There are many accounts detailing the importance of small and medium enterprises (SMEs) as a sector with significant potential for job creation, and as a catalyst for economic activities, entrepreneurship, and innovation. These accounts also point to the significant constraints that have an impact on the development of SMEs. The constraints include factors that are idiosyncratic to the nature of the enterprise, on one hand, and factors pertinent to the environment in which SMEs operate, on the other. Without fail, significant discussion includes a focus on the access to finance as one of the most critical factors affecting the development of SMEs. In a recent study, SMEs in almost all European Union member countries were asked to rank different development constraints according to their importance. For most respondents, access to finance was among the three most important constraints. Experts also indicated that the absolute importance of “access to finance” is negatively correlated with the size of the enterprise.

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1 The other two key factors highlighted were the relevance of tax and legal issues.
policy and the practices of price discrimination. Therefore, the liberalization of the airlines sector or the privatization of airports is not a sufficient condition for the liberalization of air transportation services if the access policies are restrictive or airport fees are set in an anti-competitive fashion.

These comments are mainly concerned about access policies and non-discriminatory treatment for airport users, which are the core part of the regulatory and competitive environment of the non-competitive segment of air transportation. However, as airline competition and air traffic control services are also very important for the competitive structure of the air transportation sector, some comments on these matters will also be made.

**Airspace Categories and Navigation Facilities**

To take advantage of free and non-discriminatory access needed for competition, operators should be guaranteed that a minimum set of technical regulations are in place. However, there are still countries in the region that are classified as Category III, meaning that they do not comply with International Civil Aviation Organization (ICAO) safety standards. Paraguay and Uruguay are among them. Additionally, navigation facilities have very low standards in some countries. For this reason integration of air transportation services demands not only investing in airport facilities, but also in the improvement of navigation facilities. It should be noted at this point that there are enormous network economies to be gained from the improvement of air navigation facilities. At the same time, the level of investment needed to modernize air traffic management is usually very large. Insufficient radar coverage, scarce route coverage, few instrumental landing services and obsolete air traffic control services could be an important obstacle to a possible Latin American Open Sky.

However, the improvement of air traffic management is only one aspect of the changes needed to guarantee that free and non-discriminatory regulation will be fully effective as a device to increase competition. Standardization of air traffic systems and practices is also needed. But, in Latin America, there are more than 40 civil aviation authorities and close to 40 information regions, and the path to multilateral air traffic management will be contested by those governments and interest groups that favor government control of air traffic management, for so-called national security reasons.

**Open Latin American Sky**

The integration of the air transportation sector across Latin America would improve dramatically with a multilateral open skies agreement. There are many reasons why a multilateral agreement would be a very beneficial step forward. First, it simplifies negotiation and approval and generates a domino effect of incentives for other countries to participate in the process while providing a competition-enhancing model for future agreements. Therefore, it avoids the prolonged negotiation of numerous individual bilateral agreements. Second, multilateral open skies agreements also increase the negotiation power of the countries that sign it with respect to third countries. By expanding the open skies model to the multinational level, the new agreement would help set the terms for the Latin American marketplace. Finally, it facilitates carrier access to equity financing. Most bilateral agreements require that substantial ownership of each country’s carriers be vested in that carrier’s homeland nationals. However, this requirement had made it difficult for many foreign carriers, which don’t have access to large domestic capital markets, to obtain cross-border financing. The multilateral agreement substantially liberalizes the traditional ownership requirement, thus enhancing foreign carriers’ access to outside investment.

The Andean Community has advanced in the path to liberalization of air freedom rights. At least at the regional level, air cargo is liberalized and there is a multilateral agreement. One possibility for an open Latin American sky would be the signing of a generous open skies agreement between the Andean Community and MERCOSUR. However,
even if this was feasible, several issues would still need to be addressed. In particular, the mechanism for enforcing the terms of the agreement and the provisions to control (or even avoid), bilateral negotiations.

**Competitive Rules for Slot Allocation**

The allocation of take-off and landing slots is another important question that may deter competition in air transportation. Even if there is an open skies agreement, the rules for allocating slots can hinder actual competition. Although the problem of slots allocation in Latin America seems to be less dramatic than in the European Union (due to lower congestion across Latin American airports) slot assignment approaches based on market mechanisms are recommendable. Market-based approaches are based on the following principles. First, buying and selling slots in an airport should be allowed. This principle is not met in the European Union since the regulation on slots allocation forbids selling and buying them. Second, preserving slots for certain categories of operators should not be allowed. However, positive discrimination is the core of the EU system of “grandfather rights.” Third, concern about the persistence of dominance should not merit additional interventions in the slot market. In the EU, large airports have a coordinator to regulate the market every six months. Fourth, hoarding of slots without using the use-it-or-leave-it rule, which produces inefficient outcomes should be avoided. The EU regulation, on the contrary, uses the use-it-or-leave-it principle heavily. Since traffic congestion is not high in most Latin American airports, a system of “grandfather rights” and “use-it-or-leave-it” may be enough to guarantee access. Even though these procedures have low efficiency, the cost is small if there is no congestion, and it has the advantage of protecting, at least initially, small or financially weak domestic carriers.

**Effective Competition in Handling Services**

Liberalization of ground handling is basic to promote competition and fair access to airport infrastructure because expensive and discriminatory charges for handling can have a large effect on competition in air transportation. It is important to avoid vertical integration in handling and to allow self-handling, at least at the level of passenger services (if there is enough space). It is also very important to have a transparent policy with respect to handling concessions and charges. Restrictions to self-handling should only be allowed in ramp (for security reasons), but in this case there must be a mechanism to guarantee non-discriminatory charges.

The fact that there is more than one handling firm in large airports does not necessarily imply real competition. And potential entrance into this market does not guarantee more competition and lower charges, since the exception of capacity constraints is claimed very often. The handling in large airports should be carried out by corporations that are independent from the airlines operating in the airport, from the airport operators, and from any body controlled directly or indirectly by the airport operator or airlines with operations in the airport. Otherwise, a good rule of thumb is to have at least two independent operators.

**Enforcing Non-price Discrimination in Fuel**

Fuel cost represents 20% to 22% of the cost of airlines. Compared with aeronautical charges (ATC, landing and take-off fees, parking charges, etc.) or even passengers and cargo handling charges, fuel represents a very large proportion of total cost to carriers. There is evidence of large deviations in the price of fuel (even up to 30%) depending on the origin and type of flight, even in very developed airport systems like the EU. In Latin America, these differences are even larger. Since fuel represents such a high proportion of the airlines’ costs, it is very important to guarantee that there are no discriminatory charges. Since introducing competition in fuel provision services at the airport level may be difficult, competitive rules should be applied and enforced. Competition authorities or even special regulatory agencies may be needed to do the monitoring.

- **A rule for improving competition is to make sure that fees are related to costs and to avoid differences in fees that are not related to cost differentials.**

**Final Recommendation: Promote Cost-based Charges in Services**

Private sector participation in many airport infrastructures in Latin America has implied a substantial increase in charges (20-35%), at least if one takes seriously the complaints of carriers. Private sector participation might increase charges in airports, especially if they coincide with rising environmental, quality or security standards. However, regulation’s goal should be to increase benefits to consumers and users and ensure non-discriminatory access. A general rule for so doing is to make sure that fees are related to costs and to avoid differences in fees that are not related to cost differentials. The application of differential charges according to nationality, or transport provider, generates distortions in competition. It makes sense to charge a higher landing fee to a large aircraft than to a small aircraft. However, it is discriminatory to charge differently according to the domestic versus international nature of the flight. The basic principles of “user pays” and “marginal social cost” developed by the EU White Paper (1998) on fair payment for infrastructure use could be a good benchmark. National or regional regulations establishing a detailed account for how to set cost-related charges and fees are a necessary condition for enforcing cost-based charges.
prize. Enterprises with 1-9 employees rank this constraint higher compared with other constraints than enterprises with 10-49 employees. This finding hints at the role of the underlying growth cycle in the evolution of SMEs, where businesses usually start with their own resources then graduate to a phase where they become undercapitalized, and thus required additional funds.

There has been a real flirtation with capital markets as a source of funding for SMEs. In specific terms, this pertains to the development of SME-specific securities exchanges in some countries, including Germany, France, Italy, and Austria that have been copied to some extent by some exchanges in developing countries. This article reviews the experience of various exchanges and reaches some conclusions regarding the applicability of capital markets as a mechanism to increase access to funding for SMEs.

SME-Specific Securities Exchanges

Most SME-specific securities exchanges develop as offshoots of more established exchanges. The SME exchanges are established to meet sector specific needs or alternatively to respond to market cap qualifications. In both the sector and the market cap segments, higher risk is the factor that distinguishes this structure from the mainstream exchange.

The Helsinki Stock Exchange, for instance, separates its SME markets by sector: a) New Market List for young, fast growing and small high-tech companies; and b) Investors’ List (previously the OTC List and Brokers’ List) for other SMEs. The main purpose is to distinguish between higher and slower growing sectors. This solution usually attracts investor attention to the young, high-risk, but fast growing companies and so in some cases it can be rather disadvantageous for those companies that are listed on the other market as they might find themselves “neglected” by investors.

A market division by market capitalization usually has the purpose of helping investors distinguish between micro, early stage, high-risk companies and established small and medium sized, lower risk companies. An interesting solution for a subdivided SME market is the Deutsche Börse’s example of hybrid segmentation of both sector and market capitalization: (1) SMAX, established in 1999, is a small cap segment for micro blue chips and (2) Neuer Markt (“New Market”), established in March 1997, is an IPO segment for high growth companies involving admission according to the rules of the Regulated Market but offering trading in the Third Segment (Regulated Unofficial Market).

Another interesting example is the Australian Stock Exchange (ASX) that initially allowed listing of small cap stocks on its main exchange and, in 1998, created an “Enterprise Market” as a seed funding market. In terms of company size, it is probably one of the smallest SME market and in many respects it might be more appropriately viewed as a matching mechanism because it does not officially list or trade securities but operates as an Internet based “market” that brings together companies offering investment opportunities, potential investors, and a business network of advisors. Businesses do not list their securities but publish specific investment opportunity for the information of the investment community. Once successful in attracting an investor, private negotiations begin with the business and the potential investor.

The European experience with SME exchanges is also very interesting. Many of these markets were established with some type of sponsorship and support either from existing exchanges or by a public entity. However, their purposes were not the typical ones of exchange markets. Some SME-specific exchanges were developed as incubator-type mechanisms that would eventually be graduated to the mainstream market. In other cases, the exchanges established their SME markets for different competitive reasons, e.g., marketing purposes, and not all of them operate under the explicit goal of profitability. The overall rationale being that this segment of the market would need specific type of enticement to both list and also attract investors to ensure adequate liquidity. The table below gives an overview of the European new markets as of the end of 2001. By the end of 2001, there were 20 new markets aimed at young, high growth and mostly technology-focused enterprises. The growth of all markets has slowed down, which most likely will affect the smaller markets that are widely considered as more risky. In the year 2000, all markets suffered from the decline of technology stocks.

Assessing the Success of SME Exchanges

The jury is still out on the accomplishments attained by stock exchanges dedicated to serving SMEs and the extent to which they have been successful in bringing SMEs to the capital market. On one side, there is support for the notion that, especially for emerging economies, stock exchanges are particularly relevant to help medium size indigenous firms gain access to finance and promote local market development. On the other hand, given the nature of SMEs, there are specific doubts regarding the suitability of SMEs for capital markets.

One factor that affects the success of SME-specific exchanges is the inherent inflexibility of existing standards in the mainstream exchange.

Experience shows that despite some successes, there is not a prepon-

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derance of evidence to indicate that capital markets would resolve all the financing constraints that SMEs face. Instead, it is more important to focus on the overall access to financial markets. It is somewhat difficult to prove the success of SME markets because only limited data is available and few evaluations have been made so far. In his study, M. A. Schulman claims that the “responses to the FIBV’s SMB Questionnaire strongly indicate that SMEs are benefiting from coming to market”.

Many of the SME specific exchanges that developed in Europe were motivated by the opportunity to replicate the success of NASDAQ in the later 1990s, which became a primary source of funds for entities with high-growth potential. However, most of these SME-exchanges were unable to replicate the kind of success that NASDAQ had and many have been unsuccessful in attracting an appropriate number of issuers, while others have suffered from regulation, risk or liquidity issues. However, while NASDAQ has a very high market capitalization, its liquidity (turnover of shares as a percent of total market capitalization) is not so much different from that of some of the new European markets that are considerably smaller. Nuovo Mercato and techMARK, for instance, proved to be the most liquid new markets in the past few years.

By 2002, statistics still indicated a low level of interest for moving SMEs to SME exchanges. For example, in a survey conducted in early, 2002, only 3% of the total SME sector in Europe and only 10% of medium sized companies considered flotation as an option in the foreseeable future. In fact, half of the SMEs surveyed, indicated that they would not seek a change of ownership in the foreseeable future. Most SMEs seek a change of ownership in a three- to five-year period and show two preferences: trade sale and passing the business on to the next generation. However, if we look specifically at medium sized businesses, there are two options that are

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**TABLE 1: SME Exchanges in Europe**

<table>
<thead>
<tr>
<th>COUNTRY (YEAR OF ESTABLISHMENT)</th>
<th>CITY</th>
<th>NEW MARKET</th>
<th>LISTED COMPANIES (NUMBER)</th>
<th>MARKET CAPITALIZATION (MILLION EURO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium (2000)</td>
<td>Brussels</td>
<td>NASDAQ Europe</td>
<td>50</td>
<td>8000</td>
</tr>
<tr>
<td>Czech Republic (1999)</td>
<td>Prague</td>
<td>Prague SE New Market</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Denmark (2000)</td>
<td>Copenhagen</td>
<td>KKVX Growth Market</td>
<td>13</td>
<td>1,000</td>
</tr>
<tr>
<td>Finland (1998)</td>
<td>Helsinki</td>
<td>HEX New Markt</td>
<td>16</td>
<td>437</td>
</tr>
<tr>
<td>France (1996)</td>
<td>Paris</td>
<td>Nouveau Marché (Euronext)</td>
<td>164</td>
<td>15,000</td>
</tr>
<tr>
<td>Germany (1997)</td>
<td>Frankfurt</td>
<td>Neuer Markt</td>
<td>327</td>
<td>50,000</td>
</tr>
<tr>
<td>Greece (2001)</td>
<td>Athens</td>
<td>Athens SE (NEXA)</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Iceland (2001)</td>
<td>Reykjavik</td>
<td>ICEX Alternative Market</td>
<td>3</td>
<td>472</td>
</tr>
<tr>
<td>Ireland (1997)</td>
<td>Dublin</td>
<td>Developing Companies Market</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>Italy (1999)</td>
<td>Milan</td>
<td>Nuovo Mercato</td>
<td>45</td>
<td>13,000</td>
</tr>
<tr>
<td>Malta (2001)</td>
<td>Valletta</td>
<td>Alternative Companies List</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Netherlands (1997)</td>
<td>Amsterdam</td>
<td>EuroNM Amsterdam (Euronext)</td>
<td>9</td>
<td>268</td>
</tr>
<tr>
<td>Poland (2000)</td>
<td>Warsaw</td>
<td>Warsaw SE (SITECH/TechWIG)</td>
<td>21</td>
<td>7,000</td>
</tr>
<tr>
<td>Slovak Republic (2000)</td>
<td>Bratislava</td>
<td>Bratislava SE New Market</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Spain (2000)</td>
<td>Madrid</td>
<td>Nuevo Mercado</td>
<td>13</td>
<td>17,000</td>
</tr>
<tr>
<td>Switzerland (1999)</td>
<td>Zurich</td>
<td>Swiss Exchange New Market</td>
<td>15</td>
<td>4,000</td>
</tr>
<tr>
<td>United Kingdom (1995)</td>
<td>London</td>
<td>AIM</td>
<td>629</td>
<td>19,000</td>
</tr>
<tr>
<td>United Kingdom (1999)</td>
<td>London</td>
<td>TechMARK</td>
<td>246</td>
<td>693,000</td>
</tr>
</tbody>
</table>

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4 SMB: Small and Medium size Business.
ranked higher relative to the overall SME sector: private equity investors (22% compared with 15%) and flotation (10% compared with 3%).

Another factor that affects the success of SME-specific exchanges is the inherent inflexibility of existing standards in the mainstream exchange. In addition to the fact that registration and listing on stock markets are often expensive, the rules for stock exchange listing may require a minimum firm size or age, a certain level of profits or other enterprise characteristics, which are unattainable for SMEs. Thus, regulations would need to be tailored to ensure that the qualification standards for registration are more flexible and the registration procedures simplified.

**SMEs face major barriers to access capital markets, and specifically, SME-specific exchanges should not be viewed as a panacea to resolve these issues.**

**Conclusion**

The lessons drawn from the experience of SME-specific exchanges are relevant for emerging economies in Latin America and the Caribbean. The article has indicated that there is evidence that SMEs face major barriers to access capital markets, and specifically, SME-specific exchanges should not be viewed as a panacea to resolve these issues. In this respect, specific actions to help increase SME access to financing should be tailored to their needs and could include harmonizing measures to improve structural and economic conditions, but most importantly, to improve regulatory conditions for the participation of financial intermediaries, issuers and private and institutional investors. At some stage, this would have the added positive outcome of making many local capital markets more relevant and attain their true potential to serve those enterprises that are at a stage to access risk capital.
Book Reviews, Articles & Papers:


Infrastructure services have evolved from monopoly and public ownership settings lacking specific regulations, towards scenarios where private participation prevails, with competition and regulation playing complementary roles. However, even though competition is a pivotal feature to all public services reform processes, a high degree of vertical and horizontal concentration pervades within the industrial structure of many of the region’s countries. Furthermore, mergers and acquisitions taking place in the context of an increasingly global economy, without the appropriate legislation geared at promoting competition and restraining market control, have often led to reduced levels of competition for the market or in the market. The book, which has twelve chapters by different authors, identifies competition problems in infrastructure sectors, discusses legal and structural mechanisms to overcome them and offers conceptual and practical approaches for dealing with competition problems in regulated industries in emerging economies.


The two volumes provide twenty-four articles on privatization issues. The first book addresses the reasons put forth by privatization proponents, the theoretical and conceptual issues raised, as well as the political and institutional dimensions and political and economic impacts of privatization. Book two addresses privatization processes in industrialized countries as well as in transitional and emerging economies. Competition and regulation, which are the building blocks of the privatization process are only marginally address in these two volumes. The editors’ decision of limiting the coverage of competition did not allow for the study of the impact of privatization on market efficiency. Efficiency impacts are limited to internal efficiency and they do not find conclusive evidence.


This study focuses on the relationship between small and medium sized enterprises (SME), private equity and capital markets in the European Union and in the United States. Specifically, it examines the impact of private equity and capital markets on SME developments on both sides of the Atlantic. The work analyzes the different features of SMEs in Europe and in the United States, from the seed stage to more mature businesses. It describes start-up and failure profiles of these types of enterprises as well as topics that range from their economic impact to the problems they find when seeking finance. The authors use private and public SME data for the analysis. The book provides an in-depth research of the most relevant issues for SMEs in the dawn of the XXI century: private equity and venture capital, markets for SME publicly quoted stocks, institutional policies towards SMEs. The book also offers conclusions and recommendations for policymakers and SME executives in learning best practices of two different models of SME.


The Yearbook provide knowledge of how to manage project finance in today’s complex markets and illustrates trends within the market through editorial and comments. It also includes specialist chapters covering innovative aspects of project finance, in the form of case studies and regional reviews covering a wide range of aspects: the role of equity in European private infrastructure, rating US energy trading and marketing firms, and financing solutions for European infrastructure development. Industries covered cross the spectrum from rail, port privatization, wind farms, power, and infrastructure. This edition features project reports from Europe, Middle East, Australia, UK, Portugal, The Netherlands, Mexico, Brazil, and Japan. The accompanying directory lists over 1500 companies specializing in project finance and is recognized may be useful for contacts within the industry.


A competitive environment in infrastructure sectors enhance no only infrastructure productivity, but across the whole economy. A top priority of the current government in Russia is to reform the infrastructure sectors, specifically in such sectors as rail transport and electric power, to create an efficient and effective regulatory regime that supports the creation of competition where possible and provides more effective protection to consumers in those spheres where competition is not possible. However, even
Infrastructure and Financial Markets Review

though competition is a pivotal feature if Russian infrastructure reform, problems that need to be solved for achieving competition are complex both technically and socially. This book compiles the proceedings of four meetings held at the request of the Minister for Antimonopoly Policy of the Russian Federation, on the reform of railroads, telecommunications, electricity and natural gas, during December 2000-September 2001. This review is part of the OECD’s ongoing co-operation with non-Member economies around the world. Enhancing competition in infrastructure sectors demands the appropriate mixed of three policies. Structural reforms that separate competitive and non-competitive segments, competition regulations as those forbidden abuse of dominant position, control of merger and acquisition and appropriate regulations for ensuring that prices and access of essential facilities, the non-competitive segments of the industry are not non-discriminatory and fair.

Events:

January 24, 2003

The Inter-American Development Bank (IDB) and the Association of Supervisors of Banks of the Americas (ASBA), will host a one-day Seminar focusing on the current situation of the works of the New Capital Accord, the preparation status at the regional level from the perspective of both the regulators and the industry, and the challenges for its successful implementation.

The event will take place at the IDB Headquarters, 1300 New York Avenue NW, Washington DC, Andrés Bello Auditorium, on January 24, 2003. For additional information, please contact Andrés Zamberk at (202) 623-1878 or andresz@iadb.org.