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# Alternative Securities Markets as Financing Sources for SMEs – Selected Aspects of AIM and NC

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**Abstract.** Small and medium-sized enterprises are the foundation for the development of each contemporary national economy. Their number affects macroeconomic indices of economies and directly translates into the labour market created by SMEs. This article aims to investigate the key conditionings behind the macroeconomic significance and legal factors of the financial market operation in Poland and the UK, with particular emphasis on the stock exchange as the fundamental element of the capital market. Both AIM and NewConnect are platforms dedicated to SMEs, which have been allowed easier access to this capital market segment by minimising mandatory legal conditions. This study analyses the number of listed companies and their capitalisation values in 1999–2015, covering: the rules of the financial market operation, with a special focus on the legal bases of the stock market operation in the economies investigated; legal conditions for the development of this economic segment; and a detailed analysis of the number of participants and capitalisation values achieved on the Warsaw and London Stock Exchanges, in particular AIM and NewConnect. This paper builds on source data from various annual reports and stock exchange publications drawn up and made available by stock exchanges and financial supervisors. The attempt to compare the indices and capacities of the WSE and the NC with the biggest European player is motivated by the fact that the Warsaw Stock Exchange is classified as the largest and most dynamically growing stock exchange in Central and Eastern Europe.

Keywords: WSE, LSE, capital market, stock exchange, capitalisation, AIM, NewConnect.

JEL Classification: G19, G20, G29.

Conference topic: Contemporary Issues of Economics and Management Studies: Problems and Perspectives.

#### Introduction

Money surplus among the operators who were eager to make it available to those with shortages of funds is the foundation of the financial system functioning in a market economy (Smith 2000, 2016). The capital flows so generated have always been unquestionably crucial for proper market processes in every country in the world. One of the major factors helping any modern economy to adapt to constantly changing economic conditions is the mobility of capital and the place of its allocation. In this respect, all capital flows are of particular importance (Modigliani, Miller 1958; Quinn, Cameron 1983; Churchill, Lewis 1983; Dębski 2014). Their mobility and efficient mechanisms in international markets allow for meeting capital demand, which is an elementary condition for good economic growth (Płókarz 2013). Internationally, capital flows through two channels: the banking systems and the securities market, where stock exchanges as trading venues for various financial instruments are the main instruments. Owing to its basic functions as a public capital market, the stock exchange is of fundamental importance to capital flows and development of economies, both nationally and globally (Altman 1968; Płókarz 2013; Małecka 2015a, 2015b). It is an institution of the organised market where securities may be traded according to strictly defined principles, by applying appropriate legal parameters and by following the rules specified by relevant supervisory authorities that are often established solely for this purpose (Flores, Szafarz 1997; Małecka 2016a).

The Amsterdam stock exchange<sup>1</sup> is regarded as the first stock market where securities were traded on a mass scale (Bień 2008). Generally, the 17<sup>th</sup> century is considered to be the period when financial exchanges were thriving in Northern Europe. However, stock exchanges were developing most dynamically during the Industrial Revolution, when growing companies needed enormous capital frequently exceeding the resources of even the richest family. Hence, public issues of shares gradually became more and more meaningful (Encyclopedia Britannica 2016)

<sup>&</sup>lt;sup>1</sup> The first financial instruments constituting an ownership interest in the Dutch East India Company appeared in 1602.

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One of the most important stock markets is the London Stock Exchange (LSE), which dates back to the 17<sup>th</sup> century (Bień 2008). The data on its performance in 1973, when six active regional stock exchanges merged with the London Stock Exchange to form one exchange organisation, namely the Stock Exchange of Great Britain and Ireland, are not statistically documented (Kulpaka 2007). 3 March 1801 is presumed to mark the beginning of the stock exchange in London as it was then that formal participants commenced their operations on a subscription basis. In 1986, the London Stock Exchange started to change its status, initially becoming a commercial company and later, on 8 June 2000, a public limited company (londonstockexchange.com, 13.09.2016)<sup>2</sup>. It is known to be a major stock exchange in the world, alongside New York, Frankfurt and Tokyo.

The Polish Warsaw Stock Exchange (WSE) is considered the largest in Central and Eastern Europe (WSE 2013). It started operating in 1817, and its activity was interrupted by the outbreak of World War II. The subsequent centrally managed economy delayed its reactivation until 1991<sup>3</sup>. Since 1994, it has been a member of the World Federation of Exchanges; since 1999, it has been recognised by the US Securities and Exchange Commission (SEC) set up for American investors (WSE 1998).

Each of these two market leaders, LSE for Europe and the WSE for Central and Eastern Europe, operates a special platform enabling also SMEs to access the source of development funding. Specific markets are dedicated to SMEs, allowing those enterprises to gain the status of listed companies. This sector, in fact, is represented by the largest group of entrepreneurs that directly affects the macroeconomic factors of individual national economies (Łuczka 2002, 2011; Małecka 2016b).

The article attempts to compare the results achieved by the two platforms, which offer SMEs the opportunity to raise capital for development through cooperation with the capital market. Legal conditionings as well as the development and statistics on the performance in individual years have been analysed. Given different historical backgrounds and times of establishment, the initial years of progress of these platforms (AIM in the UK and NewConnect (NC) in Poland) have been examined.

#### Main legal norms and regulations governing financial markets in Poland and the United Kingdom

The rules of the financial system operation consist of a general set of legal norms and provisions stemming from multiple by-laws and statutes of various financial institutions and supervisors that define the rules of the functioning of that economic sector (Małecka 2016a). In many countries, very rapid, dynamic and complex changes in financial markets caused their diversification, resulting in very detailed, extensive and complicated regulations. Since new financial institutions are constantly emerging and the securities exchange and trade processes are undergoing modifications, the various legal conditions and by-laws are being further amended to adapt the financial system to current market conditions (Dębski 2014; Mrzygłód, Nowak 2013; Sopoćko 2010).

In Poland, legal norms and regulations for the financial market were first defined in the late 1980s and early 1990s, at the time of the economic transition (Małecka 2016a; Kulpaka 2007). Before that, there were no legal norms governing the operation of many, even basic, financial market segments, no law on public trading in securities or act on investment funds. Financial law was evolving alongside the rapid and dynamic development of the financial system itself, regulating bank operations, with the adoption of tax law or the Act on Bonds. Many of those provisions were amended or completely altered while being developed or implemented and, above all, adapted to prevalent market realities (Dębski 2014; Januszkiewicz 1987).

An important regulatory role is played by operating rules derived from practices and by-laws of the authorities supervising this economic segment. On the one hand, they are not mandatory legal norms in individual countries. Yet, if an operator wants to be active in a given market, they must be followed and respected (Małecka 2016a). Countries with well developed financial systems have clearing houses. In Poland, transactions between the key financial market players have been supervised by the National Clearing House (KIR)<sup>4</sup> since 1992. There also exist institutions keeping records of existing financial instruments and settling securities transactions. They are responsible for organising and managing the mandatory deposit system, guaranteeing the settlement of transactions concluded in the public capital market. In Poland, since 1991, the National Depository for Securities (KDPW)<sup>5</sup> has played the role of a central institution in charge of managing and supervising the depository and settlement system for trade in financial instruments. The LSE transactions are settled by: the London Clearing House and Clearnet (LCH) ensuring the

<sup>&</sup>lt;sup>2</sup> Since its establishment, the LSE has suspended its activity only for six months (during World War I) and for 7 days (during World War II).

<sup>&</sup>lt;sup>3</sup> The founding act was signed on 12 April 1991, and the first trading session took place four days later.

<sup>&</sup>lt;sup>4</sup> The KIR S.A. notarial deed specifying the company's authorities and statute was signed by 16 banks (including the National Bank of Poland – NBP) and the Polish Bank Association on 22 November 1991 (KIR 2015).

<sup>&</sup>lt;sup>5</sup> Since 1994, KDPW has been a joint-stock company operating under the Law on Public Trading of Securities, articles 118 and 122–146a, its Statute and Rules (KDPW, 2015). Only stock exchanges, brokerage houses, the OTC market, the Treasury, commercial banks and the NBP may be its shareholders.

settlement of transactions in various capital market segments, and Euroclear, which settles transactions and acts as a central depository for securities listed in England<sup>6</sup> (LCH Group Limited 2015; Euroclear 2006).

Stock and organised OTC markets also work under their own statutes and by-laws. Detailed operating and trading rules apply to any existing trading floor. These are specific regulations concerning the prices of financial instruments, types and ways of placing orders, particular hours and days when trading transactions may be concluded, ways of concluding, settling and confirming transactions, and the obligations to provide information to the public. The WSE and the Polish OTC market equivalent, namely the Central Table of Offers (CTO), also operate under their statutes, rules and detailed trading regulations (Warsaw Stock Exchange 2015; Bondspot 2015). The London Stock Exchange is regulated by the basic document, namely the Rules of the London Stock Exchange (London Stock Exchange 2016). The financial market in most countries is also overseen by specifically established State institutions. As financial markets are of macroeconomic importance and can potentially influence the global economy through daily multimillion transactions, such supervisors are chiefly responsible for the financial market and ensure that the law is complied with therein by both institutions and individual investors. Their main role is to supervise compliance with the rules and the law, warn against and prevent fraud. In Poland, there are several State institutions overseeing individual segments of the financial market: the Securities and Exchange Commission (KPWiG), the Commission for Banking Supervision (KNB), the Insurance and Pension Funds Supervisory Commission (KNUiFE)<sup>7 8</sup>, the General Inspector of Financial Information (GIIF). In the United Kingdom, the Financial Service Authority (FSA) operates as an independent institution directly accountable to the Parliament and regulates the financial services segment. It has the power and authority to develop and implement provisions on the financial market and conduct investigations (The Financial Services Authority (FSA) 2015).

In most countries with developed capital markets, in particular public securities markets, separate institutions have been set up specifically to monitor exclusively this segment. In Poland, this function is exercised by the Securities and Exchange Commission (KPWiG), which, as a government authority, supervises the Polish securities market. Its operations are governed by its Statute and the Law on Public Trading in Securities of 21 August 1997<sup>9</sup>. It is a member of the International Organization of Securities Commissions (IOSCO). The LSE is called a Recognised Investment Exchange (RIE). Therefore, it meets all the requirements imposed by the financial supervisory institutions in the UK. In practice, this implies maintaining high market standards by means of its Rules, advice and monitoring so as to ensure that issuers, intermediaries and investors have secure access to the capital market (Mosionek-Szweda 2014).

An important financial supervisory authority, particularly for the banking sector, is the Commission for Banking Supervision. In Poland, this role is played by the General Inspector of Banking Supervision, which operates within a separate National Bank of Poland (NBP) structure as the executive body of the Commission, working under the Act on the National Bank of Poland<sup>10</sup>, the Banking Law<sup>11</sup>, and additional implementing regulations<sup>12</sup>. Its main tasks include collecting and analysing received financial information in order to prevent and combat fraud, i.e. money laundering or placing criminal proceeds on the legitimate market. In the UK, the central bank (Bank of England) cooperates with the FSA to ensure the financial market stability, but generally it is not active in the capital market (bankofengland.co.uk, 13.09.2016).

In countries with developed public securities markets, there also exist chambers of commerce and investor associations and federations that bring together selected groups of financial institutions. Their roles and functions vary from country to country. Both in Poland and in England, these groups include: broker and investment adviser associations, chambers of brokerage houses, associations of individual investors, associations of listed companies, associations of investment funds<sup>13</sup>. The implemented norms and regulations and the various institutions operating in

<sup>&</sup>lt;sup>6</sup> Also in Ireland, the Netherlands, Belgium and France.

<sup>&</sup>lt;sup>7</sup> This institution has existed since March 2002; by then, two institutions operated: the National Insurance Supervisory Authority (PUNU) and Pension Funds Supervisory Authority (UNFE).

 <sup>&</sup>lt;sup>8</sup> It conducts its activities under the amended Act on Insurance Business of 28.07.1990, Journal of Laws (Dz.U.) of 1996 No. 11, item 62; Dz.U. of 1997 No. 43, item 272, No. 88, item 554, No. 107, item 685, No. 121, item 770, No. 139, item 934; Dz.U. of 1998 No. 155, item 1015; Dz.U. of 1999 No. 49, item 483; No. 110, item 1255, articles 82–85, 199–214.
<sup>9</sup> Law on Public Trading in Securities of 21.08.1997, Dz.U. of 2002 No. 49, item 447, No. 240, item 2055; Dz.U. of 2003, No. 50, item 424, No. 84, item 744; No. 170, item 1651, No. 124, item 1151, No. 223, item 2216; Dz.U. of 2004, No. 64, item 594,

No. 91, item 871; No. 96, item 959, No. 146, item 1546, No. 116, item 1205, No. 273, item 2703, articles 3, 12–21.

<sup>&</sup>lt;sup>10</sup> Act on the NBP of 29.08.1997, Dz.U. of 2005 No. 1, item 2, articles 25–30.

<sup>&</sup>lt;sup>11</sup> Banking Law Act of 29.08.1997, Dz.U. of 2000 No. 116, item 1216; Dz.U. of 2001 No. 111, item 1195, No. 130, item 1450; Dz.U. of 2002 No. 126, item 1070, No. 144, item 1208, No. 141, item 1178, No. 169, item 1387, No. 241, item 2074; Dz.U. of 2003 No. 50, item 424, No. 60, item 535; No. 65, item 594, No. 228, item 2260, No. 229, item 2276; Dz.U. of 2004 No. 64, item 594, No. 91, item 870, No. 121, item 1264, No. 146, item 1546, No. 173, item 1808, articles 131–169.

<sup>&</sup>lt;sup>12</sup> Act on Counteracting Introduction into Financial Circulation of Property Values Originating from Illegal or Undisclosed Sources of 16.11.2000, Dz.U. of 2002 No. 169, item 1385; Dz.U. of 2003 No. 153, item 1505; Dz.U. of 2004 No. 62, item 577, No. 96, item 959, No. 116, item 1203.

<sup>&</sup>lt;sup>13</sup> All of these have a substantial influence on opinions and, primarily, on ensuring good practices and professional ethics rules.

each market ensure transaction security, encouraging investors to more and more frequently resort to the financial solutions offered by stock exchanges.

The results of the author's own research published in 2016 have demonstrated that the awareness of capital market tools and solutions enabling the search for an effective source of financing outside the money market is not the basic knowledge among managers (owners or CEOs) of small and medium-sized enterprises (SME) in Poland (Małecka, Łuczka 2016). Therefore, skilful and effective popularisation of information about how to construct capital market instruments, along with dissemination of this knowledge among SMEs, is of crucial importance. This also applies to security, regulations and legal norms in view of the fact that SMEs are the main target group for alternative trading systems as regards potential cooperation.

## The methodology of research

The research covered the performance of the London and Warsaw Stock Exchanges and was aimed at analysing the position of the stock exchange as one of essential tools of the capital market in Poland.

In order to calculate and present the findings in tables and figures, mathematical analysis tools were employed that allowed for determining the quantitative share and percentage increases as well as for depicting a trend analysis and comparing the indicators obtained. The performance of the two platforms for raising capital for SME development (AIM in the UK and NewConnect in Poland) have been compared. Statistics on their results achieved in each year have been studied. Given different historical backgrounds and times of establishment, the initial years of development of these platforms have been examined so as to depict their trends and contributions to stock exchange development. Additionally, their real capitalisation values have been outlined in the actual years of their operation, i.e. since 2007, when NewConnect was formed.

It is worth noting that a difference exists between the published results relating to currency, because each stock exchange reports official figures in the monetary unit applicable in its country. However, the overall picture has been successfully outlined and the comparison has been based on the values published by the NBP in table A of average exchange rates, in each case on the last day of the year recorded. Throughout this text, the 2015 data refer to the results and quotations reported on the last day of August (Table1).

Table 1. Table A of the NBP average exchange rates used to convert GBP to PLN ( <i>Source</i> : Prepared by the author on the basis of data from Narodowy Bank Polski 2017)
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Table A of the NBP average exchange rates							
Year	2009	2010	2011	2012	2013	2014	2015
Exchange rates	4.5986	4.5938	5.2691	5.0119	4.9828	5.4648	5.8309

### Number of companies listed on the lse and wse and their capitalisation in 1999–2015

The research covered the performance of companies on the LSE and the WSE in 1999–2015. In view of the comparative analyses performed, the year 1995 is noteworthy. It was then that a new segment of the UK market emerged, namely the Alternative Investment Market (AIM), the Polish equivalent of which, NewConnect, started operating in 2007 (Kordela 2013; Cai *et al.* 2015; Czapkiewicz, Wojtowicz 2014). Both platforms are addressed primarily to SMEs (World Bank 2015).

### Number of companies listed on the LSE and the WSE in 1999-2015

A several-year gap exists between the LSE and the WSE as regards their operation and history, including the period of the most prominent socio-economic changes in both countries. Despite advancing globalisation and computerisation of this market segment in both countries, allowing access to rankings and quotations from any place in the world, statistics clearly demonstrate greater popularity of the London Stock Exchange and more involvement of investors therein (Fig. 1).

A detailed analysis reveals that the Polish market, despite a much lower number of companies, has shown an upward trend since 2004 (Małecka 2015a). In the same period, the LSE has experienced fluctuations (the biggest increase of 26.7% in 2012, when both the regular market and the AIM attracted considerable interest; the biggest drop of 25.8% one year later over the previous year can also be seen on both markets) (Tables 2 and 3)

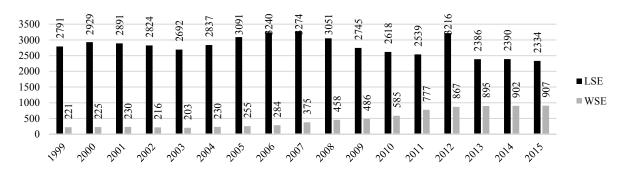


Fig. 1. Number of companies listed on the LSE and WSE in 1999–2015 (*Source*: Prepared by the author on the basis of data from Warsaw Stock Exchange 2016; London Stock Exchange 2016)

	(500766.11	lepared by the auti	ior on the basi		Sider Exc.	liange 2010)			
	LSE								
		Main market			AIM		Tatal		
Year	Domestic companies	Foreign companies	ALL	Domestic companies	Foreign companies	ALL	Total Companies		
1999	1945	499	2444	325	22	347	2791		
2000	1904	501	2405	493	31	524	2929		
2001	1809	453	2262	587	42	629	2891		
2002	1701	419	2120	654	50	704	2824		
2003	1557	381	1938	694	60	754	2692		
2004	1465	351	1816	905	116	1021	2837		
2005	1358	334	1692	1179	220	1399	3091		
2006	1276	330	1606	1330	304	1634	3240		
2007	1239	341	1580	1347	347	1694	3274		
2008	1174	327	1501	1233	317	1550	3051		
2009	1121	331	1452	1052	241	1293	2745		
2010	1093	330	1423	967	228	1195	2618		
2011	1069	327	1396	918	225	1143	2539		
2012	1701	419	2120	870	226	1096	3216		
2013	996	303	1299	861	226	1087	2386		
2014	973	313	1286	885	219	1104	2390		
2015	975	293	1268	859	207	1066	2334		

Table 2. Number of companies listed on the LSE by seat registration in 1999–2015 (*Source*: Prepared by the author on the basis of data from London Stock Exchange 2016)

Table 3. Number of companies listed on the WSE by seat registration in 1999–2015 (*Source:* Prepared by the author on the basis of data from Warsaw Stock Exchange 2016)

	WSE						
	Main market NewConnect					Total	
Year	Domestic companies	Foreign companies	ALL	Domestic companies	Foreign companies	ALL	Companies
1999	221	0	221				221
2000	225	0	225				225
2001	230	0	230				230
2002	216	0	216				216
2003	202	1	203				203
2004	225	5	230				230
2005	248	7	255				255
2006	272	12	284				284
2007	328	23	351	24	0	24	375
2008	349	25	374	83	1	84	458
2009	354	25	379	105	2	107	486
2010	373	27	400	182	3	185	585

	WSE						
		Main market			NewConnect		
Year	Domestic companies	Foreign companies	ALL	Domestic companies	Foreign companies	ALL	Total Companies
2011	387	39	426	344	7	351	777
2012	395	43	438	421	8	429	867
2013	403	47	450	434	11	445	895
2014	420	51	471	421	10	431	902
2015	424	52	476	421	10	431	907

What is also evident is a declining interest in cooperation with the stock exchange among British companies, particularly in the main market (a fall of 49.9% as compared to 1999), while Polish companies are constantly becoming more numerous (an increase of 91.9%). The same trend prevails on the AIM, which was most popular among Britons in 2005–2009. Since then, it has experienced a downward trend. In contrast, NewConnect has been equally popular among Polish entrepreneurs for four years. The interest in it among foreign companies is, nevertheless, small and incomparable with the LSE figures.

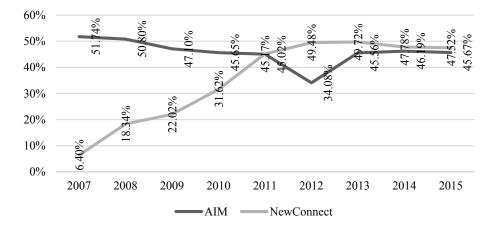


Fig. 2. The trend of companies listed on the AIM and NewConnect in 2007–2015 (*Source:* Prepared by the author on the basis of data from Warsaw Stock Exchange 2016; London Stock Exchange 2016)

The examination of individual shares of the regulated and alternative markets will show that they hold comparable shares in their portfolios. The AIM's contribution seems to be stable (a marked drop to 34.08% only in 2012), and the number of NewConnect enthusiasts in Poland also exceeds 40%, which, considering the 9-year difference in operation of the exchanges in those markets, demonstrates a similar trend in behaviours and actions of entrepreneurs seeking the source of financing through the capital market on both exchanges (Fig. 2).

#### Stock market capitalisation on the LSE and the WSE in 1999-2015

The interest in and the need for business expansion by raising development capital through the stock exchange, as reflected by the number of LSE and WSE companies, directly translate into the stock market capitalisation values.

While analysing the LSE data, it turns out that capitalisation achieved the highest values in 1999–2000 (GBP 5411.1 bn and GBP 5337.4 bn, respectively). The AIM, having existed for only 5 years at that time, did not contribute to that performance as much as the main market (GBP 5397.6 bn and GBP 5322.5 bn, respectively), whose performance has not been repeated since then, nor have the drops below GBP 3500 bn (the 2002 capitalisation was GBP 3059.8 bn, 2003: GBP 3349.9 bn, 2004: GBP 3464.1 bn) (Table 4).

The lowest figure recorded in 2008 (GBP 2934.9 bn) was also reflected in a decline on the WSE. The Polish stock exchange, having operated for 9 years only, was strengthened by the NewConnect capitalisation, and its poor performance in 2008 (PLN 466.6 bn) definitely had its source in the main market (down by 56.9% of the stock market capitalisation over the previous year) (Table 4).

	LSE			WSE			
Year	Main market	AIM	TOTAL	Main market	NewConnect	TOTAL	
	Equity market value (GBP bn)			Equity market value (PLN bn)			
2007	4 225.9	97.6	4 323.5	1 080.3	1.2	1 081.4	
2008	2 897.2	37.7	2 934.9	465.1	1.4	466.6	
2009	3 527.0	56.6	3 583.6	715.8	2.6	718.4	
2010	3 954.9	79.4	4 034.3	796.5	5.1	801.6	
2011	3 602.7	62.2	3 664.9	642.9	8.5	651.4	
2012	3 768.9	61.7	3 830.6	734.0	11.1	745.1	
2013	4 174.5	75.9	4 250.4	840.8	11.0	851.8	
2014	3 965.1	71.4	4 036.5	1 253.0	9.1	1 262.1	
2015	3 851.4	74.7	3 926.1	1 220.8	9.2	1 230.0	

Table 4. LSE and WSE stock market capitalisation by company seat registration in 2007–2015 (*Source*: Prepared by the author on the basis of data from Warsaw Stock Exchange 2016; London Stock Exchange 2016)

Although capitalisations on the Polish market tend to grow, apart from 2011, they represent only a few per cent of the values reached in London (Table 5).

Table 5. LSE and WSE stock market capitalisation by company seat registration in 2007–2015, % (*Source*: Prepared by the author on the basis of data from Warsaw Stock Exchange 2016; London Stock Exchange 2016; Narodowy Bank Polski 2016)

Year	Main market	NewConnect	Total
2007	5.3	0.2	5.1
2008	3.7	0.9	3.7
2009	4.4	1.0	4.4
2010	4.4	1.4	4.3
2011	3.4	2.6	3.4
2012	3.9	3.6	3.9
2013	4.0	2.9	4.0
2014	5.8	2.3	5.7
2015	5.4	2.1	5.4

The LSE lists the biggest global corporations<sup>14</sup> (Piekarzewska 2008), which has a substantial impact on the capitalisation value. The difference in achieved values is striking, yet the trend is the same and the AIM share in London is much lower in comparison to NewConnect in Warsaw. However, it should be borne in mind that this form of capital market has existed in Poland for 9 years only (Fig. 3).

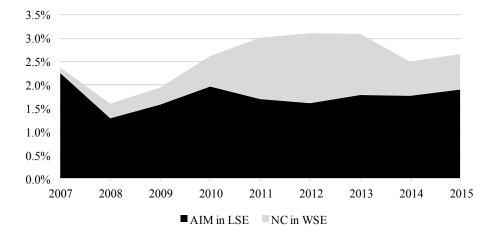


Fig. 3. Alternative market shares on the LSE and WSE in 2007–2015 (*Source*: Prepared by the author on the basis of data from Warsaw Stock Exchange 2016; London Stock Exchange 2016)

<sup>&</sup>lt;sup>14</sup> Such as BP, British Airways, Rolls-Royce, Tesco.

The research results have revealed that the trends prevailing in the initial years of the AIM and NewConnect operation point to a similar interest among entrepreneurs seeking sources of financing for their business through these alternative trading systems. This means that SMEs are increasingly resorting to solutions offered by the capital market.

## Conclusions

In economically developed countries such as the United Kingdom, the stock exchange is one of the most important capital market instruments, playing a meaningful macroeconomic role. Its activities and offer are a source of development capital, providing an alternative to the banking sector. It is a venue with huge capital flows from companies holding surplus money to those seeking financing for development. The examined public capital markets measured by the number of listed companies and stock market capitalisation are large. By providing tools to international companies, they directly affect the global economic growth, thus fulfilling one of the elementary macroeconomic functions of the stock exchange.

The WSE, having operated much shorter on the capital market, has been recognised as the most important in Central and Eastern Europe. The entire Polish financial system has virtually been built on the basis of the post-1989 political and economic changes. The stock exchange was gaining prominence for the economy and the law while it was being formed and while new financial instruments and rules of the financial market operation were emerging. Today, the capital market has many legislative solutions allowing this economic sector to function smoothly and effectively. The free market, which enables all Polish entrepreneurs to diversify their investment portfolios in any possible way, allows funds to be allocated depending on the maturity of individual owners or management boards of companies operating on the market. Despite all the conditions and opportunities, the Polish financial system is dominated by the banking sector and the macroeconomic role of the WSE may still be developed.

The deliberations contained herein give rise to further questions: first, is it sufficient to increase the awareness of potential investors and issuers so that the WSE's role is similar to that examined in the UK? Second, can the WSE be merged with other European stock exchanges, given Poland's membership of the EU? Third, will a platform so emerged be an arrangement among only Central and Eastern European countries (as was the case with Euronext established by a merger of Amsterdam, Brussels and Paris stock exchanges)? How will the forthcoming Brexit affect the development of these markets?

These and many other questions offer further opportunities for analysis and research into the importance of the WSE and the LSE for economics, law and development of today's economies such as Poland and other countries in Europe and in the world. For Poland, the country with the most advanced capital market in Central and Eastern Europe, the largest area and a modern system of platforms supporting entrepreneurship, both NewConnect and the trend shown in consecutive years of its development look promising, in particular as regards enhanced opportunities for SMEs to raise capital for development.

### References

Altman, E. I. 1968. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy, *Journal of Finance* 23(4): 589–609. https://doi.org/10.1111/j.1540-6261.1968.tb00843.x

Bień, W. 2008. Rynek Papierów Wartościowych. Difin, Warszawa.

Bondspot [online], 2015 [11 December 2015]. Available from Internet: http://bondspot.pl/

- Cai, CH. X.; Harris, J. H.; Hudson, R. S.; Keasey, K. 2015. Informed trading and market structure, *European Financial Management* 21(1) [online]. Available from Internet: http://onlinelibrary.wiley.com/doi/10.1111/eufm.12003/abstract
- Churchill, N. C.; Lewis, V. L. 1983. The five stages of small business growth, *Harvard Business Review* 63(3) [online]. Available from Internet: https://hbr.org/1983/05/the-five-stages-of-small-business- growth

Czapkiewicz, A.; Wojtowicz, T. 2014. The four-factor asset pricing model on Polish stock market, *Economic Research. Ekonomska Istrazivanja* 27(1): 771–783. https://doi.org/10.1080/1331677X.2014.975518

Dębski, W. 2014. Rynek finansowy i jego mechanizmy. Warszawa: PWN.

Encyclopedia Britannica [online], 2016 [12 December 2016]. Available from Internet: https://www.britannica.com/

Euroclear [online], 2006 [24 May 2006]. Available from Internet: https://www.euroclear.com/en.html

Flores, R.; Szafarz, A. 1997. Testing the information structure of Eastern European markets: the Warsaw Stock Exchange, *Economics of Planning* 30(2-3): 91–105. https://doi.org/10.1023/A:1003055524004

Januszkiewicz, W. (Ed.). 1987. Gielda w gospodarce światowej. Warszawa: PWE.

KDPW [online], 2015 [14 May 2015]. Available from Internet: http://www.kdpw.pl/pl/Strony/Home.aspx

KIR [online], 2015 [11 October 2015]. Available from Internet: https://www.kir.pl/en/about-us/about-kir/

Kordela, D. 2013. NewConnect – rynek gieldowy dla małych i średnich przedsiębiorstw. Warszawa: CeDeWu.pl.

Kulpaka, P. 2007. Gieldy w gospodarce. Warszawa: PWE.

LCH Group Limited [online], 2015 [11 December 2015]. Available from Internet: http://www.lch.com/home

London Stock Exchange [online], 2016 [12 December 2016]. Available from Internet: http://www.londonstockexchange.com

- Łuczka, T. 2002. *New Challenges for SME's in 21st Century*. Entrepreneurship and small business development in the 21st century. Łódź: Press University, 277–290.
- Łuczka, T. 2011. Capital structure in small and medium-sized enterprises, in S. Lachiewicz, A. Zakrzewska-Bielawska (Eds.), Fundamentals of management in modern small and medium-sized enterprises. Łódź: Technical University of Łódź, 55–70.
- Małecka, J. 2015a. Regular and specially designed dividends in small and medium-sized companies, in A. Bielawska (Ed.). *Uwarunkowania rynkowe rozwoju mikro, małych i średnich przedsiębiorstw* Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, 496–507 [online]. Available from Internet: http://www.wzieu.pl/zn/848/ZN\_848.pdf
- Małecka, J. 2015b. Selected problems of the capital market in Poland, in M. Postuła, J. Turyna (Eds.). *Finansowe uwarunkowania* rozwoju organizacji gospodarczych, zarządzanie finansami a efektywność ekonomiczna. Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania Uniwersytetu Warszawskiego, 349–362.
- Małecka, J. 2016a. Regulation of the Warsaw stock exchange: history and operating rules, *Journal of Economics World* 5(1): 34–43.
- Małecka, J. 2016b. Revenues, expenses, profitability and investments of potential contenders for the status of a listed company in Poland, *Oeconomia Copernicana* 6(4): 91–122. https://doi.org/10.12775/OeC.2015.031
- Małecka, J.; Łuczka, T. 2016. The structure of venture capital raising by companies in Poland and Central and Eastern Europe: selected aspects, *Proceedings Paper IMECS 2016* 418–431. Praha: Vysoka Skola Ekonomicka v Praze. WOS:000386957700037.
- Modigliani, F.; Miller, M. H. 1958. The cost of capital corporation finance and the theory of investment, *American Economic Review* 48(3): 261–297.
- Mosionek-Schweda, M. 2014. The use of discriminant analysis to predict the bankruptcy of companies listed on the newconnect market, *Equilibrium. Quarterly Journal of Economics and Economic Policy* 9(3): 87–105.
- Mrzygłód, U.; Nowak, S. 2013. Stock exchanges go public. The case of Warsaw stock exchange, *Journal of International Studies* 6(2): 111–123. https://doi.org/10.14254/2071-8330.2013/6-2/10
- Narodowy Bank Polski [online], 2016 [24 May 2016]. Available from Internet: http://www.nbp.pl/
- Narodowy Bank Polski [online], 2017 [10 February 2017. Available from Internet: http://www.nbp.pl/
- Piekarzewska, A. 2008. Giełda papierów wartościowych w Wielkiej Brytanii, in U. Ziarko-Siwek (Ed.). Giełdy kapitałowe w Europie. Warszawa: CeDeWu.pl.
- Płókarz, R. 2013. Globalne rynki finansowe. Warszawa: PWN.
- Quinn, R. E.; Cameron, K. 1983. Organizational life cycle and shifting criteria of effectiveness: some preliminary evidence. Management Science 29(1) [online]. Available from Internet: http://www.jstor.org/stable/2631164
- Smith, A. 2000. The wealth of nations. Random House Lcc Us.
- Smith, A. 2016. An inquiry into the nature and causes of the wealth of nations. Vol. 1 & 2. FB&c Ltd.
- Sopoćko, A. 2010. Rynkowe instrumenty finansowe. Warszawa: PWN.
- The Financial Services Authority (FSA) [online], 2015. Available from Internet: www.fsa.gov.uk
- Warsaw Stock Exchange [online], 2015 [24 May 2016]. Available from Internet: https://www.gpw.pl/
- Warsaw Stock Exchange [online], 2016 [29 Decwember 2016]. Available from Internet: https://www.gpw.pl/
- World Bank. 2015. SME exchange in emerging market economies: a stocking of development practices. World Bank.
- WSE. 1998. Rocznik Giełdowy. Warsaw Stock Exchange (WSE).
- WSE. 2013. Rocznik Giełdowy. Warsaw Stock Exchange (WSE).