

The E-Commerce Moratorium Through the Eyes of SMEs in Ghana and Turkey

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Executive Summary

The World Trade Organization (WTO) E-commerce Moratorium stands as a pivotal agreement among WTO member countries to refrain from imposing customs duties on electronic transmissions. This policy, renewed at each Ministerial Conference since 1998, is intended to foster global digital trade by eliminating tariff barriers that may hinder cross-border transactions of digital products and services.

Though instrumental in promoting innovation and facilitating cross-border digital business, the renewal of the E-commerce Moratorium has sparked discussions among WTO Members in recent years. Some WTO Members have expressed reservations primarily concerned about potential foregone customs revenues and policy space. As a result, at the WTO 12th Ministerial Conference in 2022, its renewal faced challenges and a last-minute agreement was reached to extend it until the 13th Ministerial Conference in February 2024.

In general, several studies from different international organizations agree on the positive economic impacts that the E-commerce Moratorium has had on international trade and the development of the digital economy, as well as on the economic costs that its removal would generate. Recent studies have also demonstrated that losses in the form of foregone customs revenues will be offset by the growth in the digital economy, and that, in any event, internal taxes (such as Value Added Taxes -VAT- or goods and services taxes -GST-) are a more efficient way to tax the digital economy.

This document presents a case study on the potential impacts of lifting the WTO E-commerce Moratorium on SMEs, based on qualitative evidence collected through interviews with two small entrepreneurs in Ghana and the founders of an SME platform in Turkey able to provide valuable insights into the perspective of a broader SME community in Turkey, with close to 2000 firms. The objective is to incorporate these personal narratives to the discussions on the E-commerce Moratorium renewal and gain a nuanced understanding of the real-world impacts of this issue, offering insights into the daily challenges faced by SMEs.

In general, it is observed that, if countries were to start imposing customs duties on electronic transmissions, small businesses and entrepreneurs —especially those in developing countries— would find it more challenging to participate in the global digital marketplace. The added cost of customs duties disproportionately affects SMEs —that are usually less likely to be able to absorb increased costs than bigger enterprises. This ultimately limits not only SMEs' ability to compete on a global scale, but also potentially hinders efforts to develop a strong local digital ecosystem —as many SMEs rely on the import and export of inputs delivered by electronic means.

Bawala Studio, a micro video game developer in Ghana, for instance, would face substantial challenges if countries were to impose tariffs on electronic transmissions. The studio, led by Theophilus Bonney, relies on purchasing specialized software from abroad for their unique video games portraying African beliefs and culture. If tariffs are applied on the import of electronic transmissions by Ghana, Bawala Studio would incur additional fees, escalating development costs and potentially slowing innovation. Limited budgets and unfavorable exchange rates might force the studio to increase sale prices or resort to lower-cost tools, hindering their competitiveness and compromising the quality of their work. If tariffs on imports were imposed by other countries, this could reduce the global reach of Bawala Studio's video games as it would increase costs for international buyers. Additionally, if Ghana imposes tariffs on the export of electronic transmissions, other developers may gain a pricing advantage, creating a competitive disadvantage for Bawala Studio in international markets. These potential hurdles not only impact the studio's profitability and innovation but also threaten the growth of Ghana's video game development industry, hindering its access to the global market and collaboration with international partners.

Ahmed Partey, a Ghanaian NFT artist, would also encounter difficulties if countries were to impose tariffs on electronic transmissions. Specializing in unique digital artworks, Ahmed sells most of his NFT art globally and aspires to reach buyers worldwide. If tariffs are applied on imports of electronic transmissions by Ghana, increased costs for imported software may impact profitability, quality, or pricing strategy. The imposition of tariffs by other countries could, in turn, increase costs for international buyers, limiting the global reach of Ahmed's art and potentially reducing sales. If Ghana imposes tariffs on the export, other artists without such tariffs may gain a pricing advantage, creating a competitive disadvantage for Ahmed in international markets. Beyond economic implications, tariffs on electronic transmissions could hinder cultural exchange within the global digital art community, limiting accessibility and appreciation of Ahmed's art representing Ghanaian culture and perspectives.

In both examples, keeping the WTO E-commerce Moratorium helps these Ghanaian entrepreneurs by allowing them to engage in cross-border trade more freely, reach a broader audience, and access the digital tools and resources they need for their creative and business endeavors.

Akilli KOBİ, a Turkish SME platform connecting local businesses with technology providers faces its own challenges with the potential lifting of the WTO E-commerce Moratorium. While domestic in nature, the reliance on imported software by Turkish developers underscores the importance of the Moratorium for sustaining local digital innovation. If tariffs were imposed on imports by Turkey, it would escalate costs for digital tools, hindering SMEs seeking digitalization through Akilli KOBİ. This could impede progress, innovation, and the platform's

ability to offer cost-effective solutions. Tariffs on exports would disadvantage Turkish SMEs in international markets, making it challenging to compete with counterparts offering similar products at lower prices. Moreover, tariffs by other countries on imports from Turkish enterprises could increase transaction costs, making Turkish digital products less attractive globally. The collateral cost of customs duties, passed on to consumers, could hinder consumer welfare and, in turn, diminish demand, affecting the productivity and competitiveness of companies relying on digital products.

The Akilli KOBİ example emphasizes that the E-commerce Moratorium not only facilitates international trade but also crucially supports local development in the Turkish digital sector. Akilli KOBİ's mission to drive digitalization among Turkish SMEs relies on seamless access to global digital tools. Maintaining the Moratorium is crucial for maintaining a conducive environment for digital innovation in Turkey.

1. Introduction: a 25-year-old policy in peril

The WTO E-commerce Moratorium is an agreement among WTO member countries to refrain from imposing customs duties on electronic transmissions in place since 1998. Although there is still disagreement on its scope, it is generally understood that it means that countries will not tax or charge fees on digital products and services that are delivered electronically across borders.

In 1998, [WTO Members](#) reached an agreement to maintain their existing practice of refraining from imposing customs duties on electronic transmissions. Since then, this agreement has been renewed at every Ministerial Conference thereafter. This policy is generally referred to as the “E-commerce Moratorium”.

In recent years, the ever increasing importance of digital trade, has sparked discussions among WTO Members on whether or not to continue to renew the E-commerce Moratorium. In particular, some WTO Members have expressed reservations about a further extension or a permanent moratorium, primarily concerned about potential foregone customs revenues. As a result, during the WTO 12th Ministerial Conference (MC12) in June 2022, several Members struggled with its renewal, and a last minute agreement was reached to [extend](#) it until the 13th Ministerial Conference (MC13), that will take place in Abu Dhabi, in February 2024.

The E-commerce Moratorium is intended to promote the growth of global digital trade by keeping barriers low. By not imposing customs duties on electronic transmissions, countries aim to foster innovation, encourage cross-border digital business, and ensure that the internet remains an open and accessible space for economic activities.

Several studies have estimated the economic costs of the failure to renew the E-commerce Moratorium, which have raised significant cause for concern. Recent studies have also assessed the trade-offs involved in the imposition of duties, demonstrating that any losses in the form of foregone customs revenues will be offset by the growth in the digital economy and that internal taxes (such as Value Added Taxes -VAT- or goods and services taxes -GST-) is a more efficient way to tax the digital economy. In general, these studies agree on the positive economic impacts that the E-commerce Moratorium has had on international trade, the development of the digital economy, including digitally delivered services (DDS), and businesses around the world, as well as on the economic costs that its removal would generate. However, beyond tariffs, there is still uncertainty about what a hypothetical discontinuation of this trade policy would entail. If customs duties were to be applied to electronic transmissions and their content, this would include items such as cross-border digital downloads, online services, and other cross-border data transfers that occur over the internet.

This document presents a business case based on qualitative evidence obtained through interviews with two small entrepreneurs in Ghana, Ahmed Partey and Theophilus Bonney, and the founders of an SME platform in Turkey, Umit Oncel and Basar Ceylan. Incorporating these personal narratives is important to gain a nuanced understanding of the real-world impacts of this issue. Qualitative evidence provides a valuable human perspective, offering insights into the challenges faced by entrepreneurs like Ahmed, Theophilus, Umit and Basar. Umit and Basar, representing Akilli KOBI, are also able to provide valuable insights into the perspective of a broader SME community, with close to 2000 firms in their network.

2. Background: relevance of the E-commerce Moratorium for SMEs

2.1. What is the E-commerce Moratorium?

The E-commerce Moratorium ensures that WTO members will not impose customs duties on electronic transmissions.

Customs duties are normally applied on imported physical goods, regardless of whether their purchase and payment transaction took place digitally or in person - e.g. a book that is bought online through an e-commerce store and delivered physically across borders. However, when the content of the book is transferred digitally in an e-book format, WTO Members do not apply customs duties to that electronic transmission. This does not prevent the application of internal taxes (such as Value Added Taxes -VAT- or goods and services taxes -GST-) that Members are still allowed to impose provided that they do so on a non-discriminatory basis.

The definition of electronic transmissions and its scope, however, is less clear. Generally, although there is no agreed definition at the WTO level, electronic transmissions are understood as “digitally delivered trade” – this implies that the E-commerce Moratorium does not apply to goods that are bought and paid for digitally but delivered physically. In those cases, custom duties would apply unless otherwise exempted.

But, when it comes to digitally delivered goods or services, the question arises as to whether the E-commerce Moratorium applies solely to the transmission itself (i.e., the digital delivery of a digital good or service - e.g. its telecommunication signal) or also to the content of the transmission (i.e., the goods or services that are being digitally delivered)¹.

¹ In concrete terms, this could cover an undefined range of products that are used daily by consumers, such as online shopping and banking applications, as well as basic tools and communications used by businesses of all sizes and across all industries, for example engineering designs sent by email or customer service support tools.

WTO members have proposed different perspectives and this is one of the biggest disagreements on this topic – understanding the scope of the E-commerce Moratorium is critical to estimate its economic effects, including the potential foregone revenues.

2.2. What is the economic relevance of the E-commerce Moratorium?

In the past few years, the impact of the E-commerce Moratorium has been the focus of several studies carried out by academics, think tanks, international organizations, policymakers and the private sector.

- These studies generally agree on the positive economic impacts that the E-commerce Moratorium has had on international trade, the development of the digital economy, including digitally delivered services (DDS), and businesses around the world, as well as on the economic costs that its removal would generate. Nevertheless, the studies differ in the calculation of those costs. Since there is no agreed definition of electronic transmissions, the scope of transmissions covered by those studies vary and, hence, so does the magnitude of the foreseen impact of the elimination of the E-commerce Moratorium. The European Centre for International Political Economy (ECIPE), for example, released a [Policy Brief](#) in 2019 that examines the economic losses that might arise if the E-commerce Moratorium was to be eliminated. The study highlights that such an action would result in negative economic consequences, including higher prices, a slowdown in GDP growth, and a reduction in tax revenues. Hence, the brief concludes that the costs of lifting the E-commerce Moratorium would thus far outweigh any marginal benefits.
- Foregone customs revenues are one of the main concerns that have repeatedly been voiced when developing countries or emerging economies advocate for the elimination of the E-commerce Moratorium. However, a [joint report](#) prepared by the WTO, the OECD, the IMF, the World Bank Group and UNCTAD, released in December 2023, attests that **the extent of the potential loss of customs revenue resulting from the WTO E-commerce Moratorium is small and has been estimated to be below 0.33% of overall government revenue on average²**, in line with the results of another OECD [working paper](#) published in October 2023. These estimates do not take into account

² The report recognizes that uncertainties about the E-commerce Moratorium scope and the definition of electronic transmissions, which ultimately determine the tax base for the eventual customs duties, make it difficult to precisely determine its impact. It also includes a literature review on studies analyzing the customs revenue implications of the WTO E-commerce Moratorium on customs duties on electronic transmissions.

administrative and technical costs related to the collection of this revenue, which would reduce the net revenue collected. A [Policy Brief](#) published in 2023 by the International Chamber of Commerce (ICC) and the International Trade Center (ITC) highlights that the collateral costs of not renewing the E-commerce Moratorium are considerable and compelling, and include burdensome economic and administrative costs; direct tax on consumers and businesses; negative impact on digitally-enabled services, among others.

- The [joint report](#) prepared by the WTO, the OECD, the IMF, the World Bank Group and the UNCTAD also highlights that domestic taxes represent another way to collect revenue from digital trade that does not discriminate between domestically supplied and imported products, is more uniform across different products, and does not impose a tax burden on intermediate inputs used by domestic producers; such as through VAT and GST that typically apply uniformly and are based on consumption location. Indeed, a 2023 IMF [Note](#) points that broad-based nondiscriminatory VAT are preferable to tariffs, both from an economic efficiency and from a revenue standpoint - since the study shows that they can generate higher revenues - and they are easier to implement and administer.
- The [joint report](#) underscores that imposing customs duties on electronic transmissions would likely negatively affect those who can benefit the most from digital delivery or from the use of digital tools to trade, namely SMEs and women owned traders. Unlike VAT/GST which applies to final consumption, tariffs raise the cost of inputs for production, with implications for these business competitiveness³. Another [study](#), published by the OECD in 2019 already argued that the imposition of duties on electronic transmissions are likely to impact SMEs the most, and contribute to reductions in employment and welfare in developing countries. The study also points out that the elimination of the E-commerce Moratorium would diminish consumer welfare, since the companies that export digital products or services are expected to pass through the cost of the customs duties to consumers and producers that import them, which will eventually decrease their demand and affect the productivity and competitiveness of those producers - especially those located in developing countries. More recently, in October 2023, the OECD published a [working paper](#) with new empirical evidence that concluded that failure to renew the E-commerce Moratorium would result in greater policy uncertainty and less trade, and tariffs on electronic

³ The trade and competitiveness impact of potential customs duties on electronic transmissions would also depend on the structure of trade and tariffs and on commitments including in FTAs that affect the ability of economies to levy such customs duties.

transmissions would reduce domestic competitiveness. Adverse effects would be most pronounced for low-income countries and smaller firms. The OECD paper argues that, overall, evidence demonstrates that there is a strong case for the E-commerce Moratorium to be renewed.

- A [report](#) published in 2023 by the Trade Expert Group explores the impacts of the E-commerce Moratorium on women—including women-led or owned businesses, women working in the digital economy, as well as the effect on their livelihoods—and the possible consequences of the discontinuation of this trade policy. The study revealed that women use DDS to fuel their jobs and businesses, and that the E-commerce Moratorium has been instrumental in the adoption of digital services by women-led or owned businesses by keeping costs low, creating a level playing field for firms and workers in developing countries, and providing opportunities to participate in international markets. While the evidence collected is largely qualitative, it serves as an important reminder that trade policy has a direct impact on the lives of people everyday.

2.3. Why is the E-commerce Moratorium relevant for SMEs?

The E-commerce Moratorium is particularly relevant for SMEs due to its impact on facilitating cross-border digital trade and reducing barriers to international market access. Some of the conclusions that can be drawn from the studies on the role of the E-commerce Moratorium in supporting the international activities of SMEs include:

Lowering Entry Barriers to Global Market Access: The E-commerce Moratorium is crucial for SMEs seeking global market access, reducing entry barriers by allowing them to engage in international trade without facing additional tariffs on electronic transmissions. This ensures that SMEs can reach a broader customer base and participate in the global economy more competitively. This is especially important for businesses in developing countries striving to overcome economic challenges. Introducing customs duties on electronic transmissions could also create complex administrative and compliance procedures for businesses. This might involve additional paperwork, delays, and increased bureaucracy, making cross-border transactions more cumbersome.

Digital Entrepreneurship and Flow of Data: SMEs, often characterized by innovation and agility, play a substantial role in the digital economy. By supporting the free flow of data across borders, the E-commerce Moratorium fosters an environment where digital entrepreneurship can thrive, allowing SMEs to leverage digital platforms for business expansion. Many SMEs are involved in the production and distribution of digital services and products, and the E-commerce Moratorium ensures that these businesses can operate on a global scale without

being burdened by customs duties on electronic transmissions. This is particularly relevant as SMEs increasingly rely on data-driven services and technologies, and depend on cross-border data exchanges for their business operations, as well as for educational and research purposes. Such digital resources may become more expensive if custom duties were applied, potentially limiting access, particularly in regions with fewer resources.

Innovation and Adaptability to Technological Advancements: As technology evolves, SMEs need to adapt and incorporate digital tools and services into their operations. Customs duties could hinder the free flow of information and collaboration across borders, potentially slowing down the pace of innovation as businesses face additional barriers to accessing global knowledge and resources. The E-commerce Moratorium allows SMEs to seamlessly integrate these advancements without facing additional financial burdens.

3. Methodology: a report based on qualitative evidence

In formulating the business case, our methodology relies on a combination of qualitative evidence, literature review and analysis. Qualitative evidence has been collected through interviews with small entrepreneurs in Ghana (Ahmed and Theophilus) and the founders of an SME platform in Turkey (Umit and Basar). Incorporating these personal narratives is important to gain a nuanced understanding of the real-world impacts of this issue. Qualitative evidence provides a valuable human perspective, offering insights into the challenges faced by entrepreneurs like Ahmed, Theophilus, Umit and Basar.

This qualitative information was complemented by an extensive review of existing literature, encompassing relevant studies, reports, and scholarly articles. Additionally, a comprehensive analysis of the available data further strengthens our approach. This triangulation of qualitative evidence, literature review, and data analysis aims to ensure a comprehensive and well-rounded foundation for our business case, striking a balance between qualitative insights and a robust understanding of the existing body of knowledge in the field.

Objective of the interviews

The objective of the interviews was to gather valuable insights from small and medium entrepreneurs regarding the role of digital products and services in their daily operations. Through a series of targeted questions, the goal was to understand the extent to which these entrepreneurs develop or utilize digital tools, and the crucial role these tools play in their day-to-day business activities.

The initial set of questions focused on understanding the respondents' business operations, purpose, and the contextual factors influencing their functionality. The interviews aimed to gather information about the nature of their products or services, production processes, and details regarding the size of their business. Additionally, the interviews explored the composition of their customer base, their geographic locations, and the alignment of these businesses with the cultural context of their respective countries. Overall, these questions sought to provide a holistic view of their business model, positioning, and resilience in the face of external factors, including the challenges brought about by the COVID-19 pandemic.

A second set of questions focused on establishing the relevance of digital products or services in the entrepreneurs' operations. The respondents were prompted to share whether their business activities involved the development or utilization of digital products, such as software or apps, and to what extent these tools were integral to their daily operations. This initial inquiry aimed to provide a foundational understanding of the entrepreneurs' reliance on digital technologies in the contemporary business landscape.

Subsequent questions delved into the potential impact of tariffs on digital products and services, exploring the entrepreneurs' perspectives on how such financial measures could affect costs, profit margins, and overall business strategies. The objective was to uncover the potential challenges and obstacles these entrepreneurs might face in adapting to increased costs for essential digital products and services, thereby informing a broader understanding of the implications of policy decisions on small entrepreneurs. The list of questions is annexed in the Appendix.

Limitations

While qualitative evidence, such as the insights gathered from Ahmed and Theophilus' interviews, offers a personalized understanding of specific business challenges, it is crucial to acknowledge its inherent limitations when constructing a business case.

Qualitative evidence is subjective and may not be representative of a broader population or market trends. The information obtained through interviews is based on personal experiences and perceptions, introducing the potential for bias and selective memory. Biases may also arise from the interviewers' framing of questions, specific inquiries and guidance (for instance on the E-commerce Moratorium and its potential implications), that could inadvertently shape responses.

Additionally, qualitative evidence lacks the statistical rigor and generalizability of more extensive research methodologies, making it challenging to draw universally applicable

conclusions. The reliance on a single individual's account may overlook diverse viewpoints and variations within the target audience or industry. Moreover, gaps in information may emerge when certain aspects of the business or industry are not explicitly probed during the interview. To mitigate these limitations, the qualitative evidence collected in this study could be complemented at a later stage with quantitative data, expert opinions, and a comprehensive analysis of the broader business landscape.

4. Qualitative Evidence: the E-commerce Moratorium through the eyes of SMEs in Ghana and Turkey

In exploring the potential impact of lifting the WTO E-commerce Moratorium on SMEs, we turned to the perspectives of entrepreneurs from Ghana and Turkey. The interviews offered valuable insights into the complexities faced by small businesses reliant on digital tools and services, shedding light on the intricate relationships between their businesses and the digital products and services that could be affected by potential tariffs on electronic transmissions.

Collectively, these interviews underline the interconnectedness of global trade in the digital era and the consequences of policy decisions on SMEs. The experiences shared by these entrepreneurs emphasize the delicate balance between affordability, competitiveness, and the imperative for regulatory frameworks that foster a fair and inclusive digital economy. The qualitative evidence from Theophilus Bonney, Ahmed Partey, and Umit Oncel with Basar Ceylan converges to reveal common threads while also showcasing unique challenges.

- ***Theophilus Bonney, Ghanaian video game developer:*** Theophilus, co-founder of Bawala Studio, shared insights into the challenges faced by a micro video game developer in Ghana. Theophilus is involved in the development of video games, specifically "Cowries Adventure" and a second one currently in progress. These games serve as digital products that showcase African beliefs and culture through engaging storytelling and interactive gameplay. Besides game development, Theophilus offers graphic design and animation services. His business relies heavily on digital tools, including game-making software and animation applications. The qualitative evidence obtained through the interview highlights the potential consequences of tariffs, such as increased costs for essential software, impacting profitability and limiting innovation.
- ***Ahmed Partey, Ghanaian independent digital artist:*** Ahmed, a visual artist specializing in both traditional and digital art, discussed the impact of tariffs on digital tools crucial for his art creation and online sales. He produces digital art pieces that he sells online as Non-Fungible Tokens (NFTs). These digital artworks represent a unique form of

ownership and authenticity in the digital realm. Ahmed also engages in commissioned works as a graphic designer and also plans to teach others the process of transitioning traditional art to the digital sphere, including selling art as an NFT. The interview underscores the delicate balance between pricing, competition, and access to essential software for artists, particularly in the context of a devalued currency. Ahmed's experience illustrates the potential challenges of navigating the global digital marketplace as an African artist.

- **Umit Oncel and Basar Ceylan, co-founders of Akilli KOBİ in Turkey:** Umit and Basar are co-founders of a platform supporting +800 Turkish SMEs in their digital transformation journey by providing educational content and connecting them with +800 local technology providers. In the interview, they provided insights into the digital ecosystem of Turkish businesses. There are more than 20 different sectors represented in Akilli KOBİ, the top 5 sectors being: Information Technologies, Education, Energy, Financial and Insurance Services; and Manufacturing Industry. While acknowledging the potential impact of tariffs, they expressed a nuanced view, recognizing the need for regulation in the digital space. Their perspective highlights the evolving nature of digital businesses and the importance of correct regulations for a smooth transition.

The insights gathered from interviews with **Theophilus Bonney** and **Ahmed Partey**, both micro-entrepreneurs from Ghana, reveal a compelling narrative about the challenges and aspirations of small businesses in the digital landscape. Despite their different ventures—one a video game developer and the other an NFT artist—common themes emerge, providing a nuanced understanding of the impact of lifting the E-commerce Moratorium on SMEs in Ghana.

Both entrepreneurs underscored the pivotal role of digital tools in their creative processes, emphasizing their reliance on various software applications for graphic design, animation, and digital art creation.

Theophilus relies on various digital tools in his game development venture, including game-making software like Construct 3, animation software such as Rokoko Studio, and design tools like Adobe Illustrator, Adobe Photoshop, Unreal Engine, Mixamo, Cinema 4D, and Maya, among others.

Ahmed utilizes various apps crucial for digital artists, including Pinterest for inspiration, Procreate for digital drawing, Photoshop, Adobe Illustrator, Blender for 3D art, and MetaMask for handling cryptocurrency transactions related to NFT sales.

Both entrepreneurs heavily rely on these digital tools and services for their day-to-day operations, emphasizing their importance in the creative and digital landscape. **If custom**

duties were applied to electronic transmissions, potentially impacting the cost of digital products and services, both **Theophilus** and **Ahmed** foresee significant challenges that would result in the need to adjust their business models and strategies.

Theophilus highlighted the challenge of already high software costs, especially in dollars, and the significant devaluation of the Ghanaian Cedi. If custom duties are applied to game-making software (Construct 3) and animation software (Rokoko Studio), **Theophilus** expects a rise in the cost of these software which would directly impact Bawala Studio's operational expenses.

"Unfortunately, it is already difficult for us in Ghana to buy these softwares with their current prices. They are in dollars and their price in Ghanaian Cedi has doubled in the last year, because it is a highly devalued currency."

Theophilus Bonney, Ghanaian video game developer.

Similarly, **Ahmed** emphasized the essential role of multiple apps in his creative process and worries tariffs would significantly affect the costs of these digital art creation tools, potentially disrupting the cost-effectiveness of producing digital artworks.

"There is already a price barrier because these apps are in dollars, and the Ghanaian Cedi is a devalued currency; this will add an additional one. (...)Most visual artists in Ghana wouldn't be able to afford this if subject to tariffs".

Ahmed Partey, Ghanaian independent digital artist.

The potential additional fees from tariffs might force **Bawala Studio** to allocate more budget to cover these increased costs. This could potentially strain their financial resources, impacting the overall profitability of their game development venture. The lack of transparency in understanding the rules around tariffs adds a layer of complexity to budget planning.

"How would a small entrepreneur like me know what the rules are? There is no transparency."

Theophilus Bonney, Ghanaian video game developer.

If allocating more budget becomes infeasible, **Bawala Studio** might need to adjust its pricing strategy. However, if the price of their video games increases, there is a concern about losing competitiveness. Resorting to pirated versions of software is another potential option, but it raises its own concerns. Apart from being illegal, it could also affect the quality of the work and put them at a competitive disadvantage in the market. **Ahmed**, in turn, pointed out that the fixed pricing structure in the NFT market and the expectations of buyers could limit his ability to pass on increased costs to customers. The possibility of exploring alternative, potentially lower-cost tools or resorting to pirated versions of software raises concerns for **Ahmed** as well.

"Nobody really wishes to use pirated versions of these softwares. A virus or bug could affect the work of a year. And we don't want to compromise our quality. So we would have to increase our prices."

Theophilus Bonney, Ghanaian video game developer.

"Buyers expect to buy cheap from you because you are African. If your costs go up, how would I sell? We already struggle with that."

Ahmed Partey, Ghanaian independent digital artist.

In summary, both **Theophilus** and **Ahmed** face common challenges related to the potential increase of their production and development costs and concerns about maintaining competitiveness and innovation in their respective fields due to the application of custom duties on electronic transmissions. As entrepreneurs, they would need to navigate these challenges, potentially adjusting their pricing strategies or seeking alternative tools which can affect their competitiveness, innovation, and the ability to reach a global audience — crucial considerations for their overall business strategies.

On the other hand, the interview with **Umit Oncel and Basar Ceylan** presented a different perspective on the potential impact of lifting the WTO E-commerce Moratorium on the **development of the local digital ecosystem** in Turkey, particularly on SMEs involved in digital transformation through platforms like **Akilli KOBİ** (i.e. "Smart SME"). In this case, commercial transactions in the platform primarily involve Turkish companies, as the purpose of the platform is to connect the 800+ Turkish SMEs in the network with +800 local technology providers. However, the discussions acknowledge the reliance on both global and local technologies within the **Akilli KOBİ** network. SMEs leverage a mix of international and domestic digital products and services. Turkish developers, in turn, also rely on inputs such as imported software and applications, emphasizing the interconnected nature of the global digital economy.

While expressing a general understanding of a government's need to collect revenues, including through tariffs, **Umit and Basar** stressed the importance of balanced, transparent, and effective policies regarding digital products. Their insights suggest a nuanced perspective, acknowledging the need for fair regulations that take into account the practical needs of businesses to enable a smooth digital transition, without imposing undue burdens on SMEs.

The interview suggests that, **if custom duties were applied to electronic transmissions**, SMEs within **Akilli KOBİ**'s network might face challenges similar to those highlighted by Theophilus

and Ahmed, depending on the scale of their operations and their adaptability margins. For some, adjustments in their business operations and overall business strategy would be inevitable if faced with tariffs on electronic transmissions. Increased costs associated with digital products and services could necessitate pricing adjustments, potentially affecting profit margins and competitiveness.

"Tariffs could lead to price increases, impacting businesses that have built their strategies around existing cost structures."

Umit Oncel, co-founder of Akilli KOBİ.

This understanding was confirmed in the findings of the online survey of SMEs in Akilli KOBİ's network on the perceived impacts of the application of custom duties to electronic transmissions carried out after the interview (see Box 1).

"Having to increase prices could put my company at a disadvantage in competition and may lead to a decline in sales."

Turkish Micro Enterprise in the services sector.

"Our profit margin is already low, so if this new tax is added, we'll struggle significantly in sales."

Turkish Micro Enterprise in the Wholesale and Retail Trade sector.

Rising sale prices not only jeopardizes the sales outlook for enterprises but also has a direct impact on consumer welfare. As mentioned, companies reliant on digital products or services are likely to transfer the burden of customs duties directly to consumers. This, in turn, is anticipated to diminish consumer demand, subsequently influencing the productivity and competitiveness of producers, particularly those situated in developing countries.

"We purchase multiple software licenses for each student. If customs duties impose additional costs, it wouldn't be possible to absorb this without reflecting it in the educational fees."

Turkish Medium-sized Enterprise in the Education sector.

"Potential business opportunities could be lost due to the pricing strategies of competing countries' services."

Turkish Micro Enterprise in the services sector.

Moreover, the added costs might require them to explore alternative solutions or technologies that align with their budget constraints, impacting their digital transformation journey. These adjustments would not only affect the cost dynamics but also influence the overall strategic approach of these SMEs, urging them to reevaluate their technological choices and potentially adopt more cost-effective solutions.

"If taxes become too high, we might be forced to stop using certain software."

Turkish Medium-sized Enterprise in the Agriculture and Livestock sector.

Box 1: Online survey of SMEs in Akilli KOBİ's network on the perceived impacts of the application of custom duties to electronic transmissions

Background

The survey was carried out by the Smart SME platform (Akilli KOBİ), during the period December 2023 to January 2024. The questionnaire was filled out by 96 Turkish SMEs, of which 47 were Micro Businesses (1-9 employees), 42 Small Businesses (10-49 employees) and 7 Medium-sized Enterprises (50-249 employees).

Findings

The first observation of the survey is that digital inputs are an integral part of operations and crucial for SMEs.

In the sample, 78% of the firms report that they use Digitally Delivered Products or Services (DDPoS) in the business day to day operations, and around 30% of firms both report that they are in the business of developing DDSoP or that their product or service relies on DDPoS. Only 7% of the firms replied that they neither use nor produce DDPoS.

Of the 97 firms in the sample, 87 (89 %) report that DDSoPs are crucial to their business, while only 10 firms report that it is not.

The second observation in the survey is that profit margins are slim, and, therefore, increases in costs will have to be passed through to customers and will hurt business.

Two thirds of the firms in the sample (71 firms) think that the price of the DDSoP they use in their business would increase as a result of imposing tariffs and, except for 10 firms whose

profit margins are sufficient to absorb increased costs, the remaining firms answered that they would need to make adjustments to their business strategy.

36 firms offered additional comments on what potential challenges or obstacles they foresee in adapting to potential increased costs for these essential digital products/services and, overall, their answers suggested that the increase in costs resulting from imposing tariffs would lead to lower profit margins, and these increases in costs have to be passed through to customers through price increases which then are expected to lead to a decrease in competitiveness and sales. The following comment summarizes these firms' perception of the impacts of the application of custom duties to electronic transmissions: *"Things are already challenging for us. Instead of opening up opportunities, they're creating new obstacles."*

Four of the firms that replied that their profit margins are sufficient to absorb the potential increased costs without altering usage patterns of DDPoS commented that there would still be challenges. One of the firms affirmed: *"An increased cost exists that will affect all my products at some point in the process"*.

The full analysis of the survey can be found in the Appendix.

In all cases, as revealed through their interviews, while **the COVID-19 pandemic** presented challenges for many businesses worldwide, it also created opportunities for those engaged in digital and online sectors.

For **Ahmed**, for instance, the internet became a crucial avenue to connect with potential buyers. People, confined to their homes during lockdowns, showed increased interest in purchasing digital art. In the case of **Theophilus**, the pandemic also acted as a catalyst for the initiation and growth of their creative venture.

The case of **Umit and Basar**, co-founders of **Akilli KOBİ**, reflects the transformative influence of the pandemic on the digital landscape and the imperative for businesses to embrace digital solutions. As businesses faced unprecedented challenges during lockdowns and social distancing measures, the demand for digital tools and services surged. Akilli KOBİ, their platform designed to guide SMEs through their digital transformation, saw increased traction as companies sought to adapt to the new normal. Umit and Basar describe the platform as a *"lighthouse guiding businesses in the post-pandemic era"*, emphasizing the significant role it played in helping SMEs navigate the complexities of digitization.

5. Conclusion: potential impacts of lifting the WTO E-commerce Moratorium on SMEs

This concluding section summarizes the potential impacts of lifting the WTO E-commerce Moratorium on SMEs, outlining key insights derived from our case studies. Grounded in qualitative evidence collected through interviews with entrepreneurs in Ghana and Turkey, this section takes into account the perspectives gained from real-world experiences. The significance of this qualitative evidence cannot be overstated, as it provides a human context and an in-depth understanding of the daily challenges faced by SMEs in the digital realm.

In general, it is observed that, if countries were to start imposing customs duties on electronic transmissions, small businesses and entrepreneurs —especially those in developing countries— would find it more challenging to participate in the global digital marketplace. The added cost of customs duties disproportionately affects SMEs —that are usually less likely to be able to absorb increased costs than bigger enterprises. This ultimately limits not only the SMEs' ability to compete on a global scale, but also potentially hinders efforts to develop a strong local digital ecosystem —as many SMEs rely on the import and export of inputs delivered by electronic means.

Bawala Studio: Ghanaian Video Game Developers

- Consider Theophilus Bonney, motion designer and co-founder of Bawala Studio, a micro video game developer in Ghana, who needs to purchase specialized software from a company located abroad, perhaps in North America or Asia. This software is crucial for the development of the video game they are creating, portraying African beliefs and culture through a main character fighting for freedom. Their ambition is to showcase the quality and uniqueness that Ghana, in particular, and Africa, in general, can offer the world.
- **Impact of lifting the WTO E-commerce Moratorium:** If countries were allowed to impose tariffs on electronic transmissions, it would significantly impact Bawala Studio's development process by potentially limiting access to cutting-edge tools or making it difficult for them to showcase their video games internationally.
 - *Tariffs on the import of electronic transmissions imposed by Ghana would increase development costs and slowed innovation:*
 - If Ghana decided to apply tariffs on the imports of electronic transmissions (i.e. to the software that Bawala Studio is purchasing from abroad), Bawala Studio would have to pay additional fees, making the

overall cost of importing the necessary software for game development higher. Bawala Studio would have to allocate more budget to cover these additional fees, potentially impacting the overall profitability of their game development venture. If allocating more budget proves to be unfeasible, Bawala Studio would need to adjust its pricing strategy, which could imply a loss of competitiveness.

- Due to their limited budget and the effect of an unfavorable exchange rate, higher costs for essential software could also limit Bawala Studio's access to the latest tools and technologies. Indeed, resorting to alternative lower-cost tools or pirated versions of software could be a necessity to continue in business, which could affect the quality of his work and put him at a competitive disadvantage in the market. Ultimately, this might slow down the innovation and quality of their games, putting them at a disadvantage compared to developers in countries where such tariffs do not exist.
- From a broader perspective, tariffs on electronic transmissions could stifle the growth of the video game development industry in Ghana. Small developers like Bawala Studio might face barriers to accessing the global market and even collaborating with international partners, hindering the overall progress of the local gaming sector.
- *Tariffs on the import of electronic transmissions imposed by other countries would create increased costs for buyers:* Bawala Studio wants to sell their video games to countries all over Africa and other continents, so if those countries start applying tariffs on the import of electronic transmissions (i.e. to a video game from a developer in Ghana that a Kenyan buyer is trying to purchase), it would mean that international buyers would have to pay additional fees when purchasing Bawala Studio's video games. This could make their products more expensive for customers abroad, potentially reducing sales and limiting the global reach of their creative work.
- *Tariffs on the export of electronic transmissions imposed by Ghana would create a competitive disadvantage for Bawala Studio:* Similarly, if Ghana started applying tariffs on the export of electronic transmissions (i.e. to the video games that Bawala Studio sells abroad), other video game developers from countries without such tariffs might have a pricing advantage, making their video games more attractive to buyers worldwide. Bawala Studio could face challenges in

competing on a level playing field, despite the quality and uniqueness of their work.

Ahmed Partey: Ghanaian NFT Artist

- Consider Ahmed Partey, a talented NFT (Non-Fungible Token) artist from Ghana who creates unique digital artworks. NFTs are digital assets that represent ownership or proof of authenticity of a digital item, such as art. He sells most of his NFT art to persons located in the US and aspires selling his art to enthusiast buyers around the world, including countries in Europe, South America and Asia.
- **Impact of lifting the WTO E-commerce Moratorium:** If countries were allowed to impose tariffs on electronic transmissions, it would potentially impact Ahmed's ability to showcase and sell his art internationally.
 - *Tariffs on the import of electronic transmissions imposed by Ghana would create a competitive disadvantage for Ahmed:* If Ghana decided to apply tariffs on the imports of electronic transmissions (i.e. to the software that Ahmed is purchasing from abroad), similarly to Bawala Studio, Ahmed would have to pay additional fees, making the overall cost of importing the necessary software for digital art making higher. He would have to allocate more budget to cover these additional fees –potentially impacting the overall profitability of his business–, resort to alternative lower-cost tools –which could affect the quality of his work–, or adjust his pricing strategy –which could imply a loss of competitiveness.
 - *Tariffs on the import of electronic transmissions imposed by other countries would create increased costs for buyers:* For instance, if countries in South America started applying tariffs on the import of electronic transmissions (i.e. to the digital art from an artist in Ghana purchased by a Brazilian buyer), it would mean that international buyers would have to pay additional fees when purchasing Ahmed's NFT art. This could make his art more expensive for customers abroad, potentially reducing sales and limiting the global reach of his creative work.
 - *Tariffs on the export of electronic transmissions imposed by Ghana would create a competitive disadvantage for Ahmed:* If Ghana started applying tariffs on the export of electronic transmissions (i.e. to Ahmed's digital art that is sold abroad), other artists from countries without such tariffs might have a pricing

advantage, making their digital art more attractive to buyers worldwide. Ahmed could face challenges in competing on a level playing field, despite the quality and uniqueness of his work.

- *Tariffs could limit cultural exchange:* Tariffs could also hinder the cultural exchange facilitated by the global digital art community. Ahmed's art, representing Ghanaian culture and perspectives, might be less accessible to a diverse international audience, impacting the potential for cultural understanding and appreciation.

In both examples, keeping the WTO E-commerce Moratorium helps these Ghanaian entrepreneurs by preventing the imposition of tariffs on electronic transmissions. This allows them to engage in cross-border trade more freely, reach a broader audience, and access the digital tools and resources they need for their creative and business endeavors without facing unnecessary barriers. This, in turn, fosters a more inclusive and accessible global digital marketplace, allowing creative entrepreneurs to share their talents with the world and participate in the global digital economy.

Akilli KOBİ: Turkish Smart SME Platform

- Consider the case of Umit Oncel and Basar Ceylan, co-founders of Akilli KOBİ, an SME platform in Turkey dedicated to connecting Turkish SMEs with local technology providers to facilitate their digitization process. While the trade in this case primarily involves Turkish companies, it is crucial to underscore that Turkish developers heavily rely on inputs such as imported software and applications. Lifting the WTO E-commerce Moratorium would therefore inevitably impact the digital ecosystem development within Turkey.
- **Impact of lifting the WTO E-commerce Moratorium:** If countries were allowed to impose tariffs on electronic transmissions, the repercussions for Akilli KOBİ and the Turkish digital ecosystem could be significant. Although the transactions occur domestically, the utilization of imported software and digital tools by Turkish developers makes the Moratorium's preservation essential for sustaining local digital innovation and growth.
 - *Tariffs on the import of electronic transmissions imposed by Turkey would lead to increased costs and hinder digital development:* For instance, if Turkey decided to apply tariffs on the import of electronic transmissions (i.e. to the purchase of software or other digital inputs by Turkish developers from abroad), it would result in additional fees, elevating the overall cost of these essential

digital tools. These increased costs place a burden on SMEs seeking digitalization through Akilli KOBİ, limiting their access to essential tools for digitalization and potentially impeding their progress and innovation in the digital space given the potential constraints on budget allocation. Higher costs could even hinder the ability of Akilli KOBİ to offer cost-effective digital solutions to Turkish SMEs, reducing its effectiveness in supporting SMEs in their digital transformation journey.

- *Tariffs on the export of electronic transmissions imposed by Turkey would create a competitive disadvantage for Akilli KOBİ and other Turkish SMEs:* If Turkey started applying tariffs on the export of electronic transmissions (i.e. to the digital products or services that Akilli KOBİ or any SME in its network is selling abroad), the platform or SMEs within its network might face challenges competing with counterparts in countries without such tariffs that can offer similar digital products or services at a lower price. This pricing disadvantage could make it harder for Turkish enterprises operating in the digital space to compete effectively in international markets and to attract international clients. The increased costs for international buyers might discourage them from purchasing Turkish digital products or services, leading to a decline in demand. This, in turn, could hinder the growth and recognition of Turkey's digital capabilities on a global scale.
- *Tariffs on the import of electronic transmissions imposed by other countries could also present challenges for Akilli KOBİ and other Turkish enterprises:* Similarly, if other countries were to apply tariffs on the import of electronic transmissions, it would increase the costs for these transactions for Turkish enterprises seeking to export their digital products or services. For instance, if a foreign buyer is attempting to purchase digital products or services from a Turkish enterprise, the imposition of tariffs by the buyer's country would mean additional fees for the international transaction. These added expenses could make Turkish digital products or services more expensive for customers abroad and therefore less attractive, potentially diminishing competitiveness and limiting the global reach of their offerings.
- *Tariffs could directly impact consumer welfare:* Besides leading to increased costs, creating a competitive disadvantage and hindering digital development, the imposition of customs duties on electronic transmissions carries an additional collateral cost —diminishing consumer welfare. Companies reliant on digital products or services are expected to pass through the cost of the customs

duties to consumers, which is equivalent to imposing a direct tax on them. This, in turn, could eventually decrease demand, and affect the productivity and competitiveness of these firms.

Unlike the previous cases, this example illustrates that the E-commerce Moratorium not only facilitates international trade but also plays a crucial role in supporting local development efforts in the digital sector. Akilli KOBİ's mission to foster digitalization among Turkish SMEs relies on a seamless and cost-effective access to global digital tools. The continuation of the E-commerce Moratorium is therefore vital to maintaining an environment conducive to innovation, ensuring Turkish developers and technology providers connected through Akilli KOBİ can contribute actively to the global digital landscape while assisting local businesses in their digital transformation journey. In contrast, lifting this 25-year-old policy could impact Turkish SMEs' sales and global market reach, by potentially creating a competitive disadvantage if tariffs on electronic transmissions were to be imposed.

Appendix

Interview questions for Ahmed Partey and Theophilus Bonney (Ghana)

These questions aim to explore the intricate relationship between entrepreneurs, their businesses, and the digital products and services impacted by the “E-commerce Moratorium”. Additionally, the aim of these interviews is to shed light on potential challenges arising from changes in the cost structure due to the introduction of tariffs on electronic transmissions.

The interview with Ahmed Partey was conducted on Dec. 11, 2023, via Google Meet, and that with Theophilus Bonney on Dec. 14, 2023, via Zoom.

1. Introduction to the entrepreneurship

First, can you tell us a little bit about your business?

- 1.1. What is it that you do/ What products or services do you sell?
- 1.2. How do you deliver these products or services?
- 1.3. How long have you been in business?
- 1.4. Do you employ any individuals? How many?
- 1.5. What drives your business? What are your ambitions and motivations?
- 1.6. In what ways does your business align with the cultural context of your country? How do your roots and culture affect your work?
- 1.7. Who are your customers? Where are your customers located? Do you sell abroad or aspire to?
- 1.8. Did the COVID-19 pandemic affect your business? How or in which ways?

2. Connection to E-commerce Moratorium

Second, let's talk a little about the digital products and services that are affected by the so called “E-commerce Moratorium” and how they are connected to your business;

- 2.1 Do you develop or utilize (for the activities in your business) digital products or digitally delivered services (such as software or apps), or do your products or services rely on them?
- 2.2. If so, which specific digital products or digitally delivered services do you produce or use?
- 2.3. How crucial are these apps or software to your business' day-to-day operations?
- 2.4. Were there any changes in your usage of these services during the pandemic?

3. Impact of Tariffs in your business

Third, if tariffs were to be applied to the digital products or digitally delivered services, leading to a potential increase in the prices of the apps or software that you develop or use:

- 3.1 Do you think the application of such tariffs would affect the cost of the digitally delivered services you use? If yes, how do you think it would affect your business' budget and operations?
- 3.2. How do you think the application of a tariff to the digital products or digitally delivered services you provide would affect your business?
- 3.3. Are your profit margins sufficient to absorb these potential increased costs without altering your usage patterns?
- 3.4. If not, what adjustments would your business need to make, and how might this impact your overall business strategy?
- 3.5. What potential challenges or obstacles do you foresee in adapting to potential increased costs for these essential digital products/services?

Interview questions for Umit Oncel and Basar Ceylan (Turkey)

These questions aim to explore the intricate relationship between entrepreneurs, their businesses, and the digital products and services impacted by the “E-commerce Moratorium”. Additionally, the aim of these interviews is to shed light on potential challenges arising from changes in the cost structure due to the introduction of tariffs on electronic transmissions.

The interview with Umit and Basar was conducted on Dec. 12, 2023, via Google Meet.

1. Introduction to the entrepreneurship

First, can you tell us a little bit about your business?

- 1.1. How does Akilli KOBİ work and what is its purpose?
- 1.2. What products or services do you sell or deliver?
- 1.3. How do you deliver these products or services?
- 1.4. How long have you been in business?
- 1.5. Do you employ any individuals? How many?
- 1.6. How many SMEs participate in the platform? What sectors do they represent?
- 1.7. Who are your customers? Where are your customers located?
- 1.8. In what ways does your business align with the cultural context of your country?
- 1.9. Did the COVID-19 pandemic affect your business? How or in which ways?

2. Connection to E-commerce Moratorium

Second, let's talk a little about the digital products and services that are affected by the so called “E-commerce Moratorium” and how they are connected to your business or to the business in Akilli KOBİ's network:

- 2.1. Do you/they develop or utilize (for the activities in your business) digital products or digitally delivered services (such as software or apps), or do your/their products or services rely on them?
- 2.2. If so, which specific digital products or digitally delivered services do you/they produce or use?
- 2.3. How crucial are these apps or software to your/their business' day-to-day operations?
- 2.4. Were there any notable changes in your/their usage of these services during the pandemic?

3. Impact of Tariffs in your business

Third, if tariffs were to be applied to digital products or digitally delivered services, leading to a potential increase in the prices of the apps or software that you or the business in Akilli KOBİ's network develop or use:

- 3.1. Do you think the application of such tariffs would affect the cost of the digitally delivered services you/they use? If yes, how do you think it would affect your/their business' budget and operations?
- 3.2. How do you think the application of a tariff to the digital products or digitally delivered services you/they provide would affect your/their business?
- 3.3. Are your/their profit margins sufficient to absorb these potential increased costs without altering usage patterns?
- 3.4. If not, what adjustments would your/their business need to make, and how might this impact your/their overall business strategy?
- 3.5. What potential challenges or obstacles do you foresee in adapting to potential increased costs for these essential digital products/services?

Akilli KOBİ online survey results (Turkey)

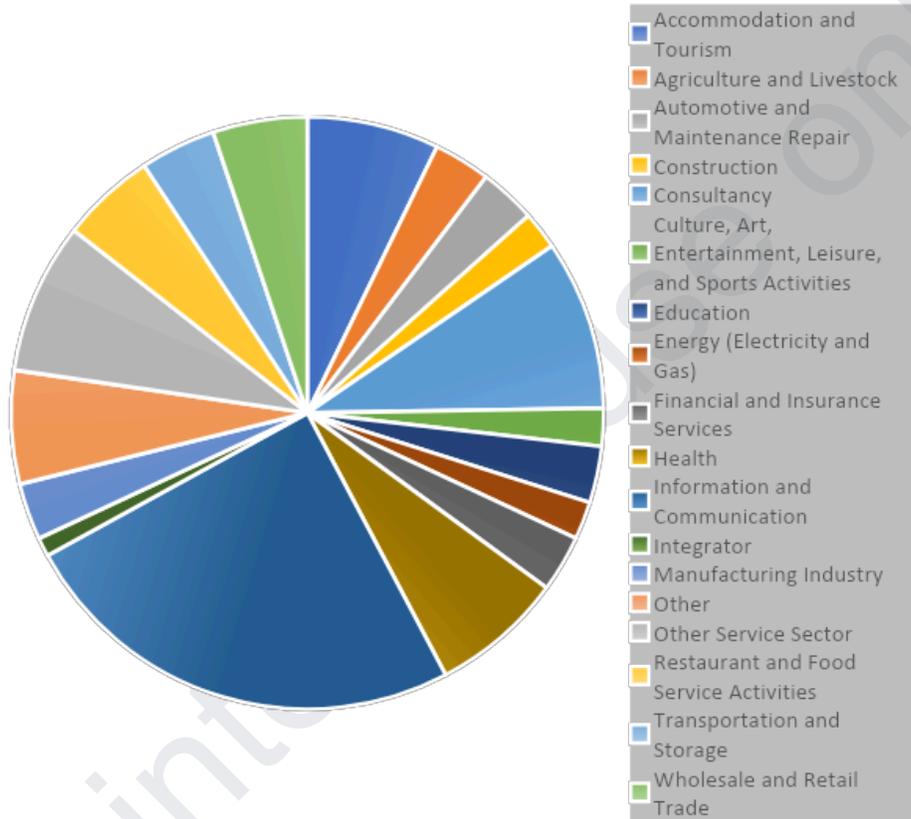
Background

Akilli KOBİ submitted at our request an online survey on the perceived impacts of the application of custom duties to electronic transmissions to Turkish SMEs and technology providers within their network.

The survey was carried out by Akilli KOBİ during the period December 2023 to January 2024. The questionnaire was filled out by 104 Turkish firms, of which 7 were large (> 250 employees) and one was unidentified, so they were omitted from the final results; which left us with a sample of 97 SMEs, of which 48 were Micro Businesses (1-9 employees), 42 Small Businesses (10-49 employees) and 7 Medium-sized Enterprises (50-249 employees).

Since the mission of the Smart SME platform is “to support SMEs in all aspects of their digitization process”, firms from the Information and Communication sector made up the largest share of the sector representation (24 firms), but in general, there was a wide representation of firms from 15 different sectors represented in the survey.

Sector Representation in Survey



As is the case with SMEs in general in the economy, most firms in the sample produce and sell only domestically, in this case within Turkey (61 firms/ 63%), 28 cater to both the domestic and international market, 8 firms in the sample are mainly oriented to selling internationally.

Findings

The first observation of the survey is that digital inputs are an integral part of operations and crucial for SMEs.

In the sample, 78% of the firms report that they use Digitally Delivered Products or Services (DDPoS) in the business day to day operations, and around 30% of firms both report that they are in the business of developing DDSoP or that their product or service relies on DDPoS. Only 7% of the firms replied that they neither use nor produce DDPoS.

Of the 97 firms in the sample, 87 (89 %) report that DDSoPs are crucial to their business, while only 10 firms report that it is not.

The second observation in the survey is that profit margins are slim, and, therefore, increases in costs will have to be passed through to customers and will hurt business.

Two thirds of the firms in the sample (71 firms) think that the price of the DDSoP they use in their business would increase as a result of imposing tariffs, of which only 10 report that they have profit margins that are sufficient for them to continue using these DDSoP with our having to make adjustments to their business strategy. The remaining 61 firms answered that their profit margins are insufficient to absorb these potential increased costs and would need to make adjustments to their business strategy.

The firms were allowed to comment on what potential challenges or obstacles they foresee in adapting to potential increased costs for these essential digital products/services. For the firms that would have to make changes to their business strategy, the answers of the 36 firms that added a comment suggested that the increase in costs resulting from imposing tariffs would lead to lower profit margins and these increases in costs have to be passed through to customers through price increases which then are expected to lead to a decrease in competitiveness and sales. Below are some of their comments:

- *"Having to increase prices could put my company at a disadvantage in competition and may lead to a decline in sales."*
- *"Potential business opportunities could be lost due to the pricing strategies of competing countries' services."*
- *"It can negatively impact competitiveness. It may necessitate a search for more cost-effective products/services and subsequently require a larger workforce."*
- *"One of the biggest challenges will be the inability to compete internationally due to increasing costs."*
- *"Even in Europe, sales may halt due to high prices following the exchange rate despite high prices."*
- *"The pressure of competition and customer satisfaction can be challenging for me."*
- *"Things are already challenging for us. Instead of opening up opportunities, they're creating new obstacles."*

- *"We purchase multiple software licenses for each student. If customs duties impose additional costs, it wouldn't be possible to absorb this without reflecting it in the educational fees."*
- *"Our profit margin is already low, so if this new tax is added, we'll struggle significantly in sales."*
- *"If taxes become too high, we might be forced to stop using certain software."*
- *"When we pass on the cost increases to our prices, our sales drop. We're going through a tough period. It really affects our business badly."*
- *"New taxes, increased taxes, they've always negatively impacted our advantages. This practice is no exception."*

Two firms that replied that their profit margins are sufficient to absorb the potential increased costs without altering usage patterns of DDPOs commented that this would be dependent on the rate. Other two firms in the same situation added that *"Even if my profit margin covers it, it will still pose a challenge, especially for my pricing policy"* and that *"An increased cost exists that will affect all my products at some point in the process"*.

Table 1: Sectors included in the sample

Accommodation and Tourism	7
Agriculture and Livestock	3
Automotive and Maintenance Repair	3
Construction	2
Consultancy	9
Culture, Art, Entertainment, Leisure, and Sports Activities	2
Education	3
Energy (Electricity and Gas)	2
Financial and Insurance Services	3
Health	7
Information and Communication	24
Integrator	1
Manufacturing Industry	3
Other	6
Other Service Sector	8
Restaurant and Food Service Activities	5
Transportation and Storage	4
Wholesale and Retail Trade	5

Table 2: Summary of replies to questions regarding the usage or development of digital products or digitally delivered services (DDSoP)

I utilize Digitally Delivered Products or Services for my business' day-to-day operations.	76	78%
The product or service I deliver relies on DDP or DDS	27	28%
I develop digital products or digitally delivered services (such as software or apps).	28	29
I do not develop or utilize digital products or digitally delivered services in my business	7	7%

Table 3: Replies to question How crucial are DDSoP in your business?

Highly crucial	54	55%
Somewhat crucial	33	34%
Not really crucial	10	10%

Questions for Akilli KOBIs network

1. In the context of your business' day-to-day operations, do you either develop or utilize digital products or digitally delivered services (such as software or apps), or do your products or services rely on them? *[more than one answer possible]*

- Yes, I develop digital products or digitally delivered services (such as software or apps).
- Yes, I utilize them for my business' day-to-day operations.
- Yes, my products or services rely on digital products or digitally delivered services.

- No, I do not develop or utilize digital products or digitally delivered services in my business.

2. If you answered yes to the previous question, how crucial are these digital products or digitally delivered services (such as software or apps) to your business' day-to-day operations?

- Highly crucial.
- Somewhat crucial.
- Not really crucial.

3. Do you export (sell abroad) your products or services?

- Yes, my business is mainly oriented to exports.
- Yes, I export some of my products or services.
- No, I do not export my products or services.

4. If tariffs (import or export duties) were applied to digital products or digitally delivered services, do you think it would affect the cost of the digital products or services you develop or use?

- Yes.
- No.

5. Are your profit margins sufficient to absorb these potential increased costs without altering usage patterns, or would you need to make adjustments to your business strategy?

- My profit margins are sufficient.
- I would have to make adjustments to my business strategy.

6. What potential challenges or obstacles do you foresee in adapting to potential increased costs for these essential digital products/services? *[optional, up to 200 words]*