Master Thesis: Comparison of AIM, Entry Standard and AlterNext

--from the perspective of market feature and company profile

Author: Liulingzi CHENG (39635)

Tutor: Pascal QUIRY

Major: Grande Ecole - Finance Major

Date: 5/18/2015

Acknowledgement: The author wishes to thank to my tutor Pascal QUIRY for guiding me into this very interesting topic and helping me to set up the entire thesis structure. During the 3 months of conducting research and analyzing facts and statistics, the author has acquired a lot of insights of the Germany, UK and France second-tier markets as well as the economic structure of each country. The process of writing the thesis is a perfect practice for the author to learn and think. Also, the author would like to thank to HEC Librarians as they help me to explore databases and gave me timely help for researching data on DataStream. Last but not least, the author would like to thank to HEC Paris, especially the Grande Ecole program, as it facilitates me to build a comprehensive and in-depth financial knowledge system.

Abstract

AIM, Entry Standard and AlterNext are the second-tier markets in UK, Germany and France. This thesis is trying to give more insight about AIM, Entry Standard and AlterNext by analyzing and comparing the market features and company profiles of them. All the three markets are regulated by stock exchange with the help from financial advisors. While all of them employ less strict listing prerequisites and on-going obligations than first-tier markets, AIM has the lowest minimum listing requirements. From 2006 to 2014, AIM and AlterNext followed the trend of first-tier market performance whereas Entry Standard significantly underperformed. AIM has the highest portion of micro and small enterprises and companies in the start-up stage. The sector distribution of AIM and AlterNext is compatible with UK and France economic structure, and the unexpected higher proportion of companies in financial sector in Entry Standard reflects the heavy reliance of German economic on "intermediate finance".

Key Words: Second-tier Markets, SMEs Financing, AIM, AlterNext, Entry Standard, Open Market

Table of Contents

Section 1. Introduction

Small and Medium Enterprises (SMEs) can be seen everywhere. From a bakery store nearby to a start-up operated online, they serve as an indispensible part of our daily life. Moreover, they contribute enormously to economic growth, employment and social stability. According to Annual Report on European SMEs 2013/2014, EU Commission (2014) stated that "European SMEs represent approximately 99% of the number of enterprise, account for 2/3 of employment and produce 58% of value added."[1]

Although SMEs usually act as the backbone of a country's economy, their financing channels are much more limited when compared with those of big enterprises. In Europe, since the late 90s, governments have tried to solve this problem and launched second-tier markets in succession to improve the financing conditions and competitiveness of SMEs. Those major second-tier markets include Alternative Investment Market (AIM) in Britain, AlterNext in France and the "Entry Standard" segment of open market in Germany.

The major purpose of this dissertation is to give an overview of the aforementioned second-tier markets. By understanding their position in the respective capital markets, and analyzing different features and company profiles of the three markets, we are trying to understand the roles of AIM, Entry Standard and AlterNext in the financial system and the profiles of SMEs listed on these second-tier markets.

The paper is organized as follows: Section 2 gives an overview of SMEs composition, economic structure and SMEs financing situation in Germany, France and UK. Section 3 describes the market structure of stock exchanges and the relative position of the second-tier markets in Germany, France and UK. Section 4 focuses on data analysis that we divide into two parts: in the first part, we use the data provided by stock exchanges to analyze some market features of AIM, Entry Standard and

[1] **European Commission** (2014), "Annual Report on European SMEs 2013/2014", http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm

AlterNext such as their listing prerequisites and on-going obligations, number of company listed and market performance from 2005 to 2014 and analyze their common or different characteristics; in the second part, we utilize some fundamental data collected by DataStream and provided by the stock exchanges to analyze the profile listed on these three market, such as their number of employees distribution, annual revenue distribution and sector distribution. Section 5 concludes.

Section 2. Background Information

This section mainly serves to provide background information for the analysis in the following section. In this section, we firstly outline the definitions of SMEs based on the standard of European Union; then we discuss the detailed composition of SMEs in each country, as well as the contribution of SMEs to each country from the value added terms to show the respective importance of SMEs to local economies. To get a better understanding of the SMEs distribution across sectors in the following section, we briefly introduce the economic structure of each country and explain their different and common points from historical, cultural and economical perspectives. At the end, we have a glance at the "financial growth cycle theory" to get the overview of SMEs financing option and look at the current financing situation of SMEs in Germany, France and UK.

2.1. The Definition and financial features of SMEs

Based on the Article 2 of Commission Recommendation 2003/361/EC, there are three criteria to define an enterprise as SMEs:

1. Number of employees
2. Turnover
3. Annual balance sheet

Among these three criteria, the first threshold one is the number of employees, then comes to either the annual turnover or the size of annual balance sheet. EU Commission (2003) said "if the company has less than 250 employees, and has either an annual turnover less than 50 million or an annual balance sheet less than 43 million euro, then it falls into the category of SMEs."[2]

Figure 1 gives more detail about the definition:

[2] **European Commission** (2003), "Commission Recommendation 2003/361/EC", Official Journal of the European Union L 124, p. 36

Enterprise category	Headcount: Annual Work Unit (AWU)	Annual turnover		Annual balance sheet total
Medium-sized	< 250	≤ €50 million (in 1996 € 40 million)	or	≤ €43 million (in 1996 € 27 million)
Small	< 50	≤ €10 million (in 1996 € 7 million)	or	≤ €10 million (in 1996 €5 million)
Micro	< 10	≤ €2 million (previously not defined)	or	≤ €2 million (previously not defined)

Figure 1: Definition of SMEs

Source: European Commission (2003), "The new SME Definition User Guide and Model Declaration", http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/ sme_user_guide_en.pdf, p. 14

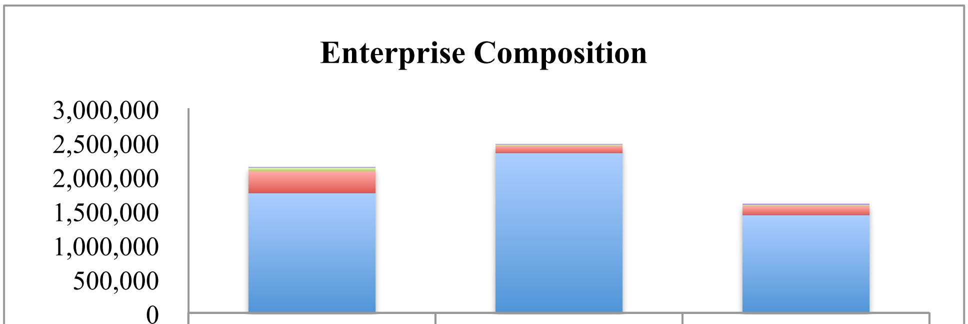
2.2. Comparison of SMEs Composition in Germany, France and UK

Based on the information illustrated on Chart 1 below, for Germany, UK and France, the rank of the number of enterprises from the highest to the lowest (Micro>Small>Medium>Large) are the same. Although France has the largest number of enterprises, most of them are SMEs, especially microenterprises. The popularity of SMEs in France can be partially explained by the low cost and fast procedure to set up a business (EU Commission, 2014).[3] In France, it only takes 4 days and 84 euros to start a business, whereas the corresponding numbers in the EU level are 4.2 days, 318 Euros (EU Commission, 2014).[4] Germany enjoys the highest number of large enterprises both in absolute terms and in relative terms (approximately 0.4% of all enterprises). This result is not a surprise, as we all know that German has the higher GDP than the other two, which can be simply explained

[3] **European Commission** (2014), "2014 SBA Fact Sheet France", http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2014/france_en.pdf

[4] **European Commission** (2014), "2014 SBA Fact Sheet France", see note 3

by the higher proportion of large enterprises.



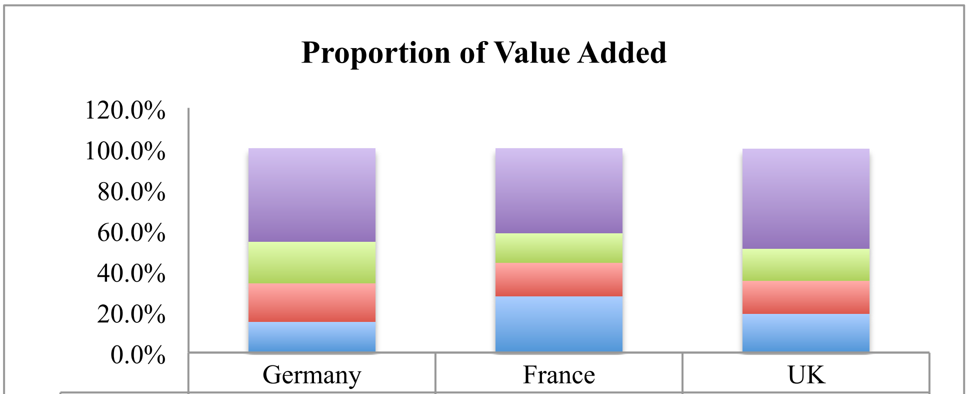
	Number Germany	Number France	Number UK
Large	9589	3188	4893
Medium	50194	16857	22043
Small	325416	109894	137851
Micro	1755472	2341031	1430137

Chart 1: Enterprise Composition in Germany, France and UK

Source: 2014 SBA Fact Sheets Germany, France, Unite Kingdom - European Commission 2014

From the perspective of value addition, as illustrated on Chart 2 below, France has approximately 58.7% value addition coming from SMEs, UK has 51% and Germany has 44.4%. Therefore, for France, SMEs are a structurally more important component to the economy, attributed to its significant contribution to number of companies, employment and value added. For UK, although the contribution to value added from SMEs and large companies are half-half, given the small percentage of large enterprise in terms of the total number of enterprises, large companies actually have more impact on the size of the economy. European Commission (2014) once explained UK's enterprise composition in the "SBA Fact Sheet", saying "the prominent role of large enterprises is explained by the UK's open economy and its well-developed financial markets, which facilitate large-scale mergers & acquisitions and make the UK an attractive location for corporate headquarters."[5] For Germany, large companies play a more important role to the prosperity of the economy than SMEs.

[5] **European Commission** (2014), "2014 SBA Fact Sheet United Kingdom", http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2014/uk_en.pdf



	Germany	France	UK
Large	45.6%	41.3%	49.0%
Medium	20.4%	14.6%	15.5%
Small	18.9%	16.3%	16.3%
Micro	15.1%	27.8%	19.1%

Chart 2: Proportion of Value Added Contributed by SMEs and Large Companies

Source: 2014 SBA Fact Sheets Germany, France, Unite Kingdom - European Commission 2014

2.3. Economic Structure of Germany, France and UK

In regard to the economic structure of each country (Chart 3), Germany relies more heavily on industry and manufacturing sectors for its value added. Germany is the fourth largest economy in the world in nominal GDP terms and Europe's largest (CIA, 2014).[6] Germany excels in the production of automobiles, machinery, electrical equipment and chemicals and benefits from a highly skilled labor force (CIA, 2014).[7] Out of the top 10 largest companies in Germany, 6 belong to manufacturing and industry sectors (Forbes 2014 Global 500 companies)[8], which further prove that Germany has an economy more deeply rooted in the industry and manufacturing sectors. In terms of economy structure, France and UK share some similarities, which, the author believe, can be a consequence of their geographical proximity. Both of them have more than two-thirds value added coming from trades and service sectors.

[6] **CIA (2014),** "The World Fact Book: Countries - Germany", https://www.cia.gov/library/publications/resources/the-world-factbook/geos/gm.html
[7] **CIA (2014),** "The World Fact Book: Countries - Germany", see note 6
[8] **Forbes (2014),** "Global 500: Countries- Germany", http://fortune.com/global500/. *"The top 10 companies of Germany are Volkswagen, E.On, Daimler, Allianz, Siemens, BMW Group, BASF, Metro, Munich Re Group and Deutsche Telekom"*

As the world largest financial center and a significant trading power (CIA, 2014)[9], UK has slightly higher value added proportion than France coming from trades and financial service sector. France has a higher value added percentage contributed by other services activities, which may link to the fact that France is the most popular tourist destination worldwide and the home of much cultural interest, beaches and seaside resorts, ski resorts, and rural regions that many enjoy for their beauty and tranquility (UNWTO, 2014).[10]

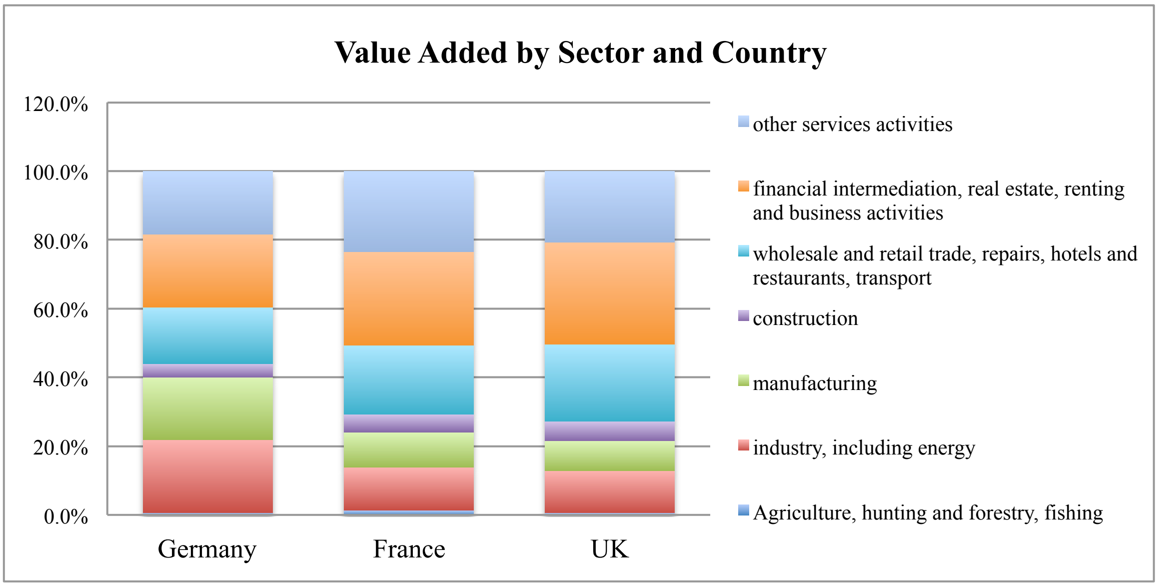


Chart 3: Value Added by Sector and Country

Source: OECD Library: Country Statistics Profile (http://stats.oecd.org/?queryid=9185)

In terms of economics structure of SMEs (Table 1), all these countries have a higher than national average level SMEs in service[11] and construction sectors; On the contrary, they tend to have a higher than national average level large enterprises in manufacturing sector[12]. This phenomena can be simply explained by the fact that,

[9] **CIA (2014),** "The World Fact Book: Countries – United Kingdom", https://www.cia.gov/library/publications/resources/the-world-factbook/geos/gm.html

[10] **UNWTO (2014 United Nations World Tourism Organization)**, "UNWTO Tourism Highlights-2014 Edition", http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights14_en.pdf

[11] **OECD (2014),** "Entrepreneurship at a Glance 2014", http://www.oecd-ilibrary.org/docserver/download/3014031e.pdf?expires=1428052545&id=id&accname=guest&checksum=6B23B452AA6F27E1F212F2E24D70B32F. *"For simplicity, Services comprises: Wholesale and retail trade, repair of motor vehicles and motorcycles; Transportation and storage; Accommodation and food service activities; Information and communication; Real estate activities; Professional, scientific and technical activities; Administrative and support service activities, Financial and insurance activities."*

[12] **OECD (2014),** "Entrepreneurship at a Glance 2014",

from the perspective of cost structure, manufacturing industry is more capital intensive and usually has higher fix cost. As a consequence, size acts as an important competitive advantage and forms a natural entry barrier in this industry. Large manufacturing companies can effectively lower their unit cost through scale of economy and achieve higher margin; In turn, the higher profit they acquire can be further invested into R&D and better machinery to improve their business. Such virtuous cycle helps them establish and strengthen the economic moat. On the other hand, service and construction sectors are less "balance sheet dependent" and customization of products could be an important competitive advantage. These features leave open space for SMEs entrepreneurs to play their imaginations.

	Manufacturing		Services		Construction		Total	
	SMEs	Large	SMEs	Large	SMEs	Large	SMEs	Large
France	99.5%	0.5%	99.9%	0.1%	99.9%	0.1%	99.9%	0.1%
Germany	98.2%	1.8%	99.7%	0.3%	99.9%	0.1%	99.6%	0.4%
UK	99.0%	1.0%	99.7%	0.3%	99.9%	0.1%	99.7%	0.3%

Table 1: Percentage of Number of Enterprise by Size and Sector

Source: Entrepreneurship at a Glance 2014 - © OECD 06-05-2014

Note: More detail breakdown by size, sector and country can be seen in the appendix—"Appendix Table 1"

2.4. Financial Growth Cycle and Overview of SMEs Financing Options in Germany, France and UK

Companies usually seek financing for working capital cash flow and investment (BIS, 2015)[13]. The common financing option including internal cash flow generated by operation, trade credit from suppliers or customers, private or public equity contributed by owners and investors, as well as private or public debt obtained from

http://www.oecd-ilibrary.org/docserver/download/3014031e.pdf?expires=1428052545&id=id&accname=guest&checksum=6B23B452AA6F27E1F212F2E24D70B32F. *"For simplicity, Manufacturing comprises: Mining and quarrying; Manufacturing; Electricity, gas, steam and air conditioning supply; Water supply, sewerage, waste management and remediation activities."*

[13] **BIS (2015),** "Small Business Survey 2014: SME employers", BIS Research Paper Number 214, March 2015

loans or bond market (Berger & Udell, 1998).[14] Although only a small part, government subsidies consist another source of financing for SMEs.

Financially speaking, the information opacity instead of the size may be the most significant factor that leads SMEs financing options different from large enterprises (Berger & Udell, 1998).[15] As SMEs usually have less product offerings and less diversified customer base, they are more fragile to competitions. Keeping their strategies and business plan (i.e top 10 customers or suppliers) in secrete might protect them from the other competitors or at least their owners think it in this way (Infelise, 2014).[16] Because of such information opacity, external investors are less willing to put their money at risk or they are more likely to require a higher risk premium, which as a result, pushing up the cost of external financing for SMEs (Infelise, 2014).[17]

Another significant factor which influences the financial option of SMEs could be the one-off cost relevant to financing sources. Compared with private debt/equity market, public debt/equity market usually entails large upfront cash outflow such as legal advisory cost or audit cost before SMEs getting any cash inflows (Infelise, 2014).[18] Moreover, SMEs sometimes can even be turned into lack of liquidity during their process of tapping into public capital market. For this reason, Infelise (2014) said that "the decision of going public largely dependent on the size of a firm, and SMEs typically do not have the necessary asset size that would make the choice of exploring these options economically sound."[19]

Considering the constraints for SMEs financing options and the continuing

---

[14] **Allen N. Berger, Gregory F. Udell (1998),** "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", Journal of Banking & Finance 22 (1998) 613-673

[15] **Allen N. Berger, Gregory F. Udell (1998),** "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", see note 14

[16] **Federico Infelise (2014),** "Supporting Access to Finance by SMEs: Mapping the initiatives in five EU countries", ECMI Research Report No. 9/April 2014

[17] **Federico Infelise (2014),** "Supporting Access to Finance by SMEs: Mapping the initiatives in five EU countries", see note 16

[18] **Federico Infelise (2014),** "Supporting Access to Finance by SMEs: Mapping the initiatives in five EU countries", see note 16

[19] **Federico Infelise (2014),** "Supporting Access to Finance by SMEs: Mapping the initiatives in five EU countries", see note 16

development of SMEs' business, Berger and Udell (1998) have proposed the concept of "the financial growth cycle of small business" (Figure 2), stating that the financial option of SMEs evolves along with its size, age and information transparency (Berger & Udell, 1998).[20]

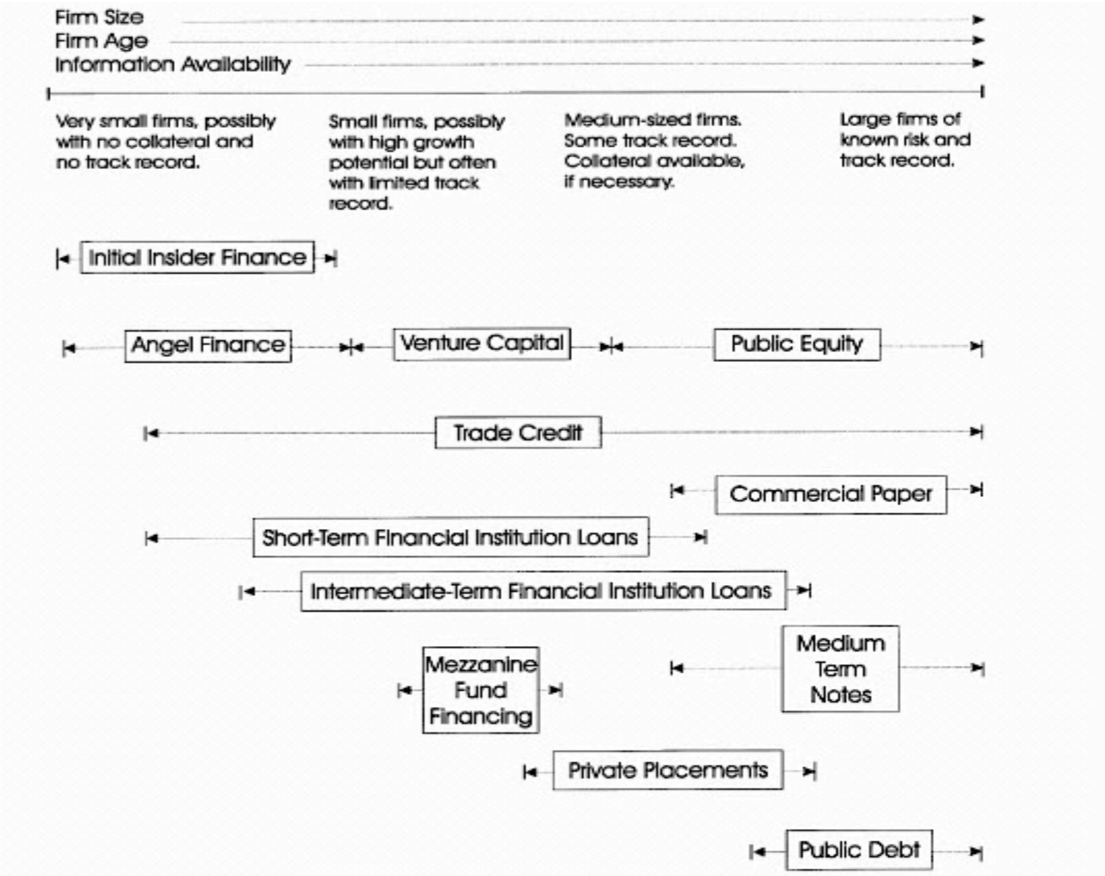


Figure 2: Financial Growth Cycle

Source: Allen N. Berger, Gregory F. Udell (1998), "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", Journal of Banking & Finance 22 (1998) 613-673

In the financial growth cycle, firms mainly rely on insider finance (personal wealth), trade credit and angel finance at their initial stage or "microenterprise stage" as these informal financial options require less additional information; as the firm grows, it gains access to intermediated finance on the equity side such as venture capital and on

[20] **Allen N. Berger, Gregory F. Udell (1998),** "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", see note 14, "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", *"the financing needs and options of SMEs will change as the business grows, gains more and more experienced and become less informationally opaque."*

the debt side such as banks, and after the firm making itself through all the ups and downs and becoming a "large company", it then may be eligible to access to public equity and debt markets (Berger & Udell, 1998).[21] Although in the real life, SMEs may choose different financial options that don't exactly comply to the "financial growth cycle", this model does give us a very comprehensive view about the potential financial options for SMEs at various stage of development (Berger & Udell, 1998).[22] European SMEs financing options don't fall out of the normal financial growth cycle. Bank financing comes as a favorite choice of external financing solutions. Based on SAFE 2014, bank loans were reported as the most relevant financing sources to firms in France and Germany, and the third most relevant financing sources in UK (ECB SAFE, 2014);[23] Bank overdraft/credit lines were the most relevant financing sources to firms in UK, and the second most relevant financing sources in France and Germany (ECB SAFE, 2014).[24] When asked whether or not they have used some types of financing during the past 6 months (Table 2), most SMEs in all three countries claimed that they have used bank financing (including bank overdraft, bank loan, factoring)(ECB SAFE, 2014).[25]

	Germany	France	UK
Internal Fund	15%	20%	20%
Granted or Subsidized Bank Loan	11%	8%	7%
Credit Line, Bank/ Credit Cards Overdraft	32%	38%	45%

[21] **Allen N. Berger, Gregory F. Udell (1998),** "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", see note 14

[22] **Allen N. Berger, Gregory F. Udell (1998),** "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", see note 14

[23] **ECB (2014),** "Survey on the access to finance of enterprises (SAFE), April to September 2014. The EXCEL file", https://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html, *"71% French companies reported bank loan as relevant sources of finance to the firm; for Germany, the percentage is 60%; for UK; the percentage is 47%. The second most relevant sources for UK companies is leasing or hire-purchasing, which were claimed by 54% of the companies as relevant financing source."*

[24] **ECB (2014),** "Survey on the access to finance of enterprises (SAFE), April to September 2014. The EXCEL file", see note 23, *"57% French companies reported bank overdraft and credit lines as relevant sources of finance to the firm; for Germany, the percentage is 47%; for UK; the percentage is 63%."*

[25] **ECB (2014),** "Survey on the access to finance of enterprises (SAFE), April to September 2014. The EXCEL file", see note 23, "*For German firms, the top 5 financing sources are leasing/hire-purchasing, credit lines/bank overdraft, internal fund, bank loans and granted/subsidized bank loan; for French companies, the top 5 are credit lines/bank overdraft, leasing/hire-purchasing, bank loans, internal fund and factoring; for UK companies, the top 5 are credit lines/bank overdraft, leasing/hire-purchasing, trade credit, internal fund and factoring."*

Bank Loan	13%	22%	8%
Trade Credit	3%	5%	21%
Other Loan	7%	6%	7%
Debt Securities	0%	1%	1%
Equity Capital	4%	2%	2%
Leasing or Hire-purchasing	44%	29%	38%
Factoring	4%	11%	9%
Other Source of Financing	6%	3%	4%

Table 2: Percentage of Number of Enterprise by Size and Sector

Source: ECB SAFE Questionnaire, April to November 2014

Concerning to other financing sources, the difference of the percentage of usage of these three countries is not astonishing except that SMEs in UK are good at using trade credit, which may be a result of the Anglo-Saxons culture of UK economy.

The first implication drawn from the table is that SMEs in the three countries heavily rely on bank finance (EU Commission, 2014).[26] Although such result is compatible with the features of SMEs according to the financial growth cycle, the small percentage of equity capital also unveils that these SMEs have a highly imbalanced external financing structure. That is also one of reasons explaining why these SMEs would suffer more than large companies in case of credit crunch such as the credit crisis in 2011 because of shrinking in the bank credit (Orçun Kaya, 2014).[27] In order to sustain the vitality of SMEs, such imbalanced structure of external finance has to be changed. Developing alternative external financing source is more than ever important. "One of the solutions is to educate SMEs and potential investors about the benefits of Europe's dedicated SME exchanges, such as the London Stock Exchange's AIM market or Euronext's Alternext (Simon Lewis, 2015)."[28]

[26] **European Commission (2014),** "Access to finance: still a barrier for EU companies' growth", published on 12/11/2014

[27] **Orçun Kaya (2014),** "SME financing in the euro area, New solutions to an old problem", Deutsche Bank Research, published on 14/10/2014

[28] **Simon Lewis (2015),** "Europe's SMEs need more equity capital and courage to take a risk", The Telegraph Investor, published on 24/02/2015

Section 3. Comparison of the market structure of stock exchanges

Stock exchange is a major form of public equity capital market. Firms wanting to access to the public investors can list themselves on one or more stock exchanges. In order to expand their company coverage, many exchanges organize themselves as multi-layer markets, dividing themselves into different segments so as to cater to varieties of company features. Usually, each segment has different listing requirements such as annual turnover, amount of annual operating cash flow, and age of the company.

Currently, many stock exchanges have a secondary segment dedicating to SMEs listing. Such segment is characterized by less stringent listing requirements and lower cost (Silvio & Stefano & Jay, 2012).[29] In Europe, London Stock Exchange (LSE) is a pioneer from this perspective; as it is the first stock exchange that created a exchange regulated second-tier market for SMEs, namely, AIM. After the successful launch of AIM, many other stock exchanges emulated this idea by launching its own second-tier market, among which including Alternext market of Euronext and "Open Market" (Freiverkehr Market) of German Stock Exchange (Silvio & Stefano & Jay, 2012).[30]

In this section, we firstly look at LSE and its market structure, as its second-tier market, namely AIM, was established the earliest and served as a model to the establishment of the Entry Standard market and AlterNext market (Silvio & Stefano & Jay, 2012).[31] Although the second-tier markets of Frankfurt Stock Exchange and Euronext were inspired by the AIM, as we discussed in detail, there are still some differences as the compartments of each market segment are divided in a different way.

[29] **Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012)**, "Europe's Second Markets for Small Companies", European Financial Management, Vol. 18, No. 3, 2012, 352–388

[30] **Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012)**, "Europe's Second Markets for Small Companies", see note 29

[31] **Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012)**, "Europe's Second Markets for Small Companies", see note 29

3.1. London Stock Exchange (LSE) and its market structure

Founded in 1801, LSE is the largest stock exchange in UK. With 4.09 trillions market cap at the end of 2014, LSE is the world third largest exchange and the largest exchange in Europe (LSE, 2014).[32] LSE are organized as a two-tier market with another two specialist markets: the Main Market and AIM are respectively the first tier and the second tier market, and the Professional Securities Market (PSM) and Specialist Fund Market (SFM) are markets dedicating to special type of investors or listing entities.[33] Figure 3 gives a simple illustration of the market structure of London Stock Exchange.

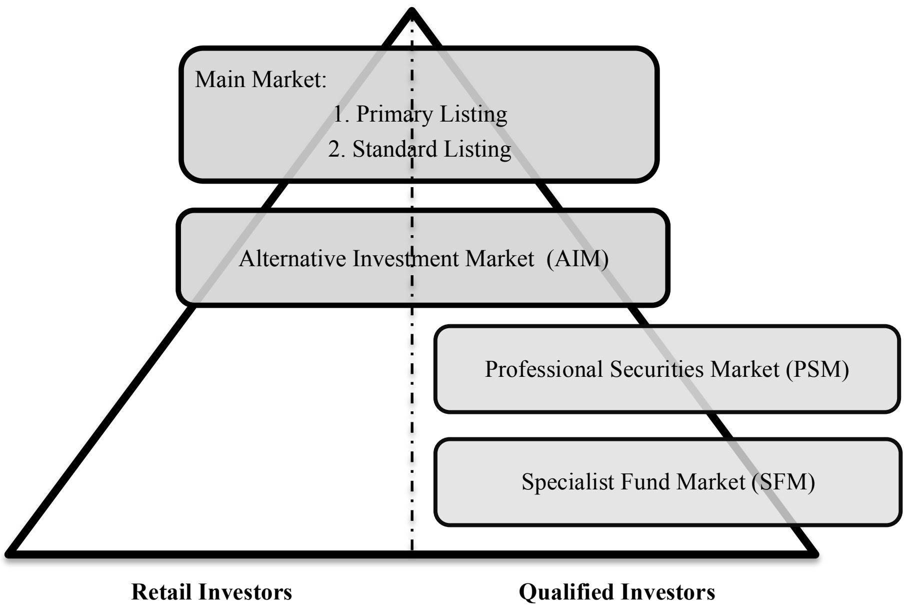


Figure 3: Market Structure of London Stock Exchange

The Main Market is the official list for more than 3000 large and developed companies from 70 countries, and there are two different brands within it, namely Premium Listing and Standard Listing (LSE & White Page, 2010).[34] Whereas either shares or Deposits Receipts (DR) can be listed under the Standard Listing brand, only equity shares can be listed under the Premium Listing brand (LSE & White Page, 2010).[35] Besides the difference of the type of security admitted to be listed, Listing

[32] **LSE (2014)**, "Monthly Market Report – Dec 2014"
[33] **London Stock Exchange Website,** http://www.londonstockexchange.com/home/homepage.htm
[34] **LSE, White Page Ltd (2010),** "A guide to listing on the London Stock Exchange"
[35] **LSE, White Page Ltd (2010),** "A guide to listing on the London Stock Exchange", see note 34

on Premium Listing requires companies to abide by stricter rules, according to the listing guidance, "Issuers seeking a Premium Listing of equity shares will be required to comply with the more substantive eligibility requirements that are imposed by the super-equivalent parts of the Listing Rules, including longer past accounting records and more comprehensive corporate governance structure, in addition to those requirements in the Listing Rules based entirely on EU law (LSE & White Page, 2010)."[36]

Main Market is known for its high entry barrier, whereas AIM is acknowledged for its private regulation mechanism. As the most successful second-tier market, AIM has lived through three economic downturns and has helped more than 3100 small and growth company raise over £67 billion capital since launched in 1995 (LSE & White Page, 2010).[37] Instead of regulating by UKLA (UK Listing Authority), Companies applying to list on AIM are only regulated stock exchange and supervised by Nominated Advisors (NOMADs), and there is no minimum requirement for years of trading records or market capitalization or percentage of free floats or corporate governance structure as that applied for firms listing on Main Market (LSE & White Page, 2010).[38] "The NOMAD's role is a core concept of AIM," said by Chris & Kean (2011), "the decision of approving a firm to go public is in the hand of NOMADs rather than UKLA."[39] More precisely, LSE (2010) has given a description of the role of NOMADs, stating that "every company seeking admission to AIM must appoint a NOMAD being a full-time corporate finance adviser approved by the Exchange to act in this capacity. The NOMAD plays a key role at admission, assessing the company's overall appropriateness and suitability for AIM and assisting it throughout the flotation process. Once on the market, the company must retain a NOMAD at all times to help meet its continuing obligations, maximize the benefits of its AIM

[36] **LSE, White Page Ltd (2010),** "A guide to listing on the London Stock Exchange", see note 34
[37] **LSE, White Page Ltd (2010),** "A guide to AIM"
[38] **LSE, White Page Ltd (2010),** "A guide to AIM", see note 37
[39] **Chris Mallin & Kean Ow-Yong (2011),** "The UK Alternative Investment Market – Ethical Dimensions", Journal of Business Ethics (2010) 95:223–239

quotation and deal with market issues as they arise (LSE, 2010)."[40]

AIM serves not only as a platform that allows company in the early stage to experience the life as a public company,[41] but also as a two-way channel to the Main Market. Companies can voluntarily apply to transferring from AIM to the Main Market when they becomes stronger, or they can go the opposite direction when feeling AIM is more compatible with their profile. Based on a research conducted by Kevin & Isaac (2014), during 1996- 2011, there are more than twice as many firms move from the Main Market to the AIM than move in the other way around; However, the total value of firms moving up to the Official List was £22.3bn while the corresponding figure for firms moving down to the AIM was £4.8bn.[42] For firms moving from AIM to Main Market, the four major justifications are 1) seeking for better growth and appropriateness for firm size, 2) raised profile for the company or market, 3) increased investor base, 4) increased liquidity; for firms moving from Main Market to AIM, 1) seeking for better growth and appropriateness for firm size, 2) cost savings/simplification of reporting and regulation, 3) General flexibility regarding to corporate transactions are the top three mentioned reasons (Kevin & Isaac, 2014).[43]

Unlike the Main Market and AIM that are open to all investors, PSM and SFM are only open to professional or institutional investors. PSM enables companies to raise capital from professional investors with the flexibility to choose the type of securities, including debt and depositary receipts and to report using domestic accounting standard.[44] SFM is a dedicated market for specialist closed ended investment funds targeting institutional, professional and knowledgeable investors.[45]

---

[40] **LSE, White Page Ltd (2010),** "A guide to AIM", see note 37

[41] **London Stock Exchange Website,** http://www.londonstockexchange.com/companies-and-advisors/aim/faq/faq.htm

[42] **Kevin Campbell, Isaac T. Tabner (2014),** "Bonding and the agency risk premium: An analysis of migrations between the AIM and the Official List of the London Stock Exchange", Journal of International Financial Markets, Institutions & Money 30 (2014) 1–20

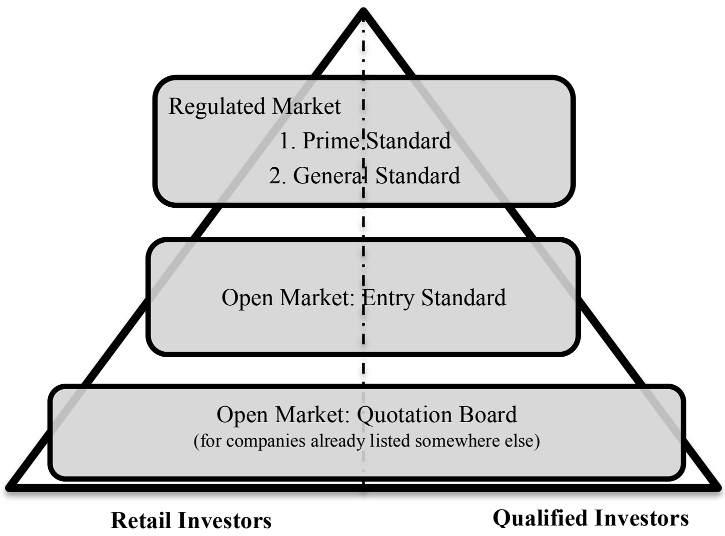
[43] **Kevin Campbell, Isaac T. Tabner (2014),** "Bonding and the agency risk premium: An analysis of migrations between the AIM and the Official List of the London Stock Exchange", see note 42, more information about the justification of transfer can be referred to Appendix-Table 3

[44] **London Stock Exchange Website,** http://www.londonstockexchange.com/companies-and-advisors/psm/home/psm.htm

[45] **London Stock Exchange Website,** http://www.londonstockexchange.com/companies-and-advisors/sfm/about/sfm-factsheet.pdf

3.2. Frankfurt Stock Exchange (FSE) and its market structure

Among 8 stock exchanges situated in Germany, FSE is the largest one dated back to 1585 and fully controlled by the Deutsche Börse Group. At the end of 2014, FSE has 670 companies listed with €1.4 trillion market capitalization and ranked as the third largest stock exchange in Europe.[46] Similar to the market structure of LSE, There are two tiers of capital market, Regulated Market and Open Market. These two segments are further categorized into three market segments based on different transparency requirements: Prime Standard, General Standard and Entry Standard.[47] Securities of all these three transparency standards are traded both through the electronic trading platform Xetra and at the Frankfurt trading floor, and these two trading venues account for over 96 percent of trading in German shares (Deutsche Börse Group, 2005).[48] For companies whose shares are already listed or included at another international or domestic trading venue, they can also apply for Quotation Board, which is another sub-segment of the Open Market.[49] Figure 4 illustrates the market structure of FSE:



---

[46] **World Federation of Exchanges (2014),** "Monthly Report-Dec 2014", http://www.world-exchanges.org/statistics/monthly-reports
[47] **Frankfurt Stock Exchange Website,** http://www.boerse-frankfurt.de/en/basics+overview#&reiter=thefrankfurtstockexchange, *"As of November 1, 2007, the subdivision of Official Market (Amtlicher Markt) and Regulated Market (Geregelter Markt) no longer exists. Securities entered into these markets on or since this date are now listed only in the Regulated Market."*
[48] **Deutsche Börse Group (2005),** "Entry Standard: Tailor-made capital market access for small-caps and mid-caps"
[49] **Frankfurt Stock Exchange Website,** http://www.boerse-frankfurt.de/en/glossary/q/quotation+board+40512

Figure 4: Market Structure of Frankfurt Stock Exchange

Companies seek to list on the Regulated Market are regulated under the public law.[50] While the prerequisites to be admitted in the Prime Standard and General Standard are the same except that all the publications and documents of companies of Prime Standard must also be made in English, there are additional follow-on obligations for companies admitted in Prime Standard.[51] As a result, Prime Standard is more appealing to international investors and General Standard to national investors.

The Open Market is regulated by the exchange based on private law.[52] For companies applying to list on the Open Market, they only need to fulfill the Entry Standard transparency requirement. In terms of prerequisites for admission, unlike AIM that has no minimum requirement for many indicators, the Entry Standard does set the threshold for years of tracking record, amount of capital, number of shareholders and percentage of free float.[53] When applying to list on the Entry Standard market, companies need to appoint a listing partner to facilitate them to publish prescribed and voluntary information, and to nominate a trading participant which will be the lead broker for the shares and responsible for monitoring whether the company fulfill its obligations all the time.[54]

3.3. Euronext and its market structure

Founded in 2000, Euronext is a pan-European market operating across Belgium,

---

[50] **Frankfurt Stock Exchange Website,** http://www.boerse-frankfurt.de/en/basics+overview/market+segments/regulated+market, *"The company must have existed for at least three years and have issued at least 10,000 shares. 25 percent of the shares must be owned by diversified holdings. In addition, the company must provide an admission prospectus, in which balances, profit and loss, as well as the capital stream from the past three years are stated. The publishing language is German and, for foreign issuers, in English. The details governing an admission and the follow-up obligations are regulated in the German Stock Exchange Act, the Stock Exchange Admission Regulation, the German Prospectus Act as well as the Exchange Rules."*

[51] **Deutsche Börse Group Website,** http://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/market-structure/transparency-standards/prime-standard

[52] **Deutsche Börse Group Website,** http://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/market-structure/statutory-market-segments/open-market, *"The open market was known as Regulated Unofficial Market previously."*

[53] **Deutsche Börse Group Website,** http://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/market-structure/transparency-standards/entry-standard

[54] **Deutsche Börse Group Website, "**FAQ list for the Open Market / Entry Standard"

France, the Netherlands, Portugal and the UK.[55] At the end of 2014, Euronext has 1055 companies listed with €2.7 trillion market capitalization.[56] Euronext offers companies three different tiers of markets to list: Euronext, AlterNext and Free Market. From Euronext to Free Market, the listing requirements and on-going obligations become less and less strict and more flexible to the features of company.[57] These three markets can almost cover companies from premature stage to mature stage. Figure 5 gives a simple illustration of the market structure of Euronext.

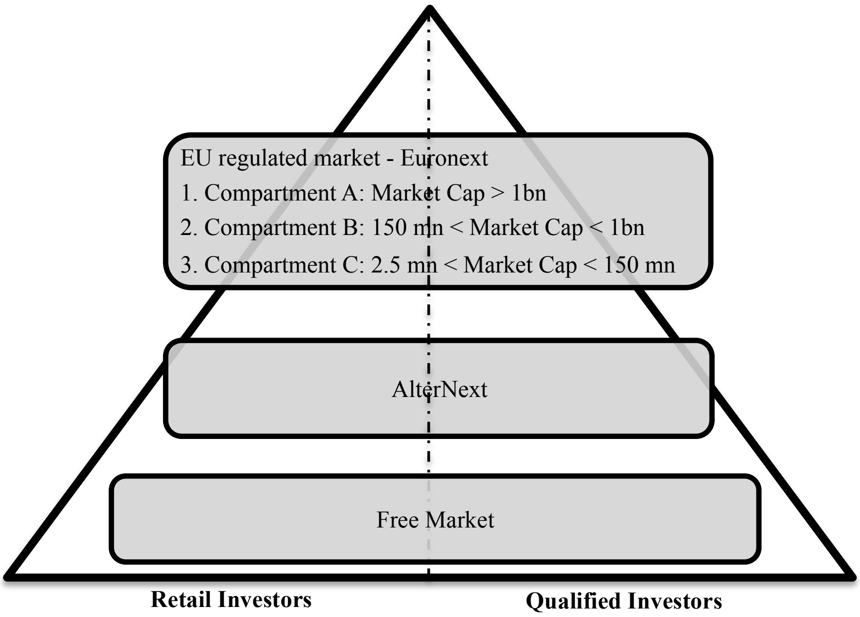


Figure 5: Market Structure of Euronext

Euronext is a European Regulated market and companies intending to list on the Euronext need to choose their entry points that will determine their corresponding national regulator.[58] Unlike LSE and FSE, Euronext divides the market into 3 compartments based on market capitalization instead of listing and on-going requirements. The Euronext market is similar to the Main Market of LSE and Regulated Market of FSE.

Formed in 2005, AlterNext is the second-tier market of Euronext, a Multilateral Trading Facility (MTF) more suitable for listing SMEs and operated by relevant

55 **Euronext Website,** https://www.euronext.com/en/about-euronext
56 **World Federation of Exchanges (2014),** "Monthly Report-Dec 2014", See note 45
57 **Euronext Website,** https://www.euronext.com/en/about-euronext
58 **Euronext Website,** https://www.euronext.com/en/listings/euronext

entities in Paris, Lisbon and Brussels.[59] In May 2015, there are 205 companies listed in AlterNext Paris, 10 in AlterNext Brussels, 2 in AlterNext Amsterdam, 2 in AlterNext Lisbon.[60] SMEs can choose one of the three ways in order to be admitted to or trading on AlterNext: 1) A public offer,[61] 2) A private placement,[62] 3) A direct listing.[63] In the 205 companies listed in Alternext Paris, 35 companies listed through private placement and 170 through public offering.[64] Regarding to the listing prerequisites, AlterNext resembles but has less requirements than the Entry Standard of FSE, as it only set a minimum number for the amount of distribution and year of financial record.[65] In terms of its regulation mechanism, AlterNext is more similar to the AIM of LSE, as there must be a Listing Sponsor, similar to the NOMAD, whose roles are assessing the suitability for listing, coordinating the listing process and guiding the company to fulfill its on-going obligations.[66]

Free Market serves to even younger companies and is managed by relevant operators in Paris and Brussels.[67] Currently, there are 242 companies listed on the Free Market Paris and 15 companies listed on the Free Market Brussels.[68] There is no minimum requirement for issuing securities in the Free Market and the issuer has no further disclosure obligations.[69] All trades conducted in Free Market are settled through physical delivery.

Comparing the market structure of these three exchanges, we find that the second-tier market all serve as a complementary part to its first-tier market. The second-tier

---

[59] **Euronext Website,** https://www.euronext.com/en/listings/alternext
[60] **Euronext Website,** "Alternext Directory", https://www.euronext.com/en/listings/alternext/directory, data obtained on 06/05/2015
[61] **Euronext Website,** https://www.euronext.com/en/listings/alternext, *"A public offer - The traditional IPO, raising capital at the time of the listing with the publication of a prospectus. Retail investors may participate."*
[62] **Euronext Website,** https://www.euronext.com/en/listings/alternext, *"A private placement – A placement of shares prior to the request for admission to listing of new securities of at least €2.5 million made in the preceding year. For institutional investors and qualified investors only."*
[63] **Euronext Website,** https://www.euronext.com/en/listings/alternext, *"A direct listing – Admission to trading for issuers already admitted to trading on an eligible market, with no capital raised."*
[64] **Euronext Website,** "Alternext Directory", https://www.euronext.com/en/listings/alternext/directory, data obtained on 06/05/2015
[65] **Euronext Website,** https://www.euronext.com/en/listings/alternext
[66] **Euronext Website,** https://www.euronext.com/listings/listing-sponsor
[67] **Euronext Website,** https://www.euronext.com/en/listings/free-markets
[68] **Euronext Website,** "Free Market Directory", https://www.euronext.com/en/listings/free-markets, data obtained on 06/05/2015
[69] **Euronext Website,** https://www.euronext.com/en/listings/free-markets

markets employ less strict requirements to encourage SMEs to diversify their financing channel earlier. All the second-tier markets employ the “exchange-regulated” mechanism and the financial advisors such as NOMADs or Listing Sponsor play a more important role than those in the first-tier markets, because they are responsible to educate and supervise these SMEs to comply with the rules on an on-going basis, and it is they and rules set by exchanges rather than the public laws or directives that facilitate the stock exchanges to maintain the order of the market.

Section 4. Comparison of Market Features and Company Profiles

4.1. Sample Description and Data Source

We divide the data analysis part into two sub-sections. In section 4.2, we use the market data of 2005-2014 provided by the stock exchanges to compare the market feature of AIM, Entry Standard and AlterNext. In section 4.3, we use the data collected by DataStream to analyze the number of employee distribution and revenue distribution of the listed companies; in addition, we use the most updated sector information provided by stock exchanges to analyze the current composition of sectors of companies in these three markets. For data provided by DataStream, the fundamental data of 2005-2013 is available for companies that are currently included in the "AIM All Share Index", "Entry All Share Index" and "AlterNext All Share Index" since the year of companies including in the AIM and 2 years before the date of companies including in the Entry Standard and AlterNext. Because data is updated annually and subject to the availability of the source, data provided by DataStream is not as intact as that provided by stock exchanges. The sample provided by DataStream includes 844 companies of AIM, 167 companies of Entry Standard and 177 companies of AlterNext. Although the sample size of DataStream is less than that of stock exchanges and the data is less updated, they are sufficient for us to have a glance at the basic characteristics of companies listing on these three markets.

4.2. Overview of AIM, Entry Standard and AlterNext Market Features

4.2.1. Comparison of the listing requirements and on-going obligations of AIM, Entry Standard and AlterNext

Table 3 below shows that AIM, Entry Standard and AlterNext have similar documentations system based on the ways companies choose to be listed. In case of a public offer to retail and institutional investors, companies need to produce a prospectus approved by relevant national regulators. This measure can be viewed as a way for local regulator to ensure the transparency of second-tier market in spite of less strict listing requirements. For private placement only opens to qualified investors, while AIM and AlterNext require companies to hand in and publish relevant document, Entry Standard only requires issuer to produce an issuer data form which will not be available to the public. Direct listing of companies that have already listed on the other exchange without raising capitals is permitted under AIM and AlterNext but Entry Standard, as Deutsche Börse created another segment called Quotation Board which is solely for this kind of company.

Documents Requried	**AIM**	**Entry Standard**	**AlterNext**
Public Offer	Prospectus pre-vetted by UKLA	Prospectus reviewed by BaFin	Prospectus approved by national Regulator
Private Placement	Admission Document	Unpublished Issuer Data Form	Offering circular without approval if < 5 mn
Direct Listing	Pre-admission announcement[70]	N/A, However, companies can apply to list on the Quotation Board	Information Document

Table 3: Ways of Admission and Relevant Documents Required

Source: London Stock Exchange, Euronext - Alternext, Deutsche Börse - Entry Standard

Table 4 illustrates that among AIM, Entry Standard, AlterNext, AIM impose the least strict prerequisites and Entry Standard the most. Based on AIM standard, almost all the companies are eligible to list. Such flexible requirement gives companies themselves the greatest free room to decide whether they are ready to raise public equity. All three markets requires applicant companies to appoint certain advisors to facilitate their listing and follow-on obligations. In AIM and AlterNext markets, it is

[70] **LSE, White Page Ltd (2010),** "A guide to AIM", see note 37

NOMADs and Listing Sponsors that take charge of the advisory and supervision responsibilities throughout the public life of companies; in Entry Standard market, Listing Sponsors are the “people in charge” during the listing process, facilitating companies to modify their corporate structure and consolidate all the information, and it is Trading Participants, as co-applicant with the company, that are responsible for including shares trading on the market and making sure that the companies comply with all the rules and fulfill the on-going obligations.[71]

	AIM	Entry Standard	AlterNext
Accounting standards	IFRS or Domestic	IFRS or Domestic	IFRS or Domestic
Company history	N/A	>2 years	> 2 years
Minimum capital	N/A	€ 750,000	N/A
Par value	N/A	At least €1	N/A
Free float	N/A	Free float>10% and >30 shareholders	No requirement, but a minimum distribution of 2.5 million required
Important Advisors	NOMAD	Listing Sponsor & Trading Participant	Listing Sponsor

Table 4: Listing Prerequisites

Source: London Stock Exchange, Euronext - Alternext, Deutsche Börse - Entry Standard

Generally, the on-going obligations for companies listed on these three markets are similar. For the publication of financial report, only the annual report and half-year report are required to be published, and AIM gives a slightly longer delay period than Entry Standard and AlterNext. Also, AIM explicitly requires companies to create and maintain a website which contains all the business and management information available to the public since its first day on AIM (LSE, 2014).[72] Since the entry barrier of AIM is lower than that of Entry Standard and AlterNext and almost all the

[71] **Deutsche Börse Group Website, “**FAQ list for the Open Market / Entry Standard”, see note 54
[72] LSE (2014), “AIM Rules for Companies – May 2014”

companies can fulfill the eligibility, this rules reflects the LSE's attempts to guarantee the transparency of AIM market. By providing all the relevant information, LSE brings the market into full play, handing the decision to investors.

	AIM	Entry Standard	AlterNext
Financial Report	Annual Report within 6 months passed the calendar year, Half-year report within 6 month	Annual Report within 6 months passed the calendar year, Half-year report within 3 month	Annual Report within 4 months passed the calendar year, Half-year report within 4 month
Main Disclosure	Promptly any information about itself that might have a material impact on the price of its Securities	Announcement in advance, publication and transmission of significant information concerning the security or the issuer	Promptly any information about itself that might have a material impact on the price of its Securities
Language	English	German or English	National Language or English
Company Website	Maintain a company website where maintain all the announcements made in the past 12 months	N/A	N/A

Table 5: on-going obligations to be public

Source: London Stock Exchange, Euronext - Alternext, Deutsche Börse - Entry Standard

4.2.2. Number of Companies Listed: Comparison Among Second-Tier Markets

By the end of 2014, there are 1104 companies listed on AIM, 167 listed on the Entry Standard and 205 listed on AlterNext Paris. During this period of time, the number of companies listed on AIM increased during 2005 to 2007, decreased during 2008 to 2013 and started to recover a little bit in 2014 (Chart 4). The decrease can be partly blamed on the global financial crisis as well as some discoveries of scandal of incompliance with the AIM rule, forcing the exiting companies to delist, deterring companies to come to the market and abrading the trust of investors (Chris & Kean, 2011).[73] AlterNext and Entry Standard were created almost at the same time in 2005. These two new market segments exhibit very similar pattern of development and this pattern is contrary to the overall trend of AIM (Chart 4). When AlterNext and Entry Standard were created, some companies that were at the time listed on the "Marche Libre" of France and "Neuer Markt" of Germany were transferred to their corresponding new market segments. For the initial 3 years, AlterNext and Entry Standard witnessed a very fast development of the number of companies. In 2008 and 2009, although not falling into negative range as that of AIM, the growth of the two markets almost came to standstill, which was probably due to the outbreak of financial crisis in United States. The performance of AlterNext and Entry Standard in terms of the number of company listed dispatched from 2010 to 2012 and it was back again to the similar trend from 2013. AlterNext experienced a significant increase of company listed in 2010 and 2011, which seems to be a very strange phenomenon during the course of global financial crisis but it isn't. Among these new listings, we observed that almost 50% of them came from transferring from the other market segment, especially from EuroNext market, and the other half came from listing through private placement. The high number of transfer from Euronext to AlterNext indirectly reflects the negative influence of financial crisis as companies changed their listing venue from a more expensive and regulated market to a cheaper and more flexible one. From 2012 onwards, hit by the European Debt Crisis and the recession of French economy, the number of companies listed crawled upward. For Entry Standard, its growth has been very slow since 2008 except 2012 (Chart 4). Although there is no detail listing and delisting data available, by comparing the number of

---

[73] **Chris Mallin & Kean Ow-Yong (2011),** "The UK Alternative Investment Market – Ethical Dimensions", see note 39, *"First, there was a collective failing to comply with Rule 26 which was introduced in February 2007 and required companies to include certain information relating to their financial and other activities. The LSE fined nine companies a total of £95,000 for failing to have a website compliant with Rule 26."*

companies of Prime Standard and General Standard with that of Entry Standard, we found that the number of companies decreased in Prime Standard and General Standard was roughly equal to the number of companies increased in Entry Standard. Based on this observation, we guessed that the high growth of Entry Standard in year 2012 is also attributed to the fact that many companies transferred from the Regulated Market.

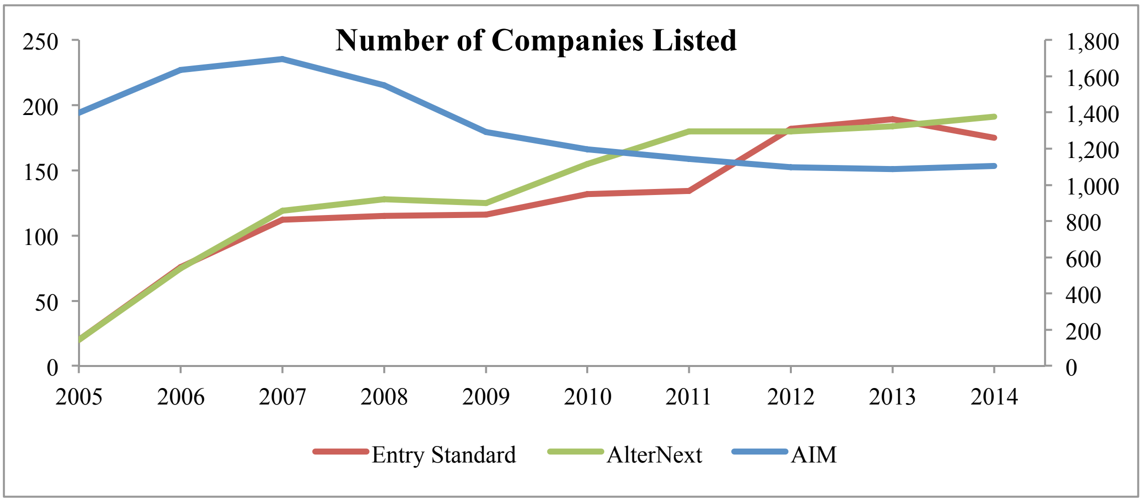


Chart 4: Number of Companies Listed on AIM, Entry Standard and AlterNext 2005-2014

Source: London Stock Exchange, EuroNext, Deutsche Börse

Note: Detailed sector distribution of listed companies on AIM can be seen in appendix Table 4

4.2.3. Market Performance Analysis: Comparison to First-Tier Markets and Among Second-Tier Markets

"FTSE AIM All Share Index" (called "AIM Index" later), launched following the AIM Market to improve the transparency and liquidity, almost contains all AIM quoted companies thus making it the best proxy to the overall stock price level in AIM market.[74] "FTSE All Share Index" (called "FTSE Index" later) represents the performance of all eligible companies listed on the LSE's main market therefore being the best indicator for the overall stock price level of the main market.[75] We

[74] **FTSE Website,** http://www.ftse.com/Analytics/FactSheets/temp/d0628a5f-c5b8-4276-9ae7-937c418d885e.pdf
[75] **FTSE Website,** http://www.ftse.com/Analytics/FactSheets/temp/1da747db-3f17-403e-9563-fc13de5f0fb7.pdf

adjust the index level by setting the 01/2005 to be the base date and recalculate indices from 01/2005 to 12/2014. Comparing the adjusted level of AIM Index and that of FTSE Index (Chart 5), we find that although their performances follow a similar trend, AIM market suffered a continuously negative return almost throughout the period whereas FTSE market were exposed to only a short term negative return during 2008 to 2009. Moreover, AIM index started to significantly undeform FTSE index from 2008, when the global financial crisis commenced. The persistence of negative return and the widening underperformance reflect the fragility of AIM market. This phenomenon, firstly, can be attributed to the high-risk nature of companies listed on AIM. As we mentioned before, AIM market is dedicated to SMEs and set almost no minimum listing requirements. As long as the NOMADs consider the company "listable", they can bring the company on the market. Therefore, companies on AIM are smaller in size and turnover, making them more fragile to some systematic risks. This idea will be verified in the following section. Secondly, the underperformance can be due to the change in investors' risk tolerance level. As investors are still in the process of the financial crisis, their risk tolerance level is low and they increase the required return for the same level of risk, putting the AIM market in pressure. Thirdly, the persistent underperformance can be partially attributed to the lower liquidity in the AIM market.

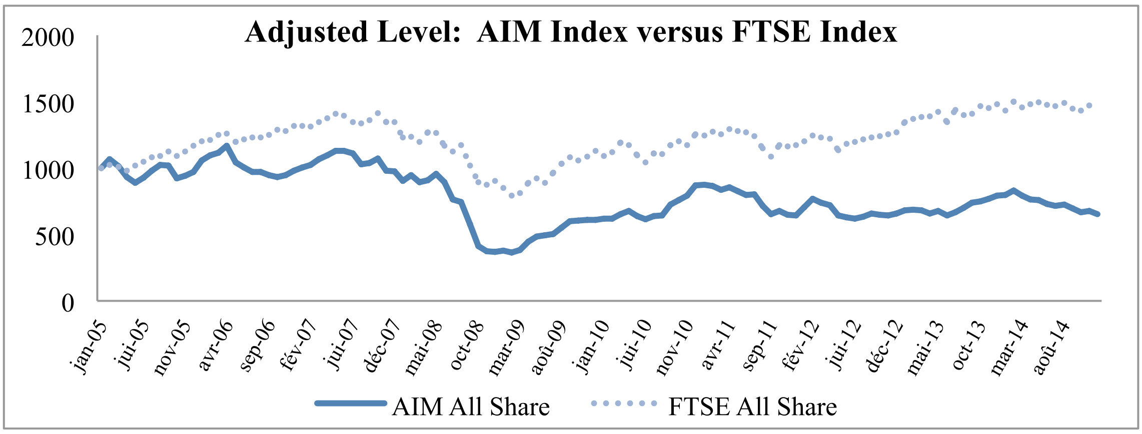


Chart 5: Adjusted AIM All Share Index versus FTSE All Share Index

Source: London Stock Exchange

For German stock market, we choose “CDAX index (Price)” as the proxy for the performance of the first-tier market as it contains all German equities listed on the General Standard and Prime Standard of FSE.[76] And we choose “Entry All Share Index (Price)” (called “Entry Index” later) to gauge the market performance of the second-tier market. We set the base date to be 04/2006, when the Entry Index was introduced, and recalculate the indices until 12/2014. Comparing these two indices (Chart 6), we find Entry Index has endured almost a consistent 50% loss in the market cap in spite of the loss and recovery of the first-tier market. Such great dispatch of performance reflects a server lack of resilience of the Entry Standard Market, which may be due to the difference of risk profile of the companies, liquidity of different markets and risk premium required by investors.

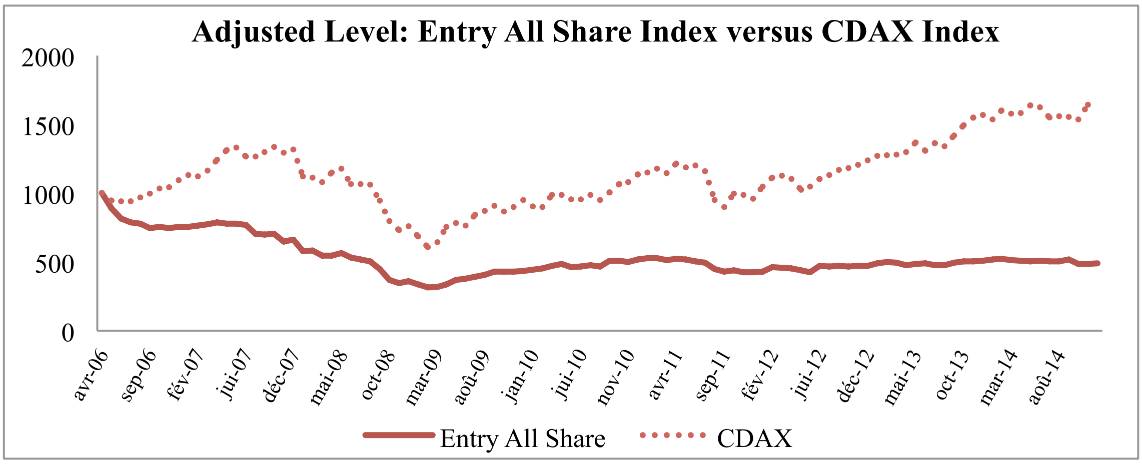


Chart 6: Entry All Share Index versus CDAX Index

Source: Deutsche Börse Group

For France stock market, we take “CAC All Share Index” (called “CAC Index” later) to represent the market performance of the first-tier market and “AlterNext All Share Index” (called “AlterNext Index” later) to represent that of the second-tier market. Also, we reset the base date to be 10/2006, when the AlterNext Index were introduced and recalculate the index level until 12/2014. When comparing their performance (Chart 7), we find that AlterNext market has very similar performance as EuroNext market and both market values fell a lot from mid-2007 to mid-2009 and have

[76] DAX Indices Website, http://www.dax-indices.com/EN/index.aspx?pageID=25&ISIN=DE0008469800

regained little by little since then. This finding could be interpreted as a hint showing that AlterNext has similar liquidity condition or companies listed on the AlterNext market has similar risk profiles as those listed on EuroNext market. Although the difference may not be significant, we still can see that EuroNext companies performed slightly better than those of AlterNext.

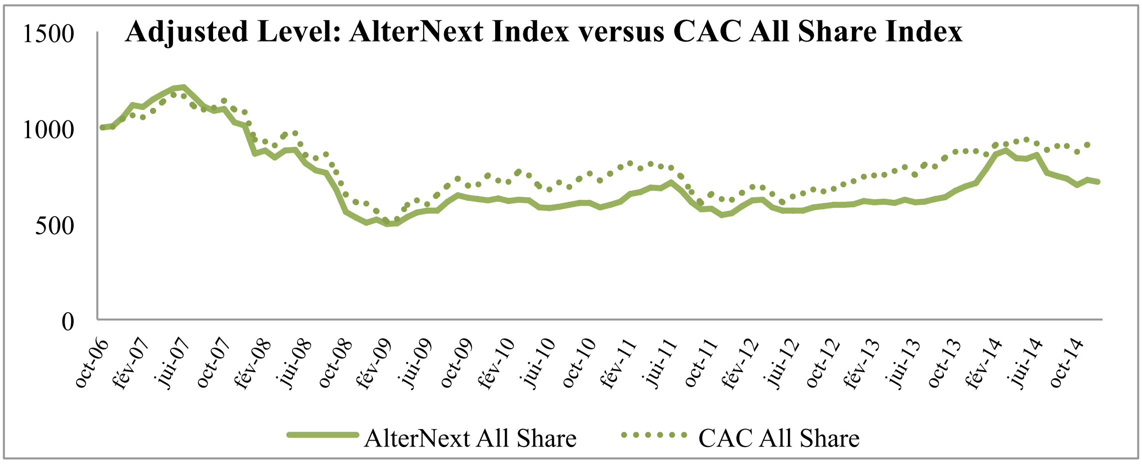


Chart 7: AlterNext All Share Index versus CDAX All Share Index

Source: EuroNext

Comparing the adjusted indices of AIM, Entry Standard and AlterNext (Chart 8), we find these three markets have similar pattern of price evolution and similar cumulative return throughout the period from 10/2006 to 12/2014. Their market value evaporated a lot from mid-2007 to mid-2009 and recovered afterwards. While the adjusted AIM index and adjusted AlterNext index have similar volatility (Table 6), they tend to be more volatile than the adjusted Entry Index. Moreover, the stability of Entry Index is due to the persistence of distress of the Entry Standard market after a big crash, which could imply a lack of liquidity or transactions activities rather than lower risk. Therefore, we believe that from the market performance perspective, AIM market and AlterNext market are more active than Entry Standard Market.

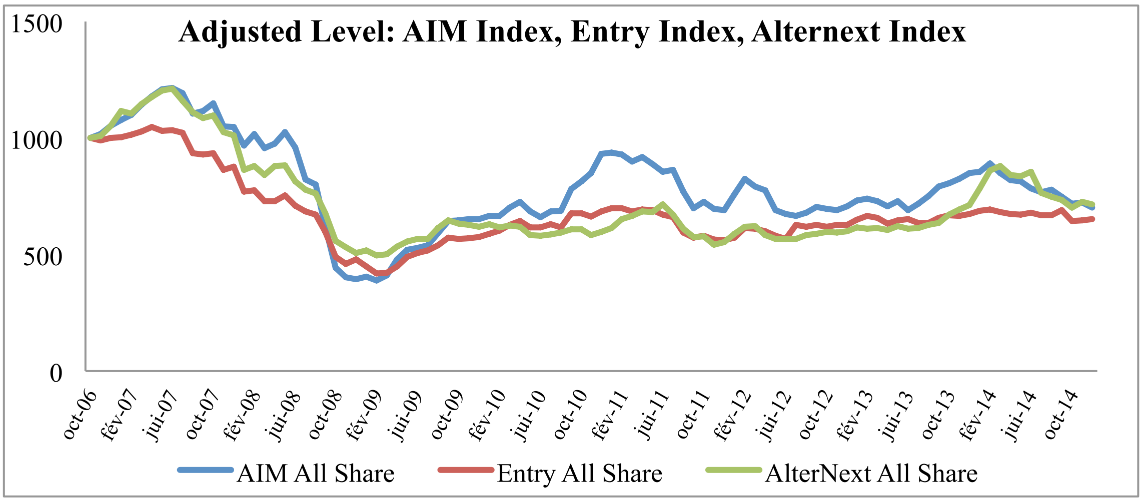


Chart 8: Comparison of AIM Index, Entry Index and AlterNext Index

Source: London Stock Exchange, EuroNext, Deutsche Börse Group

Note: Since AlterNext All Share Index started the latest on Oct 2006, we re-adjusted the base date of all indices to be Oct 2006 and compared their performances from Oct 2006 to Dec 2014.

	AIM	**Entry Standard**	**AIM**	**AlterNext**	**AlterNext**	**Entry Standard**
Mean	792.01	678.18	792.01	720.28	720.28	678.18
Variance	36421	21790	36421	35526	35526	21790
Observations	99	99	99	99	99	99
df	98	98	98	98	98	98
F	1.671		1.025		1.630	
P(F<=f) one-tail	0.006		0.451		0.008	
F Critical one-tail	1.396		1.396		1.396	

Table 6: F-test for similarity of volatility of two markets

4.3. Company Profiles

4.3.1. Categories of Securities Listed

Based on the data collected by Datastream (Table 7), one special category of securities listed on AIM is the share of Investment Trusts, and the inclusion of listing of investment company is detailed in a special sector of the official guidance to AIM. The listing of investment trust can enhance the liquidity of the shares thus lower the cost of required return, broaden the scope of target project and boost the value creation. Such special feature of AIM is compatible with UK deeply rooted culture and advancement in the financial service sector. And the result is consistent with the economic structure of UK, as it has a large proportion of value added coming from the financial sector.

Categories of securities	AIM	Entry Standard	AlterNext
Equities	825	166	173
Investment Trusts	17	N/A	N/A

Table 7: Number and Categories of Securities

Source: Datastream, original data collected by Datastream up to the end of 2014 and complied by the author

Note: Since the data collected by Datastream is incomplete, the number of companies listed reported by Datastream is lower than that provided by Exchange.

4.3.2. Size Distribution: Comparison of Percentage of Micro, Small and Medium Companies Based On Number of Employee

By studying the evolution of number of employee distribution of AIM market from 2005 to 2013 (Table 8), we find that the during the 9 years, there are less and less percentage of micro companies (<=10) listed on AIM as well as small companies. Percentage of micro companies decreases from 19.5% to 14% and that of small companies decreases from 30.7% to 23.9%. On the contrary, the percentage of medium companies increases from 29.1% to 36.0%. We could deduce from these figures that medium companies dominate AIM. Moreover, there are more and more large companies seeking their listing on the AIM market. The increasing dominance of medium company could be a result of 1) data bias; 2) development of micro and small companies; 3) AIM attractions for companies eligible to the main market. Firstly, because the data collected by DataStream only contains part of the information for companies that were constituents of AIM Index at the end of 2014 and micro and small companies are more likely and more easily to be delisted either by "squeeze out" or takeover for such a long period. The data may have a "survivor bias" that only includes "better" companies which are more likely to be medium and large companies and underestimate the percentage of micro and small companies. Secondly, as micro and small companies grow bigger and bigger, their number of employees increases and they move to the medium company category. While this explanation is only applicable for those "successful" micro and small companies which might be only a small group, there might be a third reason for the increase in percentage of large companies that many large companies choose to list or even transfer to AIM to explore the advantage of flexible regulation in spite of their qualification for the main market. Based on a recent research, there were 282 companies leaving the main market to the AIM from June 1995 to March 2010 (Silvio & Stefano & Jay, 2012).[77] Also, there is overlap of size of companies of main market and that of AIM, suggesting that many large companies prefer AIM (Kevin & Isaac, 2014).[78] As AIM develops, the market will pool more and more investments and it won't be supervise to see more medium and large companies.

AIM: No of Employee Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=10	19.5%	18.1%	16.6%	17.2%	17.0%	16.0%	15.6%	14.3%	14.0%
10-50	30.7%	32.2%	31.1%	28.4%	28.9%	30.4%	29.9%	28.2%	23.9%
50-250	29.1%	29.1%	30.7%	31.4%	31.8%	29.9%	30.8%	32.4%	36.0%
>250	20.7%	20.6%	21.6%	23.0%	22.3%	23.8%	23.7%	25.1%	26.1%
Total	430	481	524	557	575	606	642	649	628

Table 8: Percentage of Micro, Small and Medium Enterprises on AIM

Source: Datastream, original data of number of employees collected by Datastream up to the end of 2014

Table 9 shows that the dominance of medium companies is more obvious in the Entry Standard market than AIM market as the percentage of medium companies is around 40% and shows an increasing trend. The percentage of micro enterprises in Entry Standard market is around 10% and that of percentage of small enterprises is around

[77] **Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012)**, "Europe's Second Markets for Small Companies", see note 30

[78] **Kevin Campbell, Isaac T. Tabner (2014),** "Bonding and the agency risk premium: An analysis of migrations between the AIM and the Official List of the London Stock Exchange", see note 41,

22% and that of large enterprises is around 28%. Compared with AIM, Entry Standard seems to have a larger percentage of medium and large companies and a lower percentage of micro and small companies. This result is compatible with stricter listing prerequisites required by FSE than LSE.

Entry Standard: No of Employee Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=10	14.0%	13.9%	11.1%	9.0%	7.6%	8.5%	11.2%	9.2%	14.7%
10-50	26.9%	23.8%	24.1%	19.8%	23.5%	19.5%	19.2%	21.0%	12.6%
50-250	31.2%	34.7%	37.0%	39.6%	42.0%	42.4%	40.8%	41.2%	38.9%
>250	28.0%	27.7%	27.8%	31.5%	26.9%	29.7%	28.8%	28.6%	33.7%
Total	93	101	108	111	119	118	125	119	95

Table 9: Percentage of Micro, Small and Medium Enterprises on Entry Standard

Source: Datastream, original data of number of employees collected by Datastream up to the end of 2014

Table 10 shows that AlterNext market also has a higher percentage of medium enterprises than that of AIM market. The percentage of micro company is around 4%, that of small company around 24%, that of medium company around 47% and that of large company around 24%. Although France has the highest percentage of micro company (section 2), the percentage of micro company is the lowest in the AlterNext market among these three markets. AlterNext imposes stricter listing prerequisites than AIM, especially the provision that companies which go public the first time must distribute 2.5 million capitals either through private placement or public offer.[79] Such amount of capital distribution may imply significant dilution especially to shareholders of micro companies thus deterring micro companies to list on AlterNext.

AlterNext: No of Employee Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=10	5.4%	1.9%	2.8%	4.4%	3.3%	3.9%	4.2%	5.0%	2.0%
10-50	38.7%	32.4%	23.9%	20.4%	23.8%	19.7%	22.0%	28.3%	19.0%

[79] **Euronext Website,** https://www.euronext.com/en/listings/alternext

50-250	37.6%	46.7%	51.4%	51.3%	49.2%	52.8%	47.5%	40.8%	47.0%
>250	18.3%	19.0%	22.0%	23.9%	23.8%	23.6%	26.3%	25.8%	32.0%
Total	93	105	109	113	122	127	118	120	100

Table 10: Percentage of Micro, Small and Medium Enterprises on AlterNext

Source: Datastream, original data of number of employees collected by Datastream up to the end of 2014

Comparing the percentage of micro companies and SMEs distribution of the three markets, we find that AIM has a higher percentage of micro and small company than Entry Standard than AlterNext thanks to its most flexible listing prerequisites. However, the percentage of micro and small company is in a decreasing trend in AIM market. Entry Standard and AlterNext have higher proportion of medium and large companies. Medium size companies take the dominant position in these three markets.

4.3.3. Revenue Distribution

As shown in table 11, in AIM market, there are approximately 30% of "companies earning less than £1000 annual revenue" (called "<= 1000 company/ies" later) and 50% of "companies earning less than £10000 annual revenue" (called "<=10000 company/ies" later). This fact reflects that AIM does serve as an important financing channel for companies in the start-up stage of business development. From 2005 to 2013, the proportion of "companies earning more than £30000 and less than £50000 annual revenue" (called "30000-50000 company/ies") increased. This result is compatible with what we found in the previous section indicating that there is higher proportion of medium and large size companies listed on AIM.

AIM Revenue Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=1000	35.3%	36.7%	34.0%	32.9%	32.8%	31.9%	31.6%	31.8%	30.5%
1000-5000	19.0%	17.6%	16.9%	16.7%	15.4%	16.1%	15.7%	14.5%	12.8%
5000-10000	8.1%	8.3%	10.0%	9.9%	10.3%	9.7%	9.0%	9.1%	9.4%

10000-30000	18.7%	17.4%	17.9%	17.6%	20.1%	20.1%	18.7%	18.9%	18.6%
30000-50000	5.4%	6.4%	6.5%	6.5%	5.1%	6.8%	8.2%	8.4%	9.9%
>=50000	13.5%	13.8%	14.7%	16.4%	16.3%	15.4%	16.8%	17.3%	18.8%

Table 11: Revenue Distribution of AIM Companies

Source: Datastream, original data of annual revenue collected by Datastream up to the end of 2014

In Entry Standard Market (Table 12), there are less than 10% of "<=€1000 companies" and approximately 30% of "<=€10000 companies". There have been around 40% of "> €30000 companies" since 2007. Proportion of "> €50000 companies" steadily increased from 2005 to 2013, reflecting that Entry Standard Market might be an important financing channel for companies in the growth stage of business development.

Entry Standard Revenue Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=1000	15.0%	13.0%	7.8%	9.0%	8.7%	6.6%	8.0%	9.4%	8.0%
1000-5000	21.2%	16.0%	16.3%	12.8%	11.6%	11.7%	10.9%	11.6%	14.5%
5000-10000	11.5%	13.7%	11.6%	12.0%	15.9%	14.6%	13.0%	13.8%	8.0%
10000-30000	21.2%	21.4%	24.0%	26.3%	25.4%	23.4%	21.0%	22.5%	20.3%
30000-50000	8.8%	10.7%	11.6%	9.8%	9.4%	12.4%	15.2%	10.1%	13.0%
>=50000	22.1%	25.2%	28.7%	30.1%	29.0%	31.4%	31.9%	32.6%	36.2%

Table 12: Revenue Distribution of Entry Standard Companies

Source: Datastream, original data of annual revenue collected by Datastream up to the end of 2014

Table 13 shows that the percentage of "<= €1000 companies" has increased steadily since 2006 from 3.5% to 11.6%. "> €50000 companies" also increased from 14.9% to 26.7% during this period. At the same time, the percentage of "€1000- €10000 companies" exhibited a contrary trend, decreasing from 40% to 20%. The increase proportion of "> €50000" reflect that AlterNext attracts more and more companies in the growth or later stage. And the increase in the proportion of "<= €1000" is more likely due to the decrease of revenue of those small enterprises as their revenue decreased a lot during the crisis period.

AlterNext Revenue Distribution									
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
<=1000	5.0%	3.5%	7.4%	7.7%	8.6%	8.6%	9.6%	12.6%	11.6%
1000-5000	19.8%	15.0%	11.6%	10.8%	13.7%	7.9%	11.0%	12.6%	11.0%
5000-10000	22.8%	15.9%	14.0%	15.4%	12.9%	15.8%	11.6%	8.6%	12.3%
10000-30000	26.7%	36.3%	36.4%	34.6%	33.8%	33.1%	33.6%	30.5%	28.8%
30000-50000	10.9%	12.4%	12.4%	14.6%	15.8%	15.1%	9.6%	11.9%	9.6%
>=50000	14.9%	16.8%	18.2%	16.9%	15.1%	19.4%	24.7%	23.8%	26.7%

Table 13: Revenue Distribution of AlterNext Companies

Source: Datastream, original data of annual revenue collected by Datastream up to the end of 2014

The revenue distribution result is consistent with that provided by the size distribution. AIM has higher proportion of companies in the start-up stage while Entry Standard and AlterNext have higher proportion of companies in the growth or later stage.

4.3.4. Sector Distribution

Chart 4 shows that AIM has a diversified distribution of sectors: 6 sectors (Financials, Industrials, Basic Materials, Oil&Gas, Technology and Consumer Service) have more than 100 companies listed. Such balance distribution is a proof of AIM success, showing that the second-tier public equity market is a source of finance for companies of various sectors. The success can also be attributed early establishment and the vitality of the AIM market. Thanks to the acute measures and continuing commitments taken by LSE, AIM is able to survive from many economic downturns and scandals (Chris & Kean, 2011).[80] Being the only second-tier market in Europe which has existed for 20 years, AIM has built up trust and recognition in investors' minds and cultivated comprehensive advisor system with high expertise. These factors, in turn, nurture the growth and diversification of sectors on AIM.

[80] **Chris Mallin & Kean Ow-Yong (2011),** "The UK Alternative Investment Market – Ethical Dimensions", see note 38

Comparing the sector distribution of AIM with the UK economic structure, we can see they are compatible with each other, for example, 19% companies listed on AIM belong to financial sector and this sector contributes almost a third of value added to UK economy. This fact can be viewed as indirect evidence showing AIM's contribution to the UK economic development. Moreover, if we estimate the percentage of companies of secondary industry listed by aggregating the sectors, we can see roughly 70% companies coming from secondary industry.

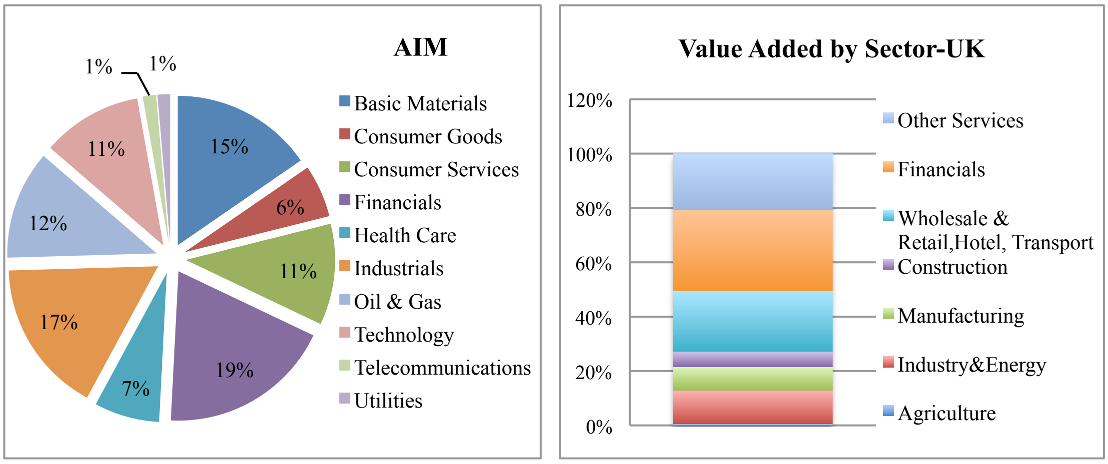


Chart 4: AIM Sector Distribution & UK Economic Structure

Source: London Stock Exchange, Statistics AIM Dec 2014;

OECD Library: Country Statistics Profile (http://stats.oecd.org/?queryid=9185), 2014

Note: Detailed sector distribution of listed companies on AIM can be seen in appendix Table 4

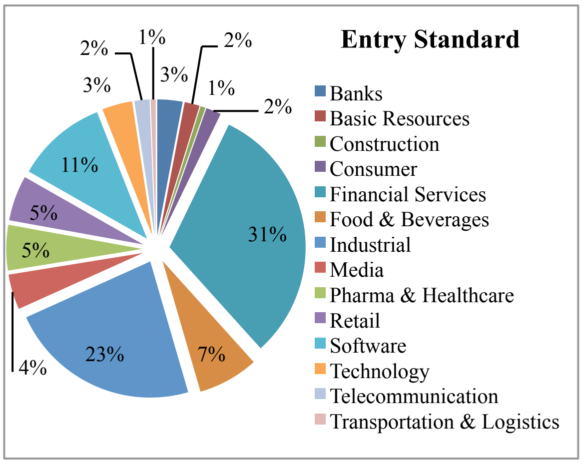
Companies listed on Entry Standard are concentrated on financial (Bank and Financial Services) and industrial sectors (Chart 5). The sector distribution of Entry Standard is much less diversified than that of AIM. Shorter history of Entry Standard results into less companies listed, which may be one of reasons for less sector diversification. The second possible explanation can be the lack of confidence of investors to the second-tier market. In 1997, Germany established "Neuer Markt", which was a kind of second-tier market as it imposed fewer restrictions on the minimum listing standards. "Neuer Markt" was definitely a huge success at the beginning, as Hans-Peter & Adrian (2003) said, "Germany's Neuer Markt was the largest of numerous new stock markets introduced in Europe during the nineties of the last century to address small and medium sized innovative growth firms."[81] However, in the wake of dot-com bubble, the temporary success ended in 2000, following a series of reputation destroying events such as "miss estimate" announcements, declaration of bankruptcy and penalties of misconducts (Hans-Peter & Adrian, 2003).[82] The failure of "Neuer Markt" has significantly destroyed the reputation of second-tier market, which might be a reason for the slow development of the Entry Standard Market.

The sector distribution of Entry Standard Market is different from German Economic Structure. Based on the German Economic Structure, we would expect that the highest percentage of companies listed could have lain in the industrial or manufacturing sectors. Nevertheless, financial sector takes the lead role. The interesting observation may be a reflection that German companies, especially SMEs, rely much more on "intermediate finance" rather than "direct finance" as we have stated in section 2.4. When lack of capital, these industrial companies may go to bank or leasing companies more often than go the public debt or equity market. As a consequence, although they are the most significant constituents of the economic structure, they present less in the capital market. To support the on-going capital requirement by industrial companies, financial intermediations need to refill their capital through the direct market, leading to highest percentage of financial companies listed on the Entry Standard Market. This opinion could be better verified by looking at the sector distribution of German bond market. In addition, there is another possible explanation. As we have said in section 2.3, Germany has a high proportion of large companies in the industrial sector and the SMEs proportion of manufacturing sector is the lowest compared with that of UK and that of France (Table 1, Section 2.3). Squeezed by large companies, SMEs in the industrial sector may represent a lower percentage in terms of value added and thus a lower percentage

[81] **Hans-Peter Burghof & Adrian Hunger (2003)**, "Access to Stock Markets for Small and Medium Sized Growth Firms: The Temporary Success and Ultimate Failure of Germany's Neuer Markt", Available at SSRN: http://ssrn.com/abstract=497404 or http://dx.doi.org/10.2139/ssrn.497404

[82] **Hans-Peter Burghof & Adrian Hunger (2003)**, "Access to Stock Markets for Small and Medium Sized Growth Firms: The Temporary Success and Ultimate Failure of Germany's Neuer Markt", see note 82

in the Entry Standard market.



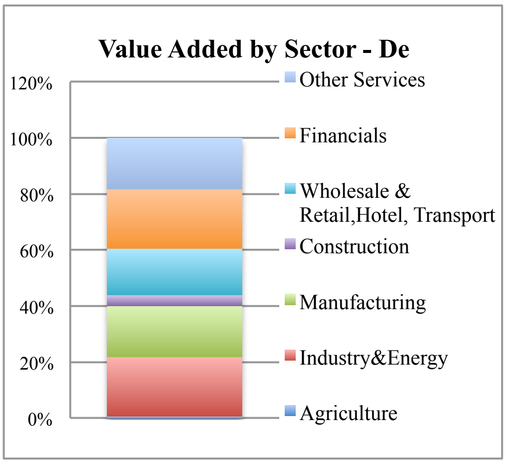


Chart 5: Entry Standard Sector Distribution & German Economic Structure

Source: Deutsche Börse AG

OECD Library: Country Statistics Profile (http://stats.oecd.org/?queryid=9185), 2014

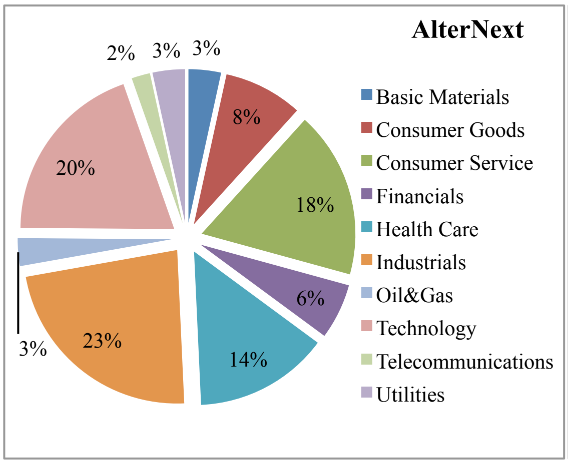
Note: Detailed sector distribution of listed companies on Entry Standard can be seen in appendix Table 5

AlterNext market demonstrates a relatively well balance among 4 sectors (Chart 6): companies of industrials sector and companies of technology sector respectively represent more than 20% of the companeis listed, following by companies of consumer service sector and then that of health care sector. The sector distribution is relatively diversified. One interesting finding is that there are so many companies of technology sectors listed on the AlterNext. More precisely, after reading the company profiles, we find that the products and services provided by these technology companies are very broad, covering commerce, health care, security, material-detector, and trainging system - almost all the traditional sectors. This favorable phenonema demonstrates the dynamic of AlterNext, its capability to channel financial resources to foster the growth of emerging industry. To reinforece this advantage, Euronext patered with Morningstar to improve the equity research coverage of the mid-size companies especially in the technology sector in 2014.[83]

The sector distribution of AlterNext is basically consistent with the France economy structure except the relative importance of the financial sector. The financial sector

[83] **Euronext Website.** https://www.enternext.biz/en/enternext/financial-analysis

contributes 27% of value added to the economy whereas it only represents 6% in the AlterNext market. As we all know, the financial sector in France is concentrated: Among the 20 largest banks around the world, there are 3 coming from France with approximately € 6 trillion in asset value by the end of 2014.[84] Because of competition pressure from these large companies, SMEs of financial sectors are put into a disvantage position. Therefore, it not superising to see that value added coming from financial sector is significant and at the same time the financial sector is a relatively small sector in the AlterNext Market.



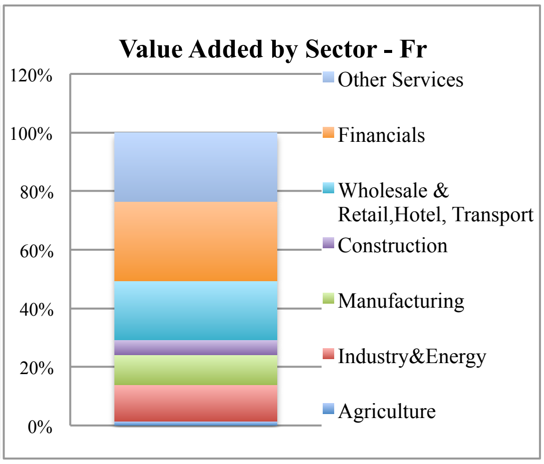


Chart 6: AlterNext Sector Distribution & France Economic Structure

Source: Euronext, Alternative Directory;

OECD Library: Country Statistics Profile (http://stats.oecd.org/?queryid=9185), 2014

Note: Detailed Sector Distribution can be seen in appendix Table 6

4.3.5. Offering Characteristics: Primary Share Percentage

Table 14 shows that in the IPOs of AIM, there were 50% of companies offering more than 37.5% of new shares, which is higher than the median level of Main Market. Moreover, companies in the AIM markets tent to offer more new shares than those of Main Market, proven by a much higher average primary share percentage in AIM than Main Market. The median of primary share percentage offered in Open Market was similar to the level of that of AIM. And the percentages of primary share offered

[84] "Top Bank in the World 2014", http://www.relbanks.com/worlds-top-banks/assets

in Regulated Market and Open Market were similar to each other. Companies listed on EuroNext regulated market tent to offer less proportion of primary share than those listed on Main Market or Regulated Market of FSE. Furthermore, companies listed on AlterNext or Free Market offered very limited new shares but a lot of secondary shares. Therefore, from the statistics below, we could suggest that IPOs on LSE and FSE are usually for increasing liquidity for existing shareholders and raising new capitals, and IPOs on AlterNext and Free Market are more inclined to serve as an exit channel for existing shareholders.

Offering Characteristics			
		Primary Share	
		Mean	**Median**
LSE	Main Market	39.10%	32.70%
	AIM	50.50%	37.50%
FSE	Regulated Market	32.40%	29.40%
	Open Market	34.60%	31.50%
EuroNext	Regulated Market	23.00%	16.50%
	AlterNext & Free Market	7.60%	0.00%

Table 14: Offering Characteristics of IPO in LSE, FSE and EuroNext (1995-2009)

Source: Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012), "Europe's Second Markets for Small Companies", European Financial Management, Vol. 18, No. 3, 2012, 352–388, Table 3-Panel B

Note: The author only extracts part of the information from Table 3-Panel B for the purpose to roughly gauge the characteristics of Primary shares percentage offered in the first-tier and second-tier market. Primary shares (%) here are defined as the average ratio of the number of newly issued shares over the number of pre-IPO shares. Since Silvio & Stefano & Jay (2012) included 3766 IPO in Europe from 1995-2009 and they categorized market into 4 categories. The author only took the data for the Main Market/Regulated Market and Exchange-Regulated Market. Exchange-Regulated Market of EuroNext includes Free Market and AlterNext and that of FSE includes Quotation Board and Entry Standard Market.

Section 5.Conclusions

From the perspective of market structure, AIM, Entry Standard and AlterNext are in the similar position that they are all second-tier markets regulated by stock exchanges and impose less strict rules on companies seeking list. These three markets have similar listing process and documentation mechanism. Among the three markets, AIM has the most flexible minimum requirements for listing whereas Entry Standard and AlterNext still set threshold for some financial figures. In terms of market performance of 2006-2014, while AIM and AlterNext followed similar trends as their respective first-tier markets, Entry Standard significantly underperformed the first-tier market since it hasn't bounce back from the fall since the crisis, leading to a lower volatility. In terms of company profiles, AIM has a higher proportion of micro and small enterprises and companies in the start-up stage than Entry Standard and AlterNext. This fact can be partly explained by the lower minimum listing requirements of AIM. While the sector distribution of AIM and AlterNext are compatible with the economic structure, Entry Standard has the highest portion of companies of financial sector that is different from its industrial-heavy economic structure. However, this can be explained by the heavy reliance of Germany economy on the "intermediate finance".

Reference

Allen N. Berger, Gregory F. Udell (1998): "The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle", *Journal of Banking & Finance 22 (1998) 613-673*

BIS (2015): "Small Business Survey 2014: SME employers", *BIS Research Paper Number 214, March 2015*

Chris Mallin & Kean Ow-Yong (2011): "The UK Alternative Investment Market – Ethical Dimensions", *Journal of Business Ethics (2010) 95:223–239*

CIA (2014): "The World Fact Book: Countries - Germany"
https://www.cia.gov/library/publications/resources/the-world-factbook/geos/gm.html

CIA (2014): "The World Fact Book: Countries – United Kingdom"
https://www.cia.gov/library/publications/resources/the-world-factbook/geos/gm.html

DAX Indices Website:
http://www.dax-indices.com/EN/index.aspx?pageID=25&ISIN=DE0008469800

Deutsche Börse Group (2005): "Entry Standard: Tailor-made capital market access for small-caps and mid-caps"

Deutsche Börse Group Website: "FAQ list for the Open Market / Entry Standard"

Deutsche Börse Group Website:
http://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/market-structure/transparency-standards/entry-standard

Deutsche Börse Group Website:
http://www.deutsche-boerse-cash-market.com/dbcm-en/primary-market/market-structure/transparency-standards/prime-standard

ECB (2014): "Survey on the access to finance of enterprises (SAFE), April to September 2014", *The Excel file source:*
https://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html

Euronext Website: "Alternext Directory",
https://www.euronext.com/en/listings/alternext/directory

Euronext Website: "Free Market Directory", *https://www.euronext.com/en/listings/free-markets*

Euronext Website: *https://www.euronext.com/en/about-euronext*

Euronext Website: *https://www.euronext.com/en/listings/alternext*

Euronext Website: *https://www.euronext.com/en/listings/free-markets*

Euronext Website: *https://www.euronext.com/listings/listing-sponsor*

Euronext Website: *https://www.enternext.biz/en/enternext/financial-analysis*

European Commission (2003): "Commission Recommendation 2003/361/EC", *Official Journal of the European Union L 124, p. 36*

European Commission (2014): "2014 SBA Fact Sheet France", *http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2014/france_en.pdf*

European Commission (2014): "2014 SBA Fact Sheet United Kingdom", *http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2014/uk_en.pdf*

European Commission (2014): "Access to finance: still a barrier for EU companies' growth", published on 12/11/2014

European Commission (2014): "Annual Report on European SMEs 2013/2014", *http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm*

European Commission (2003): "The new SME Definition User Guide and Model Declaration", *http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_en.pdf, p.14*

Federico Infelise (2014): "Supporting Access to Finance by SMEs: Mapping the initiatives in five EU countries", *ECMI Research Report No. 9/April 2014*

Forbes (2014): "Global 500: Countries- Germany", *http://fortune.com/global500/*

Frankfurt Stock Exchange Website:

http://www.boerse-frankfurt.de/en/basics+overview#&reiter=thefrankfurtstockexchange

Frankfurt Stock Exchange Website:

http://www.boerse-frankfurt.de/en/basics+overview/market+segments/regulated+market

Frankfurt Stock Exchange Website:

http://www.boerse-frankfurt.de/en/glossary/q/quotation+board+40512

FTSE Website: "AIM All Share Index"

http://www.ftse.com/Analytics/FactSheets/temp/1da747db-3f17-403e-9563-fc13de5f0fb7.pdf

FTSE Website: "FTSE All Share Index"

http://www.ftse.com/Analytics/FactSheets/temp/d0628a5f-c5b8-4276-9ae7-937c418d885e.pdf

Hans-Peter Burghof & Adrian Hunger (2003): "Access to Stock Markets for Small and Medium Sized Growth Firms: The Temporary Success and Ultimate Failure of Germany's Neuer Markt", *Available at SSRN: http://ssrn.com/abstract=497404 or http://dx.doi.org/10.2139/ssrn.497404*

Kevin Campbell, Isaac T. Tabner (2014): "Bonding and the agency risk premium: An analysis of migrations between the AIM and the Official List of the London Stock Exchange", *Journal of International Financial Markets, Institutions & Money 30 (2014) 1–20*

London Stock Exchange Website:

http://www.londonstockexchange.com/companies-and-advisors/aim/faq/faq.htm

London Stock Exchange Website:

http://www.londonstockexchange.com/companies-and-advisors/psm/home/psm.htm

London Stock Exchange Website:

http://www.londonstockexchange.com/companies-and-advisors/sfm/about/sfm-factsheet.pdf

London Stock Exchange Website:

http://www.londonstockexchange.com/home/homepage.htm

LSE (2014): "AIM Rules for Companies – May 2014"

LSE (2014): "Monthly Market Report – Dec 2014"

LSE, White Page Ltd (2010): "A guide to AIM"

LSE, White Page Ltd (2010): "A guide to listing on the London Stock Exchange"

OECD (2014): "Entrepreneurship at a Glance 2014", *http://www.oecd-ilibrary.org/docserver/download/3014031e.pdf?expires=1428052545&id=id&accname=guest&checksum=6B23B452AA6F27E1F212F2E24D70B32F*

OECD (2014): "Entrepreneurship at a Glance 2014", *http://www.oecd-ilibrary.org/docserver/download/3014031e.pdf?expires=1428052545&id=id&accname=guest&checksum=6B23B452AA6F27E1F212F2E24D70B32F*

Orçun Kaya (2014): "SME financing in the euro area, New solutions to an old problem", *Deutsche Bank Research, published on 14/10/2014*

Silvio Vismara, Stefano Paleari, Jay R.Ritter (2012): "Europe's Second Markets for Small Companies", *European Financial Management, Vol. 18, No. 3, 2012, 352–388*

Simon Lewis (2015): "Europe's SMEs need more equity capital and courage to take a risk", *The Telegraph Investor, published on 24/02/2015*

UNWTO (2014 United Nations World Tourism Organization): "UNWTO Tourism Highlights-2014 Edition", *http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_highlights14_en.pdf*

World Federation of Exchanges (2014): "Monthly Report-Dec 2014", *http://www.world-exchanges.org/statistics/monthly-reports*

Relbanks Website: "Top Bank in the World 2014", *http://www.relbanks.com/worlds-top-banks/assets*

Appendix

Table 1: Detail Enterprise Percentage Breakdown by Size, Sector and Country

Manufacturing	Germany	NL-DE	France	NL-FR	UK	NL-UK
Micro	62.2%	82.0%	87.8%	89.7%	77.8%	94.7%
Small	29.2%	15.2%	14.0%	8.6%	16.6%	4.4%
Medium	6.8%	2.3%	2.5%	1.4%	4.6%	0.7%
Large	0.5%	0.4%	0.5%	0.3%	1.0%	0.1%

Service	Germany	NL-DE	France	NL-FR	UK	NL-UK
Micro	84.6%	82.0%	95.7%	89.7%	90.0%	94.7%
Small	13.2%	15.2%	3.6%	8.6%	8.5%	4.4%
Medium	1.9%	2.3%	0.5%	1.4%	1.2%	0.7%
Large	0.3%	0.4%	0.1%	0.3%	0.3%	0.1%

Construction	Germany	NL-DE	France	NL-FR	UK	NL-UK
Micro	81.4%	82.0%	94.3%	89.7%	93.4%	94.7%
Small	17.2%	15.2%	5.2%	8.6%	5.8%	4.4%
Medium	1.3%	2.3%	0.4%	1.4%	0.7%	0.7%
Large	0.1%	0.4%	0.1%	0.3%	0.1%	0.1%

Source: Entrepreneurship at a Glance 2014 - © OECD 06-05-2014

Table 2: Top 3 Mentioned Relevant Source of Financing and Their Usage

TOP 3 RELEVANT SOURCE OF FINANCING				
Q4c. Credit line, bank overdraft or credit cards overdraft - Are the following sources of financing relevant to your firm, that is, have you used them in the past or considered using them in the future?				
	EU28	**FR**	**DE**	**UK**
yes, this source is relevant to my enterprise	53%	57%	47%	63%
no, this source is not relevant to my enterprise	44%	41%	52%	35%
DK/NA	2%	2%	1%	2%
Q4d. Bank loan (excluding subsidised bank loans, overdrafts and credit lines) - Are the following sources of financing relevant to your firm, that is, have you used them in the past or considered using them in the future?				
	EU28	**FR**	**DE**	**UK**
yes, this source is relevant to my enterprise	57%	71%	60%	47%
no, this source is not relevant to my enterprise	41%	27%	39%	52%
DK/NA	2%	2%	1%	1%
Q4m. Leasing or hire-purchase - Are the following sources of financing relevant to your firm, that is, have you used them in the past or considered using them in the future?				
	EU28	**FR**	**DE**	**UK**
yes, this source is relevant to my enterprise	47%	54%	57%	54%
no, this source is not relevant to my enterprise	51%	44%	43%	45%
DK/NA	2%	2%	0%	1%
USED IN THE PAST 6 MONTH OR NOT				
Q4c. Credit line, bank overdraft or credit cards overdraft - Have you used these sources of financing OR NOT during the past 6 months?				
	EU28	**FR**	**DE**	**UK**

used in the past 6 months	37%	38%	32%	45%
did not use in the past 6 months	17%	19%	15%	18%
source of financing not relevant to my firm	44%	41%	52%	36%
DK/NA	2%	2%	1%	2%

Q4d. Bank loan - Have you used these sources of financing OR NOT during the past 6 months?

	EU28	**FR**	**DE**	**UK**
used in the past 6 months	13%	22%	13%	8%
did not use in the past 6 months	43%	48%	46%	39%
source of financing not relevant to my firm	41%	28%	40%	52%
DK/NA	2%	2%	1%	1%

Q4m. Leasing or hire-purchase - Have you used these sources of financing OR NOT during the past 6 months?

	EU28	**FR**	**DE**	**UK**
used in the past 6 months	29%	29%	44%	38%
did not use in the past 6 months	19%	25%	13%	15%
source of financing not relevant to my firm	51%	44%	43%	45%
DK/NA	2%	2%	0%	1%

Source: ECB SAFE Questionnaire, April to November 2014

Table 3: Justifications for a change of listing

Justification category	AIM to Main		Main to AIM	
	No.	%	No.	%
No justification	47	42.3%	41	15.6%
Growth and/or appropriate for firm's size	40	36.0%	131	49.8%
Raised profile of company or market	39	35.1%	6	2.3%
Increase investor base	36	32.4%	20	7.6%
Improve liquidity/appropriate for current liquidity	30	27.0%	12	4.6%
Placing/capital raising concurrent with switch	11	9.9%	38	14.4%
Ease of future capital raising	4	3.6%	14	5.3%
Ease of future acquisitions	2	1.8%	38	14.4%
Attract staff	2	1.8%	1	0.4%
Cost savings, simplification of reporting/regulation	0	0	127	48.3%
General flexibility regarding corporate transactions	0	0	105	39.9%
Tax benefits for investors	0	0	34	12.9%
Restructuring/refocusing/refinancing/write down	0	0	28	10.6%
Violates minimum 25% free-float rule or similar	0	0	17	6.5%
Suitable for existing investor base	0	0	15	5.7%
High proportion of private investors	0	0	4	1.5%
Shareholder protection statement	0	0	37	14.1%
Total number of justifications in each sample	164		616	
Total number of firms in each sample	111		262	
Average proportion of total justification categories	NA	18.5%	NA	15.0%
Maximum proportion of total justification categories	NA	87.5%	NA	53.3%

Source: Table 1, Kevin Campbell, Isaac T. Tabner (2014), "Bonding and the agency risk premium: An analysis of migrations between the AIM and the Official List of the London Stock Exchange", Journal of International Financial Markets, Institutions & Money 30 (2014) 1–20

Table 4: Sector Distribution of Companies Listed on AIM

Sector	No. of Companies	Percentage
Total Oil & Gas	**130**	**11.8%**
Oil & Gas Producers	104	
Oil Equipment, Services & Distribution	8	
Alternative Energy	18	
Total Basic Materials	**170**	**15.4%**
Chemicals	16	
Forestry & Paper	3	
Industrial Metals	19	
Mining	132	
Total Industrials	**184**	**16.7%**
Construction & Materials	15	
Aerospace & Defence	2	
General Industrials	5	
Electronic & Electrical Equipment	27	
Industrial Engineering	28	
Industrial Transportation	10	
Support Services	97	
Consumer Goods	**63**	**5.7%**
Automobiles & Parts	4	
Beverages	4	
Food Producers	21	
Household Goods	16	
Leisure Goods	8	
Personal Goods	10	
Tobacco	0	
Total Health Care	**78**	**7.1%**

Health Care Equipment & Services	30	
Pharmaceuticals & Biotechnology	48	
Total Consumer Services	**121**	**11.0%**
Food & Drug Retailers	4	
General Retailers	22	
Media	55	
Travel & Leisure	40	
Total Telecommunications	**16**	**1.4%**
Fixed Line Telecommunications	7	
Mobile Telecommunications	9	
Total Utilities	**15**	**1.4%**
Electricity	13	
Gas, Water & Multiutilities	2	
Total Financials	**207**	**18.8%**
Banks	3	
Nonlife Insurance	5	
Life Insurance	0	
Real Estate Investment & Services	42	
Real Estate Investment Trusts	3	
Real Estate	0	
General Financial	111	
Equity Investment Instruments	42	
Nonequity Investment Instruments	1	
Total Technology	**120**	**10.9%**
Software & Computer Services	101	
Technology Hardware & Equipment	19	
Grand Total	**1,104**	

Source: London Stock Exchange, Statistics AIM Dec 2014

Table 5: Sector Distribution of Companies Listed on Entry Standard

Row Labels	Number of Companies	Percentage
Banks	**5**	**3.0%**
Credit Banks	5	
Basic Resources	**3**	**1.8%**
Mining	2	
Oil & Gas	1	
Construction	**1**	**0.6%**
Construction & Engineering	1	
Consumer	**3**	**1.8%**
Clothing & Footwear	1	
Home Construction & Furnishings	1	
Leisure Goods & Services	1	
Financial Services	**52**	**31.1%**
Diversified Financial	13	
Private Equity & Venture Capital	16	
Real Estate	17	
Securities Brokers	6	
Food & Beverages	**12**	**7.2%**
Beverages	4	
Food	8	
Industrial	**38**	**22.8%**
Advanced Industrial Equipment	8	
Containers & Packaging	1	
Industrial Machinery	2	
Industrial Products & Services	12	
Industrial, Diversified	8	
Renewable Energies	7	

Media	**7**	**4.2%**
Advertising	1	
Movies & Entertainment	6	
Pharma & Healthcare	**9**	**5.4%**
Biotechnology	4	
Medical Technology	2	
Pharmaceuticals	3	
Retail	**9**	**5.4%**
Retail, Food & Drug	2	
Retail, Internet	4	
Retail, Specialty	3	
Software	**18**	**10.8%**
Internet	3	
IT-Services	9	
Software	6	
Technology	**6**	**3.6%**
Communications Technology	2	
Electronic Components & Hardware	4	
Telecommunication	**3**	**1.8%**
Telecommunication Services	3	
Transportation & Logistics	**1**	**0.6%**
Logistics	1	
Grand Total	**167**	

Source: Deutsche Börse AG

Table 6: Sector Distribution of Companies Listed on AlterNext

Sector	Number of Companies	Percentage
Basic Materials	7	3.4%
Consumer Goods	17	8.3%
Consumer Service	36	17.6%
Financials	12	5.9%
Health Care	29	14.1%
Industrials	47	22.9%
Oil&Gas	6	2.9%
Technology	40	19.5%
Telecommunications	4	2.0%
Utilities	7	3.4%
Grand Total	**205**	

Source: Euronext, Alternative Directory