

**The role of proximities and geographic interactions
in shaping global financial integration.**

**An analysis of cross-listing flows
& spatial configurations of stock markets
in the early XXIst century.**

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Abstract:

The assessment of the attractiveness of both stock exchanges and their financial centres has become a crucial issue in the competitive context of financial globalization. Thus, this empirical and geographical contribution attempts to provide a new component to the field of studies related to financial systems attractiveness, by focusing on their gravitational strength and their spatial configurations. From this starting point, cross-listings ties and financial interactions are used as relational benchmarks. And they highlight the role of proximities and geographic interactions in shaping global financial integration.

First, the study deals with the scope of the issuers' pool: does this gravitational force concern regional, macro-regional or global scale? Also at stake is the morphology of the attractiveness area. These spatial configurations generated by the cross-listings ties might be explained by various proximities, differently identified by the previous literature. Thus, the analysis reasserts the proximities and familiarities that assemble issuers and their listing place(s) together. But as those affinities do not have the same influence with one another, it is worth studying their combination, in order to point out which components affect the most each of the seven attractiveness-profiles of markets. Besides, this typology based on a Hierarchical Agglomerative Cluster analysis allows us to discriminate the gravitational strength of the 67 stock exchanges of our sample. Furthermore, the observation of those combinations determines for which stock-markets proximities really matter and why.

1. Introduction

Within the context of globalization, the continuous liberalization of capital flows and the successive technological progress of ICT have lowered the frontiers between financial markets. Issuer companies might theoretically access any foreign stock market more easily and thereby mobilize a widened pool of investors. Many authors unhesitatingly use the expression 'the global marketplace' to characterize this set of capital markets as a whole (Clark, Wójcik, 2007). However, observing cross-listings flows through a geographical approach enables us to question the 'global' geographic configuration of Stock Exchange activity; at least as far as the equity markets and their pool of issuers are concerned.

Indeed, this so-called 'global marketplace' remains actually shared out among a few distinct markets, the portion of which is partly specified thanks to their respective attractiveness on issuers, Investment Services Providers or investors. This attractiveness might be analysed through proxy variables, such as the financial ties and flows that are inferred by the double location of market operators and corporate issuers. Such listings relationships have already been tackled by the literature dealing with the

choice of issuers concerning their overseas listings (Pagano, Roell, Zechner, 2002, Sarkissian, Schill, 2004), or with the investor behaviours as well (Portes, Rey, 2000). But instead of focusing on the listing decision of issuers or investors choices (i.e. centrifugal logic as far as geographical perception is concerned: all the flows diverge from the place where issuers are located), I would rather concentrate on the spatial attractiveness of markets (i.e. centripetal logic in the geographical framework: all the listing ties move together towards the same studied market). This also implies to take into account the features of the financial centres in which markets are embedded and to reckon their national state attributes (especially for matters of regulatory, economic and institutional environments, aso). At stake is the assessment of the attractiveness of both stock exchanges and their financial centres as financial systems, which has become a crucial issue in the current competitive context of financial globalization. Let's stress that the "attractiveness" I consider refers to the spatial convergence or concentration of foreign issuers on the specific market places. The geographic acceptance observes the interactions and flows in the worldwide space. Thus, this empirical contribution based on a geographical approach attempt to provide a new component to the field of studies related to stock markets systems attractiveness, by considering them as focal points of equity flows and focusing on their spatial configurations.

Since geographic attractiveness is comprehended using flows and financial interactions as indicators, it implies a relational perception of space. It means that stock markets and their financial centres should be described and classify according to their relational attributes and not in accordance with their local features anymore. In other words, this approach focuses less on locus for them, but mainly refers to the links between places, and also to the places according to their relationships with other sites. Thus, my works are relevant with the field of geographic literature that claims that a relational perception of space is more suitable than the single consideration of local attributes (Veltz, 1996, Offner, 2000), so as to describe our world made of interactions, in other words the "space of flows" (Castells, 2004).

In the frame of this conceptual positioning, I assert that geography and spaces features, or more specifically inherited spatial ties, distance and proximities between places still matter in the current organization of economic activities. And that, even though many trades and stock markets went virtual or global. The idea lies in the fact that, although one might exchange goods, services, information, technologies and financial assets with any trade-partners throughout the world, there are recurring relational preferences and permanent commercial dyads (or even multilateral relationships). Furthermore, the previous and residual spatial configurations of relational preferences matter for the settlement of new relationships between far-distant partners (economic actors, and various agents such as societies or non human groups).

Moreover, those partnerships between connected situated agents result from the share of common features and various proximities and similarities, that I attempt to study, compare and confront below in this presentation. Spatial proximity, socio-cultural and cognitive familiarity, economic and industry similarities, or common historic hangover are nothing but a few examples of those relational attributes that assemble places together. This is what motivates the assertion that geographic interactions and proximities contribute to shape global financial integration.

The literature describing similar worldwide relationships has already pointed out many forms of proximities, either for international trades, subsidiary companies and transnational firms' organisation (Alderson, Beckfield, 2004), or financial trades. In accordance with this framework, my paper attempts to complement the academic analyses by reckoning the relative influence of those affinities, once discriminated and compared to one another. The main point is to question their combination involving the attractiveness of markets.

Afterwards, the second stake of my contribution offers to draw a typology of attractiveness-profiles according to those proximities combinations. Thatfor, I've used a Hierarchical Agglomerative Cluster analysis (HAC). This method is usually used by geographers to discriminate located territories and spaces, but the originality of this paper is to apply it to some links and gravitational relationships. In this view, my data-base presents a quasi-exhaustive census of issuers from 114 countries, which 3214 stocks and shares were listed on 67 stock exchanges during the last quarter of year 2007 and on a worldwide scale. Then this typology is mapped in order to discriminate the 67 stock markets of our sample, according to their relational attributes and their attractiveness on corporate listings.

Considering the worldwide matrix of cross-listings, my first results point out that geographic proximity and the set of various affinities influence the spatial configuration of stock markets' pool of issuers (part 2). Confirming quite similar analyses in the economic literature, this geographical approach allows us to question the so-called global marketplace as far as listing choice is concerned. All the more because the set of influential proximities presents different combinations and defines various distinct attractiveness-profiles, sorting the whole universe of exchanges hosting foreign equities (part 3). Besides, the analysis of those listing interactions allows us to underline that the impact of proximities varies according to liquidity. The process of financial globalisation seems to be mainly driven on regional basis, especially for small markets (part 4).

The paper is structured as follows. Thanks to cartographic tools, [section 2](#) differentiates the scope of stock-markets attractiveness and the geographic morphology of their issuers' pool. Those spatial

configurations generated by the cross-listings ties might be explained by various proximities, differently identified by the previous literature. Thus, the analysis reasserts the proximities and familiarities that assemble issuers and their listing place(s) together. The [section 3](#) studies the combination of those proximities, in order to point out which components affect the most each of the seven attractiveness-profiles of stock-markets. Besides, this typology based on a Hierarchical Agglomerative Cluster analysis allows us to discriminate the attractiveness of the 67 stock exchanges of our sample. Furthermore, the observation of those combinations determines for which stock-markets do proximities really matter and why. In this view, [section 4](#) questions the relation between the economic size of stock exchanges and their profile of attractiveness. Finally, [section 5](#) presents our conclusions.

At last, let's bear in mind that the aim of this empirically-based paper is to provide an overview of the stock markets gravitational strength on corporate issuers. Also at stake is the discrimination of the competitor market operators according to their various scope and attractiveness-profiles, delineated by listing flows and financial interactions. Then the analysis lies on the available data to build a homogenous, comparable and equal database, so as to avoid plaguing and underestimating any market. Consequently, this paper has no pretension to be exhaustive. This is work in progress, therefore comments are highly appreciated.

2. The spatial configuration of stock markets and the scope of their attractiveness area, according to cross-listing relations.

Whether one considers the attractiveness of stock exchanges (spatial centripetal force) or the issuers' choice concerning their listing place(s) (geographical centrifugal force), both of those indicators and their resulting capital flows, clearly underline some spatial and relational recurrences between involved countries. Thanks to the location and nationality of corporate issuers, it is possible to map the issuers' pool and to shape out the attractiveness area of each stock exchange. Hence, I'll point out that not only the financial global integration does not generate the end of geography, but local and relational attributes of spaces, as well as specific proximities and spatial relational recurrences, all together shape the world of finance, made of informational flows as well.

2.1. Mapping the attractiveness pool of stock markets: where do issuers come from? Defining their nationality.

The use of distance variables, cultural benchmarks or other economic indicators implies to refer either to local attributes of countries, or to the characteristics of stock exchanges embedded within located financial centres. In other words, it boils down to consider the nationalities of economic actors. Whereas the nationality of host markets presents no ambiguity, the issuers' one could be assessed according to either its juridical dimension or operational nationality¹.

Existent analyses rather use the juridical nationality of firms, which refers to their country of incorporation or possibly to the ISIN code² of equities. But this methodological choice implies the consideration of dummy companies and substitute nationalities, among which many tax havens, where obviously professional taxes are lower and regulation less restrictive. Of course, the authors using juridical nationality may argue that it is a more reliable benchmark, as far as this piece of information is transparent. But this dummy nationality and its intermediate point disguise the spatial vocation of capital flows and financial interactions. Therefore, I attempt to mobilize the operational nationality since most of the decisions (strategy of the networked firm or allocation of the raised capital) are made in the country of the operational headquarters. Hence, it provides a better understanding of the listing functioning, economic partnership and spatial preferences. Thus, operational nationality seems suitable to study the effective economic and listing dyads (or even multilateral bonds). The use of operational nationality allows us to circumvent the bias of tax havens and fictive origin of the firms, without however setting them aside., contrarily to Sarkissian and Schill study (2004).

Let's make it clear that this study takes into account the offshore marketplaces. Indeed, the latter are actually significant financial centres considering the portion of financial industry within the total GDP of those tax havens: from 20% to 40% (Chavagneux, Palan, 2007). This production is mainly generated by increasingly numerous overseas subsidiaries, such as *International Business Corporations* (IBC) related to trading activity or captive insurance companies for example. In addition, at the end of year 2007, those tax havens attracted 1 170 billions US \$ of hedge funds investments (*Hedge Fund Research*, 2007); which represents twice of the hedge funds investments in on-shore centres. Nevertheless, those more or less fictive companies, and more or less independent subsidiaries are most often remote-managed or managed

¹ In this respect, Serfati stresses three characteristics on which the definition of nationality lies: the place where the firm was created, the institutional environment and then the location of the managers or decision board of directors (Serfati, 2006)

² The *International Securities Identifying Number (ISIN)* code identifies a security. Its structure is defined in ISO 6166. Securities for which ISINs are issued include bonds, commercial paper, equities and warrants. The ISIN code is a 12-character alpha-numerical code that does not contain information characterizing financial instruments but serves for uniform identification of a security at trading and settlement, notably the geographical origin. Indeed, the two first letters refer to the country where the issuer is domiciled, in other words its juridical nationality. For instance, the French equity *Air Liquide* is identified thanks to the ISIN number FR0000120073.

by some dedicated societies. Besides, the market capitalisations or turnovers of the stock exchanges embedded within those tax havens are low. The smallness of the stock markets partly comes from the fact that the foreign companies incorporated in those off-shore centres are assimilated to domestic issuers and therefore might better go listing on other markets (most often bigger and more liquid markets). Anyway, in the following analysis, tax havens are well regarded as markets, but not as the geographical origin of foreign issuers because the directors who choose the listing places stay most often in the operational headquarter and the corporate decisions are made elsewhere.

Besides, a previous comparison I realised between the two alternative nationality approaches has shown that the spatial dispersion of issuers observed via the operational nationality confirms and strengthens the influence of proximities and familiarities, as far as the attractiveness of stock markets - or inversely the issuers' choice concerning the listing place of their equities - is concerned.

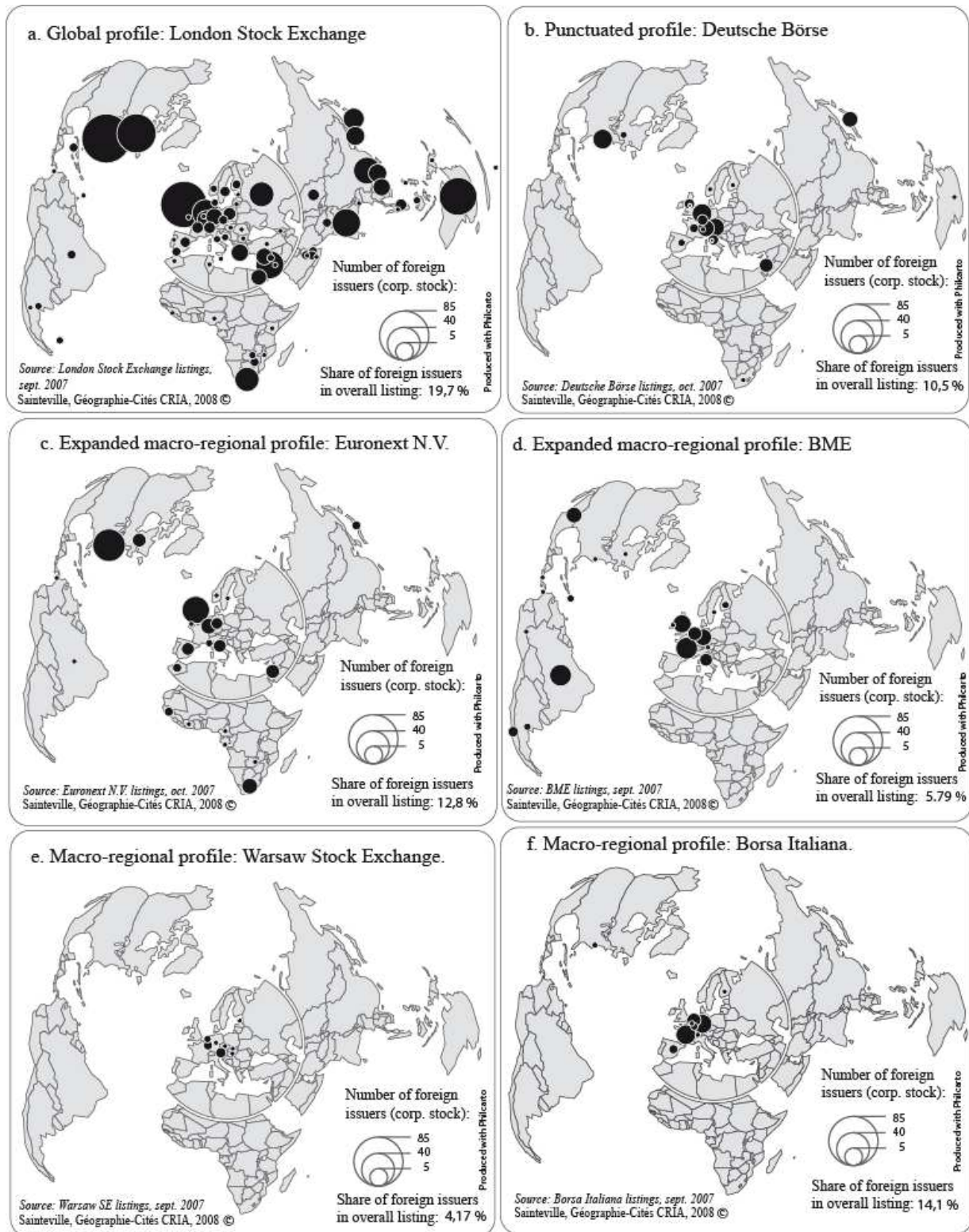
So as to elaborate this cross-listing database according to their issuer operational nationality, I first hand collected all the foreign equities on the 67 stock exchanges that list foreign securities. Most often, those equities are registered in accordance with their juridical origin. The following step consists in identifying the operational nationality of the firms involved in the sample, on an individual case basis. Those pieces of information were collected thanks to proxy indicators that refer to the contacts and location of the executive committee (the place where the decisions concerning activity, organisation and financing issues are made) and communication managers.

2.2. Spatial scopes and shape of stock-markets issuers' pools

The issuers' choice concerning their listing place(s) generates four main scopes of attractiveness pools of issuers. Despite the following remarks lie on the spatial configurations of European stock markets, this excerpt reflects the whole situations that might recover the 67 stock markets hosting foreign equities.

See figures 1. First, the « global profile » fits the widely opened market of the British *London Stock Exchange*. Its attractiveness field of issuers is almost global. *Deutsche Börse*, and even more *Swiss Stock Exchange* represent a profile that might be qualified as « elitist » or « punctuated » listing relations are preferentially centralized with the richest countries of North America, Europe, and Asia (Triad countries). Thus, 70 % of foreign equities that are listed on Swiss *SWX* are from USA, Germany or Japan. The smaller scale of the « expended macro-regional profile » complements the elitist profile with a macro-regional and intercontinental extension. For instance, the partly French exchange *Euronext* or *BME Spanish exchanges (Bolsas y Mercados Espanoles)*, respectively host foreign equities from Africa and Mediterranean Basin on the one hand, and on the other hand South and Central Americas. Lastly, the

Figures 1: The scope and issuers' pool of various European markets (end of year 2007)



« macro-regional profile » refers to the stock markets the attractiveness area of which is circumscribed to few adjoining countries across a single continent. An evidentiary European example is the spatial configuration of the issuers' pool of Warsaw Stock exchange. (Géneau de Lamarlière, Sainteville, 2008).

So as to describe those attractiveness areas of stock markets, I analysed the various equities of corporate issuers, focusing on stock and shares. As far as the market microstructure is concerned, my sample focuses on the main markets and the markets concerning smaller growing companies. For instance, the international Main Market and the Alternative Investment Market (AIM) of London Stock Exchange, or Eurolist/Alternext of Euronext. This implies a meticulous observation of the microstructure of each market involved in the study. Let's highlight that many (rather small and medium) stock markets do not have specific parallel market or segment, or at least those market segments host very few or no foreign corporate equities at all (as WSE for instance). Endly, the various listings point out the significant share of domestic equities, which might put into perspective the scope of the so-called global marketplace. Indeed, only 20% of the companies listed on *London Stock Exchange* are foreign listings, even though the latter appears to be one of the most internationalized stock markets (figures 1).

2.3. Explaining the spatial morphology of stock-markets issuers' pools: the role of proximities

The spatial morphology of the foreign issuers' pool, delineated by foreign listings, can be explained thanks to the proximities or affinities effects, which bring listing partners together. Figure 1 points out the crucial role of spatial proximity. Indeed, each map stresses the centralization of issuers within 1500 kilometres. That is to say within the same macro-region, which includes other kinds of proximities, such as cognitive (trust in well-known neighbours and markets), social, historical, commercial, way of life and consumption behaviour, and economic similarities as far as the economic environment is concerned.

Thus, relationships that are depicted by this set of maps (figures 1) confirm the various « proximities », which have already been pointed out by the previous studies related to financial links: the origins of foreign issuers listed on various non-domestic markets (Pagano, Roell, Zechner, 2002, Géneau de Lamarlière, Sainteville, 2008), or the literature related to international preferences of foreign investors (Portes, Rey, 2000). Another field that deals with those proximities is the way to transfer knowledge, such as the studies related to clusters (Rallet, Torre, 2001, Sainteville, 2008). As a case in point, the map of London testifies the influence of inherited historical and cultural connections with former colonial dependencies. At the end of year 2007, a quarter of the total foreign equities listed on LSE come from India Canada and the United States of America. All those different proximities have generated recurrent bonds between economic actors; and thatfor some countries appear to work together, as dyads or multilateral bonds. Flows and transfer of information are benchmarks that allow us to understand iterative

spatial interactions and more basically the configurations of the globalisation process. Moreover, it is possible to split those proximities and affinities into two classes: the “natural and cognitive proximities” on the one hand that refers to the share of very similar features, local and relational attributes (spatial, cultural, economic, historic, aso). And on the other hand, the “artificial proximities” that go beyond natural relational inclinations. Among the latter, at least three types might be pointed out. The first is the commercial policies and strategies of transnational companies to attract far-distant clients. A second artificial proximity lies on organisational issue, such as the settlement of subsidiaries in new places. Likewise, mutual agreements are more and more sealed between homologous, but distinct and far-distant companies, both competitors and collaborators. Those industrial accords might be settled between signatories that do not share any proximity, but present certain complementarities – see below 3.1ii - (Sainteville, 2008).

But all those well-known affinities or proximities do not have an equal influence on the attractiveness of stock markets. As a consequence, it is worth to discriminate the combination of familiarities and proximities that might explain the attractiveness of each stock market on issuers companies on the one hand. On the other hand therefore, I’d suggest applying this generated typology to the various stock-markets that host foreign equities worldwide.

3. Flows of cross-listings and the attractiveness profiles of stock markets

The cross-listings settled between issuers and their market operator(s) create new or iterative economic ties. The main issue is to understand better which motivations might guide the listing choice of corporate issuers. In return, it is also worth characterizing the gravitational strength and the convergence on the focal point, according to the ‘market principle.’ The literature about international trade points out various proximities. This section studies the combination of those proximities, in order to point out which components affect the most each of the seven attractiveness-profiles of stock-markets. Besides, the following typology allows us to discriminate the attractiveness of the 67 stock exchanges of our sample. The aim is to determine which proximities are the most influent for each stock-exchange.

3.1. Elaborating relational attractiveness-profiles of stock-exchanges

i) Sources and gathering dyads of cross-listings.

So as to characterize the preferential funding ties of stock-exchanges, according to the attractiveness they exert over their corporate issuers, I first collected a sample of 3214 cross-listings. Those overseas listings

allow us to gather dyads between the issuers' 114 countries of origin and the universe of the 67 located stock-exchanges that host foreign equities. The supporting data were hand collected during the third quarter of 2007³. The second stage consisted in characterising the linkages between the two economic actors, and more specifically between their respective locations: the origin of the issuer and its listing place. To do so, I used 24 benchmarks, which seemed relevant to estimate the different kinds of proximities or affinities involved in those commercial and funding links or dyads. Then, I qualified each dyad with a score of "presence" or "absence" for each indicator, balanced with the number of concerned corporate issuers. The following step consisted in performing a synthesis for the 67 stock exchanges involved in the 3214 cross-listings. To that end, for each indicator, I calculated the percentage of listing relations that presented a specific affinity (or proximity), related to the whole set of foreign issuers attracted by each market operator. I repeated the operation for each benchmark, applied to the 67 market operators. Moreover, I had broken the sample before the first transatlantic mergers were sealed by Nasdaq OMX and NYSE Euronext. As a matter of fact, the consolidation of globalization generated difficulties, a certain myopia for the geographical analysis of economic spaces and relationships.

ii) Explanatory variables of favoured listing ties

The literature usually explains the business and trading preferences thanks to various "proximities", both for spatial and other dimensions. This term might be substituted by "affinities", "familiarities" or "similarity" when not applied to a geographical topic or attribute. But this paper is not dedicated to this discussion, and I will use this term of "proximity", to make the demonstration easier.

The first group of variables deals with spatial proximity, in other words, physical distance. The advantage of a short distance between two partners consists in the readiness for economic meetings. Furthermore, spatial proximity is coherently correlated with macroregional associations (such as ALENA, EU). Whereas intra-regional cross-listings stand for 54,29% of transnational listings (according to my database), many stock-exchanges attract long-distance remote issuers, seeking for other kinds of proximities. In order to measure the spatial proximity, I took into account the Euclidean distance that disjoined the two economic actors. A quite similar piece of information is provided by the percentage of located issuers that share the same economic macro-region with their listing place. In this instance, spatial proximity is often complemented with political and economic affinities.

Linkages between stock-exchanges and their issuers might be favoured by cultural affinities, which might be evaluated thanks to three proxy variables. The first is the use of the same official language. The dissemination of language is particularly related to colonial experiences and other historical links, which remain the powerful medium for interactions and integration in spite of some violent

³ Before MiFID

decolonization process. Let's point out that, according to the database, 14% of foreign companies listed on Euronext are from Sub-Saharan Africa, while Latin America is the origin of more than a third of foreign companies listed on *Bolsas y Mercados Espanolas (BME)*. Writings on international trade underline that the remaining of those hangover linkages still plays a crucial role nowadays, and probably will in the future too. Finally, I also made the choice to stress the religious benchmark, using the percentage of cross-listings established between market operators where Islamic finance is settled and Muslim issuers. Nowadays, Judeo-Christian religions, and Asian religions have a very weak influence on the practice of financial activities. On the other hand, Islam and *Sharia* law banish gambling and stake (in other words usury or *riba*) or investment in alcohol products, weapon and gambling industries, and so on. For financial centres and market operators, the attraction of sovereign wealth funds and Persian Gulf investors has become a major issue. Since it appeared in the Middle East around thirty years ago, the growth of Islamic banking reached 15% a year, whereas bank assets managed by Islamic banks are now worth between 265 and 500 billions dollars around the world. City financial centres have already started the adaptation process to market *halâl* or permissible products. For instance, the London Stock Exchange has launched two specific markets for *sukuk* trades (Islamic bonds) and has also set up tax exemptions. This benchmark might be particularly relevant to understand distant cross-listings in Islamic context.

Beyond spatial proximities and cultural affinities, the assessment of economic⁴ familiarity might be relevant too. The aim is to determine whether the financing ties are settled between actors that are embedded within rather similar economies, or drastically dissimilar economies. That's why I used proxy variables such as GDP at purchasing power parity (ppp) per capita. This index measures wealth and might reflect the investment potential of the host and domestic market. Furthermore, an economic growth indicator enables us to identify markets that attract issuers of rising and promising economies. This implies that foreign issuers trust the host market and its potential investment force. Beyond those economic attributes, related to the economic environments of both countries of issuers and stock-markets, the cross-listing decisions and attractiveness are widely influenced by the characteristics of the host market operators, especially size and liquidity. Therefore, I also took into account the capitalization and turnover of the hosting stock-markets, and their ability to attract foreign companies (turnover of foreign equities, number of foreign companies as a percentage of the total listed firms) as well.

Furthermore, a set of variables may qualify possible pre-existent relations before the cross-listing is settled. One can then observe commercial preference and common membership to a certain regional

⁴ What might be considered as economic proximity is the degree of similarity between two economic environments and levels, which might be measured thanks to GDP ppa capita or economic growth. But there might be different accepted meanings of economic proximity. For instance, Sarkissian and Schill (2004) measure the economic proximity using the percentage of export of a specific country (in this case the country of issuer's origin) going to the country of the host stock-exchange. I rather consider this kind of economic links as commercial proximity.

organisation. In addition, PC-TAS data (1996-2000) describe the habits of commercial links (Grasland, 2008). But the analysis does not take into account the network of remote correspondent investment firms or credit institutions; that is to say the social networks that tend to dispense Investment Services Providers to locate in the neighbourhood of their clients (investors).

In order to evaluate the influence of mutual agreements within the settlement of cross-listings, I also seek for eventual commercial agreements between stock-exchanges (MOU, MOC, or even more IT providing accords) - or between market operators and others financial centres as well - that would correlate with overseas listings. Indeed, some of those accords deal with the share and homogenisation of market standards and regulations, in order to improve the compatibility of securities trading. For practical purposes, those agreements also generate the promotion of stock exchanges on their associated markets: such a mutual support might stand for an assurance of the attractiveness strengthening of both market operators. Nevertheless, it is difficult to assess the influence of the new industrial and commercial agreements on the cross-listings, all the more because the boom and quickening of consolidation and accords processes are quite recent. Indeed, while 12 agreements were sealed between stock-markets worldwide in 2003, the number of accords reached 70 in 2007 (Sainteville, 2008).

Furthermore, the integration of signatory markets and cross-listing process are favoured thanks to the mutual access to the associated markets both for issuers and members. Besides, the regulatory principle of « European Passport » (i.e. institutional proximity) allows the European intermediaries (ISP) to trade equities and derivatives all over UE territory. This passport facilitates the transnational financial flows and can be used either by the setting-up of branch offices or subsidiaries, or via free investment service delivery, according to the new regulation rule MiFID. Sharing an electronic trading platform and the same regulatory framework facilitate the trade of foreign equities; such as the members of Cyprus Stock Exchange (CSE) and Athens Stock Exchange (ATHEX) that both use the same system since November 2006. But on the other hand, mergers may also influence the cross-listing process in two diverging ways. Consolidations and mergers might have an impact on liquidity, as well as on the size of the markets (issuers, members and investors) (Ulf, 2008). Second, cross-listings that occur between two financial centres related to the same consolidated market (i.e. “internal cross-listings”) are considered as domestic listings and not foreign listings. There is thus a loss of a part of the cross-listings; which minimises the foreign attractiveness of integrated markets. This is precisely the case for Euronext N.V. and OMX Group, as far as the sample of cross-listings is concerned at the end of year 2007, the equities of which are traded respectively through *NSC system (Nouveau Système de Cotation)* and *Saxess*. That is another reason why I had decided to break the sample before the first transatlantic mergers were sealed by Nasdaq OMX and NYSE Euronext.

Besides this commercial proximity, market operators might attract specialised trades and equities, as far as industries and line of business are concerned. As an aside, Pagano and alii evoke “be with your pears” (Pagano, Roell, Zechner, 2002). To implement this familiarity due to a common industrial base within the analysis, I also took into consideration the degree of sectorial specialisation, according to a dedicated index I had elaborated before (benchmark: % stock exchange specialisation). Also at stake is the sectorial similarity or complementarity between the issuers’ domestic market and the profile of the foreign listings of the host market (benchmark: % same specialisation). Therefore I used the specialisation of the two markets as a proxy variable, considering the industrial profiles of the cross-listings they host. Ideally, we might have compared the sectorial specialisation of the issuer’s domestic market with the industrial specialisation of its host market. Nevertheless, using the correlation of the ranked industry distribution of firms listed overseas between each pair of countries, the results confirm that firms prefer to list in those countries that have a similar data base to their home country (Sarkissian, Schill, 2004).

iii) The issuers’ “nationality” has been defined above, § 2.1.

3.2. Typology of attractiveness-profiles of stock-exchanges

From the 24 indicators described above, one can specify which proximity or affinity is more or less influent for the listing relationships. In order to evaluate the influence of those familiarities compared to one another, I’ll first suggest analysing them according to the *Principal Components Analysis* (PCA). The result gives a glimpse of the overall sorting of those familiarities, without distinguishing between the 67 distinct markets that attract listing flows.

The extractions of main components (or macro variables) summarize the 24 variables. The process of combination and correlation calculations of each indicator with all the characteristics of the whole cross-listings, allows us to pick out the weight of each variable. Thereby, the first macro-variable sets the main opposition between markets that attract issuers for economic reasons (high liquidity, big markets and a promising pool of investors) on the one hand; and on the other hand markets which gravitational strength is rather explained by other reasons such as various proximities. This first component contributes to 22,16 % of the absolute inertness, in other words, it is representative for only a fourth of our sample of listing relationships. In this respect, the most representative indicators are the highest capitalisation and turnover of the stock market that hosts foreign issuers. The second macro-variable complements the analysis with 13,39 % of the absolute inertness, stressing on the iterative commercial links between equal economic partners. Regarding spatial proximities and cultural links, they are more influent in components 4, which accounts for no more than one 8,05% of the global inertness. The limit of the Principal Components

Analysis (PCA) is that this method does not allow to point out heterogeneity among actors. Thus, it is advisable to complement it with an overall typology in order to discriminate the preferential listing ties of the various stock exchanges.

i) HAC Method and hypothesis

In order to discriminate those preferential relationships, I'll deal with a *Hierarchical Agglomerative Cluster analysis* (HAC), which is commonly used in geography to elaborate typologies of places and regional synthesis. The object is to bring together geographical territories according to their similarity and to discriminate them upon their dissimilarity. Although the originality of this contribution is not to apply this method to located spaces, but to some links and relationships. The aim is to bring together and discriminate listing ties; and to build a typology of the market places according to the configuration of their respective listing bonds (i.e, relational perception of their issuers' pool).

Combining the 24 benchmarks described above allows us to determine 7 types of market operator's attractiveness profiles. In other words, it is possible to determine which proximities come into play in the choice of listing places or inversely, which familiarities might shape the gravitational strength of equity markets; and that, for each stock exchange of the sample. On the one hand, literature had previously identified various types of proximities and familiarities (Pagano, Roell, Zechner, 2002); but on the other hand, few authors have observed their combination and their distribution among players involved in those relationships.

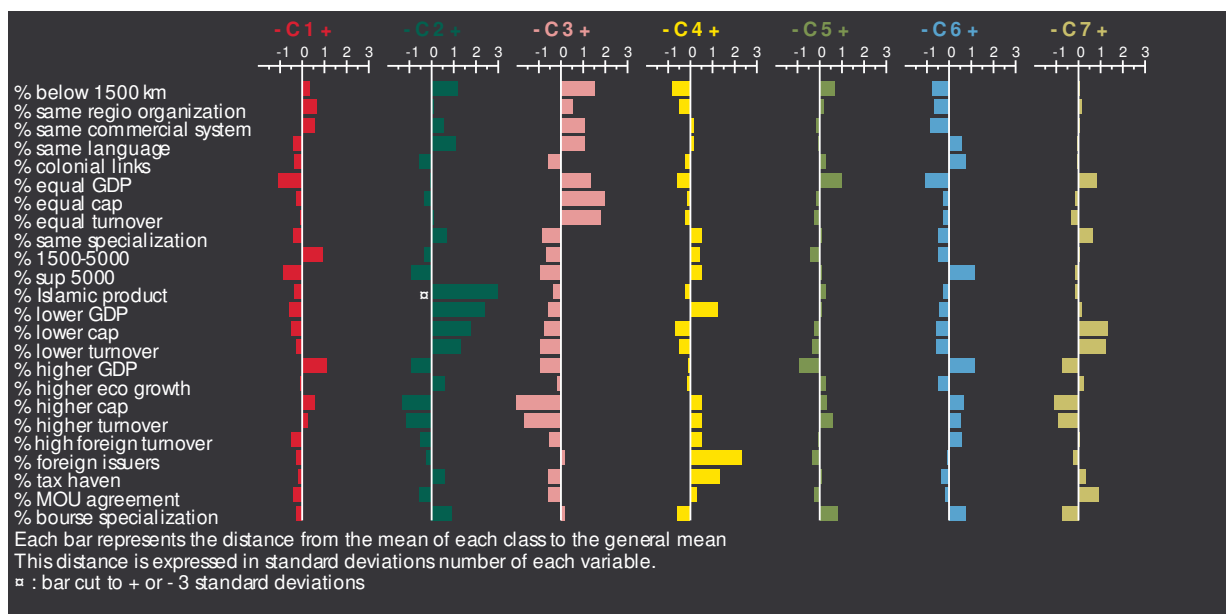
I suggest testing the following hypothesis. Familiarities, affinities and proximities are all the more essential for small markets, the latter being less attractive. On the contrary, main markets, thanks to their reputation and their dynamism, can go beyond those affinities or tactical considerations. Besides, this method allows us to catch sight of the motives that generate the cross-listing choice.

ii) The seven attractiveness-profiles of stock markets and the scope of their issuers' pool

The successive mega-variable defined by the PCA allows us to clearly differentiate two groups of preferential listing relations, according to the economic attractiveness and various affinities and proximities. However, those variables are not equally significant, and their influence varies according to the strategy and expectations of issuers. Breaking up the combination thanks to an HAC, we can observe which familiarities are really significant to characterize and discriminate the profiles of relational preferences (figure 2). After observing the classification tree and the leaps of dissimilarity, I chose to establish the typology of those 67 stock exchanges entities on 7 different classes, this choice being corroborated by the Huntsberger index, which recommends 7 types. The results of this typology are mapped. On the synthesis map below (figure 3), the various-sized circles refer to the number of foreign

listings hosted by the involved stock markets. The colours represent the various classes of listing ties preferences. Nevertheless, it remains difficult to describe a strict hierarchy. Neither can we define the order in which the proximities come to light as far as the strategy nor attractiveness of actors are concerned.

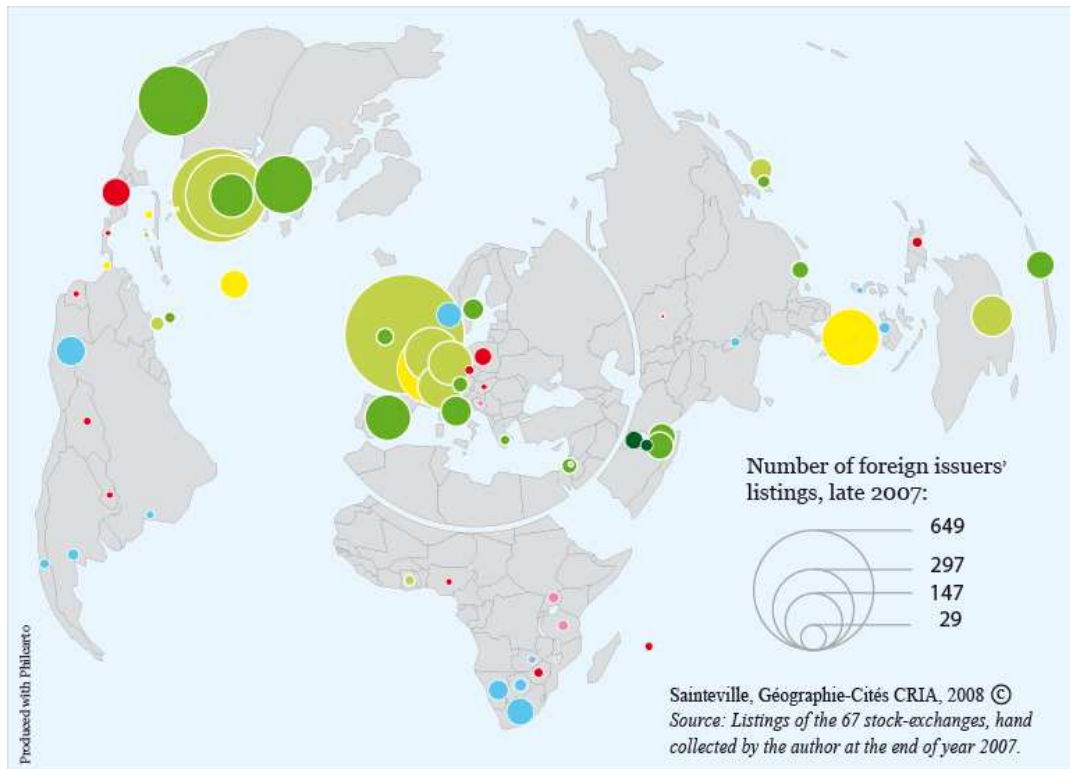
Figure 2: Stock exchanges' profiles, according to their attractiveness on foreign issuers (end 2007)



Source: Listings and statistics of the 67 stock-exchanges, hand collected by the author at the end of year 2007, WFE, 2008, World Bank 2007

NB: The inclination of each profile towards some proximities or another can be read on the histograms thanks to the length of each bar. This bar represents the overrepresentation of the variable evaluated in comparison to general mean. The distance of each class mean from the general mean is expressed in standard deviation of each variable. The overrepresentation might be positive or negative. An overrepresentation materialized on the right side of the graph points out a positive effect of the variable on the profile's constitution. However, a variable is not especially significant when it is estimated close to average.

Figure 3: Typology of markets, sorted according to their attractiveness and their gravitational force on foreign issuers (late 2007)



Caption :

Attractiveness profiles of stock markets at the end of year 2007

- C7 ■ Liquidity & visibility
52,7 % issuers - 80,6 % turnover
- C5 ■ Regional peer
17,8 % issuers - 16,2 % turnover
- C2 ■ Exclusive club
1,7 % issuers - 0,1 % turnover

- C6 ■ Industry specialisation
4,8 % issuers - 2,0 % turnover
- C4 ■ Tax & regulatory
12,8 % issuers - 0,4 % turnover
- C1 ■ Neighbourhood entry & access
9,8 % issuers - 0,7 % turnover
- C3 ■ Local brotherhood
0,2 % issuers - 0,1 % turnover

Sainteville, Géographie-Cités CRIA, 2008 ©
 Source: Listings of the 67 stock-exchanges, hand collected by the author at the end of year 2007.

- **Type C7 = Liquidity & visibility**

An insight to the map (figure 3) allows us to discriminate a first type that gathers the biggest and most powerful Stock Exchanges, such as NYSE, Euronext N.V., London Stock Exchange, Deutsche Börse, or Tokyo Shoken Torihikijo embedded within the richest economies of the world. Therefore and coherently, their client-issuers mainly come from economies the level of which is either equal, or lower with a high economic growth. In addition, the domestic markets of those foreign companies have lower turnover and capitalization. Thus, the potential attracted foreign issuers seek for liquidity and profitability on markets that even present similar and generalist profile concerning the industrial specialisation of their foreign listing. In other words, those big host markets present no specific specialization, since they list equities from all industries (figure 2). As far as comparative advantages are concerned, very few of the host countries are tax havens, such as the City of London or Switzerland; but they might provide better visibility and reputation. Even though, in the very competitive framework of globalization, the strategy of those market operators aims at capturing markets, at least to attract issuers whose market and activity are the most promising. So as to achieve this goal, the stock exchanges develop policies of attractiveness and specific financial products dedicated to those targeted clients. Another way to increase their market and become more attractive is the settlement of cooperation agreements (figure 2: % MOU agreements), which allows the intermediaries ISP to trade mutually on the two signatory markets for instance. This new artificial and commercial proximity might be exemplified by the mutual agreement between NYSE Group and China's Jiangsu Province's Economic & Trade Commission. The aim of this accord that was sealed in August 2006 was to promote the NYSE as a favoured market for Chinese companies. In return, NYSE renders technical assistance to help Chinese firms prepare their Initial Public Offering (IPO). Nowadays, the bourse universe has become a wide chessboard, in which the Middle East, India and China are the new and main pawns. But I still do not have evidential results of those attractiveness policies dedicated to potential issuers. In this respect, this is work in progress. Nevertheless, few elements and facts may corroborate the hypothesis. In November 2007 for instance, Deutsche Börse (DB) listed its first Chinese company after having contracted a cooperation agreement with Beijing (CBEX) and Shanghai Stock Exchange (SSE). A few months later, Euronext hosted *China Corn Oil* on its listing.

So as to finish with this liquidity & visibility profile, let's highlight that the Japanese exchanges attract very few foreign issuers on their listings, compared to the other exchanges of the Triad. This involves the specific policy of the Japanese market operators. Besides, many listed equities on the Tokyo Shoken Torihikijo are issued by big financial firms and come from Europe and United States. This might be a tactic of corporate issuers to enter the local profitable market of finance (see turnover on figure 4), and the networks of the financial centre as well.

- **Type C5 = Regional peer**

The following profile deals with medium-sized stock markets, which attract issuers that share the same economic level or familiarity with the host country. Firms that attempt to get listed on those “peering attractiveness” markets do not necessarily seek many liquid markets, since most of their own domestic markets present higher capitalization and turnover. In fact, they rather attempt to join listings that quote equities with the same specialization. For instance, finance industry as far as Hong Kong (HKEX) market is concerned, raw materials and mining activities on listing places of Toronto (TSX) and AMEX, wealth industry and new technologies on the Nordic market of OMX Group. But in opposition to the profile relevant to a “specialisation attractiveness” (C6), those “peering” markets attract corporate issuers that are rather close-located and whose GDP country is most often lower.

- **Type C2 = Exclusive club**

As the « liquidity & visibility » ilk depicted above, Bahrain and Kuwait Stock Exchange mainly attract issuers that seek profitability and more liquid trading platform for their securities. But the pool of their corporate issuers seems to be more specific and selective, since most of them are located below 1500 kms, use the same Muslim language and might issue Islamic financial products as well. Besides, the club effect might be strengthened by the same market specialization concerning their foreign listings, especially in Finance industry, in the frame of the rich investors’ pool and investment funds of the Persian Gulf. Besides, the countries hosting those stock markets also present some taxing facilities.

Emirati stock markets (EAU) might have been included within this type, all the more because the Dubai International Financial Centre (DIFC) is a free zone where the market capitalisation of *sukuk* has an hedge on the equities one. Nevertheless, the Dubai International Financial Exchange is not exclusive, since it also attracts equities of far-distant issuers.

- **Type C6 = Industry specialisation**

The three last types of stock-markets seem to attract foreign issuers thanks to more specific features, such as *de facto* specialisation, the facilities they might reserve for outsiders issuers, and the usual commercial partnerships between far-distant economic actors.

Oslo børs, the Norwegian stock-exchange is well representative of an attractiveness that relies on sector-based specialisation. According to figure 2, spatial proximity and cultural affinities do not seem to play a crucial role. Indeed, foreign issuers the origins of whom are far-distant (more than 5000 kilometres) are overrepresented on the graph (figure 2). Nevertheless, those remote issuers often present some historical ties, such as colonial links with the country of their listing place. For instance, 44% of the equities listed

on the Johannesburg Stock Exchange (JSE) are from United Kingdom (*Jubilee Platinum plc.* for instance), whereas 40 % of the other listings come from another part of the former British empire.

But those preferential ties might be supplemented by relational attributes concerning sector-based specialisation. Thus, 55% of the issuers listed on the JSE deal with the mining industry, such as *Uranium One Inc.* This attractiveness of specific equities might be explained thanks to the familiarity and the trust of the investors (especially local market) upon the mining industry. Indeed, the auriferous, platinum and other kinds of mines contribute for about 6 % of the South African GDP. In this respect, the example of Oslo Børs specialisation is also particularly relevant, since many equities of the gas and oil industry, and shipping business too are traded on the Norwegian market. Then, the American *Royal Caribbean Cruises* or the Emirati *Maritime industrial services*, list their public shares on Oslo market place, the history of which is deeply rooted to the sea. From the fish trading during medieval times to the offshore petrol and gas extraction, but also while the golden age of the Hanseatic League, North and Baltic seas have always accounted for the pillar, as far as transactions and flows of information are concerned.

In a nutshell, the profile of industry specialisation attracts mainly far-distant issuers located within richer economies and whose domestic stock exchange capitalisation and turnover (in other words: liquidity) are still most often higher. So the main reason why those far-distant issuers list their equities on less liquid markets is the degree of specialisation and the high turnover of the listed foreign equities, even if the latter are not that numerous, compared to the total of listed equities. As a matter of fact, considering my sample of 67 stock-exchanges, those bourses present a high degree of specialisation, and more particularly the stock markets of Oslo, Southern Africa (Namibia, South Africa and Botswana), Malaysia and most of the countries located in Southern America (Peru, Chile, Argentina and Brazil). When firms choose to list their equity on such specialised markets, it might be to increase their visibility and reputation in the involved industry.

- **Type C4 = Tax & Regulatory**

Unlike the previous profile, stock exchanges that recover from the 4th type do not attract issuers thanks to their listing specialisation. Indeed, the specialisation index applied to the representative Singapore Exchange (SGX) and Bourse du Luxembourg (BdL) is below 0,4. Likewise, the origin domestic exchange is most often more liquid than the host domestic market. So liquidity benchmark does not seem to account for the most influential factor to attract issuers. Moreover, only foreign issuers benefit from favourable facilities provided by permissive regulations. Corporate companies that list their equities on those stock markets first seek tax havens in off-shore centres, even if the listing places are far-distant located. This explains the massive proportion of foreign firms among the whole listed issuers, and the high foreign turnover too (above 10 %)! Considering the high financial benefits deriving from the financial activities in

tax havens, there is an obvious bias indicating that the origins of issuers are lower economies. Nevertheless, these profiles attract many issuers from developing countries, namely Indian issuers that are listed on Bourse du Luxembourg or Chinese firms that rather choose Singapore SGX.

But I would also like to emphasize the fact that the role of tax havens is underestimated in the listing choice process, when considered as listing places only. Indeed, those specific places are also used to getting a fictive nationality and thus to benefiting from the local fiscal concerns, in Bermuda for instance. As a consequence, those false and juridical Bermudian companies do not list on Bermudian Stock Exchange since they are considered as domestic issuers and do not benefit from taxing facilities anymore. Therefore, they go listing on other stock markets, such as NYSE, Nasdaq, London Stock Exchange... but also on other tax havens such as Luxembourg or Singapore. The comparison between my two databases (either juridical or operational nationalities) enables me to attest that such a case represents 485 equities, in other words 15% of the sample. When both of those two functions (listing places and dummy corporations) are combined, tax havens concern 34% of the cross-listings flows of our matrix. But if one considers London (and more specifically the City) as a tax haven, then the percentage reaches 52% of the whole universe of cross-listings.

According to the combinatorial analysis, the HAC analysis sorted Luxembourg, Bermuda and of course Caiman Islands. Singaporean SGX also recovers this “convenience attractiveness” profile. But some other listing places, despite the fact that they are still considered as tax havens or off-shore centres, have been sorted in other types, when other factors are more influent than taxing facilities.

- **Type C1 = Neighbourhood entry & access**

La Bolsa de Valores de El Salvador and Warsaw Stock Exchange attract issuers, the countries of which are used to trade with one another. Most of the listed companies are from the same regional economic organisation or belong to the same commercial system. Even though the economic partners do not share direct colonial links, they have most often been a part of a common former empire. For instance, the two-thirds of the foreign equities listed on Bolsa de Valores de El Salvador (BVES) come from USA, and the others from Chile, Costa Rica, Guatemala, Honduras, Nicaragua and Panama. In others words, the pool of issuers mainly comes from Central America countries. The attractiveness of El Salvador Stock Exchange broadly recovers from spatial proximity, cultural affinities since most of the issuers are former colonies of the Hispanic empire, and thus they also share the same Spanish language. A meticulous analysis of the listing let suppose that the issuers use the listing on the host market to improve its visibility and access new consumers. Besides, this attractiveness might be influenced by the common membership of the Central American Common Market (MCCA as far as the Spanish acronym) that was established at the end of year 1960. Those commercial links are also strengthened by a set of bilateral cooperation agreements

that were sealed between the market operator of El Salvador and the neighbour stock exchanges. Besides, this might foretell a consolidation process, since last March (2008), Stock Exchange of Costa Rica (BNV), Bolsa de Valores de El Salvador (BVES) and Stock Exchange of Panama (BVP) have agreed on a market and business models for their exchanges, which would be implemented in the future. There is also a plan that considers the setting up of a company in which all three bourses would participate on an equal basis. This example of BVES stresses the permanence and the influence of previous linkages that bond two spaces, and hence the prevalence of the iterative geographic interactions on the death of distance or the end of geography.

This attractiveness profile is also shared in America by the stock exchanges of Panama, Equator, Bolivia and Paraguay. Harare and Mauritius Stock Exchanges follow this pattern too. The later lists equities from both Zimbabwe and South Africa. Likewise, in Europe, Warsaw Stock exchange and the market operators of Czech Republic and Hungary both attract neighbour issuers from Eastern Europe. In Asia, Port Moresby SE (POMSoX) in Papoua-New Guinea quote five Australian securities, most of them recovering from mining or energy industries.

- **Type C3 = Local brotherhood**

Type 3 is rather similar to the previous one. Stock exchanges of Tanzania, Republic of Serbia or Uganda list equities of close-located issuers. For instance, market operators of Dodoma and Kampala exclusively quote Kenyan companies, whereas Belgrade Stock Exchange hosts shares of issuers coming from the Federation of Bosnia and Herzegovina. The first difference with the previous type lies on the very short distance that separates the corporate issuers from their listing place. For that matter, one might rather evoke a “contiguity attractiveness”. The second distinction deals with the similarity of their economic and business environment: equal GDP, or comparable local attributes of stock markets: domestic capitalization and turnover. As the people use the same language and used to belong to the former British Empire, one might also consider this profile as an exclusive “identifying attractiveness” or as a “local brotherhood”; which might be a variant of the “neighbourhood” model.

4. Attractiveness on issuers: for which stock markets are proximities crucial?

Those profiles point out the combinations of proximities that mainly shape the pool of issuers of each individual stock exchange, or inversely the listing choice of issuers. Moreover, the CAH underlines that proximities and similarities are not systematically influent. Thus, when the benchmark is neither overrepresented, nor underrepresented on the graph (in other words, when it is close to the mean), it

means that the involved indicator is not particularly influential. One should then question what the most common situation for markets attractiveness at the present time is. Do financial market systems attract far-distant and radically opposite issuers, which share very few familiarities? Or do they rather list firms that are confident and feel similar to them (the host market) and their environment? The latter would allow us to question the spatial development of the financial globalization process. All the more because the process of cross-listings is largely outclassed by the home bias and domestic listings (figures 1). Moreover, cross-listings suffer the consequences of mergers and the progressive homogenisation of trading conditions, and thus they tend to get reduced. That being said, which general trend characterizes the cross-listing process in the frame of the so-called “global marketplace”: the principle of connectedness and global access, or the concept of proximity that involve similarity and a more regional gravitational strength? Besides, what is the influence of the liquidity and the size of the stock markets?

The analysis of the first nine variables on the top-part of the profiles (figure 2) contributes to provide an answer. Indeed, those indicators are supposed to be the most representative of the various kinds of « proximities » (spatial, economic, social, cultural, cognitive, and so on). Their overrepresentation on the top right-hand corner of the bar chart emphasizes that both proximity and similarity are influential on the attractiveness and the choice of issuers for their listing places.

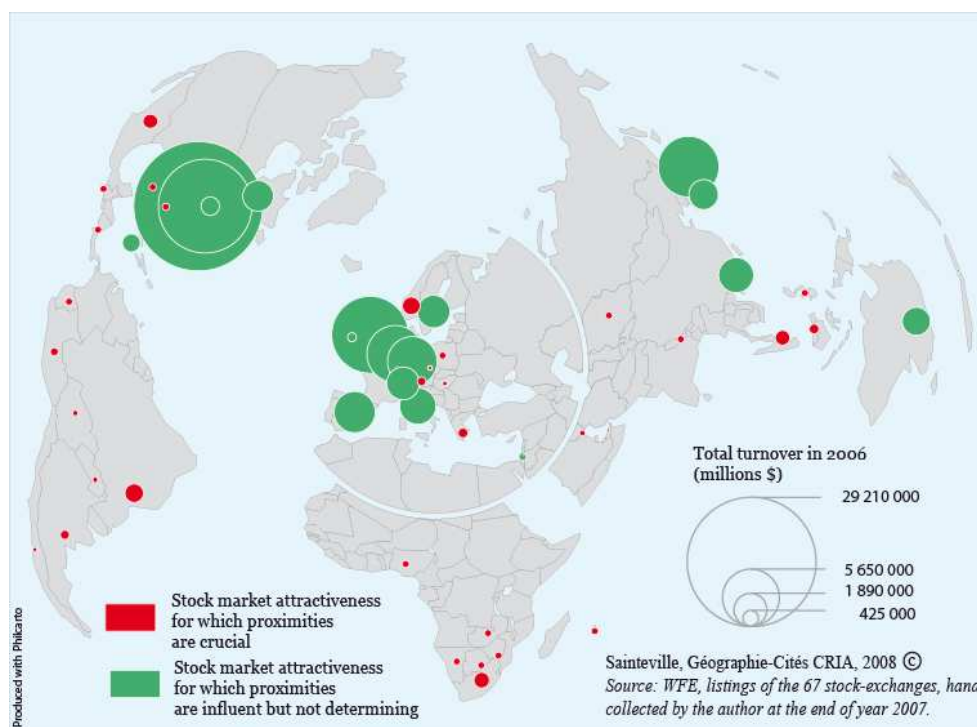
Considering our sample of 67 stock exchanges described on map below (figure 4), the trend shows that the attractiveness of markets having the biggest turnovers (both domestic and foreign shares, according to WFE figures) is scarcely influenced by any kind of proximity, setting the example for “liquidity and visibility” attractiveness. Besides, their reputation and their embeddedness in a favourable investing environment, the involved stock markets are liquid and big enough to capture far-distant issuers that do not share any proximity or familiarity (historical, cultural, economical or even industrial characteristics). The scope of the attractiveness pool is then rather global, and supported by the market operators commercial policies. The aim is to widen their markets and to cast a wide net of corporate issuers in a competitive framework. Thatfor strategy and mutual agreements might foreshadow the flow orientation of the future cross-listings, setting a new artificial proximity. The market turnover of this first group of stock exchanges accounts for 96,8% of the overall turnover (total value of share trading worldwide).

The other 3,2% percents refer to small and medium bourses capitalizations and turnovers. Their attractiveness on corporate issuers can be explained thanks to the shared proximities, described above. Those marketplaces and their financial centres are mainly located in developing markets and countries: South and Central America, South-East Asia, Africa and the new stock exchanges of Eastern Europe. According to their attractiveness profile, those markets appear like niche stock markets, defined by the

market and aggregation principles. Those listing niches lie on either specificity (tax havens, industry specialisation, Islamic products) or spatial proximity and its well-known environment that inspires confidence both for issuers and investors. Then the attractiveness pool of such market places strengthens mainly on a macro-regional scale, not to say on a larger scale between a few countries. One can then deduct that proximities effects are particularly crucial and relevant for small markets. This result comforts the analysis of Sarkissian & Schill (Sarkissian & Schill, 2004).

Nevertheless, some specific cases remain. When the two maps (figures 2 and 3) are compared, there is no denying that some small markets (as far as turnover and capitalization are concerned) host many foreign equities: Singapore Exchange (SGX), Bolsa Mexicana de Valores, Johannesburg Stock Exchange (JSE), or UAE stock exchanges. Considering the listings, those markets mainly host equities of small companies, except the Mexican exchange that lists about 130 big US firms (this represents more than the half of its listing). Those are emerging markets that aspire to become the financial pole of their respective macro-regions. This attractiveness of fact seems to strengthen (and might be locked-in) within a regional frame. But it would be worth to analyse, throughout the ages, whether this regional pattern is not a required step in the listing attractiveness development and in the process of “globalisation” of a stock marketplace.

Figure 4: For which stock-markets are proximities crucial?



NB: This map does not present the markets when the turnover figure of the stock exchange is not provided

5. Conclusion

The spatial configurations of the attractiveness of markets, on the same level as the choice of issuers for their overseas listing places are influenced by various proximities or affinities (section 2). The literature related to international trade has already studied independently those relevant proximities one from another, in the frame of finance or other industries: spatial proximity, cognitive affinities, organisational proximity, social similarity, aso. My contribution is a worthwhile addition to this literature, in so much as I don't merely identify and differentiate those discrete proximities, but I also study their combination and their bond. Besides, I have sorted out various market profiles of relational preferences or spatial attractiveness, thanks to HAC methodology. Then, those profiles have been applied to the whole universe of exchanges that host foreign equities, via a typology (section 3). Besides, the analysis of those listing interactions allows us to underline that the impact of proximities varies according to liquidity (part 4). In addition, those types give an insight of the expectations of issuers in the listing process. Some of them seek for liquidity, when others seem to try consolidating their position on a specialised market or to strengthen their reputation with the consumers of their products (in the country of their overseas listing place).

Moreover, my contribution is quite original since it focuses on the spatial configuration of the attractiveness of markets, listing convergence or gravitational force of markets (not to be confused with any gravity model), instead of analysing the opposite logic that are the listing choices of issuers. Secondly, this study also provides a global and comparative insight of the various geographic attractiveness of markets in a very competitive worldwide industry, thanks to HAC method applied to flows. Thatfor, I've decided to use listings ties and interactions as relational benchmarks that draw and characterise the issuers' pool of markets. Thirdly, I also pitched on the use of operational nationality of firms to bring the corporate issuers and their listing places together, while the previous studies lie on juridical nationality. Therefore, this choice allows me to precise and distinguish the complex role of tax havens and off-shore financial centres. Hence, I sidestepped the dummy incorporation jurisdiction of issuers, whilst keeping them as specific markets and financial systems. Be insured that by no means the off-shore centres and tax havens are driven away from the analysis. In addition, I plan to complement and improve this paper by highlighting the benchmarks related to regulation, indicators of stock exchange strategies. Therefore, for the time being I assume the limitations generated by a worldwide study, particularly in the matter of the difficult recognition of special features and individualities.

Besides those methodological positionings, the successive empirical results point out that financial globalisation seems to be partly driven on regional basis, especially for small markets. Confirming general analyses in the economic literature, this geographical approach allows us to question the so-called “global marketplace” as far as listing process is concerned.

In effect, despite the claims of the “end of geography” generated by financial globalization, with all due respect to sceptics in the matter of geography, it appears that distance and proximity still matter, and so do the other kinds of “proximities”. All those affinities might be summarized in the listing ties preferences, which bond dyads of places or multilateral relations. Besides, those affinities and spatial interactions might be specifically crucial in the process of global integration of emergent markets and marketplaces. Thus, I argue that far from sounding the death knell of geography, the global financial integration is shaped by the interactions between the financial flows.

6. References:

Baker H.K., Nofsinger J.R., Weaver D.G., 2002, « International Cross Listing and Visibility », *Journal of Financial and Quantitative Analysis*, pp. 495-521

Castells M., 1997, *The rise of the network society*, Oxford, Blackwell, 613p.

Castells M., 2004, « An Introduction to the Information Age. » *The Information Society Reader*. (ed.) Frank Webster, Raimo Blom, Erkki Karvonen, Harri Melin, Kaarle Nordenstreng, and Ensio Puoskari. London and New York: Routledge, pp.138-149

Chang Y.-C., Polachek S., Robst J., 2006, « Geographic proximity, Trade and International Conflict/Cooperation », *IZA Discussion Paper* n°1988, 49p.

Chavagneux Ch., Palan R., 2007, *Les paradis fiscaux*, La Découverte, coll. Repères, 122p.

Clark G.-L., Wójcik D., 2007, *The Geography of Finance, Corporate Governance in the Global Marketplace*, Oxford University Press, 242p.

Didelon C., Vidal Ph., 2008, « L'Europe tisse encore sa toile », *Atlas de l'Europe dans le monde*, La Documentation française, ch.15 (forthcoming)

Domowitz I., Glen J., Madhavan A., 1998, « International Cross-listings and Order Flow Migration: Evidence from an Emerging Market », *Journal of Finance*, n°53, pp. 2001-2007

Géneau de Lamarlière, Sainteville, 2008, « Une Europe financière entre consolidation régionale et intégration mondiale », *Atlas de l'Europe dans le monde*, La Documentation française, ch.10 (forthcoming)

Grasland Cl., 2008, « La puissance commerciale européenne : entre mondialisation et régionalisme », *Atlas de l'Europe dans le monde*, La Documentation française, ch.8 (forthcoming)

Offner J.-M., 2000, « Pour une géographie des interdépendances », in *Logiques de l'espace, esprit des lieux. Géographies à Cérisy*, Lévy J., Lussault M. (dir.), Paris, Belin, collection Mappemonde, pp.217-239

Pagano M., Roell A., Zechner J., 2002, « The geography of equity listing: Why do European Companies list abroad? », *Journal of Finance*, 57

Portes R., Rey H., 2000, « The Determinants of Cross-border Equity Flows: the Geography of information », working paper, University de Colombia, Berkeley

Rallet A., Torre A., 2001, « Proximité géographique ou proximité organisationnelle ? Une analyse spatiale des coopérations technologiques des réseaux localisés d'innovation », *Economie appliquée*, 54, pp.147-171

Rauch J., 1999, « Networks versus Markets in International Trade », *Journal of International Economics*, vol.48, n°1, pp.7-35

Sainteville M., 2008, « Stock exchanges networks embedded within local financial centres: the scope and relational preferences of the Financial Clusters Partnership Pool », *Regions, the Dilemmas of Integration and Competition?* Regional Studies Association, Annual Conference, Prague, 27-29 mai 2008

Sarkissian S., Schill M.-J., 2004, « The Overseas Listing Decision: New Evidence of Proximity Preference », *The Review of Financial Studies*, Vol. 17, n°3, pp.769-809

Serfati Cl., 2006, « Quelques enjeux autour de la 'nationalité des firmes' », in *La revue internationale et stratégique*, n°62

Ulf N., « Stock exchange merger and liquidity: evidence from the Euronext merger », EEA-ESEM Congress, August 2008, Milan

Veltz P., 1996, 2000, *Mondialisation, villes et territoires. L'économie d'archipel*, Paris, PUF