incurred the highest variability - it amounted from 6,2 to 9,1% in the second quarter of 2012. Interest rate of local government units was the lowest within the analysed group and amounted from 5,5 to 7% in the analysed period.

Chart 32. Average interest rate against the type of issuer



Wykres 33. Average interest rate of bonds by type of issuer

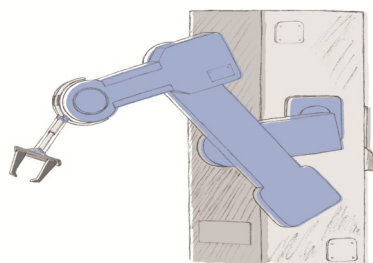
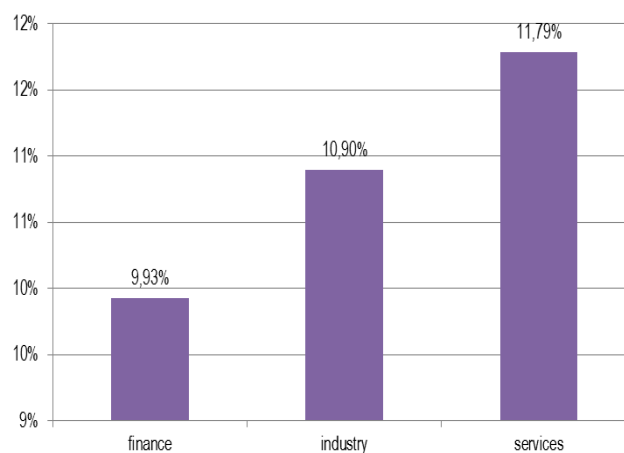


Interest rate against issuer's sector

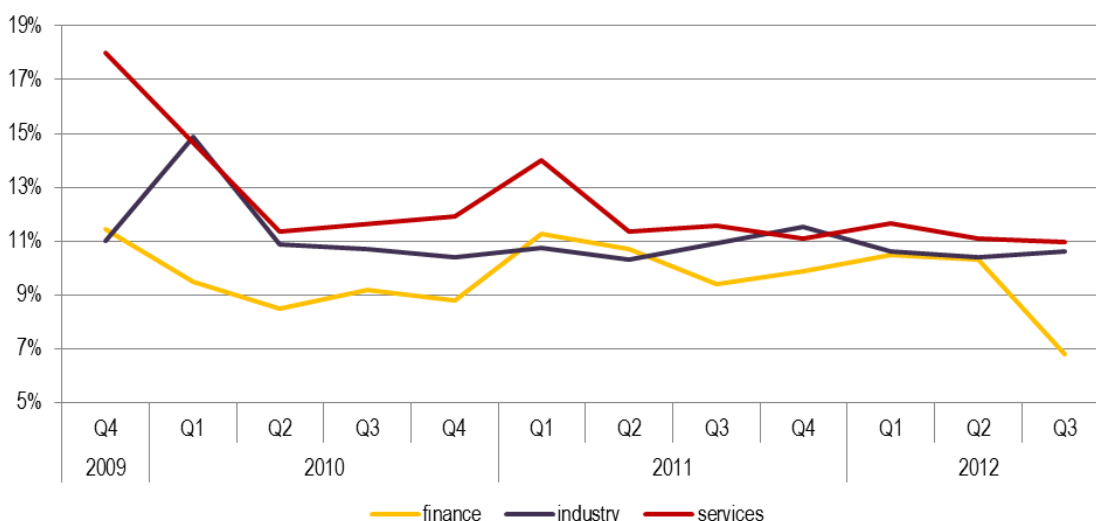
For the purpose of sector analysis of interest rate three sectors were identified: finance (commercial banks, cooperative banks and companies whose primary activity involves financial services), industry and services. The sector analysis shows that financial sector bonds are issued at the lowest interest rate at the level of 9,93% on average. Companies from the industrial sector offer interest rates amounting to 10,90%, and the highest interest rate at an average level of 11,79% is offered by bonds issued within the services sector.

In previous quarters interest rates of industrial companies fluctuated between 10 and 12% (excluding first quarter of 2010). Service providing companies offered interest rates within the range of 11-14% (excluding fourth quarter of 2009). In most quarters interest rates of financial companies were on average much lower. The only exception was first and second quarter of 2011 and second quarter of 2012, when issues of financial companies had interest rates at a similar level to bonds of companies from the industrial sector.

Chart 34. Average interest rate compared to issuer's sector



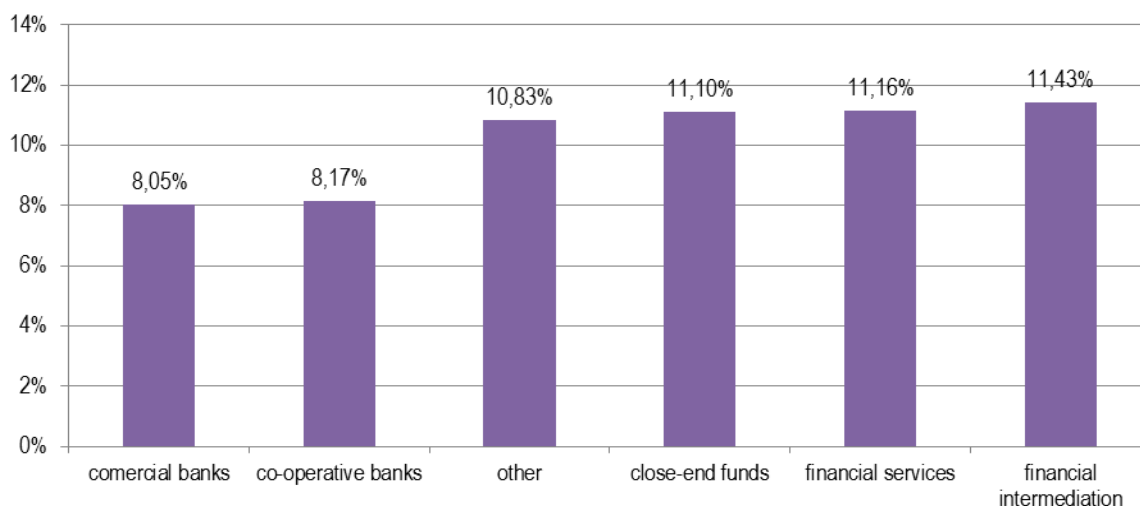
Wykres 35. Average interest rate of bonds by sector



Interest rate - financial sector

Bonds of commercial and co-operative banks had the lowest interest rate in financial sector group. An average interest rate for these entities amounted to 8,17% and 8,05% respectively. The interest rate of bonds issued by other entities providing financial services, financial intermediary services and closed-end funds is significantly higher and is within the range from 10,83 to 11,43%.

Chart 36. Mean interest rate of bonds in financial sector



Interest rate — industrial sector

The lowest interest-bearing securities in industrial sector was issued by companies from fuel sector represented by PKN Orlen and PGNiG (average interest rate of 6,37%). Average interest rate of bonds issued by companies from industrial sector was much higher. It ranged from 10,42% for light and food sector and 12,93% for pharmaceutical industry represented by companies like Miraculum and Hygienika.

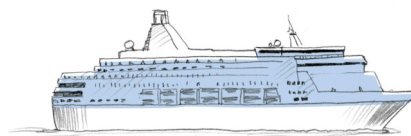
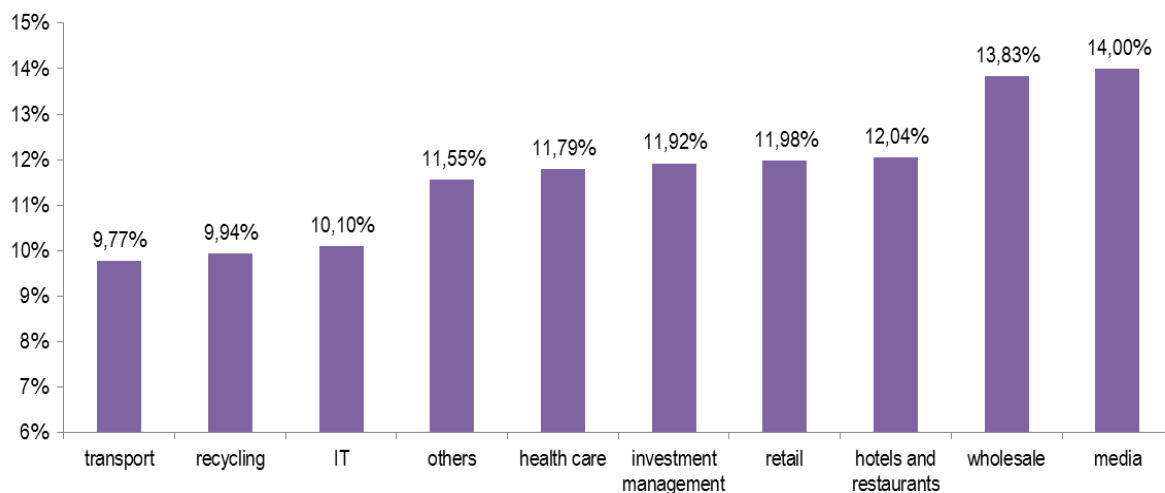


Chart 37. Average interest rate of bonds in the industrial sector



Chart 38. Average interest rate in services sector

Interest rate — service sector

Transport companies issued lowest interest-bearing bonds within the services industry at an average level of 9,77%. The group was represented by companies such as OT Logistics, Pawtrans Holding and Siódemka. Interest rates of companies from recycling and a IT sector were slightly higher and amounted to 9,94 and 10,10%

respectively. Much higher interest rate, at the level above 11,5%, was offered by bonds of companies dealing with health care, investments management, retailing and hotels and restaurants. Bonds of companies from the wholesale and media sector were the highest interest-bearing, with an average interest rate at the level of 13,83 and 14% respectively.

Tabel 8. Issues of convertible bonds

Issuer	Issue's code	Issuer's sector	Market of stock quotation	Issue value
GANT DEVELOPMENT	GNT0313	Developer	WSE Main Market	26 000 000
MARVIPOL	MVP0613	Developer	WSE Main Market	39 400 000
MARVIPOL	MVP0914	Developer	WSE Main Market	30 791 000
MCI MANAGEMENT	MCI0912	Other	WSE Main Market	50 000 000
MERA	MER0412	Building materials	NewConnect	758 500
MIRACULUM	MIR0513	Pharmaceutical	WSE Main Market	4 775 000
RUBICON PARTNERS NFI	RBC0413	Financial intermediary	WSE Main Market	32 000 000
Warimpex Finanz und Beteiligungs AG	WXF0514	Developer	WSE Main Market	66 250 000

Source: www.gpwcatalyst.pl

Convertible bonds

Only 1,54% of issues quoted on Catalyst gave the bondholders the right to exchange the bond for shares. Four out of eight issues gave the right to convert bonds into shares were issued by developers. Taking into account quotation market of shares, seven of the eight

issuers of convertible bonds were listed on the WSE Main Market and only one on NewConnect.

Convertible bonds provide the holder with an value added benefit of built-in option to exchange bonds for shares. This allows issuers of convertible bonds to offer lower interest rate than bonds with similar terms of issue, but without the built-in options.

Collateralized bonds

69,34% of issued bonds in the analysed group were not collateralized. All of the bonds issued by commercial banks, cooperative banks and local government units were uncollateralized. However 42% of bonds issued by companies were collateralized in various forms.

The most frequently used collaterals were real estate (43% of issues) and pledge (42% of issues). Guarantee (7%) and financial blockade (3%) were both less frequently used. Collaterals on rights of perpetual usufruct and mixed collateral were the least frequently used.



Jakub Szymczak
Business advisory department
Grant Thornton

„69,34% of issued bonds in the analysed group were not collateralized”

Chart 39. Structure of bond issue in terms of collateral

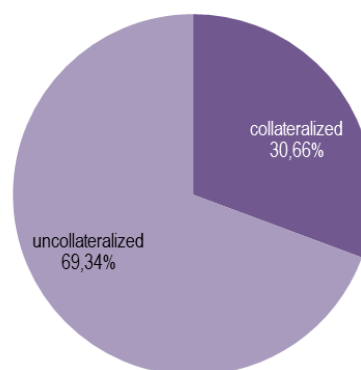


Chart 40. Share of uncollateralized issues of specific types of issuers

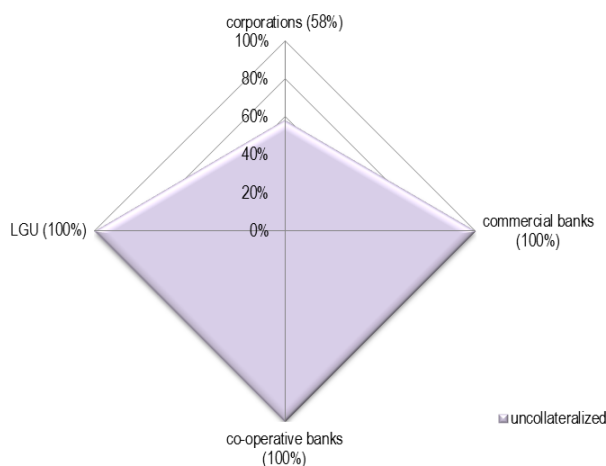
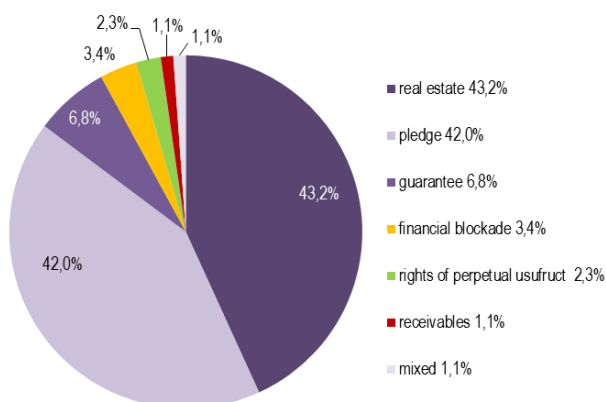


Chart 41. Structure of collateral of company bonds

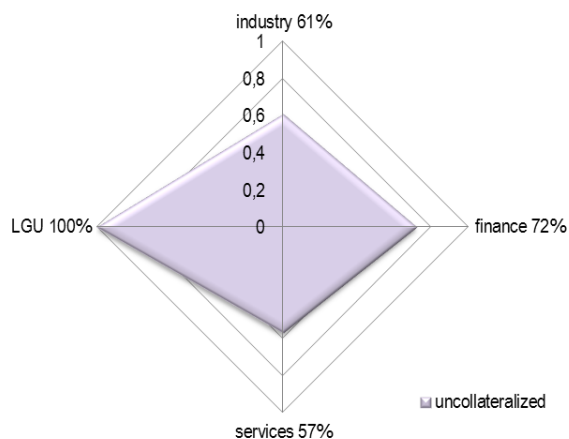




Analysis of the collateralized issues shows that bond issues were uncollateralized in case of 61% of bond series issued by companies from industrial sector, 72% of entities from financial sector and 57% of companies from services sector.

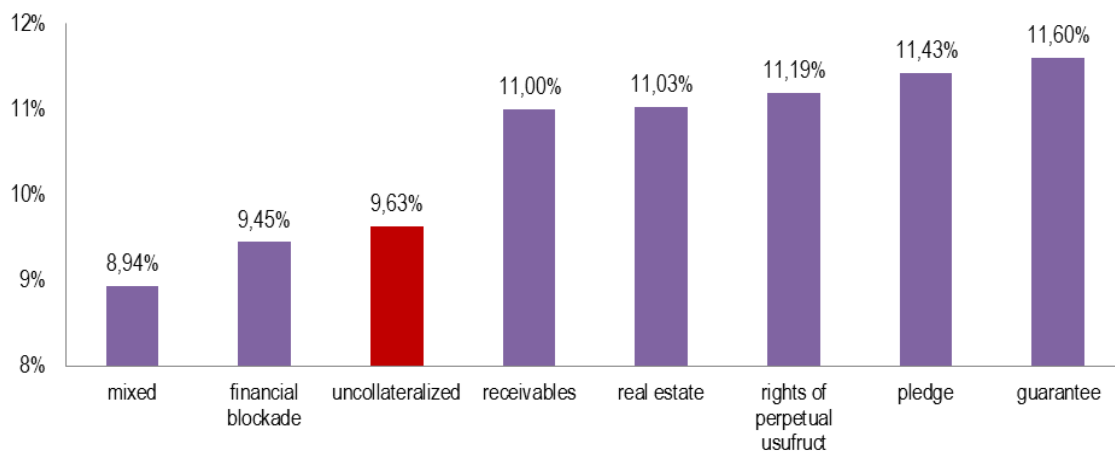
A detailed analysis of interest rate compared to collateral proves that the bonds collateralized with several instruments (8,94%) and with financial blockade (9,45%) had the lowest interest rate. It is interesting that bonds which were uncollateralised had only slightly higher interest rate amounting to an average of 9,63%. It reveals that some issuers have sufficient financial stability and investor confidence to place bonds of relatively low interest. All other forms of collateral do not appear to cause a significant reduction in the cost of capital or are established by companies in a weak financial condition. As a result average interest rate of collateralized issues conducted by companies ranged between 11,0 and 11,6%.

Chart 42. Specific type of issuer share of uncollateralized bonds



„Issues were uncollateralized in case of 61% of bond series issued by companies from industrial sector 72% of companies from financial sector and 57% of companies from services sector.”

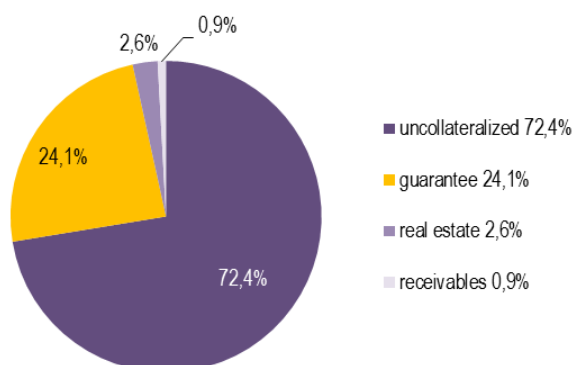
Chart 43. Interest rate of bonds compared to the type of collateral



Collateral – financial sector

72% of bonds issued by entities from financial sector were not collateralized. This results mainly from the policy of commercial and cooperative banks which do not secure their debt issues. 24% of issues were pledged on the set of claims. This type of collateral was used mainly by companies dealing with debt collection such as Kruk and e-Kancelaria.

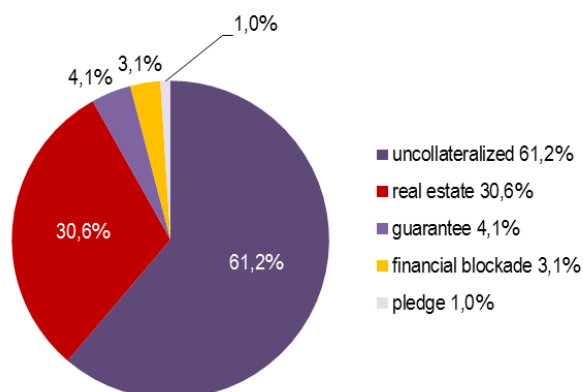
Chart 44. Finance sector - preferred collateral type



Collateral - industrial sector

Uncollateralized bonds dominated also among the issues in industrial sector, amounting to 61% of all issues in that sector. Remaining part of the issues were collateralized with mortgage 31%, a guarantee 4%, financial blockade 3% and pledge 1%.

Chart 45. Industry sector - preferred collateral type



Collateral - services sector

57% of issues in services sector were uncollateralized and 19% were collateralized with a pledge mostly on trade receivables. It was also common in case of 12% of to use real estate as a collateral.

Chart 46. Services sector - preferred collateral type

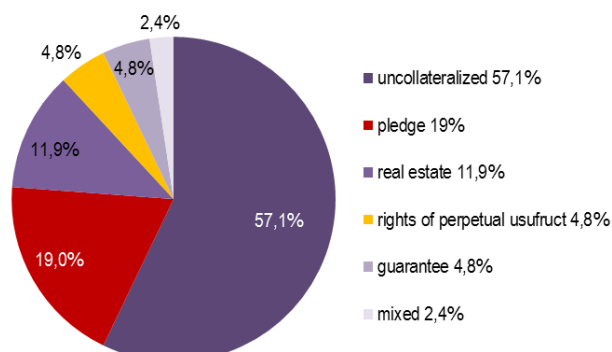
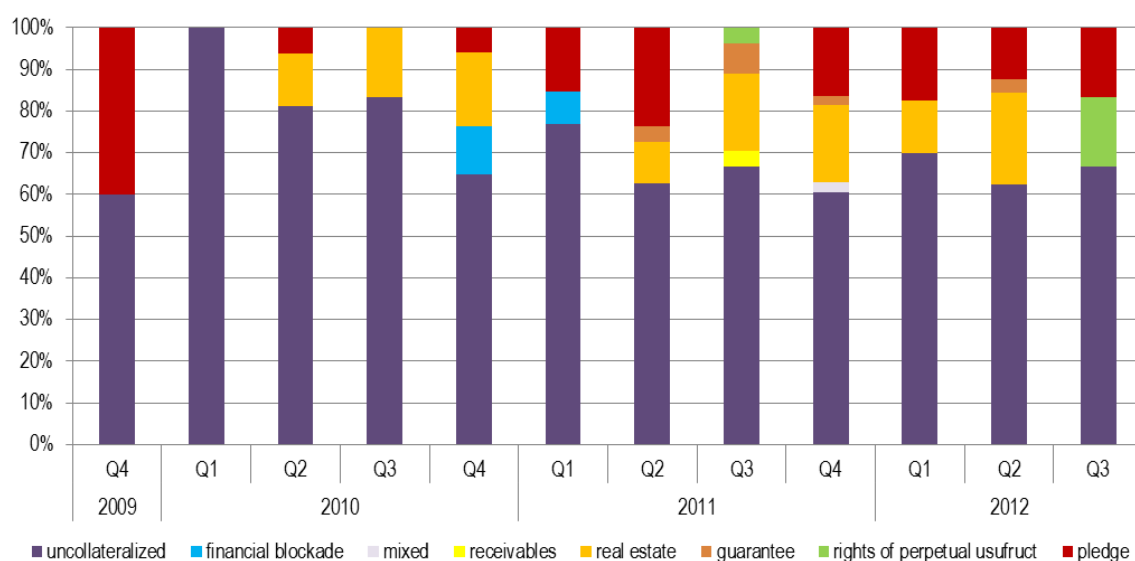


Chart 47. Structure of collateral types



Structure of collateral types

In 2009 and 2010 uncollateralised bonds accounted for a much higher percentage of new issues than today. This resulted mainly from relatively higher activity of local government units, commercial banks and co-operative banks having much more confidence of investors as issuers than companies.

In the recent years with the increasing activity of corporate issuers, different types of collateral have become more popular.

Since the second quarter of 2011 issuers have been implementing various forms of collateral. This may result from two main causes: decreasing confidence in issuer's ability to redeem bonds and increasing number of new corporate bond issues, which started to compete with each other. Within the last two years relatively high inflation level in Poland and declining dynamic of GDP caused increase in cost of the capital.

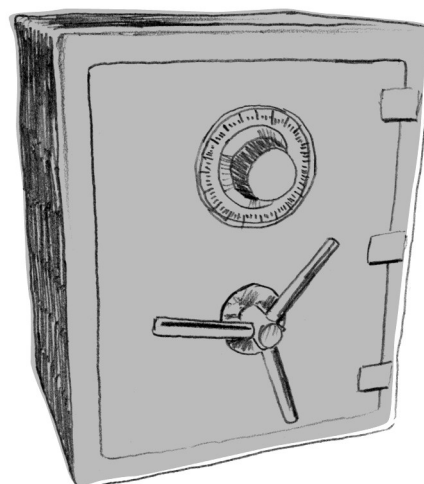
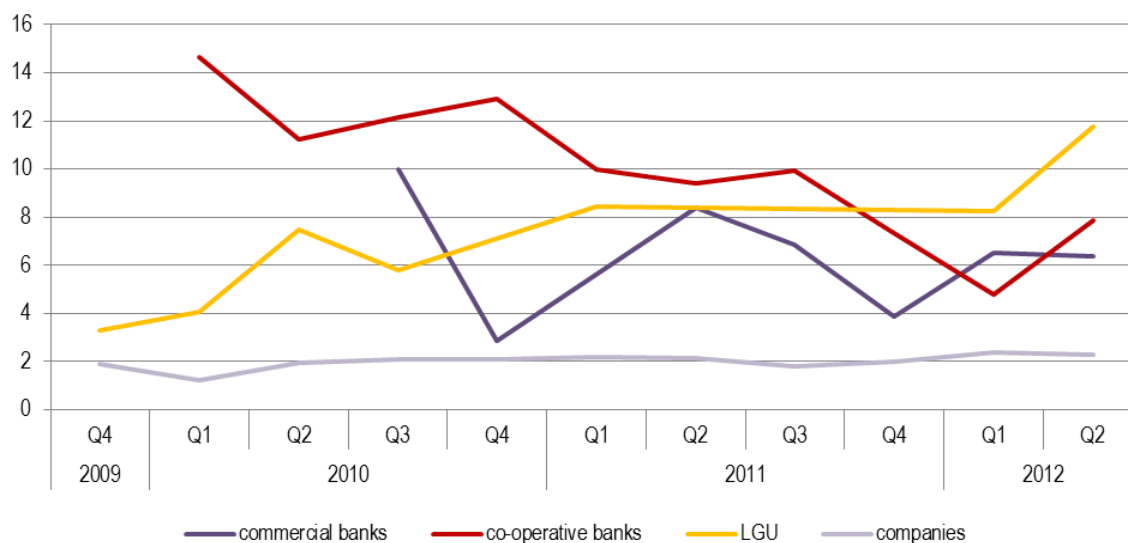


Chart 48. Average maturity of new bond issues by type of issuers in the period of IVQ 2009 - IIQ 2012 (in years)



Maturity of bonds

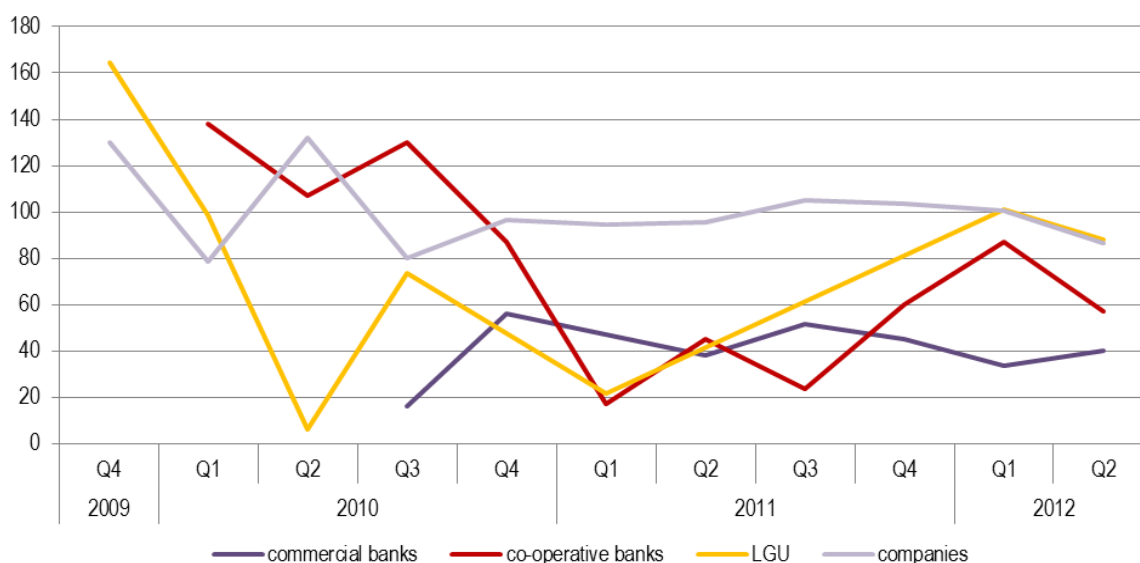
Average maturity of bonds introduced to Catalyst amounts to 2334 days, that is 6,4 years. The longest maturity at the level of 10,2 on average could be observed bonds of co-operative banks. Subsequently, the maturity of bonds of local government units was 7,2 years and 6,5 years of commercial banks. The issues of companies had much shorter maturity at the level of 2,3 years.

Maturity of company bonds was relatively stable and since the second quarter of 2010 ranged between 2-2,5 years on average.

In the first two quarters of the Catalyst market activity local government unit bonds were issued for the period of four years on average. It was much shorter period than in the last analysed quarter when average maturity for new issues amounted 12 years. In case of commercial bank issues maturity fluctuated widely in the range of 3-10 years depending on the specific period, whereas within the co-operative banks segment there was a strong downward trend in maturity. In the first quarter of 2010 the maturity amounted 15 years and then started declining gradually to 5 years in the first quarter of 2012.



Chart 49. Average time of introduction of securities on Catalyst by type of issuer within the period of IVQ 2009 - IIQ 2012 (in days)



Time of introduction of securities on Catalyst

In the analysed period the average time of introduction of bonds on Catalyst amounted to 93 days (calculated as a period from the date of issue to the first listing day).

The bonds issued by commercial banks had the shortest period to an average of 42 days. For co-operative banks this period amounted to 79 days, and 98 days for companies. It took a similar time of 95 days on average for local government unit bonds to be listed on Catalyst.



Table 10. Amount and value of defaulted bonds in relation to the all analysed issues and the issues of companies*

Specification	In relation to all issues in the analysed group	In relation to issues of companies
Number of issues not redeemed on time	1,19%	1,61%
Number of issues when issuer went bankrupt before redemption	2,08%	2,82%
Total number of defaulted issues	3,26%	4,44%
Specification	In relation to all issues in the analysed group	In relation to issues of companies
Value of issues not redeemed on time	0,05%	0,07%
Value of issues when issuer went bankrupt before redemption	0,10%	0,16%
Total value of defaulted issues	0,15%	0,23%

* analysis takes into account the total value of the defaulted issue, regardless of whether any part of the issue was redeemed

Violation of terms of issue - defaults

Default is a term that defines a violation of terms of issue by the issuer. Within the history of Catalyst there were 11 bond issues which failed to pay interest or to redeem bonds on time. Total value of these issues amounted to PLN 24,2 m. In case of four issues of Anti, Fojud, Polsport Group and ZPS Krzetzle investors did not receive interest due or face value on time. The remaining seven issues of Religa Development and Budostal-5 may not be redeemed because of a declared liquidation.

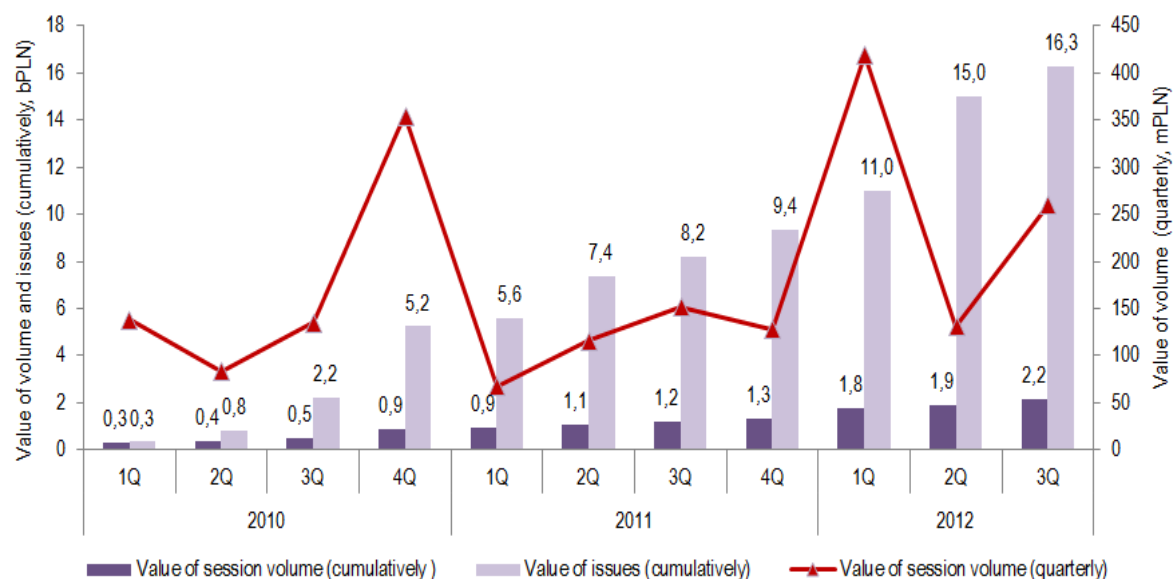
Relation of the number of defaulted issues to the number of all issues and to the number of company issues in the analysed group amounts to 3,26% and 4,44%, respectively.

Analysis of value of defaulted issues reveals, that the issues were mainly medium size issues at an average level of PLN 2,2 m. Therefore, the total value of defaulted bonds is relatively small and amounts to 0,15% of all issues value and to 0,23% of company issues in the analysed group.

The above statistics indicates that the investment in bonds is also associated with risk, and therefore should be preceded by proper analysis. In addition, each investor should be aware of the need to diversify the portfolio of bonds as it is in case of investing in equity securities.



Figure 50. Session trade volume (cumulatively and quarterly) and issue volume in analysed group within the period of IQ 2010 - IIIQ 2012 r. (according to first listing day)

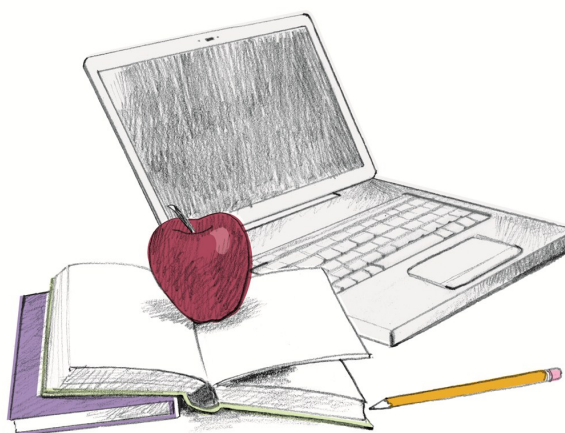


Volume analysis

Catalyst volume analysis confirms hypothesis about low but rising liquidity of financial instruments listed on that market.

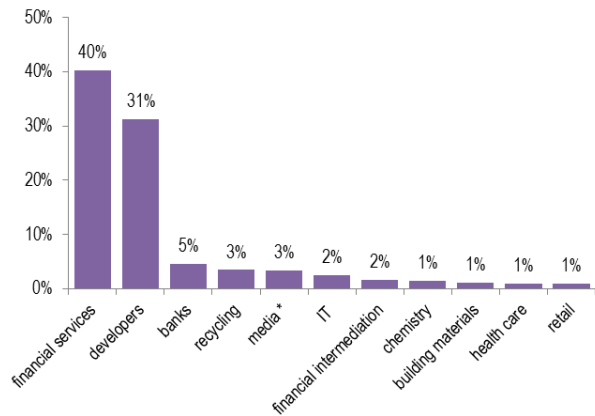
Volume in the analysed group of co-operative, municipal and corporate bonds (without issues of BGK, EIB and eurobonds) was variable, reaching its historical maximum in Q1 of 2012 at PLN 418,34 m (compared to PLN 138,28 m in Q1 of 2010). Cumulative volume in the analysed group amounted to over PLN 2,2 bn at the end of Q2 of 2012.

Investors were trading instruments quoted on WSE bond market more frequently than BondSpot, at which minimum transaction value is PLN 100 k. Quarterly WSE market generated on average about 80% of volume on Catalyst, with 20% share of BondSpot market. The Bonds listed on regulated markets were the most traded, creating 73,91% of overall listed bonds trade (56,2% for WSE market and 17,7% for BondSpot market).



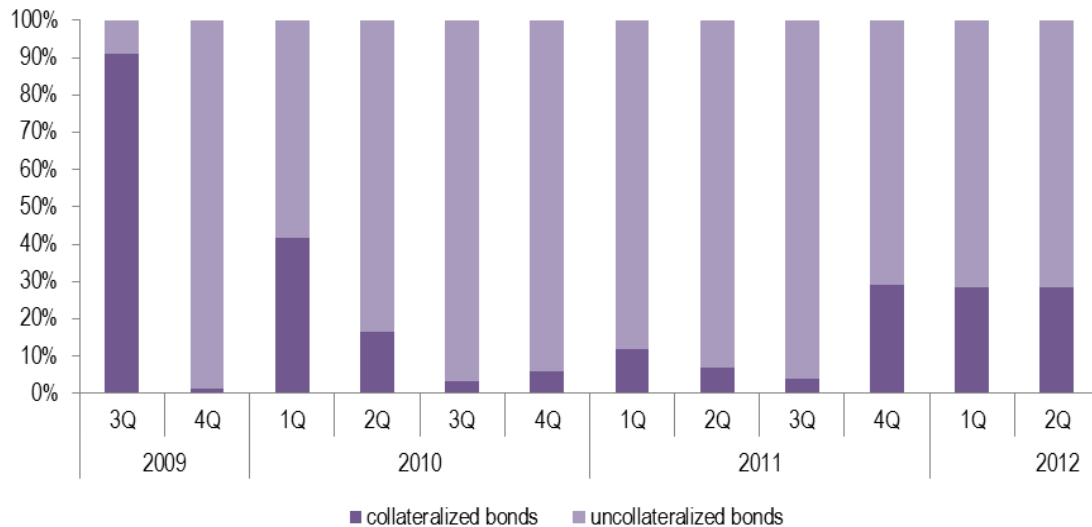
Bonds issued by financial services sector entities are the most popular with Catalyst investors, for which overall volume reached PLN 179,5 m. Development sector generated almost PLN 136 m of volume. Financial services sector volume was dominated by bonds of Prime Car Management - a company professionally engaged in car leasing. The volume of these bonds constituted 62% of volume of the financial sector. High volume could be observed on Kruk bonds (debt collection) and IPF Investments Polska bonds (a subsidiary of Provident S.A.) with 14,75% and 11,75% of overall volume of that sector, respectively. Majority of volume within the development companies was generated by Gant bonds (59,6%). Considerable part of volume was also represented by issues of Marvipol (13,46%) and Ghelamco Invest (9,17%). The rest of the sectors created below 5% of volume each. Chart 51 illustrates percentage share of sectors with at least 1% in overall volume.

Figure 51. Percentage share of corporate bonds issues in overall volume by sector



* due to the type of activity Polkomtel Finance AB was classified to media sector

Figure 52. Bonds volume in analysed group categorized by collateralized and uncollateralized bonds within the period of IIIQ 2009 - IIQ 2012 r.



Analysis of the impact of collateral on the volume of bonds in the analysed group showed lack of investors preferences for collateralized bonds. On average 78% of overall volume accounted for non-collateralized bonds. This results mainly from the fact, that only slightly more than 30% of the series in the analysed group were secured. Thus, the volume structure is closely associated with the types of instruments listed on Catalyst.

Glossary of terms

Act on Bonds	Act of 29 June 1995 on Bonds (Journal of Laws 1995 No. 83, item 420)
Act on Public Offering	Act of 29 July 2005 on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organized Trading System and Public Companies (Journal of Laws 2005 No. 184, item 1539)
Act on Trading in Financial Instruments	Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws 2005 No. 183, item 1538)
analysed group	municipal, co-operative and corporate bond issues (excluding issues of BGK, the EIB and eurobonds) referred to in "Issuers' perspective" and "Investors' perspective".
analysed period	the period from 30.09.2009 to 28.09.2012
BIS	Bank for International Settlements
BGK	Bank Gospodarstwa Krajowego S.A., Poland's state-owned bank
Company	for the purpose of the Report - every issuer of corporate bonds which is not a bank
EIB	European Investment Bank
FESE	Federation of European Securities Exchanges
FSA	Polish Financial Supervision Authority
IPO	Initial Public Offering
LGU	Local government unit, issuer of municipal bonds
NewConnect	Organised stock market of WSE ran outside the regulated market in the form of alternative trading system.
NDS	National Depository for Securities
WSE	Warsaw Stock Exchange
WSE Main Market	A regulated market being subject to FSA supervision and indicated to European Commission as a regulated market. The subject of trade on the market are: shares, rights to shares, pre-emptive rights, investment certificates, structured products and derivatives: forward agreements, options and index units.

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Contact us



Warszawa

al. Jana Pawła II 15
00-828 Warszawa
T +48 22 20 54 800
F +48 22 20 54 801

Poznań

ul. Abpa Antoniego Baraniaka 88 E
61-131 Poznań
T +48 61 62 51 100
F +48 61 62 51 101

Wrocław

ul. Włodkowica 21 lok 12
50-072 Wrocław
T +48 71 73 37 560
F +48 71 73 37 561

Katowice

ul. Francuska 34
40-028 Katowice
T +48 32 72 13 700
F +48 32 72 13 701

Kraków

ul. Kamieńskiego 51
30-653 Kraków
T +48 12 37 64 100
F +48 12 37 64 101



Maciej Richter
Managing Partner
T +48 607 679 096
E maciej.richter@pl.gt.com



Damian Atroszczak
Manager
T +48 661 530 314
E damian.atroszczak@pl.gt.com



Agnieszka Tucholska
Certified Advisor in the Alternative Trading System No. 63/2011
Senior Consultant
T +48 697 890 942
E agnieszka.tucholska@pl.gt.com



Agata Brzyska
Certified Advisor in the Alternative Trading System No. 72/2011
Consultant
T +48 61 62 51 465
E agata.brzyska@pl.gt.com



Paweł Duszek
Licensed stockbroker no. 2525
Certified Advisor in the Alternative Trading System No. 160/2012
Assistant



Jakub Szymczak
Certified Advisor in the Alternative Trading System No. 166/2012
Assistant



Aleksander Waligóra
Licensed stockbroker no. 2671
Certified Advisor in the Alternative Trading System No. 205/2011
Assistant



Mateusz Rumocki
Assistant

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Grant Thornton Frąckowiak Sp. z o.o. Sp. k.
ul. Abpa Antoniego Baraniaka 88 E, 61-131 Poznań

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