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How do financial markets adapt? An institutional comparison between European and Japanese Junior stock markets

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ABSTRACT

Since the last decade, new Junior stock markets or second-tier stock markets have emerged in various countries, often influenced by the Alternative Investment Market, created by the London Stock Echange in 1995, and considered by numerous economic and political actors as a reference. Junior Markets are characterised by simplified listing processes and customised information standards. The creation of junior stock market segments can be seen as an instance of financialisation and of the spread of market-led financial architectures to economies traditionally characterised by credit-based financial systems, according to the evolutionary taxonomy outlined by Dosi (1990). This begs the question as to whether we are witnessing an increasing convergence towards financial systems that are typical of the Anglo-Saxon world. With these questions in mind, in this paper we perform an institutional comparison of junior stocks markets located in countries characterised by different varieties of capitalism : AIM London, AIM Italy, Alternext, Entry Standard, OMX First North, Mothers, Tokyo AIM, JASDAQ. We find that while the « new » junior stock markets were largely inspired by the AIM London model, country specificities still persist. Nevertheless, complex interbreeding properties may be highlighted. On one side, while the AIM's rely on principles-based regulation through specific intermediaries; it is rather consistent with the description of credit-based systems as allocating finance through discretionary means. On the other side, while the higher centralisation of admission processes and regulatory oversight in Germany and Japan is linked to more centralised and institutionalised mechanisms' relevant to credit-based CMEs, the rules-based regulatory approach contributes to move away from discretionary financial allocation criteria and long term relationships.

Keywords: credit-based financial system, bank-based financial system, junior stock markets, hybridisation
JEL Classification : P12 Capitalist enterprises, P51 Comparative analysis of economic systems, G10 General Financial Markets

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1. INTRODUCTION

Financing SMEs has been a central concern for industrialised countries in the last decades. SMEs have embodied the myth of the entrepreneurial firm popularised during the installation stage of the fifth technological revolution (Perez 2003), albeit the evidence on their role as a driving force in the economy is still inconclusive (Nightingale and Coad 2013). SMEs face low chances to receive loans due to lacking collateral and information asymmetries, even more in high-tech sectors and in the wake of the 2007-2008 financial crisis (see e.g. Demirel et al. 2015; North et al., 2013). The Basel agreements have only hardened such difficulties for new firms in Europe (Saurina and Trucharte, 2007, Scellato and Ughetto, 2010, Cardone-Riportella et al., 2011).

As documented by Posner (2009) among others, since the Nineties political actors, alongside financial industry players such as EVCA (now Europe Invest) and EBAN in Europe,[1] have pushed for the creation of new exit opportunities for venture capitalists and other institutional investors. The so-called junior stock markets (or second-tier stock markets) are characterised by simplified listing processes and customised information standards, hence they cater to companies that are wishing to do an IPO but do not satisfy the listing requirements of the main stock exchanges. These markets may enhance the exit opportunities for venture-backed companies, as advocated by Black and Gilson (1999), as well as stimulate the recycling function (Michelacci and Suarez 2004) and the creation function (Lazonick 2007) performed by stock markets. Prominent examples include the Alternative Investment Market (AIM), a segment of the LSE established in 1995, and some "followers" set up in the last decade, such as Alternext belonging to the Paris Bourse; Entry Standard (Deutsche Boerse); AIM Italia; OMX First North (Nordic countries); and some Japanese markets (Mothers, Tokyo AIM).[2] Such a wave of junior stock markets is not unprecedented, as shown by the now defunct "new markets" operating between the mid-Nineties and the dot-com bubble crash (see Giudici and Roosenboom 2004), or some second-tier markets in the 1980s (the *Second Marché* in France, the Unlisted Securities Market in the United Kingdom, the *Geregelter Markt* in Germany).

The creation of junior stock market segments is an instance of how market institutions are spreading to economies traditionally characterised by credit-based financial systems, in terms of the Rybczynski (1974) and Zysman (1984) taxonomy, and to coordinated market economies (CMEs; see Hall and Soskice 2001 on varieties of capitalism). Due to the financialisation process (Dore 2008 among others), we are witnessing an increasing hybridisation of financial systems. This is possibly an intermediate stage in the evolution of

1 Invest Europe represents the largest private equity association in Europe (previously known as EVCA) and EBAN (European Business Angels Network) is the community of European informal investors.

2 See Mendoza (2008), Hornok (2014) on the AIM; Lagneau-Ymonet et al. (2014) on Alternext; Mizuno and Tabner (2008) on Japanese markets.

financial systems towards a fuller convergence to the Anglo-Saxon market-oriented world, but not necessarily so.

The “new” junior stock markets set up in continental Europe and in Japan were inspired by the AIM model, namely an exchange-regulated market in which regulatory supervision is outsourced to the adviser/sponsor, according to a decentralisation of responsibilities and a faith in the self-regulatory properties of free markets that is typical of liberal market economies (LMEs, Hall and Soskice 2001). The outcomes of such attempts to replicate the AIM model abroad by the LSE (as with AIM Italy and Tokyo AIM) or to imitate it by other national stock exchanges may be more or less faithful to the original. In other words, junior markets in credit-based systems may be “contaminated” with elements that reflect the specificities of the local financial setting. For instance, the design of junior markets in credit-based systems located in CMEs may inherit a higher centralisation of listing decision and regulatory oversight. This would be “resistance to change” in the eyes of scholars who believe in the superiority of the Anglo-Saxon market-oriented model. This may as well mean that the viability of a new institution depends on its adaptation to the pre-existing institutional setting, both within and outside the borders of the financial sector. Such adaptive response may be interpreted in the perspective of evolutionary economics, stressing path-dependent learning trajectories (Winter and Szulanski 2001); as an instance of the Polanyian double movement reacting to market self-regulation (Polanyi 1944); or as convergence towards an equilibrium configuration defined by the country-specific institutional complementarities (Aoki 2001).

With these questions in mind, in this paper we perform an institutional comparison of the above mentioned junior stock markets located in countries characterised by different financial systems and varieties of capitalism. Our comparative analysis focuses on similarities and specificities in admission criteria, listing costs, transparency requirements, and the regulatory framework, including the attributes and the roles of the financial intermediaries entrusted with regulatory functions, the so-called sponsors or advisers.

We find that while the “new” junior stock markets were inspired by the AIM model, country specificities persist. The Japanese markets appear as the farthest from the AIM model, because of the centralisation of regulatory functions and the absence of advisers/sponsors. In Japan, the stock market operator remains the key decision-maker regarding the listing process as well as monitoring compliance with on-going obligations. Accordingly, listing procedures are longer and listing costs higher. Quite similarly, the German Entry Standard is characterised both by a strengthened regulation and a more centralised listing process than AIM. Another peculiar feature is represented by the coexistence of two intermediaries, the listing partner and the trading participant, with differentiated roles in the listing process. The French, the Italian and the Nordic markets seem to be situated between the German market architecture and the AIM benchmark. While the Borsa Italiana has been acquired by the London Stock Exchange in 2007, the design of AIM Italy (2009) does not replicate exactly the AIM model and has been adapted to local companies.

The set up of junior segments may have been a signal to foreign investors on the will of the local political community to open up their economy to outsiders, yet the detected national specificities are consistent with a hybridisation story whereby features of the financial systems (Dosi 1990) and of the varieties of capitalism (Hall and Soskice, 2001) constrain the way an institution being "imported" from another context is shaped. Specifically, our comparison highlights a stronger centralisation of market architectures in those countries where centralised financial allocation mechanisms have been traditionally prevailing.

The paper is structured as follows. Section 2 outlines the theoretical background we employ to examine junior stock markets, encompassing varieties of capitalism, hybridisation of financial systems, and the financialisation of start-ups. There we also describe changes observed since the 1980s in countries usually associated to bank-based financial systems, that is to say, Japan, Germany, France and Scandinavian countries, where new junior markets have been set up. Section 3 is dedicated to a comparative institutional analysis of the following junior stock markets: AIM London, AIM Italia, Alternext, Entry Standard (Germany), Nasdaq OMX First North; and Mothers, JASDAQ, and Tokyo Pro Market (Japan). In Section 4 we interpret the results in the light of the theoretical background. Section 5 concludes.

2. BACKGROUND

2.1 Varieties of capitalism and hybridisation of financial systems

Research on comparative economics offers classifications of economic systems that are relevant for our goals. One comes from the literature on the varieties of capitalisms, henceforth VoC (Hall and Soskice, 2001), that draws a distinction between liberal market economies (LMEs) and coordinated market economies (CMEs). In LMEs, the coordination of individual decisions is mainly entrusted to markets and to self-regulation, whereas non-market mechanisms, entailing a higher degree of centralisation, characterise CMEs. Hall and Soskice (2001) cluster economies mainly along two dimensions: stock market capitalisation (higher in LMEs) and employment protection (higher in CMEs). More precisely, in LMEs the development of stock market capitalisation and more generally of financial market institutions is associated with the predominance of short-termism and financial performance criteria. Instead, patient capital and long investment horizons characterise the financial systems in CMEs: strong relationships and dense networks between firms and providers of capital (mainly banks) guarantee funding in the long-run. In CMEs, balance-sheet performance is only one among the allocation criteria in funding decisions. A broader set of stakeholders, beyond a company's shareholders base have voice in financial allocation processes.

Another taxonomy tries to identify "ideal types" in terms of specificities of the main financing channels (banks, stock markets, private equity), pioneered by Rybczynski (1974) and Zysman (1984) who distinguished two archetypal financial systems, namely "market-based" versus "credit-based" financial systems. Following Dosi (1990), in market-based systems, exchanges of ownership titles and financial instruments are mainly "impersonal", while credit-based systems involve more "institutionalised" ownership/control relationships. "Exit" mechanisms à la Hirschman prevail in market-based systems, as opposed to credit-based systems where financing relationships are governed mainly through "voice" mechanisms. Financial allocation is driven by selective pressure rooted in observed performance in market-based systems, whereas learning from longer-term relationships and discretionary criteria are the grounds for financial decisions in credit-based systems. As stressed by Dosi et al. (2016), varieties of capitalisms and the evolutionary taxonomy of financial systems overlap. Credit-based economies tend to fall within the CME category, whereas market-based financial systems are typical of LMEs.

Both the LMEs/CMEs and bank-based/market-based taxonomies should not underemphasise the wide heterogeneity within economies. Country-specific firm-level heterogeneity – in size, industry experience, capabilities, etc. - is so wide, that different financing patterns do coexist within the same economy (Jackson and Miyajima 2007). Anglo-Saxon models of corporate governance have been adapted by different German firms, whereas Anglo-Saxon firms in some instances a relation with finance akin the "corporatist" type (Goutas and Lane 2009, Dosi et al. 2016).

One reason for such blurred conceptual borders between financial systems and capitalist varieties lies in the tendency for economic institutions to undergo cross-country interbreeding. Following Boyer (2005a), institutional hybridisation is the outcome of implementing or imitating in one country an institution that has proved effective in another context, resulting in an original configuration. The process of hybridisation may question the strength of institutional complementarities, that usually testify how institutional forms may be connected with some economic performance and socio-political stability, and at the opposite the lack of these institutions could generate negative economic and social outcomes (e.g. Hall and Gingerich, 2009; Amable and Palombarini, 2009; Amable et al., 2011). At the same time, hybridisation means that the institution being imitated does not shake the stability of the existing institutional framework. The path dependence argument can be invoked to account for this (see for instance Thelen, 2003).

Financialization has been a powerful drive towards the hybridisation of financial systems (Van der Zwan 2014). At a very first approximation, financialization may be described as the overgrowth of finance as compared to the real sectors of the economy. Financialization has been defined in the literature as a "pattern of accumulation in which profits accrue primarily through financial channels, then through trade and commodity production" (Krippner, 2005, p. 174), and as a change in the regime of profit accumulation that signals the transition from managerial capitalism to an investor capitalism (Boyer, 2005b; Guttman, 2015 among others). Financialization of the corporation goes together with the emergence of shareholder value as the main guiding principle of corporate governance. The maximising shareholders value (MSV) principle places the shareholders at the centre of the corporate scene, theoretically grounded in agency theory (for discussions, see Lazonick and O'Sullivan, 2000; Boyer, 2005b; Dobbin and Jung, 2010 among others), under the conviction that maximising the value of the firm is the best way to increase societal welfare. In particular, Lazonick and O'Sullivan (2000) illustrated very clearly how the maximisation of the shareholder value (MSV) became dominant in the 1990s in the United States and Great Britain, LMEs with market-based financial systems. In economic thought and policy advice, the MSV principle has left far behind the competing view according to which businesses have to be managed in the interests of a broader set of stakeholders (Freeman, 1994).

2.2 Junior markets, or: the financialisation of SMEs

The set up of junior segments by major stock exchanges is an instance of financialization, as it magnifies the reliance of SMEs on equity markets for their financial needs. Markets characterised by light listing requirements and information standards as well as by customised regulation, out-sourced to financial intermediaries, allow even the shares of very small and young companies to be publicly floated and traded. As noted in the Introduction, a wave of junior markets in CMEs has been propelled by the AIM model originating from the UK. Observing differences between the design of the original financial institution (AIM) and the design of their "replicas" in other countries, may illustrate an institutional hybridisation fostered by the financialisation process.

Posner (2005, 2009) argued that the creation of junior stock markets in Europe during the 1990s was the outcome of converging interests between EVCA and the European Commission - the latter, willing to signal its commitment to reduce structural unemployment. Yet, to the extent that the MSV principle is strengthened by financialisation, the predominance of shareholders' interests raises the issue of their compatibility with real economy goals such as job creation and technological innovation. Lazonick (2007) has outlined the social conditions that must be satisfied for stock markets to support innovation, stressing that stock markets need not be tailored for the task. The authors defined five distinct and interrelated functions performed by the stock market for the innovative firm: creation, control, combination, compensation, and cash. Depending on the institutional constraints faced by the actors and on macroeconomic conditions, the relative weight of the stock market functions vary, as well as their possible combinations. The way these functions combine themselves and influence the innovative firms change over time and orient the market either towards more speculation or more productive investments. Creating stock market segments which are easily accessible to SMEs may allow them to use speculative strategies, e.g. stock repurchases, which distort the informational signals contained in stock prices and divert resources from productive uses. The evidence in Revest and Sapio (2013a) on the growth of AIM-listed firms, indeed, suggests that the labor productivity of companies listed on the junior segment is below that of a comparable set of privately-held companies.

Before comparing junior stock markets all over the world, we propose to briefly review the recent broad transformation of the financial systems we study. In the following section, we shed light on the cases of Germany and Japan, often quoted as typical examples of CMEs and bank-based systems, but that have been both increasingly influenced by a market-based perspective. Then we also illustrate the changes experimented by France, Sweden and Italy as they allow to appreciate the degree of heterogeneity in coordination mechanisms inside CMEs.

2.3 Country focuses: The German and Japanese financial systems: toward more "finance-based" but for which results?

2.3.1 Germany

The regulatory regime in Germany from the 1930s up to the 1990s may be described as a stakeholder-oriented and bank-based model. Banks and industrial firms were connected through cross-shareholdings and interlocked supervisory boards. As documented in Kregel et al. (2015) and Domanski (2003), starting in 1984 the Bundesbank and later the federal governments passed a variety of deregulatory measures, which abolished hurdles for foreign engagements (e.g. certain tax laws) and permitted financial innovations. On the one hand, these regulatory changes made the German market more transparent and more accessible for foreign investors, as it allowed for more outsider control. On the other hand, it has led to lessening the direct involvement of domestic banks in corporate governance (Detzer et al., 2013). Despite those transformations, banks are still the main actors in the German financial system (Meier and Meier, 2013). Ratios of balance sheet size, bank deposits, and bank loans to GDP are still much higher in Germany than, for example, in the USA, which is seen as the prototypical market-based financial system (Meier and Meier, 2013). In addition, stock markets only played an important role during the stock market boom at the end of the 1990s and the beginning of the 2000s (Detzer, 2014). In this landscape, German SMEs finance investments predominantly from internal sources, albeit to a lower degree than larger non-financial corporations (Detzer et al., 2013). Venture capital and leveraged buy-out emerged, under the umbrella of banks that have created subsidiaries for managing these financial vehicles; but their use in SMEs funding remains limited due to a lack of tax incentives and regulatory limitations for pension funds to invest into them (see Bedu and Montalban, 2013 for the period 2004-2008). In spite of the relatively "light" weight of stock market financing in the German economy, two significant changes deserve to be mentioned. Firstly, the withdrawal of traditional German financial institutions has left room for more financially interested investors, which put pressure on the management to follow shareholder value oriented strategies that have given rise to a market for corporate control. Secondly, large German non financial corporations have increasingly relied on their own financial resources due to competition from equity markets and preferential taxation for retained earnings – i.e. the corporate tax reform in 2000 (Deutsche Bundesbank 2012). Analysing data for the period 1991-2010, Detzer et al. (2013) show that corporate savings increased after 2000; major global groups increasingly use intra-group liquidity and financial management.

2.3.2 Japan: a lack of political consensus and coordination?

It is well known that during the first half of the 20th century, business coordinators (zaibatsu) and family firms played an active role in the Japanese financial markets, characterised by dispersed ownership (Francks et al., 2014). After World War II, a shift materialized from the family capitalism toward the power of large banks and corporations, tied by interlocked shareholdings. Such a corporate governance could be seen as a solution to the traditional problem of corporate governance à la Berle and Means, contingent upon the specificities of the Japanese economy, as well as an antidote to the hold up problem in contractual governance between industrial companies (Gilson and Roe 1993). According to Lechevalier (2007), the Japanese capitalism has converged neither toward the Anglo-Saxon model, nor toward the European model, consistent with Gilson and Roe (1993), who observed that the best practices in institutions and organisation modes are highly country- and context-specific. Though, Lechevalier claims that the increasing heterogeneity of Japanese firms in terms of organisational structures and performance, and the ensuing lack of coordination contribute to explain the long-lasting stagnation of the Japanese economy (since the mid-1990s), and that financial deregulation was one factor at the origin of these problems (Lechevalier, 2007, 2011). One indeed observes an increasingly diversified financial system in Japan, incorporating features of an Anglo-American system, leading Kushida et al. (2013) to speak of "syncretism" in a system where "old, new forms of practices, modes and norms of organisation coexist" (p. 339) .

Whereas financial markets-oriented reforms has been introduced and reinforced in the beginning of the Japanese stagnation (Jackson and Miyajima 2007, Ahmed and Iwasaki, (2015); the practical significance of most of regulatory changes remains unclear for numerous domestic actors. The greatest progress has been made in terms of disclosure and transparency (Ahmadjian and Okumura 2011). During the last decades, much of the new shareholding in Japan comes from foreign financial institutions; outsider ownership has risen from 6,1% in 1990 to 61,7% 2009, and the foreign investors share from 6,1% in 1990 to 19,5% in 2009 (Ahmed and Iwasaki 2015). Foreign investors, though, have not acquired the largest shareholdings that remains in the hands of domestic's organizations, leading the Japanese financial system organised around insider relationships. However, foreign shareholders have increased the pressure for change in corporate governance (Witt and Redding, 2013), towards the MSV principle and diminishing the orientation towards other stakeholders (Dore 2000). Even though the importance of bank lending has declined and markets have become more important (Witt 2006; Yoshikawa and McGuire 2008; McGuire and Dow 2009; BIS 2010), the Japanese financial system remains bank-led (Witt and Redding, 2013). In the recent period, the largest banks play a crucial defensive role for fragile SMEs, through extended loans (Ono and Uesugi, 2014), hence many SMEs exhibit high leverage and low profitability (Lam et al., 2012). According to several scholars, the transformation of the Japanese financial system reveals a separation between the reforms, the political will behind them and the ongoing practices, and finally can be interpreted as denoting the lack of political consensus (Aoki et al. 2007, Kushida et al., 2013).

2.4 France, Sweden, and Italy: more finance-based but specificities remain

2.4.1 France

According to Jackson and Deeg (2012), France is the most market-based system among continental European countries. Yet according to authors such as Schmidt (2003), it remains characterized by the active role of the State, albeit in different extent and forms than in the post-war period. The current banking sector is concentrated around 6 main players and the relatively high internationalisation of French ownership seems to be far from the French financial system in the middle of the 20th century. The financial liberalization phase in France started with the end of the credit system control and of foreign-exchange controls, waves of privatisation and the modernisation of the financial markets through the creation of derivatives and money market. The retreat of the State has been compensated in terms of coordination mechanisms, such as cross-shareholding between firms, i.e. an insider system. Important waves of M&As occurred during the 1990s leading to the consolidation of both industrial and financial firms. For O'Sullivan (2007), corporate managers through the use of M&A have favoured the development of financial markets. Since the 1990s, foreign ownership of French companies has been increasing (Morin, 1998) and reached 40% in 2012.

The current internationalization of the ownership combined with its institutionalization (i.e. shares held by institutional investors) is the result of many factors, among them the decline of the cross-shareholdings system, the low households' shareholdings and the adoption of the corporate governance code under the influence of the banks' managers (Vienot Report in 1995 and 1999 and Bouton Report in 2002[3]). Banks indeed remain at the core of the French financial system not only through their lending function but also through their

3 Marc Viénot and Daniel Bouton were CEOs of the French Bank Société Générale.

activities in financial markets (investment banking and asset management, see Bedu and Granier, 2014). Thus the French model is associated to a mix between banks and markets, where the State continues to play a role through regulation and its different policies aiming at boosting the financial industry. In this environment French companies, especially the smallest ones, complain about suffering from funding problems, yet the “financing obstacles” seem to be related not only to the French financial system and the behaviours of intermediaries, but also to the inner characteristics of the French SMEs (Rapport PME-ETI en croissance, 2015; Dietsch and Mahieux, 2014). In accordance to the model described above, the national venture capital industry was built by the State around the banks it owned. New types of venture capital funds were introduced theafter, but being unable to really spur financing (Bedu and Granier, 2014). The private equity industry in France is actually more developed around leveraged buy-out operations (Bedu and Montalban, 2013).

2.4.2 Sweden

Sweden is usually associated to Germany and Japan as a stereotype of CMEs (see for example Jackson and Deeg, 2007). Its current financial system is characterized by the high concentration of ownership around few families and banks account for another type of insider system. More specifically, the ownership is organized around a pyramidal structure: families and banks hold shares through closed-end investment funds and other type of holding structure[4]. In the past, some families like the Wallenbergs became influential actors, through the creation of holding structures and their connections with the Swedish industry (Högfeldt, 2005).

Like France, Sweden had experimented a process of liberalization during the 1980s and a path to more market-oriented funding. Despite a wave of mergers and acquisitions in the 1990s, the strengthening of shareholder rights and the increase of institutional investors holdings in the 2000s, company ownership is still characterized by the domination of insiders (Jackson and Deeg, 2012). Firstly, during the 1990s, cross-shareholdings were widespread to avoid hostile takeovers (Högfeldt, 2005). Secondly, it is a common practice for firms to issue different type of shares, specifically shares associated with less voting rights in order insiders not to lose control when issuing shares on the stock exchange. Financial and industrial holding companies remain among the most important insider tools (Jackson and Deeg, 2012). Lastly, the Wallenbergs have been influential in the design of the stock exchange as they were controlling shareholders of the previous Swedish stock exchange and now shareholders of Nasdaq OMX[5](Högfeldt, 2005). Thus, even if we observe some characteristics of the Anglo-Saxon

4 This structure is rooted in the 1930s when the financial authority introduced a law impeding banks to own equities directly. Banks created holdings in order to circumvent this constraint and to pursue the control of industrial companies.

5 The Wallenbergs participated to the enactment of the listing rules and the corporate governance code

model like the "comply or explain" principle in the corporate governance code[6], the Swedish industry is still controlled by families and banks that have been established for a long time, resulting in an industry with relatively old firms.

Consequently, it is not surprising to observe a path toward new funding mechanisms more suitable to the needs of small and innovative companies. More specifically, Sweden has one of the strongest venture capital industry in Europe: according to Bedu and Montalban (2013), it is the second country behind UK in terms of the amount invested in venture capital and leveraged-buyout during the period 2004-2008 and high public R&D expenditures drive this result. From this point of view, the creation of a junior stock market in Nordic countries represents a way for venture capitalists to exit.

2.4.3 Italy

Like France, Italy fits into the CMEs category while having specificities that make it an outlier in this category. Historically, Italy can be described as a State capitalism (Schmidt, 2003), but as a dysfunctional one, in the sense that the State had to deal with a high fragmentation of the administrative and political system and it often acted in the interests of political parties (Della Sala, 2004). Companies have been characterized by a large ownership concentration either through families (Pirelli family, Olivetti family for example) and the State (largest companies and companies in monopolistic sectors), or through companies cross-shareholdings, leading to a rather concentrated ownership (Corrado and Zollo, 2003). State-owned and specialized banks dominated for a long time the banking sector (Rangone and Solari, 2012).

Pressures for more market-based mechanisms have been characterizing Italy since the 1990s due to a new international context with liberalization and the Maastricht Treaty, and the concomitant need for the State to decrease its debt (Della Sala, 2004; Rangone and Solari, 2012). Italy experimented a large wave of privatisations that decreased State holdings and spurred the development of the stock exchange. Lower requirements for listing on the main segment were edited (notably the constraint of having three consecutive years of profits was abandoned) and corporate governance rules modelled on the US/UK system such as a larger number of independent directors was introduced under the Draghi reforms (Della Sala, 2004). The stock exchange itself was privatized in 1997 and merged in 2007 with the London Stock Exchange. The banking sector also experimented the reintroduction of universal banking, waves of privatizations (Rangone and Solari, 2012) and of M&A that increased the competitiveness of banks at the global level (Della Sala, 2004).

6 If the compliance with the rules is compulsory, companies can choose the appropriate practices for them through the so-called 'comply or explain' principle.

Nonetheless, the liberalization phase did not eliminate the typical characteristics of the Italian capitalism: firms' ownership by State was only partly dismantled, the State kept a controlling role (only IRI[7] disappeared) (Della Sala, 2004; Rangone and Solari, 2012). Firms' control remains in the hands of a small number of families/groups and a dense network of small and family-owned firms characterize the manufacturing sector. Also, the introduction of mutual funds as a way to develop shareholdings did not change this ownership pattern and like in France they remain in the banks' perimeter as they are promoted and managed by them. Italian SMEs are still mainly funded by loans, less by internal resources (OECD, 2015) whereas their access to loans has been restricted following the 2007 crisis (higher interest rate, mandatory collateral) (OECD, 2015). Italian pension funds were thought as a tool for financing SMEs but they failed to channel retirement savings to private equity (Della Sala, 2004). As a result, the private equity sector remained under-developed compared to the other European countries (Bedu and Montalban, 2013).

Insider mechanisms still dominate in Italy even if the financial system is marked by a mix of coordination mechanisms like in several other European countries. Yet, in contrast to the German financial system, Italian banks do not typically control firms (Della Sala, 2004)[8].

3. AN INSTITUTIONAL COMPARISON OF JUNIOR STOCK MARKETS

As the previous section has made clear, we are dealing with countries that started out with credit-led financial systems and opened up to more market-based institutions, including junior markets, even though their reliance on the credit sector and on insider networks is still prevailing.

How junior stock markets have been designed in different VoC is our focus in this section. We formulate a main working hypothesis regarding the relationship between the transformations of the Japanese and European financial systems, and the characteristics of their junior stock markets. According to this hypothesis, the introduction of junior stock markets corresponds to a hybridisation process: the listing rules and regulatory processes of junior markets in CMEs still mirror their initial institutional configuration, characterised by more centralised, institutionalised and discretionary allocation mechanisms. In order to appraise the hybridisation hypothesis, we perform a cross-country institutional comparison of several junior stock markets that have been inspired by the AIM, whose design is taken as a reference model in our analysis.

7 The state ownership of banks and firms was mainly organized, until the early 1990s, through a public holding company, IRI (Istituto per la Ricostruzione Industriale).

8 According to Rangione and Solari (2012), the introduction of more market-based mechanisms has leaded Italy toward an incoherent system of institutions.

3.1 Methodology

In the design of a junior stock market, key architectural parameters include the listing requirements, the level of information disclosure, the allocation of regulatory responsibilities, the roles of intermediaries. A few attempts have been made at classifying the architecture of markets for SMEs and growing companies, focusing on the way the above mentioned building blocks are arranged. Two taxonomies co-exist. The first one proposed by Posner (2005) maps stock markets in a two-dimensional space defined by the strength of listing requirements and by the degree of information disclosure. The second taxonomy has been built upon the difference between rules-based and principles-based regulatory approaches (Verheij et al. 1998, Burgemeestre et al. 2009, Rousseau, 2007; see also Revest and Sapio 2013b). In a rules-based regulatory system, the content of regulation is made up of general, abstract, and universal rules, defined ex-ante, i.e. before adoption and implementation. In a principles-based regulatory system, instead, the weights to the pro and con-reasons are assigned by the regulator or by an auditor case by case, and case-specific circumstances are taken into account when determining the weights. Markets that are characterized by a high level of listing requirements and information disclosure usually match the rules-based regulatory system, and vice versa.

The choice of a specific constellation of architectural parameters depends on the motivations that have driven the set up of the market. With respect to junior stock markets, the originators and decision-makers are the demutualised stock exchanges. From their viewpoint, light regulatory settings can endanger their monopoly positions on order flow at the domestic level, and can harm liquidity and market reputation if too many risky companies are allowed to go public. However, setting the entry and information requirements too high may discourage participation by SMEs altogether, against the public policy goal of providing market-based financial support to new ventures. Our investigation shall also ask how this trade-off is solved in different financial systems.

In order to perform an institutional comparison, we rely on information disseminated by the stock exchanges[9] and examine the markets through the following criteria:

- The admission requirements for issuers;

- The characteristics of the listing process: negotiation mechanisms, costs;

- The firms' obligations once listed;

- The admission requirements for sponsors / advisers;

- The sponsors' obligations.

9 We rely on the existing market regulations available on the stock exchanges websites. See the list in Appendix 1.

We first sketch the main organisational features of the AIM considered as the “leader” market, before moving on to illustrate the “followers” (Section 3.2). Then we present the main results of the comparison of these market architectures (Section 3.3). Studying several stock markets dedicated to small firms may enlighten organisationals characteristics not present in the AIM model and perhaps better adapted to the local financial system. In addition, focusing on less known and less studied markets may illustrate the way some financial centres have adapted to their own institutional context a market model originating abroad.

3.2 The AIM and the “new” junior markets: a brief overview

In Europe, the oldest and better known market dedicated to SMEs is the Alternative Investment Market, a segment of the London Stock Exchange (LSE) created in 1995. In the beginning, the AIM was created as a feeder market for the Main Market listing, i.e. a temporary market capable of propelling the top businesses towards a main listing on the LSE. According to Posner’s taxonomy, AIM is characterized by low listing requirements and low informational disclosure rules, and at the same time is an interesting illustration of the principles-based approach. AIM requires that every company seeking admission appoints a Nominated Advisor (Nomad). Nomads have to assess whether a company seeking admission is suitable for quotation, and later to provide assistance in order to ensure that the companies respect their continuing obligations (for details, see below).

The AIM success is unarguably linked to its impressive growth in size. In January 2017, the AIM includes 967 listed firms; its peak was reached in 2008, before the last financial crisis, with 1550 listed firms (source: AIM statistics). Stock exchange authorities in several countries have therefore seized upon this opportunity, taking inspiration from the AIM, and have created junior markets. The AIM model has thus influenced France, with the Alternext, and certain Nordic countries through the First North segment as well as the Toronto Stock Exchange (Carpentier et al., 2010). Other “versions” of the AIM have emerged such as the AIM Italia (2009) or Tokyo AIM (2009).

In order to measure to which extent other countries have been influenced by the AIM, we conduct a comparison between the AIM and the following junior stock markets:

- Alternext, established by Paris Bourse in 2005;

- AIM Italia, created in 2009 by Borsa Italiana and merged in 2012 with Mercato Alternativo del Capitale (MAC);

- Entry Standard, created in 2005 by the Frankfurt Stock Exchange (FSE), from 2017 named SCALE;

- Nasdaq OMX First North, created in 2006 and operated by NASDAQ OMX Stockholm AB (First North Sweden and First North International), NASDAQ OMX

Copenhagen A/S (First North Denmark), NASDAQ Helsinki Ltd (First North Finland) and NASDAQ OMX Iceland hf. (Nasdaq First North Iceland);

- Mothers (Market Of The High-Growth and Emerging Stocks), created in 1999 in Japan;

- Tokyo Pro Market, formerly AIM Japan, set up in 2009 by the *joint-venture* between the LSE and the Tokyo Stock Exchange (TSE) and from 2012 a 100% subsidiary of the TSE.

- Jasdaq (Japan Association of Securities Dealers Automated Quotation), divided in the "standard" and "growth" segments, which we consider despite it was created in the 1960s because of similarity in structure and goals with the other Japanese junior markets.

3.3 Results

3.3.1 Differences in admission processes

Usually, admission criteria fulfil a twofold objective: firstly to disseminate the shares among the public and secondly to ensure that the future listed firms exhibit a certain continuity in their activity (in order also to protect the shareholders). The comparison of the eligibility criteria (Tables A1 and A2) shed light on several distinctive features.

Table A1: Admission criteria on AIM, Alternext, AIM Italy, Entry Standard

Ø: no criteria	AIM	Alternext	AIM Italy	Entry Standard
LIQUIDITY				
min number of investors	Ø	Ø	5 professional investors or 12 investors including at least 2 professionnal investors	30
min free float				
companies	Ø	EUR 2,5 M (received orders)	at least 10% of the share class	10% du capital, capital stock of at least EUR 750 000
investing companies	min £ 6M raised in cash	25% of issued capital	min EUR 3M raised in cash	Ø
nominal value per share	Ø	Ø	Ø	min EUR 1
market cap	Ø	Ø	Ø	Ø
shareholders'equity	Ø	Ø	Ø	Ø
INFORMATION DISCLOSURE				
admission document ≠ approved prospectus	✓	✓	✓	Ø
conditions	private placement	private placement	private placement	Ø
approved prospectus	✓	✓	✓	✓
conditions	public offering	public offering	public offering	public offering
audited statements	✓	✓	✓	✓
accounting standards	companies from EEA: IFRS or national standards foreign companies : IFRS or US/JAP/CAN GAAP	national standards or IFRS	national standards or IFRS	national standards or IFRS
language	english	english, national language	english or italian	german
other documents	application document, business description, sponsor's declaration	application document, sponsor's declaration	application document, declaration of directors, sponsor's declaration	calendar of company events, company profile, articles of inc., filing with the Commercial Register, sponsor's declaration
COSTS				
admission fees	between £ 7900 and £ 89 180 according to the capitalisation	between EUR 10 000 and EUR 2 M according to the capitalisation	EUR75/EUR 500 000 of cap, min : EUR 20 000, max : EUR 500 000	EUR 1500

Ø: no criteria	AIM	Alternext	AIM Italy	Entry Standard
COMPANIES' CHARACTERISTICS				
business continuity				
number of years	2 years	2 years	2 years	2 years
exemption	✓ (lock-in)	✓ (discretionary conditions)	✓ (lock-in)	Ø
governance criteria	due care	due care	due care "appropriate provisions" + take-over provisions,	due care, positive equity capital, internal risk management system, internal reporting and compliance system
growth potential criteria	Ø	Ø	Ø	Ø
SHARES				
securities to be admitted	Ø	equity and debt securities, warrants, investment funds, other	stocks, convertible bonds, pre-emptive rights and warrants	common and preferred stocks, corporate bonds depositary receipts
STAKEHOLDERS				
sponsor-adviser	Nominated Advisors (Nomads)	Listing Sponsor	Nominated Advisors (Nomads)	Deutsche Börse Listing Partner/co-applicant or FSE Trading Participant
minimum time period	Ø	1 year	Ø	Ø
broker	✓	if decided by Euronext	✓	✓
audit firm	✓	✓	✓	✓
regulatory information service provider	✓	Ø	✓	Ø
clearing house	Ø	LCH Clearnet	Ø	Clearstream
central depositary	Ø	Ø	Monte Titoli	Ø
shareholder services agent	Ø	Ø	Ø	Ø
underwritter	Ø	✓	Ø	Ø

Table A2: Admission criteria on First North, Jasdaq, Mothers, Tokyo Pro Market

Ø: no criteria	First North	MOTHERS	JASDAQ Standard	JASDAQ Growth	Tokyo Pro Market
LIQUIDITY					
min number of investors	sufficient number of shareholders holding shares with a value of at least 500 EUR	200	200		Ø
min free float	at least 10% of the share class	25% of listed shares, min 2000 units of tradable shares and min 500 trading units offered to public free float market cap : JPY 500M	min 1 000 trading units or 10% of listed shares, offered to public free float market cap : JPY 500 M		Ø Ø
nominal value per share	min EUR 0,5	Ø	Ø		Ø
market cap	Ø	min JPY 1M (listed shares)	JPY 5B (total cap) or profit = JPY 100M	Ø	Ø
shareholders'equity	Ø	Ø	JPY 200M	> 0	Ø
INFORMATION DISCLOSURE					
admission document ≠ approved prospectus	✓	Ø	Ø		Ø
conditions	private placement	Ø	Ø		Ø
approved prospectus	✓	Securities Statement +prospectus	Securities Registration Statement +prospectus		Specific Securities Information
conditions	public offering	public offering	public offering		public offering
audited statements	✓	✓ + an unqualified opinion of certified public accountants	✓ + an unqualified opinion of certified public accountants		✓ + an unqualified opinion of certified public accountants
accounting standards	national standards or IFRS	national standards or IFRS	national standards or IFRS		national standards, US/IFRS, other
language	english, national language	japanese	japanese		japanese and/or english
other documents	application document, declaration of directors, articles of association, certificate of incorporation, sponsor's declaration	application document, minutes of Directors and general meeting, articles of inc., declaration of inexistent ties to anti-social forces, book of regulations and rules, sponsor's declaration etc.	application document, minutes of Directors and general meeting, articles of inc., declaration of inexistent ties to anti-social forces, book of regulations and rules, sponsor's declaration etc.		application document, articles of incorporation, management organization, sponsor's declaration
COSTS					
Admission fees	EUR 9 000	JPY 2 M (listing examination fee) + JPY 1 M (initial listing fee) + (nb of shares*price*9/10000)	JPY 2 M (listing examination fee) + JPY 6 M (initial listing fee)		JPY 3 M (net of tax)

Ø: no criteria	**First North**	**MOTHERS**	**JASDAQ** **Standard**	 **Growth**	**Tokyo Pro Market**
COMPANIES' CHARACTERISTICS					
business continuity					
number of years	2 years	2 years + 1 year with Directors	qualitative examination	Ø	1 year
exemption	Ø	Ø	Ø		Ø
governance criteria	due care	soundness of corporate management, effectiveness of corporate governance and internal management system, reasonableness of the business plan, appropriateness of the information disclosure, shareholders' rights	establishment of sound corporate governance and internal management system, reliability of corporate actions, appropriateness of information disclosure, shareholders'rights		appropriate due diligence, fairly and faithfully conduct of business, appropriateness of the gouvernance and internal management system, appropriate information disclosure, no relations with anti-social forces
growth potential criteria	Ø	the last 2 years: increase of profits by 30% profits = JPY 100M and increase of sales or profit = JPY 100M and increase of sales for the 2nd year or recommendation by the underwritter	Ø	qualitative evaluation by TSE	Ø
SHARES					
securities to be admitted	equity securities, option rights, convertible debentures, other types of financial instruments	stocks, subscription warrant	stocks, subscription warrants		common stocks, classified stocks, trust beneficairy certificates
STAKEHOLDERS					
sponsor-adviser	Certified Adviser	Ø	Ø		J-adviser
minimum time period	Ø	Ø	Ø	Ø	
broker	possible	Ø	Ø		✓
audit firm	✓	✓ (listed)	✓		✓
regulatory information service provider	Ø	Ø	Ø		Ø
clearing house	Ø	Ø	Ø		Ø
central depositary	Ø	✓ (Japan Securities Depositary Center)	✓ (Japan Securities Depositary Center)		Ø
shareholder services agent	Ø	✓	✓		✓
underwritter	Ø	✓	✓		Ø

The first feature refers to the absence of minimal eligibility criteria in the AIM, except for a financial history of two years. In all other markets, there is a minimum free float and/or a minimum number of shareholders required to be admitted. When the involved firms do not meet the 2 years ongoing business requirement, the admission process on the AIM may occur through a lock-in agreement. This contract prohibits insiders from selling any shares for a maximum period of one year. The goal is to secure investors' commitment towards the firm, and to avoid the insiders benefit from an increase in the share prices after the admission, at the expense of the other shareholders. One finds the same mechanism (lock-in agreement) on the AIM Italia and on the Alternext. The absence or the low requirements for listing is counterbalanced by the presence of a dedicated intermediary in charge of supporting and supervising SMEs in their listing process. It is called Nomad on AIM, Listing Sponsor on Alternext (see below). Only Mothers and Jasdaq do not require the nomination of a sponsor.

Associated to the first point, *the second crucial feature* refers to the high level of requirements on two Japanese markets, namely the Jasdaq and Mothers, as compared with the other junior markets[10]. Mothers and Jasdaq appear as the most binding in terms of requirements on liquidity and information disclosure, while also requiring a compulsory statement regarding the audited financial statement. Relatedly, an advantage of the AIM, with its admission process delegated to Nomads, concerns the reduced time to be listed. Once the firm has been recognized suitable by the Nomad, only 10 days are required to achieve the public offer. This saving of time has to be added also to the beneficial effect of providing an information document and not a prospectus. In the other countries, as the admission process depends on the market operator the delays are longer. This delay is increased in the case of the Japanese markets (Mothers and Jasdaq). The admission costs are on average close to 10,000 Euros, except for Germany where they are lower (around 1500 Euros) and in Japan where they are highest. Two mechanisms co-exist regarding the annual fees to remain listed: it is a fixed price in UK or in Italy and the fees depend on the number of shares/capitalisation. The annual fees to remain listed are between 2800 Euros on Alternext and 3600 Euros on the Tokyo Pro Market in 2015.

Thirdly, regarding corporate governance, the Japanese markets, through the Japan Exchange Regulation, conduct an examination of the governance criteria. Such assessment is detailed in the guide on market rules, whereas markets in other countries only mention obligations of best efforts, but without providing details on the procedures to be followed in the corporate governance assessment. On Mothers and Jasdaq, the assessment of corporate governance constitutes the second step of the listing examination, and takes the form of

10 The Tokyo Pro market is different from the other markets because of the absence of liquidity requirements. Yet this market is only open to professional investors.

interviews (most often, four interviews between the market operator and the company)[11]. In all other markets, the corporate governance examination rests on the sponsors.

A fourth comment relates to the special issue, of the Tokyo Pro Market, compared to all other junior markets, including the Japanese markets. The Tokyo Pro Market (TPM), is restricted only to professional investors and does not follow the same rules as the Jasdaq and Mothers. The only requirements are the following: i) to precise before the listing the components of the governance mechanisms (e.g. the number of administrators); ii) to confirm the existence of an internal control system. Finally, the Tokyo Pro Market corporate governance rules are half-way between the continental junior stock markets (France, Germany, Nordic countries) and the AIM. Whereas the TPM seems to be close to the AIM model, the main difference is the existence of private intermediaries (Nomads) on the AIM (see later) who are responsible for all decisions, while on the TPM the market regulatory authorities continue to control that the admission requirements are fulfilled.

A fifth difference lies in prerequisites concerning the companies' growth potential. The Japanese markets are the only ones that examine the economic and financial health of the firms in order to assess the growth perspectives of the companies before the admission process.

The last issue concerns private placements. The information disclosure rules are alleviated in the European stock exchanges, when admissions are displayed in the form of private placements. This process has been implemented by the European Directive 2003/71/EC (« Directive Prospectus »)[12]. Admissions through private placements are not subjected to the delivery and dissemination of a prospectus, but they only require to produce an admission document, that does not require the regulator's approval. This is the case in exchange-regulated markets such as AIM London, AIM Italia, Alternext and First North. Depending on the market examined, drafting and submitting this document falls under the responsibility of the company and/or the sponsor (see the next section)[13]. This listing process involves a smaller number of investors and usually professional ones. On Mothers and Jasdaq, only public offering with approved prospectus are allowed. The recent creation of the Tokyo Pro Market targeting "specified or professional investors" and 'certain' non-residents[14] constitutes a way to introduce private placements in the Japanese stock exchange. The 2008 amendments to the Financial

11 The admission follows a two-steps process. Firstly, firms need to meet liquidity requirements and business continuity criteria, and secondly their governance can be examined by the *Japan Exchange Regulation.*

12 The European directives on the single European capital market aim at boosting the cross-border investments in Europe.

13 According to Vismara et al. (2012), in 2012, out of a total of 1,642 IPOs on the AIM, 1,572 were placings, with no shares offered to the public at large.

14 Specified investors are the following : institutional investors, the Bank of Japan, listed companies and companies with a capital of at least 500 million yen. "Deemed specified investors" gathers individuals with financial assets or wealth assets of at least 300 million yen and stock company not belonging to the first category.

Instruments and Exchange Act allowed indeed the creation of such markets not dedicated to "general investors"[15].

3.3.2 Information disclosure rules

Once listed, firms have to fulfill some obligations, regarding especially information disclosure (Tables B1 and B2). The main differences are located between the Japanese market and the other markets. Jasdaq and Mothers require generating quarterly reports, as on the main list of the TSE. The other junior markets demand yearly and half yearly report. In addition, all information relating to the firm's operations, the financial health, the firm's performances and notable events should be spread to the public. In order to dispel the image of an opaque market, the AIM's regulatory authorities have added in the *Ongoing Requirements* (table B), that "all information that may alter the shares prices should be publicly disseminated". As only private intermediaries (the Nomads) are responsible for the admission and for maintaining listing, this ongoing requirements regarding information disclosure may be seen as a signal in order to increase the investors' trust toward the AIM-listed firms.

Listed firms also have to show that they have implemented sufficient procedures and means to fulfil their obligations. These « means obligations » are also linked to the corporate governance practices. On the majority of the junior stock exchanges, corporate governance rules are compulsory and supervised by the market operator. This is not the case on the AIM, where they are not compulsory, but firms are fostered by their Nomad to respect these rules, included in the Quoted Companies Alliance Guidelines (QCA). In case of rules violation, the market operator may decide on the type of sanction, starting from a warning letter, through financial penalties until the withdrawal of the listing.

15 See Tokyo Pro Market Rulebook, p. 4, 2015.

Table B1: Ongoing requirements on AIM, Alternext, AIM Italy, Entry Standard

Ø: no criteria	AIM	Alternext	AIM Italy	Entry Standard
INFORMATION DISCLOSURE				
price-sensitive information	✓	✓	✓	✓
periodic reports of financial statements	yearly and half-yearly reports	yearly and half-yearly reports	yearly and half-yearly reports	yearly and half-yearly reports, financial calendar
information concerning substantial events:				
susbtantial transactions	✓	✓	✓	Ø
related-party transactions	✓	✓	✓	Ø
reverse takeovers	✓	Ø	✓	Ø
changes of business tied to a strategy of cash shell	✓	Ø	Ø	Ø
general meetings	✓	✓	Ø	Ø
corporate actions (dividend, stock split etc.)	✓	✓	✓	✓
replacement of directors or managers	✓	Ø	✓	Ø
replacement of the sponsor or the broker	✓	✓	✓	Ø
changes in major shareholders	✓	Ø	✓	Ø
forecast adjustments	✓	Ø	✓	✓
incentive programs	Ø	Ø	Ø	Ø
changes of business	✓	Ø	✓	✓
takeover defense	Ø	Ø	Ø	Ø
website	✓	✓	✓	✓
information availability	1 year	2 years	1 year	Ø
language	english	national language or english	italian or english	german or english
due care	✓	✓	✓	✓
COSTS				
annual fees (charged by the stock exchange)	£ 6250	between EUR 2 940 and EUR 24 150 according to the number of equity securities	EUR 6 300	EUR 5 000 (1 250 quaterly)
SANCTIONS				
type	warning notice, fine, censure, removal of securities from trading, public disclosure of breaches and sanctions	warning notice, fine, censure, removal of securities from trading, public disclosure of breaches and sanctions, transfer of securities to a separate segment	warning notice, fine, removal of securities from trading,	observation status, fine, removal of securities from trading,

Table B2: Ongoing requirements on First North, Mothers, Jasdaq, Tokyo Pro Market

Ø: no criteria, n/a: no information available	Nasdaq OMX-First North	MOTHERS	JASDAQ	Tokyo Pro Market
INFORMATION DISCLOSURE				
price-sensitive information	✓	Ø	Ø	Ø
periodic reports of financial statements	yearly and half-yearly reports, main annual figures	yearly and quaterly reports, performance prospectus, securities report	yearly and quaterly reports, performance forecast, securities report, medium-term management plans (Growth segment)	yearly reports, quaterly reports (not mandatory)
information concerning substantial events				
susbtantial transactions	✓	n/a	n/a	✓
related-party transactions	✓	✓	✓	✓
reverse takeovers	Ø	n/a	n/a	Ø
changes of business tied to a strategy of cash shell	Ø	n/a	n/a	Ø
general meetings	✓	n/a	n/a	✓
corporate actions (dividend, stock split etc.)	✓	n/a	n/a	Ø
replacement of directors or managers	✓	n/a	n/a	✓
replacement of the sponsor or the broker	✓	n/a	n/a	✓
changes in major shareholders	Ø	n/a	n/a	✓
forecast adjustments	✓	n/a	n/a	✓
incentive programs	✓	n/a	n/a	✓
changes of business	Ø	n/a	n/a	✓
takeover defense	✓	✓	✓	Ø
website	✓	✓	✓	✓
information availability	3 years	Ø	Ø	Ø
language	national language or english, english if cap> EUR 150 M or if 50% of shares are held by foreign investors	n/a	n/a	japanese or english
due care	✓	✓	✓	✓
COSTS				
annual fees (charged by the stock exchange)	between EUR 8 000 and EUR 42 800 according to the market capitalisation	between JPY 480 000 and JPY 4,08 M according to the market capitalisation	JPY 1 M if cap < or = JPY 100 000 M JPY 1,2 M if cap > JPY 100 000 M	between JPY 480 000 and JPY 4, 08 M according to the market capitalisation
SANCTIONS				
type	reprimand, fine, removal of securities from trading,	Ø	Ø	Ø

3.3.3 The advisor/sponsor

As a general rule, junior stock markets are characterized by the presence of dedicated intermediaries, called advisors or sponsors. Although these actors can be at a first glance designed as « intermediaries », the functions performed and the power of these actors varies according to the stock exchange involved. The basic role played by sponsors on the junior stock markets is to support SMEs in their efforts to access public equity markets. SMEs, indeed, do not have experience with the formal and informal constraints and rules that govern the functioning of stock exchanges. Moreover, SMEs are often penalised by asymmetric information issues towards external providers of finance, even more if their track record is short. Hence intermediaries may also promote the visibility of the firms they advice, in such a way as to create trust between issuers and potential investors.

Comparing the five junior markets under scrutiny (Tables C1 and C2), the Nominated Adviser (Nomad) on the AIM is the intermediary who has by far the widest and more incisive functions. The Nomad is a private intermediary (bank, investment firm) entrusted by the LSE, that needs to be appointed by every company seeking admission to AIM. "A Nomad must be a legal entity with at least two recent years of corporate finance practice, having at least four "qualified" executives and at least three relevant transactions for the same two years" (AIM Rules for Nominated Advisers). Nomads act as gatekeepers, advisers and, ultimately, regulators of AIM-listed companies (Mendoza, 2008). They have to assess whether a company seeking admission is suitable for quotation, and later to provide assistance in order to ensure that the companies respect their continuing obligations[16]. Nomads have to rigorously examine the applicant's business and must understand in detail the applicants' activities: business plan, managerial structure, financial and legal status, and so forth. AIM recommends the Nomads to visit the applicant's site of operation and to employ external experts to analyze the firm's business (Mendoza, 2008, p. 301). Nomads in theory should play an important role in corporate governance decisions, by persuading their clients to satisfy certain standards[17], since the AIM rules do not mandate the adoption of specific corporate governance structures (cf Rousseau, 2007; AIM rules for companies, 2015). Unlike LSE main market companies, AIM companies are not required to comply with the UK Corporate Governance Code[18]. Consequently Nomads possess a discretionary power on the market's functioning, that is, *à priori*, compensated by the investors' right to prosecute Nomads if they are misled.

16 "The Nomad exercises the delegated regulatory responsibility that has been given to them by the Exchange", Rules for Nominated Advisers, AIM.

17 The corporate governance standards for SMEs are mentioned in the *Quoted Companies Alliance Guidelines* and are largely drawn from the code dedicated to the main companies.

18 The « comply or complain principle » applies to main market companies.

Table C1: Sponsors' functions on AIM, Alternext, AIM Italy

Ø: no criteria	AIM	Alternext	AIM Italy
FUNCTIONS, DUTIES, LIABILITIES			
liability for decision	✓	Ø	Ø
certification of the company's appropriateness	✓	✓	✓
principles for companies' examination	visits to companies and external experts, oversight of the due diligence process, of the preparation of the admission document and of the internal control system in companies, examination of Directors and governance practices	due diligence investigations, satisfaction about the procedures and internal control system in companies	visits to companies and external experts, oversight of the due diligence process, of the preparation of the admission document and of the internal control system in companies
advices and guidance	✓	✓	✓
companies' monitoring	✓	✓	✓
principles	regular contacts with the company, prior review of notifications made by companies, monitored trading, advices on any change relative to the board of directors	Ø	regular contacts with the company, advices on disclosure requirements and on new rules
OBLIGATIONS TO THE STOCK EXCHANGE			
ongoing respect of qualification criteria	✓	Ø	✓
availability during trading hours	✓	✓	Ø
information about the breaches to rules by companies	✓	✓	✓
information if any change of sponsor	✓	✓	✓
due skill and care	✓	Ø	✓
internal procedures	✓	Ø	✓
adequacy of staff	✓	Ø	✓
appropriate records	✓	✓	✓
INDEPENDENCE CRITERIA			
sponsor≠company	✓	✓	✓
exemptions with appropriate Chinese walls :			
significant shareholders	✓	✓	✓
sponsor only for one stakeholder in a transaction	✓	Ø	✓
sponsor=audit firm	✓	✓	✓
sponsor=bank	Ø	Ø	✓
sponsor=broker	✓	Ø	Ø
COSTS			
annual fees	between £ 14 000 and £ 55 000 according to the number of followed companies	Ø	between EUR 10 000 and EUR 20 000 according to the number of followed companies
SANCTIONS			
oversight by the Exchange	✓	✓	✓
type	warning notice, fine, censure, removal of sponsor status, public disclosure of breaches and sanctions	warning notice, ban from arranging new admissions, removal of sponsor status	warning notice, fine, removal of sponsor status
appeals	✓	Ø	✓

Table C2: Sponsors' functions on Entry Standard, First North, Tokyo Pro Market

Ø: no criteria	Entry Standard	Nasdaq OMX-First North	Tokyo Pro Market
FUNCTIONS, DUTIES, LIABILITIES			
liability for decision	Ø	Ø	Ø
certification of the company's appropriateness	✓ (co-applicant)	✓	✓
principles for companies' examination	Ø	Ø	Ø
advices and guidance	✓ (listing partner)	✓	✓
companies' monitoring	Ø	✓	✓
principles	Ø	Ø	Ø
OBLIGATIONS TO THE STOCK EXCHANGE			
ongoing respect of qualification criteria	Ø	✓	✓
availability during trading hours	Ø	✓	✓
information about the breaches to rules by companie	Ø	✓	✓
information if any change of sponsor	Ø	✓	✓
due skill and care	Ø	Ø	
internal procedures	Ø	✓	
adequacy of staff	Ø	Ø	✓
appropriate records	Ø	✓	✓
INDEPENDENCE CRITERIA			
sponsor≠company	Ø	✓	✓
exemptions with appropriate Chinese walls :			
significant shareholders	Ø	✓	Ø
sponsor only for one stakeholder in a transaction	Ø	Ø	✓
sponsor=audit firm	Ø	Ø	✓
sponsor=bank	Ø	Ø	Ø
sponsor=broker	Ø	Ø	✓
COSTS			
annual fees	EUR 10 000 EUR (+tax)	EUR 5 400	JPY 200 000 per each followed companies
SANCTIONS			
oversight by the Exchange	Ø	✓	✓
type	Ø	reprimand, fine, removal of sponsor status	Ø
appeals	Ø	Ø	Ø

In other junior stock markets as well, the listing sponsor helps the firm during the drafting of the information document or the admission prospectus, and provides advice regarding legal and regulatory provisions. If the firm does not possess the criteria required by the market operator, the listing sponsor may propose to the firm some organizational and legal arrangements in order to overcome the initial difficulties. In other words, the listing sponsors exercise an influence on the definition of the firm profiles that should be listed[19]. In addition on Alternext, liability arises and is the object of a specific insurance (professional civil liability)[20]. The intermediary (listing sponsor/adviser/Nomad) is accountable to the market operator for the collection and verification of information, and also regarding the compliance with a listed firm's obligations (Tables D1 and D2). In some markets (AIM London, AIM Italia, Japanese market) the listing sponsor may also operate as a broker for the supervised firm.

The main difference between AIM and other junior markets is that except on the AIM, the final decision for the admission, or for maintaining listing, belongs to the stock exchange operator[21]. A firm may fulfill the admission requirements and not be listed by the market operator. The market operator may refuse the admission if there are doubts on the veracity of information, or if the stock market reputation is in danger (see Alternext, AIM Italia). In this respect, the AIM differs intrinsically from the other junior markets, as the final decision on admissions in entrusted to Nomads.

19 « The market, through the Nomads' role, define the ideal characteristics of the firms that should be listed » AIM Italia Website.

20 In general, this type of insurance aims at compensating the victims for the damages caused by the action of an individual. Both the stock exchange and the investor can theoretically benefit from compensation.

21 Nevertheless, the LSE has the opportunity to delay a firm's listing if the LSE's operator becomes aware of a fact (« where matters are brought to the attention of the exchange »), and and/or refuse the listing.

Table D1: Sponsors' admission criteria on AIM, Alternext, AIM Italy

Ø: no criteria	AIM	Alternext	AIM Italy
QUALIFICATION CRITERIA			
legal status	firm	company or other entity, unregulated listing sponsor allowed (neither an investment firm nor credit institution under the MIFID directive)	bank, UE investment company, a company affiliated to an audit firm with a board of directors and a supervisory body + audited annual accounts
years experience in corporate finance	2	2	2
number of transactions (last 2 years)	3	>0	>0
internal procedures	✓	Ø	✓
indemnity insurance	Ø	✓	Ø
minimum number of qualified employees	4 qualified executives	2	"adequate" key executives
number of qualified employees per issuer	2 (and at least 1 qualified executive)	Ø	1
criteria for qualified employees	3 relevant transactions in the last 3 years or an qualified executive with 3 relevant transactions within the last 5 years or a qualified executive with 1 relevant transaction in the last 5 years and involved in the provision of corporate finance advices and advices relative to AIM	Ø	Ø
ADMISSION PROCESS			
advisor's accreditation by the Exchange	✓	✓	✓
other requirements	application form, interviews	application form	application form, interviews
COSTS			
admission fees	£ 21000	Ø	EUR 10 000
number (january 2016)	37	65 (Paris), 32 (Brussels), 15 (Lisbon)	15

note: a relevant transaction implies the redaction of an admission document or a prospectus or an offer document.

Table D2: Sponsors' admission criteria on Entry Standard, First North, Tokyo Pro Market

Ø: no criteria	Entry Standard	Nasdaq OMX-First North	Tokyo Pro Market
Qualification criteria			
legal status	bank, a financial services institution or any company operating under the German Banking Act, min liable equity value = EUR 730 000	legal person	corporate entity
years experience in corporate finance	Ø	2	2
number of transactions (last 2 years)	Ø	1	Ø
internal procedures	Ø	✓	✓
indemnity insurance	Ø	Ø	Ø
other criteria			knowledge of the Japanese market, sound financial conditions, appropriateness of the corporate governance, ability to operate in a principle-based system, no ties to anti-social forces
minimum number of qualified employees	Ø	2 contact persons	3 qualified supervisors
number of qualified employees per issuer	Ø	Ø	1 qualified supervisor
criteria for qualified employees	Ø	2 years experience in corporate finance advisory services + 1 relevant transaction in the last 2 years + participation in seminars and training sessions organized by the Exchange	3 years experience in corporate finance advisory services in the last 5 years before application, knowledge of the Japanese market and IPO, involvement and ability to supervise, compliance with the supervisory system, no ties to anti-social forces
ADMISSION PROCESS			
advisor's accreditation by the Exchange	✓	✓	✓
other requirements	3 letters of recommendation from listed companies on EU regulated or recognized markets and 1 letter of recommendation from a listing partner	application form, annual report articles of incorporation, CV of designated contacts, internal trading and internal control rules	Ø
COSTS			
admission fees	EUR 10 000 (+ tax)	0 for Nasdaq members EUR 5 400 otherwise	JPY 1 M (excluding tax)
number (january 2016)	64	53	8

A financial intermediary is authorised to act as a listing sponsor under under the responsibility of the stock exchange operator. Common criteria to become a listing sponsor include: legal status, years of experience in corporate finance (in raising funds, in mergers and acquisitions' operations), number of deals, qualification of the staff. Sponsors are typically required to be independent from the firm they advise: they cannot be majority shareholders, administrators or employees in order to avoid conflicts of interest. Nevertheless, most of the stock exchanges (AIM, AIM Italia, Alternext, First North) authorize shareholder holdings below 10%, under relevant procedures ("Chinese wall"). These criteria aim to certify the quality of the service provided by the listing sponsor.

Regarding the role of the listing sponsors, three markets depart from the model outlined above: Entry Standard, Jasdaq, and Mothers.

The originality of Entry Standard lies in the fact that two actors share the role performed by the Nomad on the AIM: the *Deutsche Börse Listing Partner* and the *Frankfurt Stock Exchange Trading Participant* or co-applicant. The goal of the first actor is to support the firm during the admission process, and to make the firm benefit from its own reputation and expertise. More precisely, the *Deutsche Börse Listing Partner* assesses the ongoing conditions of the stock market (favorable or negative), examines the firm's potential, establishes contacts, and formulates a strategy for the issuance of shares appropriate to the firm's business profile. This actor also supports and advises the firm regarding information disclosure. The Listing Partner is usually a bank or a large law/accounting firm. In order to become a Listing Partner, a firm has to collect three letters of reference from listed firms or issuers of corporate bonds on a European regulated market and a letter from another Listing Partner. If we consider the three functions devoted to Nomads on AIM, that is advisor, regulator and gatekeeper (Mendoza, 2008), the German listing partner may be mainly consider as an adviser.

The second actor can be rather be seen as a gatekeeper. *The Frankfurt Stock Exchange Trading Participant* submits the application to the Frankfurt Stock Exchange. He should control compliance with transparency requirements and certifies that the firm has the due characteristics for being listed. He takes responsibility for the accuracy of the information provided in the documents. This procedure reminds, at least partly, the bicephalous governance of German firms. Historically, German firms are characterized by an executive board and by a surpervisory board including representative of employees (known also under the name of "co-determination").

Another specificity is found in two of the Japanese markets under scrutiny. There are no dedicated intermediaries on the Japanese junior stock markets (Mothers and Jasdaq). One reason may be found in the implementation of a large number of formal requirements for listing, that in some respects replace the role of the intermediary. The underwriter, as on the main market, should accompany the firm in the process of an IPO. The lead underwriter must write a recommendation letter in order to give some evidence about the growth potential of the firm. Nevertheless, the Japan Exchange Regulation, which is a subsidiary of the TSE, is the only responsible of the egilibility of the firm to become public. In order to decide, the Japan Exchange Regulation organizes interviews and firms' visits. This process tends to lengthen the admission process in comparison with other junior stock markets.

Lastly, being quoted on a junior stock exchange may be seen as a springboard to the main markets. For instance, a faster admission process from Alternext to Euronext main list has been created. The First North Premier exhibit an explicit goal: to prepare firms to access the first segment. Yet, departures from the initial expectations (to feed the main list) may be observed. The AIM has been initially thought as feeder for the main list (Posner, 2009), yet until now more companies have transferred from the main list to the AIM, than the reverse.

4. INTERPRETING THE RESULTS

In this section we will try to link the main results from the above institutional comparison of junior stock markets with the reference theoretical frameworks, namely the evolutionary taxonomy of financial systems, the VoC literature and the institutional hybridisation approach. We raise the following questions. Does the AIM model fully reflect the conceptual Anglo-Saxon market-based financial system? Do the Japanese and German junior market architectures support the hybridisation view, and to what extent do they reflect the traditional features of their financial systems?

4.1 First assessments

We can summarise the main lessons from our institutional comparison through a detailed interpretation. While some "new" junior stock markets were inspired by the principle-based regulatory approach adopted by the AIM model, centered on a key intermediary such as the adviser/sponsor, their market architecture differs from the AIM, and some national specificities persist. On the one hand, the AIM offers the greatest flexibility and the highest speed of admission for issuers. The Japanese markets appear as the farthest from the AIM model, because of the absence of a dedicated private intermediary (sponsor/adviser). In Japan, the stock exchange operator remains the key decision-maker regarding both the admission process and the operational rules to be followed after listing. Accordingly, the Japanese procedures (examination and assessment) imply longer lags for a firm to be listed and at the same time a heavier administrative burden. The salient feature of the Japanese junior stock market organisation is the high centralisation of power in the hands of the market operator, which stands at the opposite of the AIM, where most oversight and decisional power is delegated to the Nomads. It is also worth noting that only the Japanese markets mandate a formal procedure to assess the firm growth potentials prior to listing.

In Europe, the German Entry Standard exhibits the lowest level of similarity with the AIM model. The Entry Standard is featured both by a strengthened regulation and centralised decision’s mechanisms (close to the Japanese markets). Another peculiar feature concerns the dual intermediation organization around two actors, the Listing Partner and the co-applicant. Since 2012, the Deustche Böerse has strengthened the admissions requirements on the Entry Standard. More precisely, nowadays all issuers seeking admission need to produce a prospectus that should be approved by the market operator. The French, the Italian and the Nordic markets seem to be situated between the German architecture and the AIM. At a first glance, the previous conclusions seem in line with the literature on the VoC (cited in Section 2): with varying degrees, the European and Japanese junior stock markets epitomise how the AIM model has been adapted to the specificities of the local VoCs. We may investigate if this illustrates an hybridisation phenomenon: “the persistence of some initial institutional forms while other change significantly” (Amable, 2016). Yet, before we propose to consider what are the underlying principles enshrined by the AIM model.

4.2 Lessons from the AIM model

From the perspective of the standard financial theory, the creation of the AIM may be viewed as a new financial device that feeds the Anglo-Saxon financial system model (market-based). While facilitating small and medium firms to access market financing, the AIM allows SMEs to benefit from the main theoretical property of market-based system: i.e. an efficient allocation of financial resources (see the earlier works of McKinnon, 1973, Shaw, 1973, and the literature on the relationships between finance and growth such as King and Levine, 1993). According to Wurgler (2000), financial markets improve the allocation of capital, and countries that "impound more specific-firm information into individual stock prices exhibit a better allocation of capital" (p. 3). Nevertheless, one may observe on the AIM some departures from this conceptual framework that more or less implicitly refers to a high level of information disclosure and investor's protection. Indeed, according to economic approaches such as the Law and Finance theory (Porta et al., 1997), the legal protection of suppliers of finance is a key determinant of the willingness of investors to finance firms. In other words, the more a stock market wants to attract investors and reach informational and allocational efficiency, the more it has to disclose information about the listed firms and offer a high investor protection, through strict corporate governance rules. It is at this level that the AIM's market models deviates from this theoretical support, because unlike the LSE main list, corporate governance rules are not compulsory, information requirements are alleviated, and all information and guarantees about the future listed firm are collected and spread by private intermediaries, the Nomads .

We interpret this result in the following ways. Firstly, the LSE adapts the regulation of its market lists, depending on its objectives: a high capitalization and liquidity level for the main list, while a high number of listed firms is preferred for the AIM. LSE also accommodates the market rules to firms' specificities such as size. As a result, stock market regulatory authorities may i) create and support market architectures that departs from strict standard financial principles, such as an homogeneous transparency and investors protection, and ii) support two different discourses, toward an "ideal" corporate governance mechanism - that supports the main list - and a more flexible mechanism – that supports the AIM[22].

Secondly, recent empirical studies on AIM tend to show that this market is characterized by low levels of initial capital raised, low liquidity, low trading volume and the lack of dividends payments (for synthesis, see Revest and Sapio, 2014; Hornok, 2014). These features, and especially the low level of liquididy plus a weak transparency, run counter standard financial principles. For instance according to Wurgler (2000), the most liquid financial markets in the world are also the ones that allocate capital most efficiently. Paradoxically, the AIM functions since 1995, has attracted an increasing number of firms until the last financial crisis, and has been a model for other stock exchanges. In addition, an empirical study dealing with firms' real performances tend to show that the selection

22 Not only the LSE's regulatory authority has been at the AIM's origin, but it has also given a genuine support to this list, especially when faced with European financial regulatory reforms. See Hautcoeur et al. (2010), Lenglet and Riva (2013) regarding criticisms against European MIF regulation.

done by the Nomads results in higher growth in operating revenues and total assets than comparable non-listed companies; they also seem to experiment a higher employee growth (Revest and Sapio, 2013a)[23]. This means that the lack of information disclosure or of centralized supervision does not impede the functioning of a financial market. In other words, financial markets may perform properly without a high level of transparency and formal (law) investor protection. Some historical works tend to exhibit similar conclusion. For instance, Franks et al. (2009) show that during the first half of the 20th century, the UK operated a large and dynamic stock market without legal investor protection, and with already a sizeable number of acquisitions (see also Musacchio and Turner, 2013, for a review).

4.3 The Japanese and the German junior markets: a new path to more market-based institutions between adaptation and resistance

The financial systems in CMEs continue to be bank-led, even if markets have reached higher importance over the years. The introduction of junior stock markets in such countries is consequently a process of adaptation within the broader trend of financialisation. This process has been completely different from one country to another and it is still ongoing as illustrated by the recent changes occurred in the German and the Japanese markets. Interestingly, while the Japanese junior markets have adopted a more centrally coordinated institutional setting through Mothers and Jasdaq, the creation in 2009 of the Tokyo Pro Market fits more with the Anglo-Saxon market design, indicating a more pronounced path toward market-based mechanisms. The redesigning of the junior market in Germany in 2012 and in 2017 illustrates instead the difficulty to find a good trade-off between coordination and market mechanisms.

In Japan, centralised admission processes, strong requirements regarding information disclosure and corporate governance practices, as well as the absence of listing sponsors reveal the will to select companies in a less discretionary way than in AIM. Nonetheless, the implementation of information disclosure and investor protection criteria witnesses the desire of policy makers to reinforce the Japanese financial market and to attract domestic and foreign investors. As a result, a hybrid model has emerged, characterized by the coexistence between coordination mechanisms and market-based funding. The recent creation of the Tokyo Pro Market aims at providing new opportunities

23 Nevertheless, the productivity's growth rate is higher for UK private firms than for AIM listed firms.

both for companies in the Asian region and for professional investors, and more generally to pursue the development of the Japanese financial market[24]. Explicitly following the AIM market model, its creation was allowed by a change of law (the Financial instruments and Exchange Acts), illustrating a move towards more market-based mechanisms supported by the State authority and the desire to enlarge the coverage of financial markets to risky companies[25]. The profile of companies thus explains why the market is dedicated to professional or specified investors. Nonetheless, its design close to the AIM's, raises thus the question of the success of its adaptation in Japan, and increase the level of institutional adaptation complexity. Finally, we are faced with two markets, Jasdaq and Mothers, that illustrates an hybridisation's phenomenon, and beside a market, TPM, which has retained the main organizational feature of the AIM: all these markets coexist in the same financial system.

The case of Germany highlights another property of the adaptation process: the fact that it constitutes a long-run and a "trial and error" process. From our point of view, the closure of the Neuer Markt in 2003 and the changes in the regulation of Entry Standard in 2012 and in 2017 can be partly viewed as an illustration of the "trial and error" process. Like the Neuer Markt before, the Entry Standard has suffered from scandals in 2012, motivating the adoption of a stricter regulation through the obligation for a company to have an approved prospectus[26].

In March 2017, the Entry Standard was replaced by a new segment called Scale targeting SMEs and companies belonging to the Industry 4.0 and digitization sectors. Especially, it aims at reinforcing the listing requirements (notably, minimum performance levels to identify more precisely which business models are sustainable) and the ongoing obligations compared to the ones characterizing Entry Standard to enhance the equity access for SMEs[27]. More importantly, one of the main properties of the German junior market design, the dual organization of the sponsor function, persists: the assessment of

24 See the Japan Exchange Groupe website.

25 "Tokyo Pro Market adopts the J-adviser system based on the Nominated Advisers (Nomads) system of AIM market established by London Stock Exchange", p 3, Tokyo Pro Market Rulebook, 2015; "Tokyo Pro Market is positioned as a listing venue for domestic and foreign companies that require risk capital", p 7, Tokyo Pro Market Rulebook, 2015.

26 Clifford Hance, "Reorganisation of market segmentation on the Frankfurt Stock Exchange", Newsletter, February 2012.

27 Deutsche Böerse AG, « Scale, the new listing segment », FAQ, 13.05.2017. A company has to satisfy at least 3 of the following performance indicators: a turnover equal or superior to 10 million euro, positive earnings, a positive equity capital, at least 20 employees, an accumulated equity capital of at least 5 million euro. Also, a market capitalisation equal or above 30 million euros, a free float of 20% or at least 20 million shares and 2 years of history are required.

firms' suitability is under the responsibility of an "applying" Deutsche Böerse Capital Market Partner (gatekeeper function according to Mendoza, 2008 or co-applicant in Entry Standard) while the ongoing services and advices are provided by a "supporting" Deutsche Böerse Capital Market Partner (adviser function). But currently a financial institution can perform the two functions[28]. Also, companies can again be listed without approved prospectus.

To summarize, the German stock exchange has introduced more quantitative criteria for listing in order to address manipulation issues and other financial scandals while keeping (at least theoretically) the dual organization of the sponsor. Thus, listing on the new segment relies less on the discretionary evaluation of the company by the sponsor than in AIM. Finally, the changes in regulation that have occurred the last 5 years show the difficulties encountered by Germany to adopt the UK junior market model[29]. Scandals have deeply reduced the trust and the attractiveness of stock markets for investors, especially for German households. Maintaining a path to more market-based funding has required rethinking institutions.

5. Conclusion

The goal of this article was to understand if the design of junior stock markets established in credit-based systems has been guided by the pure imitation of the original AIM model, by a path dependent adaptation to the specificities of the local financial context, or by a hybridisation process resulting in original institutional configurations.

To this end, we have performed a cross-country comparison among junior stock markets localised in different varieties of capitalism, namely liberalised market economies (the UK), coordinated market economies (Germany, Japan) and countries that are considered to be close to CMEs (France, Sweden, Italy). Junior market architectures have been compared in terms of the listing requirements, the regulatory framework, and the role of the listing sponsors. The AIM, created by the LSE in 1995, has been taken as the reference point in the comparison, since it is located in the European country which is closest to the idealised LME, and its survival after the burst of the Internet bubble has spawned imitations of its model, such as Alternext, OMX First North and Entry Standard. The LSE itself has engaged in replicating the AIM model abroad (AIM Italy, Tokyo AIM).

28 In the new General Terms and Conditions of Deutsche Böerse AG, no part refers to the independence of both functions.

29 Scandals have in the 1990s already altered the Neuer Market (a junior market shut down after the Internet bubble crash). See Burghof and Hunger (2004).

Our analysis sheds light on the hybridisation process determined by the set up of junior markets in the different countries under study. Quite expectedly, Japan and to a lesser extent Germany show the widest difference with the AIM's model, while France, Sweden, and Italy lie somewhere in between. The UK financial system represents an archetype of a market-based finance and LMEs, that should be governed overwhelmingly by market selection (Dosi et al., 2016). While AIM's reliance on principles-based regulation through Nomads is in line with the decentralised nature of LMEs and market-based financial systems, their wide discretionary power is rather consistent with the description of credit-based systems as allocating finance through discretionary means (see Dosi et al. 2016). This also applies to admission routes, such as through private placements, which are very diffused on the AIM and that by definition rely on insider networks of relationships rather than on transparent market transactions.

Conversely, markets in CMEs tend to mandate more general and thus "impersonal" admission rules, while networks of relationships have been historically important. Notably, the Japanese markets (Mothers and Jasdaq) are the only ones mandating a formal assessment of the real performance of the prospective issuers prior to admission, as well as strict rules on corporate governance. Though, the higher centralisation of admission processes and regulatory oversight in Germany and Japan underlines a continuity in the structure of financial relationships, which in credit-based CMEs are typically more centralised and institutionalised. Accordingly, the regulatory style in junior markets in those countries is closer to the rules-based style, departing from the AIM model. The German market design has been recently reformed. These results highlight the existence of institutional path dependencies, but also illustrate the heterogeneous responses of countries within the CME category, leading to different hybrid institutional arrangements for the market provision of equity capital to SMEs.

A route to understand the difficulties encountered by Germany or by the Japanese fragmented system (that includes 3 junior markets) relates to the issue of rules and coordination. When a financial system moves (or attempts to move) from a CMEs to a LMEs archetype, it should shift, in theory, toward less coordination mechanisms, yet initially it should generate the opposite movement. Gounded on a Polanyan view, considering markets rather as "organization of exchanges", or "instituted process of exchange" (Harvey, 2007), we argue that even for implementing a market institution, one needs, at least at the beginning, to rest on rules and accrued coordination mechanisms. Consequently, the political failure to implement increasingly market-based mechanisms may be related to a lack of rules and coordination devices.

Lastly, the creation and expansion of junior stock markets may be viewed as an illustration of the financialization of the firms, including notably the small ones. The way this process occurs and its intensity, differ according to the initial financial system and also to the type of junior markets designed. In credit-based countries, the junior markets stimulate financialization through the arrival of foreign and institutional investors, and through the emergence of a market for corporate control. On the AIM, already located in a market-based system, finance expansion exhibits a different form. The delegation of market regulatory responsibilities to private intermediaries combined with the importance of networks of relationships, and with a large number of private placements, pushes the AIM's functioning increasingly toward private equity financing principles. Nomads, as venture capitalist, assess the value of the firm, search for investors, provide advice to the firm – in theory - and at the end may promote its acquisition or merger by another firm. Consequently, if the AIM displays the characteristics of a traditional stock market with public offering, the way it operates finally brings it closer to the private equity financing mechanism, and contributes to blur the dividing line between traditional market based financing and private equity financing.

For the future, and related to the financialization issue, a stimulating research avenue would be to explore to which extent and how, concretely, the Maximising Shareholders Value principle is followed in these different markets. The MSV could rely on different corporate governance models, but all turned toward shareholders and away from stakeholders interests. In the case of continental Europe and Japan, the MSV would be supported *à priori* by standard principles, such as ownership control separation, transparency, and formal investors protection; while in the UK, the MSV would reckon on a reputational mechanism, on closed relationships between listed firms, Nomads and investors. Another research direction would be to shed light evidence of the varying degrees of firms short termist behaviours on junior stock markets, that would constitute another proof of the on-going financialization process across varieties of capitalism. Current debates compare patient capital, considered usually as a feature of CMEs, versus short termism - associated to LMEs. Financing industrial growth and supporting innovation require patient capital and a long-term perspective (Mazzucato, 2013; Mazzucato and Wray, 2015).

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Appendix 1: List of stock exchanges guidelines used for the analysis

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