Inclusive Globalization:
Small Businesses, Digital Entrepreneurship and Trade in Emerging Markets
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Executive Summary

Skeptics of globalization are weary that the sole winners in emerging markets are large enterprises that can afford the costs associated with selling internationally. The advent and expansion of information and communication technology (ICT) around the world, however, has fundamentally changed the economics of doing business across borders. The youngest startups can now be micro-multinationals. In fact, contrary to what skeptics believe, cross-border trade in the internet economy could yield a more inclusive form of globalization by broadening small- and medium-sized enterprise (SME) participation in the global supply chain of goods and services. This could enable consumers to access goods and services from SMEs in emerging markets, build more inclusive individual economies via SME enablement, diversify export mix by SMEs, strengthen south-south exchanges in global trade flows and, thereby, make the global economy more inclusive.
This research study analyzes export data of small businesses using PayPal in Argentina, Colombia, India, Kenya, Vietnam and South Africa, from 2013-2017, and finds evidence that online merchants in emerging markets are realizing the benefits of globalization and trade.

• Export value: Exports by small businesses on the PayPal platform grew by more than 17 times in Kenya, 9 times in Vietnam, 6.2 times in Colombia, 5.9 times in South Africa, 3.4 times in India, and 2.2 times in Argentina.

• Trade partners: The total number of trade corridors connecting these six markets to the rest of the world has increased from 608 in 2013 to 841 in 2017, averaging an annual growth rate of 9.5 percent.

• Survivability: The overall one-year survival rate of PayPal small businesses that exported from these six emerging markets is 97 percent, which far exceeds the world average of 43 percent.

• Dynamism: On average, new businesses accounted for 46 percent of export growth on the PayPal platform, which is a sign of a high degree of ease for small businesses to enter and participate in cross-border digital commerce.

• Growth: On average, incumbents accounted for 54 percent of overall export growth on the PayPal platform, which shows the ability of existing merchants to grow and expand.

Policy recommendations on facilitating the contribution of SMEs in cross-border trade in the internet economy fall into two categories:

1) doubling down on enabling conditions, e.g., ICT, physical and logistical infrastructure;

2) lowering export barriers for SMEs, e.g., expanding de minimis thresholds (DMTs) and implementing Digital Single Window Systems (SWS).
SMEs are the backbone of the global economy and the primary provider of employment in emerging markets. Enabling SMEs to participate in cross-border trade closely aligns with the long-term inclusive and sustainable growth agenda of emerging economies. Economic diversification by way of small business enablement will empower people in emerging markets to reap the benefits of a more inclusive, digital, globalized economy. SMEs are the backbone of the global economy and the primary provider of employment in emerging markets. Enabling SMEs to participate in cross-border trade closely aligns with the long-term inclusive and sustainable growth agenda of emerging economies. Economic diversification by way of small business enablement will empower people in emerging markets to reap the benefits of a more inclusive, digital, globalized economy.
Introduction

Emerging markets have experienced impressive economic growth in recent years. From 2013-2017, the annual growth rate of GDP in emerging markets and developing economies has averaged 4.7 percent, outpacing that of advanced economies (1.96 percent), the Euro area (1.52 percent) and G7 (1.82 percent).¹ Their growth has been closely tied with globalization and trade. Indeed, the engine of globalization has shifted from industrial to emerging countries.² This trend has the potential to persist as emerging markets continue to liberalize and allow cross-border movement of goods, services, capital and people to fuel productivity growth. Critics of globalization in emerging economies are weary, however, that the sole winners in these markets are large enterprises that can take on the capital costs, establish regional contracts and comply with regulatory requirements associated with selling internationally.³ This paper uses PayPal data to demonstrate that small businesses in emerging economies are also realizing the benefits of globalization and trade.

The advent of the internet and the revolution in information and communication technologies (ICT) have led to the “death of distance,” redefining the way individuals, firms, and governments assess and pursue economic opportunities in this interconnected world.⁴ Cross-border trade is no longer solely the domain of large enterprises. The use of the internet and a whole host of online service providers has fundamentally changed the economics of doing business across borders, drastically reducing the costs of international transactions and lowering entry barriers for small businesses to launch and reach consumers and markets on a global scale. A study by Martens and Turlea of digital commerce in the EU found that digitization cuts the distance effect of physical flows by two-thirds.⁵ The smallest startups in emerging markets are now born as digital micro-multinationals, ultimately enabling more to participate in the globalized economy.
Digitization is transforming global trade by reducing the cost of marginal production and distribution. The costs of participation for individual consumers, small firms and entrepreneurs are also reduced. Digital technology is enabling a broad set of “micro” innovations across borders—micro-multinationals, micro-lending, etc. Digitization also lowers the fixed costs of starting and running a business, by eliminating the cost of building and maintaining a physical storefront and enabling more fixed inputs to be procured and paid for on a marginal basis (e.g., outsourcing legal and accounting services online). The data in this study offers a window into the expansive nature of trade of the internet economy, which could yield a more inclusive form of globalization.
Methodology

The definition of SMEs, or micro, small, and medium enterprises (MSMEs), varies widely across entities and jurisdictions. In the interest of consistency and for the purpose of comparability across regions in research analysis, this paper series defines small businesses as businesses with an annual total payment volume of between USD 30,000 and USD 3 million on the PayPal platform, for at least one year within the 2013-2017 period. There was also a minimum threshold of at least 10 transactions during the 12 months leading up to data extraction in April 2018. This report analyzes a sample of cross-border transactions on the PayPal platform, conducted by a total of 24,631 small businesses in six emerging markets on the PayPal platform from 2013-2017: Argentina, Colombia, India, Kenya, Vietnam and South Africa.

Results are analyzed in comparison with offline exports data from Trade Map. At the two-digit Harmonized System (HS) level, a “PayPal mirror basket” of offline exports was also constructed to exclude export categories that are not typically transacted on the PayPal platform, such as oil and gas, mining, and aircrafts, and to include data on offline service exports, in order to extract a reference point that allows for a more accurate and meaningful comparison and interpretation of data on PayPal small businesses. In terms of survivability analysis, a cohort of SMEs that created a PayPal account and started transacting in 2013 was tracked over the 2013-2017 period. A small business is counted as a “survivor” if there were at least 10 transactions on the PayPal platform in a given year, and if its total payment volume registered between USD 30,000 and USD 3 million at least one year out of the 2013-2017 period. Country-level comparable on the World Bank Export Dynamics Database is unavailable for the countries included in this study.

In order to estimate the effect of internet access on export volume, propensity score matching (PSM), a statistical matching technique, is applied to analyze a subset of data.
To provide more context to each of the six markets, a “country profile” is put together using data from the World Bank, the Economist Intelligence Unit (EIU), the Central Intelligence Agency (CIA), United Nations Conference on Trade and Development (UNCTAD), International Telecommunication Union (ITU) and the World Economic Forum (WEF).

**Data sources for “Country Profile”**

- Population (2017): World Bank
- GDP per capita (USD; market exchange rate) and Real GDP growth % (historical average, 2013-2017): EIU
- Exports (2017 est.) (billions) and Country rank, by total merchandise exports (USD): CIA
- Trade openness (sum of imports and exports as % of GDP) in 2013 and 2017: UNCTAD
- Mobile cell phone subscription per 100 inhabitants in 2013 and 2016: ITU
- Percentage of Individuals using the Internet in 2013 and 2016: ITU
- Country value in the UNCTAD B2C E-commerce Index (0-100): The UNCTAD index measures on a scale from 0 (worst) to 100 (best) an economy’s readiness and capacity to support online trade, and reflects the processes involved in an online shopping B2C transaction, including internet use, account penetration, and postal reliability.
- Country value in the ITU ICT Development Index (0-10): This composite index measures on a scale from 0 (worst) to 10 (best) developments in information and communication technology over time, including ICT access, use, and skills development.
- Country value in the WEF Networked Readiness Index (1-7): This index measures on a scale from 1 (worst) to 7 (best), the performance of economies in leveraging information and communications technologies to boost competitiveness, innovation, and well-being.
Findings

Technology enables digital entrepreneurship and SME participation in cross-border trade in emerging markets.

Exports

In terms of exports, the following has been observed across these six markets.

1. **Significant growth in export value**

   - Between 2013-2017, exports by small businesses on the PayPal platform grew by more than 17 times in Kenya, 9 times in Vietnam, 6.2 times in Colombia, 5.9 times in South Africa, 3.4 times in India, and 2.2 times in Argentina. This rate of growth is even more noteworthy in the context of economic challenges in several of these emerging markets during the 2013-2017 period.

   - Strong and consistent year-over-year growth is observed in online export data on the PayPal platform, in contrast with the declines, fluctuations and lower growth rates seen in offline trade data in these emerging markets.

   - Exceptionally strong export growth from SMEs in Vietnam and Kenya to developed economies can be observed on the PayPal platform. For example, exports from Vietnam to Canada by SMEs using PayPal, by payment amount, increased by more than 22 times between 2013-2017, averaging 5.6

Export growth between 2013 and 2017, by SMEs using PayPal

- **Kenya** exports grew 17 times
- **Vietnam** exports grew 9 times
- **Colombia** exports grew 6.2 times
- **South Africa** exports grew 5.9 times
- **India** exports grew 3.4 times
- **Argentina** exports grew 2.2 times
Increase in the total number of trade corridors

2. **Significant increase in the diversity of trade partners:**

   - The total number of trade corridors connecting these six markets to the rest of the world has increased from 608 in 2013 to 841 in 2017, averaging an annual growth rate of 9.5 percent.
Effect of increase in Internet access on export

In order to estimate the effect of internet access on export, propensity score matching (PSM), a statistical matching technique, is applied to analyze a subset of data.

The treatment group consists of nine middle-income destination markets in which internet access has increased by more than 40 percent between 2013-2016. The control group consists of nine middle-income destination markets in which internet access increased by less than 20 percent between 2013-2016. Since consumption growth is largely determined by income, gross domestic product (GDP) and GDP growth were used as the matching criteria. After controlling for similar levels of GDP and GDP growth between the treatment and control groups, we compared the growth in total payment volume on the PayPal platform from 2013-2016 across the two groups.

Results show almost three times as much growth in total payment volume in the treatment group, compared with the control group. Between 2013-2016, exports from these six emerging markets to markets with more than 40 percent increase in internet access grew 372 percent, whereas exports to markets with less than 20 percent increase in internet access only grew 130 percent. In other words, a connection between growth in internet access and growth in cross-border trade is observed from this analysis, even after controlling for the effect of GDP and GDP growth.
Survivability

Despite their disproportionate importance in emerging markets, SMEs are often characterized by churn, i.e., a high level of exit and re-entry, and low rates of survival. Even among SMEs that export, survival rates are low. According to the International Trade Center and World Trade Organization, most firms in less developed countries export for only one year, as SMEs tend to export as a reaction to circumstantial opportunities instead of the outcome of long-standing relationships with customers. A survivability analysis in this study shows that the overall one-year survival rate of PayPal small businesses that exported from these six emerging markets is 97 percent, which far exceeds the world average of only 43 percent. Moreover, 75 percent of SMEs that started transacting and exporting using PayPal in these six markets in 2013 remained active in 2017.

Dynamism and growth of digital entrepreneurship

Digital entrepreneurship is marked by dynamism and growth across the markets analyzed. This report looks at the landscape of digital entrepreneurship by breaking down export growth into intensive and extensive growth margins, examining the share of contribution by new entrants and incumbents.

- Dynamism: High extensive margins indicate a high degree of ease for new small businesses to enter and participate in cross-border digital commerce. On average, most markets in the study have an extensive margin that is 46 percent, with new entrepreneurs accounting for nearly half of the remarkable growth in total export value on the PayPal platform in these markets.

- Growth: High intensive margins indicate the ability of incumbents to expand. On average, most markets in the study have an intensive margin of 54 percent, with incumbent merchants continuing to make meaningful contributions to expansion in overall cross-border trade.
Implications

Based on our findings and research, there are four implications that cut across emerging markets:

1. Broadening SME Participation in the Global Supply Chain of Goods and Services

Goods and services can now be digitally ordered, platform-enabled and digitally delivered. Small businesses can easily reach customers and scale their presence in international markets around the world. This is integral to the continued development of emerging markets, where infrastructure constraints have historically been significant and logistical costs high.

Small businesses are the backbone of communities and economies around the world, and they make outsized contributions in terms of employment, job creation and economic activities, especially in emerging markets. World Bank statistics show that small businesses in developing economies contribute more than 60 percent of gross domestic product (GDP). A study by the International Finance Corporation (IFC) shows that SMEs represent, on average, about 66 percent of permanent, full-time employment in developing countries, which understates SME contribution because data on informal businesses is excluded.

The level of SME involvement in direct exports varies significantly across developing economies, with the highest level recorded in Developing Europe, where SMEs accounted for 28 percent of overall sales, followed by 16 percent in the Middle East and 8.7 percent in Developing Asia. With digital technology, more SMEs can participate in cross-border trade and scale their market presence in the global internet economy at lower cost and with greater ease.

2. Elevating Consumer Choice and Benefits to an Unprecedented Level

Consumers in more countries can now enjoy goods of greater variety from emerging markets that have historically been less accessible. Digital marketplaces such as Etsy enable a global audience to enjoy niche products handcrafted by artisans that were previously unavailable or even unknowable. Also, digital commerce platforms make price and product information available, reducing search costs and facilitating purchase for consumers around the world.
3. Building Inclusive Individual Economies via SME Enablement

Boosting digital technology-enabled SME exports can also broaden an economy’s production base and diversify its sources of income and economic growth, which increases an individual economy’s strength and competitiveness, and closely aligns with the inclusive and sustainable growth agenda of many emerging markets. For example, the uncertainty and volatility of commodity prices have proven the importance and urgency of economic diversification. Argentina and Colombia would benefit from reducing reliance on the commodities industry as the main source of income and economic growth. Some other economies may be shifting away from agriculture to a wider range of sectors and markets, such as Kenya and India. Given the emergence of regional and global value chains (GVCs) enabled by digital technology, emerging markets are in a position to export tasks and services, broaden the base of production, and make growth more inclusive in new and important ways.

Moreover, women play a significant role in small businesses. Women-owned businesses make up nearly 32-39 percent of micro SMEs, 30-36 percent of small firms and 17-21 percent of medium-sized companies. In emerging markets, women are also more likely to operate smaller firms in the informal sector than their male counterparts. Technology-enabled SME trade is an exciting opportunity for women entrepreneurs, as technology itself does not carry gender bias and may even help level the playing field and make economic growth more inclusive.

Economic diversification by way of small business enablement may well be part of the solutions needed to make these individual economies more resilient, and reap the benefits of a more inclusive, digital, globalized economy.

4. Making Trade More Inclusive

Digital technology has made global trade more inclusive as historically untradeable services become exportable by SMEs in emerging markets, which diversifies their export portfolio and brings them further into the fold of the global economy. Since the turn of the millennium, there has been a significant departure from historical patterns of north-south trade (trade between developed and emerging economies). In terms of the composition of exports, emerging markets have been shifting away from primary commodities and resource-based products, which have historically been exported to trade for more skill- and technology-intensive manufactures.
from developed economies in the global North. One reason behind these important and complex trends is the emergence and spread of global value chains (GVCs). GVCs typically involve multiple countries in different stages of the production processes and networks, resulting in fragmentation of production, outsourcing and offshoring—hyper-specialized exporting that is traditionally associated with primary producers.

Most of the top 10 buyer markets for goods and services exported by SMEs from the six emerging markets in this PayPal study are developed economies in the global North, and a majority of trade is concentrated in north-south flows. The U.S. is by far the most popular buyer market, followed by Great Britain, Australia and Canada. More data is needed to draw definitive conclusions, but what can be observed from the dataset in this study is early signs of increase in service exports from SMEs in emerging markets to customers in developed economies. The top four defined export categories with the highest year-over-year growth rate by total payments amount are all services: computer software record, computer network/information services, advertising services and professional services. This may reflect the practices of outsourcing and offshoring of production processes in ways that are common in the framework of GVCs. For example, computer network/information services exported by SMEs in the six studied markets could be the kind of hyper-specialized exporting used as inputs for a larger production network in developed economies. In fact, computer network/information services have been one of the fastest growing SME export categories on the PayPal platform, by total payments amount, across all six markets every year from 2013-2017. This is an interesting trend to observe in the future, as only a limited set of services, such as travel and financial services, have been historically traded across borders. As digital technology enables historically un-tradeable services, such as advertising, education and healthcare, to be exported by
SMEs in emerging economies, we can expect to see a more diversified export portfolio by SMEs in the global South, and to see them more deeply embedded in GVCs.

Another relevant trend to watch is the soaring volume of digital and virtual goods and services, such as music, e-books, software, games, movies, etc. The share of international streaming customers for Netflix grew from 25 percent in 2013 to over 50 percent in 2017. The consumption of digital content is set to increase, as smartphones become the primary computing technology globally. There are also hundreds of thousands of small app developers and software manufacturers in emerging markets that benefit from the ease of access to global customers and participate in cross-border trade more fully.

Another way trade has become more inclusive in the global economy is the expansion of south-south trade. North-south trade and south-south trade analyzed in this PayPal dataset have been growing at almost the same rate, by an average year-over-year rate of 41 percent and 42 percent, respectively. As internet connectivity and electronic payment systems become more available in emerging markets, and especially if a middle-class, consumption-based economy manifests in these markets, many dormant online trading relationships between merchants and consumers in emerging markets within the global South will become activated and developed. We expect south-south trade flows to grow in absolute terms, and also as a share of global trade flows.
Country-Level Findings and Insights
ARGENTINA
Country profile by numbers

GDP per capita (USD; market exchange rate): 14,391
Real GDP growth percent (historical average, 2013-2017): 0.7
Exports (2017 est.) (billions): $59.69
Country rank, by total merchandise exports (USD): 47 out of 225

Trade openness (sum of imports and exports as percent of GDP)
- 2013: 29
- 2016: 26

Mobile cell phone subscription per 100 inhabitants
- 2013: 158.35
- 2016: 145.33

Percentage of individuals using the internet
- 2013: 59.9
- 2016: 70.97

Country value in the UNCTAD B2C E-commerce Index
- 2013: 51.9

Country value in the WEF Networked Readiness Index
- 1 worst
- 7 best
- 2013: 3.8

Country value in the ITU ICT Development Index
- 0 worst
- 10 best
- 2013: 6.2
Economy at a glance

Argentina has enjoyed higher GDP per capita compared to many of its neighbors in Latin America, despite challenges of political and macroeconomic instability. It has been a relatively closed economy, with its trade-to-GDP ratio averaging about 40 percent during the 2005-2012 period, which is about half the average for emerging market economies. In Argentina, bank credit to the private sector is only 17 percent of GDP, compared to 118.3 percent in other upper-middle income countries. Small businesses account for at least half of GDP in Argentina, yet the credit they receive represents only 3 percent of GDP.

Cross-border trade stagnated under the Kirchner administration as an extensive network of administrative controls were put in place, in the form of trade barriers, foreign exchange restrictions and currency controls, which undermined competitiveness and growth. Although part of the MERCOSUR trade bloc, Argentina has lagged behind other regional peers in trade liberalization, such as the members of the Pacific Alliance—Chile, Mexico, Colombia and Peru. Two-thirds of Argentina’s overall export portfolio is commodities, led by soybean meal (16.9 percent of total exports) and followed by corn (7.39 percent of total exports). The duration of this study, from 2013-2017, coincided with when global commodity prices and Argentine exports were on a downward trend. Faced with steep interest rates and a currency crisis, Argentina recently received a bailout package from the IMF totaling USD 57.1 billion through 2021.
On the PayPal platform

Despite instability and trade-related challenges, total goods and services exported by small businesses using PayPal in Argentina, measured by total payment volume, grew 2.2 times from 2013-2017. Such growth is impressive when compared with the decline or slow growth experienced by their offline exporting counterparts:

**Growth rate comparison (2013-2017)**
Moreover, the number of export destinations reached by PayPal small businesses in Argentina increased by 20 percent in the same timeframe, increasing from 100 destination markets in 2013 to 120 in 2017. The growth in the number of trade partners enjoyed by PayPal small businesses is even more remarkable when compared with their offline counterparts. While the overall number of destinations for offline exports decreased for Argentina as a whole, small businesses that exported using PayPal gained new trade partners.

Change in number of trade partners between 2013-2017

Number of markets reached by SMEs using PayPal
Export growth between 2013-2017 was largely a function of new entrants, instead of and despite reduction in export by incumbents. There were significant inter-year fluctuations, but the average intensive margin is -27 percent while the average extensive margin is 127 percent, meaning the source of growth was overwhelmingly coming from new merchants who started exporting via PayPal.

Top destinations of goods and services sold by PayPal merchants in Argentina are United States, United Kingdom, Spain, Canada, Brazil, Germany, Israel and Mexico.
COLOMBIA
Country profile by numbers

Population (2017): 49,065,615
GDP per capita (USD; market exchange rate): 6,409
Real GDP growth percent (historical average, 2013-2017): 3.2
Exports (2017 est.) (billions): $34.30
Country rank, by total merchandise exports (USD): 58 out of 225

Trade openness (sum of imports and exports as percent of GDP)

Mobile cell phone subscription per 100 inhabitants

Country value in the WEF Networked Readiness Index

Country value in the ITU ICT Development Index

Country value in the UNCTAD B2C E-commerce Index
Economy at a glance

During the timeframe of this study, 2013-2017, Colombia’s economy went from enjoying a position of stable and strong growth to grappling with oil price shocks. Oil prices plummeted by about 40 percent in the second half of 2014 and slowed economic growth. Oil exports account for more than one half of Colombia’s total exports receipts. Oil-related revenues amount to 16 percent of total government revenue, so a drop in oil price would also have serious implications on fiscal revenues. After five decades of armed conflict and rounds of negotiations from 2012-2016, the government reached a peace accord with the main guerilla group (FARC), potentially creating increased stability in the country.

The number of SMEs (MiPymes) in Colombia is an estimated 90,000 companies, which generate 40 percent of the country’s GDP and 80 percent of all jobs. They are focused in the industrial, retail and service industries. The percentage of MiPymes connected to the internet grew dramatically, rising from only 7 percent in 2010 to 60 percent at the close of 2013.

According to the Colombian Chamber of Electronic Commerce (CCCE), e-commerce grew at an annual rate of 64 percent from 2015-2016, and accounted for 5.61 percent of the country’s GDP in 2017. It is also the only country in Latin America with a fully dedicated Ministry of E-Commerce. Furthermore, the Ministry of E-Commerce and the Ministry of Technology have created a non-profit E-Commerce Observatory that monitors and measures the growth of the sector.
On the PayPal platform

Total goods and services exported by small businesses using PayPal in Colombia, measured by total payment volume, grew 6.2 times from 2013-2017. The year-over-year growth is particularly remarkable when compared with the decline or slow growth experienced by their offline exporting counterparts.
Moreover, the number of export destinations reached by PayPal small businesses in Colombia increased from 69 in 2013 to 108 in 2017, a 56.6 percent increase. The growth in the number of online trade partners is noteworthy when compared with their offline counterparts.

**Change in number of trade partners between 2013-2017**

<table>
<thead>
<tr>
<th>Overall offline exports</th>
<th>Offline PayPal mirror basket</th>
<th>SMEs Using PayPal</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>10</td>
<td>39</td>
</tr>
</tbody>
</table>

**Number of markets reached by SMEs using PayPal**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>69</td>
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<tr>
<td>2014</td>
<td>89</td>
</tr>
<tr>
<td>2015</td>
<td>92</td>
</tr>
<tr>
<td>2016</td>
<td>101</td>
</tr>
<tr>
<td>2017</td>
<td>108</td>
</tr>
</tbody>
</table>

Growth analysis yields an average intensive margin of 38 percent and an average extensive margin of 62 percent. In other words, newcomers drove and accounted for 62 percent of export growth in Colombia on the PayPal platform.

Top destinations of goods and services exported by PayPal merchants in Colombia: United States, Mexico, Canada, Ecuador, Spain and United Kingdom.
INDIA
Country profile by numbers

Population (2017): 1,339,180,127
GDP per capita (USD; market exchange rate): 1,942
Real GDP growth percent (historical average, 2013-2017): 5.8
Exports (2017 est.) (billions): $299.30
Country rank, by total merchandise exports (USD): 21 out of 225

Percentage of individuals using the internet
2013: 15.1
2016: 29.55

Trade openness (sum of imports and exports as percent of GDP)
2013: 56
2016: 43
2017: 69.32

Mobile cell phone subscription per 100 inhabitants
2013: 2.5
2016: 85.17

Country value in the WEF Networked Readiness Index
2013: 3.8

Country value in the ITU ICT Development Index
2013: 0
2016: 10

Country value in the UNCTAD B2C E-commerce Index
2013: 0
2016: 34.0

INDIA
Population: 1,339,180,127
GDP per capita (USD): 1,942
Real GDP growth percent: 5.8%
Exports (2017 est.): $299.30 billion
Country rank: 21 out of 225

Percentage of individuals using the internet:
- 2013: 15.1%
- 2016: 29.55%

Trade openness:
- 2013: 56%
- 2016: 43%
- 2017: 69.32%

Mobile cell phone subscription per 100 inhabitants:
- 2013: 2.5
- 2016: 85.17

Country value in the WEF Networked Readiness Index:
- 2013: 3.8

Country value in the ITU ICT Development Index:
- 2013: 0
- 2016: 10

Country value in the UNCTAD B2C E-commerce Index:
- 2013: 0
- 2016: 34.0
Economy at a glance

India boasts the second largest population and the seventh largest economy in the world.\(^{37}\) Its average growth has accelerated steadily across agriculture, industry and services over the past 50 years.\(^ {38}\) Since the global financial crisis, economic growth has slowed but still averaged 7.4 percent GDP growth per year.\(^ {39}\) Agriculture employs slightly less than half of the workforce, followed by small businesses, which employ 111 million and account for 32 percent of the economy.\(^ {40}\) MSMEs manufacture more than 6,000 products and account for 40 percent of total exports from the country.\(^ {41}\)

Over the past decade, the growth of the internet economy in India has given rise to a large number of entrepreneurs and enabled SMEs to take their businesses online and global. Research conducted by Acapture in 2014 shows that MSMEs that use e-commerce platforms enjoy five times more export opportunities than traditional enterprises. The research, however, also showed a high concentration with the top five cross-border e-commerce businesses accounting for more than 90 percent of the market share.\(^ {42}\) There are many government flagship initiatives to boost the sector—such as “Digital India,” which focuses on building digital infrastructure as a core utility—in order to transform India into a digitally empowered economy.\(^ {43}\)
On the PayPal platform

Total goods and services exported by small businesses using PayPal in India, measured by total payment volume, grew by 3.4 times from 2013-2017. The rates of year-over-year growth are robust, and especially so when compared with the decline or volatility experienced by their offline exporting counterparts.

Growth rate comparison (2013-2017)
Moreover, PayPal merchants in India have been able to reach consumers in more countries, with the number of export destinations having grown from 155 in 2013 to 184 in 2017, an 18.7 percent increase. The growth in the number of trade partners is noteworthy, particularly when the number of trade partners for their offline counterparts decreased in the same period.

*Change in number of trade partners between 2013-2017*

<table>
<thead>
<tr>
<th>Category</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs Using PayPal</td>
<td>29</td>
</tr>
<tr>
<td>Offline PayPal mirror basket</td>
<td>-6</td>
</tr>
<tr>
<td>Overall offline exports</td>
<td>-4</td>
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*Number of markets reached by SMEs using PayPal*

<table>
<thead>
<tr>
<th>Year</th>
<th>Markets Reached</th>
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<tr>
<td>2013</td>
<td>155</td>
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<tr>
<td>2014</td>
<td>172</td>
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<tr>
<td>2015</td>
<td>174</td>
</tr>
<tr>
<td>2016</td>
<td>175</td>
</tr>
<tr>
<td>2017</td>
<td>184</td>
</tr>
</tbody>
</table>

Export growth between 2013-2017 can be almost equally accounted for by existing and new merchants on the PayPal platform in India. The average intensive margin is 45 percent and the average extensive margin is 55 percent, meaning newcomers contributed slightly more to the growth than incumbents.

Survival rates

The overall one-year survival rate of small businesses using PayPal in India is 97 percent, which far exceeds the world average of 43 percent. The survival rates in subsequent years have also remained higher than the world average.
Top destinations of goods and services sold by PayPal merchants in India: United states, United Kingdom, Australia and Canada.
### Kenya 
**Country profile by numbers**

<table>
<thead>
<tr>
<th>Metric</th>
<th>2013</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2017)</td>
<td>49,699,862</td>
<td></td>
</tr>
<tr>
<td>GDP per capita (USD; market exchange rate)</td>
<td>1,508</td>
<td></td>
</tr>
<tr>
<td>Real GDP growth percent (historical average, 2013-2017)</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Exports (2017 est.) (billions)</td>
<td>$5.8</td>
<td></td>
</tr>
<tr>
<td>Country rank, by total merchandise exports (USD)</td>
<td>103 out of 255</td>
<td></td>
</tr>
</tbody>
</table>

**Trade openness (sum of imports and exports as percent of GDP)**

- 2013: 54
- 2017: 38

**Country value in the ITU ICT Development Index**

- 2013: 2.8
- 2016: 3.8

**Mobile cell phone subscription per 100 inhabitants**

- 2013: 71.01
- 2016: 80.44

**Percentage of individuals using the internet**

- 2013: 13
- 2016: 26

**Country value in the UNCTAD B2C E-commerce Index**

- 2013: 37.9
- 2016: 3.8

**Kenya**
Economy at a glance

Kenya is a commercial and cultural hub in East Africa and has averaged over 5 percent real GDP growth for the last decade. Agriculture is the backbone of the economy, contributing over 25 percent of GDP and 75 percent of labor force (on at least a part-time basis), as well as over 50 percent of revenue from exports. Kenya’s export portfolio is skewed towards agriculture and horticulture, led by tea and cut flowers, which represent 23 percent and 14 percent of total exports, respectively.

Small businesses play a key role in Kenya’s economic development and job creation. Estimates vary, but according to government statistics, total employment of formal and informal micro, small and medium enterprises (MSMEs) stands at 14.9 million, which is about 30 percent of total firms, of which micro-sized businesses accounted for 81.1 percent. Altogether, MSMEs contribute to 33.8 percent of Kenya’s GDP.

Kenya is home to M-Pesa, a mobile wallet provider used by 46 percent of Kenyans to make mobile payments quickly and easily. The strides Kenya has taken in promoting financial inclusion has made extending credit at more affordable rates to SMEs possible. According to the World Bank’s latest Enterprise Surveys, only 15 percent of firms in Kenya identified access to finance as a major constraint in 2013, compared to the Sub-Saharan African regional average of 41.5 percent. Moreover, 10 percent of small firms in Kenya exported directly, which is almost twice as high as the regional average of 5.2 percent.

As internet penetration increases, mobile phones become cheaper and the price of connectivity comes down, digital commerce is set to grow. Currently, the percentage of consumers and small and medium-sized businesses engaging in cross-border digital commerce is estimated to be less than 5 percent of the total population.
On the PayPal platform

Total goods and services exported by PayPal small businesses in Kenya, measured by total payment amounts, grew 17 times from 2013-2017. The year-over-year growth rates are even more noteworthy when compared with the decline or slow growth experienced by their offline exporting counterparts.

Growth rate comparison (2013-2017)
The diversity of trade partners also grew at a remarkable rate. The number of export destinations reached by PayPal small businesses in Kenya increased by 122 percent in the same timeframe, increasing from 55 destination markets in 2013 to 122 in 2017. The increase in the number of trade partners is significant, especially relative to offline counterparts.

Change in number of trade partners between 2013-2017

Number of markets reached by SMEs using PayPal
Analysis of export growth by PayPal small businesses in Kenya shows an interesting deviation from the pattern exhibited by the other five emerging markets in the study. From 2013-2017, the intensive margin averages at 62 percent and the extensive margin averages at 38 percent, meaning existing small businesses—rather than newcomers—contributed more to the overall export growth observed on the PayPal platform.

Top destinations of goods and services sold by PayPal merchants in Kenya: United States, United Kingdom, Israel, Canada, Latvia, Cyprus, China and Australia.
VIETNAM
Country profile by numbers

Population (2017): 95,540,800
GDP per capita (USD; market exchange rate): 2,309
Real GDP growth percent (historical average, 2013-2017): 6.2
Exports (2017 est.) (billions): $214
Country rank, by total merchandise exports (USD): 28 out of 225

Trade openness (sum of imports and exports as percent of GDP)
2013: 163
2017: 200

Mobile cell phone subscription per 100 inhabitants
2013: 135.23
2016: 127.53

Country value in the ITU ICT Development Index
2013: 4.0
2017: 10

Country value in the WEF Networked Readiness Index
2013: 1 worst
2016: 7 best

Country value in the UNCTAD B2C E-commerce Index
2013: 43.1
2017: 100 best

Percentage of individuals using the internet
2013: 38.5
2016: 46.5
Economy at a glance

Vietnam has a dynamic economy with a history of strong inclusive growth, averaging 6.5 percent per year from 2000-2016. The economy has undergone a structural shift from agriculture-driven to manufacturing- and services-focused, as Vietnam transitioned from a centrally-planned economy to a market-oriented system. Small and medium-sized businesses play an important role in the economy, accounting for 98 percent of all companies, 40 percent of GDP and 50 percent of employment. About 10 percent of SMEs receive at least 10 percent of their sales from direct exports. Vietnam is a highly open economy with a deep commitment to continuing its global economic integration—its trade openness, defined as the sum of imports and exports as percentage of GDP, increased from 163 percent in 2013 to 200 percent in 2017. Total exports from Vietnam have increased at an annualized rate of 15.1 percent from 2011-2016. Most recently, its exports are led by broadcasting equipment, which accounts for 16 percent of its total exports, followed by integrated circuits (7.2 percent) and telephones (4.8 percent).
On the PayPal platform

Total goods and services exported by small businesses using PayPal in Vietnam, measured by total payment volume, grew more than 9 times from 2013-2017. Such growth is remarkable even in comparison with the strong growth experienced by their offline exporting counterparts.

Growth rate comparison (2013-2017)
The number of export destinations reached by PayPal small businesses in Vietnam increased from 132 in 2013 to 169 in 2017, a 28 percent increase. In fact, SMEs on PayPal had more trade partners than their offline counterparts in 2015 and 2016, reaching consumers in 14 and 18 more markets, respectively.

**Change in number of trade partners between 2013-2017**

**Number of markets reached by SMEs using PayPal**

![Chart showing the change in number of trade partners between 2013-2017 and the number of markets reached by SMEs using PayPal.](chart.png)
Survival rates

The overall one-year survival rate of small businesses using PayPal in Vietnam is 94 percent, which far exceeds the world average of 43 percent. The survival rates in subsequent years have remained higher than the world average.


Growth analysis shows existing merchants and newcomers contributed by almost the same amount to growth of total exports on the PayPal platform. Between 2013-2017, the intensive margin averages at 46 percent and the extensive margin averages at 54 percent. In other words, newcomers account for slightly more of the growth of exports observed on the PayPal platform in Vietnam.
Top destinations of goods and services sold by PayPal merchants in Vietnam: United States, Canada, Australia, United Kingdom, Germany and Israel.
SOUTH AFRICA
Country profile by numbers

Population (2017): 56,717,156
GDP per capita (USD; market exchange rate): 6,166
Real GDP growth percent (historical average, 2013-2017): 1.5
Exports (2017 est.) (billions): $78.25
Country rank, by total merchandise exports (USD): 40 out of 225

Country value in the ITU ICT Development Index: 4.7

2013
142.96
2016
147.13
Mobile cell phone subscription per 100 inhabitants

Trade openness (sum of imports and exports as percent of GDP)

2013
2017

2013
64
2016
58

Percentage of individuals using the internet

2013
2016

4.2
54
46.5

Country value in the WEF Networked Readiness Index

Country value in the UNCTAD B2C E-commerce Index: 50.3

1 worst
7 best
0 worst
100 best
Economy at a glance

The living conditions of a large portion of the South African population have improved since the country’s peaceful political transition to democracy in 1994, but economic growth has decelerated in recent years and South Africa remains one of the most unequal economies with high poverty and unemployment rates. South Africa has an abundant supply of natural resources and its export portfolio is heavily weighted towards commodities—led by gold (20 percent), diamonds (10 percent) and platinum (8 percent).

According to government statistics, the total number of formal and informal micro, small and medium enterprises in South Africa is estimated to be over 2.2 million, accounting for over 14 percent of total employment and over 42 percent of GDP. However, a new report by the Small Business Institute (SBI) in partnership with the Small Business Project (SBP) claims the number of formal SMEs stands at only 250,000, and while 98.5 percent of the economy is made up of SMEs, they account for only 28 percent of all jobs. The 2030 National Development Plan, which charts out the growth path of the country, specifically identifies small businesses as primary engines of economic growth and empowerment, and sets the goal of generating 90 percent of employment opportunities from small businesses.
On the PayPal platform

Merchants who sell online and internationally are a small minority of the small business community in South Africa. However, a subset of that group of small businesses generated strong growth on the PayPal platform. Total goods and services exported by PayPal small businesses in South Africa, measured by total payment amounts, grew 5.9 times from 2013-2017. Such growth is remarkable, especially relative to the decline and volatility in export growth experienced by their offline exporting counterparts.

Growth rate comparison (2013-2017)
Moreover, the number of export destinations reached by small businesses using PayPal in South Africa increased from 97 in 2013 to 138 in 2017, a 42 percent increase. The growth in the number of destination markets reached by small businesses using PayPal is even more significant when compared with offline counterparts.

**Change in number of trade partners between 2013-2017**

- **SMEs Using PayPal**: 41
- **Offline PayPal mirror basket**: 9
- **Overall offline exports**: 6

**Number of markets reached by SMEs using PayPal**

- 97 in 2013
- 118 in 2014
- 134 in 2015
- 140 in 2016
- 138 in 2017

Growth analysis shows on balance, existing merchants and newcomers made similar contributions to total exports on the PayPal platform. Between 2013-2017, the intensive margin averages at 44 percent and the extensive margin averages at 56 percent. However, it is worth noting that the shares of contribution reversed in 2016. In other words, the intensive margin was higher than extensive margin in the first half of the studied timeframe. Existing merchants accounted for more of the total export growth from 2013-2015, and new merchants accounted for more of the total export growth from 2015-2017.

Top destinations of goods and services sold by PayPal merchants in South Africa: United States, United Kingdom, Australia, Canada and Germany.
POLICY RECOMMENDATIONS
The following policy recommendations are designed to facilitate the contribution of SMEs in cross-border trade in the internet economy, and to enhance inclusiveness in the global economy.

I. Doubling down on enabling conditions

• **Investing in Information and Communication Technology (ICT) infrastructure**: Internet penetration has increased around the world, but there is still tremendous room for improvement, especially in emerging markets. For example, internet penetration stood at only 29.5 percent in India in 2016, compared with 88 percent in the U.S.\(^6^1\) Promoting the continued expansion of access to the internet at low cost and without gatekeepers is a foundational enabling condition, without which small businesses cannot connect to commerce platforms, intermediaries and consumers from around the world. In fact, the benefits of a robust ICT infrastructure go beyond mere internet access and web presence to broader usage of more sophisticated applications, such as cloud computing and enterprise resource planning tools, which could help small businesses operate more efficiently if adopted.\(^6^2\)

• **Strengthening physical and logistical infrastructure**: The low quality of roads, railways, ports and postal systems has been a serious impediment to growth in cross-border trade in emerging economies, especially in a world where speedy delivery has become an increasingly important source of competitiveness. The cost of poor basic physical infrastructure can be significant. For example, in 2013, about 88 percent of small firms in Kenya experienced electrical outages, and the average number of outages in a typical month amounted to 6.5 times, resulting in loss of 6.9 percent of annual sales.\(^6^3\)

In contrast to bulk exports by large enterprises, shipments by small businesses tend to be lower in volume and often consist of single items sent through traditional post networks. Markets with simple, efficient and modernized physical infrastructure, especially international gateways and multimodal interfaces, will be most prepared to seize international opportunities more fully, both in terms of exports and imports. Moreover, harmonizing and integrating na-
tional postal services, along with promoting closer cooperation with private shippers, will facilitate more broad-based SME participation in digital cross-border trade.

- **Improving SME access to finance**: Small businesses are often under-collateralized and have limited credit history, which have typically limited their access to the capital they need to grow and scale. Many small businesses in emerging markets are informal and may lack the expertise or bandwidth to produce the requisite financial statements. Credit constraints experienced by small businesses can also be a result of asymmetric information or other market dysfunctions, such as privileged access enjoyed by state-owned enterprises over other firms. The World Bank estimates about half of formal SMEs do not have access to formal credit, and an even higher proportion of micro and informal enterprises are credit-constrained. The current credit gap for formal SMEs stands at USD 1.2 trillion, and the total for both formal and informal SMEs can be as high as USD 2.6 trillion. Credit expansion, coupled with proper safeguards, can bridge or eliminate funding gaps and enable SME development and their participation in cross-border trade.

## II. Lowering cross-border trade barriers for SMEs

- **Simplifying legal, regulatory and policy frameworks**: The uncertainty and complexity of regulatory requirements and procedures affect small businesses disproportionately, because they might lack the necessary information, in-house expertise or financial resources, relative to large enterprises. For example, over 20 percent of small firms in Kenya and the greater Sub-Saharan African region identify customs and trade regulations as major constraints. Lifting or ameliorating these burdens will help address the administrative challenges and concerns that have inhibited small businesses to formalize, compete and participate in cross-border trade.

- **Expanding de minimis thresholds (DMTs)**: Increasing customs import duty and tax exemption thresholds will facilitate lower duties and fees, less paperwork, less delay, easier product returns, and ultimately improve the ease and economics of cross-border trade for small businesses. Despite drastic technology-enabled cost reductions, cross-border trade may still not make economic sense for small businesses, if they are at a significant competitive disadvantage compared with merchants who sell in markets with higher DMTs.
• **Implementing Digital Single Window Systems (SWS):** Digital SWS can reduce the complexity and costs of administrative requirements associated with cross-border trade that disproportionately burden small businesses by providing “a system that receives trade-related information and disseminates it all to relevant governmental authorities, thus systematically coordinating controls throughout trade processes.”\(^{68}\) Furthermore, making the digital SWS interoperable between countries, and harmonizing processes such as risk management, data exchange and electronic payment, will further reduce the barriers for SMEs to join the global value chains.\(^{69}\)

• **Liberalizing services trade:** OECD estimates show that the trade cost equivalent of services trade barriers largely exceeds the average tariff on traded goods. Moreover, an average level of services trade restrictiveness translates into an additional 7 percent in trade costs for small firms, compared with large enterprises.\(^{70}\) To reap the gains of and to realize the growth potential from SME participation in services trade, governments of emerging markets could leverage membership in regional organizations, such as Association of Southeast Asian Nations (ASEAN), to harmonize regulations and break down restrictions on broad-based services trade.\(^{71}\)

• **Breaking down informational barriers:** One explanation for the high rates of churn among exporters in developing countries is the lack of reliable information. Without accurate market intelligence, it is hard to assess prospects of profitability and make decisions accordingly.\(^{72}\) Mechanisms such as support centers, online platforms, or demand and supply collaborative networks could be designed to address the market failure of information asymmetry, such that SMEs in emerging markets are able to access and benefit from information on the nature of demand, potential markets, competitors and their products’ competitive position, the regulatory framework, and availability of private and public financial resources and support programs, etc.\(^{73}\)
Moreover, efforts to improve data collection and harmonize definitions, by both the public and private sectors, will enable more robust research analysis, which can in turn support the development of more effective policies. Currently, research analyses are limited by data challenges, one of which associated with this study is the lack of generally agreed upon definitions of “SME” and “digital economy.” For example, under the Micro and Small Enterprises Act of 2002 in Kenya, the parameters of small enterprises are 1) between USD 5,000 and USD 50,000 in annual turnover, and 2) employment of 10-49 people. However, in Vietnam, SMEs are defined as enterprises with capital investment of less than 100 million VND (~USD 4,285), with less than 300 employees in total. Data on online and offline activities of SMEs are not always collected, and if collected, not often comparable due to variations in definitions.

In addition, standardized industry and product classifications for internet platforms and associated services do not exist either. There are, therefore, data compilation and measurement challenges for digital commerce and their inclusion in national accounts. The OECD surveyed countries on national accounts compilation practices regarding the digital economy in 2016, and the IMF extended the survey to some non-OECD countries in 2017. Only a third of the 40 countries that responded to the surveys collect data on online purchases, and only five countries collect separate data on cross-border e-commerce transactions. Research on the impact of technology on cross-border trade would benefit greatly from more available, higher-quality, standardized and harmonized data.

Conclusion

SMEs are key engines of growth in emerging markets and, more broadly, the global economy. This study offers some evidence that by democratizing and leveraging digital technology, small businesses in emerging economies are able to reach customers in more markets, survive and thrive, and participate in cross-border trade. As emerging markets look to the next stage of growth and development, economic diversification by way of SME export enablement may well unlock the potential of a more inclusive, digital and globalized economy.
References

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5 Bertin Martens and Geomina Turlea, “The Drivers and Impediments for Online Cross-Border Trade in Goods in the EU,” Institute for Prospective Technological Studies, Digital Economy working paper number 2012/1, July 2012.


7 The following categories are excluded to create the “PayPal mirror basket”: 01, 02, 03, 04, 05, 06, 07, 10, 16, 23, 26, 27, 28, 29, (30), (31), 36, 38 47,71-76,78-81, 84, 86, 88, 89, 93, 98, 99.


