



# Latin American IT Business

## Risk and Rewards in Financing With America's Neighbors

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High economic volatility, political instability, and large-scale social transformations require business leaders to rethink what makes a successful corporation in the 21st century. Radically changing business environments mean that global corporations must develop more sophisticated mechanisms to anticipate and minimize business risks.

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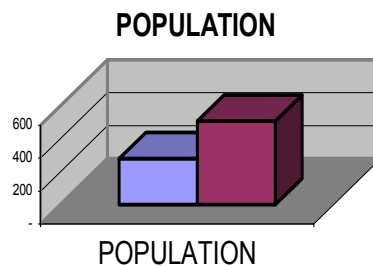
## 1.0 EXECUTIVE SUMMARY

It is quite possible to build a profitable and growing information technology (IT) equipment leasing business in Latin America despite the widespread perception that such an undertaking would represent undue risk or that Latin America is an intrinsically “risky region” for any sort of IT-related financial investment. While Latin America does pose unique challenges to those seeking to invest in IT there, it also offers equally distinct opportunities for almost unprecedented growth and reward for those who take the time to fully understand its IT markets.

United States Department of Commerce data indicate the potential for U. S. \$25 billion (all dollar amounts cited in this paper will be in U.S. dollars, unless stated otherwise) in total sales in Latin America for fiscal year 2003. With an average lease penetration rate of 12 percent to 15 percent, substantial opportunities exist for equipment leasing and financing expansion in Latin America.

The recent economic and political volatility in Argentina and violence in Colombia have created an undercurrent of negative impressions about South America. However, the fundamentals of most South American economies are sound, and the businesses they sustain should be re-evaluated today. The *Asociación de Leasing de Argentina* expects continued recognition of this fact and more favorable scenarios to emerge in the near future. In addition, Brazil is already a thriving market for IT goods and services, with noteworthy advancements in e-commerce and cutting-edge developments in electronic banking.

In short, the potential for business growth in Latin America is enormous. Looking at demographics is revealing in itself. The population of South America today is 500 million, and the annual per capita income is \$3,000 compared to \$30,000 in the United States. The “upside potential” is glaringly obvious: *as living standards in Central and South America and Mexico advance toward U.S. levels, demands for services and goods will rise correspondingly.*



Source: World Bank, data as of 2002

The economic research evaluated for this paper suggests that IT will continue to lead further business development worldwide. Therefore, distributing IT to an increasing number of business and educational entities will lay the foundation for growth in productivity, enhanced cooperation, and access to world markets—the fundamental components of strong economic development. With established macro-economic and social demand, the IT equipment leasing and finance

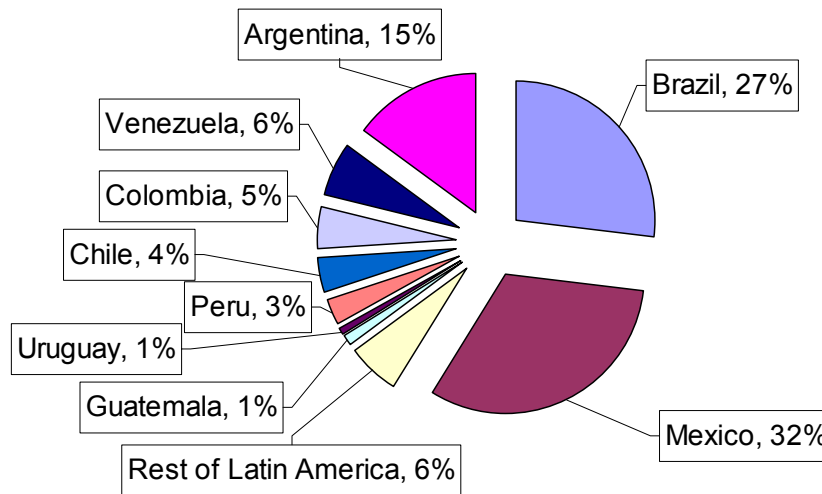
industry is offering a unique opportunity to build equipment volume and profits by helping IT vendors penetrate emerging and expanding markets in Latin America.

This white paper will examine the actual size and potential of Latin American IT markets, their unique opportunities, and the corresponding risks of conducting business in this region. Finally, it will suggest a formula for identifying potential rewards, assessing their corresponding risk, and identifying various types of risk coverage to consider.

## 2.0 INTRODUCTION

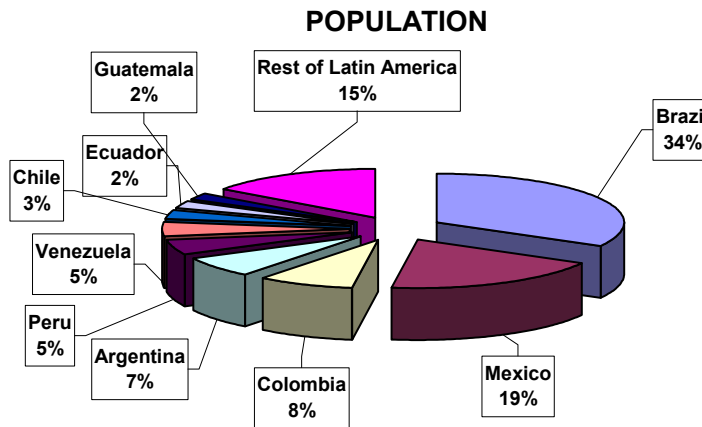
### *Information Technology Will Drive Business in Latin America*

In terms of actual purchasing power, 92 percent of the Latin American market potential is concentrated in just seven countries—Mexico, Brazil, Argentina, Venezuela, Colombia, Chile, and Peru—as the following chart illustrates.



Source: World Bank Group, data as of 2002

Likewise, those with the resources to buy will also be those expected to use those new goods and services. In terms of potential users of goods and services, the rankings change slightly, but, as shown below, the same countries that hold the majority of the purchasing power in the region also constitute the preferred target markets.



With regard to IT sales, the potential for sales of computers, hardware, and software services in the aforementioned countries is represented in the following table:

**COMPUTERS, HARDWARE,  
SOFTWARE, AND SERVICES**

<b>COUNTRY</b>	<b>MARKET SIZE (U.S. \$ MILLION)</b>
BRAZIL	13,500
MEXICO	6,391
ARGENTINA	3,275
COLOMBIA	1,126
CHILE	189
VENEZUELA	648
PERU	234
<b>TOTAL</b>	<b>\$25,363</b>

Source: United States Department of Commerce

In general terms, equipment financing is a critical factor for successfully closing sales of IT equipment and services. However, many local financial markets in Latin America are not yet prepared to understand and manage asset-based financing for IT equipment. Therefore, a “captive” leasing organization, working as an arm of the manufacturer and therefore capable of providing in-house financing, will not only add value and help capture greater profits but also serve to demonstrate the successful application of asset-based financing for IT products.

To ensure that financing can be fully utilized, many factors must be evaluated in detail and assessed in the unique context of each country and its potential market. Country-specific issues cover a wide range of topics and include foreign exchange risk, interest rate differentials, the prevailing internal financial climate, structure and enforcement of collateral, accounting regulations, tax benefits and burdens, bankruptcy law, and business cultural differences.

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## **3.0 COUNTRY-BY-COUNTRY CONSIDERATIONS**

### *An Overview of IT Market Characteristics in the Seven Leading Latin American Economies*

#### **3.1 Mexico**

Mexico is the largest Latin American economy and the ninth-largest economy in the world.

The United States Department of Commerce reports that Mexico represents the second-largest Latin American market for IT products, following Brazil. The size of the IT market in Mexico grew by 5.6 percent during 2001, reaching \$6.0 billion. For 2002, the forecast was for a conservative increase of 6.1 percent, the World Bank reported. Similar growth can be forecast for 2003.

##### **3.1.1 IT Demand**

Hardware equipment sales in Mexico grew by 8.5 percent between 2001 and 2002 and now represent 59.9 percent of the total IT market in that country. Sales of multi-user systems, network equipment, and data communications equipment are seeing particularly strong growth in Mexico. The import market there is estimated at 45 percent, with U.S. exports accounting for almost 70 percent of all imports.

Within the hardware sector, personal computers (PCs) represent the largest market segment. According to the most recent available estimates, the value of the PC market in Mexico was \$2.1 billion in 2001, up 6 percent from 2000, but was only expected to grow to \$2.2 billion in 2002 and \$2.3 billion in 2003. Nonetheless, the greatest proportion of Mexican IT spending is projected to be in PCs and will represent a more than 30 percent share of total IT expenditures in that country through 2005.

##### **3.1.2 Growth Opportunities**

In 2001, the Mexican IT services market, which represents 30.3 percent of the total Mexican IT market, increased by 2.6 percent. This subsector of Mexico's economy was expected to grow by 5.3 percent in 2002 and is expected to grow by 5 percent in 2003, primarily through opportunities for U.S. companies providing Internet- and e-business-related services. The Mexican use of application service providers (ASPs) is more popular, and therefore more profitable, than in the United States. Since most small companies in Mexico do not have an IT department, they often find it easier to outsource their application needs to an ASP, a practice that is less costly in some cases than actually purchasing the necessary hardware, software, and storage capacity to handle certain applications themselves. Complete ASP solution providers that allow businesses to rent software applications and storage space are in demand. Small and medium-sized enterprises will provide excellent growth opportunities for ASPs in Mexico.

### 3.1.3 Market Characteristics

Accounting for 9.8 percent of the IT market in Mexico, the software market there is very competitive, with most major U.S. and other foreign developers actively selling in it. Very few firms actually develop software in Mexico. One exception is Sofftek, a Monterrey-based company that also has operations in Latin America, the United States, and Spain. Of total software sales in Mexico, only an estimated 10 percent is packaged, and some 90 percent is imported through subsidiaries of large international corporations. The remaining 10 percent is customized software, which is the second most important application after administrative software because of its flexibility and relatively low cost compared to high-end applications such as enterprise resources planning (ERP), customer relationship management (CRM), or supply chain management (SCM) applications.

Most Mexican companies are unfamiliar with enterprise applications. Thus, U.S. companies must place a priority on educating potential end-users about the utility of these applications in order to increase market share. The Mexican software market was valued at \$587 million in 2001-2002 and is expected to grow by 1.8 percent in 2002-2003. Software spending is expected to recover slightly in 2004 after two years of rather flat spending. The majority of expenditures in the software arena are for application software rather than system infrastructure software. Spending on application software is projected to represent only 1 percent of software expenditures through 2005.

Mexican IT Market	U.S. \$ MILLIONS		
	2000	2001	2002/e
<b>Total Mexican Market</b>	5,716	6,022	6,391
<b>Local Production</b>	3,395	3,553	3,746
<b>Imports</b>	2,549	2,718	2,917
<b>Exports</b>	228	249	272
<b>Imports from U.S.</b>	1,243	1,331	1,429

Source: Total market figures are from Select-IDC; all other figures are estimates.<sup>1</sup>

Fiscal Year 2003 forecast volumes are similar to those of 2002.

The results of a survey by IDC, one of the world's most reliable sources of data for the IT industry, correlated investment in software to the total revenues of Mexican companies. The findings showed that, on average, Mexican businesses invest 0.41 percent of their total revenues in software annually. Medium-sized Mexican enterprises led the way by investing 0.71 percent of their revenues in software, while big companies and small companies invested scarcely 0.36

<sup>1</sup> U.S. & FOREIGN COMMERCIAL SERVICE AND UNITED STATES DEPARTMENT OF STATE, 2002, "Mexico Country Commercial Guide FY 2003"

percent and 0.31 percent, respectively<sup>2</sup>. What does this mean for the potential IT investor in Mexico?

With a market potential of \$6 billion in Mexico, most existing vendors need to provide a competitive business proposition to their customers. *Financing is definitely the key component of such a business proposition in Mexico because customers are demanding extended payment terms in order to keep their cash, and, in most cases, they have restrictions on investments in IT fixed assets, both tangible and intangible.*

## **3.2 Brazil**

Until the end of 2001, Brazil was *the* largest Latin American economy and the world's eighth largest. In 2002, it became Latin America's second-largest economy after Mexico, and its ranking in the world's economy fell to eleventh. Brazil was displaced by China (which rose to sixth place) and assumed a spot behind Spain (at number 10) and Mexico (as mentioned above, at number nine)<sup>3</sup>.

Nonetheless, having the largest population of Latin America and the second-largest population of the Western Hemisphere, Brazil still has the economic potential of a giant market.

The United States Department of Commerce reached this conclusion: "As the largest and most dynamic IT market in Latin America, Brazil offers significant opportunities for U.S. suppliers of IT products and services. Brazilians have a high regard and strong preference for U.S. technologies and will buy from U.S. companies that can offer competitive prices."

### **3.2.1 IT Demand**

The Brazilian market for software represents one of the best opportunities for U.S. exporters. Industry experts predict total software sales in excess of \$6 billion in Brazil during 2002. Of this amount, \$2.7 billion will be spent on imported software products, of which almost 90 percent will originate in the United States. The role of the United States as the primary source of software for Brazil paves the way for U.S. suppliers to introduce new products to this market.

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<sup>2</sup> IDC "Software Investment Buying Trends and Vendor Position," November 2002

<sup>3</sup> World Development Indicators database, World Bank, August 2002

## BRAZILIAN SOFTWARE/SERVICES REVENUES

(U.S. \$ millions)			
	2000	2001	2002*
<b>Total Market</b>	1,560	5,500	6,000
<b>Local Production Equip.</b>	760	3,000	3,300
<b>Total Exports</b>	-	100	100
<b>Total Imports</b>	800	2,500	2,700
<b>Total Import from U.S.</b>	640	2,000	2,500

(\*) Source ABES 2001 Estimated Exchange Rates. All values are expressed in U.S. dollars as of June 2002 (US \$ 1.00 = Brazil R 2.70).

### **3.2.2 Growth Opportunities**

The Brazilian packaged software market has enormous potential for U.S. suppliers as long as the Brazilian government and the Brazilian private sector make meaningful progress toward reducing intellectual property rights violations.

Brazilian manufacturing and service corporations have a significant need for software solutions that will help them reduce costs and increase profits through automation of their industrial and commercial processes. The software packages that will continue to be in the highest demand in Brazil are those for CRM, SCM, networking and communications, database management, electronic document management (EDM), and ERP.

Desktop PC applications, such as word processing, spreadsheet, and graphics software, represent good sales opportunities as the use of PCs grows among small and mid-size companies and more affluent home users. Educational software packages will emerge as another lucrative area in concert with the Brazilian government's efforts to provide PCs to secondary schools and its focus on electronic learning (e-learning).

Most Brazilian companies are concerned about the security of their operations following the tragic September 11<sup>th</sup> attacks in the United States. They are expected to spend heavily on IT security solutions such as encryption, anti-virus systems, and firewalls. The end-user sectors that U.S. firms should consider identifying first for such needs are financial service institutions, particularly banks, and retail operations, because they face the most immediate security threats.

The following table shows the Brazilian corporate investment business plan for IT. Among 147 companies that participated in this survey, 49 percent are from the industrial sector, 41 percent are from service, and 10 percent are from the commercial segment.

## INVESTMENT IN THE BRAZILIAN CORPORATE MARKET DURING 2002

Software and Services	percent companies investing in solutions
CRM	60%
Data Warehouse	57%
Business Intelligence	53%
Supply Chain	41%
E-commerce	39%
Internet/Intranet/Extranet	38%
Security	34%
ERP	30%
Industrial Automation	19%
Outsourcing	18%

Source: *Gazeta Mercantil* (a leading Brazilian business daily)

### 3.2.3 Market Characteristics

In addition to the software industry, Internet services and e-commerce present very encouraging prospects for the IT market in Brazil.

According to IDC Brasil, Forrester Research, the Gartner Group, and Boston Consulting Group, electronic commerce continues to grow in Brazil. Although the initial euphoria is gone, this sector continues to receive significant investments, especially in the B2B [business to business] area. In 2001, electronic business transactions between companies in Brazil represented \$3.9 billion. In three years, this amount is expected to more than quadruple, to surpass \$21 billion. Worldwide, the Gartner Group estimates that online sales will reach \$3.17 trillion in 2003, compared to \$75 billion generated in 2000.

In Brazil, business projections for the digital "e-economy" are optimistic despite the depreciation of the *real* (the Brazilian currency), the Argentine crisis, and the U.S. economy's slow down. E-commerce growth was steady in Brazil in 2002, although not as strong as it was in 2000 and 2001. Due to the rapid expansion of the Brazilian telecommunications sector in 2001, this segment grew and made room for more broadband applications. Some of the factors influencing growth in Brazil were:

- Large user base;
- State-of-the-art banking equipment;
- Large local retailers with strong brand recognition;
- A wide array of Portuguese-language content providers; and

- The Brazilian government's new project to extend Internet access to all its citizens.

Brazil has approximately 23 million Internet users. A few large Internet Service Providers (ISPs) dominate the Brazilian market. According to the Brazilian Association of Internet Service Providers (ABRANET), more than a thousand ISPs conduct business in Brazil, but market share is concentrated in the grasp of only five large companies that hold 50 percent of the market. The market leader for paid Internet access is Universo Online (UOL), with approximately one million subscribers. The UOL group is ranked in first, second, and third places for Brazilian ISPs with its UOL, BOL (Brazil Online), and ZipNet holdings.

In addition to being the largest ISP, UOL is also the largest Brazilian portal and has attracted many business partners with its e-commerce site, "Shopping UOL." Other ISPs include ZAZ/Terra (owned by Spain's *Telefonica*), iG, AOL, Starmedia, O Site, Matrix, and PSI Net. Fierce competition among ISPs has caused access costs to fall, which has caused a boom in the number of users, but this has not always resulted in profits for dot.com companies.

The B2B segment is still growing in Brazil and is concentrated in a few large companies. Brazilian companies know they are lagging in this segment and must redouble their efforts in this vital area if they are to remain competitive in the global economy. Although a large number of Brazilian and multinational companies made significant investments to develop e-business there, the statistics on B2B investment point to a starkly different reality. For example, in the state of São Paulo, only 5 percent of the industry there is currently utilizing B2B tools to close sales, according to *The Industries Federation of the State of SP-FIESP*. In contrast, Dell Corporation is a good example of a U.S.-based computer hardware company that opened a plant in Brazil in 1999 (*Rio Grande do Sul*) and has been fully operating in the Brazilian B2B e-business field.

Among the main Brazilian business-to-consumer (B2C) players are diverse retail companies such as Amelia.com (*Grupo Pão de Açúcar*, the second-largest Brazilian supermarket chain), Americanas.com (a major retail chain), *Livraria Saraiva* (a bookstore chain), Webmotors (used-car sales), and Submarino.com (books and CDs). All hope to dramatically increase sales through online channels.

It is estimated that one-fifth of Brazilian Internet users have made online purchases. Most local Brazilian B2C sites are dedicated to books, music, groceries, electronics, brokerages, banks, airlines, computer software and hardware, and other goods or services (including auction sites and virtual automobile dealerships). While books, CDs, and software are still the most frequently purchased items online, Brazilian consumers have begun to buy items such as computer peripherals and accessories, cosmetics, vitamins, car accessories, clothes, household items, and toys via the Internet.

In the consumer-to-consumer (C2C) segment, a number of local on-line auction sites continue to offer their services—e.g., Arremate.com, *Mercado Livre*, and *Lokau*.

The average Brazilian online consumer is well educated, highly sophisticated, accustomed to shopping internationally, and just beginning to experiment with online shopping. The penetration rate is limited due to the relatively small portion

of the population in the upper and middle classes who have access to computers and other necessary hardware to access the Internet.

The government-to-consumer (G2C) and government-to-business (G2B) segments are a new reality in Brazil. The Brazilian government has successfully established a one-stop-shop portal called [www.redegoverno.gov.br](http://www.redegoverno.gov.br), a G2C site where public services are available online to Brazilian citizens. Filing income taxes electronically has become very popular among Brazilians of all classes.

Thanks to Brazilian banks, the country is on the cutting edge in the development of secure e-commerce technology. Through an early focus on PC banking and Internet-based offerings, of which Bradesco (the largest private Brazilian retail bank) was the pioneer, Brazil has developed one of the most advanced home-banking systems in the world. In 1999, approximately 1.5 million Brazilian consumers had accessed their banks via direct dial-up or the Internet, performing a variety of transactions such as obtaining checking account balances, making fund transfers, and applying for loans online.

High-speed Internet access has become more popular in certain regions of Brazil where it is available. Sao Paulo's telecommunications operator, *Telefonica*, offers high-speed Internet services through asymmetric digital subscriber line (ADSL) connectivity, and TVA cable television also offers high-speed Internet access through cable modem technology with its "@jato" service.

Economic and technological issues that have impeded the growth of the Internet and e-commerce in Brazil are gradually being resolved. PC ownership is increasing as prices decline with the introduction of cheaper models. However, local telephone charges remain high because calls are still billed on a per-minute/per-pulse basis. Additionally, despite improvements, the postal and package delivery systems that serve Brazil are still inadequate to meet the high volume of small packages that characterizes B2C e-commerce. As these issues are resolved, the potential for e-commerce transactions will grow as well.

Brazilian E-commerce	(U.S. \$ Millions)		
	2000	2001	2002 (*)
Total Market (B2B + B2C)	3.100	3.900	7.400

Exchange Rate: U.S. \$ 1.00 = R 2.50 (June 2002);

(\*) The above statistics are unofficial estimates;

Sources: IDC Brasil, Forrester Research, Gartner Group, and Boston Consulting Group <sup>4</sup>

The hardware market is a little more complex in Brazil because that country has a very strong domestic computer and peripherals manufacturing industry.

Approximately 63 percent of the computer hardware market in Brazil is dominated by local production. Among local companies, the major players are Itautec, UIS, Tropcom, and Microtec. These companies benefit from their long-established experience in Brazil as well as their sales distribution channels

<sup>4</sup> U.S. & FOREIGN COMMERCIAL SERVICE AND UNITED STATES DEPARTMENT OF STATE 2002 "Brazil Country Commercial Guide FY2003."

already established in other businesses. Imports account for 38 percent of the local market. International companies, such as Compaq, Acer, IBM, (and, most recently, Dell) established local manufacturing facilities in Brazil to supply the Brazilian and export market. These companies benefit from fiscal incentives, such as BPP (Basic Productivity Process) locally and today enjoy significant market share.

### **BRAZILIAN COMPUTER HARDWARE AND PERIPHERAL MARKET SHARE**

<b>(U.S. \$ millions)</b>			
	<b>1997</b>	<b>1998</b>	<b>1999*</b>
<b>Market Size</b>	5,537	6,545	7,658
<b>Local Production</b>	3,500	4,165	4,873
<b>Exports</b>	92	109	128
<b>Imports</b>	2,092	2,489	2,913
<b>Imports from U.S.</b>	1,781	2,125	2,487

Source: Abinee/Fenasoft/IDC

The first computer manufacturing in Brazil began in the 1960s. During the 1970s, mainframes and the mini-computer dominated local production. Over that decade, Brazil became one of the largest computer markets in the world, although the use of computers was still limited to governmental agencies, universities, and large companies. Between 1960 and 1980, Brazil attracted several foreign suppliers, and a number of domestic companies emerged to service these imported computers by offering software development, accessories, supplies, and services.

During the 1980s and the early 1990s, the Brazilian computer market suffered from the official "market reserve policy," a government ban on computer imports that was designed to encourage the development of domestic Brazilian computer manufacturing. Within this protected market, several local companies that had specialized in providing technical support for foreign computers began to manufacture their own line of products. Unfortunately, this protectionist policy resulted in higher prices, lower quality, and poor technology standards. Under this market reserve policy, most of the computers "manufactured" in Manaus, part of Brazil's free-trade zone, were actually imported computers that were shipped to Brazil dismantled and then re-assembled before receiving a local brand. It was very common at that time to simply put a sticker with a local brand on top of the original manufacturer's name. The failed market reserve policy formally ended in 1992.<sup>5</sup>

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<sup>5</sup> United States Department of Commerce STAT-USA on the Internet, Publication Date: 1998-11-13

**BRAZILIAN COMPUTER HARDWARE SUBSECTOR REVENUES  
(U.S. \$ MILLIONS) AS A PERCENTAGE OF HARDWARE MARKET**

<b>SUB-SECTOR</b>	<b>REVENUES</b>	<b>PERCENT</b>
Small computers	2,243.8	29.3
Printers	896.0	11.7
Large-sized computers	811.7	10.6
Medium-sized computers	635.6	8.3
Supplies and accessories	597.3	7.8
Local network equipment	474.8	6.2
Banking automation equipment	451.8	5.9
Long-distance network equipment	352.3	4.6
Industrial automation equipment	298.7	3.9
Infrastructure systems	206.8	2.7
Monitors/terminals	191.5	2.5
Components	176.1	2.3
Commercial automation equipment	183.8	2.4
Data devices	61.3	0.8
Parts and pieces	61.3	0.8
Other	15.3	0.2
<b>TOTAL</b>	<b>7,658</b>	<b>100</b>

*Source: Anuario de Informatica Hoje*

**3.2.3.1 ACCESSORIES**

Imports dominate the Brazilian accessories market, with the United States and Asia being the primary suppliers. No local market data are available for scanners, handheld computers, multimedia kits, and storage devices.

**3.2.3.2 LAPTOPS**

As in the PC market, the laptop market is dominated by the gray market originating in Paraguay and stimulated by the high prices charged in Brazil.

**3.2.3.3 IMPORTS**

Personal computers, video monitors, printers, and digital switchboards are currently subject to a 30 percent import tariff, which makes competition with local manufacturers stiff, especially when considering the local manufacturing BPP benefit. By the year 2006, all tariffs on computer-related products will be reduced to between 12 percent and 16 percent.

Most computer hardware imports into Brazil consist of peripherals, accessories, and components related to manufacturing. U.S. exports held 85 percent of the import market share in 1998. The best prospects for countries seeking to export to Brazil are laptops, scanners, printers, DVD players, handheld devices, network products, and storage devices.<sup>6</sup>

Therefore, adding up the demand for computer services, Internet services, and e-commerce with hardware, the total Brazilian IT market reaches a figure that exceeds \$20 billion annually. This total represents an enormous potential for financing.

### **3.3 Argentina**

Argentina stands as the world's 17<sup>th</sup> largest economy and was ranked third in Latin America last year.<sup>7</sup> Argentina has maintained this strong economic position despite the Argentine economic crisis of 2002.

While overall the Argentine IT market declined by 9 percent between 2000 and 2001 and this downward trend continues, IT still accounts for a significant share of business in that country. The United States leads all other countries in exporting to Argentina, according to the United States Department of Commerce.

When IT service is removed from the total, there is growth within the overall IT sector in Argentina. This IT market (exclusive of its service component) grew 5.2 percent in 2001 and accounted for \$1.6 billion in revenue. Due to the devaluation of the Argentine peso, this segment may have declined in 2002, but the same devaluation will increase the need for companies to spend additional funds on services to maintain existing technology, the department noted.

According to the United States Department of Commerce, "Growth has been fueled by: 1) clients' need for internal cost reduction; 2) companies' increased concentration in core business, and 3) difficulty retaining specialists in certain technologies within the company. These factors will continue to drive demand for IT services in 2002/2003."

#### **3.3.1 IT Demand**

According to sales ranking, the primary Argentine IT services that are contracted are maintenance, help desk/support, systems management, software development services, outsourcing, and professional services. Hardware repair services are expected to soar in 2002/2003, given the increased obstacles for procurement of new equipment.

Internet data centers, ASPs, and business process outsourcing (BPO) also grew significantly in 2001, the most recent year for which complete data exist. Other IT services that have growth potential in Argentina are e-commerce solutions, disaster recovery systems, call center administration, document management, imaging and storage, and Web site development. Likewise, network security systems and services and the Internet show great potential for 2002/2003. All

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<sup>6</sup> Paschalino, Christian. American University MBA Program. In <http://www.american.edu/carmel/cp8809a/brazil.htm> last visited February 10, 2003.

<sup>7</sup> World Development Indicators database, World Bank, August 2002

these applications are targeted to reduce costs, increase sales, increase efficiency, and improve client satisfaction.

### 3.3.2 Growth Opportunities

According to the research and consulting firm Prince and Cooke, IT services will be one of the first subsectors to pick up when preliminary signs of a turnaround in the Argentine economy appear. Furthermore, IDC Trends Consulting has noted that IT managers are currently more interested in better connectivity and wider bandwidth than in a faster microprocessor. Internet access services grew 46 percent between 2000 and 2001. Although data for 2002/2003 are not currently available, it is estimated that the same pattern is continuing.

### 3.3.3 Market Characteristics

This focus on Internet access and related services explains the trend toward new business models that rely on ASPs or BPO in Argentina. To compete, it has become necessary to provide applications, hardware, and broadband access from one integrated solution provider. Toward this end, certain business alliances with service providers were designed to better satisfy the full spectrum of customers' needs. In this sense, ASPs are still a budding market in Argentina.

#### ARGENTINE IT MARKET SIZE

	(U.S. \$ millions)			
	2000	2001	2002 (projected)	Projected Growth
Hardware	1,645	1,182	895	(2%)
Software	759	664	530	1.5%
Services	1,519	1,549	1,600	6%
Consumables	297	295	250	2%
Total Market	4,220	3,690	3,275	7.5%
Rate of Exchange	US\$1=AR\$1	US\$1=AR\$1	US\$1=AR\$3.5	

Sources: The above statistics are unofficial estimates, based on the most recent available industry sources, such as Prince & Cooke (subsidiary of Forrester Research), IDC Trends Consulting

Additionally, computer hardware was updated by many Argentine companies in the late 1990s and 2000-2001. In reference to end-users, a report by Prince & Cooke shows that 65 percent of Argentine IT revenue comes from sales to large corporations and government. A 12 percent drop in the IT sector in 2001 was due to SMES (Small and Medium Enterprises), SOHO (Small Office Home Office), and residential clients' reduced budgets. In 2002, the annual IT budget of the corporate segment remained at the 2001 level—but in Argentine pesos, which significantly narrows investment capacity. The areas expected to be most affected are hardware, software, and licenses.

Moreover, the software subsector in Argentina dropped 16 percent from 2000 to 2001. The devaluation of the local currency will affect this sector severely, particularly considering that Argentina has highly trained human resources for software development. The unfavorable exchange rate is expected to increase demand from domestic developers.

Argentine IT service niches with the greatest potential include the following:

- E-commerce high-end solutions
- Network services (network management, system management, network cabling, and consulting)
- Network solutions and middleware
- Network security applications and firewalls
- ASPs/BPO applications
- Support services (upgrading, platform conversions, and systems integration)
- Information services (database access, e-mail, stock and financial Information, Internet)
- Transaction services/e-banking solutions and services<sup>8</sup>

### **3.4 Colombia**

Colombia is the fifth-largest Latin American economy and ranks 41st worldwide<sup>9</sup>

Although the Venezuelan economy is larger than Colombia's, the Colombian potential market for IT is better in volume and growth. According to the United States Department of Commerce, Colombia's IT market is valued at more than \$880 million per year and can be assessed as follows:

#### **3.4.1 IT Demand**

Colombia's computer hardware/software market amounted to \$701 million in 2000, \$802 million in 2001, and is estimated to have reached approximately \$880 million in 2002. Real growth of 6.5 percent is predicted during the 2002 to 2004 period, with services growing about 12 percent.

The Colombian imported software market is estimated to have an annual value of \$250 million. The growth of PC software has been boosted by the constant growth of microcomputer sales, which can be used as an indicator to project the market for PC software applications. The price of software for medium and large computers also includes high service costs. As a result, it is difficult to separate services from software because the same software publishers that sell the software also sell its installation, set up and equipment integration, and the customizing of the product.

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<sup>8</sup> U.S. Commercial Service- Argentina Country Commercial Guide FY2003

<sup>9</sup> World Development Indicators database, World Bank, August 2002

### 3.4.2 Growth Opportunities

The applications in Colombia that will see growth this year are related to CRM or the management relations with the client, e-business, and ERP, among others. This tendency exists because these technologies assist in the performance of essential tasks for organizations, such as monitoring fulfillment in different areas, and thereby allow them to make wiser business decisions. All new software applications in the Colombian market should be Internet friendly.

In Colombia, software producers have created quality software adapted to national laws. Software designed for accounting, human resources, and payroll, among other applications, that contains applicable legal and tax regulations is in strong demand. Such software facilitates the tax contribution process that Colombian companies must carry out under law.

### 3.4.3 Market Characteristics

An important characteristic of the computer sector in Colombia is the continuous change in market share (in units and dollars) within the computer, peripheral, and software categories. The Colombian market is composed mainly of PCs, networks, laptops, and handheld computers. Although microcomputer sales represented only 10 percent of the market share a few years ago, they now represent more than 32 percent, followed by peripherals at 25 percent and software at 20 percent. Related hardware (including servers) represented 10 percent; networking products, 8 percent; and maintenance services, 5 percent.

By the end of 2002, it is estimated that the number of computers in use in Colombia exceeded 3.2 million units. By 2005, the IT sector in Colombia will represent over 5 percent of the nation's GDP, with related services predicted to be at 40 percent of this total market.

**COLOMBIAN IT MARKET DATA TABLE**

	(U.S. \$ millions)		
	2000	2001	2002*
Total Market Size	701.5	802.0	880.0
Total Local Production	3.5	4.8	8.0
Total Exports	2.0	2.8	3.2
Total Imports	700.0	750.0	803.0
Imports from the U.S.	420.0	453.0	481.0
Service	210.0	226.0	246.0
Exchange Rate (year end)	2,229.2	2,291.2	2,451.7

\*These statistics are based on unofficial estimates.<sup>10</sup>

<sup>10</sup> U.S. Commercial Service: Colombia Country Commercial Guide FY 2003

Therefore, adding up computer hardware and software, the total estimated IT sales in Colombia are more than \$1.1 billion per year.

### 3.5 Venezuela

Venezuela is positioned as the fourth-largest Latin American economy and ranks 29th worldwide<sup>11</sup>.

#### 3.5.1 IT Demand

According to the United States Department of Commerce, the total IT market in Venezuela is estimated at more than \$648 million, as follows:

**VENEZUALAN IT MARKET DATA TABLE**

	(U.S. \$ millions)		
	2000	2001	2002*
Total Market Size	200	280	300
Total Local Production	0	0	0
Total Exports	0	0	0
Total Imports	200	280	300
Imports from the U.S.	190	270	290

\* Projected. Note: The above statistics are unofficial estimates.

In the last 10 years, IT sales in Venezuela have increased dramatically—particularly as a result of the market liberalization of the telecommunications sector. The oil and gas and the telecommunications sectors are the major consumers of hardware, software, and related computer services in Venezuela.

#### 3.5.2 Growth Opportunities

A major new Venezuelan growth subsector is composed of services that leverage both wireline and wireless Internet infrastructure, including e-commerce, e-banking, virtual private networks (VPNs), and e-business solutions, including CRM, ERP, and SCM. These services represent significant business opportunities for a variety of hardware and software solutions now and in the future. The consumption of Internet banking services is also a major growth area in Venezuela. In the area of private networks, major national and multinational companies are migrating from costly leased-line services to more economical VPNs. The total market for private networks is estimated at more than \$300 million.

<sup>11</sup> World Development Indicators database, World Bank, August 2002

E-business solutions were introduced in Venezuela during 2000, and this market is now estimated at more than \$40 million. A number of top companies have already implemented these services, and several more are expected to do so this year. The surge in Internet activity at all levels is also raising local demand for data storage capabilities. The significant increase in information generated by subscriber growth, Web portals, e-commerce, Web hosting, and e-business solutions requires a range of data storage solutions. The local market for data storage in Venezuela is currently estimated to be in the range of \$4 million, and U.S. companies are the major providers of these services.

<b>Computer Software</b>	<b>CSF</b>		
	<b>(U.S. \$ millions)</b>		
	<b>2000</b>	<b>2001</b>	<b>2002*</b>
<b>Total Market Size</b>	200	230	244
<b>Total Local Production</b>	0	0	0
<b>Total Exports</b>	0	0	0
<b>Total Imports</b>	200	230	244
<b>Imports from the U.S.</b>	190	220	233

\* Projected. Note: The above statistics are unofficial estimates.

Rising consumption of IT hardware, peripherals, software, and associated professional services is tied to growing market demand in Venezuela, primarily by the oil and gas and the telecommunications sectors.

### **3.5.3 Market Characteristics**

Market demand in Venezuela is lower in the manufacturing and utility sectors as well as in the public sector. Top companies in the petroleum, banking, and utility sectors continue to rely on proprietary IBM mainframes supplemented with open-system configurations of servers, workstations, and PCs. In the Venezuelan corporate sector, Sun and HP are the leading providers of medium-sized computers, including servers based upon the UNIX operating system. UNIX dominates the local market for high-range applications such as Web site management, computer-aided design/engineering (CAD/CAE), and groupware. The major suppliers of PCs to the corporate sector are Compaq, HP, and IBM. In the public sector, Dell is well represented along with other leading brands. In the PC environment, Windows NT is the prevailing operating system. To date, there is low market penetration by the Linux operating system, with the exception of a few leading banks running specific Linux applications on IBM mainframes.

In terms of office software applications, Microsoft leads the market in Venezuela, with lesser participation by Lotus, Oracle, and Sybase. The oil and gas sector drives the market for customized software solutions. According to unofficial local estimates, the total market for software related to the oil and gas industries exceeds \$244 million. At the present time, large companies account for approximately 80 percent of all IT sales. However, leading vendors and industry

associations have launched initiatives aimed at increasing sales to an estimated 14,000 small and medium-sized companies (SMEs).<sup>12</sup>

## **3.6 Chile**

Chile is the sixth-largest Latin American economy and ranks 43<sup>rd</sup> in the global economy.<sup>13</sup>

### **3.6.1 IT Demand**

The IT market in Chile is led by U.S. imports, mostly of PCs. Chile imported \$143.2 million worth of PCs—\$92.4 million, or 64.5 percent, of which came from the U.S. In 2001, imports from the U. S. fell by 19.2 percent, but U.S. suppliers still retained 62.1 percent of market share, or \$74.6 million worth of PCs. Computer peripherals and parts follow a similar import pattern.

According to IDC, the Chilean market for computers grew 43.5 percent in 2000, boosted mostly by the education system (which grew 95 percent) and the government sector (which grew 80 percent). It is expected that computer sales will grow only about 10 percent this year as the market recovers from the current worldwide economic slowdown. Chile's installed base of computers is expected to grow to 1.5 million computers, or 9.6 units per 100 inhabitants. Currently, Chile has the highest per-capita installed base of computer hardware in South America, with 8.6 units per 100 inhabitants.

Personal computers, both desktops and laptops, along with printers show the highest demand in the Chilean market. These areas are expected to see major growth in the next few years.

### **3.6.2 Growth Opportunities**

After the Chile/Canada free trade agreement was enforced, the tariff for importing computer products into Chile was eliminated. Now, U.S. suppliers can compete on equal trading terms with other countries supplying the Chilean market.

Chile's major supplier of computers and peripherals is the United States, accounting for more than 60 percent of the market. Its main competitors for the remainder of the market are China, Taiwan, and Mexico.

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<sup>12</sup> U.S. Commercial Service: Venezuela Country Commercial Guide FY 2003.

<sup>13</sup> World Development Indicators database, World Bank, August 2002

## CHILEAN IT MARKET DATA TABLE

	(U.S. \$ millions)			
	1999	2000	2001	2002*
Total Market Size	182	201	169	189
Total Local Production	9	7	7	8
Total Exports	4	4	8	9
Total Imports	173	194	162	181
Imports from the U.S.	98	117	99	100

\*2002 statistics are estimates<sup>14</sup>

### **3.6.3 Market Characteristics**

Chile is a highly sophisticated market, where most of its business sector has evolved into a global culture that is therefore aware of the importance of IT as a tool for success in the competitive global economy. Chile enjoys the highest rate of penetration of the Internet per household among all Latin American economies.

## **3.7 Peru**

Peru has the seventh-largest Latin American economy and ranks 46th worldwide<sup>15</sup>.

The United States Department of Commerce has assessed the Peruvian market as a growing one, with both government and private sector plans to increase IT usage throughout the country.

### **3.7.1 IT Demand**

The size of the Peruvian software market is approximately \$171 million and is expected to grow at a 10 percent rate over the next three years. The corporate sector represents over 50 percent of software sales, making this segment of the market potentially lucrative for U.S. firms.

There are three million Peruvian Internet users, reflecting an 11.5 percent penetration rate, and 1.3 million PCs are in use in the country, according to the International Telecommunications Union (ITU). Peru ranks second in Latin America in high-speed Internet access for businesses, with a 38 percent penetration rate, according to Pyramid Research. Corporate and non-corporate use of the Internet is growing. For example, more than 800 "Public Internet Cabins" (PICs) are placed throughout the country, providing inexpensive Internet access to the approximately one-million Peruvians without computers.

<sup>14</sup> U.S. Commercial Service: Chile Country Commercial Guide FY 2003

<sup>15</sup> World Development Indicators database, World Bank, August 2002

U.S. exports of computer equipment to Peru in 2001 were worth \$63 million. Exports of peripheral equipment from the United States to Peru accounted for 62 percent of computer equipment exports to Peru<sup>16</sup>. Therefore, there is a considerable potential market for IT in Peru.

### **3.7.2 Growth Opportunities**

Hardware, especially PCs, software, and networks are the IT sectors that are expected to grow fastest in Peru.

### **3.7.3 Market Characteristics**

The evolution of the IT market in Peru is driven by the substantial growth of financial services, the expanding presence of multinational corporations in the most promising sectors of oil and gas, Internet services, travel and tourism, security and safety, food processing and packaging, architectural/construction/engineering services, cosmetics and toiletries, and mining, among others.

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<sup>16</sup> United States Department of Commerce: Business Development Mission; Peru & Chile; Led By Secretary of Commerce Donald L. Evans; December 2-6, 2002: Infotech Industry Information.

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## **4.0 FUNDAMENTALS FOR IT CAPTIVE DEVELOPMENT**

### **4.1 Empirical Investigations**

Our sources have found that in Latin America, IT customers require not only extended payment terms for their hardware, software, and ancillary services but also off-balance-sheet solutions and tax-deductible structures.

Local financial markets in Latin America have not yet developed the expertise to serve local or international IT vendors when an instrument finances intangibles, such as software. While technology evolves, the soft cost is a larger part of the IT solution than the single tangible solution, and therefore the tendency to rely on asset-based financing needs to be subordinated to the non-resale value of intangibles. The prevailing risk culture in Latin America shows aversion for highly technological, evolving assets and total reluctance to finance software for being intangible. Since domestic financial entities have not yet developed comprehensive risk assessment and coverage for such hybrid financing between asset-based financing and unsecured lending, a U.S. company could take advantage of this weakness.

This attitude coexists with the overall risk aversion toward Latin America that U.S. lenders and lessors currently have. And this gives room to a vendor captive development opportunity for U.S.-based companies.

The Alta Group has supported several vendor captive developments with global reach. In the past two years, after the formal establishment of its franchise in Latin America with The Alta Group Latin American Region, various vendors with captive development have enjoyed Alta Group assistance in developing a productive business in IT financing, providing effective, value-added sales aid for their parent companies.

For companies seeking to enter the Latin American IT market, many questions need to be answered, and most of them relate to the risk/reward balance in developing a captive organization in Latin America. The following sections of this paper will address the basis for risk assessment and coverage types to consider.

### **4.2 Risk Assessment**

It would be unreasonable to deny the risks that exist in conducting business in the countries mentioned in this paper. Yet, it would be equally shortsighted to deny the growth potential of the IT markets in this region. A prudent strategy is to clearly identify opportunities and their attendant risks and then pursue means to anticipate, avoid, prevent, and mitigate such risks.

In order to identify the risks associated with a captive and/or independent leasing venture in Latin America, one must understand that risk factors can be allocated in the following groups:

<b>Risk factors impacting overall net profit</b>	
Factors affecting volume	<ul style="list-style-type: none"> <li>• Economic risk</li> <li>• Country risk</li> </ul>
Factors affecting GSA costs	<ul style="list-style-type: none"> <li>• Labor risks</li> <li>• Regulatory risks</li> </ul>
Factors affecting delinquency	<ul style="list-style-type: none"> <li>• Credit risks</li> <li>• Documentation risks</li> <li>• Enforceability risks</li> </ul>
Factors affecting taxes	<ul style="list-style-type: none"> <li>• Direct taxes (income tax)</li> <li>• Indirect taxes (value added tax, property taxes, financial transaction taxes, etc.)</li> </ul>
Factors affecting cash disposition	<ul style="list-style-type: none"> <li>• Inconvertibility risk</li> <li>• Other country risks</li> </ul>
Factors affecting spreads	<ul style="list-style-type: none"> <li>• Funding risks</li> <li>• Foreign exchange risks</li> <li>• Competition risks</li> <li>• Regulatory risk</li> </ul>

It is not the purpose of this paper to develop a comprehensive manual for risk management. Such a role must be undertaken on a case-by-base basis, and recourse to good consulting is crucial.

In general terms, some basic coverage for some of the mentioned risks is outlined below.

### 4.3 Country Risk Coverage

It is important to stress that neither sovereign risk ratings<sup>17</sup> nor sovereign debt spreads (EMBI+<sup>18</sup> and similar) are necessarily the right measure of the political risk faced by an international lender or lessor in a particular Latin American country. Unless a given portfolio is concentrated in state-controlled entities, such indicators are not an accurate measure of risk. A typical example is Argentina: Argentina defaulted in all its public lending, but the portfolios of leasing companies are still performing. However, the political risk became a casualty as soon as the Argentine authorities, first, devalued the currency and, second, introduced legislation enabling all obligors to pay one-for-one in local currency, subject to an equitable adjustment<sup>19</sup>. This is the casualty that should be covered.

Which is the best type of coverage available in the prevailing marketplace for such political risk?

First and foremost, a government-sponsored corporate guaranty, generally through export credit agencies, such as U.S. Ex-Im Bank programs (or likewise an ECGD, Hermes, Sace, COFACE, Japan Ex Im Bank program, and so forth) is subject to the national component of the equipment leased and generally is restricted to cross-border transactions;

Second, in the United States, OPIC has programs, as well as MIGA (World Bank) and other Export Credit Agencies (ECAs), that protect lessors' investments, not only in stock but also in portfolios, against the following risks:

- Inconvertibility,
- Expropriation,
- War and civil disturbances, including revolutions, and
- Breach of contracts by government authorities.

The cost of such coverage varies from case to case, but in average is close to 1.2 percent per annum. It is interesting to note that there is a current discussion about the scope of the concept of "expropriation," meaning that this is not only the forced transfer of title to any asset from private hands to the government but also any regulatory action that deprives a foreign investor of value (This definition is contained in the judgment issued in the case *Metalclad vs. Republic of Mexico*

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<sup>17</sup> Sovereign risk ratings are the grades that the most respected credit agencies (Standard & Poor's, Moody's and Fitch) assign to the debt issued and payable by governments. The ratings are addressed to gauge the risk of default of a particular country, taking into account several economic factors as well as political and past performance circumstances. More detailed information can be found on the Internet at [www.moodys.com](http://www.moodys.com); [www.standardandpoors.com](http://www.standardandpoors.com) and [www.fitchratings.com](http://www.fitchratings.com).

<sup>18</sup> Created by JP Morgan, "The Emerging Markets Bond Index Plus (EMBI+) tracks total returns for traded external debt instruments in the emerging markets. The instruments include external-currency-denominated Brady bonds, loans and Eurobonds, as well as U.S. dollar local markets instruments. The EMBI+ expands upon Morgan's original Emerging Markets Bond Index, which was introduced in 1992 and covers only Brady bonds."

<sup>19</sup> Foreign investors and lessors who funded their transactions in United States dollars and matched their receivables in the same currency based upon the legal framework of the so called Convertibility Law (#23,928) suffered the subsequent regulatory intervention (by means of Public Emergency Law #25,561 of 2002) whereby their liabilities remained in United States dollars while their assets were converted into a local currency having a lesser market value.

in late 2001)<sup>20</sup>. It is important to mention that this coverage tends to be granted after a bureaucratic process, although some private companies, such as AIG or XL Insurance, may provide a faster coverage (at a slightly higher cost). But obtaining coverage in these cases needs to have a specific *ad hoc* application, as opposed to a pre-defined, fully delineated coverage.

Third, but basically in support for obtaining faster coverage from U.S.- sponsored agencies, the existence of a Bilateral Investment Treaty (BIT) is an additional means of protection against country risks. The United States has BITs in force with the following countries of Latin America and the Caribbean: Argentina, Bolivia, Ecuador, El Salvador, Grenada, Haiti, Honduras, Jamaica, Nicaragua, Panama, Trinidad, and Tobago. In addition, Chapter 11 of the North American Free Trade Agreement (NAFTA) contains the rules of an investment treaty covering United States investors in Mexico.

The countries described as targets that do not have a BIT with the United States but do have BITs with other industrialized countries are as follows: Brazil, none (only with Chile and Venezuela), Chile, none (Chile has 13 BITs, but all of them are within Latin America), and Colombia, none (only a BIT with Peru).

The main role that consultants and advisors play is the evaluation of the best suitable coverage alternative for such captive developments and equipment lessors and to help them to obtain them, opening the doors of the entity and supporting them in shaping any available coverage. In addition, prevention and mitigation are outcomes of such consulting work. But for that purpose, any consulting firm or group would need first to understand the scope and dimensions of such captives' or equipment lessors' business plan and, in particular, how it intends to exploit the above-described business potential.

#### **4.4 Credit Risk Anticipation, Mitigation, and Coverage**

Coverage of credit risks is related to a professional and adequate approach of well-trained credit managers understanding the normal operation of the local business environment.

The framework for their risk assessment has as one of its borders the prevailing understanding of creditor rights protection under local applicable law, which means the anticipation of time and costs associated with collections in case of delinquency.

The good news is that accurate and updated information is increasingly available. Most Latin American countries have progressed in making available their credit bureau databases, tax compliance information, and other data valuable for credit risk assessment, although it is still necessary to have human resources with training and insight identifying additional relevant data. Several programs of credit risk coverage are provided by insurance providers, both at domestic and international levels. It is advisable to shop around for them.

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<sup>20</sup> In *Metalclad Corporation vs. Republic of Mexico*, CASE No. ARB(AF)/97/1, the arbitration panel defined the concept of expropriation, following NAFTA's rules, as "...includes not only open, deliberate and acknowledged takings of property, such as outright seizure or formal or obligatory transfer of title in favour of the host State, but also covert or incidental interference with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property even if not necessarily to the obvious benefit of the host State."

In addition, a reasonable structure of vendor programs with limited recourse could enhance credit risk acceptance, increasing volume and thus generating profits. Limited recourse structures need to deal with issues connected to revenue recognition under U.S. Generally Accepted Accounting Principles (GAAP) rules<sup>21</sup>.

Consultants can contribute to the success of these efforts by assisting in the structuring of enhancements of credit programs and providing good training and education, informing about the legal environments and prevailing practices, and supporting the development of a sound credit risk evaluation and monitoring program. This is, of course, related to adequate and solid documentation and the local enforcement of such documents.

## 4.5 Funding Risks and Cash Management

Funding is a critical aspect that can become either a competitive advantage or disadvantage. In general, domestic capital markets are underdeveloped. Hence, a good funding structure should exploit resources in advanced capital markets while using local resources that are available under good terms and conditions.

A typical example of useful funding for multinationals operating in Latin America domestic markets is the FINAME funding in Brazil. These funds are provided by a government-owned bank, *Banco Nacional de Desenvolvimento* (BNDES), or the National Development Bank, and offer a competitive source of funding in local currency with acceptable maturities.

But funding can also bring some risks that need to be covered. Such risks are basically those associated with foreign exchange:

- devaluation of currency of repayment to funding sources
- interest rate fluctuations that could generate additional, unforeseen funding costs
- maturity risks that could create a mismatch between tenors of funding and leasing contract term, thus subjecting lessors to even more volatility in the domestic markets.

For such purposes, many coverage and prevention policies are applicable.

Hedging is a good example of coverage against devaluation risks. Countries such as Mexico and Brazil now make hedging instruments available in a number of ways, including derivatives exchange markets. However, hedging strategies require some financial-management skills. Either financial officers can structure and put into place hedging, or a good consulting team can assemble coverage for such risks.

Good consulting support may provide our clients information about ways to maximize funding. For example, would it be more advantageous to fund deals in Brazilian *reals* or U.S. dollars? How do interest rates and hedging costs impact the funding package? Are there other potential structures that should be

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<sup>21</sup> A wonderful summary of this subject matter can be read in the article written by Deborah Brady, Key Equipment Finance “Manufacturer Recourse: Revenue Recognition Issues” in *Equipment Leasing Today* Vol XIV, No.10 ELT November/December 2002 Issue (Equipment Leasing Association of America).

considered? Effectively resolving such questions will ensure that lessors minimize their cost of funds and earn a profitable spread.

#### **4.6 Collateral Risk Management**

As IT financing is typically asset-based financing, the value of collateral is an important factor to foresee the likelihood of recovering an investment by both financing sources or captive divisions and companies.

Collateral value may be impaired by weak secondary markets, overall economic downturns, and other factors. Typically, these risks can be covered by various forms of residual value insurance.

In addition, consultants may provide assistance and support in defining a system and structure to manage collateral (equipment or underlying assets, such as software), keep track of them, anticipate their tendencies and technical risks, and track any residual risks.

#### **4.7 Back Office and Human Resource Risks**

This is a field where there is no ad hoc coverage, but many alternatives are in place, such as good selection of servicing partners, selection of local talent, and benchmarking for organizing an adequate and rational back-office organization. A combination of different factors and structures, tailor-made according to the particulars of each captive organization or vendor, may be organized.

#### **4.8 Pricing and Spread Risk Assessment**

A permanent source of reliable information and benchmarking about how to anticipate, keep, and control pricing structures and spreads is crucial. As in the back-office field, no such coverage program is in place. A self-coverage structure can be built based upon sound information that may be provided by competitive analytical studies and updated information about the prevailing financial markets.

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## 5.0 CONCLUSION

In today's global economy, no single region of the world should be abandoned as a potential market. The needs of more than 6 billion human beings on the planet create unique business opportunities that, one way or the other, are being met. The challenge in succeeding in these opportunities lies in fully understanding the parameters of the opportunity—and fully recognizing its limits and inherent risks—before creating a strategy to effectively seize the opportunity.

U.S.-based corporations in the IT market may take advantage of the potential volume and profits to generate a permanent source of revenue in the Latin American region. And while this will certainly not be an easy or risk-free task, it is clearly an opportunity that can and should be taken.

Clearly, a potential market of more than \$25 billion annually deserves attention. Just as clearly, the resources exist to exploit and extract revenues and profits from this market—with minimal risk.

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## 6.0 APPENDIX 1

### 6.1 About The Alta Group

For more than a decade, The Alta Group has drawn on the experience of the best and brightest in the leasing industry, building a reputation for excellence while helping manufacturers, vendors, and lessors around the globe evaluate and improve their business practices and strategies, train their staffs, and chart a course for future growth. The Alta Group's 18 principals and associates are leasing "Top Guns": former senior executives, company founders, and Equipment Leasing Association chairmen who have more than 350 years combined experience in all aspects of lease finance and operations.

The Alta Group's Latin American Region LLC provides specialized advisory services to include market niche analysis, analysis of potential customers, country risk analysis and recommendations, and cross-border delinquency management, including collection strategies and supervision.

The Alta Group's Latin American Region principals have management and consulting experience of over 25 years in the Latin American leasing industry and have advised both most of the successful multinational corporations doing business in the region as well as some Latin American governments.

### 6.2 About the Author

Rafael Castillo-Triana is an international attorney with more than 20 years of business and management experience in the Latin American leasing industry. Former executive vice president of Leasing Grancolombiana S.A., he founded and managed Megaleasing S.A. for a Colombian group affiliated with Mitsubishi Heavy Industries in Colombia, and Equileasing S.A., the first distributor captive leasing company for Canon equipment in Colombia. As counsel, he developed the business plan for the establishment of Fes Leasing S.A. and extensively advised Siemens S.A. (Colombia) to create Euroleasing S.A., an independent lessor with Sudameris Group, and market entry of AT&T Capital Corporation in South America.

Since then, Castillo-Triana has provided advice and counsel to several vendors and leasing companies throughout Latin America. Guest speaker at the fourth, fourteenth, and sixteenth World Leasing Conventions in Tokyo, London, and Cancun, Castillo-Triana participated in the World Leasing Council as well. In 1988, he was appointed by the Colombian government and the Colombian Leasing Federation to intervene in the negotiation and drafting of the UNIDROIT Convention on International Financial Leasing, adopted in Ottawa, Canada. He is also the author of *Legal Aspects of Equipment Leasing in Latin America*, published by Kluwer Law International. Currently, through his Coordination Center for Legal Counsel in Latin America, Castillo-Triana leads the Head Legal Counsel services for the Latin American offices of CIT Group.

Castillo-Triana has prepared several papers on international transactions and cross-cultural negotiation and lectured extensively on business and legal topics in Latin America at a number of prominent universities in the United States (Saint Marys Law School at the University of Texas in San Antonio; Utah State

University, Logan, Utah; and Florida International University, Miami, Florida) and for the American Bar Association, the New York State Bar Association, and the Brazilian Bar Association.

### **6.3 Contact Information**

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