



Early Consequences Regarding the Impact of Artificial Intelligence on International Trade

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ABSTRACT

The consequences of this new technology for international trade have recently garnered much attention, thanks to the growing interest in AI's effects on the economy and society. Given the current reevaluation of the advantages of globalization by the world's leading nations, the focus continues to be on the policies governing international commerce. Understanding and forecasting future trade patterns is a high priority for decision-making within and between nations. This is due to the fact that trade has a significant impact on employment, production, pricing, and wages. Even though conventional economic models are intended to be accurate forecasters, we investigate the prospect that Artificial Intelligence (AI) techniques can produce more accurate predictions and associations. In addition, we describe contextual AI algorithms that can be used to analyze trade patterns disrupted by unusual occurrences such as trade wars and pandemics. The fuel for the algorithms that can forecast, recommend, and categorize policies can only be provided by open-government data; therefore, having access to these data is vital. The information that was gathered for this study describes the economic elements usually linked with international trade transactions. Association Rules are used for grouping commodity pairs. Finally, models and their results are presented and then appraised in terms of the quality of their predictions and associations, with example policy implications provided. This paper explores the interlinkages between AI technologies and international trade and outlines key trade policy considerations for policymakers looking to harness AI technologies' full potential. Specifically, the paper focuses on China's efforts to develop its artificial intelligence (AI) industry.

Keywords: Trade policy, International Trade, Artificial Intelligence, Innovations, Data Flows, Imports and Exports

INTRODUCTION

There is a significant possibility that artificial intelligence (AI) will have a revolutionary effect on international trade. Already, particular applications in fields such as data analytics and translation services are helping to lower the barriers that exist in the way of trade. At the same time, there are obstacles in the development of artificial intelligence that international trade norms may address. One of these obstacles is improving worldwide access to data that can be used to train AI systems (Blind et al., 2017). The following is an overview of some of the most significant potential that artificial intelligence presents for trade, as well as those areas in which trade rules can aid and facilitate the development of AI.

Our understanding of the variables that cause trade and the implications of the free flow of goods and services

across national borders have been significantly advanced thanks to the lengthy history of international commerce. Despite this, the recent shocks to the free-trade regime call into doubt the accuracy of past predictions and their viability in the setting of significant trade disagreements. This article analyzes AI strategies appropriate for the context of international trade and tests their validity in creating high-quality estimates. The goal of this study is to answer the issues that have been presented here. Transparency is an essential component in the context of public decision-making. Recent technological breakthroughs in artificial intelligence (AI) and the democratization of data have contributed to its increased availability (Li et al., 2017).

AI is a general-purpose technology that can boost innovation, develop new value from data, and cut trade



costs. AI is a machine-based system that can make predictions, recommendations, or judgments affecting real or virtual worlds. AI systems differ in autonomy. For example, AI uses data to train algorithms and often coexists alongside software implanted in robots, autonomous automobiles, or IoT products (IoT). Intelligent assistants, translation, self-driving cars, medical diagnosis, and robotics use AI. Precision agriculture, manufacturing, and services use AI today. AI's economic and societal consequences are attracting more attention, as are trade policy and AI challenges. While the AI regulatory and policy environment (e.g., security, privacy, etc.) evolves, it is crucial to consider trade and AI challenges (Achar, 2018). This is particularly significant in current trade policy talks, such as the WTO's Joint Statement Initiative on e-commerce or regional trade agreements.

The fundamental purpose of the study is to identify methods that are most appropriate for economic forecasting, particularly in the context of international trade, assess their relevance using historical data on trade trends, and, wherever it is correct, use these methods.

SIGNIFICANCE OF THE STUDY

It is necessary to provide a definition of artificial intelligence before moving on to the topic of how AI will affect trade. To be more specific, there is a critical distinction between specific applications of artificial intelligence, such as chatbots, translation services, autonomous vehicles, and general applications of AI, which are defined as "systems capable of self-learning that can learn by experience with humanlike breadth and still outperform humans in all tasks." General artificial intelligence presents more significant existential concerns, such as how to match the aims of such a system with human own to prevent disastrous outcomes; yet, general AI is still a technology that has not yet been achieved and will not be developed for a very long time (Feng & Zhang, 2014).

To fully appreciate the potential impact that narrow AI could have on business, it is necessary first to examine its fundamental components for a moment. Narrow AI, in particular, is founded on machine learning, which uses vast quantities of data and complex algorithms to generate increasingly accurate forecasts regarding the future. For example, the data utilized for machine learning can either be supervised, in which the data are accompanied by associated information such as labels, or unsupervised, in which the data are presented in their raw form and require the discovery of patterns without prior prompting. This includes the process of reinforcement learning, in which machine-learning algorithms actively select their training material and can even generate their own (Brougham & Haar, 2018).

To initialize AI systems, these breakthroughs need to be used in the context of the business world, which requires enormous data sets. Quantity is essential in this context

because machine learning needs to factor in as many probable outcomes from the past as possible when making predictions about the future. This indicates that access to the less specific and irregular data in a dataset is essential.

AI FOR INTERNATIONAL TRADE

AI is used in healthcare, education, and sports. The few economic applications include AI and Economics, economic growth in Zhejiang, California's increasing tobacco economy, GDP growth, and economic patterns. Within AI, Machine learning (ML), Deep Learning (DL), and Reinforcement Learning (RL) have shown success in diverse fields. ML algorithms discover hidden insights from massive data sets. DL is a bio-inspired approach that uses neural networks to classify variable outputs and identify patterns. RL is a model that affects software agents' actions to maximize cumulative reward and avoid punishment (using value functions).

This study uses AI approaches to an extensive imports/exports data set to enhance forecasts. This research optimizes AI algorithms to anticipate and associate commerce of certain commodities and countries (regressions, classifiers, clusters, associations, and multiple other actionable outcomes). Given the data size and quantity of variables, numerous models are built; few are compared to explain international trade trends. This study's AI approaches. The report also discusses ways to the unpredictable global trade environment. Finally, contextual AI is proposed as a possible trade application.

THE ADOPTION AND PROLIFERATION OF AI TECHNOLOGIES

ANI and AGI are the two core subfields of AI (AGI). "Narrow" AI includes vision, speech recognition, and translation. Narrowly defined tasks where AI can surpass humans in problem-solving or reasoning. "Narrow" AI generalizes pattern recognition in images, text, and language (Egger & Lassmann, 2012). ML techniques instruct machines by showing them many accurate results. For example, they can design rules and let the machine learn by trial and error. Deep learning (DL) is an advanced kind of Machine Learning (ML) based on neural networks that approximates complicated relationships by classifying input instances to output examples based on massive amounts of training data. AI may be used in many commercial areas. Examples:

- AI systems can maximize warehouse usage by forecasting demand, organizing inventories, enhancing supply chain efficiency, and tracking packages.
- AI reads and understands commercial product descriptions and classifies them against Harmonized System codes to help companies discover customs procedures and duties. AI is also used to spot fakes.
- AI systems power autonomous vehicles, interpreting road signs, reading maps, and recognizing danger. In

other applications, ML and human inputs are merged to optimize navigational software using real-time traffic data and historical information. AI is utilized in air and sea transport to improve scheduling, optimize load space and capacity, and analyze real-time information.

- Financial organizations use AI to improve financial decisions, automate processes, personalize services, analyze creditworthiness, detect fraud, and minimize customer service expenses.
- Lawyers, engineers, and architects can use AI to improve their work. "Lawbots" analyze case law, saving lawyers' time.
- AI enables software to reply to spoken or written commands and inquiries. Virtual assistants cut consumer relations costs and increase service customizing.
- AI systems improve user experience, personalize information, and make more accurate advertising predictions.
- AI systems can analyze farm data in real-time, predicting weather, water use, soil health, and other variables. This helps farmers boost agricultural productivity and quality and decide what, how, where, and when to sow.
- AI is increasingly employed in medical diagnostics, disease outbreak prevention, and drug development.
- Natural language processing improves automated language acquisition, translation, and essential communications.
- AI systems can improve user experience by tailoring and customizing content suggestions, AI can reduce image quality when bandwidth is high.

AI offers many opportunities across many applications and sectors, but it also poses many challenges, including governance and use (for instance, potential societal, consumer, or security risks). As countries grapple with AI, national and international regulatory instruments may proliferate. This raises questions about innovation and regulation. It takes time to balance innovation and regulatory oversight. Reforms must ensure that rules remain responsive to changes in AI technologies, promoting their economic and social benefits while minimizing their risks (Achar, 2016). Practical regulator-innovator cooperation is critical. As new AI regulations are adopted, it will be essential to limit regulatory fragmentation, which could increase AI businesses' trade costs. Future domestic laws to set AI standards may prioritize adopting international standards to facilitate AI use across countries. Policy experimentation through regulatory sandboxes promotes flexible application or enforcement of policies, which could encourage knowledge sharing and best practices (Feng & Zhang, 2014).

WHY DOES AI MATTER FOR TRADE?

AI is still evolving and has limitations, but it could improve international trade. One is through increased adopter

productivity, which boosts exports. AI and productivity evidence is just emerging. On average, the benefits of transformative technologies like AI still need to be discovered in productivity statistics, especially in data-intensive sectors like finance, insurance, and online consumer platforms. "Modern productivity paradox" False hopes, mismeasurement, redistribution, and implementation delays could explain this paradox. The latter may be the most significant contributor to the lack of productivity evidence, so positive effects are expected once AI capabilities are diffused, and complementary innovations are developed and implemented. AI's potential to improve supply chain efficiency also boosts trade (Kang, 2013). This includes more intelligent, automated manufacturing, better consumer demand predictions, and better production location decisions. AI could reduce greenhouse gas emissions in supply chains by optimizing logistics operations. AI can help firms reduce production costs and respond more quickly to consumer demand. AI reduces trade costs. Greater logistical efficiency, better supply-and-demand connections, and fewer language barriers can help. AI in customs and other border agencies may also reduce border trade costs.

WHY IS TRADE IMPORTANT FOR AI?

Trade affects AI adoption by interacting with its lifetime. Recent OECD research proposes four AI lifecycle phases.

- Planning and designing an AI system, collecting and processing data, and constructing and interpreting models.
- Model execution and validation.
- Live production deployment, including piloting, compatibility testing, regulatory compliance, organizational change, and user experience evaluation.
- Operation and monitoring, including measuring outputs against goals.

Trade and trade policy can facilitate access to commodities, services, people, and data in each phase. Other policy disciplines, such as IP protection or international standards, are also important.

Tariffs on ICT equipment may affect access to and pricing necessary hardware and final consumer goods, including smartphones. ICT services, such as telecommunications and computer services, play a crucial role in establishing the communication networks needed to develop AI systems (Gil et al., 2002). Services markets also offer opportunities to monetize AI technology (e.g., improving existing services and providing the basis for new ones).

AI is a knowledge-intensive discipline, hence specialist skill is needed to create its models and algorithms. Enabling cross-border expert movement could increase access to top data scientists. Data movement, the primary input for AI systems, will also be crucial.

EASING TRADE BARRIERS CAN BOOST AI DEPLOYMENT

AI systems require high-performance computing equipment, data sensors, communication units, and enough network equipment to provide flawless information flow and interlinkages between units (Achar, 2015). Most ICT equipment is made in a few Asian countries, especially China. Border tariffs can increase prices and discourage AI adoption, especially in countries without indigenous substitutes. AI hardware is particularly specialized and can be more expensive than standard computing hardware because of its high-performance components. Even low tariffs can increase the price of AI-related ICT equipment. Higher prices on devices that utilize AI technologies, such as smartphones, smart speakers, and laptops, can decrease customer demand. Tariffs vary by area but are greatest in developing nations that do not participate in the WTO IT Agreement (ITA). This hinders these countries' adoption of AI via commerce and the development of their own AI capacity. This may be significant for using AI for development and helping developing countries recover from the pandemic.

LOWERING SERVICES TRADE RESTRICTIONS HELPS AI SYSTEMS

Services have helped modern economies go digital. Telecommunications services offer the backbone for digital networks, and computer services supply communication software. Transport, logistics, distribution, and courier services enable efficient e-commerce (parcel trade), while financial services enable secure online purchases. Most services can now be sold partially or entirely via digital networks, and AI systems are increasingly used in the input or output of services. An enabling trade regulatory environment that allows market access and foreign investment in innovative technologies, limits unnecessary restrictions on AI uptake and use, safeguards competition, and a level playing field can boost AI adoption (Ikram & Kepli, 2018). Trade obstacles could hinder this process. Existing services commitments under the WTO General Agreement on Trade in Services (GATS) or regional trade agreements are technologically neutral; thus, they apply when AI is utilized to provide services. According to the OECD's Services Trade Restrictiveness Index (STRI) and Digital STRI, domestic rules can be improved by eliminating existing obstacles, especially in communication infrastructure and data connectivity. This is especially relevant for developing countries, with higher trade restrictions that make getting AI technologies and adopting AI solutions difficult (Fish & Ruby, 2009). The global regulatory framework for digitally enabled services trade has been more restrictive in recent years, especially in telecommunications, computer, financial, transport, and distribution services.

CAN AI BOOST TRADE POLICYMAKING?

More attention should be paid to how AI can assist governments in building better policies (except for the

SDGs). In the context of a growing number of unexpected events affecting international trade, such as natural disasters, cyberattacks, or health crises, AI can become a valuable tool to analyze real-time data and provide more timely and granular information to economic agents and policymakers as well as help understand the impact of uncertainty or specific shocks. The Valencian Government's use of AI in its fight against it illustrates how AI is increasingly being used to inform policymaking. Identifying and obtaining relevant information that can provide insights into emerging trade patterns and verify the completeness of these datasets is one of the primary obstacles to developing AI methods in trade policymaking (Ontañón et al., 2018). In addition, machine learning algorithms with high-frequency data are being used to track real-time economic activities.

CONTEXTUAL AI AND OUTLIER EVENTS

Uncertainty influences economic outcomes. Natural disasters, pandemics, and financial shocks like the U.S.-China trade war can cause delays. Uncertainty causes price adjustments, producer and customer behavior changes, shipping and transportation concerns, and worker well-being. Cascade strength varies by product or analysis location. World War II, the Great Depression, & World War I were the three worst events since the 1870s. The 1918 influenza was an outlier among outliers, with World War I co-occurring.

Modeling and predicting outlier events is crucial. Outlier events require uncharted analysis. Pattern identification and predictions require daily or hourly data, not monthly data. Real-time analysis and on-demand analytics are needed to make quicker decisions (Sloan, 2017). AI approaches help to identify the impact of uncertainty or outliers and deliver timely information to economic agents, including policymakers.

Context (a prominent AI field) depicts outlier events in the coronavirus pandemic. Features represent a dataset's context. Features can be primary, irrelevant, or incidental. Traditional domain-specific traits are primary. Randomly occurring outside features can be deleted, but contextual features are essential. The above categorization helps eliminate extraneous material, but the context must be clarified. IML uses a Bayesian classifier for context categorization and Meta algorithms to detect contextual changes. Context-sensitive feature selection is an alternative to IML that outperforms sequential feature selection. The first tier captures the context's essential characteristics; the second tier captures property updates and context dependencies. Context injections work well in specific domains. For example, the classifier's rules were updated using a transformation-based learning technique (Olivier, 2001).

All the above strategies require high-quality data since bias can emerge at any stage of the data science lifecycle or when removing context. For example, the tendency might

start during data collection, cleaning, modeling, or any phase. Data biases are independent of sample size or statistical significance and can alter results or models. They can even show the opposite of an actual link or correlation. For example, the most common data science bias is class imbalance owing to covariate shifts; for example, uneven class ratios might result from changes in data distribution (covariate shifts).

Four factors cause the imbalance between classes:

- the level of inequality between classes
- the level of complication of the idea that is being represented by the data
- the total number of participants in the training, and
- the classification method used.

Imbalanced data sets make it more difficult to retrieve information, perform filtering activities, and convey knowledge, all of which, if not taken into account, can result in incorrect information in the fields of agriculture and economics. Therefore, we plan to investigate the approaches mentioned and test them alongside the ways offered for AI during both typical and abnormal periods.

TRADE AI APPLICATIONS

AI value chains

AI affects global value chain development and management. It can improve future trend predictions, such as customer demand changes and supply chain risk management (Alali & Yeh, 2012). Just-in-time manufacturing and delivery can be improved with better warehouse management. Robots pack and inspect inventory. Smart manufacturing uses sensors, Internet-connected machinery, materials, and supplies for predictive self-maintenance and quick client adaptation. As more industries adopt smart manufacturing, better connectivity might open global value chains to specialized service suppliers in R&D, design, robotics, and data analytics. AI could also increase onshoring. In addition, automation and 3D printing could minimize the need for extended supply chains that rely on low-cost labor.

Digital trading

eBay is also using AI. Digital platforms have helped small businesses go global. 97% of eBay small firms export, compared to 4% offline (Wang & Zhuang, 2018). AI-powered translation services make digital platforms more trade-friendly. eBay's exports to Spanish-speaking Latin America climbed 17.5% in volume and 13.1% in income due to machine translation.

Negotiations

AI can help international trade discussions. For example, AI might be used to examine the economic trajectories of each negotiation partner under multiple assumptions and outcomes, including growth pathways under various trade

liberalizations (Fish, 2006). Brazil's Intelligent Tech & Trade Initiative incorporates AI-assisted trade discussions.

SUMMARY OF AI APPLICATIONS TO TRADE

AI affects global value chain development and management. It can improve future trend predictions, such as customer demand changes and supply chain risk management. Such solutions boost GVC efficiency by helping businesses manage complicated, scattered production units. For example, AI can improve warehouse management, demand forecast, just-in-time manufacturing, and delivery. In addition, robots improve packing and inventory inspection productivity. In addition, AI can improve supply chain inspection and maintenance.

AI-driven smart manufacturing will affect the development of GVCs. German-led industry 4.0 relies on sensors, IoT, and cyber-physical systems to connect machines, materials, supplies, and customers. This includes factory-level predictive machines and self-maintenance, complete supply chain communications, and the ability to manufacture to customer specifications, even in small batches. These advancements could boost GVCs. Smart manufacturing's emphasis on connection could open GVCs to more particular engagement by specialized service suppliers in R&D, design, robotics, and data analytics. AI could cause production on shoring (Panday & Malcolm, 2018). Automation and 3D printing could lessen the need for extended supply chains, especially those reliant on cheap labor. Dani Rodrik calls this "premature industrialization" in emerging countries.

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AI can help international trade discussions. For example, AI could analyze the economic trajectories of each negotiating partner under different assumptions, including trade negotiation outcomes (growth pathways under various forms of trade liberalization), how these outcomes are affected in a multiplayer scenario where trade barriers are adjusted down at different rates, and predicting the trade response from non-negotiating countries. Finally, Brazil's Intelligent Tech & Trade Initiative incorporates AI-assisted trade discussions.

TRADE RULES AND POLICY IMPLICATIONS

WTO and FTA trade laws can support AI's impact on international trade patterns. Here are several areas where trade regulations will affect AI development and implementation globally.

As shown in CPTPP and USMCA, the free movement of data globally will boost AI development. To train AI, enormous amounts of data are needed. Global data is required to build AI systems that handle diverse difficulties and demographic groups. For example, voice-recognition AI requires considerable quantities of speech data to extract local slang, intonation, and less common terms. In addition, data localization methods that restrict global data movement will impair AI customization.

AI builds on cloud computing, big data, and the internet of things (Achar, 2017). Digital technologies require cross-border data transfers. Data localization initiatives restricting global data exchanges will hurt AI by reducing training data and undermining its building blocks.

Data flow restrictions will most affect smaller (typically developing) countries. With huge populations, the U.S. and China rely less on third-country data to build AI for their markets. As a result, smaller countries will need global health data to make AI for health care. Access to such data will diminish AI accuracy and relevance in developing countries.

Governments must make massive data sets public to improve AI access. Here, USMCA makes headway by recognizing the importance of access to government information for economic and social growth and making government data machine-readable and available.

AI's Privacy

Trade agreements allow countries to restrict cross-border data transfers to achieve valid public policy goals. Governments are restricting the flow of personal data across borders to maintain domestic privacy rules. For example, the GDPR forbids transferring personal data to countries not deemed "adequate" by the EU.

GDPR constraints on personal data processing and use could hinder AI development. For example, personal data gathered as part of a transaction cannot be used to train AI to improve service delivery, per GDPR. Instead, GDPR's requirement that organizations restrict the data they collect and keep is also at odds with AI data sets.

Strong privacy is needed for individuals to trust life online, including contributing personal data for AI learning. From this perspective, creating AI and privacy does not conflict. Designing privacy regulations that allow data access and use will be easy. Trade rules can help by requiring importers of personal data to respect its privacy. Encourage reciprocal recognition of privacy systems and promote regional and global privacy norms.

AI & Standards

AI will necessitate new industrial norms. Autonomous vehicles need technological, safety, and production criteria. Different national requirements will raise export costs for international manufacturers who must retool. In addition, the USMCA promises to build domestic norms

on international standards, which will boost interoperability and eliminate barriers to developing AI globally (Nilsson, 2005).

Code protection

Requiring source code for investment or market access hinders AI development. The USTR recognized requiring such access as part of forced technology transfer in China. However, as AI is based on algorithms, accessing source code restricts its global dispersion. As a result, the U.S. and other countries are responding to this problem. For example, in CPTPP and USMCA, the parties agreed not to "demand the transfer of, or access to, software source code owned by another party" as a condition for import or sale.

AI and Intellectual property (IP) protection

AI development presents IP and commerce difficulties. AI requires many data. Copy and edit training data often. Thousands of protected works could be copied depending on how the data is acquired. For example, in the U.S., the "transformative" or "non-expressive" fair use exception to copyright may cover such data use. Fair use gives principles-based copyright exclusions. Reasonable use exclusions were crucial to creating and collapsing digital business models in the U.S. Even in the U.S., fair use provisions may not cover some complex AI data uses. For example, many countries do not have reasonable use exceptions or equivalent copyright flexibilities (Falat & Pancikova, 2015). The EU's copyright exceptions list excludes text, data mining, and AI. Australia follows EU policy. Legally duplicating data to build AI in the U.S. may be prohibited in other nations, presenting a barrier to AI deployment in those countries. However, copyright flexibilities are rarely addressed in trade agreements. The CPTPP recognizes the need for "an adequate balance in its copyright and related rights regimes," but the USMCA does not.

AI and trade

Access to commodities will affect AI development globally and data, standards, and IP. For example, CPUs are employed in Deep Neural Networks, as indicated above. However, AI development requires CPU trade. This highlights the importance of cutting tariffs for AI development.

CONCLUSION

The paper starts with a concise explanation of various AI technologies. It then moves on to demonstrate what previously collected data can tell us about the acceptance and spread of AI. After this, a more in-depth conversation on the policy concerns that arise at the confluence of trade and AI will take place, during which we will examine both the implications of AI for trade and the repercussions of commerce for AI. Following that is a discussion of three case studies focusing on specific AI technologies'

applications in global marketing. In the latter part of the essay, some concluding thoughts are presented.

This article intends to shed light on AI's growing importance for international trade and the role international trade can play in enabling its adoption. AI uses complicated algorithms and data to forecast cognitive tasks. This has already improved global trade productivity, supply chain efficiency, and trade costs. This article shows that AI advancements are crucial in tradable areas like ICT goods and services. This study emphasizes the importance of commerce in products, services, human expertise, and data for AI. It also highlights that commodities, services, people, and data obstacles limit AI deployment. Many developing and emerging economies have ICT tariffs. This increases the cost of AI hardware and processing facilities. In recent years, barriers to digitally enabled services have risen, limiting countries' ability to benefit from digitalization and AI. AI-related services and goods can be sold internationally, but they must be explained, implemented, and maintained. Finally, AI solutions require trained engineers and programmers. However, hurdles to people's movement persist, and eliminating them would help transmit AI-related knowledge and skills. The developing patchwork of legislative approaches to data flows risks decreasing the ability to implement AI systems internationally, reducing access to information, and requiring duplication of actions. To gain the benefits of AI, we need more interoperable regulatory methods that enable trusted data free-flow.

Regional trade agreements include AI-related elements. Data localization, cross-border data flows, and cybersecurity provisions are examples. New digital trade agreements include AI-related features emphasizing the significance of building ethical governance frameworks for the safe, responsible use of AI technologies. Three case studies highlight how AI can boost international trade. First, AI in machine translation has reduced language barriers in business and boosted exports for e-retailers. Second, AI can help improve logistics by managing smart warehouses with better forecasts and coordination. AI has also helped financial services with credit access, risk assessment, anti-money laundering compliance, and personalized banking. AI is rapidly evolving and has many problematic aspects. This article intends to help trade policymakers address AI and international commerce. This field is understudied, and future research could assess AI's trade ramifications.

The report's length was kept to a minimum, and immediate attention was paid to more general concerns that trade policymakers might find deserving study. Artificial intelligence is a rapidly developing science that encompasses much ground for debate because of its myriad vital subfields. This paper provides an initial framework for thinking about the implications of AI for trade. However, it will not delve into several essential but broader regulatory concerns that are being discussed in the

context of the work of the OECD Science Technology and Innovation Directorate. Instead, it will provide an initial framework for thinking about the implications of AI for trade.

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