



Towards the Next Paradigm

An eBay Report Presenting a Global, Inclusive
and People-focused Economic Model

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Introduction

There are almost daily warnings about the adverse impact technology and globalization will have on our society and economy. They are often articulated based on a “winner takes all” worldview that assumes technology and globalization inherently will benefit only a few companies operating in only a few places. The effects of disruption are imagined through this lens, and policy responses are then designed to prevent these imagined effects.

The reality of traditional industrial globalization is that micro and small enterprises – representing more than 90% of the EU’s enterprise population – have largely been excluded from world markets and have been unable to benefit from the latest technological innovations. But some technology tools and business models are challenging this paradigm and promise more inclusive economic growth and opportunity.

Since 2011, the eBay Public Policy Lab and a team of economists at Sidley Austin LLP (Sidley) have worked together to examine how globalization and technology empower, in particular, micro and small enterprises, and promote a more inclusive and robust economy. Covering more than 50 countries, we have studied the trade patterns and growth of enterprises using the eBay Marketplace.¹

We have found that national and global opportunities have expanded beyond traditional large corporations as even the smallest Internet-enabled enterprises can connect directly with customers around the world. This is driven by the dramatic reduction in the cost of engaging in commerce over distance when a small, independent firm is enabled by the Internet, technology and online platforms.

When technology reduces trade costs, it meaningfully dissociates the ability to take advantage of economic opportunities from the location of a firm or individual. Our research shows that small platform-enabled businesses are able to reach markets worldwide whether they are located in an advanced or emerging economy. We have also found significant platform-based business creation and commercial activity in areas across the US and the EU otherwise underserved by the traditional economy.² Technology can meaningfully reduce the negative impacts of distance on commerce by small enterprises, something that especially benefits communities outside of capitals, populous areas and wealthy regions.

This report confirms how small businesses across the EU are seizing the opportunities that the online commerce platform offers them. Small businesses in the EU using eBay served on average 21 different countries in 2016, their export sales grew by almost 36% between 2012 and 2016, and about 50% of them reached customers on at least four different continents.

About the eBay Public Policy Lab

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The eBay Public Policy Lab seeks to address the public policy challenges that lie at the nexus of technology, commerce and inclusive economic opportunities. We conduct innovative research using unique data analytics methodologies and creative insights. We seek to inspire debate at the highest levels of public policy discourse about the future of commerce and how technology can be leveraged to achieve the best possible outcomes for all.

Brian Bieron
Executive Director

Hanne Melin
Director
Global Public Policy

Alan Elias
Senior Manager
Global Public Policy

The Lab's findings over the years, including those presented in this report, show that a new paradigm is within reach: the opportunities of technology and globalization are, and can be, harnessed also by individuals and very small enterprises wherever located. The six entrepreneurs showcased in this report provide a foretaste of what this paradigm has on offer. They illustrate how the "Future of Work" includes regular people using online platforms to improve the prospects of traditional entrepreneurship. The online commerce platform provides global visibility and access to technology tools that empower them to expand beyond the confines of their local economy. Herein lies a model to keep more people engaged in traditional, productive and local work occupations.

The ambition of this report is threefold. First, it presents robust data that demonstrate the real-world behavior of platform-enabled enterprises. These research findings, together with the entrepreneurs' testimonials, tell us that a more inclusive economic model is possible with technology powering independent, people-centric businesses. Second, it puts forward recommendations for policy action at EU level, designed with this emerging paradigm in mind. These recommendations will hopefully form an agenda for the forthcoming mandate of the European Commission.

Finally, it introduces an innovative modelling tool to help guide EU policy prioritization. It is a tool for analyzing how EU's regions are equipped to support online commerce enterprise activity. For the purposes of this report, we have applied the modelling tool to Bulgaria, France, Germany, Romania, Spain and the UK, home to the featured entrepreneurs. We have used it to identify what type of policy actions would have the greatest impact across those countries and then measure the potential regional impact would such policy actions be carried out.

This tool offers a starting point for exploring what makes some regions home to a dynamic community of small online commerce businesses and what could improve a region's performance. Above all, our hope is that it can help promote the growth of small, independent yet global enterprises throughout the EU, inspire a new policy mindset, and speed up a transition to the next paradigm.

Moving Beyond Yesterday's Trade Paradigm

This report focuses on the internationalization of Micro Small and Medium sized Enterprises (MSME) and the factors relevant to their capacity for expanding their commercial reach beyond local and national markets. The ability to reach world markets is of course not a recipe for business success, but it is a condition associated with the prospect of higher productivity, faster growth, greater innovation and better chances of survival.³ Moreover, strong and sustained growth at country level has generally been dependent on open markets and diversified exports.⁴ However, as internationalization has been a costly endeavor, exporters

have generally been the largest firms in a country.⁵ And these large exporting firms have traditionally had the strongest voices when trade and economic policies are formed.

Now, there is a growing recognition that this traditional global commerce order is contributing to unbalanced and unequal growth within countries. The majority of a country's enterprise population (the micro and small enterprises) are not benefitting from globalization for growth: this may harm areas outside of a country's traditional economic hubs; it holds back the prospect of self-employment for job creation and higher life satisfaction in less advantaged regions; and the opportunities from truly diversifying the economy and exports are not unlocked.

As the research presented in this report shows, the connections making up globalization are changing. We have coined the term Global Empowerment Network (GEN) to describe the mechanisms behind this change in the area of commerce. The GEN combines a set of services and conditions (building blocks) that contribute to an emerging borderless system that supports an alternative model for reaching consumers on a global scale. This model has significantly reduced the cost of MSME exporting⁶ and the rate of exporting by platform-enabled MSMEs has consequently increased dramatically, as the data below shows.

However, current policy analysis and measures remain grounded in yesterday's paradigm. This means that economic and trade policies are crafted with a mindset where international companies are large and expand through physical networks. But less and less does this represent the full picture, as shown by the research presented in this report. Tomorrow's paradigm is one where economic growth is more balanced and inclusive because more individuals and enterprises in more places can benefit from technology and globalization. Supporting this transition calls for public policies to be crafted with a mindset recognizing how small enterprises (1) do not invest directly in new "target markets" but they (2) ride on the internet and platforms to reach customers in global markets and then (3) serve those customers remotely without any facilities in the consumer jurisdictions while (4) remaining independent.

The Four Building Blocks of the Global Empowerment Network

01

Connectivity to the global Internet at low cost and without gatekeepers

02

Global platform-based marketplaces

03

Global payment services

04

Efficient, modern and "connected" package-level logistics and delivery services

A Glimpse of the Next Paradigm

In 2005, then University of California, Berkeley economist Hal Varian wrote a groundbreaking piece in the New York Times about a new phenomenon of small businesses leveraging technology and the internet to locate employees and access customers around the world.⁸ Professor Varian called them “micro-multinationals”. But, notably, the article did not have much data and instead relied upon case studies in envisioning a future where this phenomenon would be commonplace.

The econometric and statistical analysis presented below provides evidence that Professor Varian’s 2005 anticipation of the next paradigm is being realized by MSMEs using the GEN model to directly engage with consumers on a global scale. The analysis is based primarily on datasets covering eBay transactions by small businesses in EU28 Member States for 2016. To ensure that the analysis properly captured the community of small enterprises with a meaningful commercial use of the eBay Marketplace, we have limited the data to transactions by professional sellers with sales of more than US\$10,000⁹ annually on the eBay marketplace. These are called eBay-enabled firms.

An Economy of Small, Independent Yet Global Businesses

The most striking data point presented in this report is how nearly all eBay-enabled firms are international; in fact, one needs to search to find the occasional platform-enabled non-exporter. This is almost the inverse of a traditional small business economy, where the majority sells merely locally and one needs to search for the exporters. It is worth noting that in this platform-enabled model, the small firms are not swapping remote selling for local selling. They are supplementing their traditional local market opportunities with access to global customers. This together suggests that an economy where also the many micro and small enterprises contribute to internationalization and diversification is a realistic prospect.

“The world is still far from flat, but its connections are beginning to touch a far broader range of countries, enterprises, and people.”

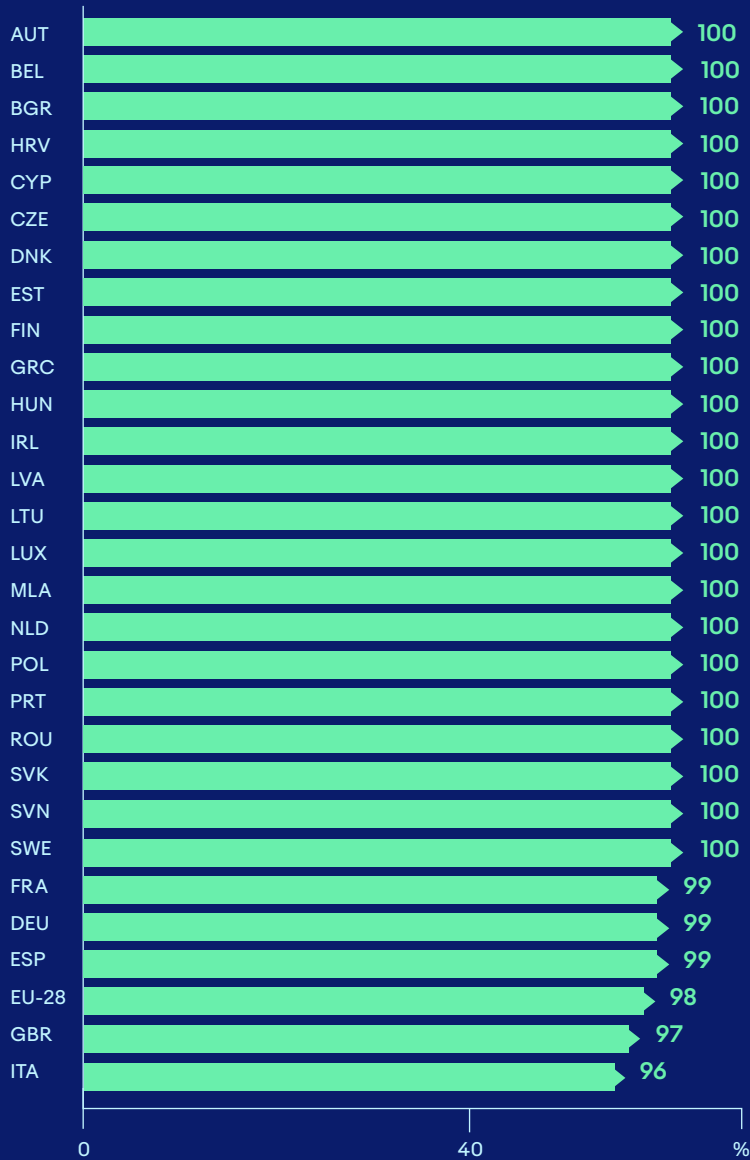
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“Globalization for the little guy”, McKinsey Global Institute, January 2016, available: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/globalization-for-the-little-guy>



FIGURE 1.0

Share of eBay Enabled Firms Exporting



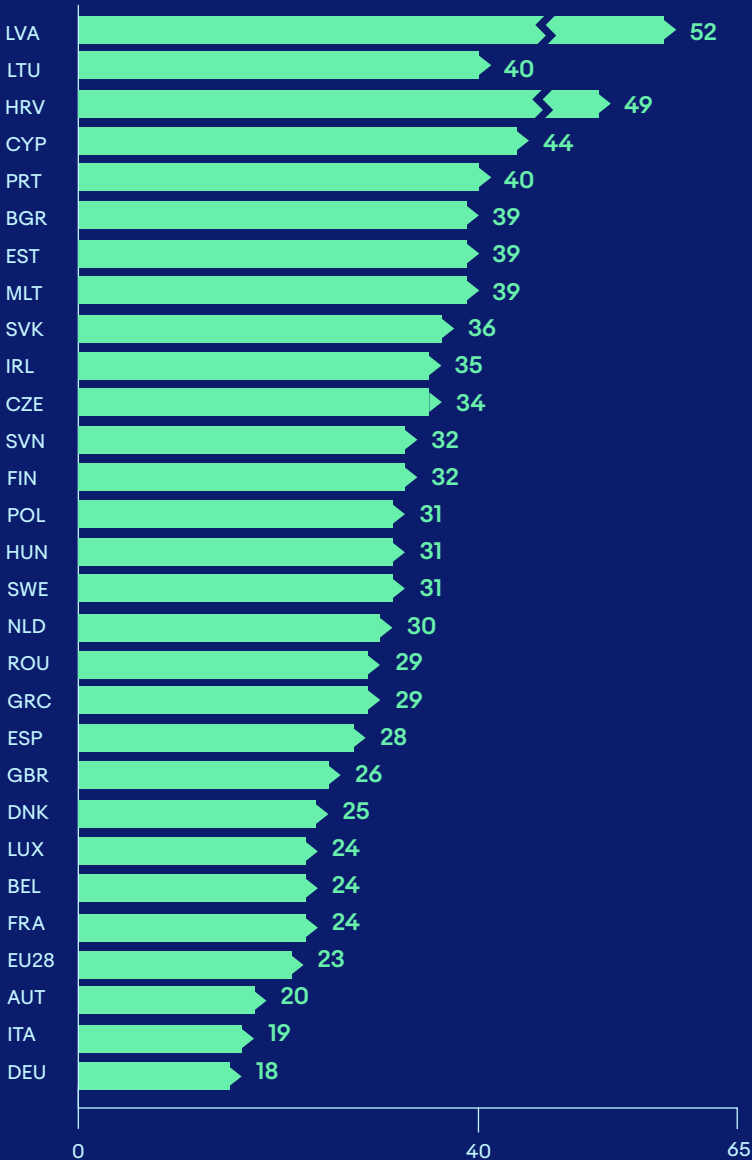
Note: "Traditional Business" figures are not fully comparable due to different methodologies and coverage of firms. We use the OECD Trade by Enterprise Characteristics database for the percentage of exporting firms in the retail and wholesale sectors for the latest available year 2015.

The number of export destinations is a data point indicating that internet-based global commerce does not follow the traditional logic of how market entry costs determine export strategies.¹⁰ Platform-enabled small businesses across the EU ride on the internet and online platforms to reach customers in on average 23 different countries in 2016. This effectively tells us that traditional sunk costs, such as the setting up a distribution or service network and establishing a brand name through advertising, do not apply to this type of trade. Here there is an element of the customer choosing the seller¹¹, and that in turn suggests that other costs such as trust, delivery, delays, and domestic choices, come into play. These are not traditional market entry costs, but rather “market servicing costs” that need to form part of economic and trade policies.



FIGURE 2.0

Average Number of Foreign Destinations



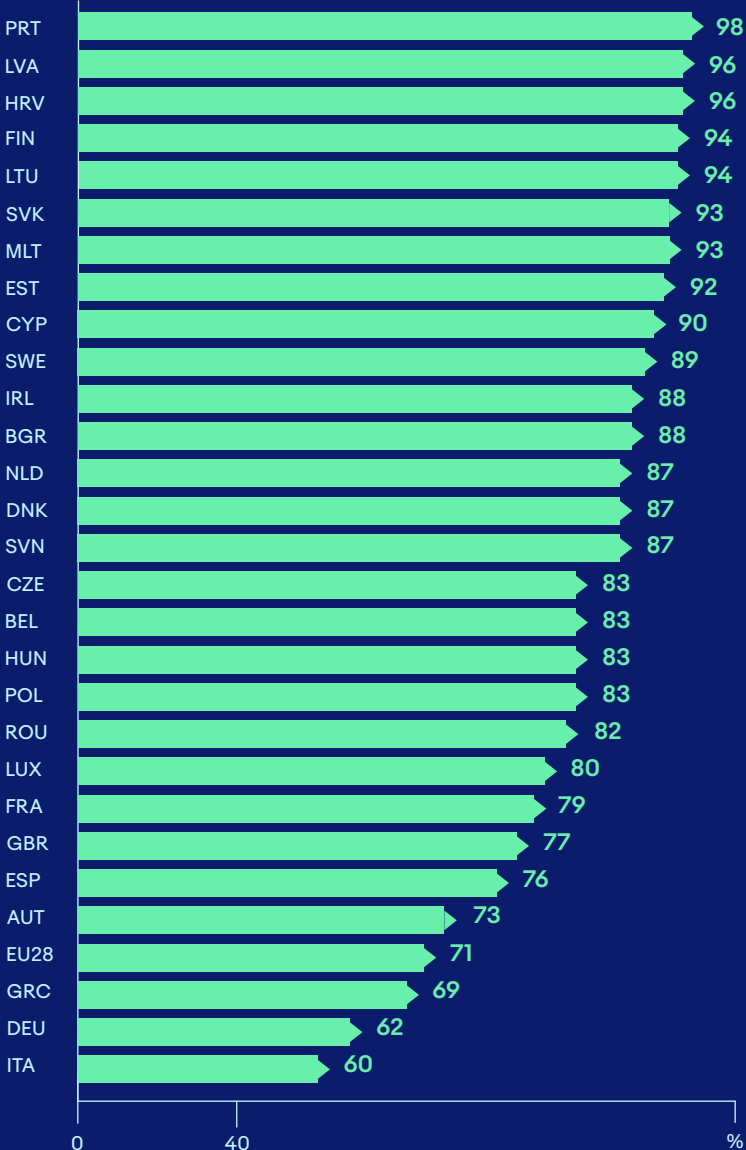
Note: Only exporting eBay-enabled firms are considered.

We have measured the share of eBay-enabled firms reaching 10 or more foreign countries because this data point suggests the interests of small, independent businesses, remotely serving foreign markets, should influence today's trade and economic policies just like the interests of large exporters have traditionally done. According to the OECD, firms that manage to export to more than 10 different countries are those dominating trade. This has traditionally been relatively few very large firms, who have then also been highly influential in setting the domestic economic as well as trade policy agenda. With almost 71% of eBay-enabled (largely micro sized) firms demonstrating this level of market reach in 2016, it is clear that the center of gravity in trade is changing – and trade and economic policies need to follow suit.



FIGURE 3.0

Share of eBay-Enabled Firms Reaching 10+ Foreign Markets



Note: Only exporting eBay-enabled firms are considered.

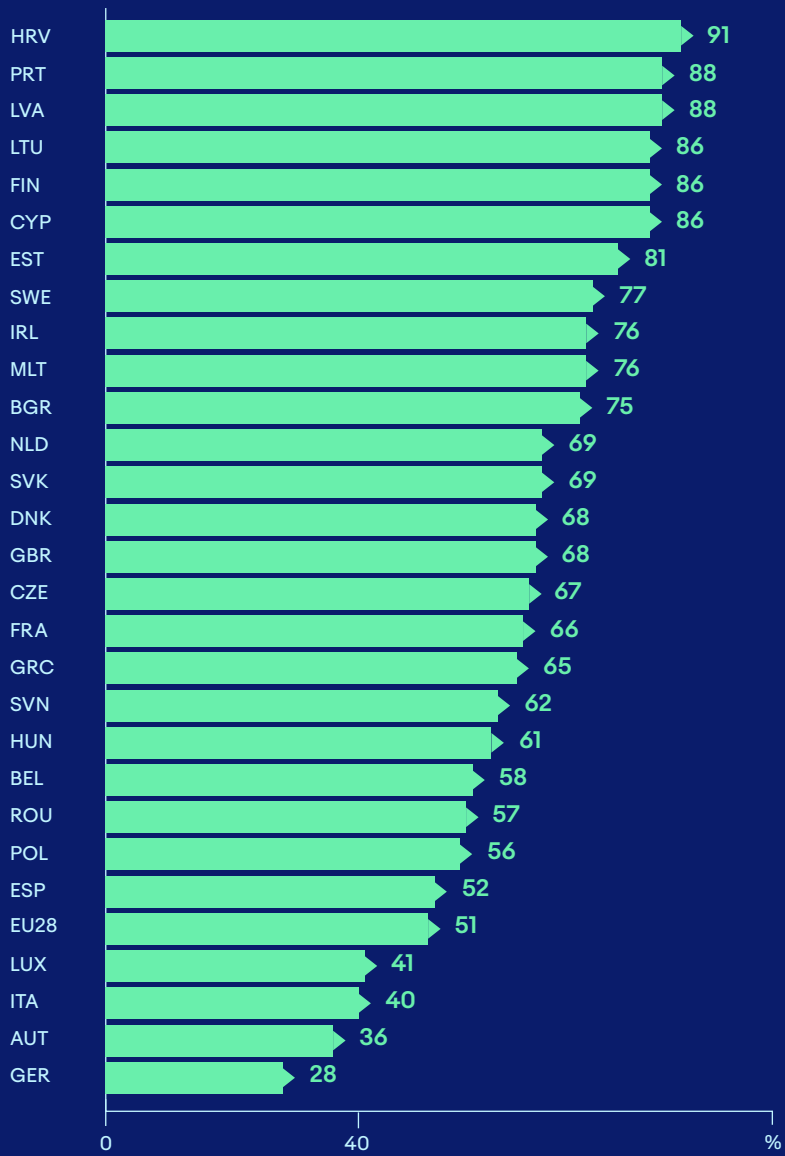
In light of how the EU's enterprise population is dominated by micro and small enterprises, ensuring that MSMEs have several options to internationalize their operations is at about diversifying Member States' economies and reducing dependency on a few large exporters. Illustrating how diversified platform-based global commerce is, just over half of eBay-enabled firms across the EU served customers in four or five continents in 2016. Here is an alternative and fundamentally different model to traditional trade and the Global Value Chain (GVC) model.

An increasingly well-studied method of MSME trade participation, GVCs are mostly organized by Multinational Enterprises with MSMEs as intermediary suppliers.¹² This model has been heralded as providing MSMEs "access global markets at lower costs than those faced by individual small-scale producers".¹³ However, GVCs also come with downsides, such as economic dependence and power imbalances that are aggravated during a macro-economic crunch.¹⁴ Diversifying an economy towards broad-based growth therefore requires that MSMEs can also directly serve world markets as independent companies.



FIGURE 4.0

Share of eBay-Enabled Firms Reaching Four or Five Continents



A Growing Phenomenon

Two final data points show the direction of current developments. For the period 2012 to 2016, total export sales by eBay-enabled firms across the EU grew by 36% and the number of firms reaching 15 or more different markets grew by 29%. Although, the growth rate varied between Member States, this suggests that there is a self-organizing movement towards independent internationalization by small businesses, leveraging the internet and online platforms.

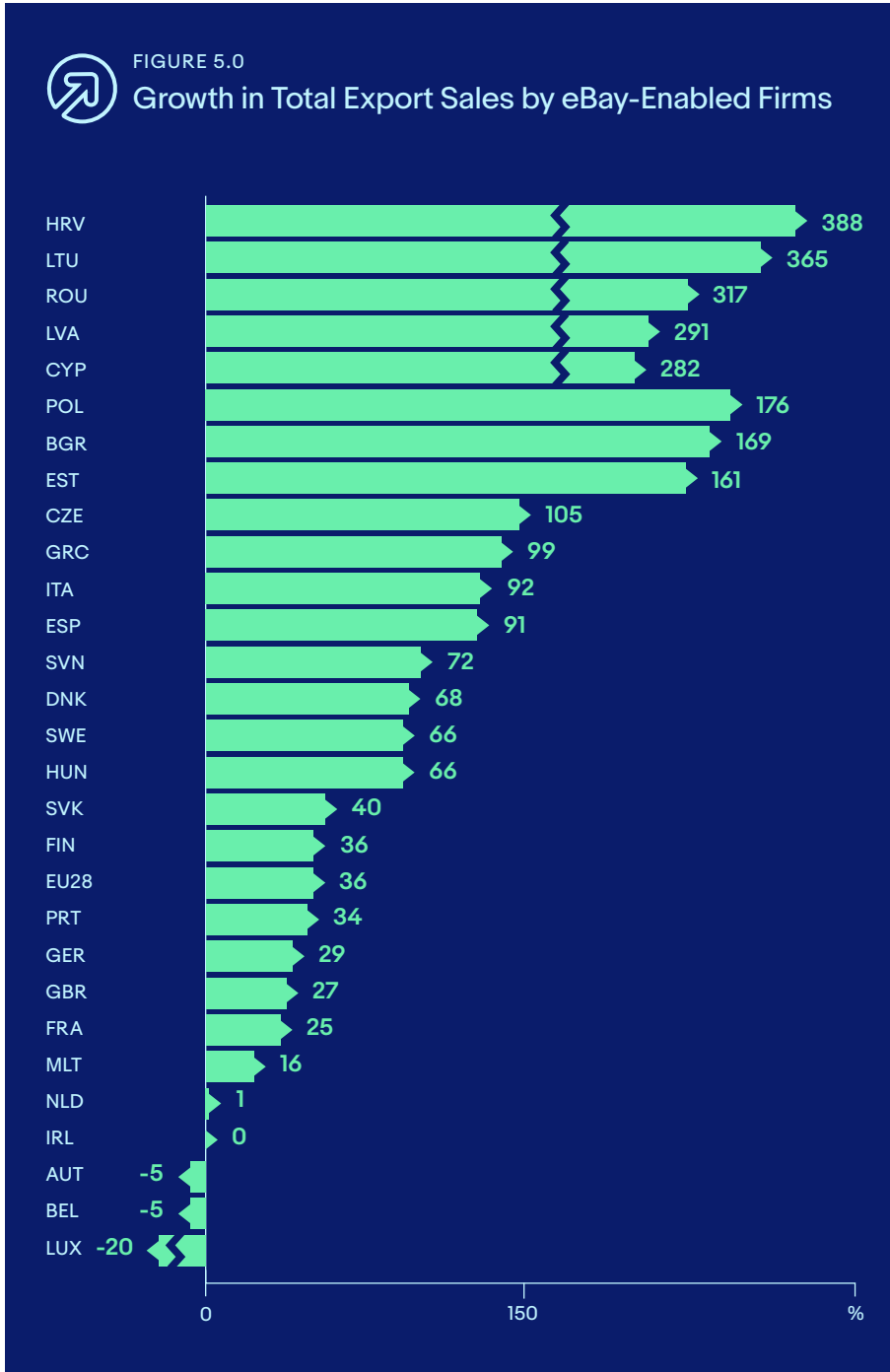


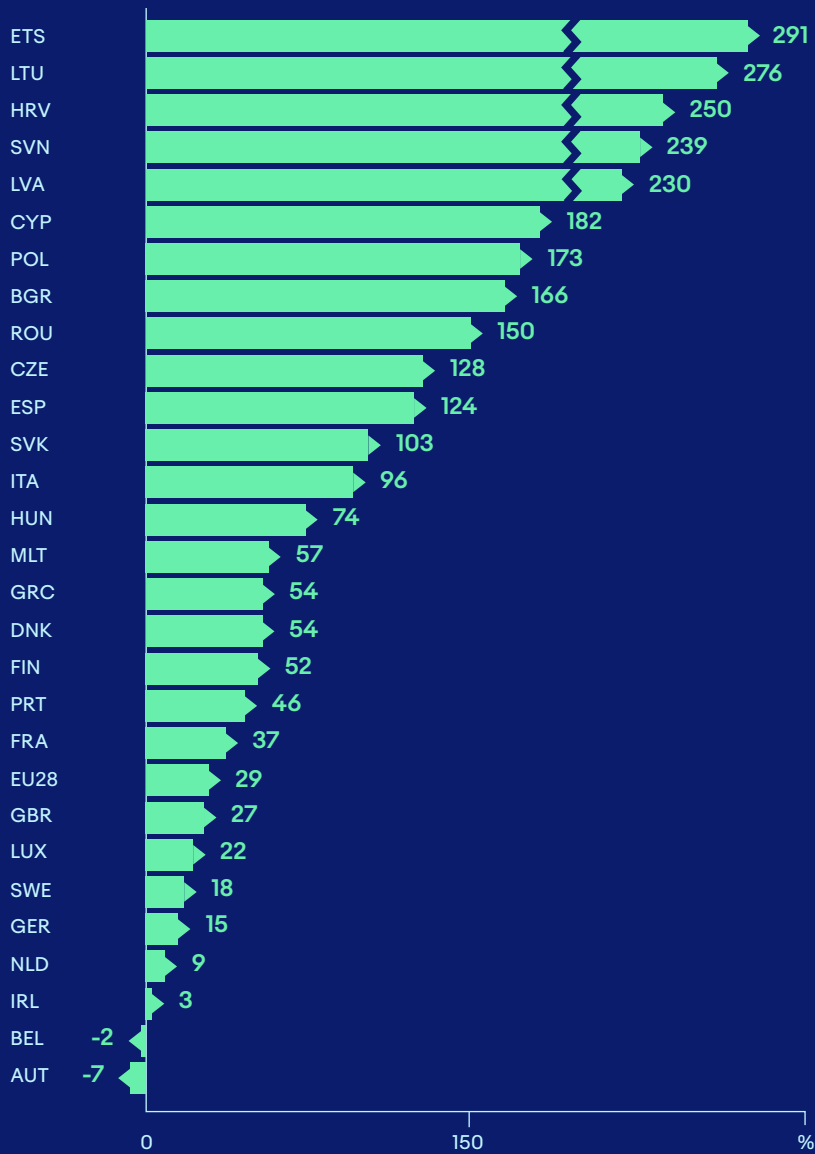
Figure 5.0

The EU's traditional export growth for the period 2012-2016 was 3.6% (source Eurostat).



FIGURE 6.0

Growth in Number of eBay-Enabled Firms Reaching 15+ Foreign Markets (2012 - 2016)



The Next Paradigm Is About People

The research presented above shows that the opportunities of technology and globalization can now be harnessed also by very small enterprises. The six entrepreneurs showcased below provide a foretaste of what this could mean for the prospects of businesses run by self-employed and the happiness of those business owners.

Self-employment – when someone works in their own business for the purpose of owning profit¹⁵ – is nothing new. Both the number of self-employed and their rate to total employment have remained stable in the EU over the years. The fact that we have always had entrepreneurial individuals does not detract from the importance of their businesses. These businesses constitute a major component of the EU's MSME population: the majority of firms in the businesses sector are run by self-employed individuals, and a large share have no employees (in 2014, 54% of all active enterprises were owned by individuals and 56% had no employees).¹⁶

In general, the majority of people move into self-employment by genuine choice (60%). Still, as many as 36% become self-employed out of necessity or a combination of necessity and preference. That is of course not a problem in itself.¹⁷ However, analysis by Eurofound – an EU agency – suggests that the reasons for becoming self-employed largely determine how self-employed individuals assess their work situation.¹⁸ Those motivated by necessity are more likely to find it hard to bear the responsibility of running their business. At the same time, self-employed who earn higher income, have some financial security in case of sickness, believe they can relatively easily find new clients/customers, and can take time off, were also those reporting higher satisfaction and engagement.¹⁹

A great potential of the internet, technology and online platforms lies in them being tools to improve the prospects for business run by self-employed individuals and thereby also increase their mental well-being. Online platforms in particular provide global visibility and access to technology that empower regular people running small businesses to expand beyond the confines of their local economy. This offers them a better foundation for business growth and resilience, and thus greater chances of achieving a sense of personal fulfilment through their work.

This paper is not arguing that the internet, technology and online platforms are reasons for more individuals to turn to self-employment. It is showing through research and testimonials how in particular the online commerce platform is a tool for improving the prospects of small businesses. That could in turn help decouple the reasons why an individual becomes self-employed in the first place from how that individual assesses his/her work situation. It should also help increase job satisfaction and mental well-being. The policy recommendations presented below are thus policy also for happier entrepreneurs contributing more to their local, national and European economy.



Bulgaria
Velin Koychev
Data Protection Ltd.

Velin left a well-paid job as a software engineer to start his own business. It was a big personal risk to start Data Protection that specializes in high-quality Bulgarian cosmetic products made by organic essential oil. Since 2016, Velin's company is selling on eBay and that has allowed it to continue to grow by serving the European market as well as customers worldwide. In fact, the majority of its sales are exported.



Velin lives in Sofia, in the region of Yozguzapaden.



France
Audrey Flores
Magstore and More

Magstore and More sells recently published magazines, journals, books, newspapers on a variety of topics. Audrey's idea for her business came from her own experience of how difficult it is to find older journal issues. She makes a rich selection of French press accessible and is putting her education in literature into providing extra services to her customers, such as detailed text searches, support in finding articles, assistance to foreign clients. Audrey leverages the services and global visibility of eBay to serve customers all over the world; and her customers range from academics, collectors, to fans, businesses and specialists. Her ambition is to grow her role as a purveyor of culture and information.



Audrey Flores lives in Aubagne, in the region Provence-Alpes-Côte d'Azur.



Germany

Andrea and Hans Gönner
Garnwelt

Husband and wife Andrea and Hans Gönner owned a textile company, which manufactured and sold ladies' clothing. When the company unfortunately went out of business, the couple turned that misfortune into an opportunity by building up a new business of selling on eBay the high-quality wool they once used for ladies' garments and that Germany is renowned for. What started as a means to liquidate their failed business, evolved into an extremely successful venture. Today they employ 30 people during summer and 60 during winter, and operations across multiple online platforms have been complemented by a shop for local customers.



Garnwelt is based out of Riedling, in the region Tübingen



Romania

Bogdan Pascu
Kit Xenon Tuning

Bogdan is a medical university graduate specialized in endocrinology, but with an automotive passion dating back to his teenage. Ten years ago, he decided to turn his passion and knowledge into a family-owned company and started Kit Xenon Tuning, a high-performance tuning car parts and accessories company. Bogdan has over time developed relationships with the right manufacturers, and today overs a product portfolion of more than 6,500 articles. It has become Romania's market leader in car tuning accessories, employing 35 people, and is now looking to expand its presence across the EU and the world. Bogdan says that by selling products he is passionate about he can bring creativity and enthusiasm to the job of selling and everyday push his business forward.



Kit Xenon Tuning is based out of Bucharest, in the region of București-Ilfov



Spain
Frank Burguera
California Motorcycles

Frank has always been in the motorcycle accessory and repair industry, and he's also worked for the Harley Davidson University training technicians from all over Europe. In 2007, Franc took his extensive experience and put it into his own business, California Motorcycles, of repairing and selling parts and accessories. Early into his operations, he noticed that expensive inventory didn't sell well locally and so he tried the eBay marketplace. In less than a year, Frank realized that this was a way to expand his physical business internationally ("it's like having a virtual store in every country of the world", explains Frank), which in turn allowed him to hire people and he's today at four employees. Currently, California Motorcycles sells about 25% internationally to countries all over Europe and the world including the US, Saudi Arabia and Mexico.



California Motorcycles is based out of Oliva, in the region of Valencia.



The UK
Andrew Weightman
Rock Hall Ltd

Having spent 30 years working in the IT hardware industry, Andrew has for the last five years been developing his own business. He leverages the eBay marketplace to grow sales into the online business server market. He is indeed seeing global sales but view his business as European and believes its growth is linked to sales in the EU single market.



Rock Hall is based out of Leicester in the region Leicestershire, Rutland and Northamptonshire

Recommending Policy Action to Promote Inclusive Trade and Growth

This report has presented robust data that demonstrate the real-world behavior of platform-enabled enterprises. The phenomenon of “micro multinationals” is no longer merely a prediction, but a reality. And the growth in this type of independent small business internationalization suggests that the development could become commonplace across countries and regions.

The central message of this report is that economic policies, including in the area of trade, should be crafted with an eye to the next paradigm. It is about the mindset of the policymaker. If the policymaker assumes cross-border, global commercial activity is undertaken by large, resourceful companies and implies physical footprint in foreign markets, then rules, standards, infrastructure, taxation etc. will be appraised and proposed with that in mind. The public policies become a self-reinforcing set of guardrails preserving the traditional models of commerce and trade and thereby preserving some well-established shortcomings, in particular in the form of selective economic opportunities and a lack of inclusive growth.

On the other hand, if the policymaker recognizes the limitations and specificities of small, independent, remote yet global enterprises, any requirements that create extra cost in foreign markets for those firms will be treated as the equivalent of traditional trade tariffs and non-tariff barriers. At the same time, if the policymaker believes in how the internet and technology transform the prospects of the EU’s many micro and small enterprises, the sheer number and potential economic power of MSMEs should give their interests significantly more weight in policy prioritization.

The policy recommendations below seek to inject this mindset into a concrete policy agenda for the forthcoming mandate of the European Commission. As will be discussed in the next section, these policy recommendations would improve the conditions for independent small business internationalization by lowering market serving barriers and costs, enhancing legal and institutional stability and trust, and extending access to one of the key (GEN) enablers.

1. Remove contractual restrictions to boost MSME-trade

Manufacturers of branded goods are increasingly putting in place contractual restrictions to limit the distribution of their goods in the online environment. Often such restrictions prevent MSME retailers from using online marketplace services to reach a wider customer base, thereby slowing down their online growth potential. These restrictions also significantly reduce competition online, leading to higher prices and less choice for consumers. The European Commission should revise its Vertical Restraints Block Exemption Regulation and classify such online marketplace bans as hardcore restrictions under EU competition law.

2. Help MSMEs to cope with the new VAT compliance burden

EU Member States adopted new EU VAT rules for e-Commerce in December 2017. These new rules, set to come into force in 2021, significantly increase the VAT compliance burden for MSMEs that trade across the EU Digital Single Market. As of 2021, MSMEs serving customers in other EU countries will need to charge the VAT rates of the country of their customers after crossing a low pan-European sales threshold of EUR 10,000. Hence, MSMEs will need to have the compliance capability of charging hundreds of different VAT rates, depending on where their customers are based and what type of product is being sold. Here is an example of rules adopted with the mindset of the fading paradigm. To mitigate some of the harm in the short term, the European Commission should at the very least put in place compliance support tools for MSMEs. Most importantly, the Commission should create and maintain a legally binding database covering VAT rates applicable in EU member states, based on product identifiers.

3. Take the regulatory lead in a platform-enabled online economy

At this point in the ongoing evolution of the Internet, most citizens' and businesses' online activities rely on digitally interconnected ecosystems built on top of the Internet's access layers. Online platforms have become resources for users to reap the benefits of what is generally considered "the Internet", the connected world. The European Commission has taken initial steps to develop a suitable regulatory framework for the platform-enabled economy through its "Regulation on promoting fairness and transparency for business users of online intermediation services". Further work is required to ensure a sustainable development of the platform-enabled online economy. To that end, the Commission should now adopt initiatives establishing certain key rights, such as non-discrimination in digital platform access and conditions of use, fair contract terms, transparency, fair data use, and the ability to change to and use multiple digital platforms.

4. Adopt global solutions to global challenges

As the data in this and previous Lab reports demonstrate, technology has fundamentally changed the nature of international commerce by allowing small businesses and consumers to become direct trade actors and transact across borders. MSMEs anywhere in the world can find and serve customers everywhere in the world without having a physical establishment in each country they serve. This new "many-to-many", and slightly random²⁰, form of trade challenges authorities across different governance areas – from market surveillance to tax and consumer protection authorities. In order to keep online trade open, the European Commission should take the lead in developing international policy approaches on common challenges in cooperation with key trading blocks. For example, fostering international product safety standards and enforcement mechanisms will support both EU independent, small businesses in their international expansion as well as enhancing EU consumer purchasing power. Building regulatory walls around the European online commerce market will only benefit the incumbent and relatively larger EU players.

5. Maintain VAT independence of SMEs

The EU's new VAT rules for e-Commerce, coming into force in 2021, will make online marketplaces liable for collecting VAT on behalf non-EU businesses using their services to reach EU consumers. Some have suggested such obligation should be expanded to cover EU businesses trading on online marketplaces. In order to comply with such a VAT collection obligation, marketplaces will be pushed to exert control over the operations of small merchants using their services, effectively turning these independent merchants into quasi-subsidiaries of marketplaces against their will and true aspirations. This is a step towards an economy that limits small business internationalization to that of an input to the supply chain of a multinational or online marketplace. To instead promote a diversified economy that includes independent micro and small enterprises, the European Commission needs to embrace a vision for European online commerce based on the principle of enabling truly independent small businesses. Valuing the independence of small businesses is just as critical as expanding their opportunities.

6. Adopt a smart, targeted approach to illegal content online

The European Commission recently issued a Recommendation to EU Member States and Online Platforms on "illegal content online." The Recommendation takes a largely horizontal approach, covering a wide range of illegal content, ranging from fake news, IP infringements, and hate speech to unsafe products. Many stakeholders have also called for a revision of the intermediary liability protections of the EU E-Commerce Directive (ECD) – the legal cornerstone of the platform-based internet.

The ECD provides a sensible and balanced legislative framework for online intermediaries in Europe. These fundamentals should not be changed, which does not preclude initiatives targeting different types of illegal content provided the ECD principles are respected. The Commission should conduct sectorial research, aiming to identify and quantify potential problems, map solutions, and facilitate multi-stakeholder projects to roll-out solutions. The Memorandum of Understanding on the online sale of counterfeit goods is a good example of a targeted approach.

7. Take further steps to support Fast, Affordable, Reliable, and Traceable delivery solutions

The eBay Public Policy Lab's research shows how the online commerce platform model opens up market opportunities across the EU (as well as globally) for small European enterprises, and these opportunities are not exclusive to businesses in the economic hubs. As the European Commission has correctly identified, cross-border parcel delivery is a key building block of a fully functioning Digital Single Market. While the parcel delivery sector is innovating and evolving to serve online commerce, there are system failures that harm small infrequent senders in general and those in peripheral areas in particular. The Commission is looking to the industry to lead efforts to improve quality of services and interoperability,

while it is asking national regulatory authorities to help in increasing transparency of services and prices through its “Regulation on cross-border parcel delivery services”. National regulatory authorities should use the tools provided by the Regulation to not only assess price affordability but also identify coverage gaps in cross border delivery services. The Commission in turn should closely monitor the impact the Regulation has on cross-border prices and service levels and adopt further regulatory measures if needed.

8. Prioritize high-speed broadband roll-out

High-speed broadband access is a key enabler of small online businessship; connectivity being one of the four GEN building blocks. We therefore strongly support the EU’s gigabit society goals of supplying every European with access to at least 30 Mbps connectivity and to provide half of European households with connectivity rates of 100 Mbps by 2020. Fast and cheap connectivity needs to reach all rural areas of the EU. In order to achieve these goals, we believe the European Commission should push for a speedy and ambitious implementation of the recently adopted Electronic Communications Code at national level.

Supporting Micro-multinationals in Their Regions

This report has described how the Global Empowerment Network (GEN) – services and solutions for connectivity, marketplaces, payments and delivery – reduces dramatically the cost of engaging in commerce over distance. Lendle et al (2012) have found that distance has a much lower negative impact on firms transacting cross-border in the online marketplace.²¹ Similarly, a 2013 report by the European Commission’s Joint Research Center concludes that distance matters far less online.²²

When technology reduces the cost of distance, it meaningfully dissociates the ability to take advantage of economic opportunities from the location of a firm or individual. This means that in theory any region anywhere in the EU could be the home of thriving online commerce enterprises. Looking at eBay data, we find that they are. All of EU’s 275 NUTS 2 level regions²³, except for the islands Åland (Finland) and Mayotte (France), housed eBay-enabled firms with sales in 2015.

Looking beyond eBay-enabled firms, how well are EU regions supporting online commerce enterprises and what factors, such as infrastructure or legal, would improve a region’s performance? We are hoping to provide a starting point for answering these and hopefully many other questions about the digital economy’s ability to promote regional cohesion in the EU. To that end, this report introduces a model for ranking regions in relation to each other on what we call “Digital Density” and a tool for assessing the impact in regions from changes to macro-economic, technological, legal, and socio-economic factors.

“By reducing the trade costs associated with physical distance, e-commerce allows a larger number of businesses – including those located in remote areas – to [...] reach a broader network of buyers.”

—

WTO, Mainstreaming Trade to Attain the Sustainable Development Goals, 2018.

“Digital Density” is a measurement based on the number of eBay-enabled small businesses per 100,000 inhabitants and their sales per capita for each region. We have then controlled for (zeroed out) eBay-relevant variables in order to create a generalizable measurement of online commerce enterprise activity. This generalized measurement allows us to rank regions on their ability to support online commerce entrepreneurship in general (a generalized ranking). We have also used it to distill the factors that cause differences in rankings across the regions. In other words, we have empirically identified five groups of factors that are statistically significant for explaining differences in online commerce enterprise activity across EU regions. This exercise then allowed us to create a modelling tool for estimating the impact that improving those factors would have in the regions when it comes to online commerce enterprise activity. We quantify the impact in four ways:

1. How the region’s “Digital Density” ranking might change
2. How many new online retailers might emerge in the region
3. How many additional online sales might be generated in the region
4. How many new jobs might be created in the region

This is not an attempt at forecasting nor a tool for such. These are four measurements of the impact that certain policy actions might have in a region based on the data-enabled tool. They are best seen as proxies for an enabling environment and can be used for comparing the impact of different policy actions in a region or across a country.

Factors Found Relevant for Online Commerce Enterprise Activity

Legal Factors

- Regulatory Quality
- Efficiency of Legal Framework
- Property Rights

Internet Factors

- Broadband Access
- Online Purchases
- Knowledge Jobs

Infrastructure Factors

- Postal Coverage
- Accessibility of Motorways
- Accessibility of Railways

Education, Technology and Entrepreneurship Factors

- Higher Education
- Innovative MSMEs
- Technological Adoption

Macro Economic Factors

- GDP in Purchasing Power Standards
- Unemployment

For the purpose of this report, we used the modelling tool to identify what type of policy actions would have the greatest impact in supporting the local MSMEs such as the six featured entrepreneurs. We find that for all six countries – Bulgaria, France, Germany, Romania, Spain and the UK – policy actions improving the legal factors would yield the greatest impact for online commerce enterprise activity regionally. This supports our view that current legal measures, including those to create a true Digital Single Market, were designed with today’s fading traditional commerce paradigm in mind – not with the interests of small, independent yet international enterprises serving national, European and world markets remotely without physical presence in target markets. And hence, the majority of our policy recommendations detailed above address the very legal and institutional environment.

Digging deeper, we find that for all six countries, the **top 3 parameters** (two of which are legal factors) that produce the greatest positive impact for online commerce enterprise activity regionally are:

1. Improving “Regulatory Quality”

This factor reflects the perceived ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. It includes discriminatory taxes and effect of taxation, burden of regulation, red tape, and trade barriers.²⁴ We present three policy recommendations for lowering market (serving) barriers and costs for MSMEs to engage in global online commerce and leverage the internet, technology and platforms:

- Putting in place support tools for MSMEs to cope with new VAT compliance burden (**Policy Recommendation 2**)
- Developing international policy approaches on common challenges in cooperation with key trading partners in contrast to building regulatory walls and in support of inclusive global commerce (**Policy Recommendation 4**)
- Adopting a smart, targeted approach to illegal content online while upholding the key principles of intermediary liability protection (**Policy Recommendation 6**)

2. Improving “Property Rights”

This factor reflects how strong protection of property rights, including of financial assets, is perceived to be. More broadly, it is a measure of the institutional environment of a country/region, which in turn influences business decisions and organization.²⁵ We present four policy recommendations for ensuring the necessary stability and trust in the institutional environment for MSMEs to invest in independent internationalization:

- Classifying online marketplace bans as hardcore restrictions under EU competition law **(Policy Recommendation 1)**
- Establishing certain key rights, such as non-discrimination in digital platform access and conditions of use, fair contract terms, transparency, fair data use, and the ability to change to and use multiple digital platforms **(Policy Recommendation 3)**
- Embracing a vision for European online commerce based on the principle of enabling truly independent small businesses and recognizing how valuing the independence of small businesses is just as critical as expanding their opportunities **(Policy Recommendation 5)**
- Promoting the use of the Parcel Delivery Regulation at national level for assessing price affordability as well as services coverage gaps and ensuring close monitoring of the impact the Regulation is having **(Policy Recommendation 7)**

3. Expanding “Broadband Access”

This factor reflects the percentage of total households with access to broadband. ²⁶ Fast and cheap connectivity is one of the four GEN building blocks that enable independent internationalization of MSMEs. It needs to be available throughout the EU and to that end we urge a speedy and ambitious implement of the recently adopted Electronic Communications Code at national level **(Policy Recommendation 8)**

We use the modelling tool to measure the impact in the regions of the six countries would these eight policy recommendations be implemented. Our lower-end estimate is that these recommendations would improve the factors regulatory quality, property rights and broadband access by 25% each. The table in Appendix 2 presents the results of such improvements would all policy recommendations be implemented. Recall that we quantify regional improvements in four ways: (1) changes to the region’s “Digital Density” ranking, (2) new online retailers in the region, (3) additional online sales in the region, and (4) new jobs created in the region.

The tool can also give us insight into what policy action might have the greatest impact in a region and how policy priorities perhaps should differ between regions in a country and/or between countries. Studying the individual impact of improving the three selected factors, we can for example see that for the UK region **Leicestershire, Rutland and Northamptonshire** the individual policy action with the greatest impact would be improving the factor regulatory quality; whereas for the other five regions, improving the factor property rights would produce the greatest impact individually.



FIGURE 7.1

Velin Koychev's region
Yugozapaden, Bulgaria

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	18	161	640	\$34,557,435	1698
Broadband Access	5	174	199	\$10,724,721	527
Property Rights	10	169	276	\$14,895,446	732
Regulatory Quality	2	177	166	\$8,937,268	439



FIGURE 7.2

Audrey Flore's region
Provence-Alpes-Côte d'Azur, France

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	11	93	1463	\$78,962,159	501
Broadband Access	4	100	466	\$25,178,805	160
Property Rights	5	99	608	\$32,801,016	208
Regulatory Quality	2	102	389	\$20,982,338	133



FIGURE 7.3

Hans and Andrea Gönner's region
Tübingen, Germany

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	3	46	430	\$23,200,724	152
Broadband Access	1	53	137	\$7,383,244	65
Property Rights	1	53	222	\$12,004,743	106
Regulatory Quality	1	53	168	\$9,069,934	80



FIGURE 7.4

Bogdan Pascu's region
Bucuresti-Ilfov, Romania

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	27	186	688	\$37,142,691	1245
Broadband Access	11	202	214	\$11,527,042	387
Property Rights	17	196	297	\$16,009,781	537
Regulatory Quality	9	204	178	\$9,605,868	322



FIGURE 7.5

Frank Burguera's region
Comunidad Valenciana, Spain

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	23	139	1488	\$80,322,558	731
Broadband Access	9	153	462	\$24,927,690	227
Property Rights	11	151	641	\$34,621,792	315
Regulatory Quality	7	155	385	\$20,773,075	189



FIGURE 7.6

Andrew Weightman's region
Leicestershire, Rutland and Northamptonshire, UK

Factor	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
All three factors	0	10	336	\$18,118,321	137
Broadband Access	0	10	73	\$3,955,150	30
Property Rights	0	10	125	\$6,747,266	51
Regulatory Quality	0	10	137	\$7,415,905	56

We have gone one step further and controlled for (zeroed out) all the statistically relevant factors - legal, internet, infrastructure, education, technology and macroeconomic factors - getting us close to a level playing field across regions. This allows us to create a (hypothetical) ranking of the regions in the (hypothetical) situation where all these identified factors would be equal across all regions. The remaining differences are due to unknown variables.

This could be interesting because it offers a starting point for exploring what other factors than those identified here might encourage and support small online businesses. By comparing a region's generalized rank and hypothetical rank²⁷, it is possible to identify which regions are over- or underperforming relative to their circumstances.

For instance, if studying the regions of the six eBay entrepreneurs, it seems that especially the region **Yoguzapad** in Bulgaria is punching above its weight in terms of supporting online commerce enterprises despite some macroeconomic, infrastructural, legal and/or technological disadvantages. On the other hand, the region **Tübingen** in Germany should consider investigating what those regions that are high in the hypothetical ranking, such as the region **Leicestershire, Rutland and Northamptonshire** in the UK, are doing particularly well in fostering and promoting entrepreneurship. From an EU level perspective, our modelling tool could spur research into potential commonalities between those regions higher up the hypothetical rank.

The generalized as well as hypothetical scores and ranks of all EU 275 regions can be found in Appendix 3.

Our hope is that this tool and the impact analysis it allows for would encourage concrete discussion on how EU policies will best support small online businesses in their home regions. The tool offers a method for exploring what makes some regions home to a dynamic community of small online commerce businesses and trying out what could improve other regions' performance. The end goal is promoting the growth of small, independent yet global enterprises throughout the EU, inspiring a new policy mindset, and speeding up a transition to the next paradigm.



FIGURE 8.0

Regional Performance Relative to Conditions

Region	Generalized Rank	Hypothetical Rank	Rank Change compared to Generalized
Yoguzapaden	179	140	39
Provence-Alpes-Côte d'Azur	104	80	24
Tübingen	49	123	-74
Bucuresti-Ilfov	213	267	-54
Comunidad Valenciana	162	153	9
Leicestershire, Rutland and Northamptonshire	10	4	6

Note: The hypothetical rank suggests the ranking the region would have if all regions fared equal in terms of the legal, internet, infrastructure, education, technology and macro-economic factors. Comparing the generalized and hypothetical rank indicates whether a region is over- or under-performing in relation to its circumstances.

Appendix 1

Data Explanation

Share of eBay-Enabled Firms Exporting

The ebay data reflects the share of 2016 ebay-enabled firms (professional sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) in each of the eu's 28 member state and the eu28 average.

Average Number of Foreign Destinations

The ebay data reflects the average number of different foreign markets reached by 2016 ebay-enabled firms (professional sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) in each of the eu's 28 member state and the eu28 average.

Share of eBay-Enabled Firms Reaching 10 or More Foreign Markets

The ebay data reflects the share of exporting 2016 ebay-enabled firms (professional sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) in each of the eu's 28 member state and the eu28 average, who exported to 10 or more different foreign markets in that year.

Share of eBay-Enabled Firms Reaching Four or Five Continents

The ebay data reflects the share of exporting 2016 ebay-enabled firms (professional sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) in each of the eu's 28 member state and the eu28 average, who exported to four or five continents in that year.

Growth in Total Export Sales by eBay-Enabled Firms

The ebay data reflects the 2012-2016 percentage growth in total export sales of ebay-enabled firms in each of the eu's 28 member state and the eu28 average. To take into account the appreciation of the usd, for this data point an ebay-enabled firm is defined as an ebay professional seller with at least annual sales of \$10,000 usd (fixed at 2016 exchange rates) and at least ten transactions on the ebay marketplace. Gmv values are actual values and not adjusted.

Growth in Number of eBay-enabled Firms Reaching 15+ Foreign Markets

The ebay data reflects the 2012-2016 percentage growth in number of exporting in-country ebay-enabled firms (professional sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) in each of the eu's 28 member state and the eu28 average, who exported to 15 or more different countries. To take into account the appreciation of the usd, for this data point an ebay commercial seller is defined as an ebay seller with at least annual sales of \$10,000 usd (fixed at 2016 exchange rates) and at least ten transactions on the ebay marketplace.

“Digital Density”

What this report calls the “digital density” measurement reflects two factors: (1) the number of 2015 ebay-enabled firms (sellers with \$10,000 usd or more in sales and at least 10 transactions annually on the ebay marketplace) per 10,000 inhabitants in each region and (2) sales in value by 2015 ebay-enabled firms per capita in each region of the eu's 28 member states. We created a score as a function of the two factors, where the top performing region gets 100 and the bottom performing region gets 0. Based on this score we rank all regions. We use both score and rank as they give us different insights. The score indicates how much better or worse a certain region is compared to other regions, whereas the ranking will simply show if a region is better or worse than other regions.

The digital density score calculated based on ebay data is the ground work for two refined scores and rankings:

Generalized digital density

We control for ebay relevant variables that may bias a more objective measure of online commerce enterprise activity captured in the digital density score. We correct the original digital density score by controlling for both buyer and seller centric variables related to ebay. The result is a generalizable score and the resulting ranking is no longer ebay-specific but a generalizable ranking of online commerce enterprise activity across the eu.

Hypothetical digital density

We control for all the statistically relevant factors - legal, internet, infrastructure, education, technology and macroeconomic factors. From the generalized digital density score, we factor out the factors we identified as statistically relevant for explaining differences between regions. The result is a hypothetical score and ranking that reflect a situation where all these factors are equal across the regions.

Additional Online Sales and New Online sSellers in a Region

The estimated impact on (1) additional online sales and (2) additional online sellers in a region from an improvement to one or several of the factors (a policy shock) reflects how that policy shock will change the region's score. We translate the score point improvement into (1) per capita sales values and (2) per capita sellers numbers.

New Jobs Created in a Region

The estimated impact on new jobs created in a region from an improvement to one or several of the factors (a policy shock) reflects the number of employees that could be sustained by the additional online sales that the policy shock might generate in the region. We use data on average regional retail wages (eurostat 2012) to estimate how many employees could be sustained by the gross margins (i.e. Net profit margin plus employment margin) generated by the additional online sales that a policy shock might generate.

Appendix 2

Regional Impact From 25% Improvement of Legal and Internet Factors

Results for the regions of Bulgaria, France, Germany, Romania, Spain and the UK when improving two legal factors (regulatory quality and property rights) and one internet factor by 25%: three factors (broadband access) by 25%.

Bulgaria

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Severozapaden	17	167	240	\$12,962,087	949
Severen tsentralen	18	170	249	\$13,423,793	982
Severoiztochen	18	181	286	\$15,446,966	1130
Yugoiztochen	17	166	319	\$17,212,195	1260
Yugozapaden	18	161	640	\$34,557,435	1698
Yuzhen tsentralen	21	151	435	\$23,510,306	1155

France

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Île de France	11	94	3335	\$180,068,753	1014
Champagne-Ardenne	10	110	393	\$21,201,303	141
Picardie	17	116	567	\$30,594,512	204
Haute-Normandie	16	123	544	\$29,358,654	196
Centre (FR)	11	92	757	\$40,868,320	272
Basse-Normandie	16	114	434	\$23,415,200	156
Bourgogne	10	103	481	\$25,983,834	173
Nord - Pas-de-Calais	16	112	1194	\$64,469,173	402
Lorraine	17	119	686	\$37,017,015	240
Alsace	7	83	552	\$29,779,939	193
Franche-Comté	17	127	346	\$18,661,615	121
Pays de la Loire	17	126	1089	\$58,810,016	409
Bretagne	16	131	966	\$52,135,201	363
Poitou-Charentes	11	111	528	\$28,493,691	198
Aquitaine	16	121	988	\$53,348,001	350
Midi-Pyrénées	16	118	880	\$47,494,597	312

Limousin	12	139	215	\$11,607,596	76
Rhône-Alpes	10	109	1909	\$103,035,304	704
Auvergne	16	122	400	\$21,586,885	148
Languedoc-Roussillon	11	96	818	\$44,166,716	280
Provence-Alpes-Côte d'Azur	11	93	1463	\$78,962,159	501
Corse	18	150	96	\$5,173,446	33
Guadeloupe	15	144	127	\$6,879,364	48
Martinique	22	175	111	\$5,986,025	42
Guyane	3	76	75	\$4,028,333	28
La Réunion	12	97	247	\$13,349,582	93

Germany

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Stuttgart	0	38	959	\$51,794,397	340
Karlsruhe	6	49	651	\$35,163,724	231
Freiburg	3	75	525	\$28,319,757	186
Tübingen	3	46	430	\$23,200,724	152
Oberbayern	2	55	1071	\$57,800,181	401
Niederbayern	0	4	284	\$15,314,024	106
Oberpfalz	0	3	256	\$13,846,034	96
Oberfranken	3	25	250	\$13,503,246	94
Mittelfranken	2	30	406	\$21,933,416	152
Unterfranken	2	13	308	\$16,609,304	115
Schwaben	2	44	431	\$23,289,885	162
Berlin	2	14	864	\$46,655,149	328
Brandenburg	0	17	612	\$33,048,235	255
Bremen	1	32	150	\$8,118,929	61
Hamburg	3	28	401	\$21,622,955	136
Darmstadt	1	33	878	\$47,394,820	317
Gießen	2	41	234	\$12,622,286	84
Kassel	2	40	273	\$14,732,461	99
Mecklenburg-Vorpommern	2	42	430	\$23,197,692	182
Braunschweig	3	57	355	\$19,177,599	140
Hannover	3	22	474	\$25,595,313	187
Lüneburg	1	39	377	\$20,366,807	149
Weser-Ems	3	26	553	\$29,873,846	218
Düsseldorf	3	19	1185	\$63,976,487	433
Köln	1	34	1012	\$54,626,456	370

Münster	- 2	16	599	\$32,320,369	219
Detmold	0	12	471	\$25,419,416	172
Arnsberg	0	36	825	\$44,557,720	302
Koblenz	3	27	343	\$18,500,554	129
Trier	5	65	121	\$6,535,839	46
Rheinhessen-Pfalz	4	60	467	\$25,204,867	176
Saarland	1	18	225	\$12,131,818	91
Dresden	2	5	423	\$22,861,730	182
Chemnitz	2	11	389	\$21,004,044	167
Leipzig	2	35	266	\$14,341,544	114
Sachsen-Anhalt	5	62	552	\$29,807,988	239
Schleswig-Holstein	3	21	650	\$35,087,021	252
Thüringen	6	48	527	\$28,457,921	250

Romania

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Nord-Vest	44	196	779	\$42,042,739	2390
Centru	52	200	708	\$38,215,036	2173
Nord-Est	39	193	985	\$53,165,953	3154
Sud-Est	46	198	751	\$40,527,388	2404
Sud - Muntenia	27	185	922	\$49,778,654	1669
Bucuresti - Ilfov	27	186	688	\$37,142,691	1245
Sud - Vest Oltenia	27	177	607	\$32,777,766	2164
Vest	47	199	546	\$29,460,405	1945

Spain

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Galicia	13	176	824	\$44,467,421	463
Principado de Asturias	12	173	316	\$17,071,703	178
Cantabria	14	180	176	\$9,518,347	99
Pais Vasco	14	187	652	\$35,206,042	349
Comunidad Foral de Navarra	14	188	192	\$10,348,342	102
La Rioja	12	169	94	\$5,098,851	50

Aragón	12	184	400	\$21,568,241	214
Comunidad de Madrid	17	149	1764	\$95,249,348	836
Castilla y León	14	177	746	\$40,295,299	410
Castilla-la Mancha	17	152	621	\$33,542,036	341
Extremadura	12	174	329	\$17,750,554	181
Cataluña	21	143	2228	\$120,280,252	1095
Comunidad Valenciana	23	139	1488	\$80,322,558	731
Illes Balears	12	168	339	\$18,292,832	167
Andalucía	20	156	2530	\$136,583,669	1317
Región de Murcia	16	155	441	\$23,801,974	230
Ciudad Autónoma de Ceuta (ES)	43	196	25	\$1,363,878	13
Ciudad Autónoma de Melilla (ES)	13	164	25	\$1,375,167	13
Canarias (ES)	12	170	640	\$34,572,590	392

The UK

Region	Rank Changes	New Ranking	New Online Sellers	Additional Online Sales	New Jobs Created
Tees Valley and Durham	3	65	252	\$13,615,516	121
Northumberland and Tyne and Wear	2	75	305	\$16,462,148	146
Cumbria	3	81	103	\$5,577,167	47
Greater Manchester	0	2	569	\$30,705,355	260
Lancashire	1	8	306	\$16,499,041	139
Cheshire	3	24	190	\$10,246,375	87
Merseyside	2	64	315	\$16,993,181	144
East Yorkshire and Northern Lincolnshire	2	54	188	\$10,132,864	85
North Yorkshire	2	50	164	\$8,838,789	74
South Yorkshire	4	46	277	\$14,957,081	126
West Yorkshire	0	5	461	\$24,877,262	209
Derbyshire and Nottinghamshire	1	17	410	\$22,152,039	167
Leicestershire, Rutland and Northamptonshire	0	10	336	\$18,118,321	137
Lincolnshire	7	32	140	\$7,537,482	57
Herefordshire, Worcestershire and Warwickshire	1	22	276	\$14,919,428	134
Shropshire and Staffordshire	3	23	334	\$18,052,950	162

West Midlands	0	11	591	\$31,906,092	287
East Anglia	2	49	462	\$24,953,191	201
Bedfordshire and Hertfordshire	6	35	334	\$18,035,221	146
Essex	1	20	329	\$17,754,285	143
Inner London - West	2	74	208	\$11,250,129	65
Inner London - East	3	66	422	\$22,808,673	132
Outer London - East and North East	1	19	343	\$18,500,464	107
Outer London - South	4	67	237	\$12,785,651	74
Outer London - West and North West	1	7	380	\$20,522,602	118
Berkshire, Buckinghamshire and Oxfordshire	1	52	421	\$22,716,872	153
Surrey, East and West Sussex	1	62	506	\$27,296,813	184
Hampshire and Isle of Wight	3	69	349	\$18,841,260	127
Kent	3	55	321	\$17,312,154	117
Gloucestershire, Wiltshire and Bristol/Bath area	3	56	451	\$24,322,058	215
Dorset and Somerset	3	45	243	\$13,092,764	116
Cornwall and Isles of Scilly	1	60	102	\$5,528,858	49
Devon	3	42	216	\$11,640,198	103
West Wales and The Valleys	2	71	410	\$22,130,540	215
East Wales	3	59	242	\$13,068,731	127
Eastern Scotland	5	88	427	\$23,048,319	195
South Western Scotland	2	78	484	\$26,137,500	222
North Eastern Scotland	14	135	102	\$5,488,126	47
Highlands and Islands	12	141	97	\$5,221,750	44
Northern Ireland (UK)	2	79	378	\$20,406,248	195

Appendix 3

Scores and ranking of all EU 275 nuts 2 regions

The table below presents the generalized score and rank (controlling for eBay relevant variables) as well as the hypothetical score and rank (further controlling for the statistically relevant factors). The score is scaled between 0 and 100 (the top performer gets 100, the bottom performing region gets 0) and the ranking is based on the scores. The score indicates how much better or worse a certain region is compared to others, whereas the ranking will just show if a region is better or worse than other regions.

Country	Region	Generalized Score	Generalized Rank	Hypothetical Score	Hypothetical Rank
AT	Salzburg	21	82	24	202
AT	Oberösterreich	18	89	32	139
AT	Wien	17	92	29	164
AT	Tirol	16	94	30	162
AT	Vorarlberg	15	101	28	174
AT	Niederösterreich	13	111	28	176
AT	Steiermark	13	112	28	179
AT	Burgenland (AT)	11	127	24	203
AT	Kärnten	10	142	27	183
BE	Prov. Antwerpen	12	124	25	198
BE	Prov. Limburg (BE)	8	152	49	47
BE	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	8	155	28	178
BE	Prov. Oost-Vlaanderen	8	156	42	77
BE	Prov. West-Vlaanderen	8	157	43	69
BE	Prov. Liège	8	158	19	222
BE	Prov. Brabant Wallon	8	160	34	128
BE	Prov. Hainaut	7	165	43	66
BE	Prov. Vlaams-Brabant	6	170	40	85
BE	Prov. Namur	6	175	30	155
BE	Prov. Luxembourg (BE)	2	203	24	200
BG	Yuzhen tsentralen	6	172	14	229
BG	Yugozapaden	5	179	32	140
BG	Yugoiztochen	5	183	34	124
BG	Severozapaden	4	184	32	141
BG	Severen tsentralen	4	188	31	151
BG	Severoiztochen	3	199	28	173
CY	Kypros	3	200	13	231
CZ	Praha	2	205	10	245
CZ	Severozápad	2	209	9	248

CZ	Jihozápad	2	210	10	244
CZ	Střední Čechy	2	214	10	246
CZ	Severovýchod	1	221	13	233
CZ	Střední Morava	1	248	13	232
CZ	Moravskoslezsko	1	250	10	243
CZ	Jihovýchod	0	259	12	239

DE	Oberpfalz	58	3	47	52
DE	Niederbayern	58	4	46	55
DE	Dresden	53	7	57	25
DE	Detmold	47	12	46	56
DE	Chemnitz	47	13	72	12
DE	Münster	47	14	42	71
DE	Unterfranken	47	15	42	74
DE	Berlin	47	16	45	59
DE	Brandenburg	45	17	41	79
DE	Saarland	43	19	37	102
DE	Düsseldorf	41	22	42	70
DE	Schleswig-Holstein	41	24	67	16
DE	Hannover	40	25	37	100
DE	Oberfranken	39	28	36	108
DE	Weser-Ems	39	29	42	72
DE	Koblenz	39	30	46	54
DE	Hamburg	39	31	37	105
DE	Mittelfranken	38	32	44	64
DE	Bremen	38	33	34	127
DE	Darmstadt	38	34	35	114
DE	Köln	38	35	42	73
DE	Arnsberg	37	36	40	86
DE	Leipzig	37	37	66	19
DE	Stuttgart	37	38	34	121
DE	Lüneburg	36	40	41	81
DE	Kassel	36	42	33	131
DE	Gießen	35	43	35	120
DE	Mecklenburg-Vorpommern	34	44	33	129
DE	Schwaben	34	46	34	126
DE	Tübingen	33	49	34	123
DE	Thüringen	31	54	56	29
DE	Karlsruhe	31	55	32	142
DE	Oberbayern	30	57	30	158
DE	Braunschweig	29	60	30	160
DE	Rhein Hessen-Pfalz	27	64	37	103
DE	Sachsen-Anhalt	27	67	60	21
DE	Trier	26	70	38	96

DE	Freiburg	23	78	29	165
DK	Hovedstaden	1	228	36	111
DK	Midtjylland	1	247	36	113
DK	Syddanmark	1	256	33	130
DK	Nordjylland	0	261	35	115
DK	Sjælland	0	263	30	154
EE	Eesti	2	208	27	185
EL	Attiki	2	207	37	101
EL	Dytiki Makedonia	2	211	39	91
EL	Stereia Ellada	2	216	14	228
EL	Dytiki Ellada	1	217	23	208
EL	Thessalia	1	218	50	42
EL	Kentriki Makedonia	1	219	39	90
EL	Kriti	1	224	31	146
EL	Notio Aigaio	1	225	43	65
EL	Ipeiros	1	233	38	99
EL	Anatoliki Makedonia, Thraki	1	241	35	118
EL	Voreio Aigaio	1	253	38	95
EL	Peloponnisos	1	254	21	220
EL	Ionia Nisia	0	270	43	68
ES	Comunidad Valenciana	7	162	31	153
ES	Cataluña	7	164	30	159
ES	Comunidad de Madrid	7	166	31	145
ES	Castilla-la Mancha	6	169	27	184
ES	Región de Murcia	6	171	31	152
ES	Andalucía	6	176	32	137
ES	Ciudad Autónoma de Melilla (ES)	5	177	33	134
ES	Illes Balears	5	180	32	135
ES	La Rioja	5	181	28	170
ES	Canarias (ES)	5	182	27	189
ES	Principado de Asturias	4	185	21	219
ES	Extremadura	4	186	25	196
ES	Galicia	4	189	28	177
ES	Castilla y León	4	191	27	187
ES	Cantabria	3	194	29	168
ES	Aragón	3	196	31	149
ES	País Vasco	3	201	26	195

ES	Comunidad Foral de Navarra	2	202	28	175
ES	Ciudad Autónoma de Ceuta (ES)	1	239	30	161
FI	Åland	1	237	31	148
FI	Helsinki-Uusimaa	1	258	29	167
FI	Etelä-Suomi	0	267	27	188
FI	Länsi-Suomi	0	271	30	156
FI	ja Itä-Suomi	0	274	39	92
FR	Guyane	22	79	23	209
FR	Alsace	17	90	27	181
FR	Centre (FR)	14	103	37	107
FR	Provence-Alpes-Côte d'Azur	14	104	41	80
FR	Île de France	14	105	33	132
FR	Languedoc-Roussillon	14	107	41	82
FR	La Réunion	14	109	24	204
FR	Bourgogne	13	113	35	116
FR	Rhône-Alpes	12	119	38	97
FR	Champagne-Ardenne	12	120	22	211
FR	Poitou-Charentes	12	122	23	206
FR	Pas-de-Calais	11	128	32	136
FR	Basse-Normandie	11	130	36	109
FR	Picardie	11	133	27	186
FR	Midi-Pyrénées	11	134	34	125
FR	Lorraine	11	136	31	147
FR	Aquitaine	10	137	32	143
FR	Auvergne	10	138	36	110
FR	Haute-Normandie	10	139	30	163
FR	Pays de la Loire	10	143	26	191
FR	Franche-Comté	10	144	26	194
FR	Bretagne	9	147	26	193
FR	Limousin	8	151	35	117
FR	Guadeloupe	8	159	26	192
FR	Corse	7	168	37	104
FR	Martinique	3	197	22	215
HR	Kontinentalna Hrvatska	0	262	25	199
HR	Jadranska Hrvatska	0	272	22	213
HU	Közép-Magyarország	2	215	28	171
HU	Dél-Dunántúl	1	226	42	78

HU	Nyugat-Dunántúl	1	230	24	201
HU	Dél-Alföld	1	234	40	87
HU	Észak-Magyarország	1	235	36	112
HU	Észak-Alföld	1	243	40	83
HU	Közép-Dunántúl	1	255	27	182
IE	Southern and Eastern	5	178	52	37
IE	Border, Midland and Western	3	193	48	49
IT	Campania	54	6	52	39
IT	Puglia	27	65	51	40
IT	Abruzzo	20	83	49	45
IT	Sicilia	20	85	35	119
IT	Basilicata	19	86	53	34
IT	Marche	16	95	53	33
IT	Umbria	16	97	49	46
IT	Lazio	15	99	56	27
IT	Calabria	14	108	46	57
IT	Emilia-Romagna	12	116	45	61
IT	Lombardia	11	126	47	53
IT	Piemonte	11	131	52	38
IT	Molise	10	145	42	76
IT	Toscana	9	148	46	58
IT	Provincia Autonoma di Bolzano/Bozen	9	150	32	138
IT	Veneto	8	154	38	98
IT	Liguria	7	161	45	60
IT	Friuli-Venezia Giulia	7	163	40	84
IT	Provincia Autonoma di Trento	4	187	23	207
IT	Valle d'Aosta/Vallée d'Aoste	4	190	50	43
IT	Sardegna	3	195	31	150
LT	Lietuva	4	192	53	35
LU	Luxembourg	7	167	33	133
LV	Latvija	3	198	56	30
MT	Malta	1	223	43	67
NL	Limburg (NL)	100	1	42	75
NL	Gelderland	25	74	21	218
NL	Overijssel	25	75	20	221
NL	Noord-Brabant	19	87	22	212
NL	Flevoland	17	91	28	180

NL	Friesland (NL)	16	96	22	210
NL	Utrecht	16	98	29	166
NL	Groningen	15	102	16	226
NL	Noord-Holland	12	115	29	169
NL	Zuid-Holland	12	117	28	172
NL	Zeeland	12	121	22	216
NL	Drenthe	11	129	24	205
PL	Lubuskie	33	47	10	242
PL	Wielkopolskie	18	88	8	250
PL	Podlaskie	15	100	4	263
PL	Dolnoslaskie	14	106	8	251
PL	Lubelskie	14	110	13	234
PL	Podkarpackie	13	114	6	258
PL	Slaskie	12	118	13	230
PL	Malopolskie	12	123	12	236
PL	Lódzkie	11	125	38	94
PL	Zachodniopomorskie	11	132	11	241
PL	Swietokrzyskie	11	135	7	255
PL	Opolskie	10	140	6	257
PL	Pomorskie	10	141	8	252
PL	Kujawsko-Pomorskie	10	146	6	260
PL	Warminsko-Mazurskie	6	173	4	264
PL	Mazowieckie	6	174	38	93
PT	Norte	1	227	5	262
PT	Área Metropolitana de Lisboa	1	236	7	253
PT	Centro (PT)	1	249	7	254
PT	Região Autónoma da Madeira (PT)	1	257	0	275
PT	Alentejo	0	260	2	272
PT	Algarve	0	266	6	259
PT	Região Autónoma dos Açores (PT)	0	273	1	274
RO	Sud-Vest Oltenia	2	204	3	265
RO	Muntenia	2	212	2	271
RO	Ilfov	2	213	3	267
RO	Nord-Est	1	232	2	269
RO	Nord-Vest	1	240	1	273
RO	Sud-Est	1	244	2	268
RO	Vest	1	246	3	266

RO	Centru	1	252	2	270
SE	Stockholm	1	238	6	261
SE	Småland med öarna	1	245	12	238
SE	Sydsverige	1	251	10	247
SE	Västsverige	0	264	12	240
SE	Östra Mellansverige	0	265	7	256
SE	Mellersta Norrland	0	268	12	237
SE	Norra Mellansverige	0	269	8	249
SE	Övre Norrland	0	275	12	235
SI	Zahodna Slovenija	1	220	21	217
SI	Vzhodna Slovenija	1	231	15	227
SK	Východné Slovensko	2	206	26	190
SK	Bratislavský kraj	1	222	17	225
SK	Západné Slovensko	1	229	22	214
SK	Stredné Slovensko	1	242	25	197
UK	Greater Manchester	63	2	92	3
UK	West Yorkshire	54	5	100	1
UK	West and North West	51	8	64	20
UK	Lancashire	51	9	86	6
UK	Leicestershire, Rutland and Northamptonshire	50	10	92	4
UK	West Midlands	49	11	82	8
UK	Derbyshire and Nottinghamshire	43	18	93	2
UK	East and North East	42	20	58	24
UK	Essex	42	21	78	10
UK	Herefordshire, Worcestershire and Warwickshire	41	23	67	17
UK	Shropshire and Staffordshire	40	26	70	14
UK	Cheshire	39	27	71	13
UK	Lincolnshire	37	39	88	5
UK	Bedfordshire and Hertfordshire	36	41	72	11
UK	Devon	34	45	55	31
UK	Dorset and Somerset	33	48	56	28
UK	South Yorkshire	33	50	78	9
UK	East Anglia	32	51	70	15
UK	North Yorkshire	32	52	84	7
UK	Berkshire, Buckinghamshire and Oxfordshire	31	53	48	51
UK	East Yorkshire and Northern Lincolnshire	30	56	59	23

UK	Kent	30	58	48	48
UK	Gloucestershire, Wiltshire and Bristol/Bath area	29	59	48	50
UK	Cornwall and Isles of Scilly	28	61	52	36
UK	East Wales	28	62	45	62
UK	Surrey, East and West Sussex	28	63	44	63
UK	Merseyside	27	66	57	26
UK	Tees Valley and Durham	26	68	54	32
UK	East	26	69	60	22
UK	South	25	71	37	106
UK	Hampshire and Isle of Wight	25	72	39	88
UK	West Wales and The Valleys	25	73	39	89
UK	West	23	76	66	18
UK	Northumberland and Tyne and Wear	23	77	49	44
UK	South Western Scotland	21	80	34	122
UK	Northern Ireland (UK)	21	81	32	144
UK	Cumbria	20	84	51	41
UK	Eastern Scotland	16	93	30	157
UK	North Eastern Scotland	9	149	19	223
UK	Highlands and Islands	8	153	18	224

Resources

¹ All Lab reports are accessible here: <https://www.ebaymainstreet.com/policy-papers>

² See e.g. the Lab's latest report "Platform-Enabled Small Business Formation as a Counterweight Against Forces of Economic Concentration", June 2018, available: https://www.ebaymainstreet.com/sites/default/files/ebay_policy_lab_geographic-inclusion_report_2018-05-30_vf_2.pdf

³ "Internationalisation of European SMEs – taking stock and moving ahead", March 2018, published by BPIFrance, British Business Bank, Cassa Depositi e Prestiti, Instituto de Credito Oficial, KfW Bankengruppe.

⁴ See "The Growth Report: Strategies for Sustained Growth and Inclusive Development" (2008), by the Commission on Growth and Development, published by The World Bank.

⁵ For instance, Sinani and Hobdari (2010) find that large firms and firms with higher capital intensity are more likely to export ("Export market participation with sunk costs and firm heterogeneity", Applied Economics, 2010, vol. 42, issue 25, 3195-3207)

⁶ Olarreaga, Marcelo. eBay Reduces Trade Costs Where it is Needed Most. The World Bank - Let's Talk Development Blog. November 7, 2012. Available at: <http://blogs.worldbank.org/developmenttalk/ebay-reduces-trade-costs-where-it-is-most-needed>

⁷ Varian, Hal. Technology Levels the Business Playing Field. The New York Times. August 25, 2005. Available at: http://www.nytimes.com/2005/08/25/business/technology-levels-the-business-playing-field.html?_r=0

⁸ Approximately €9,000 in 2016.

⁹ For example, see Roberts, Mark J. and James R. Tybout, Directions in Development: What Makes Exports Boom? (Washington, D.C.: The World Bank, 1997a); Bernard, Andrew. And Joachim Wagner, "Export entry and exit by German firms," Review of World Economics (Weltwirtschaftliches Archiv), 137 (2001), 105-123.; Bernard, Andrew and J. Bradford Jensen, "Entry, Expansion, and Intensity in the U.S. Export Boom, 1987-1992," Review of International Economics, 12 (2004b), 662-675.

¹⁰ Andreas Lendle, "An anatomy of online trade: evidence from eBay exporters", August 2013, available: <http://www.etsg.org/ETSG2013/Papers/206.pdf>

¹¹ See e.g. Gereffi, Gary, John Humphrey, and Timothy Sturgeon. The Governance of Global Value Chains. Review of International Political Economy 12 (1): 78-104. February 2015. Available at: http://www.fao.org/fileadmin/user_upload/fisheries/docs/GVC_Governance.pdf

¹² "Enhancing the Role of SMEs in Global Value Chains", OECD (2008).

¹³ UNCTAD describes how an economic crisis may lead to a domino effect within GVCs: the main enterprise faces difficulties, the first tier suppliers are strongly affected, the second and third tier suppliers end up suffering from serious financial difficulties with their survival threatened. "Integrating Developing Countries' SMEs into Global Value Chains", UNCTAD (2010), http://unctad.org/en/Docs/diaeed20095_en.pdf

¹⁴ Eurostat definition, see page 47 of the European Commission's Annual Report on SMEs 2016-2017.

¹⁵ European Commission, Annual Report on SMEs 2016-2017.

¹⁶ This is according to the 6th European Working Conditions Survey, conducted in 2015, and analysed by Eurofound in its research report "Exploring self-employment in the European Union" (2017), Publications Office of the European Union, https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1718en.pdf

¹⁷ Eurofound, 2017.

¹⁸ Eurofound, 2017.

¹⁹ Research by Andreas Lendle and Pierre-Louis Vézina found that to some degree the number of markets a platform-enabled seller reaches is the result of action by the buyer. This is much more the case online than offline, and indicates that fixed costs to enter a new market or enter into a new customer relationship are lower on the online marketplace than in the traditional marketplace. They describe this as there being a certain "randomness" to online exporting. See Lendle and Vézina, "Emerging market e-multinationals", October 2013, available: http://pierrelouisvezina.weebly.com/uploads/2/3/4/2/2342194/ebay_deggit.pdf

²⁰ "There Goes Gravity: How eBay Reduces Trade Costs", by Andreas Lendle, Marcelo Olarreaga, Simon Schropp, Pierre-Louis Vézina, Pierre-Louis, in World Bank Policy Research Working Paper No. 6253, October 2012.

²¹ "The drivers and impediments for cross-border e-commerce in the EU", by Estrella Gomez, Bertin Martens and Geomina Turlea (European Commission, Joint Research Center), Digital Economy Working Paper 2013/2: "the results show that the importance of geographical distance is strongly reduced in online trade, compared to offline trade, due to a drastic reduction in information costs in the digital economy that enables consumers to scan a much wider territory to satisfy their wishes and place their buying orders".

²² The NUTS classification (Nomenclature of territorial units for statistics) is a hierarchical system for dividing up the economic territory of the EU for the statistical, analytical and policy purposes. NUTS 2 level regions are the basic regions for the application of regional policies. See: <https://ec.europa.eu/eurostat/web/nuts/background>

²³ This factor is taken from the World Bank's Worldwide Governance Indicators.

²⁴ This factor is taken from the World Economic Forum's Global Competitiveness Index.

²⁵ This factor is taken from Eurostat's Regional Information Society Statistics.

²⁶ As a reminder, the generalized rank controls for eBay-relevant variables and the hypothetical rank then further controls for also the identified legal, internet, infrastructure, education, technology and macro economic factors.

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