

Fueling Digital Trade in Mercosur:

A Regulatory Roadmap

Kati Suominen

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Fueling Digital Trade in Mercosur: A Regulatory Roadmap

Executive Summary

Kati Suominen

Mercosur members have grown into Latin America's digital leaders in the past decade. Online sales have grown much faster than national economies, retail, or foreign trade. Brazil generates 60 percent of Latin America's ecommerce purchases and is home to such ecommerce powerhouses as B2W, Argentina has produced dozens of startups such as Mercado Libre that have grown into global technology companies, and Buenos Aires and Montevideo are booming as regional startup hubs. Regional tech events bring habitually together thousands of ecommerce companies and tech entrepreneurs with first-rate foreign speakers.

Mercosur member countries' rapid transformation into digital economies is in many ways a staggering for a region that as for decades been known primarily for its commodities and, in the case of Brazil, heavy manufactures. Digitization has changed the way people in Mercosur countries shop, bank, and communicate. More recently, it has changed the prospects of the region's trade. Digital trade – trade in goods and services sold online and across borders – appears to have grown much faster than regional overall trade.

The next frontier in the region's digitization must be regional integration. Indeed, most digital sales and purchases in Mercosur countries are still domestic; digital trade in the region is still quite nascent. One reason is that the regional economies have yet to attain regulatory coherence that would enable digital companies and online sellers to seamlessly operate across the regional market. Mercosur governments have in some cases widely differing visions and proposals on such key domestic regulations as data privacy and transfer, over the top rules regulating online services and audiovisual productions, Internet companies' legal liability for online content, and taxation of online sales. This is an area where Mercosur governments can make a difference: work together to create the right conditions for Mercosur region's digital companies and online sellers to grow and scale their sales not just in their domestic markets, but in the broader intra-regional market.

The purpose of this report is to provide a regulatory roadmap that helps Mercosur region's policymakers and business leaders in this key juncture to unlock digital trade in goods and services as an engine of regional trade and job-creation. The report pays particular attention to frameworks and policies that enable Mercosur region governments best help SMEs that sell goods and services online to grow, export, and create jobs. This report draws on new interview and survey data on the way firms in the region leverage ecommerce, and on the enabling environment for ecommerce, and puts forth policy recommendations.

The main findings of this report are as follows:

- **Internet is essential for the growth, productivity, and trade of Mercosur companies.** Almost all companies in the regional economies use email to interact with client and suppliers, and some one half has websites – 68 percent of companies in Argentina, 58 percent in Brazil, and 50 percent in Uruguay have their own websites. Over 80 percent of companies agree that

limiting their access to the Internet would reduce their productivity by more than 15 percent, and nine percent say their productivity would drop by 5-15 percent.

- **Mercosur region companies that sell online are likelier to export, export to many markets, and grow faster.** While only 17 percent of small Mercosur region companies that do not have online sales or purchases export, some 60 percent of small companies that sell and buy online also export, and nearly all large companies that sell online export. Online sellers are also more diversified in terms of their export exposure: 65 percent of online sellers in the Mercosur region export to two or more markets and 28 percent export to four or more markets, while only 20 percent of offline sellers export to two or more markets and only 8 percent export to four or more markets. Online sellers are often also two-way traders – they both import and export, which suggests that transacting online may fuel participation in regional and global value chains. Online sellers, data show, tend to be firms that have entered the virtuous cycle of online sales, exports, and growth.
- **Mercosur economies are each other's main digital trade partners – and markets of most struggle.** Most Mercosur companies export to other Mercosur markets, followed by the rest of Latin America, the United States, and China and EU. For example, 60 percent of Argentine online sellers sell to Brazil and vice versa, and 77 percent of Paraguayan and 67 percent of Uruguayan online sellers export to Argentina. The main markets in which especially Paraguayan and Uruguayan companies struggle with real or perceived regulatory issues are their most common export markets Argentina and Brazil, followed by the United States – which to most companies is still an aspirational market.
- **The main challenges for small companies in the Mercosur region to engage in domestic and cross-border ecommerce are in the areas of access to finance, logistics and customs procedures, and digital regulations.** When asked about regulatory challenges to their online sales, small businesses are most concerned about IP protections, OTT rules, copyright rules, taxes, and legal liability rules, while for large companies, taxes, OTT rules, and legal liability are especially important. In cross-border trade within Mercosur, companies are concerned about IP and copyright regimes, data localization issues, and interoperability of their respective countries' digital regulations with those of other Mercosur markets. Customs procedures and cost of logistics are a challenge for 50 percent of small businesses, while large companies are particularly concerned about delivery costs, customs procedures, and functioning of single windows.
- **Improving the regulatory environment for Internet services and the sale of digital goods and services would enable companies to increase their revenues and exports by almost 30 percent annually.** Digital regulations are no minor matter. Companies surveyed here estimate that improving digital regulations in the Mercosur region would enable them to increase their revenues and exports by almost 30 percent annually. If their top-3 constraints to doing ecommerce were removed, Mercosur companies say they would score annual revenue gains of 34 percent in their domestic markets and 35 percent in international markets. The majority of companies in every country report that they would expand their sales in the Mercosur region in particular if these regulatory barriers were removed.

Creating a more coherent regional digital market is essential for regional digital companies and SMEs that sell goods and services to scale, export, and create new jobs – which in turn is key for them to compete in Latin America and internationally. As this report shows, such a regional project requires focus and hard work. But there is also data to draw on. Empirically, complicated, uncertain, or stringent digital regulations, such as **stringent data privacy regimes, limits on data transfer, legal liability on Internet companies for user content on their sites, and high taxes on online sales are all found to limit the growth of the online economy, reduce investment in Internet start-ups, lower the rate of technology adoption, and hold economic growth back.**

This report draws on new interview and survey data on the way firms in the region leverage ecommerce and how they view the enabling environment for ecommerce, and makes a number of proposals for Mercosur governments to unlock the region's economic potential through digitization. Among them are:

- **Create smart digital regulations, and enforce in a pragmatic manner:** Mercosur region's regulatory frameworks need to be upgraded to the digital era, and they need to interoperate with trading partners to enable online sellers and buyers transact without undue frictions and costs and grow. Priority should be on flexible enforcement of data protection regulations that focus on improving security rather than limiting the use of data, and promote interoperable policy frameworks; safe harbor rules that limit internet intermediaries' liability from user-generated content; updated copyright laws that include limitations and exceptions; consumer protection laws that balance protection and compliance costs; and savvy, pro-investment tax regimes on the key input for companies and consumers – digital and digitally sold goods and services. In addition to these immediate regulatory priorities, it is important the regional governments start considering regional interoperability of online payments, the critical conduit for online trade.
- **Drive at mutual recognition of online service providers:** Internet companies that operate in multiple markets, such as of online payment, online delivery service, data analysis, digital marketing, online lending, and ecommerce companies. Providers of these services can more quickly expand to service multiple countries in the presence of mutual recognition across countries of their business licenses, certificates, professional qualifications, and digital signatures, among other requirements.
- **Modernize customs procedures to facilitate and secure new trade:** Governments need to make better use of the established mechanisms to fuel trade, such as increase customs clearance times 24 hours per day, put in place electronic filing of customs documents via “single windows” for one-stop compliance; and enable the collection and remit of value added and other taxes for goods above the *de minimis* level from away from the border. As ecommerce shipments proliferate, and new, data-driven “Trusted eTrader” program could foster small businesses' trade compliance and ameliorate the tension in customs between facilitating and securing trade. Use of blockchain and machine learning in customs can be seminal in balancing the aims of product traceability, customs security, revenue collection, and trade facilitation.
- **Create new instruments to fund SME skills development:** Recently, export promotion agencies have in several countries, including in the Mercosur region, introduced programs to help companies export online. To scale these efforts and make them highly actionable to companies, Mercosur governments could copy experiences in Latin America where export

promotion agencies work closely with ecommerce platforms to train companies to use ecommerce. Governments can also use innovative public-private funding mechanisms to scale these efforts. For example, governments could work with the private sector take advantage of social impact bonds, whereby private foundations, social impact investors, and/or ecommerce platforms make the initial investment in ecommerce training programs, and get compensated at a premium by the government if the program meets certain per-established performance indicators, such as target number of ecommerce-related jobs created or amount of new online exports.¹

- **Start systematic “Regional Digital Dialogues”:** Mercosur governments are at a crucial juncture: they are today establishing rules for the digital economy that will have far-reaching consequences for their trade, entrepreneurship, investment, and economic growth for years to come. In the process, they will critically benefit from the views of the drivers of digital trade, the private sector, and from discussing the regulatory issues at the regional level with other Mercosur governments and private sectors. Some positive national efforts are already on the way; it is now time to regionalize and institutionalize them. The region has a timely opportunity to establish a Digital Dialogue (Dialogo Digital) that brings together each quarter government officials with businesses and consumer groups to discuss the benefits of new technologies and optimal regulatory frameworks for them, and learn from best regulatory practices from other regions and world-class researchers.

Taking a step further, the regional governments could draw on UK’s work in FinTech regulations and establish a regional regulatory “sandbox” where companies in the Mercosur region could introduce digital innovations to any one Mercosur market or all Mercosur markets without requiring full regulatory approvals, and regulators could proceed learn how the innovation is used in the marketplace and establish regulations where they may be beneficial. This type of “learning by doing” takes guesswork and costly errors from the process of fashioning domestic and regional digital regulations.

The two risks Mercosur faces is that each economy sets its own rules and those rules are too stringent for companies to operate effectively, and/or national rules do not interoperate – so that companies seeking to engage trade online and grow into regional businesses have to apply a different set of regulations in each market, which especially for small businesses is often too costly, undermining their interest in exporting and regionalizing their operations. Mercosur governments have a unique window of opportunity to create an entirely different outcome: a vibrant regional digital economy. It is imperative to get this right if the regional leaders want to continue leveraging digitization for trade and prosperity. Time is now.

Fueling Digital Trade in Mercosur: A Regulatory Roadmap

Kati Suominen

November 2017, with updates in September 2018

I. Introduction

Mercosur's long integration process has responded to demands of times. In the 1990s when the bloc was created as a safeguard for democracy and a conduit for the members to expand their trade and investment flows with each other. In the 2000s, Mercosur began to act as a bloc in foreign trade policy, including with such trading powers as the European Union. Today, Mercosur is faced with yet another task and opportunity: to create a vibrant digital economy.

Mercosur member countries have made extraordinary progress in the past decade, becoming Latin America's digital leaders. Online sales have grown much faster than national economies, retail, or foreign trade. Brazil generates 60 percent of Latin America's ecommerce purchases and is home to such ecommerce powerhouses as B2W, Argentina has produced dozens of digital startups such as Mercado Libre that have grown into global technology leaders, and Buenos Aires and Montevideo are booming as regional startup hubs. Regional tech events bring habitually together thousands of ecommerce companies and tech entrepreneurs with first-rate foreign speakers.

Mercosur economies' digital transformation is in many ways a staggering for a region that has for decades been known for its commodities and, in the case of Brazil, heavy manufactures. Digitization has changed the way people in Mercosur countries shop, bank, and communicate. And it is now propelling cross-border trade – trade in physical and digital goods and services sold online and across borders. Digital trade in Mercosur appears to have grown many times faster than overall regional trade.

However, the region's digital trade will not reach its potential without regional integration – creation of a market where companies and consumers can buy and sell goods and services online seamlessly, unhampered by national borders. Indeed, most digital sales and purchases in Mercosur countries are still domestic; digital trade is still quite nascent in the region. This is where Mercosur governments can make a difference: create the right conditions for digital companies and online sellers grow and scale their sales not just in their domestic markets, but in the broader intra-regional market.

Creating a more coherent regional digital market is essential for regional digital companies and SMEs that sell goods and services to scale, export, and create new jobs – which in turn is key for them to compete in Latin America and internationally. As this report shows, such a regional project requires focus and hard work. As of now, Mercosur governments are amid fashioning their domestic regulations in such areas as data privacy and data transfer, over the top rules regulating online services and audiovisual productions sold online, Internet companies' legal liability for online content, copyright rules for online content and digital designs, and taxation of online sales. From a regional point of view, Mercosur governments have in some cases widely differing visions, proposals, and progress in these areas. For example, proposals have resurfaced in Brazil to force companies seeking market access to build servers in Brazil, something that can be prohibitively costly for companies in the other Mercosur

nations. Meanwhile, Uruguay has recently concluded a free trade agreement with Chile with a robust ecommerce chapter that respects free flow of data across borders and bars localization, and Argentina is about to conclude an agreement of similar intent with Chile. Brazil and Paraguay have been among the front runners of protecting Internet companies from liability of third party content posted on their sites, while Argentina and Uruguay are only considering such safe harbors. Mercosur economies also have differing interests; for example, Argentina stands out with a strong offensive interest in digital services, given its vibrant tech startups and large digital services companies.

The risk is that after all is said and done, each Mercosur government will have set its own rules on its own and with other trading partners and those rules do not interoperate – so that companies seeking to sell online in Mercosur market have to apply a different set of regulations in each of the four markets. This is too costly especially for small businesses, undermining their interest in exporting and regionalizing their operations.

However and positively, given that digital regulatory regimes are currently being shaped in the region also means that Mercosur governments have a unique window of opportunity to create an entirely different outcome: a vibrant regional digital economy. For regional leaders to continue leveraging digitization for trade and prosperity, it is imperative to get regulations right, at home and regionally.

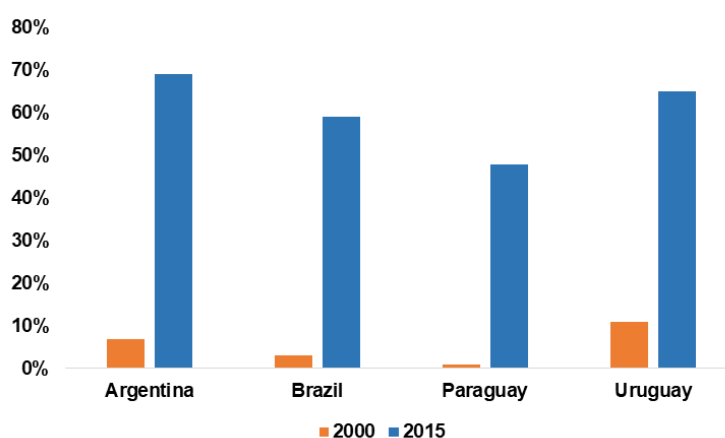
The purpose of this report is to provide a regulatory roadmap that helps Mercosur region's policymakers and business leaders in this key juncture to unlock digital trade in goods and services as an engine of regional trade and job-creation. I pay particular attention to frameworks and policies that enable Mercosur region governments can best help SMEs selling goods and services online to grow, export, and create jobs. This report draws on new interview and survey data on the way firms in the region leverage ecommerce and how they view the enabling environment for ecommerce, and puts forth policy recommendations.

The following section reviews the patterns of digitization and ecommerce in Mercosur, while section three examines regional firms' use of the Internet as a catalyst for trade. Section three takes stock of the state of play in digital regulations and digital trade provisions pursued by Mercosur countries, and provides data and research results on the costs of benefits of different kinds of digital regulations and integration efforts, for Mercosur governments to weigh. Section four turns to Mercosur firms' perspectives on the opportunities and challenges to digital transactions and trade at home and with other Mercosur nations. Section five concludes with priority policy recommendations, including a call for a new regional Digital Dialogue among public and private sectors.

II. Digitization and Digital Trade in Mercosur

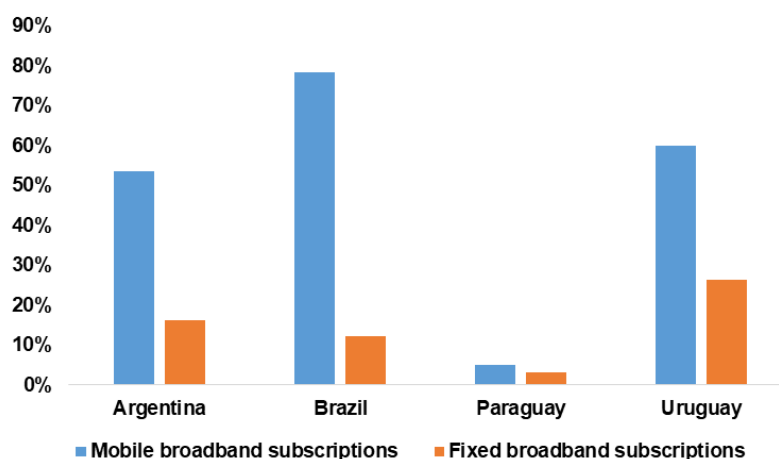
Mercosur is amid an Internet boom. In 2000 fewer than 5 percent of people in the region used the Internet; by 2015, over one-half the region was online (figure 1). Argentina, Brazil, and Uruguay all surpass Latin America and Caribbean (LAC) regional average in connectivity. Though the regional economies still have relatively low broadband penetration rates – only 5-15 percent of regional populations have access to fixed broadband, depending on country, less than half of levels in the United States (figure 2). However, mobile broadband rates have grown in most countries and broadband subscription fees are by now quite at a par with several Western European countries such as France, Denmark, and Belgium.

Figure 1 – Internet Usage in 2015, Selected Countries and Regions



Source: World Bank's World Development Indicators.

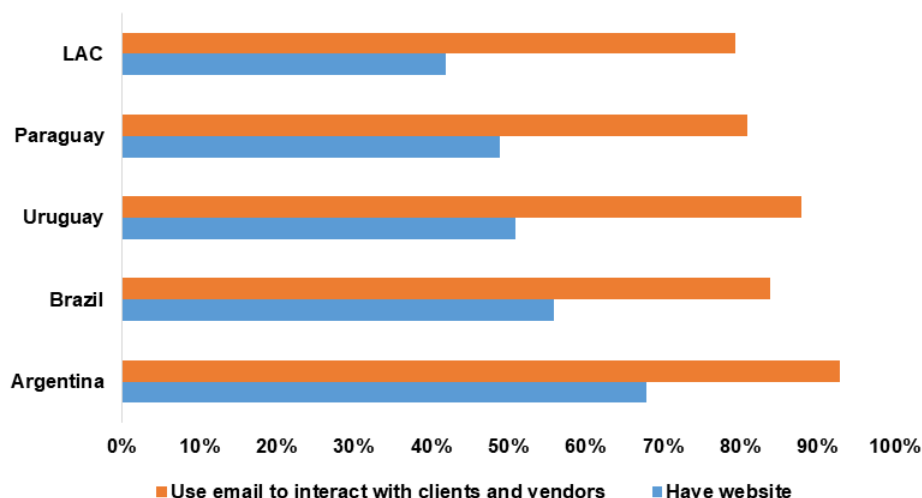
Figure 2 – Mobile and Fixed Broadband Subscriptions in Mercosur 2016, by Country



Source: World Economic Forum's Networked Readiness Index.

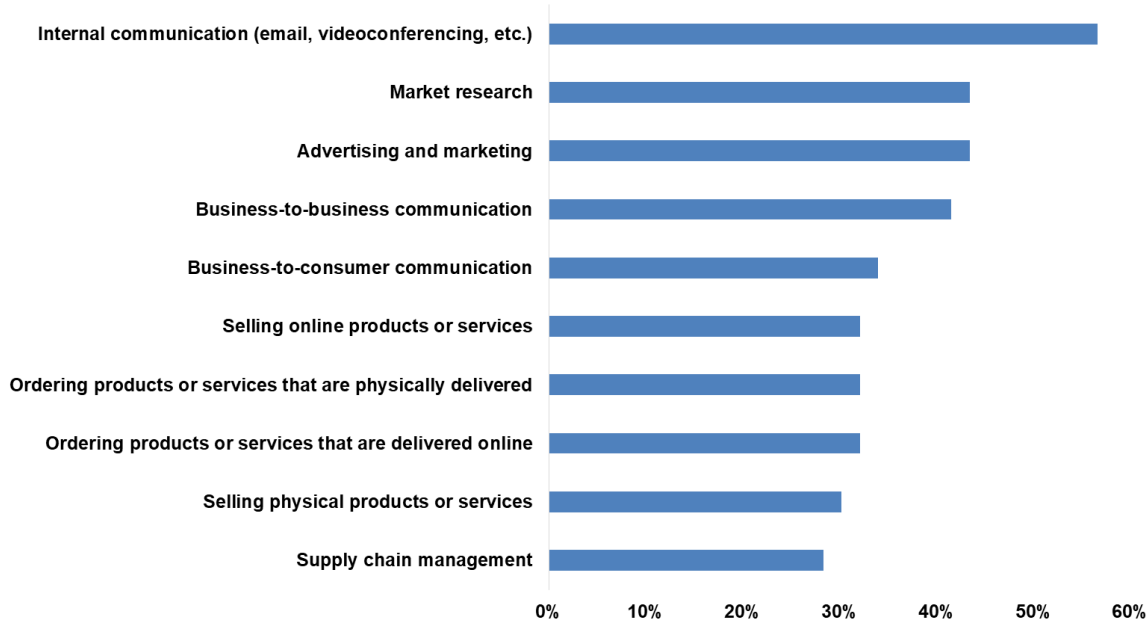
Mercosur businesses have also grown more connected. Almost all companies in the regional economies use email to interact with client and suppliers, and some one half has websites – 68 percent of companies in Argentina, 58 percent in Brazil, and 50 percent in Uruguay have their own websites (figure 3). Most regional companies say they use the Internet “always” for internal communication, Market research, and advertising (figure 4). Overall, the Internet has become a very important tool. When asked about the productivity drop if their companies were cut off from the web, 83 percent of companies reported a loss of over 15 percent and 9 percent reported a loss of 5-15 percent (figure 5).

Figure 3 – Firms’ use of Email and Websites for Doing Business in 2015, by region



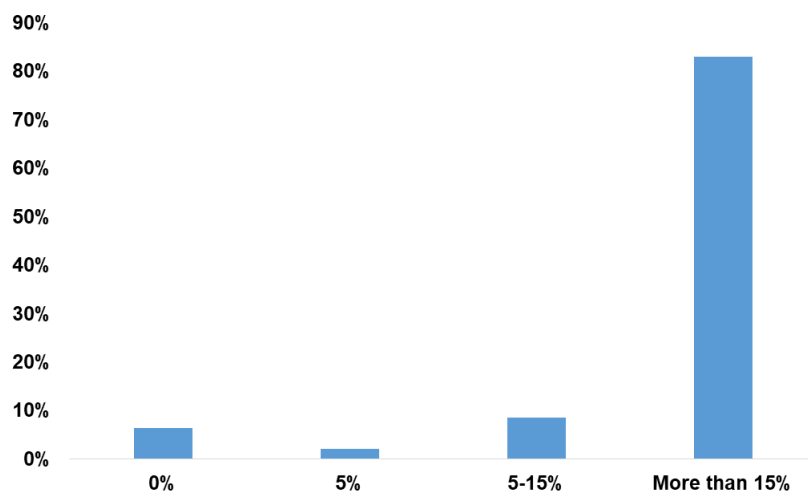
Source: Enterprise Surveys.

Figure 4 – % of Companies in Mercosur Using the Internet “Always” in a Business Function



Source: Suominen, Kati (2017). “Accelerating Digital Trade in Latin America and the Caribbean.” Report for the Inter-American Development Bank (January).

Figure 5 – Importance of the Internet for Mercosur Companies’ Productivity (share of companies answering to question “what would be the negative impact on your organization's productivity, measured as the value of sales per employee, if it did not have access to the Internet or other digital networks?”)

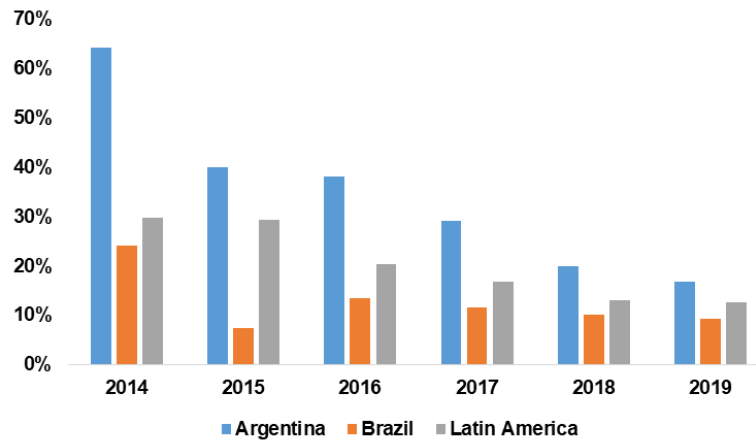


Source: Suominen, Kati (2017). “Accelerating Digital Trade in Latin America and the Caribbean.” Report for the Inter-American Development Bank (January).

The Internet has had a dramatic impact on the region’s retail landscape. By 2017, ecommerce made up some 4.3 percent of retail in Brazil and 2.7 percent in Argentina.² Granted, Mercosur region’s ecommerce is not nearly as vibrant as in the U.S. or China (where it makes up 12.7 percent and 15.5 percent of retail, respectively).

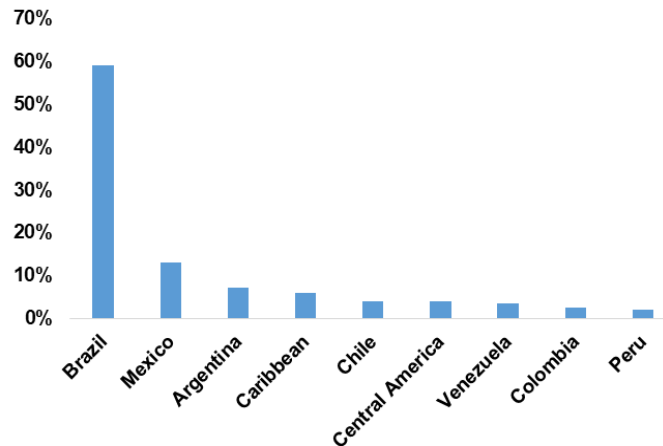
However, ecommerce in Mercosur has grown robustly and much faster than national economies, retail, or foreign trade, and is expected to grow by double digital rates in 2018-19 (figure 6). While the boom has been attenuating from the days when ecommerce was very new and started from a low base, growth is still strong. The region is also a significant market: Brazil is a top-10 market in the world for ecommerce retail, after China, United States, Japan, and several European economies, and combined, the regional economies make up nearly 70 percent of Latin American ecommerce purchases (figure 7).

Figure 6 – Year-on-year Growth of B2C Ecommerce in Argentina, Brazil and Latin America, 2014-19



Source: eMarketer.

Figure 7 – Distribution of B2C Ecommerce Spending in LAC in 2015, by Economy



Source: Statista.

Box 1 – FinTechs, EdTechs, AgTechs: Mercosur Region's Vibrant Online Companies

Mercosur region has countless companies that provide online services. In Brazil, Samba Tech enables small businesses to create and distribute world-class videos; Sympla provides a platform for event organizers to boost ticket sales and manage and track their events; and SmarttBot is breaking new ground in offering automated investment strategies in the stock market. Brazilian start-up Nubank, a mobile-based credit card business, has raised \$80 million in venture funding. Argentine company Restorando offers online recommendations and reservations for restaurants across Latin America, and Papumba gives children educational games based on mobile devices. Paraguayan Aposta.la enables users to bet on sports across Latin America.

There are also in the Mercosur region several two-sided online market places. Argentina's Mercado Libre connects buyers and sellers of products across Latin America. Another Argentine company Argofy connects sellers and buyers of agricultural machinery and equipment, Brazilian startup DogHero connects pets to pet sitters, and Uruguayan company PedidosYa! helps foodies order meals from 15,000 restaurants in more than 400 Latin American cities.

Labor markets are also digitizing. Argentina's Workana connects Latin American freelancers with companies looking for temporary staff that can execute remote projects. Many foreign companies have also entered to service the region. For example, using the global work platform Upwork that enables some 40 million online jobs each year, Uruguayan company Codigo Del Sur has worked on more than 150 projects for foreign companies such as Skout, a dating app with more than 200 million users, and Kindara, a popular health startup. The company has grown rapidly on the back of its services exports, from two employees in 2008 to 48 employees in 2016, working over 50,000 hours and earning more than \$1 million over the period.³

Digital Trade in the Mercosur Region: How Much Is There and Who Drives It?

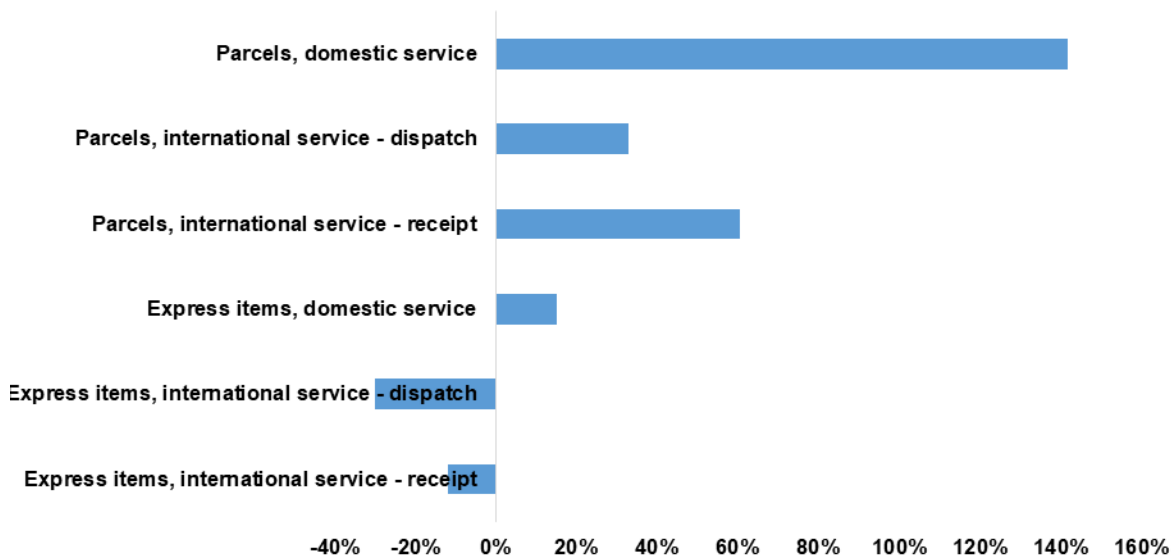
Mercosur region's trade has traditionally been driven by a small number firms – only about 13 percent of companies in the region export – and most of the region's trade is produced by very large companies, such as Brazilian conglomerates Vale and Embraer. Indeed, the top-5 percent largest exporters in Mercosur economies, as in most economies, have traditionally generated some 90 percent of the region's exports.⁴ Empirical studies by now strongly suggest that digitization and the Internet are changing these patterns. For example, Riker (2014) finds that growth in broadband use in 2000-11 increased trade-to-GDP ratio by 4.2 percentage points in a broad sample of countries.⁵ Data also suggest that the Internet is helping to expand the odds for especially small businesses to export and import, for at least three reasons:⁶

- **Access to a worldwide market of buyers.** Ecommerce is widely found to reduce the geographic distance which for centuries has curtailed visibility, trust and trade between buyers and sellers geographically located far apart. Online, buyers around the world have more visibility into sellers from around the planet than ever before – in other words, the Internet curtail search costs. In addition, online platforms provide credibility signals and ease for transacting: star ratings systems, customer reviews, policies that allow return of items, and payment tools give the buyer a sense of trust, the lubricant of trade that in the offline economy takes several transactions between buyer and seller to build. Data accordingly suggest that companies that sell online are more poised to export and import and scale their sales.
- **Wider availability of quality products and inputs at lower cost.** The Internet enables consumers and companies to shop around for the best deal. SMEs that buy online can access a worldwide pool of suppliers – which enables them to buy the best inputs at lowest cost and thus increases their productivity and competitiveness. According to a study by the Boston Consulting Group, SMEs that use the web intensively are 63 percent likelier to source products and services from farther afield than were light or medium web users.⁷ Similarly, accessing online a far wider variety of products than they might from stores in their cities or regions, consumers can score significant welfare gains.

- **Improvements for trading across borders.** The Internet enables companies of all sizes to make, market, and move products and services worldwide with greater ease than ever before. Using online services for logistics, payments, market research, trade compliance, user data analytics, advertising, and so on, companies can streamline logistics, speed up transactions, and get a bigger return on investment on marketing and customer service.

How much online cross-border trade is there then in the Mercosur region? And to what extent are the trade gains from the Internet being realized in the region? One simple way to explore the likely amount cross-border ecommerce is to use as a proxy variable trade in parcels shipped through postal systems, which has grown explosively in the past few years. International parcel shipment data from the Universal Postal Union show that the number of domestic parcel shipments in Mercosur countries grew by 142 percent in 2009-14, and inbound international parcel shipments on average grew by some 61 percent, double the rate of the regional economies' import growth, and international parcel Dispatches grew by 33 percent, also exceeding regional economies' export growth, respectively (figure 8). Possibly replaced by posts, express shipments have decline somewhat – however, the data are volatile year-on-year.

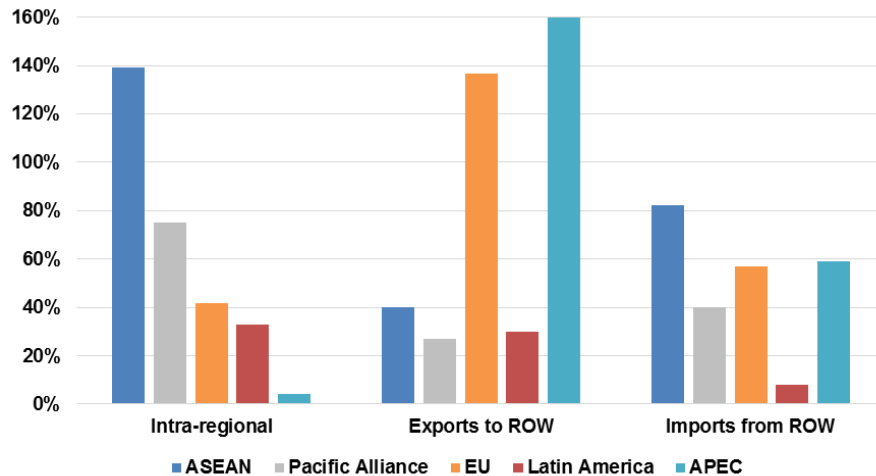
Figure 8 – Domestic and International Parcel Shipments in Mercosur Countries in 2009-14



Source: United Postal Union.

Where are the international parcels going? UPU data suggest that the volume (in tonnage) of intra-regional parcels flows has grown by 35 percent in Latin America (whose data are here dominated by Mercosur members) in 2011-15, a period when intra-regional trade growth has turned negative (figure 9). The region's parcel traffic lags behind the growth of global cross-border parcel flows and intra-regional flows in the European Union and Pacific Alliance, and the explosive 140 percent growth in the tonnage of parcels within the Association of Southeast Asian Nations (ASEAN). The volume of the region's extra-regional parcel exports grew faster at 25 percent during the period and imported tonnage by 7 percent. Proprietary industry data suggests that about 80 percent of ecommerce export shipments in Latin America, whose data are driven Mercosur, are low-value items of less than \$100.⁸

Figure 9 – Growth in Tonnage of Cross-Border Parcel Flows in 2011-15, Selected Regions and Directions (Index where World in 2011 = 100)

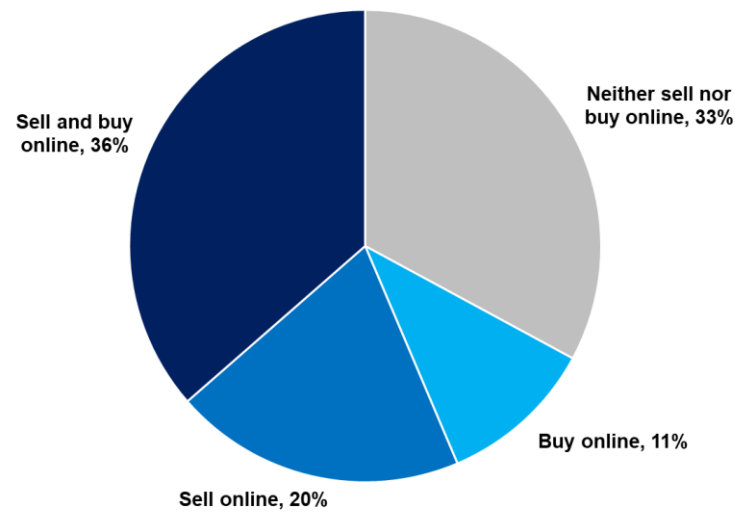


Source: UPU.

Another means to explore the extent to which digitization has helped drive trade in Mercosur is to ask companies about their online sales. Indeed, it should be the case that digitization and the rise of ecommerce are translating into new exports and exporters also in the Mercosur region. To that effect, I carried out a survey of 823 Mercosur region companies selling goods and/or services in August 2017.⁹ The survey is composed of small companies of less than 50 employees (45 percent), mid-size companies with 51-250 employees (13 percent), and large enterprise with over 250 employees (42 percent) (appendix I). The respondents vary mostly from vice president and senior vice president to CEOs; some 58 percent are men and 42 percent women. Of the total sample, 12 percent of respondents are male CEO and 11 percent female CEOs.

The surveyed companies are actively selling and buying online.¹⁰ Some 20 percent of surveyed Mercosur companies sell products or services online, and 11 percent purchase products or services online, and 36 percent both sell and buy online, while 33 percent do not have online sales and purchase activity (figure 12).

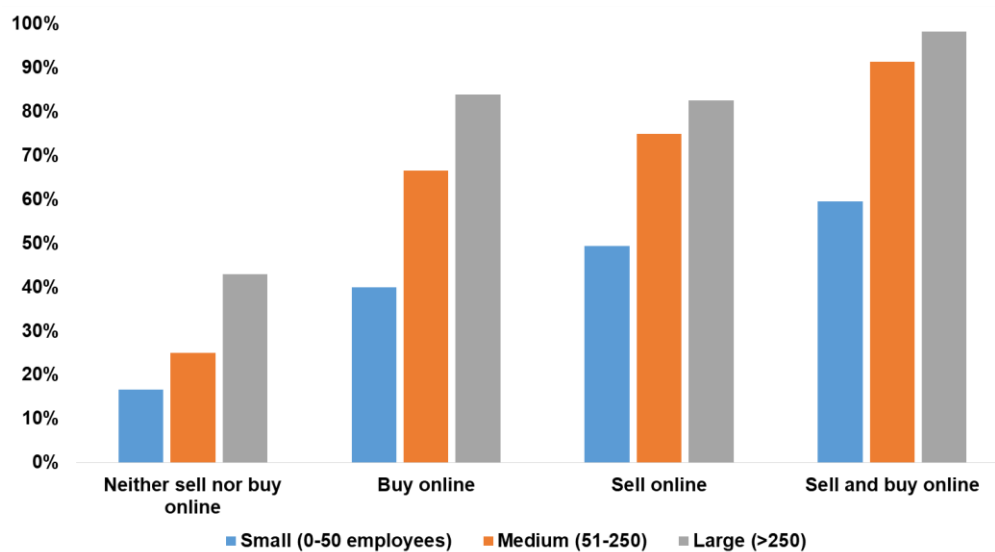
Figure 10 – Surveyed Mercosur Companies, by Online Activity



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Those Mercosur companies that sell online are much more internationalized than companies that neither buy nor sell goods or services online. For example, while only 17 percent of small companies that do not have online sales or purchases export, some 60 percent of small companies that sell and buy online also export (figure 11). As expected, large companies are likelier to export in general than small companies; nearly all large companies that buy and sell online also export, as opposed to 43 percent of offline seller large companies.

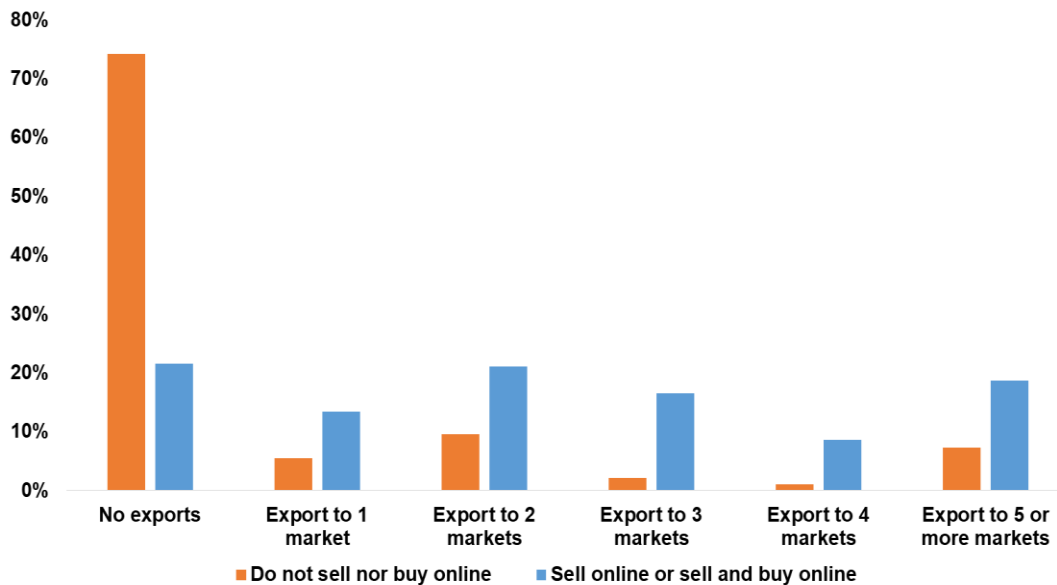
Figure 11 – % of Mercosur Companies that Export, by Online Presence, 2016



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Online sellers are also more diversified in terms of their export exposure: 65 percent of online sellers in the Mercosur region export to two or more markets and 28 percent export to four or more markets, while only 20 percent of offline sellers export to two or more markets and only 8 percent export to four or more markets (figure 12). In other words, most offline sellers that export, export to just one market, whereas most online sellers that export, tend to export to several markets.

Figure 12 - Number of Export and Import Markets, by % of Mercosur Companies



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

These data are echoed in a Boston Consulting Group study that finds that SMEs that use the Internet intensively are almost 50 percent likelier to sell products and services outside of their countries than those that do not.¹¹ The correlation between online sales and exporting is even more resounding in eBay's transactional data, likely because eBay has a global buyer base that accentuates the odds for companies in Latin America to be discovered by foreign buyers. For example, in Brazil, 100 percent of companies that sell on eBay also export, as opposed to only 6 percent of Brazilian companies that have traditionally exported. Brazilian eBay sellers on average to 22 different markets, as opposed to 2.5 markets that the median traditional offline exporter sells to.¹² Data on Chilean companies show that online sellers are also more resilient, likely because they are more diversified in their export markets: 80 percent of eBay sellers that start exporting in year 1 still export in year 2, as opposed to only 30 percent for offline sellers.

While it cannot by these data be said that online selling *causes* companies to export and have more diverse export destinations, it can be said that selling online is associated with, and can be hypothesized to drive, exporting and export diversification. It appears that online sellers are also frequent two-way traders – they both import and export, which suggests that transacting online may fuel companies' participation in regional and global value chains (figure 13). Indeed, selling online can help even the smallest companies build their own regional and global value chains. Not only are online sellers more prolific and exporters; they tend to be higher-growing companies than offline sellers of companies that

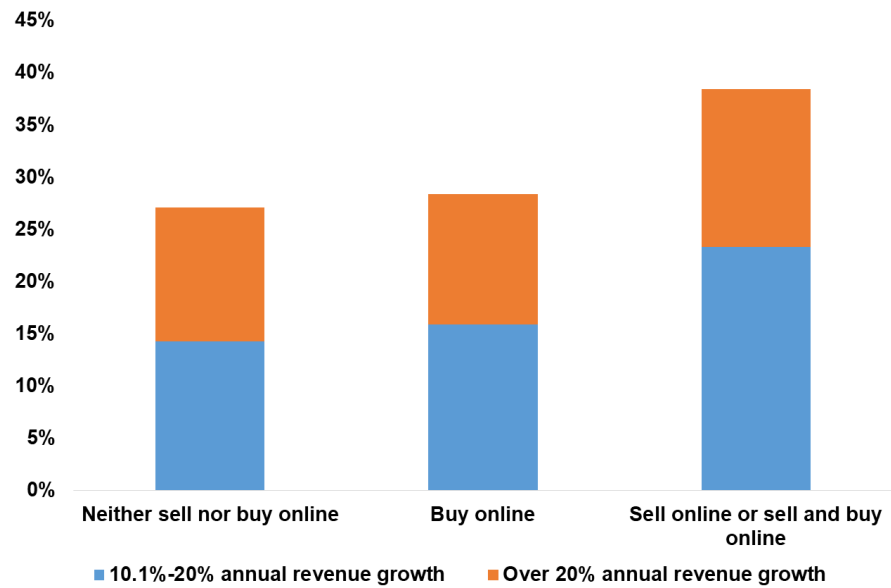
only buy online (figure 14). It appears then that many online sellers are firms that have entered the virtuous cycle of online sales, exports, and growth.

Figure 13 – % of Firms that Both Export and Import in Mercosur, by Online Activity



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Figure 14 – % of High-Growth Companies in Mercosur, by Online Activity

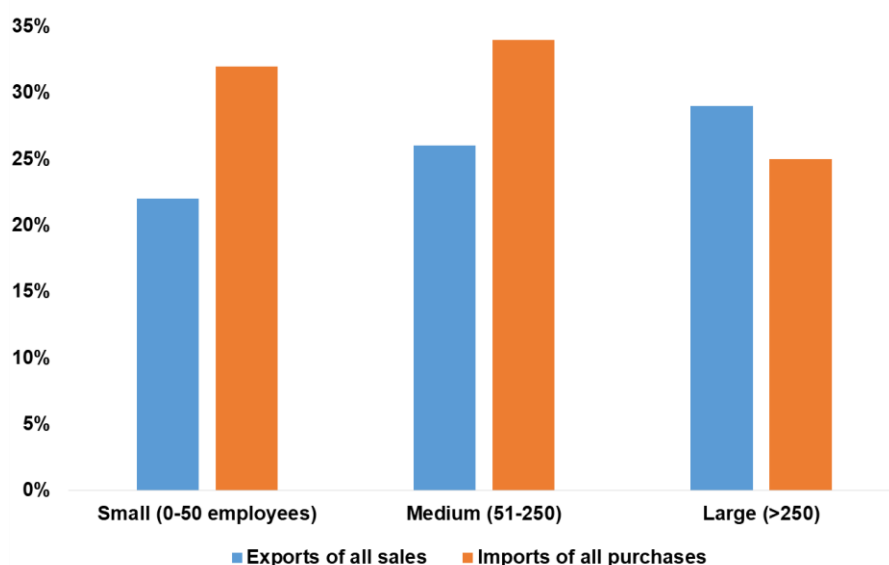


Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Trade matters to the surveyed firms. Cross-border sales represent 22 percent of surveyed small exporters' revenues and 29 percent of large exporters' revenues, while cross-border purchases represent 32 percent of all purchases of small companies and 25 percent of the purchases of large companies in the region (figure 15).

Most surveyed companies export to other Mercosur markets, followed by the rest of Latin America, the United States, and China and EU (table 1).¹³ Another study suggests that the Internet has enabled Mercosur companies to gain new overseas customers. When asked about the type of customers that order their goods or services online from foreign countries, 27 percent of Mercosur companies report those customers are new customers, while 43 percent say their online export sales are generated by a mix of existing and new foreign customers. Only 30 percent say their online export sales are from existing customers that only now place orders online (figure 16).

Figure 15 – Importance of Cross-Border Sales and Purchases to Mercosur Companies that Sell and/or Buy Online, 2016



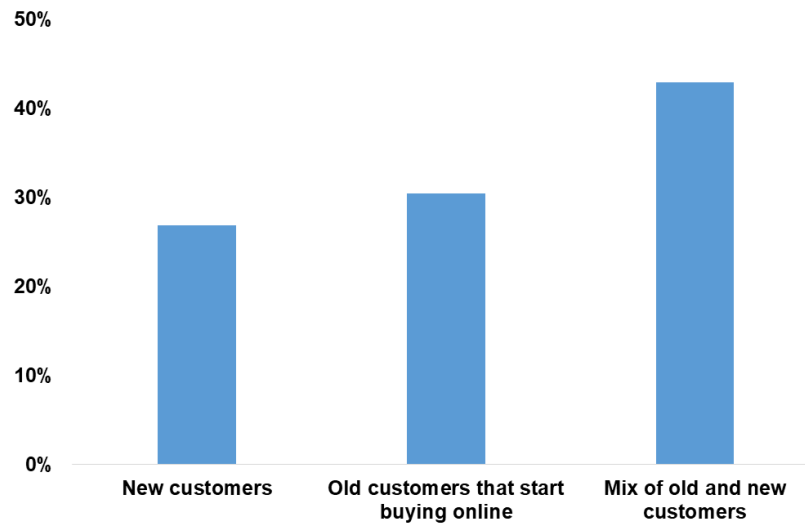
Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Table 1 – Mercosur Region Online Sellers' Export Destinations, by Country

	<i>Export Destination</i>										
	Argentina	Brazil	Uruguay	Paraguay	Chile	Colombia	Peru	Mexico	USA	China	EU
<i>Exporter</i>											
Argentina		59%	43%	18%	44%	9%	5%	17%	18%	8%	11%
Brazil	60%		22%	20%	25%	8%	7%	19%	64%	35%	32%
Paraguay	77%	63%	25%		13%	12%	2%	6%	12%	8%	8%
Uruguay	67%	59%		14%	23%	4%	4%	13%	14%	3%	13%

Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Figure 16 – % of Mercosur Companies by Type of Customer in Online Export Sales



Source: Suominen, Kati (2017). . “Accelerating Digital Trade in Latin America and the Caribbean.” Report for the Inter-American Development Bank (January).

Summary

In sum, this section has shown that the Internet has become absolutely essential for the growth, productivity, and trade of Mercosur companies. Almost all companies in the regional economies use email to interact with clients and suppliers, and over 80 percent of companies agree that limiting their access to the Internet would reduce their productivity by more than 15 percent. Mercosur region companies that sell online are far likelier to export, export to many markets, and grow faster than those that are still offline. Online sellers are often also two-way traders, integrated in regional supply chains, and fast-growing. The next section explores the unfolding regional regulatory panorama companies seeking to growth through digital trade are poised to operate in in years to come.

III. Mercosur's Digital Regulations: State of Play and Lessons for the Future

Digitization and digital trade have grown in Mercosur in recent years. However, the region is still in many ways at “ecommerce 1.0” – there will be much more digital trade and ecommerce both domestically and regionally as Mercosur region’s consumers and companies get online and transactions digitize. How well do national and regional policies and markets facilitate this digital transformation and facilitate online transactions and trade? What are the priorities and issues Mercosur region’s policymakers need to consider today to bring about a vibrant digital marketplace tomorrow?

Policymakers in the Mercosur countries have long appreciated the importance of a good enabling environment for trade, and have promoted market access, solid transport infrastructures, and firms’ ability to export for the region’s competitiveness in world trade. In the digital era where transactions are made online, this “enabling environment for trade” requires further components to work well for businesses seeking to engage in trade – such as Internet connectivity, well-functioning online payments, workers with technological skills, access to fast-disbursing digital working capital loans, and regulations and tax regimes conducive to online transactions and new innovations.

Of this set of issues, digital regulations have become a battleground among businesses that want to service customers and attain scale key to their competitiveness, consumer lobbies keen on securing individuals’ data, and governments’ own interests in taxing booming digital businesses. Several law proposals have been introduced in the Mercosur region to regulate digital companies and transactions that reflect these various interests. The debate has centered on five issues in particular:

- **Data privacy and localization.** Whether transacting on- or offline, Mercosur companies have grown into avid users of data on their operations, customers, and market at home and abroad (box 2). Understanding and analyzing these data on a cross-border basis is crucial for companies seeking to streamline operations, improve their services, and lower costs to customers. At the same time, pressed by consumer lobbies and other considerations, governments in the region have considered proposals to regulate companies’ access to consumer data and the movement of personal data or other data across borders, as well as rules that would require companies to set up servers or other IT infrastructure in-country as a pre-condition for market access. For example, in September 2013, Brazil considered a policy that would have forced Internet-based companies, such as Google and Facebook, to store data on Brazilians in local data centers, but it withdrew this provision from the bill. Brazil’s Central Bank introduced a similar proposal in September 2017 for a public consultation about cloud services for the financial sector.

Mercosur governments have also revised their data protection laws. Brazil’s data protection law, Lei Geral de Proteção de Dados (LGPD) that passed in 2018 and will go into effect in 2020, requires companies to comply with strict requirements related to the processing of personal data, in rather similar fashion as European Union’s General Data Protection Regulation (GDPR). It has similar extraterritorial reach as GDPR, but is more lenient in some areas, such as anonymized data or fines for incompliance.¹⁴ Companies globally view the GDPR as straitjacketing and very costly to implement; the United States and the APEC region have viable alternative regimes turning more on sectoral regulation and firm-level commitments on privacy, backed up by national privacy enforcers (box 3). Argentina’s data protection law has a similar extraterritorial reach and has been clarified to permit transfer of data to certain

jurisdiction deemed to have adequate protection of data privacy – member states of the European Union and the European Economic Area, Switzerland, Guernsey and Jersey, the Isle of Man, the Faeroe Islands, Canada (only applicable to their private sector), New Zealand, Andorra and Uruguay.¹⁵

Box 2 – How Mercosur Region Companies Use Data to Provide Better Service at Lower Cost

Large companies in the Mercosur region have long used data to optimize their operations and customer service. For example, Brazil's airplane company Embraer uses data on to monitor in real-time the performance and operations and maintenance needs of its 5,600 active aircraft with 1,700 clients globally.¹⁶ Brazilian energy giant Petrobras draws on 387 indicators to monitor its environmental performance and a platform to capture and process real-time operational data from the various drilling rigs.¹⁷ Argentina's telecom company Movistar Argentina leverages data and machine-learning capabilities to monitor and forecast the performance of its services and operations and to detect deviations in usage data.

However, data and analytics are today not just for large companies to streamline and scale. They are also accessible to even the smallest companies which can now rent pay-per-use data services from companies such as Amazon or Salesforce, instead of having to buy expensive hardware and software systems and in-house data analysts. One example is Brazilian company WebMotors that hosts 200,000 classified ads for new and used vehicles each month. WebMotors has used Amazon CloudFront to transmit vast quantities of data that improved its performance by 45 percent and enabled it to scale up to support more than 20 million unique visitors per month from around the world.¹⁸

There are also small yet highly scalable online data businesses that enable other businesses to tap crucial data at very low cost. For example, Argentine small business DataPro enables small ecommerce merchants to assess its markets and competitors on Mercado Libre for free, and in-depth at mere \$5 per competitor.¹⁹ The savings in market research enable small business clients to invest in new activities.

- **Internet intermediary liability.** Internet intermediary liability has become an issue of heightened focus in recent years, as some governments have begun to look to digital companies to police illegal and other problematic content posted by users, and monitor users' copyright violations. Companies have sought to remove illegal content – for example, Facebook removes 15,000 items in Germany each month.²⁰ However, companies have also pushed back against onerous liability regimes and ambiguous monitoring requirements that can be costly and complex to implement, rather asking for a more predictable set of liability protection measures. As a result, some countries have put in place liability laws, typically referred to as “safe harbors”. In its Marco Civil Internet law of 2014 that defines Internet users' rights, Brazil has a “safe harbor” that limits the responsibility of providers for hosting or transferring third-party content. Companies implementing Marco Civil see it generally as a major improvement to the preceding, more ambiguous liability law. Outside Mercosur, Chile's copyright law of 2010 specifies similarly that internet intermediaries are not liable for user content on their sites if they take appropriate actions in response to official notices.²¹ Both Argentina and Uruguay are considering liability laws.

- **Over the top (OTT) rules.** Internet services delivered via the Internet include, among others, broadcasting services such as Netflix or Hulu that provide audio, video, and other media over the Internet without similar subscription as required by traditional cable companies; messaging services, such as services provided by WhatsApp, Skype, and Facebook, that are not text-messaging services provided by traditional mobile network operators; and various other services such as Uber or Lyft that enable anyone with a mobile phone to order private cars and taxis. The usage rates of these services are very high globally as well as in Mercosur, and growing much faster than traditional telecommunications and cable services. Facebook has 2 billion monthly users worldwide and WhatsApp has over a billion users; according to eMarketer, almost 100 percent of Internet users in Brazil use WhatsApp.²² Uber provides for millions of trips globally each month: some 62 million trips were taken in July 2016 alone.²³

Leveraging the Internet, Internet service providers are supplementing traditional providers by providing consumers with means of communicating and accessing content which drastically cut consumers' costs – but also are perceived by telecommunications companies as biting into their revenues, when these services are not developed, created, or provided by the telecoms.²⁴ The vibrant debate in the Mercosur region on OTT regulations reflects these concerns of telecommunications companies for their market share in the increasingly digitizing region. For example, there are proposals in Argentina on OTT rules that regulate audiovisual and voice distribution. Several countries are also amid broader debates of whether it is appropriate to extend traditional telecommunications regulations to these new digital services that do not share the same technical and market characteristics as telecommunications services – and concern that the application of these traditional regulations would likely force consumers to pay a premium for accessing digital content and services.

- **Taxes on digital companies.** Governments in Mercosur, as in other parts of the world, are considering how to implement taxes on Internet services without making it more difficult to deliver digital services on a cross-border basis. For example, in January 2018, Uruguay introduced a 22 percent tax on online services such as AirBnB and Uber, and in March 2018, Argentina introduced a 21 percent tax on domestic and offshore Internet services. In Brazil, the National Cinema Agency has proposed a tax on audiovisual platforms regardless of their geographical origin. It has also proposed local content rules – a minimum quota of 20 percent of Brazilian content on TV and audiovisual companies' catalogues, and require investments in co-production of original content equivalent to 4 percent of gross income.²⁵

Companies in the Mercosur region are keen on taxes that are consistent and applied in a non-discriminatory manner, given the cross-border nature of digital services. For example, companies tend to think that governments should seek to avoid unilateral digital taxation measures that deviate from regional and global norms, and avoid singling out digital platforms for special or unique treatment – since the digital economy is increasingly indistinguishable from the economy itself.

- **Copyright and IP.** As content, services, and products digitize, concerns have been growing about infringement of intellectual property rights associated with digital or non-digital products or services, including copyright, patent, trademark, or trade secret infringement. To promote growth of the digital economy, it is critical to enforce these rights while guarding against

unbalanced or onerous intellectual property rules that could limit market access and inhibit development of services that are critical to digital trade, such as search engines, cloud services, translation software, and machine learning tools. Companies also tend to highlight the importance of safe harbors to protect intermediaries from user-generated content, as that content often has copyright consequences.

All Mercosur members have a copyright regime in place, but none of them are fully updated to reflect the challenges of the digital era, and enforcement of existing laws is weak in many countries. In Uruguay, a 2003 law did include computer programs and databases in the definition of “works” governed by the 1937 copyright regime. Yet few countries have updated their copyright framework with fair use rules or other limitations and exceptions that are necessary to enable companies and researchers to build next-generation technologies around machine learning and text and data mining. Discussions are intensifying in the region on the appropriate copyright regimes that would strike a balance between protecting rights owners and propelling innovation.

Table 2 summarizes various key existing regulations and regulatory proposals in the Mercosur region.

Table 2 – Regulations and Recent Regulatory Proposals in Mercosur Countries, Selected Categories (as of November 2017, with some updates in September 2018)

	Argentina	Brazil	Paraguay	Uruguay
Data Privacy and Transfer	The government is finishing a data protection draft bill which has been open to public consultation. The bill has a good international data transfer regime; there are problematic provisions regarding extra-territorial application of the law. They expect to submit the bill to Congress during this year. The existing Data Protection Law of 2000 prohibits the transfer of personal data to countries that lack protections, but so far Argentina has not determined which countries fall within this category.	Brazilian Congress approved Marco Civil da Internet defining Internet users’ rights was approved in 2014. Brazil’s data protection law, Lei Geral de Proteção de Dados (LGPD) that passed in 2018 and will go into effect in 2020, requires require companies to comply with strict requirements related to the processing of personal data, in rather similar fashion as European Union’s General Data Protection Regulation (GDPR). During the discussions of Marco Civil, Brazil considered a policy that would have forced Internet-based companies, to store data	A 2001 law details conditions for access to and use and transfer of data, and the kinds of data that can be transferred. ²⁶ Under 2002 modification, transfer of data is prohibited after three years and includes specific fines for violations.	Has data protection law of 2008 in place. Resolution of 2013 defines personal data and its treatment, ²⁷ Any company that has a Uruguayan website ending in .uy in which it captures personal data needs to register the data and write out privacy policy. Other websites only need to register data bases. Companies should have written text on how a person can access his or her data and modify or suppress it.

		relating to Brazilians in local data centers, but it withdrew this provision from the bill.		
Internet Intermediary Liability	Existing intermediary liability bill expected to be approved by the end of 2017. Viewed positively by private sector for protecting all Internet intermediates and referring to a wide range of content (including content with intellectual property protections).	“Safe harbor” that limits the responsibility for hosting or transferring third-party content. ISPs will typically not be found civilly liable for damages resulting from third-party generated content. ²⁸		No laws yet. Law proposals introduced in October 2016.
Over the Top Rules and Taxes	In March 2018, Argentina introduced a 21 percent tax on domestic and offshore Internet services.	There is ongoing discussion on the proposal by the Brazilian National Cinema Agency to regulate audiovisual OTT platforms to levy taxes regardless of their geographical origin, create a minimum quota of 20 percent of Brazilian content on TV and audiovisual companies’ catalogues, and require investments in co-production of original content equivalent to 4 percent of gross income. ²⁹	Consideration in 2016 of a law to regulate and tax OTT operators such as Netflix.	22 percent taxes for sales of Internet services took effect in January 2018. ³⁰
Copyright and IP	Copyright law dating back to 1930 does provide a sound legal framework to protect intellectual property such as books, films, music, and software, but enforcement is weak. ³¹ Lack of key copyright limitations and exceptions that are necessary for machine learning and the digital environment.	Copyright is regulated by a 1998 law. New copyright reform bill proposed by the Ministry of Culture in 2013 was not taken into consideration in Congress. In 2016, Brazil launched a new public consultation about copyright in the digital environment -- but has not yet developed key copyright limitations and exceptions that are necessary for machine learning and the digital environment. High levels of Internet piracy and online sales of counterfeit	Latest copyright law in 1998; discussions on modifications. Lack of key copyright limitations and exceptions that are necessary for digital environment.	Copyright laws on literary and artistic property in force since 1937; modification of 2003 includes computer programs and databases among “works” and establishes the author retains his/her right of ownership throughout his life, and his/her heirs for the term of fifty years thereafter. Lack of key copyright limitations and exceptions that are necessary for digital environment.

		goods persist, in part keeping Brazil on US Trade Representative's Special 301 Watch List since 2007. ³²		
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Box 3 – How to Regulate Data Privacy? The battle of GDPR vs. CBPR

The General Data Protection Regulation (GDPR) is the EU's means to strengthen and unify data protection for all individuals within the EU, and to regulate transfer of personal data outside the EU. GDPR became enforceable on 25 May 2018 after a two-year transition period.

GDPR applies to EU-based “data controllers”, or organizations that collect data from EU residents, and “processors”, or organizations such as cloud service providers that process data on behalf of data controller. It also applies to organizations based outside the EU if they collect or process personal data of EU residents.

It protects such data as basic identity information such as name, address and ID numbers, web data such as location, IP address, cookie data and RFID tags, health and genetic data, biometric data, racial or ethnic data, political opinions, and sexual orientation. Under GDPR, EU citizens have the right to know upon request what personal data a company is using and how it is being used.

All companies with 250 employees or more need to adhere; companies with fewer than 250 employees whose data processing is not occasional, or includes certain types of sensitive personal data, also need to comply.

The private sector widely views GDPR as overly straitjacketing and very costly to implement. For example, companies:

- Can store and process personal data only when the individual consents and for “no longer than is necessary for the purposes for which the personal data are processed”;
- Must erase personal data upon request;
- Must report data breaches to supervisory authorities and individuals affected by a breach within 72 hours of when the breach was detected;
- Have to conduct data protection impact assessments to identify risks to EU citizens;
- Have a data protection officer (DPO) if process large amounts of data.

There are various discussed costs imposed by the GDPR:

- **Implementation costs alone are very high.** Two-thirds of American businesses are spending between \$1 and \$10 million just to implement the GDPR by the time it enters into effect in May 2018.
- **Impending penalties.** Companies are swallowing the implementation costs in part because the penalties for companies that fail to enforce GDPR run as high as €20 million or 4 percent of a company's global revenues. However, losses are impending: GDPR fines are expected to cost European banks \$5.2 billion in the first three years in hard cash.³³ The 100 companies listed on the London Stock Exchange could face fines

of up to £5 billion for GDPR breaches.³⁴ Had the regime been in place for the past five years, the top listed UK companies could have been fined £25 billion.

- **Business losses from decreased access to data.** Given its limits to access to data that curb efficiencies, GDPR is estimated to result in an immediate loss of \$66 billion in sales for EU companies. The more profound implications, such as the curtailment of credit information on consumers and ability for web analytics firms to function is expected to result in losses of \$173 billion and 2.8 million European jobs.³⁵
- **Negative impacts on GDPs, trade, investment, and welfare.** Brussels think-tank ECIPE's simulations discovered that EU's data privacy and localization laws, depending on their final outcome, will lower EU GDP by 0.4-1.1 percent, exports by 0.4 percent, domestic investments by 3.9-5.1 percent, and welfare by \$334-\$806 per worker.³⁶

In practice, the implementation will likely vary by country. Germany and France tend to have strict rules. For example, a foreign company that wishes to transfer data from Germany needs to contend with state and federal data protection laws, review the data in Germany, and ask their own country's court or government entity to request the documents from Germany, for example citing a mutual legal assistance treaty.³⁷

Also EU itself will incur implementation and enforcement costs. In addition, trade agreements are not necessarily GDPR-compatible. For example, GDPR appears to be inconsistent with the General Agreement of Trade in Services (GATS).³⁸ From EU's vantage point, trade rules should upgrade exceptions privacy and data protection; trading partners may however disagree.

Data privacy rules in the United States are very different. There exists no one comprehensive federal law regulating the collection and use of personal data services in the United States. Rather, there are various federal and state laws and some 20 sectoral regulations in different spheres such as in healthcare or in financial services. In addition, there are various self-regulatory frameworks in such industries as payments, online advertising, and mobile marketing.³⁹

As examples, the Federal Trade Commission prohibits large companies from deceptive practices online and has enforced its rules against companies that have not lived up to their privacy policies or implemented reasonable minimal data security measures; the Financial Services Modernization Act and Health Insurance Portability and Accountability Act regulate companies' access to personal financial and medical data; while the Fair Credit Reporting Act regulates use of data related to a consumer's creditworthiness, credit history, and overall eligibility for credit or insurance. There are also many state law regulating the use and collection of personal data, with California having more extensive privacy laws than other states.

APEC's Cross-Border Privacy Rules (CBPR) endorsed by APEC ministers in 2011 is a different data privacy regime than GDPR. CBPR is an enforceable code-of-conduct governing electronic flows of private data in the APEC region. It is based on self-assessment with third party verification underpinned by national enforcement authorities. CBPR is a more flexible framework than the much more formal GDPR, but it can result in strong binding commitments from company members. Unlike GDPR that is a law applying uniformly to EU economies, the CBPR system does not displace or change a country's domestic laws and regulations.

CBPR is aimed to harmonize data privacy regimes across the APEC region, and is envisaged as a blueprint for a more far-reaching global scheme. In order to join CBPR, APEC member economies need to submit a formal declaration and discuss how the CBPR can be enforced under national law, and identify at least one APEC-recognized third party certifying organization.

CBPR can offer a useful step for companies and organizations to put in place data protection policies and procedures. Businesses and organizations that opt in the CBPR system must submit their privacy practices and

policies for evaluation by an APEC-recognized “Accountability Agent”; in the United States this organization is called TRUSTe; in Japan, JIPDEC. They study such aspects as a company’s online properties (websites, mobile apps, cloud platforms) and customer and employee data management practices. Upon certification, the practices and policies will become binding on that organization and enforceable by a privacy enforcement authority (such as the Federal Trade Commission in the United States). Participating businesses are required to develop and implement data privacy policies consistent with the APEC Privacy Framework. There are currently 21 companies that have been certified, such as Apple, Box, HP, IBM, and Merck. Businesses participate because they perceive value in the external validation and sense of accountability they gain by the CBPR certifications.⁴⁰ A persistent criticism of CBPR is the low level of awareness about it and its benefits.

So far, five APEC economies have joined the CBPR – Canada, Japan, Mexico, South Korea, and the United States. Some Asian economies have so far not joined due to lack of domestic legislation.

The privacy enforcement authorities of a country that takes part in CBPR need to be able to enforce domestic laws and regulations on protecting personal information. Relying on enforcement by countries, the CBPR lacks the GDPR’s centralized enforcement mechanism. Rather, APEC encourages the cooperation of privacy enforcement authorities within the Asia-Pacific and has in place established the Cross-Border Privacy Enforcement Arrangement (CPEA) as a multilateral arrangement to share information, carry out research, and engage in cross-border cooperation in investigation and enforcement.⁴¹

Appendix I Table 1 provides a side-by-side comparison of GDPR and CBPR.

A growing body of research on the impact of digital regulations on trade, investment, and growth indicates that the choices Mercosur countries make on digital regulations domestically and regional are far from trivial. Some recent findings are as follows:

- **Data localization increases costs to all companies:** Research finds that data localization is self-defeating. Countries that require data to be cordoned off increase costs for their own firms that have to turn to costlier domestic services, paying up to 60 percent more for their computing needs. In contrast, centralized data storage and processing takes advantage of economies of scale in cloud computing and saves costs. According to one estimate, in Brazil, a local company would pay 54 percent less using cloud services located outside the country than when using a local cloud provider for the same services.⁴² It is estimated that European businesses could save some 36 percent on their server costs if moving their servers outside the EU.

Of course, the costs of data localization could well outright deter small businesses from entering new markets. However, many traditional industry companies could be most badly hurt: McKinsey has found that 75 percent of the value added created by data flows is in traditional industries, in part through increases in productivity.⁴³ Data localization requirements may also be counterproductive: giving governments more control over information, they can threaten consumers and businesses’ access to both knowledge and international markets.⁴⁴

- **Data localization hurts economic growth, investment, and welfare:** The macroeconomic impacts of data localization are significant. According to simulations by the European Center for International Political Economy (ECIPE), data localization in India can impose a welfare loss of 11 percent of the average worker’s monthly salary; in China, almost 13 percent, in Korea

and Brazil, as much as 20 percent.⁴⁵ The impact on domestic investment would decline by 4.2 percent in Brazil as a result of data localization standards. Box 3 illustrated the negative economic impacts on EU citizens of the EU's data protection regime; EU companies' immediate direct costs is estimated at \$66 billion loss in sales revenue.

- Internet intermediaries boost growth and productivity of other firms – when not stifled by an onerous liability regime.** Internet intermediaries such as Facebook fuel the flow of information online by helping individuals and companies find, share and access content and interact and transact with each other. This in turn improves growth and productivity across the economy. A 2013 study by Copenhagen Economics found that internet intermediaries increased EU GDP by €430 billion in 2012, or about 3.3 percent of EU's GDP; of this, €220 were gains from investment, private consumption, and exports, while €210 billion was indirect effect of productivity increases in firms serviced by intermediaries.⁴⁶ Additional €640 were consumer benefits from free services, increases in online advertising, and B2B platform revenues. However, these numbers could well be higher: it has been argued that the success of Silicon Valley is based on freedom of speech undergirding the American Internet laws; in contrast, Europe and Asia imposed strict intermediary liability regimes, inflexible intellectual property rules, and complex or inflexible privacy rules that stifled innovation.⁴⁷
- Clear liability regimes with limited liability on online companies expand startup investments:** There is a particularly important link between digital regulations, such as copyright and legal liability rules, and access to early-stage finance, the main challenge small Mercosur region digital companies cite to thriving online: unclear and restrictive liability and copyright regulations deter investors.

A recent Pricewaterhouse Coopers survey of early-stage investors in digital companies finds that copyright regulations that increase liability for either users or websites have a negative impact on investment.⁴⁸ Regulations holding websites liable for user-uploaded content without a license would reduce the pool of interested investors by 81 percent. In the presence of strict regulatory regimes, investors gravitate to companies promising a very high return multiplier – which likely means that investors would only focus on a handful of promising digital businesses. Meanwhile, clarifying copyright regulations to allow websites to resolve legal disputes quickly would expand the pool of interested investors by 111 percent and limiting penalties for websites acting in good faith would expand the pool of interested investors by 115 percent. Nine out of ten investors would prefer to invest in companies operating under U.S. than European copyright laws.

Of course, onerous rules also impact startup founders and users of platforms. Small businesses and start-ups are unlikely experts in liability issues – and thus either take risks and become liable for fines, or divert their precious capital to pay lawyers and specialized software to ensure compliance with stringent liability laws. One study supported by Google found that a liability regime that defines clear and cost-efficient requirements for intermediaries could bolster success rates for internet intermediary start-ups by 4 percent in Chile, 8 percent in Germany, 22 percent in India, and 24 percent in Thailand, and increase expected profits for intermediaries by 1 percent in Chile, 2.3 percent in Thailand, 3 percent in Germany, and 5 percent in India.⁴⁹

- **OTT rules that create new costs for consumers to access online services and content undermine social gains – and can undermine freedom of expression.** Proposals that would force Internet services to get a license or register with the government before they can make their services available in a country can limit free expression and innovation: in 2011, the United Nations Special Rapporteur on the Freedom of Expression wrote that “unlike the broadcasting sector, for which registration or licensing has been necessary to allow States to distribute limited frequencies, such requirements cannot be justified in the case of the Internet, as it can accommodate an unlimited number of points of entry and an essentially unlimited number of users.”⁵⁰ Rigid OTT rules can also hurt the imposing country’s companies and consumers by curbing their access to information and data, such as accessible via apps.⁵¹ For example, a recent dissertation by Min Jung Kim shows that consumers score major gains from the fact that many apps are free – they are like paid apps but with zero price.⁵² In the United States, she finds, Smartphones created up to \$271 in annual consumer surplus in 2011, with 90 percent of the welfare gain coming from free apps.
- **Internet services that operate more freely can boost telecom operators’ revenues.** Telecom operators do not need to view online service providers as a threat: there are many successful cases where telecoms have partnered with Internet services to monetize the strong growth in messaging and data traffic, so as to make up for losses from declining voice traffic. For example, Malaysian mobile service provider DiGi telecommunications has entered into a partnership with WhatsApp – which enables DiGi customers to get unlimited access to WhatsApp for a fixed fee.⁵³ In India, Bharti Airtel attributed its over 30 percent increase in net profits in the first quarter of 2015 to increases in mobile data revenue.⁵⁴ Swedish mobile services have recorded increase in revenue in 2002-14, with data services making up an increasingly sizable share of total revenues.⁵⁵ More collaboration between internet companies and telecoms may be in fact the future. For example, Facebook is lending some of its artificial intelligence experts to telecoms through its Telecom Infra Project (TIP), which is an umbrella for Facebook and other companies to collaborate on telecommunications technologies, such as open-source long-distance antennas to spread connectivity in remote regions, or small cellular stations that can be planted on street lamps or other infrastructure to accelerate the deployment of wireless service.⁵⁶
- **Lowering taxes on digital goods and services generated more growth and revenue over time.** Governments are increasingly seeking to apply new corporate and sales tax rules to digital businesses that operate across borders. European officials have made muscular proposals to tax foreign tech companies that do not necessarily have a physical presence in Europe, yet do have a strong market share of European digital markets. Many U.S. state governments have crafted tax rules for online transactions of products and for the sale of digital goods and services, such as digital audio-visual works, digital books, and even for digital ringtones – while some states such as North Dakota and District of Columbia has expressly declined to tax digital goods or services.

These measures need to be taken with care, so that digitization will continue translating into economies growth. After all, since digital goods and services affect practically all industries much like any critical infrastructure, or financial services, or energy do, taxes on them have economy-wide spill-overs in productivity, new business creation, and investment. Furthermore,

online services are widely found to have a positive impact on economic growth – and this growth can further increase with scale of usage, for example due to network effects, so that maximizing growth gains from digitization benefits from wide-spread adoption of digital devices, goods, and services by all firms and consumers.

As such, if the public policy objective is to maximize access to and penetration of devices and digital goods and services across consumers and businesses, tax rate on online transactions should be lowest possible: empirically, tax cuts and exemptions generate more economic growth and, ultimately, more government revenue than high taxes that raise the technology's cost of ownership.⁵⁷ After all, as companies use digital goods and services and cloud computing services as a critical input in their operations and production, excessive taxes on them are akin to a tariff or tax on intermediate products. Similarly, consumers of digital goods and services will be dissuaded from buying and using them if taxes raise their total cost of ownerships. For example, there is empirical evidence that 3G penetration rates decline with tax burden on 3G services, revealing how the tax code may inadvertently penalize technology diffusion.⁵⁸

The worst impact of taxing key services will lower adoption of digital goods and services maybe among the poor, the most price sensitive consumers. Taxation can also dissuade investment: firms are likely to shift their deployment footprint to minimize their tax burden, all other things equal. In contrast, in a natural experiment, when North Dakota ended its 6 percent sales tax on wireless and wireline services, investment per capita in these services more than doubled in a year.⁵⁹ In addition, there is also an important coordination issue: there is no one internationally accepted VAT/GST treatment on cross-border sales of digital services – so that instances of double taxation and non-taxation are likely to arise.

Regional Dimension of Digital Regulations

Governments aspiring to help their countries' digitizing companies sell more online and expand their presence across borders also need to consider the interoperability of their digital regulations and online payment systems with trading partners – and pay attention to the traditional topics of market access and customs procedures affecting SMEs selling goods online cross-border.

Attention to digital regulations has also heightened in Mercosur as the region has been reviving its trade talks with the European Union and as Argentina in particular has risen to play a key role in the new Friends of Ecommerce Development (FEDs) group at the World Trade Organization. Some leaders in the region have also been inspired by such trade agreements as the Trans-Pacific Partnership (TPP) agreement and the 2016 Chile-Uruguay free trade agreement that have pioneered with ecommerce chapters and the Chile-Argentina free trade agreement negotiated in 2017 that has similarly forward-looking language on digital economy.

How, then do trade agreements treat digital trade? TPP negotiators produced the most sophisticated language yet on digital trade. For example, TPP:

- Requires non-discrimination when members states protect ecommerce users from violations of personal information;
- Demands parties enable cross-border data transfers;

- Bans making market access contingent on forced transfers of technology, production processes, or data to a member state;
- Includes strong and balanced copyright protections and shields Internet intermediaries from legal liability for the infringing acts of their users;
- Prohibits customs duties or taxes on digital products; and
- Governs digital industries via a negative list and thus automatically keeps them open, unless a TPP member government explicitly exempts an industry.

The Chile-Uruguay FTA's ecommerce chapter is very similar in intent and language to TPP's ecommerce chapter. The one difference is that it omitted copyright clauses similar to TPP chapter due to Chile and Uruguay's differing copyright regimes. Box 4 outlines key clauses of the Chile-Uruguay FTA.

Selected other FTAs that cover ecommerce include the Australia-Singapore FTA of 2012 and EU-Canada FTA of 2016; however, both are silent on data transfer and localization issues and non-discriminatory treatment of digital products that TPP stresses., while table 3 summarizes some key highlights on digital trade and ecommerce rules in recent trade agreements. The Trade in Services Agreement that is being negotiated among 24 parties also touches on regulating the digital economy.

Box 4 – Best in Latin America Yet? Chile-Uruguay FTA on Digital Trade

In October 2016, Chile and Uruguay signed an FTA that has 20 chapters, including on ecommerce and SMEs. Hailed as “gold standard” agreement, the FTA provides for interoperable electronic signatures, acceptance of electronically filed trade documents, cooperation on protections of consumers online, protections of the data of consumers that shop online and sharing of experiences in protection of personal information, and clear information to consumers on how their data may be transferred.

The agreement also puts forth cooperation to further SMEs' use of ecommerce, and to advance ecommerce development in regional and multilateral forums, and self-regulation by the private sector in a way that promote ecommerce. The SME chapter requires both parties to make trade information available for SMEs electronically and creates a committee to further SMEs' use of the agreement and to build their capacity to export.

The agreement does not prohibit access to consumer data, free flow of data across borders, and it prohibits either party from requiring the other to set up servers in market. This latter provision has an exception for legitimate public policy reasons, but also a prohibition to exercise the exception if that is arbitrarily discriminating or unjustifiable. Argentina is now negotiating a similar agreement with Chile, connecting another Mercosur market more closely to the Pacific Alliance; the agreement is poised to have a similar intent as the Chile-Uruguay agreement.

Table 3 – Digital Trade and Ecommerce Rules in Selected Trade Agreements, Selected Highlights

	TPP	Uruguay- Chile FTA	Australia-Singapore FTA	EU-Canada FTA
Data Privacy	<p>Each party needs to adopt non-discriminatory practices in protecting users of ecommerce from personal information protection violations in its jurisdiction.</p> <p>Each Party should publish information on the personal information protections it provides to users of electronic commerce, including how: individuals can pursue remedies; and business can comply with requirements. Parties are to promote compatibility among each other's persona data regimes.</p>	<p>Each party needs to adopt non-discriminatory practices in protecting users of ecommerce from personal information protection violations in its jurisdiction.</p> <p>Each Party should publish information on the personal information Protections it provides to users of electronic commerce, including how individuals can pursue remedies; and business can comply with requirements.</p> <p>Parties are to promote compatibility among each other's persona data regimes.</p>	<p>Parties are to take such measures as it considers appropriate and necessary to protect the personal data of users of electronic commerce.</p>	<p>Each Party should adopt or maintain laws, regulations or administrative measures for the protection of personal information of users engaged in electronic commerce and, when doing so, shall take into due consideration international standards of data protection of relevant international organizations of which both parties are a member.</p>
Transfer of data	<p>Parties are to allow the cross-border transfer of information by electronic means, including personal information, when this activity is for the conduct of the business of a company, Parties can be inconsistent with this rule to achieve a legitimate public policy objective, provided that the measure:</p> <p>(a) is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a</p>	<p>Parties are to allow the cross-border transfer of information by electronic means, including personal information, when this activity is for the conduct of the business of a company, Parties can be inconsistent with this rule to achieve a legitimate public policy objective, provided that the measure:</p> <p>is not applied in a manner which would constitute a means of arbitrary or unjustifiable</p>		

	disguised restriction on trade; and (b) does not impose restrictions on transfers of information greater than are required to achieve the objective.	discrimination or a disguised restriction.		
Forced localization of servers	Parties are not allowed to require companies to use or locate computing facilities in their respective territory as a condition for conducting business in that territory. Parties can be inconsistent with this rule is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade; and does not impose restrictions on the use or location of computing facilities greater than are required to achieve the objective.	Parties are not allowed to require companies to use or locate computing facilities in their respective territory as a condition for conducting business in that territory. Parties can be inconsistent with this rule is not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade.		
Customs duties on digital products	Customs duties on electronic transmissions prohibited. Taxes consistent with agreement are allowed	Customs duties on electronic transmissions prohibited. Taxes consistent with agreement are allowed.		Customs duties on electronic transmissions prohibited. Taxes consistent with agreement are allowed.
	Copyright rules and enforcement reflect those of in U.S. law. ISPs cannot be required to monitor their systems for infringement of copyright. Parties are to ensure that legal remedies are available for right holders to address such	Omitted copyright clauses similar to TPP chapter due to the countries' differing regimes.	Each party will provide (a) legal incentives for service providers to cooperate with copyright owners in deterring the unauthorized storage and transmission of copyrighted materials; and (b) limitations in its law regarding the scope of remedies available against service providers for copyright	Parties provide limitations or exceptions in its law regarding the liability of service providers, when acting as intermediaries, for infringements of copyright or related rights that take place on or through communication networks, in relation to the provision or use of their services.

Copyright and Liability	<p>copyright infringement and shall establish or maintain appropriate safe harbors in respect of online services that are Internet Service Providers. This framework of legal remedies and safe harbors shall include:</p> <p>(a) legal incentive for Internet Service Providers to cooperate with copyright owners to deter the unauthorized storage and transmission of copyrighted materials or, in the alternative, to take other action to deter the unauthorized storage and transmission of copyrighted materials; and</p> <p>(b) limitations in its law that have the effect of precluding monetary relief against Internet Service Providers for copyright infringements that they do not control, initiate or direct, and that take place through systems or networks controlled or operated by them or on their behalf.</p>		<p>infringements that they do not control, initiate or direct, and that take place through systems or networks controlled or operated by them or on their behalf, as set forth in this Article</p>	<p>Parties may establish appropriate procedures for effective notifications of claimed infringement, and effective counter-notifications by those whose material is removed or disabled through mistake or misidentification.</p> <p>Parties will engage in dialogue on liability of intermediary service suppliers with respect to the transmission, or the storage of information.</p>
Consumer protection	<p>Parties need to maintain consumer protection laws to proscribe fraudulent and deceptive commercial activities.</p> <p>Parties need to adopt non-discriminatory practices in protecting users of electronic commerce from personal information</p>	<p>Parties need to maintain consumer protection laws to proscribe fraudulent and deceptive commercial activities.</p> <p>Parties need to adopt non-discriminatory practices in protecting users of electronic commerce from personal information</p>	<p>Parties will, in a manner considered appropriate by each of them, provide protection for consumers using electronic commerce that is at least equivalent to that provided for consumers of other forms of commerce under their respective domestic laws.</p>	<p>Parties will engage in dialogue on the protection of personal information and the protection of consumers and businesses from fraudulent and deceptive commercial practices in the sphere of electronic commerce.</p>

	protection violations occurring within its jurisdiction.	protection violations occurring within its jurisdiction.		
Non-discriminatory treatment of digital products	Parties cannot provide less favorable treatment to digital products created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of another party.			

Cost-Savings from Integrating Digital Markets

Imagine for a moment what might have happened with Facebook, Google, or Netflix if every state in the United States had separate interconnection points, different payment networks, limits on inter-state data flows, distinct mobile spectra, or widely different liability, copyright, and privacy laws. Would these companies have attained the scale they did in the early stages of their growth, had they had to deal with different state regulations and infrastructures? Unlikely not.

Digital regulations also need to interoperate so companies selling in one country can also sell in others, without having to apply entirely new IP, consumer protection, legal liability, data privacy, tax, and other rules. Conceptually, common regional digital regulatory and policy frameworks that facilitate doing digital business and that do not saddle companies with excessive compliance can fuel ecommerce within the region and with the rest of the world; enable scale economies that are the lifeblood of many digital companies and that help consumers access services at low cost; and help especially small businesses and startups that usually lack resources to navigate or adapt operation to complex frameworks between different countries.

Common policy frameworks are also important for incentivizing investment in start-ups – investors are much more enthusiastic about early-stage investments knowing their investees can grow unfettered across the regional market.

Various simulations indicate that regional digital integration in rules and infrastructures could yield significant returns. For example:

- The implementation of a digital agenda and strategy, including harmonization of cybersecurity, data security and privacy laws across the region and creating a single digital payment platform, could add \$1 trillion to ASEAN GDP over the next 10 years,⁶⁰ providing a 40 percent boost the region's output.

- The Asia-Pacific region, where countries have different mobile spectra, could unlock up to \$1 trillion in GDP growth by 2020 through the harmonized adoption of the 700 MHz spectrum band for mobile services.⁶¹
- In Latin America, regional Internet Exchange Points (IXPs), facilities where all Internet players can interconnect directly to each other, could reduce internet traffic transit costs by as much as 33 percent.⁶² IXPs have played a key role in the development of advanced Internet ecosystems in North America, Europe and Asia, improving quality of service and reducing transmission costs.⁶³

Yet most regions remain fragmented by national regulations and infrastructures that disincentivize digital companies and online sellers from regionalizing. Europe is a case in point. The European single market is not yet a single digital market – countries have until now had their own licensing, copyright, and many other regulations. Cross-border ecommerce is thus artificially stunted: 46 percent of European retailers and 48 percent of omnichannel retailers sell mostly domestically, getting less than 10 percent of their sale revenue from other EU markets.⁶⁴

A key reason for this relative concentration of sales in domestic markets is European countries' different payment systems, consumer protection laws and their enforcement, and value added taxes, as well as limited choice and markups on cross-border logistics.⁶⁵ In fact, 45 percent of European companies considering selling digital services online to individuals see differences in copyright restrictions preventing them from selling abroad.⁶⁶ The European Commission estimates that if the same rules for ecommerce were applied in all EU Member States, it is estimated that 57 percent of European companies would either start or increase their online sales to other EU economies.⁶⁷ Common consumer protection and other Internet laws could save EU consumers €11.7 billion each year in online shopping, with the gains stemming from access to all goods and services sold online across the EU region.⁶⁸

Currently devising rules for digital economy, Mercosur countries can pre-empt the regulatory fragmentation marking Europe, and instead pursue regional digital market integration for regional companies to easily expand and scale across the region. Positively, there is discussion about Mercosur's reviving the Ecommerce Working Group. More is needed however, and here Mercosur can learn from approaches taken by other integration groupings (box 5).

Box 5 – Digital Integration: Experiences from around the World

Many regional integration groupings have progressed on digital integration, in ways that can be instructive also to Mercosur companies. Some example include:

- **The Pacific Alliance** composed of Chile, Colombia, Mexico and Peru has in place a cooperation agreement on ecommerce covering transactions of goods, services, digital products. The agreement promotes interoperability among the regional economies' regulatory frameworks and promotion of SMEs in ecommerce. In 2016, the group adopted a Digital Agenda, pledging to work in 2017 toward regional digital market, regional cybersecurity, and public-private dialogues on the digital economy. The Alliance countries have also joined forces recently as a bloc to negotiate a trade agreement with

Australia, Canada, New Zealand and Singapore, updating members' work especially on digital trade, small and medium-size enterprises, issues related to women' inclusion in trade.

- **European Union's Digital Single Market.** In May 2015, the European Commission unveiled its plan to create a Digital Single Market aimed to tear down national regulatory silos by the end of 2016 through (1) improved access for consumers and businesses to digital goods and services across Europe; (2) a level playing field for digital networks and innovative services to flourish; (3) maximized the growth potential of the digital economy. The EU has also enabled online content portability, allowing EU citizens to access online subscription services while traveling within the EU – thereby ending the so-called “geo-blocking” tactics.
- **ASEAN ICT Master Plan.** The ASEAN ICT Masterplan 2020 focuses on fueling digital transformation of traditional industries and building a single integrated market for digital economy.⁶⁹ It follows a Masterplan 2015 that was more about digital infrastructures and human capital for digital industries. ASEAN legislation has especially focused on electronic transactions, cybercrime, consumer protection, content regulation, data protection and privacy, domain names, and dispute resolution.
- **APEC's Electronic Commerce Steering Group (ECSG).** APEC's ECSG promotes the development and use of e-commerce through legal, regulatory, and policy environments in the APEC region that are predictable, transparent, and consistent. The ECSG also explores how ICTs can drive economic growth and social development, and has guided numerous capacity-building projects promoting the development and use of ecommerce and ICTs in the APEC region.
- **APEC's Paperless Trading Subgroup** develops projects on the use of paperless trading in B2B and B2C transactions and promotes the use of electronic documents in international trade. APEC is also implementing APEC's Strategies and Actions toward a Cross-Border Paperless Trading Environment to enable the electronic transmission of trade-related information across the region by 2020.
- **The APEC Data Privacy Pathfinder and Subgroup.** In 2007, APEC ministers endorsed the APEC Data Privacy Pathfinder initiative aimed to achieve cross-border flow of personal information within the Asia-Pacific region. APEC also has in place a Data Privacy Subgroup that helps identify best practices and build member economies' capacity for data protection and promote common data privacy approaches across the APEC region, and oversee the CBPR's functioning. In August 2017, ECSG's Data Privacy Subgroup met with the European Commission to discuss interoperability on data protection and transfer between the CBPR and GDPR.

Some of the lessons from the efforts in other regions that can be useful for Mercosur members to consider include:

- **Digital transformation as a cornerstone of digital trade.** Pacific Alliance and Asian economies alike have stressed the importance of building ICT infrastructures and capabilities in the economy, and inducing digitization in traditional industries, *as precursors* to thriving digital trade.
- **Public-private collaboration and dialogue.** Pacific Alliance and Asian integration schemes are in many ways public-private partnerships. The private sector is actively included in the Pacific Alliance's work, and plays a long-standing and institutionalized role in APEC and ASEAN, with governments paying close attention to the recommendation of the private sector. This only makes sense: the private sector has a front-row seat to the opportunities and challenges to digital trade, and

often has actionable ideas to solve them. Public and private sectors can also work together to finance the buildout of the digital economy.

- **Attention to inclusive trade: SMEs, women, rural companies.** There are in most economies gaping disparities in digitization and ecommerce participation between urban and rural companies, small and large companies, young and old people, and men and women. Ironing out these disparities both provides legitimacy for the integration effort, and lifts all boats: more companies prosper, and more people can use the online economy to shop, save, and be informed. Pacific Alliance has brought the SME and gender dimensions to the dialogue on the future of digital economy and trade.
- **Negotiation as bloc.** Mercosur has long sought to negotiate as a bloc with third parties, such as the EU. A major challenge has been incomplete regional integration and internal differences in visions and interests. The Pacific Alliance is providing a promising example on how a group of countries can come together to upgrade trade commitments in key areas of the digital economy.

Summary

Empirical evidence shows that complicated, uncertain, or stringent digital regulations, such as stringent data privacy regimes, limits on data transfer, legal liability on Internet companies for user content on their sites, and high taxes on the sale of digital goods and services, are all found to limit the growth of the online economy, reduce investment in Internet start-ups, lower the rate of technology adoption, and hold economic growth back from what it could be under a smart regulations that provide Internet companies with safe harbor from liability.

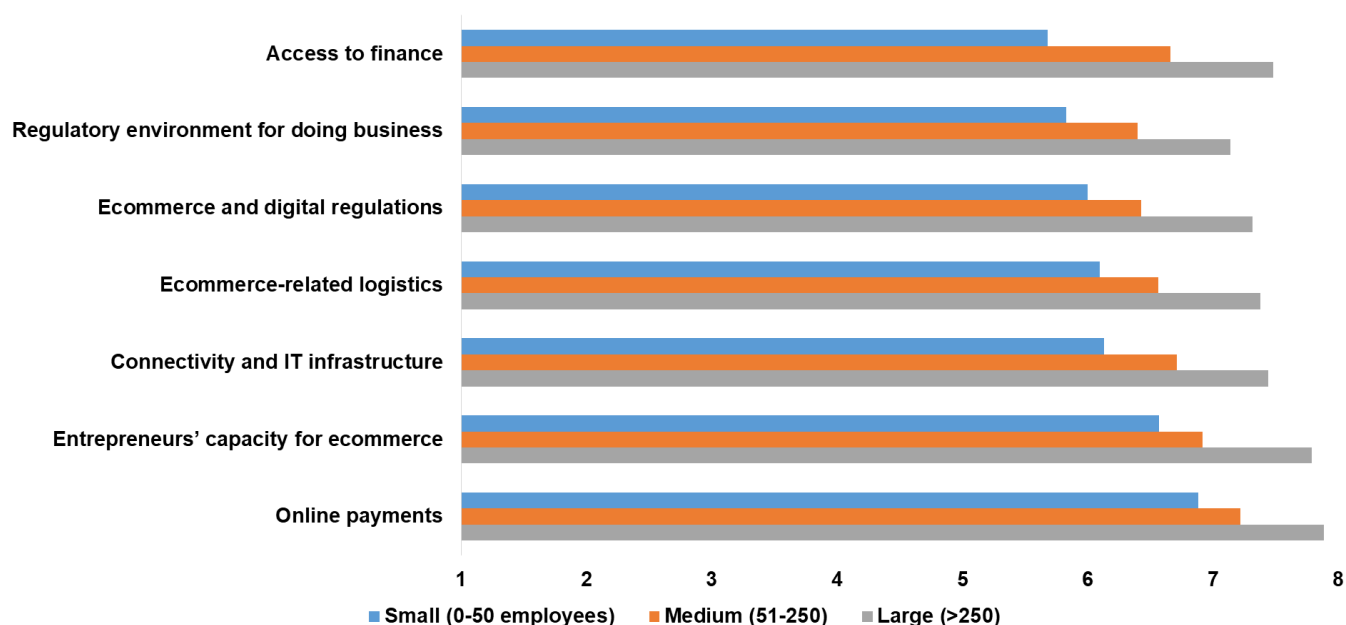
Research also concurs that creating coherent regional digital markets is essential for regional digital companies and SMEs that sell goods and services to scale, export, and create new jobs – which in turn is key for them to compete globally. The next section explores how the current regulatory state of play in the region affects Mercosur companies – and what companies could do if regulations were optimized in domestic and regional markets.

IV. Digital Regulatory Priorities and Challenges to Companies in the Mercosur Region

As the regional regulatory framework for digital transactions and trade unfolds, what are the priorities of companies in the Mercosur region? In particular, how high on their list are regulatory issues as opposed to such issues such as access to finance or skills development for online sales? And what are the regulatory priorities as highlighted by companies of different sizes and types in the different countries?

The simplest way to answer these questions is to ask companies. Here, we leverage the 823-firm survey discussed above. Asked to score elements of the enabling environment for ecommerce from 1 (very poor, significant barriers to ecommerce) to 10 (excellent, facilitates ecommerce), small Mercosur companies report access to finance, overall regulatory environment, a digital and ecommerce regulations as most challenging to their online activity in their domestic markets. Companies with 0-50 employees score these factors 6 or less, out of 10, and mid-size companies give a score between 6 and 7 out of 10 (figure 17). Mid-size and large companies tend to highlight business regulations and digital and ecommerce regulations as most challenging. There is no appreciable difference between companies in product and service sectors.

Figure 17 – Mercosur Companies’ Scoring of Components of the Enabling Environment for Their Domestic Ecommerce Sales (1= very poor; 10 = excellent), by Company Size

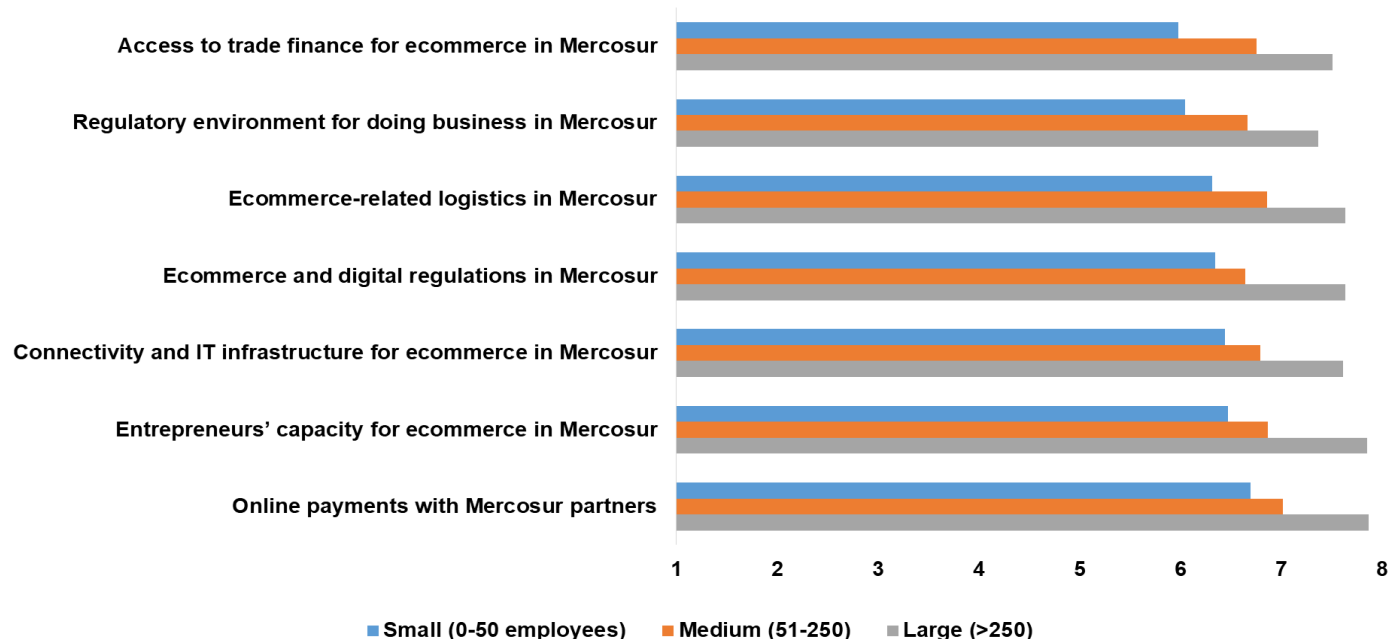


Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

When asked about the quality of the enabling environment for cross-border sales in the Mercosur region, the priorities were quite similar: companies highlighted trade finance, regulatory environment, ecommerce-related logistics (which includes logistics, customs procedures, and market access), and ecommerce and digital regulations of their Mercosur markets as most challenging (figure 18). Of

course, these are merely the largest challenges – all areas from skills development to online payments appear to require attention, as none receives a rating higher than 7 by small and mid-size companies.

Figure 18 – Mercosur Companies’ Scoring of Components of the Enabling Environment for Their Cross-Border Ecommerce Sales within Mercosur (1= very poor; 10 = excellent), by Company Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Figures 19 and 20 analyze the data at country level, mapping out the ranking by small and large companies, respectively. Uruguayan small business appear to struggle most with access to finance and trade finance, while Brazilian small companies wrestle with regulatory challenges and logistics. For large Paraguayan companies, connectivity and online payments with Mercosur appear as challenges.

Figure 19 – Small Mercosur Companies’ Scoring of Components of the Enabling Environment for Their Cross-Border Ecommerce Sales within Mercosur (1= very poor; 10 = excellent), by Country

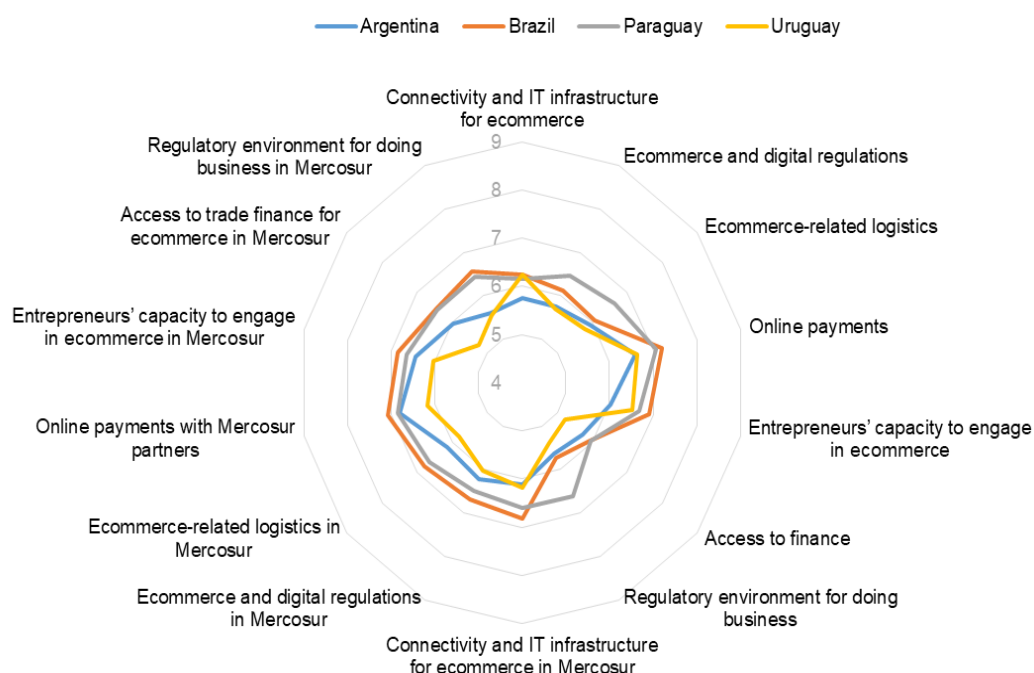
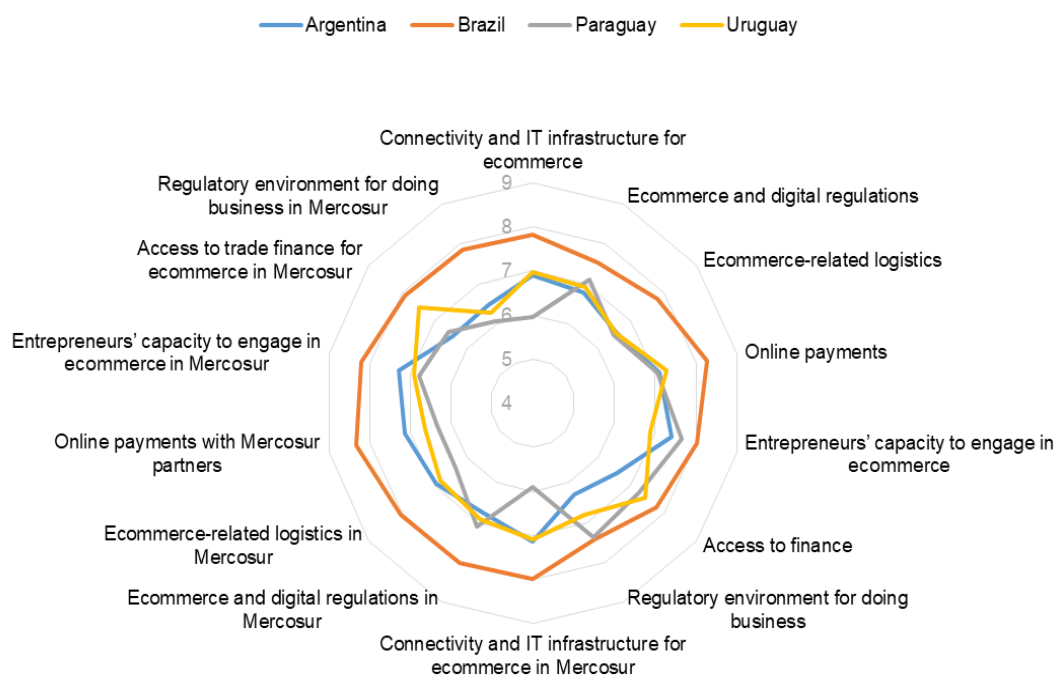


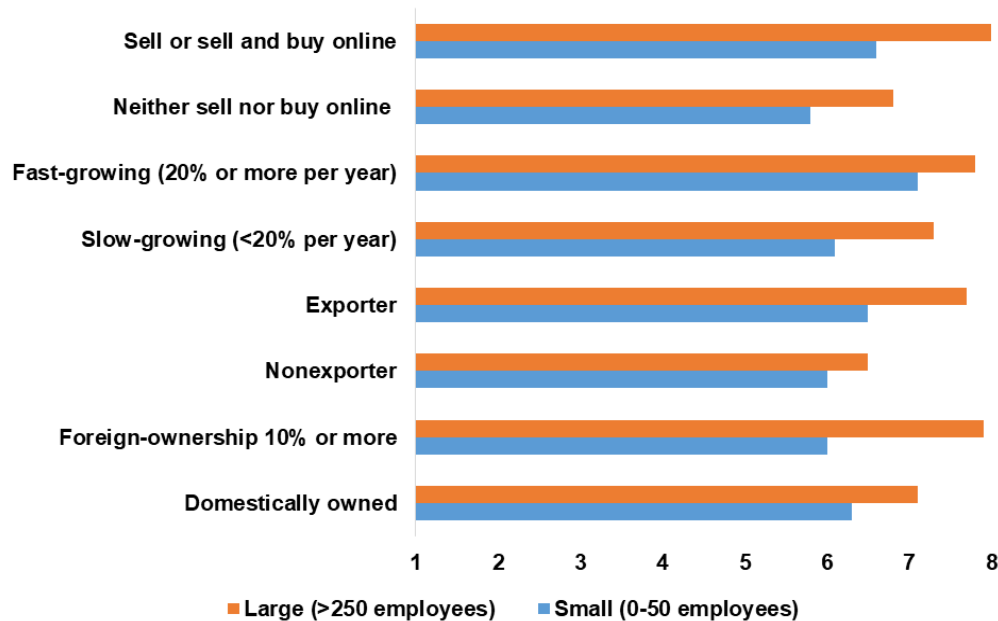
Figure 20 – Large Mercosur Companies’ Scoring of Components of the Enabling Environment for Their Ecommerce Sales within Mercosur (1= very poor; 10 = excellent), by Country



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

To be sure, there are significant differences among different types of companies within each size categories. Aggregating the variables in figure 19 into one single average score shows that companies that export, sell online, and are fast-growing all tend to report fewer challenges to online sales in each size category and country than do companies that do not export, sell offline, and grow slowly. There does not appear to be a major differences between companies that sell goods versus those that sell services, or companies that are farther from major cities versus companies in such cities as Buenos Aires, Rio de Janeiro, or Montevideo (figure 21).

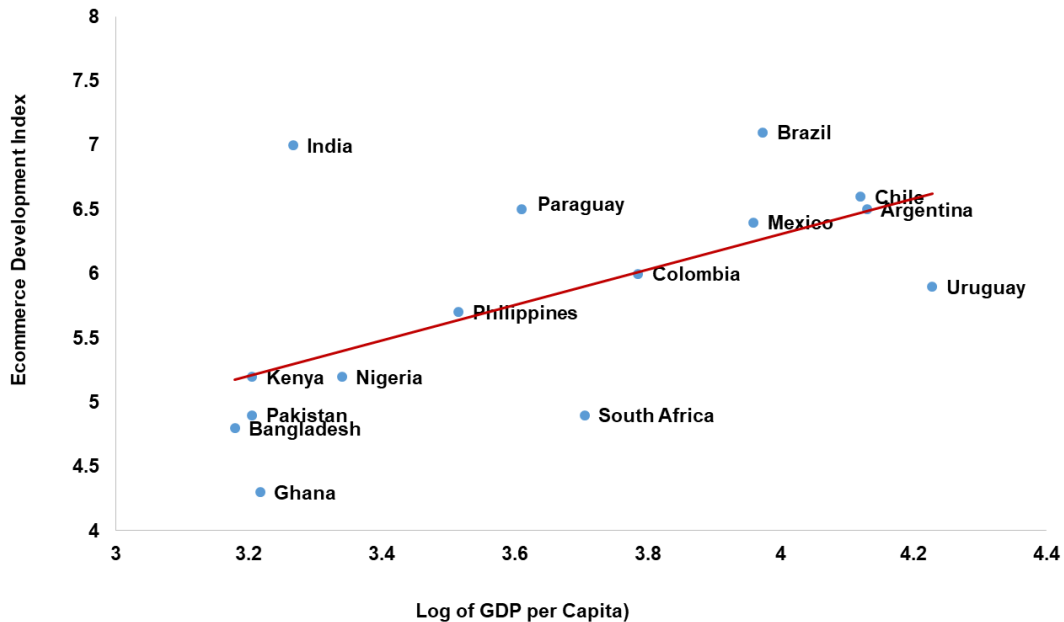
Figure 21 – Mercosur Companies’ Average Score for the Enabling Environment for Their Domestic and Cross-Border Ecommerce Sales within Mercosur (1= very poor; 10 = excellent), by Firm Type and Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Mercosur economies’ ecommerce challenges and readiness levels are quite similar to those of countries at similar levels of development. Using the single aggregate score for each country for countries for which I have the same data and correlating it with development levels shows that Uruguay underperforms vis-a-vis countries at similar levels of development, while Paraguay and Brazil outperform (figure 22).

Figure 22 – Correlation of Ecommerce Development Index and GDP Per Capita, Selected Economies



Source: Suominen, Kati. 2017. “Ecommerce Development Survey and Index.”

Which Digital Regulations Are Most Difficult for Companies?

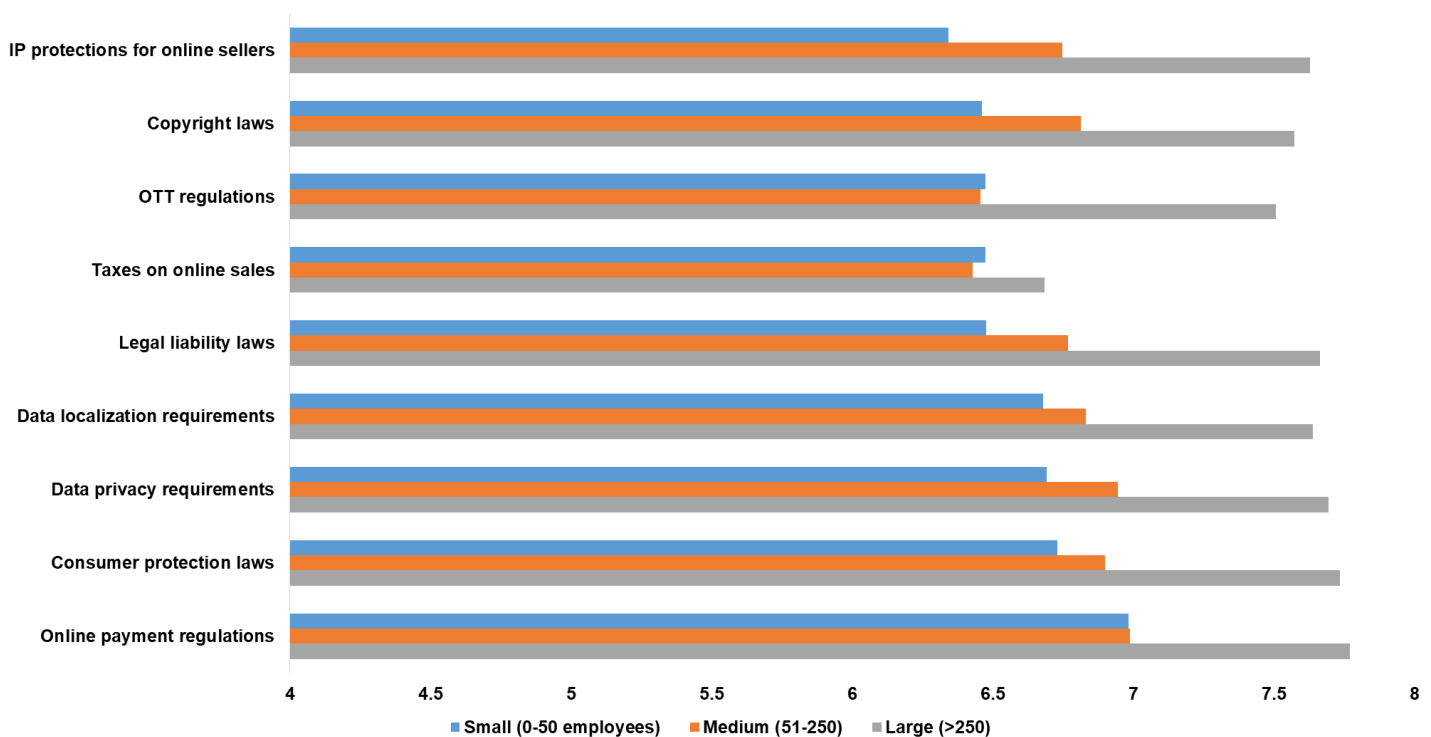
Of the specific regulations, about one-half of firms are quite unhappy or very unhappy with it – small companies highlight especially taxes on online transactions, IP protections, OTT regulations, and data privacy regulations as concerns (figure 23). These perceptions may reflect the current regulatory uncertainties or real-life impacts experienced by the companies. Large companies meanwhile worry about OTT, data localization, and payment regulations.

Digital regulations of course also have a regional dimension, given the interest of digital companies regionalize and for many SMEs to sell more of their services and goods online to other Mercosur markets. At a minimum, businesses tend to highlight the importance of interoperable regulations and free flow of data among Mercosur partners.

Small companies mention copyright laws, OTT regulations, and taxes on online sellers as the most challenging areas (figure 24). Large companies tend to be more concerned with Internet intermediary liability rules, IP, taxes, and data localization issues. In short, companies large and small and most concerned about the region’s hot-button issues outline above. These are also vexing for companies in other Latin American countries. In another survey, I found that a third of online sellers in Latin America view uncertain legal liability rules as “very significant” obstacles to their foreign trade, while a quarter is negatively impacted by foreign data localization and data privacy rules.⁷⁰

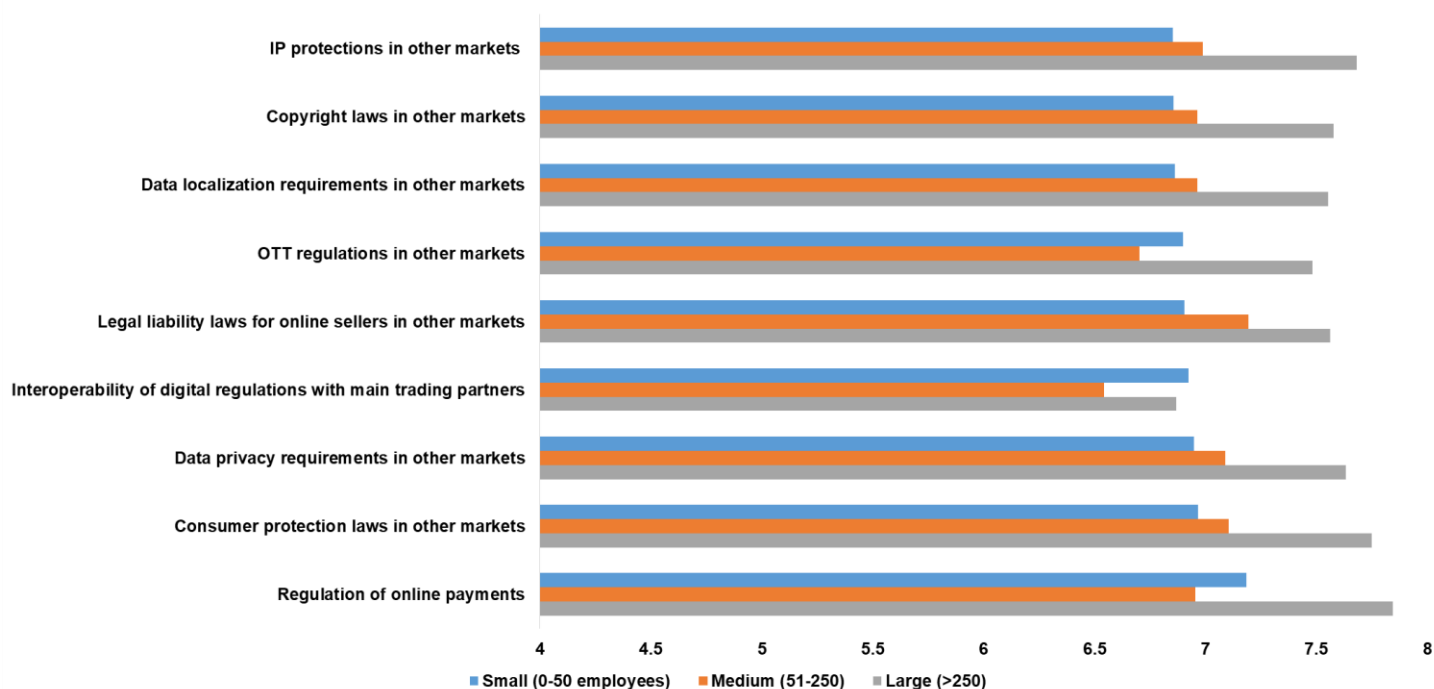
These findings also indicate that when fashioning national and regional digital regulations, Mercosur governments need to bear in mind that their regulatory choices impact not only large global platforms or tech companies. Rather, adopted regulations will be especially important for the future of small businesses and startups in the region. They can be even more important for these players, in that small companies tend to lack the resources needed to navigate and adapt operations to complex and differing national frameworks. The rules set today are key to the future of SMEs that are looking to ecommerce and online sales as a means to grow, scale, and fully realize their entrepreneurial potential.

Figure 23 – Mercosur Online Buyer and Seller Companies’ Scoring Digital Regulations for Their Domestic Ecommerce Sales (1= very poor; 10 = excellent), by Company Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

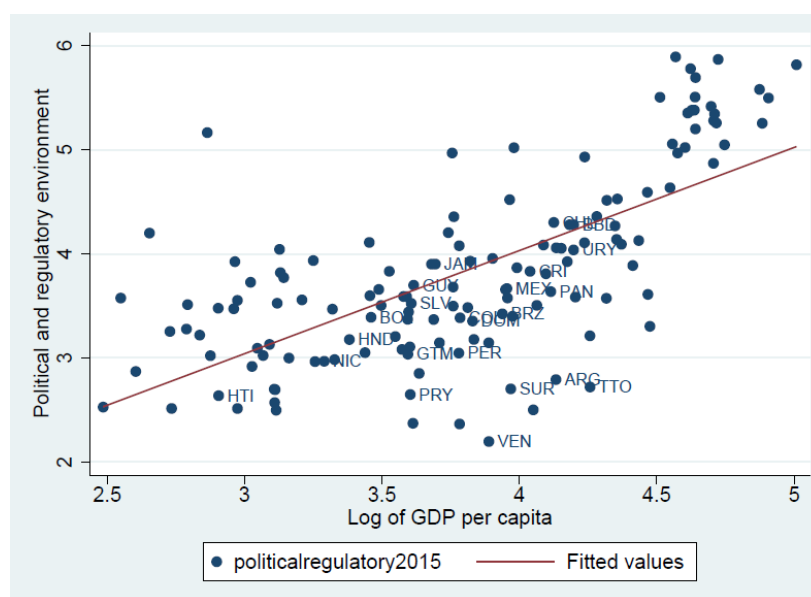
Figure 24 – Mercosur Online Buyer and Seller Companies’ Scoring Digital Regulations for Their Cross-Border Ecommerce Sales within Mercosur (1= very poor; 10 = excellent), by Company Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

These results are echoed by an analysis of Mercosur economies’ performance vis-à-vis their peers at the same level of development in the political and regulatory environment for information and communications industries. In a survey run by the World Economic Forum, Mercosur economies, just like most other LAC economies, underperform their peer economies – Argentina and Paraguay by a wide margin (figure 25).

Figure 25 – Political and Regulatory Environment Surrounding Information and Communications Technologies in 2015 (1 = low; 7 = high), Selected Economies



Source: Author on the basis of World Bank's World Development Indicators and World Economic Forum's Networked Readiness Index.

The main markets in which especially Paraguayan and Uruguayan companies struggle with real or perceived regulatory issues are their most common export markets Argentina and Brazil, followed by the United States – which to most companies is still an aspirational market (table 4). Some 29 percent of Argentine companies wrestle most with Brazilian regulations and 28 percent of Brazilian companies report challenges with Argentine regulations, followed in both cases by the perceived regulatory complexity in the U.S. and Chinese markets.

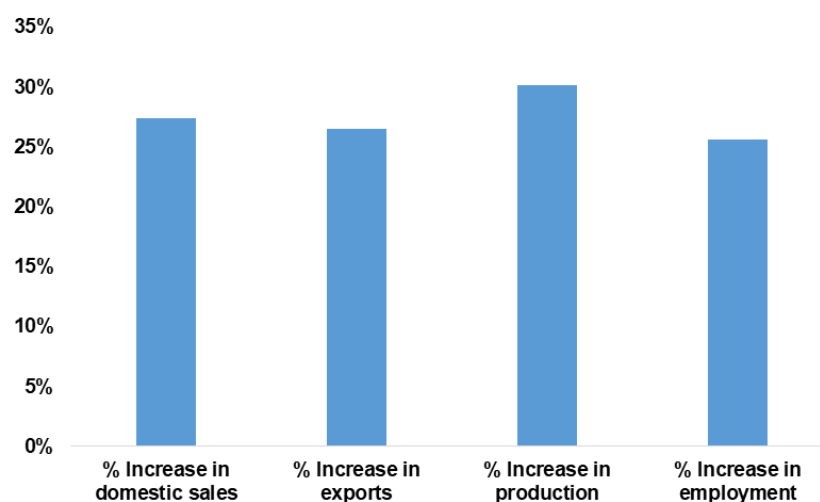
Table 4 – Markets in Which Mercosur Companies Perceive Greatest Regulatory Challenges

	<i>Export Destination</i>										
	Argentina	Brazil	Uruguay	Paraguay	Chile	Colombia	Peru	Mexico	USA	China	EU
<i>Exporter</i>											
Argentina		29%	15%	20%	18%	20%	13%	24%	44%	38%	31%
Brazil	28%		20%	28%	23%	29%	23%	29%	34%	30%	20%
Paraguay	54%	42%	29%		19%	4%	10%	10%	21%	13%	12%
Uruguay	48%	46%		19%	26%	17%	9%	17%	28%	17%	20%

Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Removing the top-3 regulatory barriers would result in significant trade, job, and production gains in every country. If their top-3 constraints to doing ecommerce were removed, Mercosur companies would score annual revenue gains of 34 percent in their domestic markets and 35 percent in international markets (figure 26). Moreover, the majority of companies in every country report that they would expand their sales in Mercosur region in particular if these regulatory barriers were removed (table 5).

Figure 26 - Mercosur Companies' Perceived Revenue, Export, Production, and Employment Growth if Regulatory Challenges to Cross-Border Ecommerce Were Removed



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Table 5 – Markets in Which Mercosur Companies Would Increase Sales if Challenges to Cross-Border Ecommerce Were Removed

	<i>Export Destination</i>										
	Argentina	Brazil	Uruguay	Paraguay	Chile	Colombia	Peru	Mexico	USA	China	EU
Exporter											
Argentina		39%	31%	23%	25%	13%	13%	20%	45%	30%	25%
Brazil	37%		25%	18%	25%	20%	15%	25%	53%	35%	28%
Paraguay	42%	42%	21%		25%	15%	10%	23%	27%	15%	19%
Uruguay	20%	19%		13%	26%	25%	17%	17%	42%	38%	32%

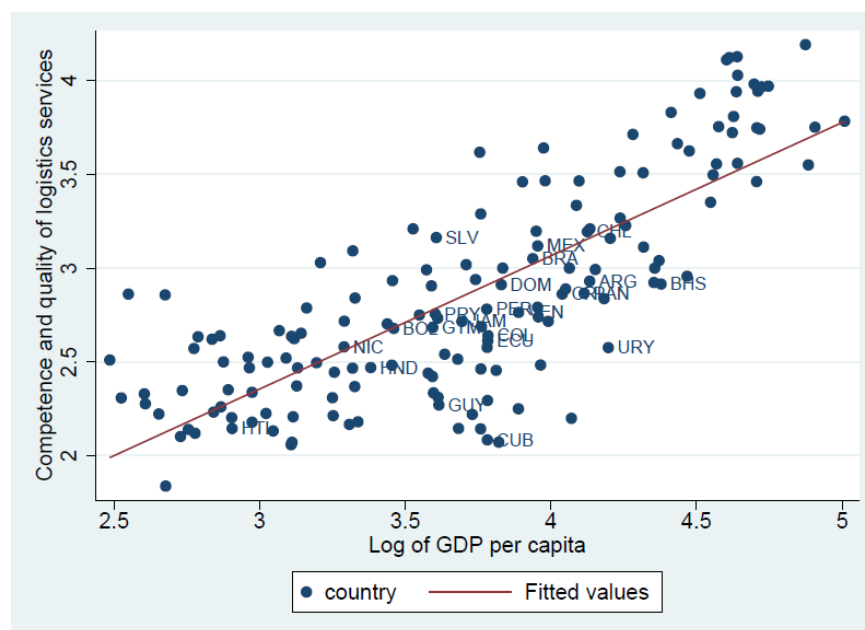
Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Logistics Challenges

For companies in goods sectors, there are also several challenges in moving goods in the Mercosur market. The regional economies trail global average ratings for logistics quality and timeliness of

delivery (figure 27). With the exception of El Salvador and Mexico, all Latin American countries are at best at a par with countries of similar levels of development in terms of quality of logistics services.

Figure 27 – Competence and Quality of Logistics Services, 2014 (1 = low; 5 = high)

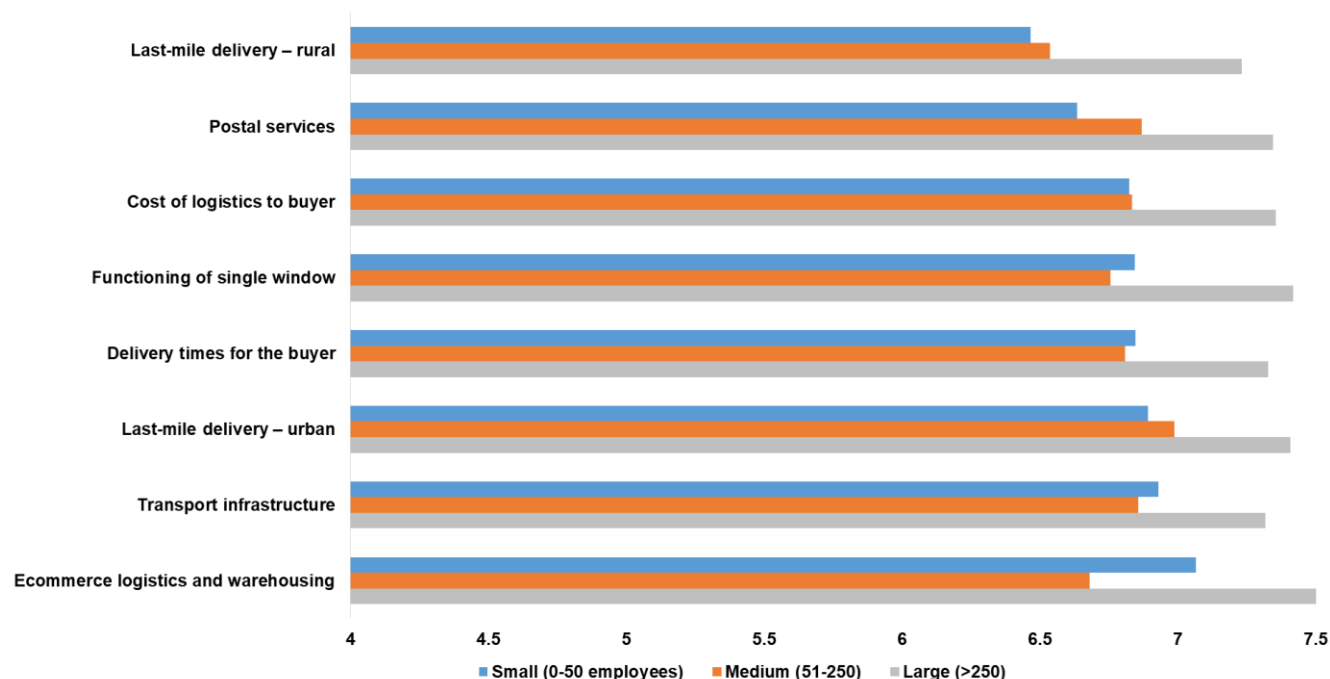


Source: World Bank, World Development Indicators.

Other data show that in Mercosur and Latin America, it also takes over twice as long to ship intra-regionally in Latin America as it takes to ship among advanced economies. The Argentine Chamber of Electronic Commerce found that even domestic ecommerce deliveries typically required at least a week to be delivered; a third took more than two weeks. These types of delays add to the cost at the point of sale and to overall unpredictability, which can become cost-prohibitive for small shipments. Survey data suggest that Mercosur firms' domestic logistics challenges center on rural last mile delivery and delivery costs as well as quality of postal services, in particular (figure 28).

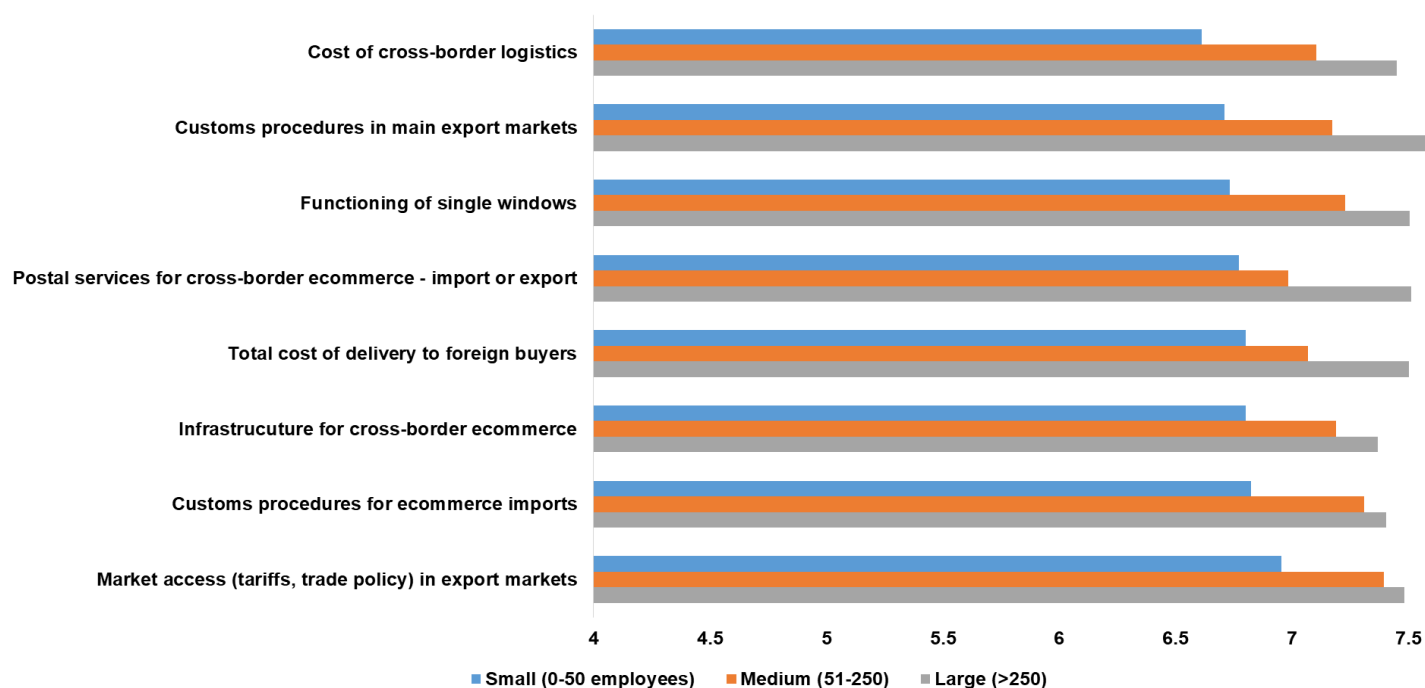
In cross-border trade within Mercosur, customs procedures and cost of logistics top small businesses list, with 50 percent finding the challenging, while large companies are concerned about costs of delivery, customs procedures, and functioning of single windows (figure 29). These findings are echoed in another survey I ran for Latin American companies that already sell and buy goods and services to and from foreign markets: in it over 50 percent find market access barriers as a “very significant” obstacle, while over 40 percent find the same for poor logistics in other markets and 32 percent for compliance with customs procedures.⁷¹ Consumers are not blind to the problem either. For example, though some 40 percent of Brazilian shoppers buy online from abroad at least once a year, they report strong hesitations related to shipping costs and ability to return items purchased.⁷²

Figure 28 – Mercosur Companies’ Scoring Customs Procedures and Logistics for Their Domestic Ecommerce Sales (1 = very poor; 10 = excellent), by Company Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Figure 29 – Companies’ Scoring Customs Procedures and Logistics for Their Domestic Ecommerce Sales in the Mercosur Region (1= very poor; 10 = excellent), by Company Size



Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

Summary

In growing their online sales, particularly small companies in the Mercosur region struggle with access to finance and trade finance, logistics and customs procedures and digital regulations, to sell more online, including cross-border. When asked about regulatory challenges to their online sales, small businesses are most concerned about IP protections, OTT rules, copyright rules, taxes, and legal liability rules, while for large companies, taxes, OTT rules, and liability are especially important. In cross-border trade within Mercosur, customs procedures and cost of logistics top small businesses list, with 50 percent finding the challenging, while large companies are concerned about costs of delivery, customs procedures, and functioning of single windows. Companies are also concerned about IP and copyright regimes, data localization, issues, interoperability of their respective countries' digital regulations with those of other Mercosur markets.

Regulations are no minor matter. Companies surveyed here estimate that improving digital regulations in the Mercosur region would enable them to increase their revenues and exports by almost 30 percent annually. If their top-3 constraints to doing ecommerce were removed, Mercosur companies say they would score annual revenue gains of 34 percent in their domestic markets and 35 percent in international markets. The majority of companies in every country report that they would expand their sales in Mercosur region in particular if these regulatory barriers were removed. The next section puts forth proposals on ways to do just that,

V. Priorities for Mercosur Digital Trade and Regulations

Ecommerce has changed the face of world trade and trade in the Mercosur. However, survey data and comparative indicators suggest that there are several challenges and uncertainties – regulatory, logistical, and so on – that Mercosur governments need to work out in order to create a vibrant regional digital market. Positively, Mercosur governments tend to appreciate that regulatory frameworks need to be upgraded to the digital era, and they need to interoperate with trading partners to enable online sellers and buyers transact without undue frictions and costs and grow. The following considerations can fuel digital trade and economy in the region:⁷³

- Access to data from around the world is critical for companies' competitiveness and customer service. Countries should not bar cross-border data transfers, force companies to localize servers on their soil or transfer technology, or mandate local presence for such critical tools of ecommerce as electronic payment services. This, research suggests, is conducive to more foreign investment, expanded trade, lower costs on local businesses. As such, Mercosur economies need to treat GDPR-type data privacy and transfer rules with care. The implementation costs can be very high, especially for SMEs, and economic effects can be detrimental, including hurting job creation. The price to pay is heavy – when alternative regimes exist. Priority should be on *enforcing data protection regulations with the aim of improving security rather than limiting the use of data, and promote interoperable policy frameworks* (e.g., APEC Cross Border Privacy Rules) that enable firms to do business across borders.⁷⁴ Also the Chile-Uruguay and TPP have blueprints of practical regulations that fuel regional digital business.
- *Create or modernize safe harbor rules that limit internet intermediaries' liability from user-generated content.* Internet intermediaries such as ecommerce sites depend on user reviews of goods and services sold on such sites, and need to be protected from liability for such content. To encourage Internet intermediaries to serve local markets, Mercosur countries should create and modernize “safe harbors” that limit intermediary liability from user-generated content. Good templates already exist in the region, in the form of intermediary liability protections are already present in Chile's Intellectual Property Law and Brazil's Marco Civil da Internet.
- *Ensure copyright laws are balanced to protect rightsowners and fuel innovation.* As products and services digitize, and as millions of microenterprises and consumers can create or copy content, designs, and 3D printed products, IP is becoming harder to protect. Mercosur countries need to balance the protection of trademarks and copyrights with the development of new Internet services and platforms. For example, copyright laws that include limitations and exceptions and fair use of protected works, the doctrine that permits limited use of copyrighted material without a permission from the rights holders, help fuel innovation and creation of new products and services such as in cloud computing, machine learning, and data mining, and many other fields. There is a need for safe harbors for intermediaries in the area of copyright, so that intermediaries are not liable for potential infringements by their users.
- *Limit over-regulation of online services and applications of legacy infrastructure regulations to online services,* such as extending telecommunications or broadcasting regulation to messaging applications or streaming platforms. One-size-fits-all telecom licensing frameworks – based on the flawed notion that telecom services and internet applications are similarly sold

and offered and substitutes not complements – should not be forced upon Internet applications or services. “Innovation without permission”-policy frameworks have enabled the development of the most robust startups ecosystems.

- ***Avoid excessive taxes on the key input for companies and consumers – digital and digitally sold goods and services.*** Excessive taxation of technologies will have a detrimental impact on digitization growth and ultimately on economic development. If the policy objective is to maximize adoption of digital access devices and digital and digitally sold goods and services, empirically low taxes drive adoption, which in turn results in large economic gains, which compensate for the foregone tax revenues. Tax policy should as such balance short-term revenue generation and long-term support of innovation and economic growth. As a rule of thumb, taxation of digital activities should not be discriminatory vis-à-vis other industries.
- ***Create balanced consumer protection laws.*** Consumer trust in products and services sold online, delivery systems, online payments, and other online services is critical for digital economies to grow. At the same time, governments need to work with industry to ensure consumer protection laws do not impose excessive compliance costs on online companies.

It is essential that domestic reforms not be pursued in isolation: ***for Mercosur governments to create a vibrant space for digital trade and growing regional digital companies, domestic regulations need to interoperate with those of other Mercosur members.*** Regionally interoperable regulatory and policy frameworks in such areas as free circulation of digital goods and services, internet intermediary liability laws, privacy, consumer protection, OTT regulations, cybersecurity, taxation of digital companies, and others help lower the costs for companies to operate across the regional market, incentivize investment and startup formation, and fuel the expansion of digital networks and services. Fragmentation in these regulations can unnecessarily hold Mercosur companies back from regionalizing, just like fragmentation in Europe is holding EU companies back. One good place to look for models is close by: the Chile-Uruguay FTA. This type of bold agreement in the region on common rules of the road will also be instrumental in talks with the EU.

The region needs to work toward ***mutual recognition of online service providers*** that operate in multiple markets, such as of online payment, online delivery service, data analysis, digital marketing, online lending, and ecommerce companies. Providers of these services can more quickly expand to service multiple countries in the presence of mutual recognition across countries of their business licenses, certificates, professional qualifications, and digital signatures, among other requirements.

In addition to these immediate regulatory priorities, it is important the regional governments start considering ***regional interoperability of online payments***, the critical conduit for online trade. Online payments are highlighted by the interviewed companies as the emerging major policy issue. One of the main concern for consumers in cross-border purchases is that they cannot be certain that their payment is returned if they return the item. Addressing payment policies for returned items is critical for the regional economies to fuel cross-border sales for Mercosur region’s online retailers. In general, solving payment challenges goes much beyond the portfolios of economy ministers, requiring coordination with central banks and finance ministries.

Customs Procedures and Logistics Services

Mercosur companies surveyed here that sell goods online but deliver them physically cite as obstacles Latin America's traditional barriers to trade – market access, customs procedures, and logistics challenges. However, old solutions do not adequately further this new trade. The region's customs agencies and regimes are not optimized for trade among small businesses and individuals – transactions where countless of small shipments are sent and/or received by parties with limited trade compliance capabilities and high fixed costs per shipment.

- ***Simplified and digitized clearance process for shipments.*** Governments need to make better use of the established mechanisms to fuel trade, such as increase customs clearance times 24 hours per day, put in place electronic filing of customs documents via “single windows” for one-stop compliance; and enable the collection and remit of VAT and taxes for goods above the *de minimis* level from away from the border. Positively, Latin America's Exporta Fácil program has simplified customs clearance for Latin American SMEs for shipments typically weighing less than 30 kilograms and with a value of less than US\$5,000. However, the program is only for postal systems and thus does not cover express shippers – and can in a sense be viewed as a subsidy for the posts.

One further, ambitious solution for the region to remove the frictions of customs procedures is to negotiate a regional trade agreement for low-value items. This would imply raising together the still low customs *de minimis* levels – or the ceiling value below which goods pass duty-free. Increased *de minimis* thresholds would also ease return shipments, whose availability is critical for the competitiveness of companies in ecommerce.

- ***Improve logistics quality and service.*** Logistics quality is a major concern for Mercosur companies engaged in online trade. Ecommerce operations often require fast and sophisticated warehousing and shipping operations that are beyond the capabilities of smaller businesses. While third-party logistics (3PL) companies have been investing aggressively in the region, policy issues such as the persistence of fiscal warehouses in Peru, Brazil, and other LAC economies, slows import processes. Prohibitions, such as in Mexico, for foreign investors to operate a dedicated fleet hampers efficiency and competition.
- ***Trusted eTrader program to facilitate and secure trade.*** Trusted Trader programs that fast-track trade through customs are still tailored to the patterns of traditional trade – large, regular trade volumes shipped by large companies – rather than accommodating small enterprises and consumers, whose trade is more sporadic and who are ill-equipped to comply with complex trade rules and the high costs of Trusted Trader programs. Customs worldwide meanwhile are growing uneasy with the proliferation of small parcels crossing borders. Governments are thus torn between two seemingly opposing objectives, to facilitate small business trade and secure trade. A “Trusted eTrader” program could overcome this tension, and both facilitating and securing trade. Truster eTrader program would consist of two elements.⁷⁵
 - The first element is incentivizing SMEs' trade compliance through simplified and digitized trade compliance and ability for SMEs that consistently comply for a period of 18 months to become Trusted eTraders whose shipments are fast-tracked through customs.

- The second element is enabling customs to use anonymized Big Data held by major online platforms to get comfortable with the patterns of new trade and enhance risk-targeting in trade, something that is considered by some companies and governments in South America. The effort could be tailored after the Air Cargo Advanced Screening program that the United States piloted a few years ago with major shippers such as FedEx, DHL, and UPS, for providing U.S. Customs and Border Protection (CBP) to gain air cargo-related data prior to loading an aircraft at a foreign port.

Some Mercosur economies have expressed concerns about transshipment of illicit cargo through Paraguay. Efforts of this kind to fast-track trade should be coupled with data-driven risk-targeting of illicit cargo. Use of blockchain and machine learning in customs can be seminal in balancing the aims of product traceability, customs security, revenue collection, and trade facilitation.

Of course, there are many further areas to address to creating a vibrant digital market. Two further key priorities is skills and finance.

Help SMEs and also Larger Companies Develop Digital Skills

To engage in digital trade, businesses need to master two things: how to do digital business, such as running geo-targeted ads and analyzing customer data; and how to export, such as dealing with foreign product standards and trading finance providers. In other words, companies with an online store do not automatically become exporters: many other things have to go right, including their own capabilities to operate and attract customers in the cyberspace and meet regulations in other markets. The challenge can be very steep for analog companies used to operating offline and in the domestic market, however competitive their products and services might be. And clearly online sellers face challenges to engage in export – while over one half of small online sellers in Mercosur export, almost one half still does not.

Numerous developing countries have set up export promotion agencies in the past two decades, and export promotion has become a key pillar of every country's trade toolkit. Recently, export promotion agencies have in several countries introduced programs to help companies export online. Brazil's Apex has created training programs for SMEs to use ecommerce to export; Chilean export promotion agency ProChile has comprehensive "Digital Exports" seminars on ecommerce, digital marketing, international promotional campaigns, and others;⁷⁶ and Mexico's export promotion agency Proméxico has organized seminars and training for Mexican SMEs, created a B2B platform for Mexican SMEs selling to overseas markets, and offers consulting services for SMEs to develop digital marketing strategy, development of one stores and online payments systems, and social media engagement.⁷⁷ Costa Rica's export promotion agency Procomer brings together for B2C and B2B merchants a simplified, one-stop access to three global platforms – I.Gourmet, Alibaba y Amazon.⁷⁸

Some of these efforts have been carried out with private sector entities, given that export promotion agencies seldom have the requisite expertise for technical issues in cross-border ecommerce, such as digital advertisement or user engagement in foreign markets. For example, eBay is working with the

International Trade Center's e-Solutions program, offering ITC access to eBay's network of fulfilment centers in least developed countries.

To truly scale these models and bring the private sector to drive ecommerce development, public and private sectors need to pool not only expertise but also funding. ***One innovative way to do that is to use social impact bonds, whereby private foundations, social impact investors, and/or ecommerce platforms make the initial investment in training programs***, and get compensated at a premium by the government and public development agencies if the program meets certain per-established performance indicators, such as target number of ecommerce-related jobs created or amount of new online exports.⁷⁹

Social impact bonds have been used to curing malaria and saving rhinos – and they lend themselves extremely well for ecommerce development, given the keen interest of impact funds for social returns such as job-creation and by ecommerce platforms in cultivating merchants. This model incentivizes investors and project implementing entities to deliver results desired by the public sector. Upon success and metric hit, governments secure both trade gains, economic and social returns. Upon failure, they incur no cost: this is “risk-free development.” Resting on rigorous measurement of results, this model would by default create transparency in project evaluation.

Not only is it important to build SMEs' capacity for digital trade. It is just as important to build awareness of the benefits of digitization and digital trade with the top management and board members of larger and older, traditionally analog companies. These leaders are often of a generation that is not fully sensitized to the potential gains digitization would have on their companies, or how their companies could take advantage of digital trade. The efficiency gains imparted by digital transformation in large companies can be transformative for the region – and thus training and education needs to go beyond SMEs.

Create Public-Private Partnerships for Expanded SME Finance

A major constraint reported by Mercosur SMEs to their ecommerce sales domestically and across borders is finance – including early-stage capital, working capital, and trade finance. The smaller the company, the worse the challenge.

- One solution to the credit crunch experiences by Mercosur region small online sellers requires not funding: it is about ***ensuring digital regulations – particularly data transfer, liability, and copyright regimes – incentivize the operation and regional expansion of startups***. If they do, investors will be much more interested in investing in regional digital businesses.
- ***Offer government guarantees on online microloans to online sellers***. Government entities, multilateral development banks, and export credit agencies like Export-Import banks have traditionally provided loan guarantees to bank loans issued to small businesses or exporters. Now the rise of FinTech and online lenders such as Mercado Crédito of Mercado Libre, which can provide microloans now of interest to banks at a fraction of the time it takes for banks, is opening new opportunities for government agencies to alleviate online sellers credit constraint, and do so at the pace of business. For example, government agencies can now partner with online lenders to guarantee diversified pools of microloans to small online merchants. This approach would help the public agencies diversify their risk and, by leveraging online lenders' nontraditional but typically effective underwriting, speed up and scale their own arcane

underwriting. The result: more microloans to successful online merchants at a lower cost of capital, likely in new markets online lenders feared to venture into.

- ***Ensure growth capital for born global companies.*** Traditionally, companies would expand international markets only after scaling and maturing in their domestic market. Today, digitization and the Internet are enabling companies to be “born global” and the ability to be active global markets earlier in their life cycles than ever before. These companies typically want to move fast to seize the demand they perceive in global markets – and because they rarely have the quantum of cash on hand needed to do that, let alone access it from banks, they need long-term debt or equity financing from venture capital funds, angel investors, and other investors.⁸⁰

Export credit agencies can play a role in this as well – for example, Uruguay’s export promotion agency Uruguay XXI has a Proexport+ program that supports both new and existing exporters up to \$40,000 in product development, market research, trade show participation, and so on.⁸¹ Canada’s Ex-Im Bank Export Development Canada has offered an Equity Program that targets born global companies and later-stage SMEs intent on growing through exports and often helps globalizing small businesses access venture capital funds. Without subsidizing exporters outright or engaging in the misguided practice of “picking winners,” developing country governments can do the same: lower investors’ per-deal search and transactions costs for promising globalizing companies, and possibly provide co-financing or risk mitigation instruments to incentivize investments in these companies.⁸²

Establish Digital Dialogue for Trade

Mercosur governments are at a crucial juncture of establishing rules for the digital economy that will have far-reaching consequences for their trade, entrepreneurship, investment, and economic growth. In the process, they will critically benefit from the views of the private sector that is in the front lines of the digital economy, as producers and users of digital goods and services, as well as from investors in digital businesses. Some positive efforts are already on the way; it is now time to regionalize and institutionalize them. The region has a timely opportunity to establish a Digital Dialogue (Dialogo Digital) that brings together each quarter government officials with businesses to:

- For ***governments to learn about leading digital applications and their benefits***, both from the private sector and from rigorous academic research;
- For ***public and private sectors to dialogue about regulatory frameworks*** that optimize trade, investment, technology adoption, growth, and consumer rights the digital economy, based on data, research, and comparative experience from other regions, such as the Pacific Alliance or APEC;
- For ***public sector to get feedback on regulatory proposals and*** ideas; and.
- For all participants to ***learn about data and findings on the implementation costs and economic gains and losses imposed by regulations on firms of different sizes and consumers, including the poorer segments.***

Taking a step further, the regional governments could draw on UK's work in FinTech regulations and establish a regional regulatory "sandbox" where companies in the Mercosur region could introduce digital innovations to any one Mercosur market or all Mercosur markets without requiring full regulatory approvals, and regulators could proceed learn how the innovation is used in the marketplace and establish regulations where they may be beneficial. This type of "learning by doing" takes guesswork and costly errors from the process of fashioning domestic and regional digital regulations.

The dialogues should result in:

- Concrete ***regulatory roadmaps*** and implementation schedules;
- Plan for ***metrics and analytics to monitor of the impact of regulations*** once they are in place, based on business and consumer surveys, case studies and interviews, and rigorous econometric analyses;
- Metrics and analytics to track SMEs' digital trade and their skills for doing cross-border ecommerce;
- An ***online platform to track the implementation regulations*** and is available publicly, as in Chile's Digital Chile Digital 2020 website that tracks the implementation of over 60 measures impacting the digital economy;
- ***Rigorous, data-driven assessments of the interoperability of domestic digital regulations*** with Mercosur markets, so that digital companies and online sellers grow and scale in the broader intra-regional market.
- ***Concrete plan to improve data and measurements of the digital economy***, so as to help track policies, motivate policy improvements, and craft appropriate policies to facilitate digital trade. Innovative censuses and surveys can bolster official statistics, while public-private partnerships can leverage the rich real-time data that private sector has to assess the state of the regional digital economy.

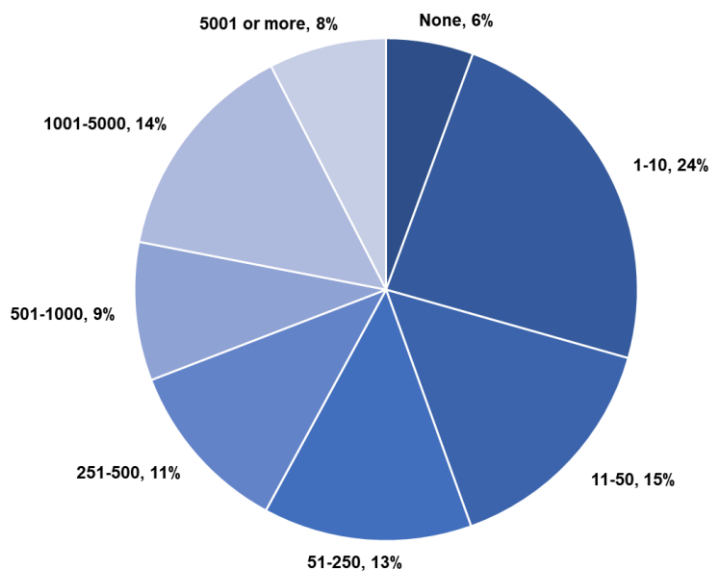
VI. Conclusion

This report has explored the rise of ecommerce in Mercosur economies' trade, described how Mercosur companies leverage the Internet in their operations and trade, and analyzed the priority regulatory and other challenges to ecommerce in the region. The data show that ecommerce has expanded in Mercosur countries domestic economies and also to an extent in the region's trade, and benefited regional companies' in terms of export sales, new customers, and higher revenues.

The next frontier in the region's digital journey is regional integration. Creating a more coherent regional digital market is essential for regional digital companies and SMEs that sell goods and services to scale, export, and create new jobs – which in turn is key for them to compete in Latin America and internationally. Mercosur economies have yet to progress to such a place – an era where digital companies and online sellers are able to seamlessly operate across the regional market.

Companies face regulatory uncertainties and somewhat divergent regulations and tax regimes in the four different markets, and sellers and buyers of products sold online encounter inefficient customs and complexities of trade compliance. Mercosur governments have in some cases differing visions on such regulations as data privacy and transfer, over the top rules regulating online services and audiovisual productions, and taxation of online sales.

Against this backdrop, this report has provided a regulatory roadmap for Mercosur region's policymakers and business leaders to unlock regional digital economy and trade. The region's governments have a golden opportunity to create such a platform of innovation, trade, and competitiveness. They also do not have to start from scratch, but can draw on the regulatory frameworks fashioned in such recent trade agreements as the Chile-Uruguay FTA – which can be a beachhead for the Mercosur economies to integrate more closely with the Pacific Alliance and Asian markets. It is imperative to get rules right at home and abroad, for companies, consumers, and small businesses to continue translating the region's great gains in digitization into trade and prosperity.

APPENDIX I – SURVEYED COMPANIES**Figure I-1 – Surveyed Mercosur Companies, by Size**

Source: Author based on a survey of 823 Mercosur region firms in 1-15 August 2017.

APPENDIX II - GDPR VS. CBPR

	APEC Privacy Framework (or CBPRs)	EU's GDPR
Purpose	To develop effective privacy protections that avoid barriers to information flows, and ensure continued trade, and economic growth in the APEC region.	To enable to free movement of personal data within the Union while protecting fundamental rights and freedoms of natural persons and in particular their right to the protection of personal data.
Material scope	Applies to persons or organizations in the public and private sectors who control the collection, holding, processing, use, transfer or disclosure of personal information.	Applies to the processing of personal data wholly or partly by automated means, within the scope of Union law.
Territorial scope	Applies to the same extent that the laws of each member country apply.	Applies to processing that takes place in the Union or by a processor who has an establishment in the Union within the context of activities in the Union or to processing activities that are related to the offering of goods and services to (or behavioral monitoring of) data subjects in the Union.
Data controller	Personal information controller means a person or organization who controls the collection, holding, processing or use of personal information.	Controller means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data.
Data processors	APEC Privacy Framework and CBPRs do not apply to processors, only controllers.	Processor means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller.
Publicly available information	The APEC Privacy Framework has limited application to publicly available information. Notice and choice requirements, in particular, often are superfluous where the information is already publicly available, and the personal information controller does not collect the information directly from the individual concerned.	The processing of publicly available information may be permitted for certain archiving purposes in the public interest, scientific or historical research purposes or statistical purposes, insofar as providing notice is likely to render impossible or seriously impair the achievement of the objectives of that processing.
Permitted member country variations (derogations)	Economies implementing the framework at a domestic level may adopt suitable exceptions to scope that suit their particular domestic circumstances. The framework is not intended to impede governmental activities authorized by law when taken to protect national security, public safety, national sovereignty or other public policy.	Member States have discretion in a number of subject areas including: Supervisory Authority; Sanctions; Demonstrating Compliance; Data Protection Officers; Archiving and Research; Third Country Transfers; Sensitive personal data and exceptions; Criminal Convictions; Rights and Remedies; Processing of Children's Personal Data by Online Services; Freedom of Expression in the Media; Processing of Data; Restrictions; Rules surrounding Churches and Religious Associations. Exceptions to general GDPR applicability also exist for national security, public safety, and police powers.
Access and correction	Individuals should be able to obtain from the personal information controller confirmation of whether or not the personal information controller holds personal information about them, and have access to information held about them, challenge the accuracy of information relating to them, have the information rectified, completed, amended or	The data subject has the right to obtain from the controller confirmation as to whether or not personal data concerning him or her are being processed, and to access to the personal data and information about the processing including: what categories of data are processed, the recipients of the data, and rights to erasure and rectification of the personal data, the

	deleted. All of the above rights subject to a balancing of the burden or expense of compliance, legal or security reasons, the protection of commercial information, the protection of the privacy rights of persons other than the affected individual.	right to lodge a complaint with a DPA, the source of the data, whether the data was subject to automated profiling (and if so, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject).
Collection limitation	The collection of personal information should be limited to information that is relevant to the purposes of collection and any such information should be obtained by lawful and fair means, and where appropriate, with notice to, or consent of, the individual concerned.	Personal data shall be collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed. The processing of publicly available information may be permitted for certain archiving purposes in the public interest, scientific or historical research purposes or statistical purposes, insofar as providing notice is likely to render impossible or seriously impair the achievement of the objectives of that processing.
Notice	Personal information controllers should provide clear and easily accessible statements about their practices and policies with respect to personal information. All reasonably practicable steps shall be taken to ensure that such notice is provided either before or at the time of collection of personal information. Otherwise, such notice should be provided as soon after as is practicable.	If the data subject's consent is given in the context of a written declaration which also concerns other matters, the request for consent shall be presented in a manner which is clearly distinguishable from the other matters, in an intelligible and easily accessible form, using clear and plain language.
Use limitation	Personal information collected should be used only to fulfill the purposes of collection and other compatible or related purposes except: a) with the consent of the individual whose personal information is collected; b) when necessary to provide a service or product requested by the individual; or, c) by the authority of law and other legal instruments, proclamations and pronouncements of legal effect	Personal data shall be collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed.
Choice and consent	Where appropriate, individuals should be provided with clear, prominent, easily understandable, accessible and affordable mechanisms to exercise choice in relation to the collection, use and disclosure of their personal information. It may not be appropriate for personal information controllers to provide these mechanisms when collecting publicly available information.	Permits the use of health-related personal data with explicit consent from the subject, unless reliance on consent is prohibited by EU or member state law. "Explicit consent" must meet a higher standard than consent for the processing of other forms of personal data — an individual must be clearly informed of the use of their data and take an affirmative action to demonstrate their consent. Consent of the data subject means any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her.
Data integrity	Personal information should be accurate, complete and kept up-to-date to the extent necessary for the purposes of use.	Personal data should be processed in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures.

Security safeguards	Personal information controllers should protect personal information that they hold with appropriate safeguards against risks, such as loss or unauthorized access to personal information, or unauthorized destruction, use, modification or disclosure of information or other misuses. Such safeguards should be proportional to the likelihood and severity of the harm threatened, the sensitivity of the information and the context in which it is held, and should be subject to periodic review and reassessment.	Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, the controller and the processor shall implement appropriate technical and organizational measures to ensure a level of security appropriate to the risk.
Access and correction	Individuals should be able to obtain from the personal information controller confirmation of whether or not the personal information controller holds personal information about them, and have access to information held about them, challenge the accuracy of information relating to them, have the information rectified, completed, amended or deleted. All of the above rights subject to a balancing of the burden or expense of compliance, legal or security reasons, the protection of commercial information, the protection of the privacy rights of persons other than the affected individual.	The data subject has the right to obtain from the controller confirmation as to whether or not personal data concerning him or her are being processed, and to access to the personal data and information about the processing including: what categories of data are processed, the recipients of the data, and rights to erasure and rectification of the personal data, the right to lodge a complaint with a DPA, the source of the data, whether the data was subject to automated profiling (and if so, meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject).
Accountability	A personal information controller should be accountable for complying with measures that give effect to the Principles stated above.	The controller shall be responsible for, and be able to demonstrate compliance with, the principles of the processing of personal data under the GDPR.
Transfer of personal data to another person or country	When personal information is to be transferred to another person or organization, whether domestically or internationally, the personal information controller should obtain the consent of the individual or exercise due diligence and take reasonable steps to ensure that the recipient person or organization will protect the information consistently with these Principles.	When a controller sends data to another party to be processed, they are a processor and therefore must be bound by contract with the controller to protect the personal data. Personal data may only be transferred to third countries where the EU has considered the laws to provide adequate protection or where protected by a binding corporate rules, approved model clauses, binding agreements combined with an approved code of conduct or approved certification.
Breach definition	There is no specified definition of breach under the APEC Privacy Framework or CBPRs.	Personal data breach means a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorized disclosure of, or access to, personal data transmitted, stored or otherwise processed.
Breach notification	The Cross-Border Privacy Rules (CBPR) to which APEC economies must bind themselves to join, require that member countries impose rules requiring that data controllers contractually protect data by requiring notification to themselves by data processors, agents, contractors or other service providers. The CBPRs do not require that member countries impose mandatory notification of breach to privacy enforcement authorities or data subjects.	

Breach mitigation	<p>The APEC Privacy Framework requires that appropriate safeguards.</p> <p>The CBPRs require the applicant country to describe how it enforces a requirement to have technical (authentication and access control, encryption, firewalls and intrusion detection, audit logging, monitoring, etc.) and administrative (training, policies, enforcement, etc.) Safeguards.</p>	<p>Notification to data subjects is not required if: the controller has implemented appropriate technical and organizational protection measures, and that those measures were applied to the data affected by the personal data breach, in particular those that render the data unintelligible to any person who is not authorized to access it, such as encryption; or the controller has taken subsequent measures which ensure that the high risk for the rights and freedoms of data subjects is no longer likely to materialize; or it would involve disproportionate effort. In such case, there shall instead be a public communication or similar measure whereby the data subjects are informed in an equally effective manner.</p>
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