

Centre for Banking Research Bayes Business School (formerly Cass) City, University of London

Navigating New Trade Horizons: Supporting Exporters in a World of Change

Andreas Klasen

Simone Krummaker

Chris Jeffs

Jan Vassard

April 2024

Centre for Banking Research Working Paper Series

WP 01/24

Navigating New Trade Horizons: Supporting Exporters in a World of Change*

Andreas Klasen, Simone Krummaker, Chris Jeffs and Jan Vassard

April 2024

Abstract

In a dynamic global landscape, the role of UK Export Finance (UKEF) and other export credit agencies (ECAs) has never been more important. Access to finance is critical for exporters as it enables them to invest in production, expand operations, manage cash flow and mitigate trade risks. However, businesses face challenges in securing export finance and trade credit insurance as geopolitical and trade megatrends lead to increased political, market and credit risks. Drawing on qualitative data from 35 semi-structured interviews and expert discussions and based on the Futures Triangle analytical framework, this white paper analyses the geopolitical and trade megatrends that UKEF and other ECAs will face in the coming years. It presents novel findings about the implications for ECA mandates, strategies, products and operations: The evolution of mandates towards a "growth promoter", the need to further scale up operations, the use of big data and artificial intelligence for risk analysis and forecasting, and the need to balance multiple and conflicting priorities, including export growth, support for small and medium-sized exporters, inclusive trade, climate action, and positive impact in developing markets.

Keywords: Multipolarity, trade policy, export strategy, trade finance, credit insurance JEL classification: B17, F13, F34, G21

^{*} Corresponding authors: Andreas Klasen: Oxford Smith School, University of Oxford, Bayes Business School (formerly Cass), City, University of London, and Institute for Trade and Innovation, Offenburg University andreas.klasen@ouce.ox.ac.uk. Simone Krummaker, Bayes Business School (formerly Cass), City, University of London, simone.krummaker@city.ac.uk. We thank Julia Beck, Kieran Dickson, Zara Hussain, Adam Lyons, Robert Maccabe, James Pennington and David Underwood for their valuable input, comments and suggestions. The research leading to this work has been funded by UKEF; UKEF is not responsible for its content.

1. Introduction

For the past 75 years, foreign trade has been a catalyst for economic progress in the United Kingdom (UK). Trade facilitates the exchange of ideas and technologies, increases the availability of a wide range of goods and services, and has a significant and positive impact on jobs (Edwards, 1993; Melitz, 2003; Sachs & Warner, 1995). Despite various crises such as geopolitical tensions, nationalism and global warming, international trade is crucial to the dynamism of the global economy, with exports being an important driver of sustainable growth in the UK. Key factors influencing this dynamism include trade openness, the UK's integration into regional and global supply chains, British exporters' foreign market knowledge and span across a variety of trading partners, strong customer relationships, price competitiveness, and the availability of trade and export finance. Trade enables UK businesses to specialise in producing goods and services in which they have a comparative advantage; thereby increasing efficiency and overall output. The idea that trade is driven by comparative advantage is the unifying theme of the Ricardian and Heckscher-Ohlin models: Through trade, economies can concentrate on their key strengths to export goods; and to import goods and services that are produced more efficiently overseas. There is a strong correlation between a nation's openness to trade and its economic growth, suggesting that trade liberalisation helps to increase gross domestic product (GDP). Krugman's New Trade Theory, for instance, expands on this idea, emphasising the importance of economies of scale, network effects and first-mover advantages (Hessels & van Stel, 2011; Krugman, 1979; Melitz, 2003).

In a dynamic global landscape, the role of export credit agencies (ECAs) has never been more pivotal. In recent years, the world has witnessed substantial shifts in global power dynamics, marked by the rise of emerging economies, changing alliances and increasing geopolitical tensions. These developments coupled with transformative megatrends, such as "Slowbalisation", shifting supply chains and digitalisation, as well as the growing emphasis on climate action and equitability, are redefining the traditional paradigms of international trade and export finance. The emergence of profound geopolitical and trade megatrends is reshaping the business environment of exporters, presenting both challenges and opportunities (Jennekens & Klasen, 2022; Peterson & Downie, 2023; UNCTAD, 2023; WTO, 2023a). As a facilitator of export opportunities and capabilities, UK Export Finance (UKEF) is at the forefront of navigating these changes. UKEF is the UK's ECA and a government department, strategically and operationally aligned with the Department for Business and Trade (DBT). UKEF's mission is to

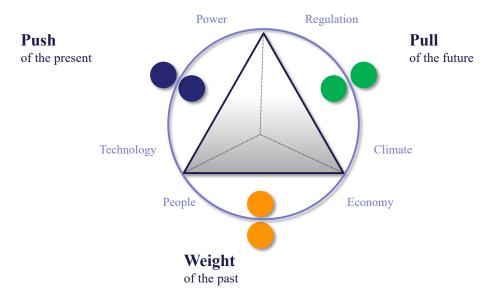
advance prosperity by ensuring no viable UK export fails for lack of finance or insurance, doing that sustainably and at no net cost to the taxpayer (UKEF, 2023). ECAs such as UKEF are tasked with managing the risks associated with trade megatrends and also capitalising on the new opportunities they offer. This requires a deep understanding of the complex interplay between geopolitical developments, economic megatrends, as well as the financing and de-risking needs of British exporters and overseas buyers.

This working paper is framed as a white paper, looking at the geopolitical and trade megatrends that UKEF and other ECAs will face in the coming years. It focuses on ECAs from the Group of Seven (G7) countries, but also considers innovation leaders including Finland and other key players such as China and South Korea. Following the description of the methodology and methods in chapter two, the third chapter sets out the narrative framework, covering scenarios that ECAs collectively, and UKEF uniquely, will need to work through. Chapter four presents novel findings about the implications for ECA mandates, strategies, products and operations. The recommendations in chapter five are designed to help policymakers and ECA practitioners understand and respond strategically to these global changes.

2. Methodology and Methods

The analytical framework for geopolitical and trade megatrends is based on the "Futures Triangle". It is a strategic tool for analysing megatrends, consisting of three elements: "Weights of the Past", "Push of the Present", and "Pull of the Future" (Figure 1). The framework provides a comprehensive approach to understand global dynamics, considering future aspirations, current drivers and historical constraints (Dufva & Rekola, 2023; Fergnani, 2020; Inayatullah, 2008). It facilitates an exploration of the complex interplay between emerging perspectives, current ECA realities and historical trade legacies. It also helps UKEF to formulate informed policies and strategies. The white paper employs a multiple case study and qualitative research approach, employing a mix of deductive and inductive analyses which is crucial for obtaining a comprehensive understanding of geopolitical and trade megatrends, as well as implications for ECAs. By combining deductive and inductive analysis, there is a balance between theory-driven inquiry and data-driven exploration. This integrated approach enhances the validity and reliability of the findings and promotes a more holistic understanding.

Figure 1: Futures Triangle



Source: Developed for this paper based on Inayatullah, 2008.

The primary data collection process included semi-structured interviews with 25 participants from ECAs and commercial banks between December 2023 and January 2024. In addition, 10 semi-structured discussions with trade experts were held. To facilitate participant preparation, we shared the interview questions in advance, enabling familiarity with more complex or sensitive topics. Secondary data was collected from megatrend reports, policy documents, international trade reports, websites, research articles, books and ECA annual reports. In order to provide empirically robust findings, this paper used thematic analysis. Thematic analysis is a recognised means to evaluate interviews and documents by identifying patterns and holistic perspectives in relation to a particular coded theme (Braun & Clarke, 2006). Following initial data reduction, the themes were reviewed in relation to the coded data and to all non-coded data. In line with previous research, the deductive coding phase during the first cycle was followed by an inductive coding phase in a second step (Gioia, Corley & Hamilton, 2013; Mergel, Edelmann & Haug, 2019; Wilson & Mergel, 2022). An interpretative approach of was used to capture meaning by breaking down the narrative into its constituent parts and then describing the content of each disaggregated component (Beck, Campbell & Shrives, 2010). Descriptive statistics complemented the thematic analysis and provided an in-depth understanding of drivers and ECA implications.

3. Geopolitical and Trade Megatrends

The transformative forces of geopolitical megatrends encompass several perspectives that are particularly relevant to UKEF and other ECAs. These perspectives include power, economy, people, technology, climate and regulation. These megatrends are often interlinked, collectively shaping international trade policy and global economic governance (Figure 2).

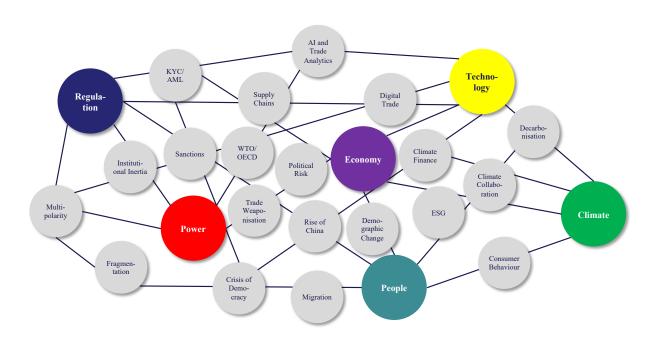


Figure 2: Megatrends in a World of Change

Source: Developed for this paper.

3.1 Power

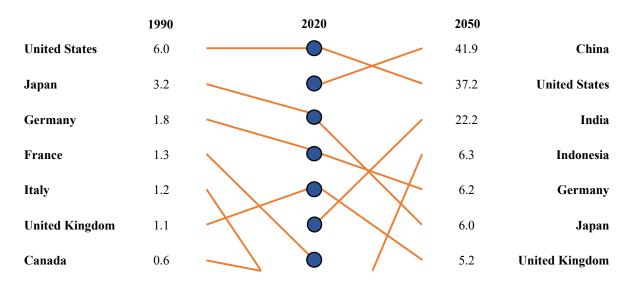
The political environment is increasingly characterised by fragmentation, polarisation and rising geopolitical tensions. Nationalist movements gain momentum and public confidence in democratic institutions declines. At the same time, a shift towards multipolarity is reshaping global power dynamics towards a diverse and multi-centred world order. The "Weight of the Past" shows that the multilateral order is under pressure: Many nations have retreated from multilateral engagement in favour of approaches that emphasise sovereignty over collective action. Traditional alliances are under pressure as more insular, divided societies emerge. The multilateral institutions around which the post-1945 international order was initially anchored are no longer the only players in a fragmented global governance. Far-reaching changes to the

governance architecture lead to greater economic independence, rather than interdependence (Acharyya, 2016; Hale, Held & Young, 2013; Telò, 2023). This poses a challenge to the UK's economic strength by creating trade uncertainties and affecting transnational investment flow.

Important "Pushes of the Present" are the crisis of democracy and rising geopolitical tensions: As public trust in political institutions continues to erode, many countries are facing a crisis of democracy (D'Anieri, 2023; Steinberg & Wolff, 2023; Waylen, 2015). In 2024, more than 60 countries representing 49% of the world's population are due to hold national elections. These countries include some of the wealthiest states, the most authoritarian and the most stressed. Populist movements are gaining momentum and people are looking for simple solutions to the world's growing complexity and uncertainty about the future. Even well-established countries in the European Union (EU) are coming under severe pressure to reform, as tensions with national agendas create barriers to EU policy consensus. Uncertainty is further fuelled by escalating political tensions. Regional instabilities have been generated by war in Ukraine, proxy wars using terrorist organisations, e.g. in Israel and Yemen; civil conflict in Myanmar, Mali and Sudan, as well as increasing sabre-rattling over countries. These can have a sudden and unexpected impact on global supply chains and fuel inflationary pressures, affecting confidence and deterring future investment in key UK markets.

The "Pull of the Future" shows that there is a decade of multipolarity: The world is shifting from the unipolar system of recent decades, dominated by the US, to a multipolar system. Multipolarity is a geopolitical concept in which power and influence on the global stage are dispersed among several independent actors, as opposed to being concentrated in one or a few dominant entities. This is reflected in the rise of multiple influential actors such as Brazil and India demanding a greater say in international affairs, and changing power dynamics between China, the US, the EU and Russia (Figure 3). A multipolar world can lead to new forms of cooperation as well as competition and conflict (Dulva & Rekola, 2023; Hadani, 2020; Papada et al. 2023; Zeitlin, Nicoli & Laffan, 2019). The task for the UK will be to manage these complex tensions while fostering cooperation on global issues such as international trade, climate change, equitability and cybersecurity.

Figure 3: Most Powerful States (GDP USD trillion; 1990-2050)



Historical and predicted GDP (current USD trillion). Source: Developed for this paper with historical data based on World Bank, 2024.

3.2 Economy

The emergence of complex poly-crises involving multiple interconnected issues, including "Slowbalisation" and industrial policies, are increasingly impacting economies. Furthermore, accelerating transition towards data-driven economies can reshape the global economic land-scape and influence patterns of wealth and power. The "Weight of the Past" shows the influence of "poly-crises" on economies: In a global economy, the megatrend of poly-crises is characterised by simultaneous and interlinked challenges across different sectors. The global financial crisis, the Covid-19 pandemic, high inflation, increased borrowing costs, higher commodity prices and rising level of debts in many economies have all adversely affected exporters (AXA, 2023; Caprio et al., 2014; Collingro & Frenkel, 2020). This caused disruption to global supply chains, reduced international demand and challenges in maintaining trading relationships.

The most relevant "Pushes of the Present" are slowbalisation and the return of industrial policy: There is a shift towards more regionalised trade and localised production, resulting in a shaping of globalisation. Slowbalisation is a response to the desire for more resilient supply chains (Figure 4). It can be defined as a continued but much slower integration of the global economy through trade and financial flows. The reconfiguration of supply chains is hitting company profits, and unpredictable policies are adding risk premiums to investment decisions (Ipsos, 2023; Roland Berger, 2023; UNCTAD, 2023). The trend poses challenges for UK exporters, potentially reducing demand for their products and requiring adaptation to more

diversified, region-specific trade practices. In addition, the return of industrial policies is reshaping the global economic landscape. While government interventions can lead to significant investments in research and development (R&D) and foster innovation in the UK, industrial policy resulting from more protectionist stances overseas may generate substantial tensions for UK exporters.

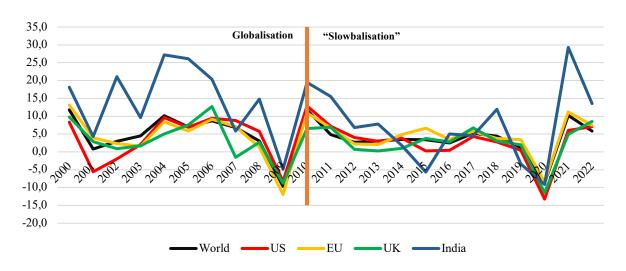


Figure 4: Slowbalisation (% Export Growth; 2000-2022)

 $Exports\ of\ goods\ and\ services\ (annual\ \%\ growth).\ Source:\ Developed\ for\ this\ paper\ with\ data\ based\ on\ World\ Bank,\ 2024.$

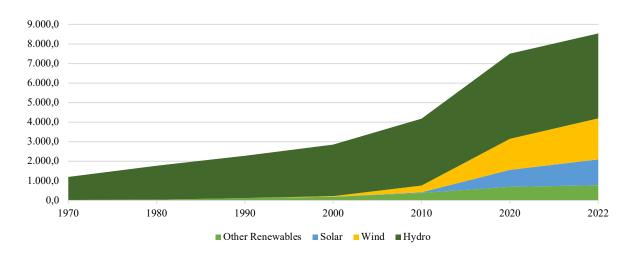
The "Pull of the Future" shows economic power shifts: The global economic landscape is witnessing a shift in power towards the Global South, with Asia at the forefront. This change is driven by large and young populations, rising middle classes, advances in technology and robust manufacturing and service sectors. The enlargement of the "BRICS" group (i.e., Brazil, Russia, India, China and South Africa) to nine members, including Egypt, Ethiopia, Saudi Arabia and the United Arab Emirates (UAE), now represents a significant share of the global economy and population. Likewise, the global participation of China has grown through its "Belt and Road Initiative" (BRI) which aims to build and expand trade routes across Africa, Europe, the Middle East and Asia. This trend suggests a future where economic leadership is more distributed, and emerging economies play a key role in shaping global policies and outcomes (Steinberg & Wolff, 2023; Trefler, 2019; Vlados, Chatzinikolaou & Iqbal, 2022; WTO, 2023b).

3.3 Climate

The current global climate narrative is increasingly dominated by urgent concerns about global warming and biodiversity loss, the imperative of a green transition to sustainable energy sources, and the innovative concept of circular economies. Resources such as water, food and critical raw materials will also become key. The "Weight of the Past" shows the challenges of global warming and loss of biodiversity: Global warming has been a growing concern, with rising average temperatures, melting polar ice and more frequent extreme weather events; underlining the need for immediate action. Biodiversity loss is also a critical environmental issue, with one-third of terrestrial species already lost, highlighting the urgent need for comprehensive protection, rewilding and other conservation efforts (Dulva & Rekola, 2023; Hoeppe, 2016)

Important "Pushes of the Present" are the green transition and global action: This urgency is driving the UK and other economies towards a green transition; defined by the shift from fossil fuel energy sources to low carbon, renewable and sustainable alternatives (Figure 5). Investments in wind, solar, nuclear and hydropower are becoming central elements of national policies and influence export strategies (Dulva & Rekola, 2023; Hoeppe, 2016; Ritchie, Roser & Rosado, 2024; Schultz, 2022). The same applies for electric vehicles and green infrastructure. The success of this transformation depends on political ambition, global cooperation and the willingness of all sectors of society to transition to a more sustainable and environmentally responsible future. The green transition can benefit UK exporters by opening up new markets for sustainable products, driving innovation in green technologies and increasing their global competitiveness in the growing green economy. Global events such as the annual COP meetings make progress on some aspects, such as the recognition of climate equity, net-zero financing, a loss and damage fund, decarbonisation targets and the transition from fossil fuels to renewable energy (Braga & Ernst, 2023; Lundquist, 2022).

Figure 5: Global Renewable Electricity Generation (TWh; 1970-2022)



Source: Developed for this paper with data based on Ritchie, Roser & Rosado, 2024.

The "Pull of the Future" shows demand for resources and a need for a circular economy: The supply of critical raw materials (CRMs) risks jeopardising the green transition. CRMs are vital to the UK economy, playing an important role in many industries at multiple stages of the supply chain. An issue that has been recognised by the EU with the formation of the European Raw Materials Alliance, which aims to increase EU resilience in the supply of essential raw materials, most critically, rare earth materials. Likewise, UK technological development and exports are increasingly dependent on access to a wider range of CRMs, particularly those essential to clean technologies. Furthermore, an increasing demand for water will become a major global challenge. As a result, agricultural supply chains are expected to become less reliable, with climate change already affecting many traditional growing regions through hydro-climatic impacts such as drought and floods. The rise of the circular economy represents a transformative approach to sustainability, challenging traditional linear models. By rethinking the life cycle of products and resources, circular economies not only help reduce environmental impact, but also promise economic resilience and innovation as resources are used more efficiently and new markets emerge (Dulva & Rekola, 2023; Kataula et al., 2022; Ünal & Sinha, 2023). The transition to a circular economy in the UK could require exporters to adapt, opening up new markets, but also presenting challenges in complying with circular economy principles, adding additional costs and regulations.

3.4 People

Global social megatrends are profoundly shaped by the dynamic interplay of population growth, extensive migration flows, and significant demographic changes, resulting in ageing populations in some regions and youth bulges in others. These influence economic structures, cultural landscapes and political arenas around the world. The "Weight of the Past" shows that the world's population continues to grow rapidly, with significant growth concentrated in emerging economies (Figure 6). This has raised pressing issues of resource allocation, urban planning and sustainable development. At the same time, populations in many developed countries are ageing, resulting in a shortage of labour and a reduction of income tax revenues (Goddhart & Pradhan, 2020; Lee & Mason, 2011; Naugthin et al., 2022). The balancing of demographic megatrends and the contrast in social needs and economic strategies, is increasingly a challenge for global and national policymakers.

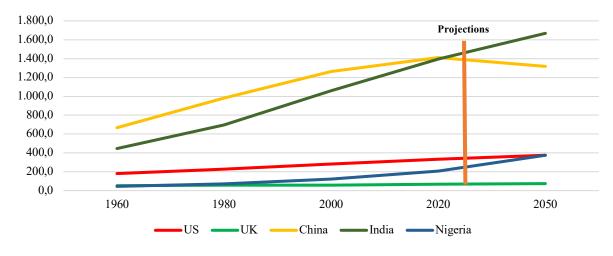


Figure 6: Population Growth (million; 1960-2050)

Historical and projected population. Source: Developed for this paper based on UN, 2022, and World Bank, 2024.

An important "Push of the Present" is migration: A powerful and diverse force shaping societies around the world; driven by flight from conflict, the pursuit of economic opportunity and as the result of climate change. The movement of people across borders is reshaping the demographic make-up of many countries, leading to the emergence of diverse multicultural societies. This phenomenon can enrich cultural landscapes and economies, but also raises complex debates on issues such as the "brain drain", the challenges of integration and skill shortages. These debates influence national policies, border disputes and international relations.

The "Pull of the Future" shows transforming labour markets and growing urbanisation (Figure 7): The opportunities presented by urbanisation are reshaping consumer markets and demand patterns. Urban centres are becoming hotbeds of innovation, technology adoption and increased consumer spending power (Dubai Future Foundation, 2023; PwC, 2022). For UK exporters, these megatrends present a complex landscape: While talent shortages at home – also driven by inter-regional inequality – can hamper operational efficiency, retention and innovation, overseas urbanisation requires large infrastructure investment and opens up new markets and customer segments with opportunities for UK businesses. Balancing these dynamics requires strategic agility and a keen understanding of both local and global market forces that influence competitiveness and growth potential.

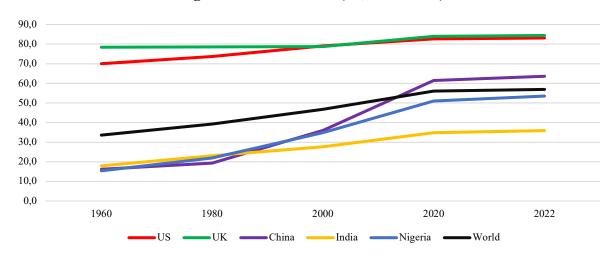


Figure 7: Urbanisation (%; 1960-2022)

Source: Developed for this Paper based on World Bank, 2024.

3.5 Technology

Technology megatrends revolve around the transformative impact of digitalisation, innovations of Industry 4.0 and rapid advances in artificial intelligence (AI), which are reshaping economies through automation, data analytics and smart technologies, while creating new opportunities and challenges in skills adaptation, data protection, privacy, cyber security and ethics. The "Weight of the Past" shows that digitalisation has become the backbone of modern economies; revolutionising every sector including communication, manufacturing and services. The digitisation of data, processes and interactions has not only improved efficiency, but also opened up new avenues for innovation, competition and service-orientation in global trade (Gröning, de la Rubia & Straubhaar, 2020; Mashayekhi, 2020; Mitchell & Mishra, 2019; Özsoy et al., 2022).

However, different levels of digitisation across countries have been a constraint, as differences in technological infrastructure and digital literacy can lead to unequal opportunities and challenges in adopting and using digital advances.

A key "Push of the Present" is Industry 4.0, representing the current wave of the industrial revolution. Industry 4.0 refers to the 4th industrial revolution, characterised by the integration of digital technologies into manufacturing and production processes. It involves the use of the Internet of Things (IoT), artificial intelligence (AI), big data analytics and automation to create smart, connected systems that improve the efficiency, productivity and flexibility of industrial operations. The result is a more agile, flexible and efficient manufacturing sector capable of producing highly customised products at the speed of mass production (Barbieri et al., 2022; Queiroz et al., 2021; Naglic, Tominc & Logozar, 2020). This technology provides new challenges for UK firms regarding cyber security, data privacy and data protection. The frequency of cyber-attacks, state or criminally sponsored, is increasing; hence, investment in skills, new technology and cyber security is high on the agenda of many UK exporters.

The "Pull of the Future" shows the rise of (generative) AI, one of the most transformative technology megatrends. AI capabilities are expanding rapidly, with machine learning algorithms able to perform complex tasks, from trade analytics to pattern recognition. This progress is not only transforming existing industries, such as pharmaceutical discovery, but also creating new ones. It has the potential to reshape trade by creating both opportunities and challenges in terms of skills demand, employment and ethics. These technology megatrends are fostering a more interconnected and digital global trade landscape (Bärtl & Krummaker, 2020; Brynjolfsson, Hui & Liu, 2019; Li, Han & Xu, 2023; Nuccio & Guerzoni, 2019; Shaffer, 2021). The future is likely to be characterised by those UK exporters who can adapt, integrate and innovate in this rapidly changing technological environment.

3.6 Regulation

Global regulatory megatrends have been characterised by the proliferation of new rules and regulations across a spectrum of sectors. However, institutional inertia of multilateral institutions underscore the necessity for a completely new set of cross-border legal frameworks to effectively address contemporary global trade challenges and international dynamics (Goldstein & van Lieshout, 2020; Raymond, 2019). The "Weight of the Past" shows financial crises and

privacy requirements: The proliferation of regulation has in part been a response to financial crises and concerns over privacy. Following the global financial crises, regulatory changes were implemented focusing on enhancing financial stability, increasing transparency, and strengthening risk management in the banking and finance sectors (Davis, 2009; Tropeano, 2011). As digitalisation increases, so does the need for robust data privacy and protection laws. This trend is epitomised by regulations like the EU General Data Protection Regulation (GDPR), influencing global standards for data handling and privacy.

An important "Push of the Present" is the growing focus on environmental, social and governance (ESG) issues in business as an emerging megatrend. It reflects a paradigm shift in how companies approach sustainability and corporate responsibility. Driven by increasing awareness of climate change, social justice issues and the need for ethical governance, companies have integrated ESG factors into their strategies. This trend is being driven by consumer demand for responsible business practices, investor preferences for sustainable investments and regulatory pressures. Companies are realising that integrating ESG criteria can lead to long-term profitability and risk mitigation, as well as a positive corporate image (EY, 2022; Navqi et al., 2023; PwC, 2022). However, the growing emphasis on ESG also presents UK exporters with the challenge of substantial adjustments in operations and reporting.

The "Pull of the Future" shows a need for new cross-border legal frameworks: Institutions that have been pillars of the global regulatory order for trade are experiencing institutional inertia; such as the World Trade Organization (WTO) and the Organisation for Economic Cooperation and Development (OECD). Both organisations have been criticised for their perceived inability to deal effectively with modern trade issues and to adapt to rapid changes. Against this backdrop, a rethinking of the role and effectiveness of these institutions is crucial to ensure that they remain relevant in a changing world. This includes responding to emerging economies demanding a greater voice and developed countries seeking to protect their interests in the face of new economic realities (Jennekens & Klasen, 2022; Klasen, 2017; Roberts, 2011). In a new world order, the development of new cross-border legal frameworks might be critical for UK exporters to effectively navigate evolving global market dynamics and regulatory land-scapes.

3.7 Trade Dynamics

The linkages between geopolitical megatrends, international trade and export finance are deep and complex. Geopolitical shifts and the realignment of global economic governance have implications for trade policy, and whilst this may include the formation of new trading blocs; trade disputes and an impact on supply chains and trade flows are also likely. At the same time, factors such as climate change, digital transformation and taxation requires a coordinated response from global institutions and national governments. The interplay between these factors is crucial in shaping the future direction of global trade, with global economic governance structures having to adapt to these new geopolitical realities.

The historical interplay between GDP and trade growth has undergone a marked change. From 1960 until the global financial crisis (GFC) of 2007/8, the relationship between GDP and trade growth was characterised by trade generally growing faster. The global trade in goods and services grew at an average real rate of approximately 6% per year, roughly twice the rate of real GDP growth over the same period (World Bank, 2024; WTO, 2023a; WTO, 2023b). This dynamic has changed significantly. The post-crisis period has been characterised by a more modest pace of trade growth, which has often been closer to, or even below, GDP growth (Figure 8). In 2024, global GDP growth is projected to be 2.6%, and global trade growth to be 3.3%.

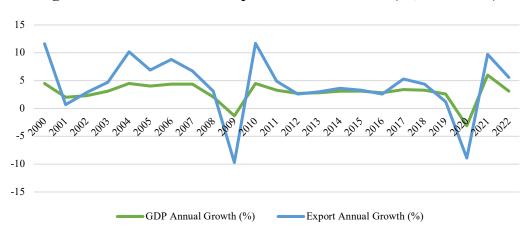


Figure 8: Global GDP and Export Annual Growths (%; 2000-2022)

Source: Developed for this paper based on World Bank, 2024.

The slowdown in global trade, reflected in lower trade volumes and subdued growth rates, shows the broader economic uncertainties and trade conflicts. It is a sharp departure from the rapid globalisation of previous decades and is prompting a reassessment of supply chains

and trade dependencies. Since 1900, trade openness expanded significantly, moving from the limited, predominantly regional exchanges of the early 20th century to a highly interconnected global trade network, facilitated by advances in technology, transport and trade policy liberalisation. As shown in Figure 9, trade openness has declined with the advent of Slowbalisation (Global Trade Alert, 2024; Klasen, 2017; Telò, 2023).

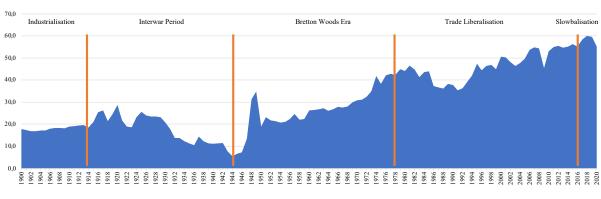


Figure 9: Trade Openness (%; 1900-2020)

G7 Sum of Exports and Imports, Percent of GDP. Source: Developed for this Paper based on Jordà, Schularick & Taylor, 2024.

Trade is increasingly political with implications for UK exporters and the export finance sector. Since leaving the EU, UK firms are navigating new markets and the opportunities they bring, as well as associated market access issues. Rising trade interventions (Figure 10) have increased the complexity and cost of trade, with implications for export finance as institutions adapt to the new risk landscape (Jennekens & Klasen, 2022; Telò, 2023; Vlados, Chatzinikolaou & Iqbal, 2022). Tensions involving key trading partners have created uncertainty and disrupted trade flows, prompting export finance providers to recalibrate their risk mitigation strategies.

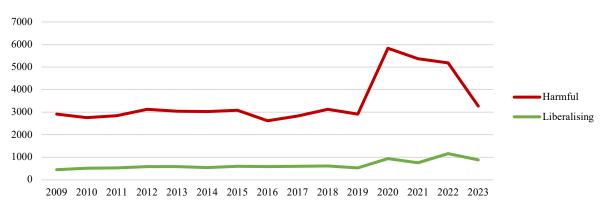


Figure 10: Government Trade Interventions (#; 2009-2023)

Source: Developed for this Paper with Data based on Global Trade Alert, 2024.

Slowbalisation and economic nationalism are also reshaping the trade landscape (see, e.g., Evenett et al., 2024). Simultaneous problems such as climate change and global pandemics, are creating volatility and unpredictability in trade, forcing UK exporters and financiers to improve their risk management strategies. The UK's reinvigorated industrial policy, focusing on strategic sectors and home-grown industries, aims to boost exports but also requires export finance to support these sectors. Shifts in economic power, particularly towards BRICS economies, force UK exporters to adapt their focus (Figure 11). Finally, as economies become increasingly data-driven, UK exporters in the technology sector are finding new opportunities, while export finance is evolving to underwrite intangible assets that are central to the digital economy.

8.000 25 **Projections** 7.000 20 6.000 5.000 15 4.000 10 3.000 2.000 5 1.000 0 0 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 BRICS Exports (\$ bn) BRICS Share (%)

Figure 11: BRIC Exports and Global Export Share (USD billion and %; 2014-2028)

Source: Developed for this paper with historical data based on World Bank, 2024.

Environmental megatrends are having a strong impact on UK exporters. The drive for environmental sustainability has led UK businesses to develop and offer green products and services. This trend has encouraged export finance to integrate environmental risk assessments more thoroughly and to support green finance initiatives. Global collaborative efforts to address climate change are linked to evolving regulations and targets to achieve net-zero emissions (Braga & Ernst, 2023; Lundquist, 2022; Peterson & Downie, 2023). Export finance institutions are recalibrating their portfolios to support industries that are central to the environmental transition. Population growth in the Global South and increasing urbanisation worldwide have implications for UK exports and export finance. Growing populations in the emerging markets and developing economies is opening up new markets for UK exporters. This demographic shift presents export finance with the opportunity to finance ventures in fast-growing markets, but it must also manage the risks associated with these economies. Increasing global urbanisation is

also driving demand for infrastructure and smart city solutions, sectors in which UK exporters have competitive strengths, prompting export finance providers to offer competitive mediumand long-term (MLT) financing instruments for large urban projects.

Technological megatrends are having a transformative impact on exporters and export finance. Industry 4.0 is pushing UK exporters to the forefront of innovation. Digitalisation has enabled UK businesses to reach global markets more efficiently, requiring export finance solutions that are agile in order to fund increasingly sophisticated production systems. The emergence of generative AI is particularly disruptive, and requiring global economies to rapidly adapt and innovate in order to maintain their competitiveness. Export finance is adapting to underwrite the intangible assets and intellectual property (IP) that are central to AI-driven businesses, while also using AI itself to improve risk assessment, financial product customisation and transaction efficiency.

Legal and regulatory megatrends are exerting a considerable influence on UK exporters. Tighter banking regulations in response to financial crises and systemic risk have led to more stringent compliance requirements and capital controls, affecting liquidity and risk appetite within commercial export finance. The rise of ESG considerations has prompted UK exporters to adopt sustainable practices and transparency in their operations, which can involve upfront costs and adjustments. Export finance institutions are increasingly integrating ESG criteria into their lending decisions and product offerings. However, practice in relation to standards and terms vary across ECAs and can distort the level playing field. Export finance providers need to develop flexible financial instruments that can accommodate different regulatory environments and support UK exporters in this complex landscape.

3.8 Export Finance and Trade Credit Insurance

Finance and de-risking play a critical role in enabling UK exporters to operate and expand in the international marketplace. Access to adequate finance is essential for UK exporters to invest in production for large orders, manage cash flow and to mitigate the risks associated with international trade. However, there are often gaps in commercial export finance and private trade credit insurance. This particularly applies for small and medium-sized enterprises (SMEs) or young entrepreneurs, which may find it difficult to secure the necessary funding due to tight lending criteria, lack of collateral or perceived higher risk by financial institutions. Similarly,

there are gaps in trade credit insurance, which protects exporters against the risk of non-payment by overseas buyers, for instance in higher risk markets or for new exporters without a strong financial history (Beck et al., 2023; Klasen & Janus, 2023; Klasen et al., 2024). These gaps can limit the ability of UK exporters to take on new business or to enter new markets, ultimately affecting their competitiveness. Addressing these market gaps through supportive government policies, alternative financing options and innovative insurance products is essential in supporting the UK export sector.

The global trade finance gap escalated to a record USD 2.5 trillion in 2022, equivalent to approximately 10.0% of global exports (Figure 12). The gap shown represents the shortfall between the demand for and the availability of finance to support international trade in imports and exports. Contributing to a rising trade finance gap are ongoing systemic challenges, including broader macroeconomic issues, geopolitical disputes and the impact of Russia's invasion of Ukraine. Common reasons for the denial of finance included perceived country risks, insufficient collateral, inadequately prepared documentation, the lack of a long transaction history or established banking relationships, and complications related to know-your-customer (KYC) regulations (Beck et al., 2023).



Figure 12: Global Trade Finance Gap (USD trillion and %; 2014-2022)

Source: Developed for this paper based on Beck et al., 2023.

4. Findings and Analysis

Geopolitical and trade megatrends are having a profound impact on the strategic and operational landscape of ECAs. For the analysis, we follow the framework developed by Klasen (2020) based on the EFQM model (EFQM, 2023). Chapter four explores the implications for ECAs' direction as evolving dynamics influence mandates and strategies, forcing governments and agencies to reassess their role in a rapidly changing world. It also analyses the implications for ECAs' execution, as emerging challenges may require governments to shift financial and human resources for adaptive and effective approaches. Similarly, ECAs are changing products and processes to remain competitive. Finally, this chapter explores the impact on ECAs' overall performance and outcomes, creating both opportunities and obstacles.

4.1 Implications for ECAs' Direction

Mandate and Strategic Approach

The spectrum of ECA mandates and strategic approaches covers a wide range of roles and functions. The first approach, the "lender or insurer of last resort", acts as a crucial backstop, providing financial support and insurance when commercial markets are unable or unwilling to do so. It plays a key role in stabilising trade flows during economic downturns or in markets perceived to be risky. The second approach, the "trade facilitator", works by proactively promoting domestic economic growth through exports and not competing with commercial actors. It focuses on reducing barriers, providing expertise and mitigating risk to facilitate smoother transaction flows. The third approach, the "trade creator", is more proactive, actively seeking new markets and trade opportunities. It often involves the strategic use of credit and insurance products to encourage and support the entry of domestic firms into unexplored or underexploited markets. Finally, the "growth promoter" approach goes beyond trade facilitation and creation to stimulate broader economic growth. This is achieved through targeted support to sectors or initiatives that have the potential to drive substantial domestic economic development, as well as development impact in buyer countries. Table 1 provides mandates and/or missions of selected ECAs from G7.

Table 1: Mandates and/or Missions (G7 ECAs)

Canada	To use our unique trade knowledge and financial solutions to support and develop sustainable trade between Canada and the world, and to enhance Canada's competitiveness in the international marketplace.							
France	To favour the growth of the French economy by helping entrepreneurs thrive.							
Germany	To protect German exporters and banks financing exports against political and commercial risks.							
Italy	To help Italy grow.							
Japan	To conduct insurance business of covering risks which arise in foreign transactions, and which are not covered by commercial insurance. ¹							
UK	To advance prosperity by ensuring no viable UK export fails for lack of finance or insurance, doing that sustainably and at no net cost to the taxpayer.							
US	To support American jobs by facilitating the export of U.S. goods and services.							

¹ NEXI. Source: Developed for this Paper based on the Websites of Respective Institutions.

Traditionally, ECA mandates and strategies have focused on additionality and crowding-in. The main objective is to finance, insure or guarantee exports. Since the OECD Arrangement first came into existence in 1978, Participants have sought to foster a level playing field, preventing a race to the bottom. Their approach until the early 2000s was often to only act as a "lender or insurer of last resort" (Jennekens & Klasen, 2023). More recently, escalating trade tensions and increasing policy uncertainties have underscored the importance of much more strategic behaviour of ECAs. There is a growing emphasis on targeting sectors deemed strategically important, such as SMEs and climate-related technologies. The evolving focus is to actively respond to the changing dynamics of global trade such as Slowbalisation, with the aim of enhancing the impact and relevance of ECA initiatives. For example, EIFO is very proactive in its origination approach as a "trade creator" for the wind industry in Denmark. In Italy, SACE is a "trade creator" with its "push strategy". It is a central part of the Italian toolkit and a crucial approach to generate new export transactions. In Japan, the government strives to create trade through a collaborative approach between NEXI, JBIC and other public agencies. With its extensive mandate and proactive "pull strategy", EDC can be described as a "growth promoter", dedicated to helping Canadian companies succeed on the world stage. Removing barriers to growth for indigenous businesses is one of EDC's equitability objectives.

Figure 13: G7 ECA Strategic Approaches

Insurer or Lender of Last Resort

Trade Creator

2024

2024

Insurer or Lender of Last Resort

Insurer or Lender of Last Resort

Trade Facilitator

Source: Developed for this paper.

Climate action has become a key goal and an integral part of the mandate of many ECAs. Recognising the critical role they play in trade and finance, ECAs are actively integrating climate change considerations into their strategies and operations (Klasen et al., 2022; Lundquist, 2022; Michie, 2022; Peterson & Downie, 2023). For instance, the UN-convened Net-Zero Export Credit Agencies Alliance (NZECA) unites public finance institutions, including EIFO from Denmark, EKN from Sweden and UKEF that are committed to delivering net-zero economies, by supporting trade decarbonisation and facilitating joint action. Many ECAs have also established dedicated products to support climate action. This demonstrates a shift towards prioritising sustainability and climate action in their financing activities.

Governments such as China, the US and EU Member States have sought new industrial policy tools to address the effects of poly-crises. The use has been uneven, with advanced economies (AEs) the most frequent users (Table 2). An important way in which this focus on industrial policy is influencing ECAs is through alignment of their activities with national strategies, driven by the factors discussed above. The pursuit of industrial policy has raised alarm in other countries about the loss of economic and national security, and a maelstrom of tit-for-tat retaliation. This is a challenge for which the multilateral rules-based trading system appears illequipped. For example, while the new OECD Arrangement represents a breakthrough in tenors and repayment terms, it falls short of modernisation in the interplay between different trade regimes, pre-shipment rules and climate action.

Table 2: New Industrial Policies by Income Group

	Domestic Subsidy	Export Subsidy	Export Barrier	FDI	Import Barrier	Localisation	Procurement
AEs	788	148	69	9	111	124	33
EMDEs	242	25	35	16	146	53	7

2023. Source: Developed for this analysis based on Evenett et al., 2024.

UKEF might implement a strategic approach to shift its mandate towards a "growth promoter" approach in a baseline scenario. The multipolar world and rising regional conflicts demand a more proactive and global strategy, where UKEF can play a key role in promoting the UK's economic links with emerging economic centres as the UK looks to grow trading relationships beyond the EU. A focus would most probably be on climate technologies. UKEF's adaptation to digital megatrends is critical to supporting the UK's SME sector and ensuring a competitive edge in the global digital economy. As a "growth promoter", UKEF will facilitate and create trade in times of Slowbalisation (Figure 14). It will also actively contribute to wider economic development by supporting more jobs, fuelling post-Brexit growth and lubricating the gears of international development with a focus on equitability. In a worst case scenario, UKEF's role would be severely challenged, and it would need flexible strategies and more resources to adapt. In a best case scenario, UKEF could pivot towards being primarily a "trade facilitator".

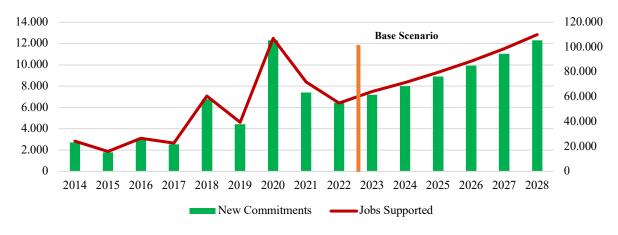


Figure 14: UKEF as a future "Growth Promoter"

Source: Developed for this paper based on UKEF data. Estimations for "New Commitments" 2023-2028 based on own calculations considering a historic CAGR of 11.4%. Estimations for "Jobs Supported" 2014-19 and for 2023-28.

Model and Policy Support

The models of ECAs are closely linked to the organisational set-up and the way in which they are legally organised. These structures manifest in three different forms of public export credit operations. In the first form, the ECA is an integral part of the government, directly embedded in the government structure. This integration ensures close alignment with government policies and objectives. In the second form, countries choose to establish ECAs as autonomous public entities. These can take the form of an independent public agency, a public bank or a state-owned company operating under its own commercial legal framework. Such a

structure allows for a degree of operational independence while maintaining alignment with broader government objectives. In the third form, the ECA is integrated into a commercial organisation where it operates on behalf of and for the account of the government. This model leverages efficiencies and expertise of the commercial sector while fulfilling the government's export credit mandate.

A "whole-of-government" approach is on the rise. While most ECAs have historically been relatively independent of policymakers and focusing on the single mandate of export support, increasingly a holistic approach is taken that combines different intervention elements. For example, export and development finance are critical to China's long-term strategies, such as "Made in China 2025" or the BRI. This leads to close coordination between policy banks such as China EXIM, Sinosure and China Development Bank. Japan and Korea take a whole-of-government approach, integrating various government agencies to enhance their trade competitiveness and support sustainable development in emerging economies. The EU is working on enhanced coordination between development finance institutions (DFIs) and ECAs in the context of the "Global Gateway" initiative. Some European economies, such as the Netherlands, have implemented joint foreign trade and development cooperation strategies that combine traditional and newly established instruments, such as Atradius DSB and Invest International. In Finland (Figure 15), "Team Finland" plays a key role for export promotion (Klasen, 2020; Salminen et al., 2019). "Team Sweden" including EKN also offers a streamlined servicespath through coordinated services at home and abroad.

BUSINESS
FINLAND

Ministry of Economic Affairs and Employment of Finland

Centre for Economic Development, Transport and the Environment

Centre for Economic Development, Transport and the Environment

Figure 15: Whole-of-government Approach with "Team Finland"

Source: Developed for this paper with logos from respective institutions.

The "whole-of-government" approach is a strategic framework that involves the coordinated efforts of different government departments and agencies to achieve comprehensive and

consistent policy outcomes. Often driven by the rise of industrial policies and strategic competition, it goes beyond traditional siloed activities and promotes cross-departmental collaboration and policy integration across different sectors to address complex, multi-faceted challenges. Geopolitical tensions, fragmentation and Slowbalisation have increased the importance of a coherent policy-making process ensuring that government actions are synergistic and mutually reinforcing. The creation of Bpifrance is an example of the "whole-of-government" approach in Europe, as it brings together various government financial instruments in a "one-stop-shop". Working also together with other agencies such as Agence Française de Développement (AFD), support for French businesses is streamlined and in line with broader national objectives.

UKEF's organisational model is well placed to deal effectively with global megatrends. UKEF is able to respond effectively to the increased weaponisation of trade, where government-backed financial support and guarantees are crucial to mitigating risk and protecting exporters from the vagaries of Slowbalisation and geopolitical upheaval. In the area of digital trade, UKEF's governmental focus enables it to keep abreast of rapid technological advances and regulatory changes, facilitating the adaptation and promotion of digital trade practices among exporters. It also allows for a streamlined approach to aligning export finance with the UK's commitments to environmental sustainability and climate change mitigation. The diversity of the UK's public sector investment landscape, including Innovate UK, UKRI, the British Business Bank, the UK Infrastructure Bank, as well as British International Investment (BII) and UKEF, is a strength - with a wide variety of financing options to support businesses, but can pose coordination challenges. A more coherent end-to-end government offer can enhance and synergise trade, development, green transition and economic growth in the context of evolving megatrends. Worst case and best case scenarios would most probably not change the future approach.

4.2 Implications for ECAs' Execution

Resources

Financial and human resources are key elements in the success of ECAs. Typically, agencies receive their funding either through government authorisation with allocations from the national budget, or via government-held ownership shares. This provides a core financial base that is critical to their operations. In addition, some ECAs expand their financial capacity by accessing

capital markets and using various financial instruments to strengthen their balance sheets. This approach allows them to diversify their funding sources and increase their financial resilience. In addition, some ECAs operate special accounts that are aligned with national interests or specific policy objectives (Klasen & Janus, 2023). From a human resources perspective, there is a shift in many ECAs towards a client-centric model. This shift underscores a commitment not only to provide financial support, but also to add value through expertise and agile engagement. This includes investing in skilled staff who understand the complexities of international trade and finance and can provide tailored advice and flexible solutions. The emphasis on human resources highlights the importance of having a knowledgeable and dedicated team capable of navigating the evolving demands of global trade. The dual focus on sound financial structuring and human expertise is essential for ECAs to fulfil their role effectively.

There has been a notable trend towards increased authorisations and capital injections, as well as growing ECA staff. For example, in Canada, EDC's authorised share capital was increased from CAD 3 billion to CAD 15 billion in 2020 to better support businesses during the Covid-19 pandemic. After a period of uncertainty, US EXIM received a renewal of its charter in 2019 with a total financing authority of USD 135 billion. Several non-G7 countries also increased financial capacities. Denmark, for instance, nearly quadrupled EIFO's authorisation between 2012 and 2022. In addition, many ECAs have expanded their staff to meet the complex international trade finance landscape. SACE in Italy grew from 457 to 646 employees between 2013 and 2022. The number of employees at Sinosure increased from 2,509 in 2013 to 3,163 in 2022. EDC in Canada has almost doubled its workforce in the last ten years. The same applies to K-Sure in South Korea and SERV in Switzerland. Other agencies, such as EH in Germany, have not grown in size, but have hired new staff to focus on more complex areas such as sustainability and green finance. These examples underscore a common trend among major economies: Strengthening the human resource capacity of their ECAs to provide flexibility and agility and to better meet the evolving challenges of international trade and finance.

SACE **B**pifrance **UKEF** US EXIM

Figure 16: G7 and China ECA Staff Developments (#; 2013-2022)

Notes: Bpifrance including all service lines; Estimations for US EXIM except 2015, 2018 and 2020, and for Sinosure for 2014-2017. Source: Developed for this paper based on data from respective agencies.

In navigating new trading horizons, UKEF may have to further scale up its operations in a baseline scenario. With a growing number of large-scale infrastructure projects emerging globally, UKEF may need to increase its financial capability to adequately support these capital-intensive ventures. These projects also require an agile approach with specialist expertise in technologies and project finance. At the same time, the expansion of trade into riskier markets presents more complex transaction challenges. To address these effectively, UKEF may need to further strengthen its workforce by recruiting additional experts in areas such as risk assessment and complex financial structuring. The escalating demand for climate finance may also require the recruitment of additional staff with expertise in environmental sustainability and green finance. In a worst case scenario, UKEF may need to explore new ways of raising funds, for example through issuing bonds. A best case scenario would allow UKEF to maintain its current financial resources, maintain a stable workforce and focus more effectively on its existing portfolio.

Products

ECAs provide products ranging from standard credit insurance to comprehensive financing solutions. The traditional ECA approach focuses on standard post-shipment insurance offerings, such as supplier and buyer credit insurance. These products protect exporters and banks against non-payment by foreign buyers due to political or commercial risks. Many agencies extend insurance offerings to the pre-shipment phase, complemented by more complex

post-shipment offerings such as project finance and asset-based guarantees. In the third approach, ECAs offer a mix of pre-shipment and post-shipment insurance as well as direct lending. This ensures that exporters have continuous coverage from production to final delivery, coupled with the provision of direct loans. The most comprehensive approach involves a full range of financing products, from equity and mezzanine finance to a variety of insurance and guarantee options, as well as direct lending. In addition, offerings can include not only pre- and post-shipment support, but also untied, import and development finance. This holistic financial solution addresses varied needs of firms, particularly those involved in large and long-term projects.

New products have been introduced around the world, ranging from equity to import guarantees for CRMs. The last decade has seen a remarkable expansion of products, with many ECAs being more agile and beginning to offer pre-shipment financing. Agencies in France, Italy, the Netherlands and Sweden, for example, have introduced working capital guarantees. There has also been a significant growth in direct lending, particularly for "small tickets", typically up to £ 15 million. Commercial Interest Reference Rates (CIRR) loans have become increasingly important, for example at Finnvera in Finland. These allow exporters to secure financing at a fixed interest rate for the entire term of the loan. There is also a growing trend towards equity financing that focuses on the link between innovation and exports. Untied loans and guarantees have increased substantially in times of Slowbalisation, and guarantees for CRM imports have become much more relevant, for example in Germany. These developments indicate a strategic shift in ECA product offerings beyond traditional export finance models directly linked to export transactions (Figure 17).

Figure 17: ECA Product Range (Examples)

Innovation	Investment	Procurement	Production	Export	FDI
Equity	CAPEX Guarantee	Import Guarantee	Working Capital Guarantee	Project Finance	FDI Guarantee

Source: Developed for this paper.

In the future, UKEF could expand its portfolio with a range of additional products designed to boost UK exports and secure access to critical materials. The new dynamics of global trade may create a need for more flexible and agile financial support for UK exporters in a baseline scenario. In particular, UKEF may need to consider the provision of untied loans and

guarantees. In addition, the introduction of import-related offerings for CRMs that are essential to strengthening the resilience of the UK supply chain might be important. A comprehensive approach with an even broader and more visible approach for innovation and CAPEX loans can reflect UKEF's commitment to adapting to the evolving needs of the global marketplace and the UK's strategic economic interests. In a worst case scenario, UKEF would have to significantly expand its services to include a fully-fledged product suite: Equity investments and comprehensive advisory services in addition to guarantees, insurance, lending options. In a best case scenario, UKEF would be open to new product changes by 2030.

Processes and Transformation

ECAs apply comprehensive risk management frameworks to identify, assess, monitor and manage the diverse risks they face. Several agencies use advanced Enterprise Risk Management (ERM) frameworks to improve their risk management capabilities. Furthermore, stakeholders in many countries focus on environmental, social and human rights (ESHR) aspects. An integration of digital processes is also vital, as it enhances efficiency, accuracy, and speed in handling complex transactions and risk assessments. Embracing digitalisation allows ECAs to better align with modern trade practices, providing technology-driven solutions that meet the evolving needs of exporters. There is an increasing emphasis on multiple dimensions of risk management and agile ECA processes. EIFO in Denmark, for instance, manages credit risk through a rating framework and by actively seeking to transfer risk to private reinsurers. There is a hard limit on capital requirements based on the Value at Risk (VaR) model. With regard to ESHR, environmental and social due diligence has become increasingly relevant for ECAs. OECD Common Approaches require an assessment of multiple dimensions of sustainability as an important aspect of export promotion, with 1,073 "Category A" and "Category B" project reports between 2013 and 2021 (Figure 18). Some ECAs such as Germany's EH even go beyond OECD requirements.

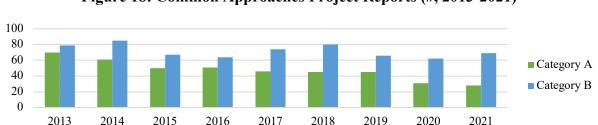


Figure 18: Common Approaches Project Reports (#, 2013-2021)

Members' Category A and Category B reporting by numbers since adoption of the 2012 (2013-2016) and 2016 (2017-2021) versions of the Common Approaches. Source: Developed for this Paper based on OECD, 2020 and OECD, 2023.

There is a common understanding that digital is a way to improve customer service and customer engagement. Digital applications often improve workflows and automate actions. This includes creating tasks and validation requests, or automatically sending emails and reminders. Some agencies have adopted sophisticated data analytics and AI-driven systems for agile credit risk assessment, reflecting a broader movement among ECAs to use technology to modernise their services, improve operational efficiency, and better meet the evolving needs of exporters in the digital age. The adoption of digital systems and AI processes for customer interactions and risk management analytics at ECAs also introduces challenges related to cybersecurity, necessitating robust measures to protect sensitive data and systems from potential cyber threats.

UKEF might further innovate its risk management and ESHR management practices. To navigate the complexities of geopolitical risk, UKEF could incorporate even more sophisticated geopolitical analytical tools and predictive models, leveraging big data and AI technologies to anticipate and mitigate potential risks. In the area of ESHR management, UKEF can also strengthen its focus on sustainability by integrating advanced environmental risk assessment frameworks and adopting more efficient due diligence processes to ensure that its financing activities will remain in line with international best practices, keeping up with evolving standards. Furthermore, UKEF can harness the power of data analytics to better understand and manage the risks associated with climate change. These strategic advances in risk and ESHR management would position UKEF as a leader in addressing the multiple challenges of the current global landscape, while fulfilling its mandate to support UK exporters. Worst case and best case scenarios would most probably not change UKEF's approach to processes and transformation.

4.3 Implications for ECAs' Results

Stakeholder Expectations

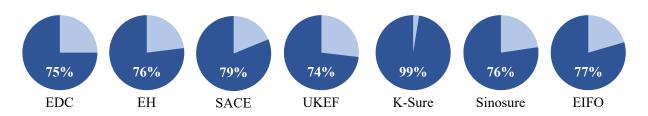
Stakeholders have a variety of expectations including sustainability, SME support, development objectives and equitability. Sustainability requires ECAs to finance projects that meet stringent environmental standards and contribute positively to the global climate agenda. Support for SMEs is critical as stakeholders expect ECAs to provide tailored financial products and advisory services to help smaller exporters navigate the complex landscape of international

trade and capitalise on growth opportunities. The development impact in buyer countries is related to ECA support for projects that stimulate economic growth, infrastructure development and social progress, particularly in emerging markets and developing economies (EMDEs) and least developed countries (LDCs). Finally, equitability is a key expectation, with stakeholders looking for ECAs to take a fair and impartial approach in supporting a diverse range of projects and businesses. This includes ensuring that ECA services are accessible and beneficial, for example for ethnic minorities or women entrepreneurs, upholding the principles of inclusivity.

Rising stakeholder expectations have shaped the operational ethos of ECAs. These expectations guide them towards a more responsible, impactful and equitable approach to their global trade facilitation role. The sector guidelines in Germany for energy, industry and transport contain decision criteria for the granting of export credit guarantees and set a climate policy benchmark in 2023 for the first time. In support of SMEs, US EXIM has implemented new initiatives specifically designed to help small businesses expand their export capabilities. In terms of promoting development in buyer countries, NEXI in Japan has been heavily involved in infrastructure projects in developing countries. Atradius DSB provides support in LDCs as an integral part of the Dutch Good Growth Fund when regular ECA offerings are not available due to higher risks. Ensuring equitability has been a focus for EDC in Canada, emphasising inclusive trade through the support of diverse and underrepresented sectors. These examples illustrate a broader trend among ECAs to align their activities with contemporary stakeholder expectations, balancing commercial objectives with a commitment to sustainable, inclusive and developmental global trade practices.

ECA support is critical because of the unique challenges SMEs face in the global marketplace (Figure 19). Through lending, guarantees and insurance, ECAs foster SMEs' access to finance and mitigate export-related risks. Working capital guarantees help exporters secure the necessary funds from banks to cover the costs of producing export goods. Supplier credit insurance protects against non-payment risks, thereby ensuring financial stability. Direct loans provide SMEs with critical financial resources. In addition, SMEs typically have less experience and fewer resources to navigate complex foreign trade regulations and market conditions. ECA support helps overcome these information and regulatory barriers by providing expertise and assurance in unfamiliar territories.

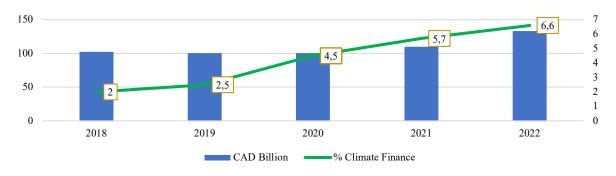
Figure 19: Share of SME Exporters (Examples)



Mean Values; 2013-2022. Source: Developed for this Paper based on Data from Respective Agencies.

UKEF may face the challenging task of addressing multiple, sometimes competing, future priorities. A multi-focussed strategy might include UKEF's strong commitment to climate change with a growing green lending and insurance portfolio similar to EDC (Figure 21). At the same time, UKEF could be tasked with providing additional support for SMEs to create and safeguard more jobs in the UK. In addition, UKEF might need to increase its efforts to contribute to the development of EMDEs and LDCs, focusing on projects that promote social development, while considering the impact on ESHR. In this context, achieving equity in its operations becomes increasingly complex. UKEF would need to seek to balance these different objectives and ensure fair and impartial support across different regions and sectors. In a worst case scenario, UKEF could face challenges in fulfilling its multi-faceted mandate. A base case scenario might allow to focus on export objectives and jobs, as well as considerations of development and sustainability.

Figure 20: EDC Commitments and Climate Finance (CAD bn; %)



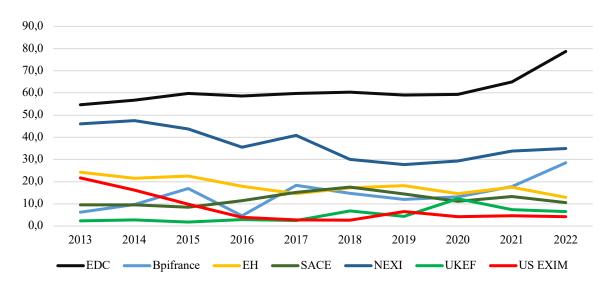
New Total commitments and climate finance percentage. Source: Developed for this paper based on EDC Data.

Strategic and Operational Performance

The performance of ECAs is a multifaceted area where financial indicators play a crucial role in understanding impact. Indicators such as new commitments, gross written premium and claims are essential not only for assessing the current performance of ECAs, but also for predicting future performance with a high degree of certainty. By analysing these metrics, ECAs can decipher the intricate links between their operational activities and outcomes, enabling them to identify the cause-and-effect relationships that have a significant impact on performance. This insight is vital for ECAs as it allows them to stay informed about their operational efficiency and effectiveness. In addition, the understanding gained from these indicators enables ECAs to make informed decisions to influence their current direction and the implementation of their strategies. Such a comprehensive approach to performance measurement ensures that ECAs remain adaptable and responsive to both internal organisational needs and external market dynamics.

Several ECAs have seen remarkable developments in their financial performance in recent years; with new insurance commitments and loans as key metrics undergoing significant changes (Figure 21). For example, Bpifrance has seen a robust increase in new insurance and lending commitments from EUR 16.0 billion in 2018 to EUR 32.7 billion in 2022. Finnvera reported substantial growth in gross written premiums amounting to EUR 154.4 million in 2022, indicating an expansion of its coverage and an increased appetite for risk in various markets. Claims remained relatively low in many countries, suggesting that ECAs could take on more risk in times of poly-crises. EDC, for example, experienced a significant decrease from CAD 465.0 million to CAD 77.0 million since 2019 despite challenging global economic conditions and the impact of the Covid-19 pandemic. These examples illustrate a dynamic land-scape where financial performance is shaped by both global economic megatrends and country-specific trade policies.

Figures 21: G7 ECA New Commitments (£ billion; 2013-2022)



Billion GBP as of 29/12/2023. Source: Respective agency.

UKEF could face a landscape characterised by increasing insurance commitments and a surge in activity in new lending. As UKEF ventures into more challenging sectors and buyer countries in a baseline scenario, it would be confronted with a riskier portfolio. In addition, the prevalence of geopolitical tensions can contribute to an environment where claims are on the rise, particularly from sectors highly sensitive to political and economic fluctuations. This scenario would require UKEF to demonstrate heightened vigilance and enhanced risk management capabilities, while maintaining a delicate balance between supporting trade and managing the increased risks associated with a diversified portfolio. In a worst case scenario, UKEF would face a number of daunting obstacles in a hostile global arena. In a best case scenario, UKEF would maintain steady support for UK exporters with consistent new commitments and low claims.

5. Summary and Conclusions

Trade and export finance in the UK are facing significant challenges due to political, environmental and technological changes. The increased complexity and cost of trade driven by fragmentation, geopolitical tensions and a multipolar global economy, are forcing the UK to diversify its trade, particularly with emerging markets. Megatrends such as Slowbalisation are driving UK businesses towards localised trade and new risk management strategies. Environmental challenges, including global warming and the green transition, are transforming UK exports, driving innovation in sustainable products and a focus on environmental risk. In addition, regulatory changes and net-zero targets are forcing UK companies to rethink their manufacturing and export strategies. Demographic shifts, particularly population growth in the Global South and urbanisation, are creating new markets for UK exports. This situation is leading to an emphasis on high-tech and advanced manufacturing exports, with export finance evolving to support these sectors and major infrastructure projects in rapidly urbanising areas.

Finance and risk mitigation are essential for UK exporters; especially as the global trade finance gap reached USD 2.5 trillion by 2022. Access to finance is critical for UK exporters to invest, manage cash flow and mitigate trade risk. However, SMEs in particular, face challenges in securing finance and trade credit insurance due to tighter lending criteria and perceived higher risks, a problem that is exacerbated in high-risk markets or for new exporters. This widening financing gap is further complicated by factors such as increased country risk and complex KYC regulations. Tackling these gaps with supportive policies, alternative finance and innovative products is vital to the UK's export competitiveness. UKEF and DBT are instrumental in facilitating these opportunities, with UKEF's aim to ensure that no viable UK export fails for lack of finance or insurance, doing that sustainably and at no net cost to the taxpayer.

UKEF is evolving its role towards a "growth promoter" model, adapting to a multipolar world by actively promoting the UK's economic links with developing markets. In response to the global urgency in addressing climate change, UKEF can play a more important role in the future, aligning its lending and insurance activities with the transition to a low carbon economy. Further digitalisation is also a priority for UKEF, which is vital to strengthening the UK's SME sector and maintaining its competitive position in the global digital economy. The enhanced "growth promoter" role, positions UKEF not just as a "trade creator" but as a proactive contributor to wider economic development; supporting jobs, driving local growth and facilitating

key aspects of international trade to create a global impact. There may be a need to further develop an even more effective ecosystem that synergises trade, development, green transition and export growth in the face of evolving megatrends. As a key component of the UK Government's export strategy, UKEF is well equipped to navigate the complexities of geopolitical and trade megatrends. With a view to countering the increasing use of trade as a geopolitical tool, UKEF provides vital government-backed financial support and guarantees to help protect British exporters from geopolitical turbulence. In the area of Slowbalisation and digital trade, UKEF's integration into the government framework enables it to keep pace with rapid technological and regulatory changes, and to improve digital trade practices among exporters. In addition, with the global shift towards decarbonisation, UKEF's role linked to government directives is becoming vital, enabling a coherent strategy to align export finance with the UK's environmental and climate goals.

UKEF may look to scale up its operations in navigating new trading horizons. With a growing number of large-scale infrastructure projects emerging globally, UKEF may need to increase its financial capability to adequately support a broad range of capital-intensive ventures. At the same time, the expansion of trade into riskier markets presents more complex transaction challenges — requiring an agile organisational approach to handle them. Looking ahead, UKEF could expand its products to further boost SME exports and ensure access to CRMs. The changing landscape of global trade may require more adaptable and tailored financial support for UK exporters. In particular, UKEF could consider offering untied loans and guarantees to support export development. In addition, incorporating import-related solutions for CRMs could be crucial to strengthening the resilience of the UK supply chain. Such a holistic approach would further demonstrate UKEF's commitment to meeting the dynamic needs of the global marketplace and aligning with the UK's strategic economic objectives.

UKEF is ready to innovate its risk and ESHR management practices to address emerging complexities. In geopolitical risk, the incorporation of sophisticated analytical tools and predictive models that leverage big data and AI will be key to anticipating and mitigating risk. For ESHR management, UKEF can enhance its sustainability focus by implementing advanced environmental risk assessments and improving social and human rights due diligence. The use of data analytics will also be critical in managing risks related to climate. In addition, optimising UKEF's internal digital processes through advanced data management and analytics systems will lead to more efficient and accurate decision-making. These strategic developments will not

only enable UKEF to effectively navigate the multiple challenges of the global landscape but will also strengthen its role in supporting UK exporters.

UKEF, like all ECAs, faces the challenge of balancing multiple and conflicting priorities in a rapidly evolving trade landscape. Amid the weaponisation of trade and the growth of the digital economy, UKEF's commitment to clean growth and transition is evident in its financing of projects that reduce carbon emissions and support sustainable technologies. At the same time, UKEF may need to increase its support for SMEs, providing UK exporters with the necessary tools and financial support to navigate turbulent markets. In addition, UKEF could increase its efforts to support the development of EMDEs and LDCs, focusing on socially beneficial projects while continuing to consider ESHR impacts. Balancing these different objectives to ensure equitable and impartial support across regions and sectors adds to the complexity of UKEF's work. As UKEF expands into more challenging sectors and countries, it could face a portfolio with increased risks, particularly as it expands into areas with significant climate-related risks, in line with global environmental objectives amid technological uncertainties. In addition, geopolitical tensions around the world could lead to more frequent claims, particularly from sectors vulnerable to political and economic volatility. In this context, UKEF would need to exercise increased vigilance and robust risk management, seeking to maintain a balance between facilitating international trade and managing the escalated risks of a more diversified portfolio. UKEF, operating within a vibrant UK public financing ecosystem, is well placed to navigate these multiple challenges and opportunities.

References

- Acharyya, A. (2016) The Future of Global Governance: Fragmentation May Be Inevitable and Creative. *Global Governance*, 22(4), 453-460.
- AXA. (2023) *AXA Future Risks Report 2023*. Available from: https://www.axa.com/en/press/publications/future-risks-report-2023-report [Accessed 30 December 2023].
- Bärtl, M. & Krummaker, S. (2020) Prediction of Claims in Export Credit Finance: A Comparison of Four Machine Learning Techniques. *Risks*, 8(1), 22.
- Barbieri, P., Boffelli, A., Elia, S., Fratocchi, L. & Kalchschmidt, M. (2022) How does Industry 4.0 affect international exposure? The interplay between firm innovation and home-country policies in post-offshoring relocation decisions. *International Business Review*, 31(4), 101992.
- Beck, A. C., Campbell, D. & Shrives, P. J. (2010) Content analysis in environmental reporting research: Enrichment and rehearsal of the method in a British-German context. *British Accounting Review*, 42(3), 207-222.
- Beck, S., Kim, K., Pandey, A., Tayag, M. C., Latoja, M. C. & Malaket, A. R. (2023) 2023 Trade Finance Gaps, Growth, and Jobs Survey. ADB Briefs No. 256, dx.doi.org/10.22617/BRF230334-2.
- Braga, J. P. & Ernst, E. (2023) Financing the green transition. The role of macro-economic policies in ensuring a just transition. *Frontiers in Climate*, 5:1192706.
- Braun, V. & Clarke, V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research* in *Psychology*, 3(2), 77-101.
- Brynjolfsson, E., Hui, X. & Liu, M. (2019) Does Machine Translation Affect International Trade? Evidence from a Large Digital Platform. *Management Science*, 65(12), 5449-5460.
- Caprio, G., D'Apice, V. Ferri, G. & Puopolo, G. W. (2014) Macro-financial determinants of the great financial crisis: Implications for financial regulation. *Journal of Banking & Finance*, 44(1), 114-129.
- Collingro, F. & Frenkel, M. (2020) On the financial market impact of euro area monetary policy: A comparative study before and after the Global Financial Crisis. *Global Finance Journal*, 45, 100480.

- D'Anieri, P. (2023) Power Politics and the Crisis of Democracy: Balance, Hegemony, and the Realpolitik of Domestic Politics. *Ideology and Politics*, doi:10.36169/2227-6068.2023.01.00001.
- Davis, K. (2009) Financial Regulation after the Global Financial Crisis. *Australian Economic Review*, 42(4), 453-456.
- Dubai Future Foundation. (2023) *10 Megatrends Shaping Our Future in 2023*. Available from: https://www.dubaifuture.ae/reports/10-megatrends-shaping-our-future-in-2023 [Accessed 29 December 2023].
- Dufva, M. & Rekola, S. (2023) Megatrends 2023. Understanding an era of surprises. Helsinki: Sitra.
- Edwards, S. (1993) Openness, Trade Liberalization, and Growth in Developing Countries. *Journal of Economic Literature*, 31, 1358-1393.
- EFQM. (2023) *The EFQM Model*. Available from: https://mail-chi.mp/73aee6f4941d/6fmwnr14te [Accessed 2 March 2024].
- Fergnani, A. (2019) Futures Triangle 2.0: integrating the Futures Triangle with Scenario Planning. *Foresight*, 22(2), 178-188.
- EY. (2022) ESG megatrends and opportunities shaping future. Available from: https://www.ey.com/en_in/climate-change-sustainability-services/how-esg-megatrends-and-opportunities-are-shaping-our-future [Accessed 2 December 2023].
- Gioia, D. A, Corley, K. G. & Hamilton, A. L. (2013) Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1), 15-31.
- Global Trade Alert. (2024) *Global Dynamics*. Available from: https://www.globaltradealert.org/global_dynamics [Accessed 31 January 2024].
- Goldstein, J. & van Lieshout, E. (2020) Is There a Future for Multilateral Trade Agreements. In: Klasen, A. (ed.) *The Handbook of Global Trade Policy*. Oxford: Wiley, pp. 173-200.
- Goodhart, C. & Pradhan, M. (2020) *The Great Demographic Reversal*. Cham: Palgrave Macmillan.
- Gröning, S., de la Rubia, C. & Straubhaar, T. (2020) On the Remeasurement of International Trade in the Age of Digital Globalisation. In: Klasen, A. (ed.) *The Handbook of Global Trade Policy*. Oxford: Wiley, pp. 47-78.
- Hadano, T. (2020) Multipolarity and the Future of Multilateralism: Towards 'Thick' Peace-keeping in the Donbas Conflict. *Global Policy*, 11(2), 212-221.

- Hale, T., Held, D. & Young, K. (2013) *Gridlock: Why Global Cooperation is Failing When We Need It Most*. Cambridge: Polity.
- Hoeppe, P. (2016) Trends in weather related disasters Consequences for insurers and society. *Weather and Climate Extremes*, 11, 70-79.
- Inayatullah, S. (2008) Six pillars: futures thinking for transforming. *Foresight*, 10(1), 4-21.
- Ipsos. (2023) *A New World Disorder? Navigating a Polycrisis*. Available from: https://www.ipsos.com/sites/default/files/2023-Ipsos-Global-Trends-Report.pdf [Accessed 10 January 2024].
- Jennekens, B. & Klasen, A. (2022) How "safe" is the WTO "safe haven"? A need to modernise disciplines for officially supported export credits. *Journal of International Trade Law and Policy*, 22(1), 1-14.
- Klasen, A. (2017) Trade: Gridlock and Resilience. In: Hale, T. & Held, D. (eds.) *Beyond Gridlock*. Cambridge: Polity, pp. 65-82.
- Klasen, A. (2020) Staatliche Finanzierung für innovative Exportunternehmen. In: Graumann, M., Müller, A. & Weiß, H.-J. (eds.) *Innovationen für eine digitale* Wirtschaft. Wiesbaden: Springer Gabler, pp. 199-224.
- Klasen, A. & Janus, H. (2023) Improving Export Credit Agency Impact Through Full Faith and Credit. *Journal of World Trade*, 57(5), 789-808.
- Klasen, A. & Lomitashvili, T., Rosbach, K. & Taniguchi, K. (2024) Policy Approaches to Stimulate Exports: The Case of Georgia. *Public Administration and Development*, 44(2), https://doi.org/10.1002/pad.2045.
- Kutaula, S., Gillani, A., Leonidou, L. C. & Christodoulides, P. (2022) Integrating fair trade with circular economy: Personality traits, consumer engagement, and ethically minded behavior. *Journal of Business Research*, 144, 1087-1102.
- Krugman, P. R. (1979) Increasing Returns, Monopolistic Competition, and International Trade. *Journal of International Economics*, 9, 469-479.
- Lee, R. D. & Mason, A. (2011) *Population aging and the generational economy: a global perspective*. Cheltenham: Edward Elgar.
- Li, H., Han, J. & Xu, Y. (2023) The effect of the digital economy on services exports competitiveness and ternary margins. *Telecommunications Policy*, 47(7), 102596.
- Lundquist, P. (2022) Export credit agencies delivering finance for the green transition in times of crisis. *Global Policy*, 13(4), 530-533.

- Mashayekhi, M. (2020) Services Trade, Structural Transformation and the SDG 2030 Agenda. In: Klasen, A. (ed.) *The Handbook of Global Trade Policy*. Oxford: Wiley, pp. 79-117.
- Melitz, M. J. (2003) The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica*, 71(6), 1695-1725.
- Mergel, I., Edelmann, N. & Haug, M. (2019) Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385.
- Michie, A. (2022) The role of the global financial system in financing the transition to net zero. *Global Policy*, 13(4), 557-562.
- Mitchell, A. D. & Mishra, N. (2019) Regulating Cross-Border Data Flows in a Data-Driven World: How WTO Law Can Contribute. *Journal of International Economic Law*, 22(3), 389-416.
- Naglic, A., Tominc, P. & Logozar, K. (2020) The Impact of Industry 4.0 on Export Market Orientation, Market Diversification, and Export Performance. *Organizacija*, 53(3), 227-244.
- Naughtin, C., Hajkowicz, S., Schleiger, E., Bratanova, A., Cameron, A., Zamin, T. & Dutta, A. (2022) *Our Future World: Global megatrends impacting the way we live over coming decades*. Brisbane: CSIRO.
- Navqi, B., Rizvi, S. K. A., Mirza, N. & Umar, M. (2023) Financial market development: A potentiating policy choice for the green transition in G7 economies. *International Review of Financial Analysis*, 87, 102577.
- Nuccio, M. & Guerzoni, M. (2019) Big data: Hell or heaven? Digital platforms and market power in the data-driven economy. *Competition & Change*, 23(3), 312-328.
- Özsoy, S., Ergüzel, O. S., Ersoy, A. Y. & Saygılı, M. (2022) The impact of digitalization on export of high technology products: A panel data approach. *Journal of International Trade & Economic Development*, 31(2), 277-298.
- Papada, E., Altman, D., Angiolillo, F., Gastaldi, L., Köhler, T., Lundstedt, M., Natsika, N., Nord, M., Sato, Y., Wiebrecht, F. & Lindberg, S.I. (2023) *Defiance in the Face of Autocratization. Democracy Report 2023*. Gothenburg: University of Gothenburg Varieties of Democracy Institute.
- Peterson, M. & Downie, D. (2023) The international political economy of export credit agencies and the energy transition. *Review of International Political Economy*, DOI: 10.1080/09692290.2023.2272845.

- PwC. (2022) *Megatrends. Five global shifts reshaping the world we live in*. Available from: https://www.pwc.com/gx/en/issues/megatrends.html [Accessed 12January 2024].
- Queiroz, M. M., Pereira, S. C. F., Telles, R. & Machado, M. C. (2021) Industry 4.0 and digital supply chain capabilities. *Benchmarking: An International Journal*, 28(5), 1761-1782.
- Ritchie, H., Roser, M. & Rosado, P. (2024) *Renewable Energy*. Available from: https://ourworldindata.org/renewable-energy [Accessed 18 January 2024].
- Roberts, J. T. (2011) Multipolarity and the new world (dis)order: US hegemonic decline and the fragmentation of the global climate regime. *Global Environmental Change*, 21(3), 776-784.
- Roland Berger. (2023) *Trend Compendium 2050. Six megatrends that will shape the world*.

 Available from: https://www.rolandberger.com/en/Insights/Global-Topics/Trend-Compendium [Accessed 10 January 2024].
- Raymond, G. V. (2019) Advocating the rules-based order in an era of multipolarity. *Australian Journal of International Affairs*, 73(3), 219-226.
- Sachs, J. D. & Warner, A. M. (1995) Economic reform and the process of global integration.

 Brookings Papers on Economic Activity, 1-118.
- Salminen, V., Halme, K., Roiha, U., Uitto, H., Koski, H., Pajarinen, M. & Ylhäinen, I. (2022) Team Finland network – significant progress made, but there is still room for improvement. *Policy Brief* 2022:19. Available from: https://tietokayttoon.fi/documents/113169639/113170760/19-2022 [Accessed 10 January 2024].
- Schultz, F. C. (2022) The circular economy and economic growth An irreconcilable tradeoff?. *Resources, Conservation and Recycling*, 183, 106351.
- Shaffer, G. (2021) Trade Law in a Data-Driven Economy: The Need for Modesty and Resilience. *World Trade Review*, 20(3), 259-281.
- Steinberg, F. & Wolff, G. (2023) Dealing with Europe's economic (in-)security. *Global Policy*. doi.org/10.1111/1758-5899.13303.
- Telò, M. (2023) Multilateralism past, present and future: a European perspective. London: Routledge.
- Trefler, D. (2019) The China-OECD trade divide: building bridges. *China Economic Journal*, 12(2), 195-207.
- Tropeano, D. (2011) Financial Regulation After the Crisis. *International Journal of Political Economy*, 40(2), 45-60.
- Ünal, E. & Sinha, V. K. (2023) Sustainability trade-offs in the circular economy: A maturity-based framework. *Business Strategy and the Environment*, 32(7), 4662-4682.

- UKEF. (2023) *Annual Report and Accounts 2022-23*. Available from: https://assets.publishing.service.gov.uk/media/649dc2a845b6a200123d459f/UK_Export_Finance_Annual_Report_and_Accounts_2022-23.pdf [Accessed 2 February 2024].
- UNCTAD. (2023) Trade and Development Report 2023. New York, NY: United Nations.
- Vlados, C., Chatzinikolaou, D. & Iqbal, B. A. (2022) New Globalization and Multipolarity: A Critical Review and the Regional Comprehensive Economic Partnership Case. *Journal of Economic Integration*, 37(3), 458-483.
- Waylen, G. (2015) Engendering the 'Crisis of Democracy': Institutions, Representation and Participation. *Government and Opposition*, 50(3), 495-520.
- Wilson, C. & Mergel, I. (2022) Overcoming barriers to digital government: mapping the strategies of digital champions. *Government Information Quarterly*, 39(2), 101681.
- World Bank. (2024) *World Bank Open Data*. Available from: https://data.worldbank.org [Accessed 31 January 2024].
- WTO. (2023a) World Trade Report 2023. Geneva: World Trade Organization.
- WTO. (2023b) World Trade Statistical Review 2023. Geneva: World Trade Organization.
- Zeitlin, J., Nicoli, F. & Laffan, B. (2019) Introduction: the European Union beyond the polycrisis? Integration and politicization in an age of shifting cleavages. *Journal of European Public Policy*, 26(7), 963-976.