Department for
International Trade

UK-India
Free Trade Agreement
The UK's Strategic Approach

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Chapter 1:
Strategic Case

CHAPTER 1: STRATEGIC CASE

Introduction

A Free Trade Agreement (FTA) with India supports the government's strategy of continuing to develop the United Kingdom's status as an independent trading nation which seeks trade and investment opportunities, champions free trade, and supports the levelling up agenda in all regions of the UK.

India is an important partner for the UK, and an FTA offers the opportunity to deepen our relationship. India is one of the dynamic, fast-growing economies at the heart of the Indo-Pacific and while our bilateral trading relationship is already significant, amounting to £23.3 billion in 2019, an FTA could strengthen it further as UK exports could increase by up to £16.7 billion by 2035. Securing an agreement which enhances our trade relationship will give the UK access to a market which promises both short and long-term benefits.

An FTA with India needs to work for the UK. We have been clear that any trade agreement with India must work for UK consumers, producers, and businesses. We remain committed to upholding our high environmental, labour, food safety and animal welfare standards in our trade agreement with India. The government has also been clear that when we are negotiating trade agreements, we will protect the National Health Service (NHS). As part of the government's commitment to secure the best deal for the UK, within negotiations we will consider the merits of an Interim Agreement as a potential option to deliver early benefits.

Trade with India brings opportunities for the UK strategically, as consumers, producers and workers, and as we explore the industries of the future. Our objectives reinforce this.

An FTA with an important partner

The UK and India share a common set of values. India is the world's largest democracy and has long maintained its support for international co-operation and democratic government. We work closely together in many multilateral fora including the United Nations, the World Trade Organisation (WTO), and the Commonwealth. In May 2021, Prime Ministers Modi and Johnson committed to an Enhanced Trade Partnership which could double trade by 2030, strengthening our relationship and invigorating our respective economies through an FTA. This Enhanced Trade Partnership is part of a wider 2030 Roadmap which covers the full spectrum of the UK-India bilateral relationship.

We have strong cultural links with India: 1.5 million British nationals are of Indian origin, and we support over half a million jobs in each other's economies. An agreement would further demonstrate the respective commitment to this relationship, and the UK's role as a strategic partner.

Using trade to tilt towards the Indo-Pacific

A UK-India agreement would help to put Global Britain at the heart of the Indo-Pacific region, an area representing over 40% of global GDP and containing some of

the world's fastest growing economies. As these economies expand, it is key that the UK has access to their markets. An agreement with India would complement the UK's other commitments in this region, such as trade agreements with Australia and New Zealand and ongoing negotiations with the 11 member countries of CPTPP.

Tilting towards the Indo-Pacific will also help diversify our trade, make our supply chains more resilient and make the UK less vulnerable to political and economic shocks from around the globe. An FTA with India will also cement our position as a leader among a network of countries committed to free trade, whilst strengthening like-minded democracies who are committed to ensuring mutual prosperity. India sits at the heart of the Indo-Pacific and shares this ambition.

New opportunities for businesses, consumers, and workers across the UK

Key benefits of an FTA with India include:

Reduced barriers to trade in goods

A trade agreement with India will make trade easier and cheaper for UK exporters, whilst improving choice and value for UK consumers. In 2019, India imported £5.35 billion of goods from the UK, of which £5.24 billion were in lines subject to tariffs. Removal of India's tariffs on imports in a potential FTA would save British companies money and increase the competitiveness of UK products.[1] India's middle class is expected to double from 30 million people in 2019 to 60 million people in 2030, before reaching nearly 250 million in 2050.[2] This demographic change represents a great increase in demand for products and services, creating huge opportunities for British firms selling high quality, iconic brands and products.

The removal of tariffs and the provision of greater legal certainty by an FTA would support UK businesses in industries that are keen to export to India such as the automotive, agri-food, machinery, and pharmaceutical industries. An agreement also means UK manufacturers will be able to save costs by accessing cheaper parts for their products, whilst UK consumers would benefit from improvements in the variety and affordability of available products.

Increased opportunities for UK services and investment

The UK's services exports to India amount to £3.2 billion, while India has an expanding services sector which accounts for 54% of its economy. As the world's second largest services exporter, the UK is well placed to support Indian growth through our provision of world leading financial, creative, digital, professional and business, and technology services.

The UK and India's financial markets are already interconnected, with 35 Indian companies listed on the London Stock Exchange and an investment

[1] Trade theory suggests that the removal of tariffs will facilitate greater demand for British products as the price Indian consumers pay falls. However, DIT has not as of April 2021 conducted modelling to determine the size of this effect.
[2] Middle class is defined as earning over $12,525 a year.

relationship which supports over half a million jobs in each other's economies. A trade agreement could enable further collaboration in these areas by easing cross-border friction and encouraging regulatory alignment, allowing the UK's financial and professional services businesses to offer expertise, increase trade, and stimulate the Indian market.

Supporting innovation and trade in a digital era

India's digital transition presents a great opportunity for the UK's pioneering digital sector. The Government of India is aiming to have a trillion-dollar online economy by 2025, while internet penetration in India was expected to hit 50%, or 622 million users, in 2020. An FTA presents an opportunity for British and Indian businesses to pioneer innovative commercial ventures in fields such as emerging tech, artificial intelligence, and cybersecurity.

A trade agreement could also help build upon the productive relationship between both countries' research sectors. Indian students are the second largest international student population in the UK whilst there is frequent collaboration between higher education institutions undertaking ground-breaking research. Provisions which strengthen joint processes and collaboration in these areas will enable higher quality interdisciplinary research in fields such as pharmaceuticals and life sciences.

More jobs for UK workers

Indian owned businesses employ more than 95,000 people throughout the UK, with most people employed in the West Midlands (29,200 people), followed by London (20,700) and Wales (10,700). 15,000 new jobs were created by Indian investment into the UK in the last three years alone. A deal will cement stronger pathways for Indian investors, supporting industries and creating opportunities for workers throughout the UK for years to come.

Creating opportunities for businesses across the UK

India's import requirements are set to be worth £1.38 trillion in 2035, improving access for companies across all sectors and regions of the UK now will prepare industries to provide for this demand. A deal which lowers India's high tariff rates will reduce costs and support thousands of jobs in sectors across the UK. As an example, applied tariffs for vehicle manufacturers are currently 125%, and annual tariffs paid on exports to India total £49 million.[3] The highest relative gains in this industry could be seen in Wales and the West Midlands, while reducing the tariffs paid on beverage exports to India would bring benefits to brewers and distillers throughout the UK.

Empowering small and medium-sized enterprises

A trade agreement would level up businesses throughout the UK, benefitting small and medium enterprises as well as large-scale UK exporters. In 2019 around 9,900 UK businesses exported goods to India, 98% of which were

[3] In 2019.

SMEs. Given financial and operational constraints, SMEs in particular stand to benefit from the increased transparency and reduced costs an FTA could provide, whilst lower importing costs would lead to the further growth of businesses of all sizes across the UK.

Promoting a modern and sustainable trade agenda for a resilient UK

The UK is a global leader on climate action. The government is committed to maintaining our standards of environmental protection within trade agreements, and an agreement with India could represent a large opportunity for our world-leading renewable energy industry The Government of India recognises the need to transition towards renewable energy and plans to install 175 GW of renewable energy capacity by 2022.[4] The expertise and experience of UK companies in this area could offer bilateral benefits, bolstering both countries' commitments to green energy.

Conclusion

While we already enjoy a productive trading relationship with India, an FTA offers the chance to deepen economic and strategic ties. It will also enable the UK to build back better from the pandemic, invigorate trade and investment services, and stimulate growth throughout the UK. A trade agreement with India will benefit UK citizens and businesses, from manufacturers to consumers on high streets across the UK, while supporting the UK's wider ambitions of tilting towards the Indo-Pacific and championing free trade.

Our approach to these negotiations has been informed by a wide-ranging consultation on trade with India, which received a wealth of responses from the UK public, businesses and civil society.

[4] UN Sustainable Development Goals, India plans to produce 175 GW of renewable energy by 2022 [link].

Chapter 2:
Outline Approach

CHAPTER 2: OUTLINE APPROACH

Overall Objectives

- Agree an FTA with India that strengthens our economic relationship with one of our largest, fastest growing and strategically important bilateral trading partners.

- Promote and increase trade in goods, services and greater cross-border investment with India. This will create new opportunities, support jobs and livelihoods and drive economic growth in both countries. Recognising the UK and India have different approaches to FTA coverage, we will work together constructively to identify areas of mutual interest across a range of areas.

- Increase UK GDP by opening up opportunities for UK businesses, including small and medium-sized enterprises (SMEs) and investors, and facilitating greater choice and lower prices for UK producers and consumers.

- Ensure high standards and protections for UK consumers and workers and build on our existing international obligations. This will include not compromising on our high environmental protection, animal welfare and food standards, as well as maintaining our right to regulate in the public interest.

- Secure an agreement which works for the whole of the UK and takes appropriate consideration of the UK's constitutional arrangements and obligations.

- Secure appropriate provisions to promote open and fair competition between our businesses.

- Send a powerful signal to the rest of the world that the UK is an independent trading nation, will continue to champion free and fair trade, fight protectionism, and remove barriers to trade at every opportunity.

- Uphold the government's manifesto commitment that the National Health Service (NHS), its services, and the cost of medicines are not on the table. To this end we will not accept any provisions that would increase the cost of medicines for the NHS. Protecting the NHS is a fundamental principle of our trade policy, and our commitment to this will not change during our negotiations with India.

Trade in Goods

- Secure broad liberalisation on tariffs on a mutually beneficial basis, considering UK product sensitivities.

- Secure comprehensive access for UK industrial and agricultural goods into the Indian market through the reduction or elimination of tariffs.

- Develop simple rules of origin that reflect UK industry requirements and consider existing, as well as future, supply chains supported by predictable and low-cost administrative arrangements.

Customs and Trade Facilitation

- Secure commitments to simple, efficient, and transparent customs procedures which minimise costs and administrative burdens for businesses.

- Ensure that processes are predictable at, and where possible away from, the border.

Technical Barriers to Trade

- Reduce technical barriers to trade by removing and preventing trade-restrictive measures in goods markets, while upholding the safety and quality of products on the UK market.

- Provide for mechanisms to make it easier for UK manufacturers to have their products tested against Indian rules.

- Promote the use of international standards to further facilitate trade between the parties.

- Promote making regulations easily accessible to businesses from each other's markets.

Sanitary and Phyto-Sanitary Standards (SPS)

- Uphold the UK's high levels of food safety, animal and plant health, and animal welfare and the UK's right to regulate in these areas in the public interest.

- Enhance access for UK agri-food goods to the Indian market by seeking enhanced commitments for dialogue, cooperation and transparency on sanitary and phytosanitary measures, which may present challenges to business, with a view to helping UK firms trade more easily.

- Seek enhanced cooperation on the related important matters of public interest of animal welfare and antimicrobial resistance.

Goods Regulatory Practice (GRP) and Regulatory Cooperation

- Reduce regulatory obstacles, facilitate market access, and improve trade flows by encouraging a transparent, predictable, and stable regulatory framework to give confidence to exporting businesses and investors.

- Seek commitments to the application of good regulatory practice, such as: internal coordination; transparency in the regulatory process, including making relevant information of the agreement freely and publicly available online; meaningful public consultation in the development of regulatory measures; the use of proportionate impact assessments for proposed major regulatory measures; and the periodic evaluation of regulatory measures in force.

Transparency

- Support market openness and increase the ease of doing business by ensuring appropriate levels of transparency between the UK and India, particularly with regards to the publication of measures (such as laws and regulations) affecting trade and investment, public consultation, and the right of appropriate review of these measures.

Trade in Services

- Seek ambitious commitments from India on market access and fair competition for UK services exporters.

- Agree ambitious rules for all services sectors, as well as sector-specific rules to support our world-leading services industry, including key UK export sectors, such as financial services, professional and business services, and transport services.

- Increase opportunities for UK business people to operate in India by enhancing opportunities for business travel.

- Continue to preserve the integrity of the UK's domestic immigration system.

- Ensure certainty for UK services exporters in their continuing access to the Indian market and transparency on Indian services regulation.

Public Services

- Protect the right to regulate public services, including the NHS and public service broadcasters.

- Continue to ensure that decisions on how to run public services are made by UK Governments, including the devolved administrations (DAs), and not our trade partners.

Telecommunications

- Seek ambitious and robust telecommunications provisions with India that will secure fair access to Indian networks and services and a level playing field, so that UK operators can seize the opportunities in India's rapidly growing telecommunications sector.

- This will also benefit UK consumers and businesses in all sectors by supporting competition and promoting a sector that is ripe for further innovation.

Financial Services

- Expand opportunities for UK financial services and ease frictions to cross-border trade and investment.

Digital Trade

- Pursue a comprehensive digital chapter that maximises opportunities for digital trade across all sectors of the economy, and businesses of all sizes, across the UK.

- Seek predictable and open regulatory principles so that firms can access overseas digital markets and operate across borders freely and in fair competition.

- Seek commitments on free and trusted cross-border data flows, prevent unjustified data localisation, and maintain the UK's high standards for personal data protection.

- Promote online consumer protection and seek necessary business safeguards in digital trade.

- Seek commitments to facilitate more efficient and secure international trade through use of digital technologies, including through paperless trading.

- Cooperate on evolving areas of trade such as innovation and emerging technologies.

Investment

- Agree provisions that create new opportunities for UK investors in India, whilst addressing existing barriers that investors currently face.

- Provide sufficient protections to UK investors and guarantee that they receive fair and non-discriminatory treatment, ensuring access to adequate remedies in the event that these obligations are breached.

- Maintain the UK's right to regulate in the national interest and, as the government has made clear, continue to protect the NHS.

Intellectual Property (IP)

- Ensure rights holders receive protection and fair remuneration for the use of their works abroad, whilst ensuring reasonable and fair access for consumers.

- Secure patent provisions which achieve an effective balance between rewarding research and innovation, whilst reflecting wider public interests such as ensuring access to medicines.

- Secure copyright provisions that support UK creative industries through an effective and balanced global framework.

- Secure effective protection for brands and design intensive goods, whilst keeping the market open to fair competition.

- Promote the accessible, transparent, effective, and efficient enforcement of IP rights including for online IP infringement and facilitate cross-border collaboration on IP matters.

- Remain consistent with the UK's existing international obligations, including the European Patent Convention, to which the UK is party.

- Reaffirm the UK's continued commitment to the Doha Declaration on the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement and Public Health, and agreed flexibilities that support access to medicines, particularly during public health emergencies in developing countries.

- Promote provisions which take account of emerging opportunities and challenges in the digital age.

- Seek effective protection of UK geographical indications in India while maintaining those protections offered to geographical indications in the UK through the UK's existing schemes.

- Protect the UK's existing IP regime which is recognised as one of the best in the world and resist changes which would undermine these standards.

Trade and Competition

- Provide for effective competition law and its enforcement that promotes open and fair competition for UK firms at home and in India.

- Provide for transparent and non-discriminatory competition laws, with procedural rights for businesses and people under investigation.

- Seek commitments on the protection of core consumer rights.
- Promote effective co-operation between enforcement agencies.
- Seek commitments on subsidies and state-owned enterprises to address discrimination and unfair practices.

Innovation

- Seek collaboration on shared global and economic challenges, including those identified in the 2030 Roadmap for India-UK future relations, for example development of low-carbon technologies and emerging technologies.
- Seek provisions focusing on the role of trade policy in facilitating innovation and ensuring our FTA is flexible to emerging business models, global trends and events.

Government Procurement

- Seek access for UK businesses to valuable Indian government procurement opportunities, in areas where UK companies have competitive advantage.
- Seek to agree provisions to ensure that procurement processes are fair, open, transparent and accessible for suppliers from India and the UK.
- Ensure appropriate protections remain in place for key public services such as NHS health and care services, as well as broadcasting.

Environment and Clean Growth

- Include measures which allow the UK to protect our regulatory sovereignty, maintain the integrity, and provide meaningful protection, of the UK's environment and climate legislation.
- Ensure parties reaffirm international environmental and climate protections, including Multilateral Environmental Agreements such as the United Nations Framework Convention on Climate Change and the Paris Agreement.
- Ensure that parties do not waive or fail to enforce their domestic environment and climate protections in ways that create an artificial competitive advantage.
- Seek provisions that support and help further the government's ambition on environment, climate change and achieving Net Zero greenhouse gas emissions by 2050, including promoting trade in low carbon goods and services and supporting research and development collaboration in pursuit of clean growth.
- Provide for appropriate mechanisms for the implementation, monitoring and dispute resolution of environment provisions.

Anti-Corruption

- Provide for measures that address the trade distorting effects of corruption on global trade and fair competition to help maintain the UK's high standards in this area.

- Provide for appropriate mechanisms for the implementation, monitoring and dispute resolution of anti-corruption provisions.

Trade and Development

- Seek to deliver an agreement that supports the government's objectives on trade and development and promote cooperation between the UK and India on trade and development activities.

- Seek to include provisions that address monitoring the impact of the FTA on developing countries outside the agreement.

Trade Remedies

- Ensure provisions support market access, uphold our WTO commitments, and are underpinned by transparency, efficiency, impartiality, and proportionality.

- Agree provisions which facilitate trade liberalisation while protecting against unfair trading practices.

Dispute Settlement

- Establish appropriate mechanisms that promote compliance with the agreement and ensure that state-to-state disputes are dealt with consistently, fairly and cost-effectively, promoting transparency and maintaining timeliness, whilst seeking predictability and certainty for businesses and stakeholders.

Small and Medium-sized Enterprises (SMEs)

- Seek a dedicated SME chapter to facilitate cooperation between the UK and India on SME issues of mutual interest.

- Seek commitments to provide online information resources to help small businesses navigate requirements for exporting to each other's markets.

- Seek to include, and signpost to, provisions in other Chapters of the agreement that enhance cooperation between the UK and India on SME issues, or otherwise enable SMEs to make greater use of the opportunities under the FTA.

Labour

- Reaffirm commitments to international labour standards.

- Provide for assurance that parties will not waive or fail to enforce their domestic labour protections in ways that create an artificial competitive advantage.

- Include measures which allow the UK to protect our regulatory sovereignty, maintain the integrity, and provide meaningful protection, of the UK's labour protections.

- Provide for appropriate mechanisms for the implementation, monitoring and dispute resolution of labour provisions.

Trade and Gender Equality

- Promote women's access to the full benefits and opportunities of this agreement, as workers, business owners, entrepreneurs and consumers.

- Seek cooperation to address the barriers which exist disproportionately for women in trade.

- Recognise the importance of upholding protections on gender equality.

General Provisions

- Ensure flexibility for the government to protect legitimate domestic priorities by securing adequate general exceptions to the agreement.

- Provide for regular review of the agreement and its operation in the context of the economic relationship between the UK and India. Allow for the agreement to be amended when necessary.

Territorial Application

- Provide for application of the treaty to all four constituent nations of the UK, taking into account the effects of the Ireland/Northern Ireland Protocol.

- Provide for further coverage of the agreement for the Crown Dependencies, and Gibraltar and the other Overseas Territories, as appropriate.

Chapter 3:
Response to the Consultation on Trade Negotiations with India

CHAPTER 3: Response to the Consultation on Trade Negotiations with India

At a virtual summit on 4th May 2021 Prime Minister Johnson and Prime Minister Modi announced their intent to negotiate a Free Trade Agreement (FTA) as part of a wider Enhanced Trade Partnership. This Enhanced Trade Partnership was signed by the Secretary of State for International Trade and committed both sides to address immediate market access barriers, affirm our ambition to double bilateral trade by 2030 and to negotiate an FTA.

On 25th May the Department for International Trade launched a consultation requesting input from consumers and businesses across all sectors, helping us craft a deal that boosts economic growth creating high-value jobs across the country.

The consultation ran for 14 weeks, closing on 31st August. In this period, we held a broad series of events and engaged stakeholders virtually across the UK.

We would like to thank all who engaged with the process and submitted responses.

Why this Free Trade Agreement?

As the world's largest democracy and with a growing population, an FTA with India offers high economic potential across a wide range of key sectors of mutual interest, including life sciences, science, technology, and services. However, there are some significant barriers to trade with India, including complex regulations and high tariffs. Securing an FTA will strengthen the economic links between the UK and India, helping families and communities build back better from coronavirus by increasing prosperity and supporting livelihoods.

What We Asked

The online consultation questionnaire had a total of 94 questions. All respondents were asked the same core 24 questions, alongside 7 questions for identification and for data protection purposes. In addition, demographic and logistical questions were asked, targeted at each group. Individuals and NGOs were asked 10 questions, public sector bodies were asked 5 questions, businesses 24 questions, and business associations 14 questions.

Overview of the Response

In total, we received 283 responses to the consultation. Respondents were given the option of replying either through our online questionnaire, hosted by the Qualtrics platform, or to a dedicated inbox monitored by the Department for International Trade. The questions that were included on the online platform were available to respondents in a PDF form to facilitate review and distribution.

The division between the number of responses can be seen below:

- Online questionnaire responses: 239
- Emails: 44

- Campaign: 0

Respondents were categorised into one of the following five groups:

- An individual – Responding with personal views, rather than as an official representative of a business, business association or another organisation.
- Business – Responding in an official capacity, representing the views of an individual business.
- Business association – Responding in an official capacity, representing the views of a business representative organisation or trade association.
- Non-governmental organisation (NGO) – Responding in an official capacity as the representative of a non-governmental organisation, trade union, academic institution or another organisation.
- Public sector body (PSB) – Responding in an official capacity as a representative of a local government organisation, public service provider, or another public sector body in the UK or elsewhere.

A breakdown of responses by respondent group can be seen below:

Respondent group	Responses (portal)	Responses (email)
Individual	42	0
NGO	24	4
Business	107	14
Business association	54	25
PSB	7	1
Not disclosed	5	0
TOTAL	239	44

Policy Response

This section contains the government's explanation of its policy in relation to the comments raised by the respondents in the public consultation on trade negotiations with India. Individual policy areas that were raised in the consultation are summarised, including specific key asks. A short response has been provided here, whilst more detail about how we will approach each of these areas in the negotiations can be found in the accompanying outline approach in Chapter Two.

Summary of Responses by Policy Area

The policy areas are:

- Tariffs
- Rules of origin
- Customs procedures
- Services
- Digital
- Product standards, regulation and certification
- Sanitary and phytosanitary (SPS) measures
- Competition, state-owned enterprises and subsidies
- Government procurement
- Intellectual property
- Investment
- Innovation
- Environment and Climate change
- Trade remedies
- Dispute settlement
- Small and medium-sized enterprises (SME) policy
- Labour standards
- Other (Gender Equality and Women's economic empowerment, Anti-corruption, Development, Human Rights)

Tariffs

Consultation responses identified tariffs as a significant barrier to trade with India. Businesses and business associations highlighted this concern across both industrial and agricultural sectors. Responses indicated that tariff liberalisation would allow for UK businesses (especially SMEs) to grow and expand in India.

Policy Explanation

Tariffs are customs duties on imported goods. Tariffs are normally applied on a Most Favoured Nation (MFN) basis. This means that there can be no discrimination in duties applied to goods from any World Trade Organisation member unless there is a preferential trade agreement or unilateral preferences to developing countries in place.

The government shares the respondents' views that reduction or removal of Indian tariffs on UK products in both industrial and agricultural sectors can offer great opportunities for UK businesses.

In the UK-India FTA, we will seek to reduce or remove tariffs for UK exports, making them more competitive in the Indian market. Similarly, India has indicated its intention in the FTA to seek to reduce or remove UK tariffs on their exports.

Rules of Origin

Respondents, particularly businesses and business associations, highlighted the importance of simple rules of origin (RoO) that reflect global supply chains, including those involving the EU. A common concern was the complexity and bureaucracy of RoO and administrative processes; respondents called for further simplification and support in understanding RoO. Some respondents stated a desire for consistent RoO across UK trade agreements.

Policy Explanation

RoO are used to determine the 'economic nationality' of a good. In FTAs, their purpose is to define which goods can benefit from the agreement, ensuring that it is the traders of the parties to the agreement that benefit from tariff reductions.

It is normal for different FTAs to contain different rules of origin, however the government recognises that a key issue for UK businesses is the complex procedures when importing and exporting. The UK's objective will be to develop simple and modern rules of origin that reflect UK industry requirements considering existing, as well as future, supply chains supported by predictable and low-cost administrative arrangements.

Customs and Trade Facilitation

Respondents used the consultation to flag those areas where they would like to see progress and to highlight customs-related issues they face when exporting goods to India.

Respondents reported problems with the multiple administrative processes associated with customs procedures in India and flagged issues such as a lack of transparency in the application of customs procedures, and a heavy reliance on paper-based trading, both of which can add to the overall clearance time for goods.

Another area of concern was around the consistency of release times for goods which respondents suggested can vary between states and ports. Delays and inconsistencies in release times can affect perishable goods in particular, and respondents reported that such goods can wait in customs clearance for several days in uncontrolled temperatures. This can impact the quality and shelf-life of the product.

Finally, respondents noted that lengthy delays in the customs valuation process often created significant uncertainty over traders' import tariff liabilities, which can in turn disrupt business planning.

Policy Explanation

The government recognises the importance of securing customs procedures that are efficient, transparent, and consistent for both UK importers and exporters. The UK seeks to ensure, through its FTAs, that customs procedures are as facilitative as possible and administrative burdens are minimised and predictable.

The government aims to advance customs co-operation in a way that minimises burdens for businesses. Reducing customs delays and costs could increase the ability of businesses, especially SMEs, to trade efficiently with India.

Businesses have flagged to the government that customs-related fees and charges should not act as an unnecessarily restrictive barrier to trade. The UK seeks to agree customs provisions with India that reduce such unnecessary barriers.

In our negotiations with India, we will seek provisions that reflect the needs of UK exporters and importers, promote supply chain security, and minimise burdens for business.

Trade in Services

Respondents identified opportunities within the services sectors, including for greater trade liberalisation and further liberalisation to support the movement of professionals and students. Respondents highlighted the professional and business services sector as an area of key interest. Respondents also showed interest in a broad range of financial services sectors, including banking, capital markets, insurance, and financial technology (FinTech). Issues highlighted by respondents in these areas were in relation to data flows and data localisation, cross-border provision of services, unequal tax treatment, barriers to insurance and reinsurance market, and regulatory cooperation.

Respondents raised a number of issues regarding business mobility, with specific comments related to facilitating the recognition of professional qualifications, while protecting UK standards and public safety. Respondents highlighted the need for greater clarity around visa processes, more certainty on eligibility criteria, and a wider breadth of permitted short-term business activities. Respondents also noted the link between the movement of professionals and opportunities for service suppliers and investors operating or looking to operate in India.

Policy Explanation

Services are the predominant driver of the UK economy, contributing 79% of GDP in 2018, and accounting for 45% of total UK exports. The UK's services exports to India amounted to £3.3 billion in 2020. As the world's second largest services exporter, the UK is well placed to take advantage of India's services sector, which accounts for over 54% of its economy.[5] The UK is also a global centre for financial services and

[5] Economic Survey 2020-21, Volume 2, Ministry of Finance, Government of India

India is a key potential growth area for UK Financial Service exports, particularly amongst emerging markets.

The government wants to ensure that UK services businesses maintain their world-leading position; it is recognised that this would be strengthened by greater access for key UK export services such as financial services, professional business services, and digital services. An FTA can provide more certainty and improved access to Indian services markets for UK businesses. The government has listened to the views of the respondents who raised the potential for barriers at both the state and union level.

Digital

Many respondents listed digital as one of their top three priorities, noting the potential opportunities that could arise from increased UK-India digital cooperation, including on emerging technologies.

A number of common barriers were raised by UK businesses seeking to engage in the India market. A key issue was the need to protect source code, encryption keys and trade secrets of businesses operating in India. They also wanted to encourage the recognition of digital signatures and paperless trading mechanisms and ensure that the FTA helps to prohibit forced technology transfer as a condition of market access. Barriers to trade brought about by data localisation requirements in India, and the differing standards with regards to data protection and data security were also key issues for businesses, alongside online consumer rights. Respondents also noted that measures to increase support for SMEs, improve India's data protection landscape, and lock in data flows would be highly beneficial to UK businesses. This would open up the range of goods and services that consumers have access to.

Policy Explanation

Digital trade provides the UK with the opportunity to expand its trading capacity by assisting micro, small, medium, and large businesses to trade with the world. The government is committed to addressing existing barriers to open digital markets around the world. This would prevent new barriers emerging, promote greater openness, and reduce or remove unfair restrictions or conditions on British businesses as they trade overseas. The government will also continue to champion data flows internationally, preventing barriers to data crossing borders, while maintaining the UK's high standards for personal data protection, including when it is transferred across borders.

Telecommunications

Responses from stakeholders indicated the need for fair competition, reasonable licensing fees, transparency, and consistent regulatory enforcement for their operations in India. Stakeholders noted that the application of telecommunications rules vary across the union and state level and between local and foreign suppliers in India. Transparency and consistency of interpretive guidance related to these telecommunications rules was also raised as a concern. The impact of high licensing fees was highlighted as a market barrier. Stakeholders emphasised the need for a formal dispute resolution mechanism.

Respondents called for greater protections to safeguard current investments in the telecommunications sector and to ensure the market can continue to develop.

Policy Explanation

Telecommunications are a foundation of a modern, digital economy and are crucial for both businesses and consumers. The expansion and technological advances of telecommunications infrastructure has been important in supporting a strong economy by increasing trade digitally and revolutionising personal communications. The telecommunication sector is integral to our economy, serving customers in the UK and around the globe and underpins an immense shift in data and capital flows internationally.

The government notes responses on the benefits of telecommunications trade for consumers and businesses. The government agrees that there is value in upholding the principle of fair, transparent, and non-discriminatory access for UK telecommunications service providers, to boost competition in the sector and ensure a level playing field. The government recognises the importance of good regulatory practice that underpins a thriving telecommunications sector, enabling further innovation and growth in the future.

Technical Barriers to Trade

Respondents highlighted the importance of maintaining current UK levels of protection and resisting pressure to reduce the rigour in the UK compliance system. The UK should seek to facilitate regulatory co-operation with India. To maintain consumer confidence and facilitate trade, the UK should promote and encourage the adoption of international standards. Respondents said the FTA should ensure transparency between the UK and India on differing regulatory practices, including at state level. The UK should promote the use of international norms for labelling regulations and regulatory convergence with regard to the testing of products.

Policy Explanation

The government is fully committed to upholding the UK's high levels of consumer, worker and environmental protections in trade agreements. The UK's reputation for quality, safety and performance is what drives demand for UK goods and is key to our long-term prosperity. The government has no intention of harming this reputation in pursuit of a trade deal. The UK is committed to the transparent and predictable development of regulations.

We will not compromise the quality and reliability of UK testing requirements and conformity assessment processes and will uphold the UK's high regulatory standards. Any future trade deal, including the UK-India FTA, must work for UK consumers and businesses. Our right to regulate on goods where necessary for reasons of product safety and human or environmental health will not be compromised.

The government will continue to ensure the safety and quality of products on sale in the UK, recognising the important role of international standards. The UK will

promote the use of international standards, increased co-operation and improved transparency to further facilitate trade with India.

Good Regulatory Practice (GRP)

Respondents repeatedly cited the importance of streamlining regulatory compliance processes and removing the need for duplicative requirements that can create additional administrative and cost burdens for business. There was a recognition among respondents that Good Regulatory Practice – particularly transparency of the regulatory process - can reduce non-tariff barriers to trade and enable regulatory cooperation.

Policy Explanation

Through the FTA, the government will aim to reduce regulatory obstacles, facilitate market access, and improve trade flows by encouraging a transparent, predictable, and stable regulatory framework.

We will seek provisions in a future FTA with India, encouraging good regulatory practice through processes such as regulatory impact assessments, public consultation, stakeholder engagement and transparency. The government recognises the importance of ensuring regulations are clear and easily accessible and will promote transparency in all aspects of trade.

Sanitary and Phytosanitary (SPS) Measures

Respondents highlighted the importance of the SPS agreement to facilitate market access and product movement. Respondents were concerned that Indian SPS rules were complex and difficult to navigate. The comments reflected a desire for improved information flows and simplified procedures to give greater clarity for business and ease trade. Some respondents highlighted sector specific barriers to trade presented by India's SPS rules. Many respondents raised the importance of maintaining high UK standards on food safety, animal and plant health, and animal welfare.

Policy Explanation

The government notes the concerns respondents have regarding food safety and standards in negotiating a UK-India FTA. Maintaining safety and public confidence in the food we eat is of the highest priority. The UK government has made a clear manifesto commitment that in all of our trade negotiations, we will not compromise on our high environmental protection, animal welfare and food safety standards.

The UK will maintain its own autonomous sanitary and phytosanitary (SPS) regime to protect human, animal and plant life and health and the environment, reflecting its existing high standards. We will not compromise on these standards.

The UK is also committed to the transparent and predictable development of regulations. We recognise the importance of clear and easily accessible regulations and will promote transparency at all levels of trade.

The government recognises the opportunities through a trade agreement to streamline procedures for UK food exports into India. We will seek enhanced

commitments for dialogue, cooperation and transparency on SPS measures which may present challenges to business, with a view to helping UK firms trade more easily.

Competition, State-owned Enterprises and Subsidies

Respondents called for the UK-India FTA to deliver fair and consistent treatment for businesses by including market protections across the policy areas of competition law, state-owned enterprises, and subsidies. Respondents provided comments on specific Indian subsidies that would have a negative impact on UK domestic production as well as the potential anti-competitive impacts of dominant state-owned enterprises in India. Several respondents elaborated on the anti-competitive impacts of India's government procurement policies or on the impact of an agreement on competitiveness, not on competition policy.

Policy Explanation

We will promote open and fair competition for UK firms at home and in India through effective competition law and its enforcement. The government will explore how best to address distortive subsidisation and unfair practices related to state-owned enterprise, which have the potential to distort trade. The government notes the views that there should be no regression in the current commitments to consumer rights and competition policy.

Although the terms 'competition' and 'competitiveness' are used interchangeably in some contexts, they have distinct technical meanings. Competition policy covers the rules and regulations concerning the way businesses operate within a market and the enforcement of such rules. Competition laws, for example, typically cover anti-competitive agreements between firms, abuse of a dominant position and merger control. Competitiveness refers to the general ability of a firm to operate in a market compared to other firms that operate in the same market, or the strength of a whole industry or economy relative to another.

Government Procurement

The consultation received a high number of responses from stakeholders highlighting barriers for UK businesses in accessing government procurement markets in India. These barriers included difficulties in finding information about Indian government procurement opportunities and complications when navigating union and state level government landscapes. Respondents expressed that there is a lack of clarity regarding requirements for local presence and local purchasing preferences in India, and high local content requirements. Some respondents highlighted barriers of upfront costs prior to securing a contract, delays in processes and payment and lack of access to domestic reviews. Respondents expressed a desire for improved information for businesses from both India and the UK about how to tender successfully for government contracts in the respective markets.

Policy Explanation

Procurement provisions in FTAs promote transparency, non-discrimination and competition within the trading partners' public procurement markets. FTA measures

ensure that in those procurements covered by the agreement, suppliers from the other party are treated the same as national suppliers.

In trade agreements, the government will seek to secure more extensive market access to the valuable Indian government procurement market, creating opportunities for UK businesses. When competing for procurement opportunities, businesses should receive fair and non-discriminatory treatment.

The government will seek to agree provisions to ensure that procurement processes are fair, open, transparent and accessible for suppliers from India and the UK. We will ensure appropriate protections remain in place for key public services such as NHS health and care services, as well as broadcasting.

Intellectual Property

Overall, stakeholders wanted to see high standards reflected within the FTA. A number of stakeholders expressed concerns about India's copyright licensing mechanisms and the extent to which creators are remunerated for their creative works. Stakeholders were also keen to see an increase in India's copyright terms of protection. With regards to patents, a number of stakeholders were keen to see processes simplified and changes made which would strengthen patent protection and provide regulatory data protection for the Life Sciences sector, whilst some respondents noted the importance of the flexibilities provided within the TRIPS agreement. In relation to enforcement, stakeholders expressed concerns around how effectively and consistently legislation against infringement is being enforced in practice. Respondents called for provisions in the FTA which facilitate further cooperation and sharing of best practice between the UK and India.

Policy Explanation

A balanced and effective IP regime is an essential element of a vibrant and creative economy and an effective global trading system. It provides confidence and protection for entrepreneurs, inventors, creators and investors, to turn new ideas and innovations into products and services, thereby contributing to economic growth. It also ensures consumers are clear about the origins and quality of the products and services that they buy.

The UK is widely recognised as being a world leader in IP protection. The government sees the UK-India FTA as an opportunity to build on our global leadership, supporting national growth and innovation whilst fostering an environment that further enhances trade between our countries.

The UK's standards of copyright protection are among the best in the world, and we will seek provisions that support UK creative industries through an effective and balanced global framework.

The UK will seek the fair treatment of the UK's innovative sectors in India, including the life sciences sector, to achieve an effective balance between rewarding research and innovation, whilst reflecting wider public interests.

The government is also committed to transparent, effective, and efficient enforcement of IP rights including for online IP infringement and seeks cross-border collaboration on IP matters.

The UK will also uphold its commitment to the Doha Declaration on the TRIPS Agreement and Public Health, and agreed flexibilities that support access to medicines, particularly during public health emergencies in developing countries.

Investment

Overall feedback from the consultation highlighted the importance of legal certainty and transparency to UK investors in India, which would improve ease and confidence of investing. While many recognised the opportunities an FTA would bring and the recent positive efforts made by India, respondents emphasized that more needed to be done to protect UK investments and to reassure UK investors establishing and operating in India. Businesses also highlighted certain market access barriers that they face in establishing investments in India which should be addressed in this FTA, including FDI caps in certain sectors and various restrictions that overly limit their ability to exercise control over their investments.

Policy Explanation

The government recognises the importance of maintaining and increasing investment into India and the UK. UK investment overseas enable UK businesses to access new markets, increase their financial returns and contribute to both the UK and foreign economies. Foreign investment into the UK provides capital for major projects, helps to fund start-ups, and generates economic growth. The government is committed to addressing barriers to UK investments overseas and enabling greater market access for investors. The government agrees on the importance of legal certainty and transparency for UK investors investing in Indian markets. The UK-India FTA represents an opportunity to create a legal framework of clear and transparent investment rules which provide certainty for investors. In line with UK practice, we will seek to ensure that UK investors and their investments overseas receive fair, adequate and non-discriminatory treatment, and that they have access to adequate remedies. The government will ensure that UK-India FTA negotiations are consistent with the UK's interests and policy priorities. We will maintain, in all cases, the UK's continued right to regulate in the public interest to uphold public policy objectives, including for public health purposes.

Innovation

Throughout the consultation, respondents raised several issues related to innovation that would benefit from increased engagement with India. Responses demonstrated an appetite for cooperation between the UK and India on innovation, innovative technologies, and promotion of innovative sectors.

Policy Explanation

The UK is driving consideration of the impacts of innovation on trade. The UK's Innovation Strategy sets out our ambition to be a global leader in innovation and secure free trade agreements that support innovation and innovative businesses.

The UK-India FTA represents an opportunity to deliver on this ambition and facilitate greater collaboration between the UK and India on innovation and its impact on trade. The FTA also presents an opportunity for both parties to strengthen our relationship, ensure our FTA remains alive to the possibilities of supporting innovation, and work together to drive forward innovative business across a range of areas.

Environment and Climate Change

The consultation returns illustrated significant stakeholder interest in protecting both the UK and the global environment. Respondents would like to see an impactful climate and environment chapter in all FTAs, implemented effectively. Returns also indicated a desire from UK companies to collaborate with Indian firms to exchange clean/green technologies. There was support for the FTA to drive clean growth, combining economic and environmental benefits, but some respondents were also clear the FTA should not drive environmental exploitation or undermine UK standards. Finance sector respondents wished to improve funding for green projects that will be essential to deliver clean growth but highlighted that this would require changes within India. Organisations that want to do more business in India highlighted the need for more sustainable supply chains as a pre-requisite of doing so in a substantial way. They referenced a desire to broaden their trading links while noting the above challenges.

Policy Explanation

The UK is a world leader on climate action, and we promote delivery of our environmental and climate commitments in multilateral fora, as well as in our free trade agreements. The government is firmly committed to maintaining our high standards of environmental protection in trade agreements and possible environmental provisions within a UK-India FTA could support these objectives. The responses to the consultation, including those supported by independent surveys ran by respondent organisations, made clear that the public strongly shares these views.

The UK and India are parties to many international Multilateral Environmental Agreements, including the Paris Agreement. We are committed to upholding our international obligations under these agreements and will continue to play an active role internationally. The UK recognises countries' sovereign right to regulate for their own levels of domestic environmental protection and we will ensure this is maintained under the UK-India FTA. We will also seek to support economic opportunities in India's growing low-carbon sectors and advocate for clean growth and cooperation in the global fight against climate change.

Trade Remedies

Overall feedback from the consultation highlighted the importance of the UK having the ability to impose anti-dumping, countervailing and safeguard measures, including bilateral (transitional) measures. This is to ensure adequate protection is available for domestic producers.

Policy Explanation

The government views trade remedies as an important part of a rounded trade policy. They provide a safety net to protect domestic industries if injured by unforeseen import surges or certain aspects of unfair trading (dumping and subsidy). Trade remedies are about restoring a level playing field, applying measures that are at a sufficient and appropriate level to provide protection, whilst minimising harm to downstream users or consumers. In the UK-India FTA, we will ensure provisions support market access, uphold our WTO commitments, and are underpinned by transparency, efficiency, impartiality, and proportionality. We will agree provisions which facilitate trade liberalisation while protecting against unfair trading practices.

Dispute Settlement

Respondents highlighted the importance of an effective dispute settlement mechanism with a robust panel process which ensures adequate access to remedies at the end of that process. Respondents reflected that these processes would continue to reinforce the confidence of businesses operating in India. Some respondents highlighted the need for a bilateral dispute settlement mechanism capable of resolving disagreements concerning goods, tariffs, and procurement. Other respondents also emphasised the importance of maintaining transparency and timely, cost-effective dispute settlement.

Policy Explanation

Dispute settlement is commonly used in reference to the formal state-to-state mechanism for resolving disputes where one or more parties consider that there has been a breach of obligations under the relevant international trade agreement and it has not been possible to resolve the dispute informally.

The government considers an effective dispute settlement mechanism to be an appropriate part of an FTA. Effective dispute settlement mechanisms give parties and stakeholders the confidence that commitments made under the agreement can be upheld, and that any disputes will be addressed fairly and consistently.

The government recognises that respondents want a dispute settlement mechanism that is robust and transparent. Under the India FTA, we seek to achieve a state-to-state dispute settlement with strong mechanisms that promote compliance with the agreement. Provisions ensure state-to-state disputes are dealt with consistently, fairly and in a cost-effective, and timely manner, whilst providing predictability and certainty for businesses and stakeholders.

Small and Medium-sized Enterprises (SME) Policy

The recurring theme from respondents was the request for greater government support, a streamlining of administrative burdens, and reduction of ‘hidden costs’ pertaining to tariffs or customs procedures. This cut across multiple sectors and linked to respondents’ feedback on SMEs as resource poor compared with larger businesses.

Policy Explanation

Trade barriers tend to disproportionately burden smaller firms, which often have fewer resources to overcome barriers than larger companies. We will seek to use the UK-India FTA to secure the benefits of trade for the whole economy, including small businesses and entrepreneurs.

The government is committed to seeking an FTA that reduces potential barriers to trade to benefit UK businesses already exporting to India, of which 80% are SMEs, and to create opportunities for new SME exporters. The government recognises the varied views around the opportunities and risks for SMEs. We will want to discuss further with stakeholders how even SMEs with limited organisational capacity can best take advantage of benefits achieved through an agreement. This should encompass businesses exporting services and goods. We will also seek commitments from India to make information about rules relating to trade and investment transparent and easily accessible. We will explore appropriate frameworks for collaborating with India on issues affecting SMEs.

Labour Standards

Overall, the key priorities that emerged from the responses include the need to ensure that the labour chapter does not weaken or reduce the level of protection afforded by labour laws in order to encourage trade or investment. Concerns were raised over the perceived differences in domestic enforcement and standards and the potential impact that an agreement could have on workers and business, particularly with regards to open and fair competition. Respondents also submitted comments on human rights, women's rights, employment practices, and the potential for movement of jobs and tasks from one country to another.

Policy Explanation

The government shares the public's high regard for worker protections and has made clear that we will not compromise on these. The UK will maintain its high standard of workers' rights and continue to advocate for the highest standards and working conditions. We will seek to ensure parties reaffirm their commitment to international labour protections.

The UK has one of the most dynamic, flexible and supportive labour frameworks in the world, with important protections for individuals. We are also world-leading in our pursuit of the elimination of all forms of forced labour. The government will seek to ensure that the agreement allows the UK to protect our regulatory sovereignty, protect against labour rights being reduced to gain a trade advantage, and provide for appropriate mechanisms for the implementation, monitoring and dispute resolution of labour provisions.

Other

Anti-Corruption

The consultation showed that UK businesses from a variety of sectors identified concerns regarding bribery and corruption. Organisations from sectors such as fast-

moving consumer goods, chemicals, luxury goods, food and drink, telecoms and healthcare identified anti-corruption as a priority for the FTA to address. Some UK SMEs also stated that they have not traded or stopped trading with India to date because of concerns about corruption.

Policy Explanation

Respondents were clear in their desire to see provisions related to anti-corruption within the FTA, which aligns with the aims of the government. The UK has a strong anti-corruption framework through the UK Bribery Act 2010 and we will want to build on our expertise in this area. We will seek provisions that address the trade-distorting effects of corruption on global trade and fair competition.

Human Rights

Human rights were mentioned by a small number of respondents. Those responses focussed on FTA negotiations being utilised to improve the human rights situation in India.

Policy Explanation

We recognise that several respondents highlighted the protection of human rights more generally. We will work with India bilaterally and in a range of international fora to promote democracy and human rights. The UK has a strong history of protecting human rights and promoting our values globally and continues to encourage all countries to uphold international human rights obligations.

Gender Equality and Women's Economic Empowerment

Respondents raised a number of issues related to women's rights, women's experiences in the workplace and the barriers to trade they faced as business owners. These ranged from discriminatory attitudes, to concerns around gender-based violence and sexual assault. Some respondents sought more opportunities for women in trade, including better access to information and investment opportunities.

Policy Explanation

Gender equality and women's economic empowerment is a crucial issue. We recognise that women can face particular barriers which prevent them from benefiting equitably from the opportunities of free trade.

The UK is committed to ensuring that our trade policy supports women's economic empowerment and furthers our efforts to promote gender equality. We will explore opportunities, in partnership with India, to reflect this in our FTA. We will also seek to build our evidence-base on how the impacts of trade vary by gender, including by exploring options for conducting gender-focused trade analysis.

Trade and Development

Some respondents raised issues that specifically addressed the government's commitment to support developing countries to reduce poverty through trade. Their

priorities included the need for closer alignment of trade and development objectives both within India and with regard to other developing countries.

Policy Explanation

Trade is a key driver of economic growth which can trigger positive changes in a country's economy, helping to raise incomes, create jobs and lift people out of poverty. Increasing trade with India through an FTA may support these objectives, however we will seek to deliver an agreement that promotes cooperation with India as a partner in tackling development issues and supporting UK objectives on trade and development.

To further UK ambition to support free and fair trade, and to deliver on our public commitment to ensure our trade policies support development goals, we will assess the impacts of the UK-India FTA on developing countries outside the agreement and consider measures to address risks and maximise opportunities for development.

Next Steps

As we have been developing our independent UK trade policy, the government has been consulting with stakeholders through both informal and formal mechanisms.

We will ensure that our new agreements and our future trade policy work for the whole of the UK and its wider UK family. Parliament, devolved administrations (DAs), local government, business, trade unions, civil society and citizens from every part of the UK will have the opportunity to engage and contribute.

This will be delivered by:

- open public consultations, to inform our overall approach and the development of our policy objectives;
- use of the Strategic Trade Advisory Group (STAG), to seek informed stakeholder insight and views on relevant trade policy matters;
- use of Trade Advisory Groups (TAGs), to contribute to our policy development at a detailed technical level;
- engagement outreach events across the UK nations and regions.

The STAG's principal purpose is for the government to engage with stakeholders on trade policy matters as we shape our future trade policy and realise opportunities across all nations and regions of the UK through high level strategic discussion. The STAG's remit extends across the breadth of trade policy and more information can be found online at gov.uk.

The objective of the TAGs is to enable the government to draw on external knowledge and expertise to ensure that the UK's trade policy is backed up by evidence at a detailed level and is able to deliver positive outcomes for the UK. We will draw on the expertise of these groups to gather intelligence which will help inform the government's policy positions.

DIT is committed to ensuring we will have appropriate mechanisms in place during negotiations to inform the government's position. As we move forward, we will review

our approach to engagement, and consider whether existing mechanisms are fit for purpose. We welcome further and ongoing feedback and input from stakeholders during this process.

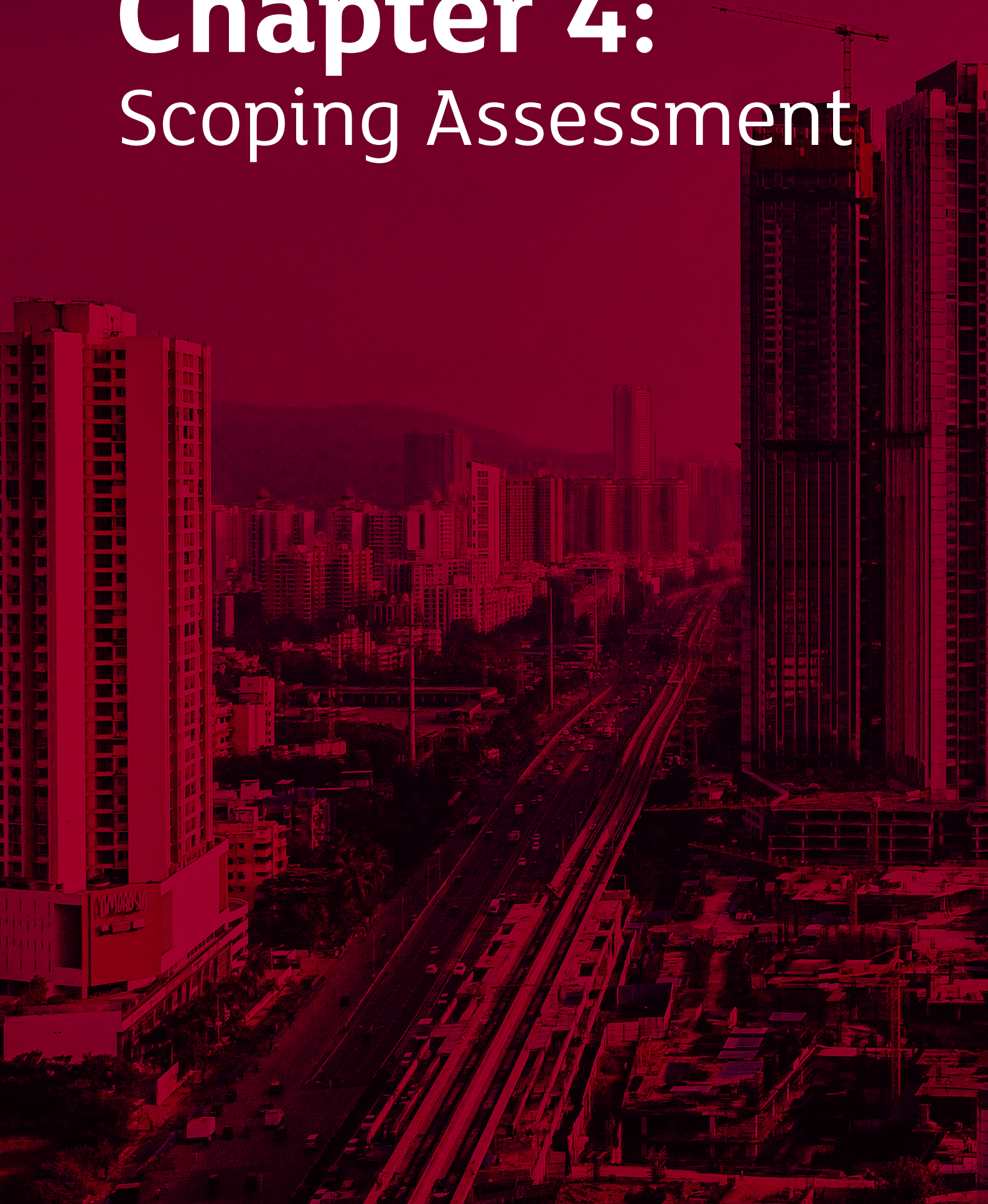
The government is committed to ensuring that our trade policy is transparent and subject to appropriate parliamentary scrutiny. The government will publish regular updates throughout negotiations.

Through both Department-wide boards such as STAGs and TAGs, as well as engagement led at team level, DIT has continued to work with BROs, businesses, SMEs, civil society, and trade unions to inform its policy positions. This work greatly supplements the views provided to us through the consultation, and ensures the Department receives up-to-date perspectives as the UK's trade policy develops.

After launching our negotiations, we will continue to work closely with all our stakeholders, including the DAs, to ensure that negotiations with India further the UK's key interests and brings benefits for the whole of the UK.

The UK government has built close working relationships with colleagues in Wales, Scotland and Northern Ireland at a Ministerial and Official level on trade matters. These discussions will continue to develop as the UK pursues an ambitious independent trade agenda.

Chapter 4:
Scoping Assessment



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Executive Summary

This scoping assessment sets out the potential economic impacts from a Free Trade Agreement (FTA) between the UK and India.

An FTA between the UK and India provides an opportunity for British and Indian businesses to benefit from lower trade costs, boosting economic activity in both countries' areas of competitive strength and providing opportunity for increased specialisation. Businesses across both countries could gain access to cheaper inputs, benefitting existing supply chains and encouraging businesses to build new ones. An agreement could benefit consumers directly through increased consumer choice, better product quality and lower prices.

The economy of India

India is estimated to be the world's third largest economy by 2050. India was the world's fifth largest economy in 2019, with nominal GDP of £2.25 trillion.[1] It has grown strongly over the last decade, at, on average, 7% per year in real terms and is projected to sustain growth at levels of around 5.6% per annum between 2019 and 2030. As the world's second most populous country, it was home to around 1.38 billion people in 2020 – 18% of the world's population. As India's GDP per capita rises, so does the economic potential of this market.

India is projected to be the
3rd largest economy
by 2050

Our existing relationship

An agreement with India will enhance specialisation in areas of economic complementarity, allowing the two economies to play more to their strengths, as well as intensifying specialisation and raising productivity within industries, building upon a strong existing relationship.[2] In 2020 India was the UK's 15th largest trading partner. Trade was worth £23.3 billion in 2019, before falling to £18.3 billion in 2020 due in large part to the Coronavirus pandemic. The UK's foreign direct investment (FDI) holdings in India totalled £15.3 billion in 2019 and India's FDI holdings in the UK amounted to £9.5 billion. Our trading relationship supports jobs throughout the UK. Around 63,000 UK jobs were directly or indirectly supported by exports to India in 2016.

£23.3bn
UK trade with India in 2019

Trade flow data points to areas where the two economies complement one another. For example in the exports of engines, motors & other transport products, pharmaceuticals, and financial services where the UK is strong, or textiles, agriculture and telecommunications, computer & information services, where India has export specialisation. There are also many areas where businesses in both countries are active, providing the opportunity to contribute to one another's supply chains.

Barriers to trade and investment between the UK and India

Indian barriers to trade and investment are currently higher than for many of our other major trading partners. UK exports face an average 18.7% tariff in 2021 and this has increased from 13.4% in 2016. India has been raising tariff levels towards their 'bound' maximum, set by World Trade Organisation (WTO) 'Most Favoured Nation' (MFN) levels. However there is still significant room for further increases, with a 30-percentage point difference between applied and bound rates. Reductions in tariffs through an agreement could create important opportunities for British exports and consumers. For example, 2019 annual duties on UK exports of whisky and vehicles & parts are estimated at £164 million and £49 million respectively.

18.7%
simple average tariff on UK exports to India in 2021

In 2019, services exports accounted for 46% of the UK's total exports to India. India has higher restrictions to services trade than the UK and the OECD average – across all 22 sectors covered by the OECD's Service Trade Restrictiveness Index.

46%
of UK exports to India are in services

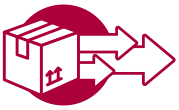
1 Where appropriate data analysis is based on a 2019 reference period, prior to the Covid-19 pandemic to better reflect the long run historic trend.
2 Trade complementarity indicates to what extent a country's export and import profiles complement one another.

Gains from an FTA

An FTA with India could provide a substantial boost to UK GDP, trade and wages.

£3.3bn - £6.2bn
Increase in UK GDP by 2035

- DIT modelling suggests that an FTA could boost UK GDP by around £3.3 billion in 2035, up to around £6.2 billion in 2035 (in 2019 prices) depending on the depth of the negotiated outcome.[3,4] This is equivalent to an increase in UK GDP of between 0.12% and 0.22% in the long run.[5]
- This increase in overall economic activity is underpinned by a significant increase in trade. Projected trade with India could increase by around £14 billion in 2035, to around £27.7 billion in 2035, equivalent to an increase of between 40% and 79%.[6] Again this would depend on the depth of the negotiated agreement.
- UK exports to India could increase by around £8.8 billion (50%) in 2035 to around £16.7 billion (95%) in 2035. UK imports from India could increase by around £5.2 billion (30.7%) in 2035 to around £10.9 billion (63.7%) in 2035.
- Reducing tariffs alone could increase UK total trade with India by £8.9 billion (26%), and UK GDP by £1.4 billion (0.05%) in the long run, compared to 2035 levels.



£8.8bn - £16.7bn
Increase in UK exports by 2035

Individuals within the economy could see the benefits of these changes as well. UK wages could increase by £1.7 billion to £3 billion, dependent upon the depth of the agreement compared to 2019 levels in the long run.

A trade agreement can provide mutual benefits to both the UK and India. India's GDP could increase by around £3.7 billion in 2035, up to £8.6 billion in 2035 (in today's prices) under a deeper agreement.[7] This is equivalent to an increase in India's GDP of between 0.07% and 0.16% in the long run.

£3.7bn - £8.6bn
Increase in India's GDP by 2035

As with any modelling of this nature, there is significant uncertainty around these estimates, which in any case are purely indicative of the impacts of any final negotiated agreement.

A UK – India FTA could deepen supply chain linkages. In 2019, 43% of goods imported to the UK from India were intermediate goods, whilst 85% of UK goods exported to India were intermediate goods. Such interconnections are expected to strengthen as trade becomes easier.

Impact on UK sectors, nations, and regions

The macro-level impacts set out above reflect a vast array of opportunities for individual importers, exporters and consumers, and involve a shift in the mix of economic activity in both economies as, over time, resources are channelled into activities where they are most productive.

The distributional impacts of this agreement will depend on a range of factors such as the structures of the UK and Indian economies, areas of relative specialisation and the ability of businesses to make use of the new opportunities which open up. These in turn will evolve over time in ways which are not predictable, particularly in the case of a rapidly growing economy such as India. The eventual impacts of the agreement will also be shaped by the final negotiated outcome. As such, we can say at this point that there are opportunities to unlock benefits for specific areas and also risks for others as the mix of activity in each economy changes to reflect these new opportunities (though we expect such changes to be small overall across most sectors).

An FTA provides the opportunity for the UK and India to become more specialised in areas that each economy is comparatively better at exporting and also allows businesses to become increasingly specialised in different parts of the production process, leading to increased trade in intra-industry and intermediate goods.

3 For the purpose of this scoping assessment, 2035 represents the long run. This is because we assume the long run to be around 15 years following the implementation of the agreement.
4 This is when compared to projected levels of GDP in 2035 (in 2019 prices) without the agreement. As with all modelling exercises, both the point estimates and the projections which they are applied to are subject to uncertainty. More details on the methodology and projections used can be found in the technical annexes.
5 In this context, long run impacts are typically assumed to be a period of around 15 years.
6 For context, the increase in total trade is estimated at £8.5 billion or £17.1 billion when compared to outturn levels in 2019.
7 A £1.6 billion or £3.6 billion increase based on 2019 GDP levels.

An agreement could unlock additional growth across a wide range of sectors.

The highest percentage increases are seen in **transport equipment, the manufacture of electrical equipment and the motor vehicles sectors**. A deeper agreement could see further large increases in UK value added across the **machinery and equipment, and beverages as well as the tobacco products sectors**. These increases can be expected to be greater in relation to the depth of the agreement.

Certain agriculture and food sectors, as well as the textile industry, could face an increase in import competition. Whilst output in these sectors could therefore be lower than without an agreement, this competition could also provide opportunities for UK businesses in these supply chains, as imports of cheaper inputs and intermediate goods become available, making UK producers more competitive in global markets. Importantly, consumers could also benefit from more choice and lower prices.

The distribution of gains across the country suggests that all nations and regions could see an increase in output from an FTA, with concentration of manufacturing of transport equipment driving the largest relative expansions in Wales and the South West where trade is moderately liberalised (these could be equivalent to around £69 million and £139 million respectively compared to 2019 levels). An expansion in motor vehicle related production could drive larger expansions in the West Midlands in a deeper agreement (equivalent to £297 million on the same basis).

Other regions are expected to expand output such as the North East (£45 million or £93 million depending on the depth of an agreement), and the North West (£164 million or £304 million depending on the depth of an agreement) due to these regions' concentrations of motor vehicle related production. All of the sub-national impacts are subject to a high degree of uncertainty.

A UK-India FTA could benefit consumers directly through increased consumer choice, better product quality and lower prices by lowering tariffs and non-tariff measures (NTMs).

As a result of higher real wages for workers, our modelling estimates show that annual real consumer expenditure in the UK (a component of GDP) could increase by either £2.1 billion to £3.7 billion compared to 2035 levels, depending upon the depth of the agreement. UK consumers could also benefit from lower tariffs on imported goods from India. An estimated £2.0 billion worth of UK imports of final goods from India were subject to tariffs in 2019 – with related duties paid of £151 million.

£151m

Estimated duties on UK imports of final goods from India in 2019

These gains would feed through over a number of years (around 15 years) and our analysis does not tell us what path would be followed over this period. Similarly, we expect that over the long run the economy will adjust, and a trade agreement will not impact on the overall employment rate. However, as the economy adjusts, certain sectors will expand their employment, while others demand less than they otherwise would have. For example, UK employment could slightly rebalance away from textiles and other business services towards manufacture of electrical equipment and other machinery and equipment. These changes reflect the limited structural changes we expect to see in the economy overall.

There is no estimated implication for protected groups in the labour market, except by sex where male workers are disproportionally concentrated in sectors where employment is estimated to marginally fall relative to the baseline.

Wider impacts

An FTA could have wider effects on economic and social development as well as environmental impacts.

The GDP impact on developing economies in the region is estimated to be minimal in most cases – between 0.00% to -0.02% for Bangladesh, Pakistan, Sri Lanka and Indonesia. However, there will be an impact on certain sectors to varying degrees.

Overall greenhouse gas emissions associated with UK-based production are estimated to increase by around 0.08% to around 0.14% depending on the depth of a UK-India FTA. This is equivalent to an increase of around 0.4 $MtCO_2e$ to around 0.7 $MtCO_2e$.

0.4 - 0.7 $MtCO_2e$

Estimated increase in greenhouse gas emissions compared to 2018 levels

Transport-related emissions associated with increased bilateral trade flows are estimated to increase by up to 21% or 36% depending on the depth of a UK-India FTA. This is equivalent to an increase of up to 0.8 $MtCO_2e$ or 1.4 $MtCO_2e$ each year. This modelling does not account for improvements of carbon usage in shipping over time. The UK is committed to being at the forefront of tackling maritime emissions.

0.8 - 1.4 $MtCO_2e$

Estimated increase in transport-related emissions compared to 2035 levels

The agreement would provide an opportunity to boost trade in environmental goods, which can speed the development and uptake of environmentally friendly production techniques. 30 and 240 products classified as environmental goods by the OECD's combined list are currently subject to tariffs by the UK and India respectively.

The agreement could also affect air pollution, water quality, forests, biodiversity and waste management as a result of economic changes within the UK and India and shifts in global trade patterns.

1. Background

Prime Ministers Johnson and Modi launched the India Enhanced Trade Partnership (ETP) on 4 May 2021 setting out a roadmap towards launching negotiations for a UK-India Free Trade Agreement. Following the agreement of the ETP, the government launched a public consultation on a potential FTA between the UK and India between May and August 2021.

The aim of this Scoping Assessment is to provide Parliament and the public with a preliminary assessment of the broad scale of the potential long run macrœconomic, distributional, and environmental impacts of an eventual FTA between the UK and India prior to the launch of negotiations. The content of any eventual FTA is not yet known. Once the provisions of the agreement have been negotiated, the Government will publish a full impact assessment reflecting the outcome.

The UK and India are the world's 6th and 5th largest economies, respectively. Together they account for 6.6% of global GDP in 2019. India has been an engine of global growth in recent years. In the 10 years to 2019, India's economy grew by 7.0% a year on average.

9,910 businesses have exported £4.6bn worth of goods to India in 2019

63,000 UK jobs were estimated to be directly or indirectly supported by exports to India in 2016

43% of the UK's Indian goods imports, and 85% of UK's goods exports to India were intermediate products

UK-India trade £23.3bn in 2019

India is projected to become the fourth largest economy by 2030

India's economy is expected to grow rapidly – rising by 5.6% yearly on average between 2019 and 2030

Indian demand for sectors of UK specialism is expected to grow to over £300bn between 2019 and 2030

Economic case for a UK-India FTA

Reduce trade in goods barriers

Average tariffs on UK exports to India stand at 18.7%

Reduce trade in services barriers

India's average barriers to trade in services exceed OECD's average

Increased competitiveness for key products

UK whisky currently faces 150% tariffs, despite dominating India's market

Access to a growing consumer base

India is likely to have 60 million consumers earning over $12,535 by 2030 – similar to the UK

Facilitate entry to a large import market

India's overall import market size could be worth £1.38tn by 2035

Benefit the UK as a whole

All regions in the UK are expected to benefit from the FTA

Estimated macroeconomic impact of a UK-India FTA

Macro impacts by 2035

UK GDP + £3.3 bn to £6.2 bn

India GDP + £3.7 bn to £8.6 bn

Total trade + £14 bn to £27.7 bn

Distributional impacts

UK sector opportunities in beverages, manufacturing of electrical equipment, motor vehicles and services.

All UK nations and regions could see an increase in output

Wider impacts

Minimal impacts on developing economies.

+ production emissions by 0.4 to 0.7 $MtCO_2e$

+ transport-related emissions 0.8 or 1.4 $MtCO_2e$

Source for analysis on this page: DIT estimates; OECD Services Trade Restrictiveness Index [services trade barriers]; Market Access Map, International Trade Centre, www.macmap.org [tariffs and non-tariff measures]; DIT's Global Trade Outlook – September 2021 [economic and middle class projections]; HMRC Business Structural Database [businesses data]; ONS, UK total trade, all countries, non-seasonally adjusted; HMRC Trade in goods and TradeMap [UK market share]; HMRC Trade in goods and BEC classification mapping [intermediate vs final goods – note that final goods are those which consumers would directly purchase. Intermediate goods are those which are processed by businesses into final goods].

2. The economic case

This section describes a range of analyses that aim to summarise the economic case of an UK – India FTA. Key findings include:

India is projected to become the world's fourth largest economy by 2030 and is one of the UK's most economically and strategically important trade and investment partners.[8]

The Indian middle-class market is growing fast – estimated to encompass 60 million consumers by 2030 – and is expected to increase the country's demand for healthcare, education, and premium products.[9]

An FTA with India could support jobs across the UK. Experimental analysis shows that exports to India were estimated to support (directly and indirectly) around 63,000 UK jobs in 2016.[10] Additionally UK businesses in every region of the UK trade goods with India.[11]

The Indian's overall demand for imports is projected to reach £1.38 trillion per year by 2035.[12]

On goods trade, India's simple average tariff applied to UK exports to India is higher than the UK's equivalent tariff applied to Indian exports to the UK. India also has a relatively high level of regulatory restrictions affecting trade in services. **An UK – India FTA is expected to reduce these trade barriers affecting UK businesses.**

India was the UK's 15th largest trading partner in 2020.[13] Trade was worth £23.3 billion in 2019. UK exports to India were worth £8.5 billion in 2019 (1.2% of UK exports), making India the 10th largest export destination for the UK, outside of the EU, before falling to £6.6 billion in 2020. Imports were worth £14.8 billion (2.1% of UK imports in 2019), making India the UK's 5th single largest import supplier outside of the EU, before reducing to £11.7 billion in 2020.[14]

India was the world's 5th largest economy in 2019, with nominal GDP of £2.25 trillion.[15,16]

As the world's second most populous country, India was home to around 1.38 billion people in 2020 – 18% of the world's population.[17] Despite both the UK and Indian economies contracting sharply in 2020 as a result of the Coronavirus pandemic (with 10% and 8% decreases in real GDP respectively), the long-run prospects for growth in both the UK and India remain positive.[18]

The UK's foreign direct investment (FDI) holding in India totalled £15.3 billion in 2019. India's FDI holdings in the UK in the same year amounted to £9.5 billion.[19]

India is projected to overtake Germany to become the world's fourth largest economy by 2030 and could leapfrog Japan to become the world's third largest economy by 2050 (figure 1). India has been an engine of global growth in recent years.

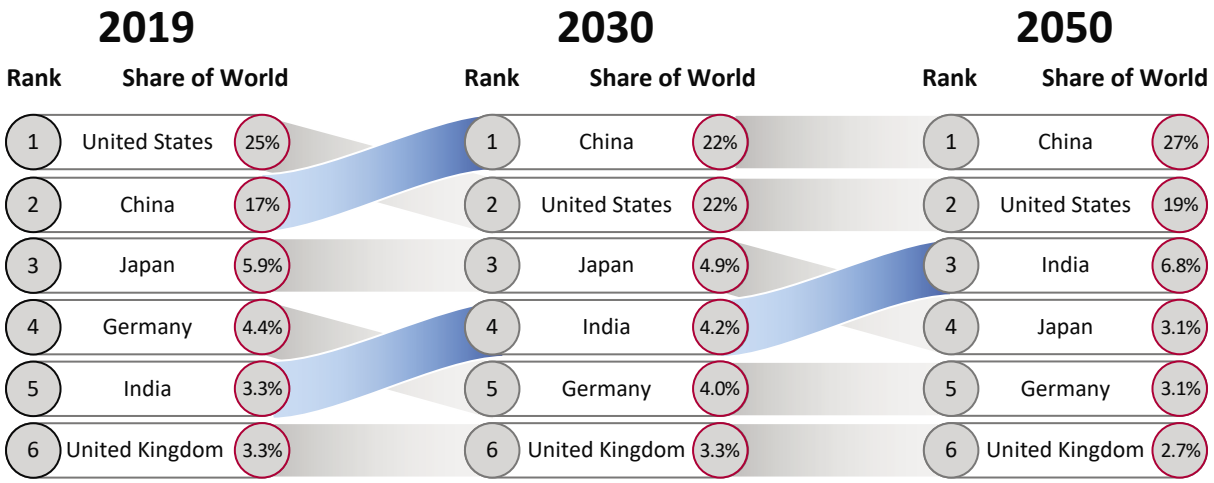
In the 10 years to 2019, India's economy grew by 7.0% a year on average (in real terms) and accounted for 6.1% of global growth over the same period.[20] India's economy is expected to continue to grow rapidly – rising by 5.6% on average each year (in real terms) between 2019 and 2030 – more than double global growth expected over the same period (2.5% per year).[21]

The Indian middle-class market is growing fast – in 2019 there were close to around 30 million consumers earning over $12,535 per year, and by 2030 that figure could double to 60 million – approaching the population of the UK.[22] This growing middle class, which is expected to drive 75% of India's consumer spending by 2030, is predicted to spearhead the country's demand for healthcare, education and premium products.[23]

8 DIT Global Trade Outlook September 2021.
9 DIT Global Trade Outlook September 2021. The income threshold is calculated using the World Bank's income thresholds for 2019 and inflated to 2030 by 1.2%pa.; How India will consume in 2030: 10 mega trends. World Economic Forum, January 2019.
10 Evaluating the impact of exports on UK jobs and incomes.
11 HMRC Regional Trade Statistics (data extracted from the interactive tables in July 2021).
12 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook (September 2021). Conversion using Bank of England annual average exchange rate, USD to GBP (2019).
13 Office for National Statistics, UK Total Trade: all countries, non-seasonally adjusted, 2020 data. India is the UK's 8th largest trading partner if the EU is treated as a single trading partner.
14 Office of National Statistics (ONS) data source for total trade: UK Economic Accounts (seasonally adjusted series).
15 DIT Global Trade Outlook September 2021. Conversion using Bank of England annual average exchange rate, USD to GBP (2019).
16 Where appropriate data analysis is based on a 2019 reference period, prior to the Covid-19 pandemic to better reflect the long run trend.
17 IMF World Economic Outlook April 2021. Population data.
18 IMF World Economic Outlook April 2021, Compared GDP in 2019 and 2020 at constant prices (National Currency).
19 ONS publication of UK inward and outward investment positions – foreign direct investment involving UK companies.
20 GDP in constant prices, compound average growth rate between 2009 and 2019. Data from IMF April 2021 World Economic database.
21 DIT global trade outlook September 2021 (pages 55 and 56).
22 DIT global trade outlook September 2021. The income threshold is calculated using the World Bank's income thresholds for 2019 and inflated to 2030 by 1.2%pa.
23 How India will consume in 2030: 10 mega trends. World Economic Forum, January 2019.

As the number of Indian citizens who are digitally connected increases digitally influenced consumption, where consumers across different income levels use digital platforms for product discovery and pre-purchase research, is also expected to expand.[24]

Figure 1: Rankings of the world's six largest economies over the next 30 years



Source: DIT's Global Trade Outlook, September 2021; rankings are based on nominal GDP expressed in percentage of global nominal GDP at time-varying market exchange rates. Totals may not equal 100% due to rounding.

A UK-India FTA could help support jobs across UK nations and regions

An FTA with India could support jobs across the UK. Experimental analysis shows that exports to India were estimated to support (directly and indirectly) around 63,000 UK jobs in 2016.[25]

Indian-owned businesses employ UK workers in every region of the UK. In 2019, there were over 1,000 Indian-owned local business units operating in the UK, employing more than 95,000 people, with the most people employed in the West Midlands (29,200 people), followed by London (20,700) and Wales (10,700).[26]

There will be opportunities for businesses in all UK nations and regions as a result of the FTA with India. As seen in Figure 2, UK businesses in every region of the UK trade goods with India. In 2020 London, the South East, the West Midlands and the East of England had the greatest share of total traded goods with India.[27]

Figure 2: Total goods trade (exports and imports) with India by UK region, 2020

Source: HMRC, October 2021

Source: HMRC, October 2021

24 How India will consume in 2030: 10 mega trends. World Economic Forum, January 2019.
25 Evaluating the impact of exports on UK jobs and incomes.
26 2019 data, DIT analysis of ONS (2021), Business Structural Database. This work was produced using statistical data from ONS. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.
27 HMRC Regional Trade Statistics (data extracted from the interactive tables in July 2021).

Strong growth in the Indian economy is estimated to increase UK exports to India by £9.2bn by 2035 in real terms.[28]

India's demand for imported goods and services will grow as its economy expands. DIT's projections suggest that the Indian market could grow by around £0.9 trillion (US$1.1 trillion) in real terms between 2019 and 2035, with overall demand for imports projected to reach £1.38 trillion (US$1.8 trillion) per year in real terms by 2035.[29] This represents around a 160% increase in the size of the import market in real terms (today's prices) compared to 2019.

UK exports to India will depend on how its share of that growing market evolves. If the UK's share of India's trade evolves in line with the UK's expected global market share (which is projected to fall by around a fifth between 2019 and 2035), UK exports to India could increase by £9.2 billion (US$11.8 billion) in real terms by 2035.[30] If the UK maintains its 2019 market share in India, rising demand in India would translate into an additional £14 billion (US$17.8 billion) in UK exports by 2035.

This growth in exports will depend on how a range of factors evolve. These include the compatibility of the UK's sectors of comparative advantage with the composition of India's import demand, the extent of external competition and the degree to which India integrates into cross-border supply chains over the period.

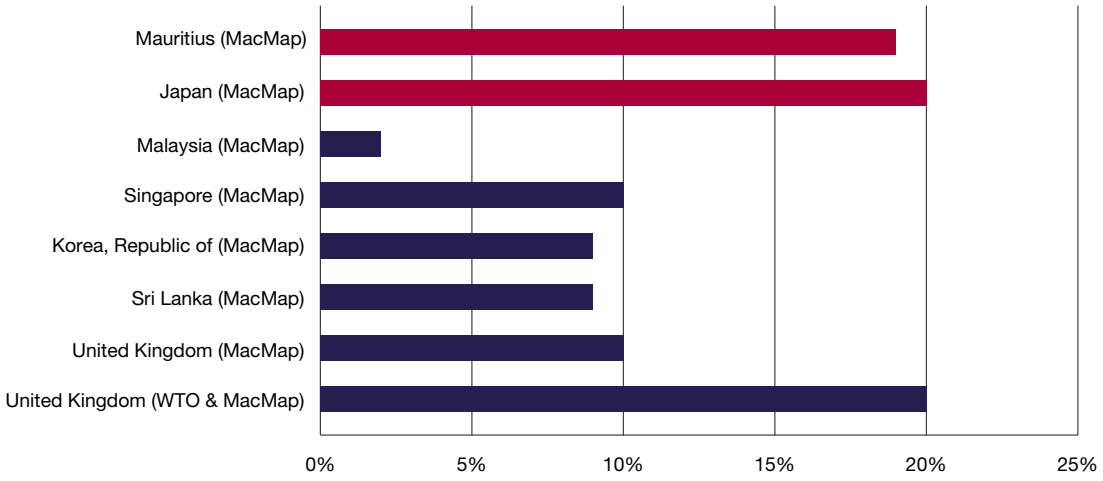
Barriers to trade and investment on UK businesses in the Indian market are high and have been growing in recent years, with scope to grow further.

Goods trade

India's simple average tariff applied to UK exports to India is higher than the UK's equivalent tariff applied to Indian exports to the UK. According to the WTO figures, the simple average tariff applied on UK exports to India is estimated to be around 18.7% (this has increased from 13.4% in 2016).[31] Using MacMaps figures this simple average is 20.07%. Both those estimates are higher than what India applies to most of its FTA partners (see figure 3) – as well as considerably higher than those facing Indian imports to the UK.[32,33] In 2019, it is estimated that UK products entering the Indian market incurred £810 million in tariff duties.[34] India's simple average tariff masks significant tariff peaks such as those applied on whisky (150%), fresh apples (75%) and vehicles (125%).[35,36]

28 US$11.8 billion. The UK's market share is estimated to reduce by a fifth by 2035 similar rate to the estimated decline in UK's market share in its trade with the rest of the world. Conversion using Bank of England average annual exchange rate, USD to GBP (2019).
29 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook (September 2021). Conversion using Bank of England annual average exchange rate, USD to GBP (2019).
30 DIT's Global Trade Outlook. The UK's market share is projected to fall by around a fifth to 2.6% by 2035, based on an extrapolation of the independent Office of Budget Responsibility's March 2021 medium term forecasts. These projections assume the current status quo continues in terms of UK trade policy and promotion.
31 18.7% calculated using WTO data as the primary source, complemented by MacMap. 13.4% calculated using WTO data.
32 DIT calculations using WTO and MacMap (Market Access Map, International Trade Centre, www.macmap.org) tariff data, 2019 Data, Tariff Line Level. The estimated simple average tariff applied on UK imports from India is based on UKGT and GSP, 2021.
33 The comparative countries have been selected based on the countries that have bilateral FTAs (in force) with India, as per the WTO regional trade agreement database: https://rtais.wto.org/UI/PublicSearchByCrResult.aspx. The applied average tariff rates show the minimum rates as indicated by the MacMap website. Note - the ASEAN bloc also has an FTA with India, however, Malaysia and Singapore (part of ASEAN) are included within figure 3. Further, Sri Lanka is part of SAFTA (South Asian FTA) which India is a signatory of.
34 Duty estimates based on trade data from Ministry of Commerce and Industry, with tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org; Tariff rates accessed July 2021. The benefits of tariff liberalisation are contingent on products meeting Rules of Origin.
35 Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.
36 Tariff peak within HS8703: Motor cars and other motor vehicles principally designed for the transport of persons for less than 10 persons.

Figure 3: Simple average tariffs applied to UK exports to India, compared to simple preferential tariffs applied to India's FTA partners' exports into India (2019)

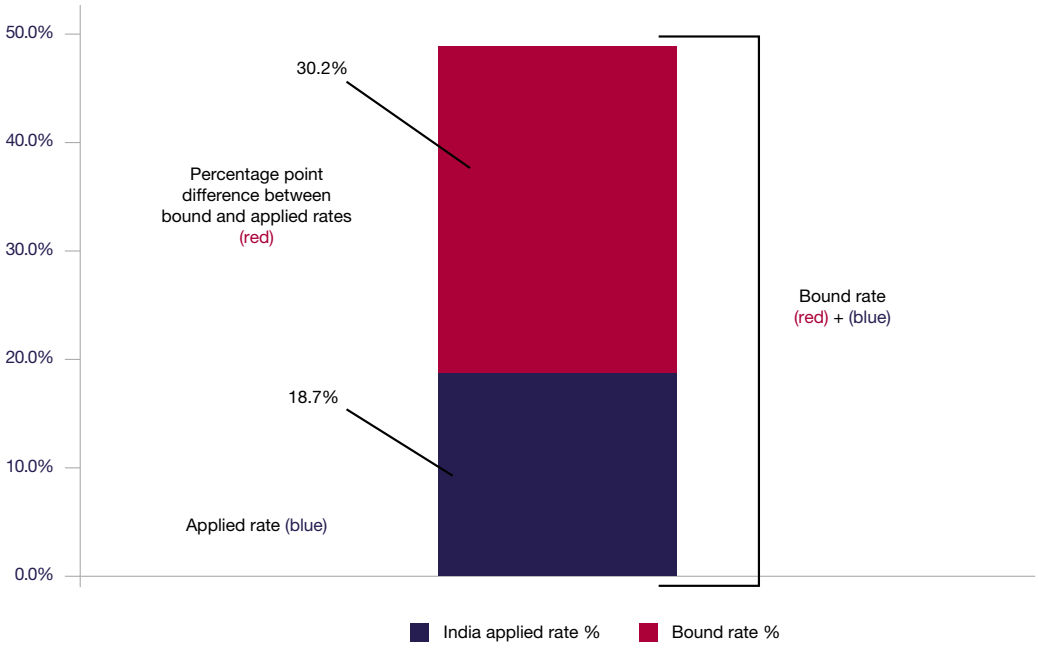


Source: DIT calculations using WTO & MacMap for UK simple average and MacMap tariff data (simple average) for other countries. 2019 data tariff line level.

When countries join the WTO they commit to apply Most-Favoured Nation (MFN) tariffs on imports, except where they have a preferential trade agreement (such as an FTA) in place with a partner country. In practice MFN rates are the highest tariffs that WTO members can charge one another in the absence of a trade agreement.

The average applied MFN tariff rate on India's imports is notably lower than its average MFN bound rate (the maximum tariffs that India can apply to WTO members on an MFN basis). In 2019, the difference between India's average MFN bound and applied rates was 30 percentage points (Figure 4).[37] This provides India with discretion to increase applied MFN tariff rates to other WTO members (including the UK) with which it dœs not have preferential trade agreements.

Figure 4: India's bound rate compared to applied tariff rate (simple average)

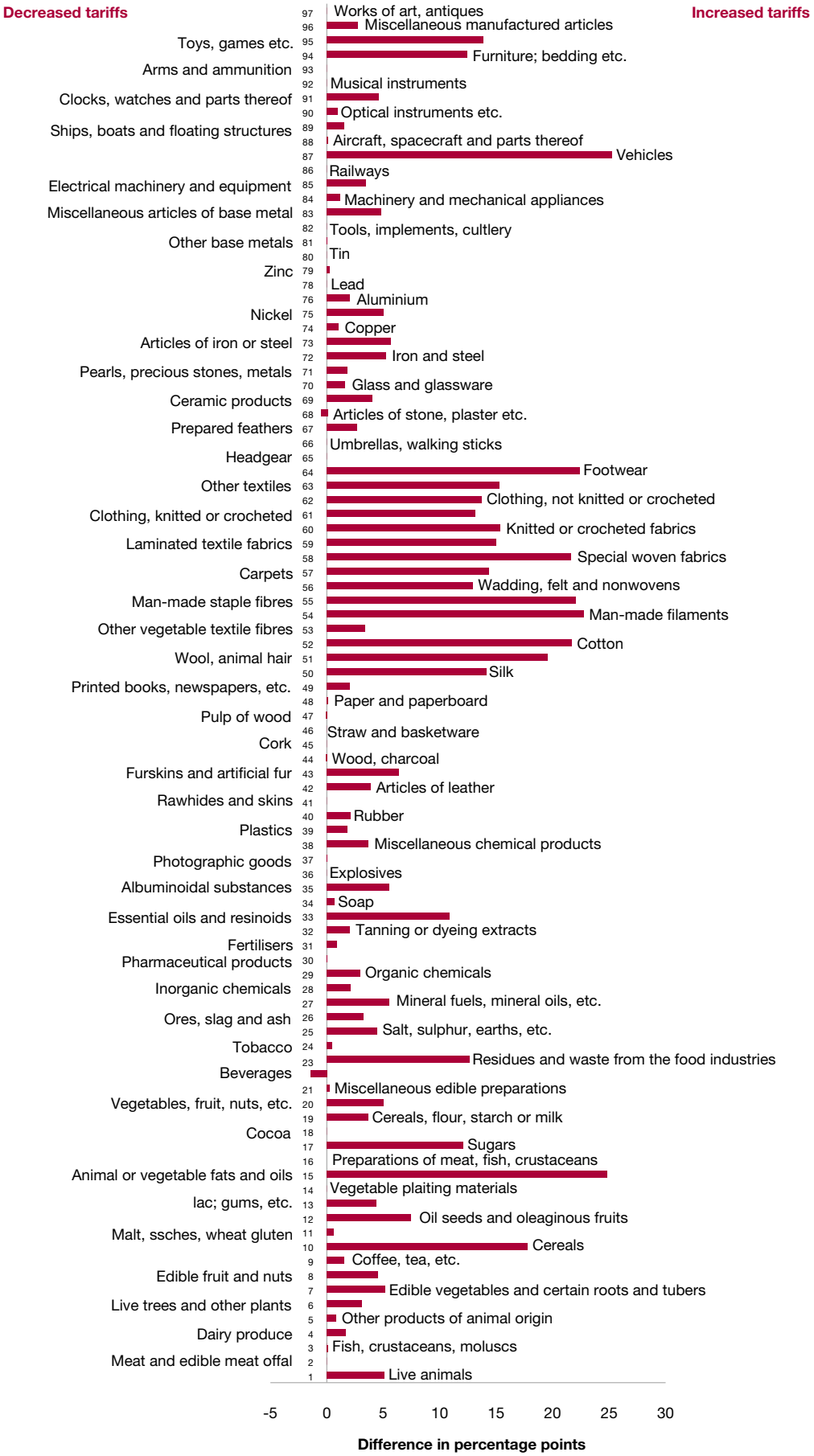


Source: Indian applied tariff rate: from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021; Indian bound tariff rate, WTO TAO.

In recent years, there has been evidence of an increase in India's applied tariffs (Figure 5). From 2017 to 2021 many of the tariffs applicable to UK exports increased, raising the overall duties on UK exports to India over this period. As seen in the figure below, India's largest percentage point tariff increases were in man-made filaments (26 percentage point increase), animal or vegetable fats and oils (25 percentage point increase) and footwear (22 percentage point increase). An FTA with India could go some away to reducing or eliminating the risk of increases in applied MFN tariffs by locking-in preferential tariffs rates at an overall lower level. This would secure improved market access and help support the competitiveness of UK exports in the Indian market.

37 One percentage point = 1%. For example, moving from 20% to 24% is a rise of 4 percentage points.

Figure 5: Change in HS-2-chapter tariffs (percentage point difference) from 2017 to 2021.[38] India has increased tariffs in most HS chapters



Source: Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.

38 As of June 2021 using estimates of current tariffs.

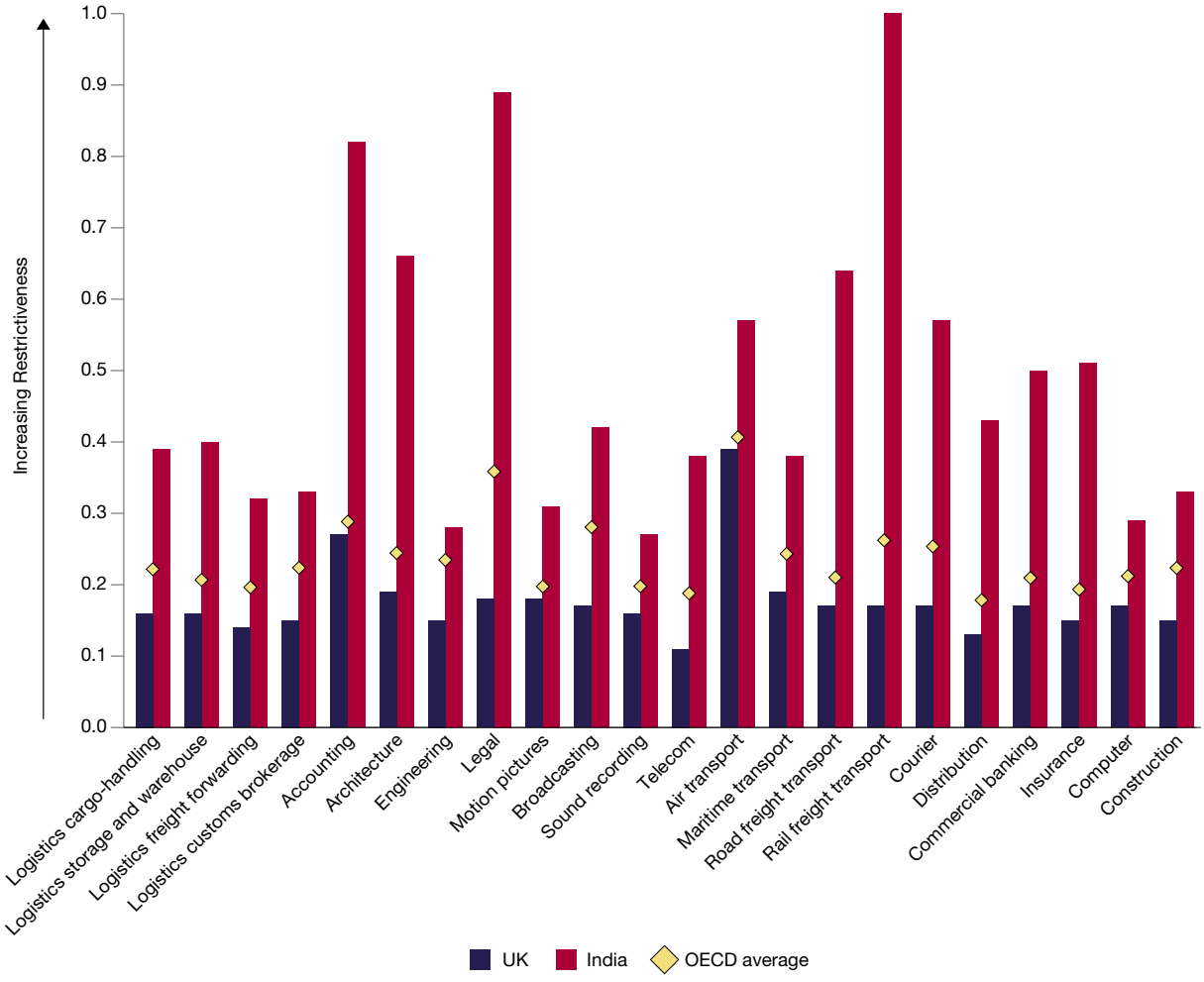
Services and Investment trade

India has a relatively high level of regulatory restrictions affecting trade in services; digitally enabled services; and foreign direct investment.

In 2019, services exports accounted for 46% of the UK's total exports to India. Nevertheless UK services providers trading with India operate in a comparatively restrictive trade environment.[39]

The OECD's Services Trade Restrictiveness Index (STRI) provides a measure of regulatory restrictions to trade in services across 22 sectors, with 0 representing a sector which is completely open to foreign service suppliers and 1 representing a sector which is completely closed. India is more restrictive than the UK – and the OECD average – across all 22 sectors covered by the index. The sectors of the India economy with the greater restrictions to international trade in services are Accounting (0.82), Legal (0.89) and Rail Freight Transport, where India is seen by OECD as closed to international trade (score of 1). The difference between the UK (which scores 0.27 in Accounting; 0.18 in Legal; and 0.17 in Rail Freight Transport) and the India's scores on these sectors underlines the difference in openness to trade in services between the two countries.

Figure 6: STRI for the UK, India, and OECD average by sector in 2020



Source: OECD STRI index, 2020

The OECD's Digital Services Trade Restrictiveness Index (Digital STRI) builds on the STRI by identifying cross-cutting barriers that affect trade in digitally enabled services across five broad categories.[40] India's overall DSTRI score (0.343) indicates that the country is relatively more restrictive in digitally traded services than the UK (which scores 0.083) and the average for the OECD (0.145).[41] The largest proportion (46.4%) of India's digital trade restrictiveness falls under the Infrastructure and Connectivity category.

39 Office for National Statistics, UK Total Trade: all countries, non-seasonally adjusted, 2020 data.
40 Infrastructure and connectivity; electronic transactions; payment systems; intellectual property rights; and other barriers affecting trade in digitally enabled services.
41 OECD Digital STRI 2020 scores.

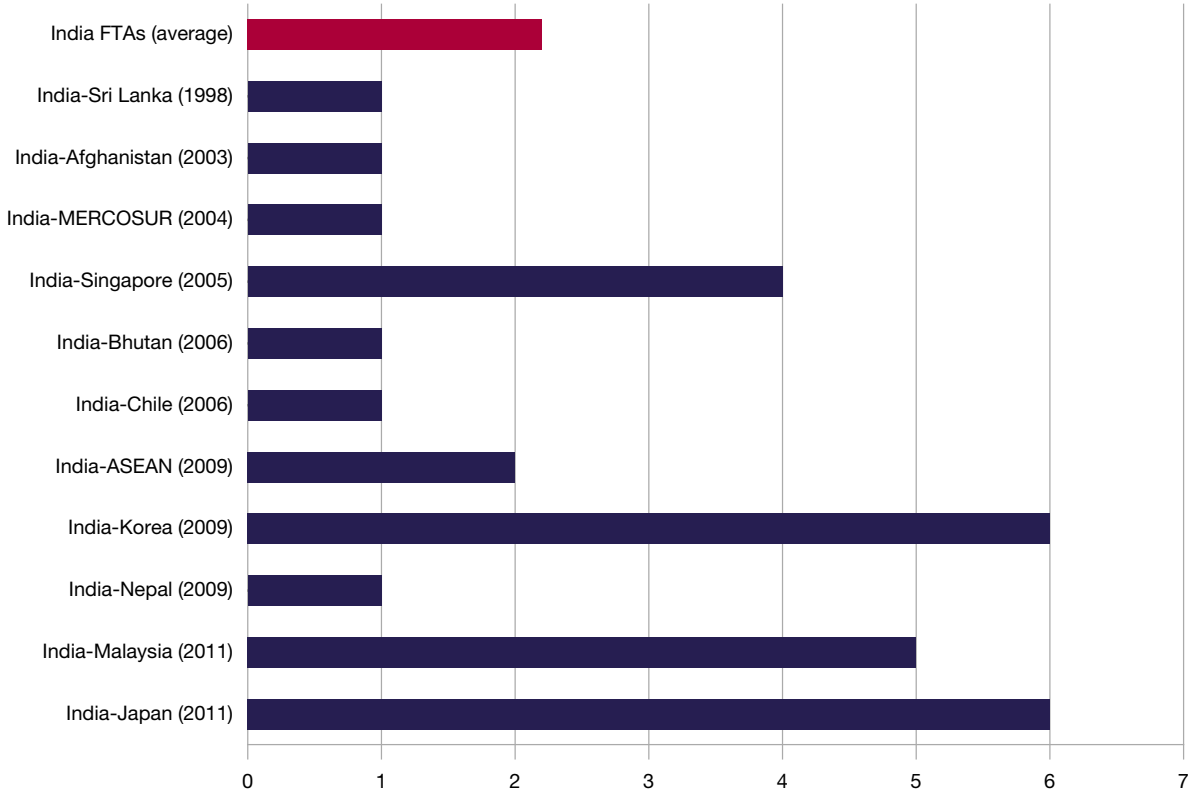
The OECD's Foreign Direct Investment Regulatory Restrictiveness Index (FDI RRI) assesses the restrictiveness of a country's foreign direct investment (FDI) rules across four main types of restrictions.[42] The FDI RRI measures restrictions on a 0 (open) to 1 (closed) scale. The index shows that India (with an overall score of 0.21) is relatively more restrictive to FDI than the UK (0.04) and the average for the OECD (0.06).[43] 78% of the overall restrictions to FDI in India are in the Foreign Equity limitations category.

An FTA with India represents an opportunity to reduce regulatory restrictions between the UK and India in services, investment and wider digitally delivered trade, helping to support the competitiveness of UK exports in the Indian market.

The coverage and breath of India's FTAs have increased over time, including more legally enforceable provisions that go beyond tariffs

Figure 7 illustrates the coverage and breath of India's FTA, based on the DESTA database score (0 – Low depth; 7 – High depth). On this measure, the average depth of India's FTAs is relatively low, reflecting that they are typically less comprehensive than other agreements. However, India's more recent FTAs, such as India-Japan and India-Korea, are more comprehensive relative to other FTAs negotiated by India.

Figure 7: Depth of India's FTAs



Source: DESTA database, depth (1-7).[44]

42 1) Foreign equity limitations; 2) Discriminatory screening or approval mechanisms; 3) Restrictions on the employment of foreigners as key personnel and 4) Other operational restrictions, e.g., restrictions on branching and on capital repatriation or on land ownership by foreign-owned enterprises. The FDI Index is not a full measure of a country's investment climate. A range of other factors come into play, including how FDI rules are implemented.
43 OECD's FDI Regulatory Restrictiveness Index, 2020 scores.
44 India FTA partners included Afghanistan, Bhutan (2006), Chile, Korea, MERCOSUR, Nepal (1991), Nepal (2009), Singapore, Sri Lanka, ASEAN, Japan and Malaysia. US FTA partners include Canada, Chile, Colombia, Israel, Jordan, Korea, Morocco, Oman, Panama, Peru, Singapore, Vietnam, Australia, Bahrain, Laos. China FTAs include Chile, Hong Kong, Macao, New Zealand, Pakistan, Pakistan (services), Peru, Singapore, Costa Rica, Australia, Switzerland, Korea, Iceland, Georgia. Note that UK Japan DESTA score is not yet available but is expected to be of a similar depth than EC Japan. A score of 1 indicates a shallow agreement, a score of 7 indicates a comprehensive agreement.

Chart 1 illustrates the greater depth of India's recent FTAs with Japan and Korea, they cover a wider range of areas beyond tariffs including movement of capital and trade-related aspects of intellectual property rights (TRIPs).

Chart 1 – Content of India's FTA

	Industrial FTA	Agriculture FTA	TRIPs	GATS	Procurement	Customs	Export Taxes	Investment	TBTs	State aid	Countervailing measures	Antidumping	SPS	IPR	Movement of capital	Competition policy	Environmental laws	Consumer protection	Data protection	SME
Sri Lanka (1998)																				
Afghanistan (2003)																				
MERCOSUR (2004)																				
Singapore (2005)																				
Bhutan (2006)																				
Chile (2006)																				
ASEAN (2009)																				
Korea (2009)																				
Nepal (2009)																				
Malaysia (2011)																				
Japan (2011)																				

Source: Global Preferential Trade Agreements Database, World Bank. To note, white means that the provision is not mentioned in the agreement or not legally enforceable; blue means that the provision is mentioned, legally enforceable but explicitly excluded by dispute settlement provision; red means the provision is mentioned and legally enforceable.

3. Quantifying the macroeconomic and trade impacts of a UK-India FTA

This section presents estimates of the long run impacts of the agreement on GDP, trade, and sectoral output in the UK. These are estimated using the department's Computable General Equilibrium (CGE) model, which provides a comparative static analysis. The estimates are applied to dynamic economic projections of the global economy from DIT's Global Trade Outlook to generate a forward-looking value for the expected £ value of the agreement (expressed in today's prices). While CGE modelling is a standard approach to assessing the impact of trade agreements, the modelling may not capture the full range of dynamic impacts of the agreement.

The main macrœconomic impacts are:

A long run boost to UK GDP. A UK-India FTA is estimated to increase UK GDP by the equivalent of around £3.3 billion to around £6.2 billion, depending on the depth of the agreement, when compared to projections of UK GDP in 2035 levels.[45] This is equivalent to an increase in UK GDP of between 0.12% and 0.22% in the long run. The scale of impact is uncertain. Reducing tariffs alone could increase UK total trade with India by up to £8.9 billion (26%), and UK GDP by up to £1.4 billion (0.05%) in the long run, compared to 2035 projections.[46]

More opportunities for UK exporters. As UK goods and services become more competitive in the Indian market, UK exports to India are estimated to increase by £8.8 billion (49.5%) when compared to projected levels in 2035.[47] This could increase to around £16.7 billion (94.6%) under a deeper agreement in 2035.

Businesses and consumers could benefit from better access to Indian products. Imports of Indian goods and services are estimated to increase by £5.2 billion (30.7%) when compared to projections of 2035 levels.[48] This could increase to around £10.9 billion (63.7%) under a deeper agreement in 2035.

Better jobs. The modelling estimates an increase in wages for UK households by between £1.7 billion and £3 billion every year in the long run, depending on the depth of the agreement.[49] This reflects increases of between 0.19% and 0.34% respectively.

Economic gains from trade agreements

International evidence suggests that by reducing the costs of trade and investment, trade agreements can generate a wide range of economic gains through a variety of channels:

Increased specialisation across sectors. Enhanced access to international markets and imports helps economies to specialise in producing goods and services in which they are relatively better at producing. Over the long run this greater specialisation increases the overall national output and wealth of the country.

A more efficient allocation of resources within sectors. Enhanced openness to trade can spur innovation and the expansion of the most efficient firms within sectors, driving up the average productivity and wages within the sector, while at the same time generating increased choice and lower prices for consumers.

Increases in productivity. These result from businesses becoming more efficient as they spread their costs across a higher number of products and services traded; increases in investment; and a boost to research & development.

45 Source: DIT CGE Modelling (2021). Note: Throughout this chapter, equivalent pound values are provided. These are calculated by multiplying the percentage changes from the model with the projections for 2035 where available. Full details, including numbers based on 2019 values are found in the technical annexes.
46 Ibid.
47 2035 projections for UK total exports and imports are calculated using the methodology described in DIT's Global Trade Outlook (September 2021). For bilateral trade between the UK and India in 2035, the projections are combined with a market share assumption where both UK and India's markets shares evolve in line with projections of their global market shares (as projected in the Global Trade Outlook).
48 Source: DIT CGE Modelling (2021). Note: Throughout this chapter, equivalent pound values are provided. These are calculated by multiplying the percentage changes from the model with OBR projections of UK GDP in 2035.
49 Source: DIT CGE Modelling (2021). ONS: UK sector (S.1): Wages and salaries (D.11): Resources: Current price: Seasonally adjusted.

Approach to assessing macroeconomic impacts

The scale of the macrœconomic and sectoral impacts is estimated using a Computable General Equilibrium model (CGE) undertaken by the Department for International Trade (DIT). This is a standard technique used internationally to estimate the impacts of trade agreements. The approach is a stylised model of the world economy including links between countries and sectors.[50] The model estimates the impact on trade and the economy of reducing trade barriers.

The CGE model is 'static', in the sense that it estimates the economic changes resulting from reductions in existing trade costs using a snapshot of the world as it is now. This means that the modelling dœs not account for future trends which mean that the UK, Indian and wider global economy could look very different in the future. It means that the modelling estimates are not an economic forecast and they do not capture the full range of potential dynamic impacts from the agreement.

Box 1: Technical limitations of the CGE modelling

Computable General Equilibrium (CGE) modelling is the standard approach to estimating the impacts of trade agreements, adopted by governments and academics around the world. However the modelling is subject to a range of technical limitations. These include:

Data

The modelling uses the widely used GTAP dataset.[51] GEMPACK (General Equilibrium Modelling PACKage) is a suite of economic modelling software. It is especially suitable for computable general equilibrium models but is also able to model a wide range of economic behaviour. The latest available GTAP dataset draws on data from 2014. This means that changes in the pattern of trade between 2014 and today are not fully reflected in the estimates.

Where possible, more recent trade agreements have been incorporated into the baseline (more detail in Annex 1) and, in light of the changes to applied tariffs in both the UK and Indian economies since 2014, tariffs have been updated to reflect the most recent data available.

Comparative statics approach

The modelling is based upon a so-called comparative statics approach, which compares the level of economic variables such as GDP, trade and wages before and after the effects of the agreement have worked through the economy. The estimated changes are in addition to any long-term underlying growth. In this context, the long run impacts are typically assumed to be a period of around 15 years.

This means that the modelling does not fully capture the impacts of, for example:

- Future growth in the size of the Indian economy or future growth in the relative importance and integration of the UK and Indian economies.
- Future policy choices which influence the value of the agreement.
- The future effects of global trends such as the rise of global value chains, the increasing importance of services trade, changing demographics, technological advancement, and economic development.
- The full potential range for the so-called 'dynamic effects' resulting from increased trade on the long-run growth rate of productivity in the economy.
- The impact of on-going or recently concluded negotiations that the UK is not party to, including the RCEP agreement.
- the value of increased resilience for UK exporters in the face of regional or global shocks owing to options provided through enhanced and more secure access to a diverse range of markets.

The net effect of future trends on the estimated impacts of the agreement is uncertain. The limitations mean that the modelling approach does not necessarily fully capture the complete range of potential dynamic impacts arising from trade agreements.

50 Results from the CGE modelling are not directly comparable to results presented in previous scoping assessments, as a different model specification has been used in this case.
51 GTAP is a global network of researchers and policy makers conducting quantitative analysis of international policy issues. The consortium produces a consistent global economic database which is widely used to study prospective international economic policy.

The full employment closure rule for the labour market

The full employment closure rule is a common technical assumption employed in CGE modelling. This reflects the assumption that in the long run there is no effect on the labour supply and the economy returns to equilibrium employment levels. The employment closure rule means that the overall level of employment in the long-run (once the economy has adjusted to the agreement) is not affected by the FTA. This is consistent with the evidence that FTAs do not raise the long-run level of employment and means that workers experience gains dues to increases in wages due to higher productivity and by moving across sectors.

Annexes 1 and 2 provide further technical detail on the modelling, including the choice of model structure, choice of baselines and derivation of inputs used to model the agreement.

Scenarios and inputs

The assumed magnitude of tariff and non-tariff cost reductions resulting from the agreement are an important determinant of the estimated scale of impacts. As the content or depth of the agreement is not yet known, the modelling exercise provides estimates based upon two illustrative scenarios, representing alternative assumptions regarding the depth of the agreement.

- **Scenario 1** represents an agreement with moderate tariff liberalisation and moderate reduction in non-tariff measures (NTM). The UK's tariffs applied on imports from India are reduced on average by 2 percentage points whilst tariffs imposed on UK exports to India are reduced by 9 percentage points. NTB and regulatory restrictions to services (AVEs) on UK imports from India are reduced by an average of 7 percentage points, whilst the reduction is 6 percentage points on UK exports to India.
- **Scenario 2** represents higher degree of tariff liberalisation and higher degree of reduction in NTMs. The UK's tariffs applied on imports from India are reduced on average by 3 percentage points whilst tariffs imposed on UK exports to India are reduced by 12 percentage points. NTM and regulatory restrictions to services (AVEs) on UK imports from India are reduced further, by an average of 12 percentage points, whilst the reduction is 11 percentage points on UK exports to India.

The scenarios have been developed by considering relevant precedents from both UK and Indian FTAs. Table 1 summarises the assumed reductions in tariffs and NTMs for UK imports from India and UK exports to India.

Table 1: Tariff, NTMs and regulatory restrictions to services (AVEs) trade cost reductions (percentage point reductions)[52,53]

		Scenario 1		Scenario 2	
	Percentage point reductions	**UK (barriers faced by Indian exporters to the UK)**	**India (barriers faced by UK exporters to India)**	**UK (barriers faced by Indian exporters to the UK)**	**India (barriers faced by UK exporters to India)**
Overall average trade cost reductions		**8**	**13**	**14**	**20**
Tariffs	**Overall tariff reductions**	**2**	**9**	**3**	**12**
	…Agri-food sector	3	11	5	17
	…Industrial goods sector	1	7	1	8
NTMs and regulatory restrictions to services (AVEs)	**Overall NTMs and regulatory restrictions to services (AVEs)**	**7**	**6**	**12**	**11**
	…NTMs Agri-food sector	12	11	22	19
	…NTMs Industrial goods sec-tor	5	4	8	7
	…Regulatory restrictions to services (AVEs) trade cost reductions	2	3	4	5

52 AVEs are calculated as simple averages of all AVE reductions across relevant sectors.
53 Tariffs on HS71 are held at MFN. This approach was taken to avoid overestimating the impact on trade under HS71, where UK exports to India may not qualify for preferential access due to rules of origin requirements.

A boost to trade, GDP and wages in UK

The modelling produces estimates for the long-run impact of the agreement relative to a baseline in which the UK and India do not have a trade agreement. The long run is generally assumed to represent around 15 years from implementation of the agreement.

Results from modelling a UK FTA with India show long term increases in the UK's GDP, trade and wages. The macrœconomic impacts estimated are summarised in table 2.

Table 2: Summary of estimates of UK macrœconomic impacts, long run changes against the baseline

Results from CGE model	£bn and % change estimates, compared to 2035 projections	
	Scenario 1	Scenario 2
Change in GDP	£3.3bn (0.12%)	£6.2bn (0.22%)
Change in UK exports to India	£8.8bn (49.5%)	£16.7bn (94.6%)
Change in UK imports from India	£5.2bn (30.7%)	£10.9bn (63.7%)
Change in total UK exports	£3.8bn (0.5%)	£7.8bn (1.1%)
Change in total UK imports	£3.1bn (0.38%)	£6.4bn (0.77%)

Source: DIT CGE Modelling (2021). Note: Throughout this section, equivalent pound values are provided. These are calculated by multiplying the percentage changes from the model with the projections for 2035 where available. Full details, including numbers based on 2019 values are found in the technical annexes.

DIT's projections suggest that the Indian import market could grow by around £0.9 trillion between 2019 and 2035.[54] This represents around a 160% increase in the size of the import market in real terms (today's prices) compared to 2019.

The modelling shows that total UK trade with India could additionally increase by around £14 billion compared to 2035 levels in 2019 prices to around £27.7 billion. This is equivalent to an increase of total trade between the UK and India of between 40% and 79%.[55]

Around 41% or 32% of the gains in UK total trade with India are attributed to tariff liberalisation, depending on the depth of an agreement. This is equivalent to around £5.7 billion in 2035 (2019 prices), up to £8.9 billion in 2035 under a deeper agreement.

DIT's projections suggest that even in the absence of an agreement Indian import growth could translate into an extra £9.2 billion in UK exports by 2035. This represents a 108% increase in UK exports to India in real terms (today's prices) compared to 2019.

The modelling estimates point to an additional increase in the long run level of UK exports to India by around £8.8 billion in 2035 to around £16.7 billion in 2035, in 2019 prices.[56] This represents an increase of between 50% and 95%.[57] The greatest UK export increases are in the manufacture of motor vehicles, transport equipment, and electronic equipment sectors. Around 53% or 41% (equivalent to between around £4.7 billion and £6.8 billion) of the gains in UK exports to India are attributed to tariff liberalisation, depending on the depth of an agreement.[58]

Overall UK exports to the world are estimated to increase by around £3.8 billion when compared to projected levels in 2035, to £7.8 billion under a deeper agreement.[59] This represents an increase of between around 0.5% to around 1.1%.

As the UK economy imports more, production shifts towards areas of comparative advantage, resulting in a more efficient allocation of resources across the economy in the long run. There could be adjustments whereby activity may be reduced in less efficient parts of the economy in the face of import competition and pressure to use resources for activities which are more competitive.

54 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).
55 Source: DIT modelling. 2035 projections for UK total exports and imports are calculated using the methodology described in DIT's Global Trade Outlook (September 2021). For bilateral trade between the UK and India in 2035, the projections are combined with a market share assumption where both UK and India's markets shares evolve in line with projections of their global market shares (as projected in the Global Trade Outlook). For context, the increase in total trade is estimated between around £8.5 billion to £17.1 billion when compared to levels in 2019.
56 Source: DIT modelling. 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).
57 For context, this represents an increase of £4.2 billion or £8.0 billion when compared levels in 2019.
58 Source: DIT modelling.
59 Source: DIT modelling. 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).

The modelling estimates point to an increase in UK imports from India of between around £5.2 billion to around £10.9 billion, equivalent to 31% and 64%, depending on the depth of agreement when compared to projected levels of imports in 2035.[60,61] The greatest estimated import increases are in the textiles and motor vehicles sectors. Around 20% or 19% depending on the depth of the agreement (equivalent to between around £1.1 billion for scenario 1 to around £2.1 billion for scenario 2) of the increase in UK imports from India are attributed to tariff liberalisation, depending on the depth of an agreement.

Overall UK imports from the world are estimated to increase by around £3.1 billion to £6.4 billion depending on the depth of the agreement in the long run.[62] This is equivalent to an increase of between around 0.4% to around 0.8% when compared to 2019 levels showing that around 40% of the estimated increase in imports from India are replacing UK imports from other countries.

Reduced trade costs and increased trade lead to higher productivity; this means that businesses can produce more with the same number of workers, afford to pay higher wages and that consumers can consume more and better products.

The estimates point to a long run increase in UK GDP equivalent to £3.3 billion in 2035, up to £6.2 billion in 2035, depending on the depth of the agreement.[63] This relates to a modelled increase in UK GDP of between 0.12% and 0.22%, and is applied to projected GDP in 2035 (around 15 years from the implementation of the agreement).[64] The largest contribution comes from increased consumer spending. Around between 62% to 60% (equivalent to around £2.1 billion up to £3.7 billion when applied to projected GDP in 2035) of the gains in UK GDP are attributed to an increase in consumer spending, depending on the depth of an agreement.

Real wages (wages in today's prices) are estimated to rise by around 0.19% up to around 0.34% depending on the depth of the agreement, equivalent to around £1.7billion up to around £3.0 billion annually when compared to 2019 levels, as workers benefit from higher productivity in the economy.

The economic gains from an agreement could rise substantially if applied tariffs in India continue to rise in future years.

In the core modelling scenarios presented above, India's tariffs are assumed to remain at current levels in the future. However, applied tariffs in India have been rising in recent years (see Figure 5 above). In an alternative modelling scenario, where India tariffs are assumed to rise to a level halfway between currently applied rates and their bound rates, the estimated increase in long run UK GDP is around £4.0 billion up to £6.9 billion depending on the depth of the agreement, when compared to projected levels of GDP in 2035.[65]

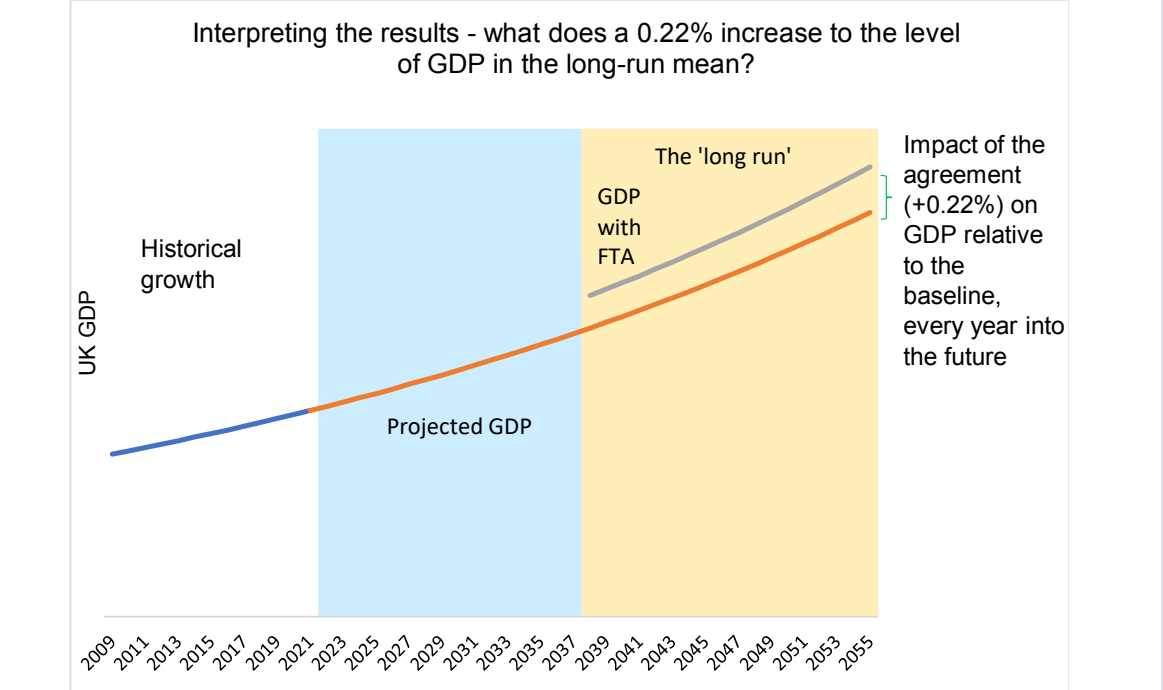
60 Source: DIT modelling. 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).
61 For context this is equivalent to an increase of around £4.6 billion to around £9.5 billion depending on the depth of agreement when compared to 2019 levels.
62 Source: DIT modelling. 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).
63 Source: DIT CGE Modelling (2021). Note: Throughout this chapter, equivalent pound values are provided. These are calculated by multiplying the percentage changes from the model with the projections for 2035 where available. Full details, including numbers based on 2019 values are found in the technical annexes.
64 For context this is equivalent to around £2.6 billion up to £4.9 billion when compared to GDP levels in 2019.
65 In this scenario, the assumed trade-weighted reduction in tariffs on UK exporters is 24% in scenario 1 and 28% in scenario 2, compared to 9% and 13% respectively in the core scenario. 2035 projections for UK total exports and imports are calculated using the methodology described in the Global Trade Outlook, (September 2021).

Box 2: Interpreting the macroeconomic impacts in a comparative steady-state model

The 'long-run' here refers to the time period after the economy has fully adjusted to the new trade agreement – where the economy enjoys a more efficient allocation of resources within and across sectors and geographies of the economy. This is typically considered to be around 15 years after the agreement enters into force.

The chart below provides a stylised representation of the impact of the agreement on UK GDP to help interpret the results and what they mean. There are three points to help understand the estimates of the agreement on UK GDP:

- The impact on annual GDP is permanent; the level of GDP is higher every year into the future.
- If the economy grows over the next 15 years – 0.12 % to 0.22 % – this could translate into a higher £ value in future.
- The impact of the agreement is compared to a situation without the deal – the baseline.



4. Distributional impacts

In addition to the macrœconomic benefits of a boost to trade, GDP and wages, an FTA could also generate important distributional impacts.[66] The FTA could affect sectors and nations and regions of the UK differently and affect various businesses, consumers, and workers.

The distributional impacts, such as who is most affected by the trade agreement, are likely to depend on the interaction of a range of complex factors, including the structure of each economy, products and services that each country is relatively better at producing (specialisation, or 'comparative advantage'), as well as the ability of businesses and individuals to adjust and respond to the opportunities opened up by the trade agreement.

The distributional impacts also depend upon the outcome of the negotiation and shape of the eventual agreement. Therefore, the assessment of the potential distributional impacts of the FTA is preliminary at this stage of the FTA process and is subject to a high degree of uncertainty.

Sectoral opportunities

Trade agreements provide the opportunity to open markets enabling economies to become more specialised in goods and services which they are comparatively better at producing – as well as becoming more specialised in parts of the production process, leading to increased trade in intra-industry and intermediate goods.

Trade flow data points to areas where the UK and India complement one another, for example in the exports of engines, motors and other transport equipment, pharmaceuticals and financial services where the UK is strong; or textiles, agriculture and telecommunications, computer and information services – where India has export specialisation.

There are also opportunities for facilitating closer integration of UK and Indian supply chains, in the textiles and motor vehicles sectors, through improved access to imported intermediate inputs.

An FTA could provide the opportunity to increase economic output and trade by:

- Enhancing and securing market access from the removal of tariffs and non-tariff measures which could lower trade costs, boosting economic activity in areas of competitive strength and providing opportunity for increased specialisation.
- Facilitating closer integration of UK and Indian supply chains through the export and import of intermediate goods and services.

Specialisation and trade

A UK-India FTA could enhance opportunities for specialisation from trade for both nations. Table 3 below sets out a measure of export specialisation for the UK and India, as well as global demand growth between 2019 and 2030.

Sectors where the UK is more specialised (and where India's global import demand is estimated to grow by over 100% by 2030) include the exports of engines, motors and other transport products; pharmaceuticals; and financial services. In comparison India has a greater level of specialisation in agriculture; and in telecommunications, computer and information services – sectors where UK's global import demand is estimated to grow by 88% and 61% respectively by 2030. India is also highly specialised in the exports of clothing & footwear, however it is estimated that UK demand could reduce by 27% over the same period.

Future growth in Indian imports is projected to be strongest in other private services; travel services; and construction services sectors. The Indian market for the UK's 10 sectors of comparative advantage (highlighted in green in column 'UK RCA' below) is expected to grow from around £113 billion in 2019 to over £300 billion by 2030 (in nominal terms).[67]

66 Winners and losers from international trade: what do we know and what are the policy implications, UKTPO (2019).
67 DIT Global Trade Outlook September 2021.

Table 3: Relative export specialisation in the UK and India by sector[68]

		UK RCA	India's global import demand growth, 2019-2030	India RCA	UK global import demand growth, 2019-2030
Goods	Advanced Manufacturing	-0.73	112%	-0.88	43%
	Engines and motors & other transport equipment	1.66	123%	-0.05	87%
	Agriculture	-0.75	120%	0.55	88%
	Automotive	0.04	94%	-0.45	60%
	Chemicals	-0.37	122%	0.09	33%
	Clothing & Footwear	-0.49	143%	0.52	-27%
	Food & Beverages	-0.34	377%	-0.1	66%
	Pharmaceuticals, medicines, and devices	0.24	176%	-0.19	38%
	Machinery & Equipment	-0.37	97%	-0.58	55%
	Mining & metals	-0.48	-13%	0.63	28%
	Oil & Gas	-0.44	119%	-0.03	-19%
	Other Consumer Goods (NIE)	-0.14	101%	-0.23	52%
	Other Industrial Inputs	-0.49	136%	0.03	66%
	Power & Utilities Infrastructure	-0.49	115%	-0.27	102%
Services	Recreational & Media Services	0.69	132%	-0.75	104%
	Business Services	1.9	229%	1.36	54%
	Construction	0.01	439%	0.19	117%
	Telecommunications, computer and information services	0.44	288%	3.54	61%
	Financial Services	3.61	161%	-0.45	101%
	Other Private Services	-0.04	735%	-0.91	188%
	Public Services	0.41	-63%	-0.61	69%
	Transport Services	-0.03	143%	-0.1	49%
	Travel Services	0.03	460%	-0.03	32%

Source: DIT Global Trade Outlook September 2021; Data as of Sep 01 2021.

68 Calculated using data from the Global Trade Outlook, which uses data from UNCTAD, IMF WEO Apr 2021 and OBR (for the UK). Revealed comparative advantage (RCA) is calculated by comparing the UK's and India's share of global exports for a sector, with their aggregate share of global exports, using 2017-2019 data. Sector definitions can be found in DIT Global Trade Outlook September 2021, section 3.

Examples of sectors that could benefit from the FTA

The removal of tariffs and non-tariff measures could improve the competitiveness of UK businesses and provide opportunities to increase UK exports to India. For example:

- **Chemicals and pharmaceuticals** – India's demand for chemicals, including pharmaceutical products, has significantly increased in recent years, making it India's fifth largest import from the world, worth £47 billion in 2019. Whilst UK's exports to India in this sector have increased by 60% since 2010, totalling £43 million in 2019, India's tariffs in this sector peak at 100%. It is estimated that annual duties on UK exports of chemicals to India was around £50 million in 2019.[69]
- **Transportation equipment**[70] – India's tariffs on UK exports are up to 10% on certain parts of aircraft and spacecraft, and up to 10% on certain vessels. It is estimated that annual duties on UK exports of other transport equipment such as aircraft, ships and railway was around £10.7 million in 2019.
- **Vehicles**[71] – Tariffs imposed on UK exports of vehicles and parts to India averaged at 59% in 2019. UK exports such as petroleum, electric and hybrid motor vehicles face high tariffs, often reaching 125%.[72] It is estimated that annual duties on UK exports of vehicles and vehicle parts was £49 million in 2019.[73]
- **Whisky** – In 2010 India imported £36.5 million worth of whisky from the world, which just over quadrupled to £168 million in 2020. The UK is a competitive supplier of whisky to the country, exporting £110 million to India in 2019, however Indian tariffs on whisky are high at 150%.[74, 75] It is estimated that annual duties on UK Whisky exports to India were £164 million in 2019.[76]

A new FTA with India could reduce these tariff barriers and increase the competitiveness of UK exports in the Indian market, further enhancing trade.

Supply chain linkages

Gains from trade can also come from economies specialising in different parts of the production process, leading to increased trade in intra-industry and intermediate goods. Intermediate goods are defined as goods that are used as inputs in the production of another good. Over the last decades the UK has imported an increasing amount of the inputs required to produce its goods and services. According to the OECD, 15.4% of all inputs into the production of UK exports were sourced abroad.[77] In the same year India imported 16.1% of the inputs required to produce its exports.

Trade flow data between the UK and India provide evidence of the close supply chain linkages between both countries. In 2019, 43% of UK goods imports from India were intermediate goods. Conversely, 85% of the UK's goods exports to India were in intermediate goods.[78]

There are opportunities for facilitating closer integration of UK and Indian supply chains through the import of intermediate goods and services, including improved access to imported inputs. For example:

1. **Vehicles** – 67% of all UK imports from India in vehicles in 2019 were in intermediate goods.[79] UK tariffs imposed on these vehicles averaged at 5.3% and it is estimated that annual duties on these UK imports from India were £9.7 million in 2019.[80]
2. **Textiles and textile articles**[81] – The UK tariff on intermediate textile imports from India is up to 12%, with imports such as woven fabrics of cotton, synthetic filament yarn and artificial staple fibres being subject to a tariff of up to 8%. Based on 2019 trade data, the total estimated duties on intermediate UK imports of textiles and textile articles from India was £10.5 million.

The removal of UK tariffs on these imports could reduce costs for UK businesses operating in these sectors, improve productivity, pass benefits onto consumers in the form of lower prices. Consumers could benefit directly from lower trade costs on final goods. In some instances, UK businesses may face greater import competition as a result of a reduction in import costs to trade.

69 Duty estimates based on trade data from Ministry of Commerce and Industry, with tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org; Tariff rates accessed July 2021.
70 "Transportation equipment" is defined as trade taking place in the '86: Railway or tramway locomotives, rolling- stock and parts thereof; railway or tramway track fixtures', '88: Aircraft, spacecraft, and parts thereof', and '89: Ships, boats and floating structures' Harmonised system chapters.
71 "Vehicles" defined as trade taking place in the '87: Vehicles other than railway or tramway rolling- stock, and parts and accessories thereof' Harmonised system chapter.
72 Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.
73 Ibid.
74 India Ministry of Commerce and Industry
75 Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.
76 Ibid.
77 OECD's import content of exports. 2016 figure. Total, % of gross exports. https://data.oecd.org/trade/import-content-of-exports.htm
78 Data on UK imports from India from Eurostat. Data on Indian imports from UK from India Ministry of Trade and Commerce.
79 'Vehicles' defined as trade taking place in the '87: Vehicles other than railway or tramway rolling- stock, and parts and accessories thereof' Harmonised system chapter. UK imports data from Eurostat, 2019, converting Euro into Sterling using Bank of England 2019 annual average spot exchange rate.
80 Average of tariffs in the Harmonised system chapter 87. 2019 trade data from Eurostat, accessed October 2020 converting Euro into Sterling using Bank of England 2019 annual average spot exchange rate. UK tariff rates based on UKGT and UK GSP tariff schedules.
81 Based on HS Section 11: Textiles and textile articles. UK imports data from Eurostat, 2019, converting Euro into Sterling using Bank of England 2019 annual average spot exchange rate. UK tariff rates based on UKGT and UK GSP tariff schedules.

Estimated impacts on exports, imports, and output in economic sectors under various scenarios

Our modelling shows that the majority of UK sectors are expected to see a long-run expansion following an FTA with India.

The estimated increases are broad-based across a wide range of sectors. Services sectors are estimated to expand in both modelling scenarios, while the largest proportional expansions are in goods sectors including beverages and other manufacturing sectors such as transport and electrical equipment and motor vehicles in scenario 2.

However, there are other parts of the economy where activity may be reduced in the face of import competition and pressure to use resources for activities which are more competitive. The analysis shows some potential for this to happen in certain agriculture and food sectors, as well as the textile industry, and to a lesser extent other manufacturing sectors (such as manufacture of furniture).

The scale of estimated impacts across sectors means that there is only a very marginal impact on the composition of the UK economy.

Overall output for the UK – measured on a GVA basis – is estimated to increase because of an FTA with India.[82] This is over and above the underlying future growth of the economy which is not captured in the static modelling.

As a result of an FTA with India, some sectors are expected to grow relative to other sectors of the economy as the UK's more competitive businesses take advantage of enhanced and more secure access to India's market, improved access to imported inputs and as they respond to increased competition from international markets. This raises the share of UK output that is accounted for by those faster-expanding sectors. This is reflected in the modelling as more resources and investment, such as capital and labour, move into these sectors with higher returns, expanding output overall. As a result, some sectors account for a smaller proportion of the expanded output of the economy than would have otherwise been the case. The comparative static modelling dœs not take account of expected underlying growth in the UK economy: in general, most sectors are likely to be larger than they are today.

The impact of a UK FTA with India increases the GVA of 17 out of the 23 sectors in scenario 1 and 18 out of 23 sectors in scenario 2. The impacts by sector are set out in table 4. Except for a few sectors, the changes to GVA are less than 0.5%. The largest estimated percentage increases in UK GVA across both scenarios are seen in, transport equipment; the manufacture of electrical equipment; and the motor vehicles and parts sectors. In scenario 2 there are further large increases in UK GVA across the machinery and equipment and beverages and tobacco products sectors. The increase in GVA in these sectors is due to reductions in tariffs, NTMs and regulatory restrictions to services between the UK and India.

There are small (<0.5%) reductions in GVA in the textiles and apparel, processed food, manufactures, motor vehicles and agriculture sectors in scenario 1. For example, the fall in output for the agriculture, forestry and fisheries sector is driven by a fall in output (0.45%) in the vegetable, fruits and nuts sub-sector. This is as a result of the reductions in tariff and regulatory barriers to trade that could make Indian exports to the UK more competitive. In scenario 2 there is a larger decrease in the textiles and apparel sector.

82 Gross value added (GVA) is an alternative measure of economic output to GDP. At a sector level, it is the output of that sector minus the value of intermediates that have been used to produce the goods and services in that sector. At the national level, GVA is also the equivalent of the value of GDP plus government subsidies, minus taxes.

Table 4: Percentage changes in UK output by sector (GVA, long run % change on baseline)

Sector	Description	Scenario 1- percentage change in GVA	Scenario 2- percentage change in GVA
Agri-Food	Agriculture, Forestry and Fisheries	-	-
	Beverages and tobacco products	+	++
	Processed food	-	-
	Food products n.e.c.		
Industry	Chemical, rubber, part plastic products	+	+
	Energy		+
	Manufacture of electrical equipment	++	++
	Machinery and equipment n.e.c.	++	++
	Motor vehicles and parts		++
	Transport equipment n.e.c.	++	++
	Manufactures n.e.c.	-	-
	Minerals, ferrous metals and wood products	+	+
	Paper products, publishing	+	+
	Textiles and apparel	-	--
Services	Other business services		+
	Communications		+
	Construction	+	+
	Other financial services		
	Insurance	+	+
	Services	+	+
	Recreational and other consumer services	+	+
	Public services	+	+
	Trade and distribution services	+	+

Key:

Above 0.5% (++)	0.05 to 0.5% (+)	-0.05 to 0.05%	-0.05 to -0.5% (-)	Below -0.5% (--)

Source: CGE Modelling Results. Notes: 'n.e.c.' refers to not elsewhere classified.

Estimates of impacts by nation and region of the UK

The distribution of sectors across the country suggests that all nations and regions could see an increase in output from an FTA, with concentration of manufacturing of transport equipment driving the largest relative expansions in Wales and the South West in a more shallow agreement; and expansions in motor vehicles driving larger expansions in the West Midlands in a deeper agreement.

International evidence suggests that trade agreements and trade liberalisation affect regions within an economy differently.[83] This is primarily because trade agreements affect sectors asymmetrically; the sectoral composition of output, employment and productivity vary systematically across regions.

Based on the sectoral composition of GVA across the nations and regions of the UK, the central estimates suggest that all nations and regions could see an increase in output from a UK-India FTA.

In scenario 1, output in South West England and Wales could be set to expand the most in relative terms as a result of an agreement. The estimated increase in output in the South West and Wales is 0.1% each; as an indicative order of magnitude, based on 2019 nominal GVA, this equates to around £69 million for Wales and £139 million for the South West. Manufacture of other transport equipment is the largest driver of the expansions in both Wales and the South West in scenario 1, followed by wholesale and retail trade.

The North East, North West and Northern Ireland could benefit most after the South West and Wales in scenario 1. Expansions are largely due to public and other business services and wholesale and retail trade. The increases in Northern Ireland and the North East are also driven in part by manufacturing and manufacture of other transport equipment, respectively.

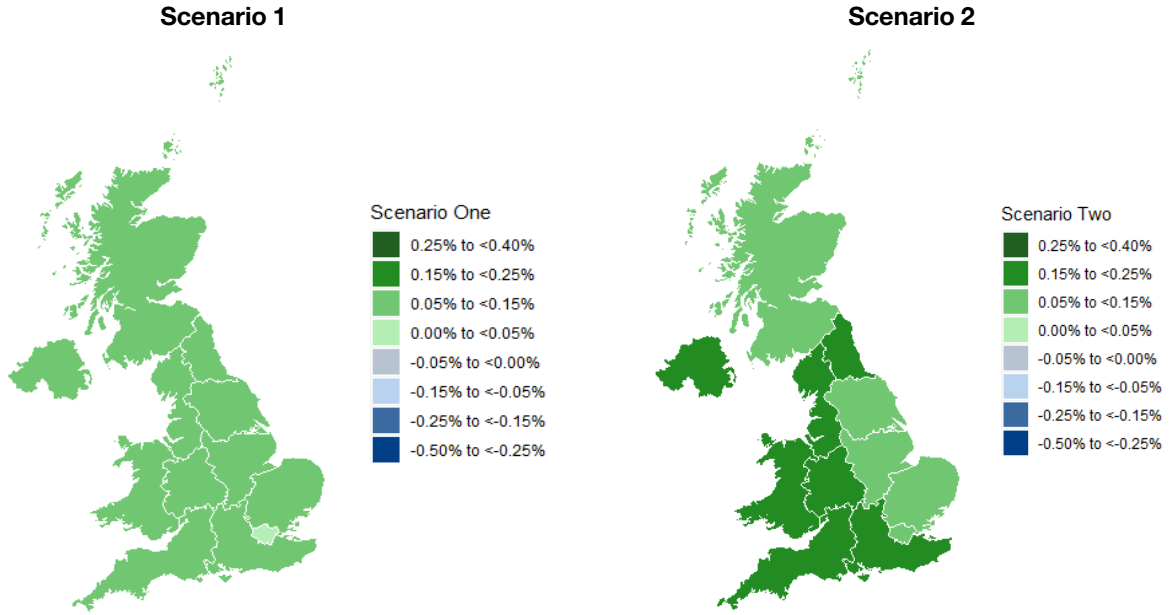
In scenario 2, in line with modelled sector GVA impacts, expansions in the manufacture of motor vehicles means that the West Midlands could expand the most, followed by Wales due largely to manufacture of other transport equipment. West Midlands and Wales could expand by around 0.21% and 0.19%. As an indicative order of magnitude, based on levels of nominal GVA in 2019 this equates to around £297 million for the West Midlands and £126 million for Wales.

The South West, North East and Northern Ireland could benefit most after the West Midlands and Wales in scenario 2. Expansions are largely due to public and other business services and wholesale and retail trade, manufacturing, business and public services.

The sensitivity analysis in section 7 shows that the estimates of impacts by nation and region of the UK are robust (not highly sensitive) to assumptions regarding the presence and scale of local economic effects.

83 See, for example: 'Making Trade Work for All' (2017) and 'Local Jobs, trade and investment: why does the local picture matter for trade policy?' Department for International Trade (2021) . 'Making Trade an Engine of Growth for All' 2017 (viewed December 2018), for an overview of the international evidence.

Chart 2: Changes in UK nations and regions value added, long run % change



Source: DIT Calculations (2021).

Our modelling dœs not provide these estimates directly since the CGE model only produces impacts at the whole economy level. The estimated impacts on GVA and monetised values, as well the approach used to provide the estimates above and its limitations are set out in Annex 4.

All of the sub-national impacts are subject to a high degree of uncertainty. They directly relate to the CGE estimates for sectors and so are subject to the same limitations. In addition, the estimates do not account for future changes to the location of production for various sectors or local economic multiplier effects. The long-run impact of increased trade liberalisation on regions is subject to a high degree of uncertainty due to the mobility of firms across regions. Evidence shows businesses in similar fields tend to concentrate in a particular region as this may generate knowledge spill overs or easier access to inputs and workers. For example, car production is highly concentrated in the Midlands and the North East of England. It is estimated that output in the North East could increase by around £45 million, up to around £93 million depending on the depth of an agreement, and the North West by around £164 million, up to around £304 million depending on the depth of an agreement, due to the region's concentration of motor vehicle related production. Reduction in trade costs could further incentivise this type of local concentration of businesses.[84]

Regional comparative advantages can change significantly over time resulting in changes to the sector make-up of different regions. This means that the location of production for various sectors may evolve significantly over the 15-year time horizon for the economic modelling. The pace at which sectors and regions will adjust will depend on a multitude of factors, for example the relative labour market conditions and productivity across and within regions and sectors.

The expert modelling review panel are exploring ways to help improve DIT's modelling toolkit, including improving the estimation of sub-national impacts.

84 Winners and losers from international trade: what do we know and what are the policy implications, UKTPO (2019).

Business and small and medium-sized enterprises (SMEs)

A UK–India agreement could enhance the competitiveness and resilience of UK businesses of all sizes. This could be through enhanced and more secure access to India's growing market for UK exporters and from improved access to imported inputs and services from the sub-continent for UK businesses.

Annual duties on UK exports to India were up to £810 million based on 2019 trade data, and annual duties on UK imports from India were up to £185 million.[85]

Around 9,900 UK businesses exported goods to India and around 14,500 businesses imported goods from India in 2019.[86] Lower barriers to trade and investment could enhance the competitiveness of existing traders of both types, as well as incentivising businesses which do not currently export to do so. Provisions enhancing transparency and providing better information for small and medium-sized enterprises could enable new UK businesses to enter the Indian market.

Some UK businesses could experience greater competition from imports from Indian exporters. The evidence shows that competition from trade promotes business innovation and growth.[87] Some businesses may expand, creating more jobs, but some businesses may be adversely affected by the increased competition.

Export opportunities and business growth: improved market access leading to a greater diversity of export markets for UK businesses.

Annual duties on UK exports to India were estimated be around £810 million based on 2019 trade data. These included annual duties of £164 million on whisky, £184 million on precious stones and metals and £49 million on vehicles (not railway-related).[88]

Removing tariffs through an FTA would benefit UK businesses by increasing competitiveness, especially when compared to competitors exporting to India from countries without an FTA.

An FTA could also provide dynamic benefits to UK businesses and the UK economy more widely by providing the option to export to a greater diversity of export markets.

An FTA with India represents an opportunity to support the UK's objective to cement market access in a growing number of markets across the globe to support the resilience of UK exports in the face of global or regional economic shocks which disrupt demand for UK exports in particular markets.

Disruptions in demand can arise from global or regional business cycles (e.g. recessions in particular countries or regions) or from policy changes, such as, the adoption of protectionist policies in particular markets.

Since exports are a component of GDP, dampening the impact of shocks on UK exports reduces the impact of these disruptions on short-run GDP, helping businesses and the economy to operate closer to their potential on a more consistent basis.

Import opportunities and more diverse supply chains: improved access to imported inputs and a greater diversity of import suppliers to build resilience in an uncertain world.

An FTA with India could enhance competitiveness by reducing costs and expand choice for the 14,500 UK businesses importing goods from India in 2019.[89] 43% of UK goods imports from India were intermediate goods in 2019, covering over £3.2 billion worth of goods.[90]

Based upon 2019 trade flows and the UK's Global Tariff, the annual duties paid on imports from India are estimated to be around £185 million. The majority are estimated to affect final goods, while around 18% were estimated to apply to intermediate goods (those goods which are used in the production of

85 India tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021. UK tariff rates based on UKGT and UK GSP tariff schedules. UK to India trade data from Ministry of Commerce and Industry. UK import data from Eurostat, 2019, converting Euro into Sterling using Bank of England 2019 annual average spot exchange rate.
86 HMRC, UK trade in goods by business characteristics 2019. Figures show all businesses which traded in goods, including firms that are predominantly producers of services.
87 CMA (2015) Productivity and competition: A summary of the evidence.
88 Duty estimates based on trade data from Ministry of Commerce and Industry, with tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org; Tariff rates accessed July 2021.
89 HMRC. 'Trade in Goods by Business Characteristics' 2019 (accessed June 2021).
90 Based on 2019 import data from Eurostat, GSP and UKGT tariff rates. Trade preferences reduce or remove rates of duty (tariffs) on imports from eligible developing countries into the UK. A number of eligible developing countries – including India – receive preferential access to the UK under the UK Generalised Scheme of Preferences (GSP).

final goods by UK producers) as seen in Table 5. Duty savings on final products are more beneficial for consumers whereas savings on intermediate products benefit businesses which use the goods for further transformation.

Table 5: Potential duty reductions on UK imports from India, by end use

	Maximum duty savings, £m
Intermediate goods	33.7
Final goods	151.4
Total savings	**185**

Source: GSP and UKGT tariff rates, Eurostat data.

These potential tariff reductions provide benefits for businesses that make use of India imports in their production processes. This could provide competitiveness gains for those UK businesses but could also result in increased competition between Indian producers, domestic producers and imports from third countries on intermediate products with liberalised tariffs.[91]

A greater diversity of import suppliers could also provide benefits through helping to build business resilience in an uncertain world.

Imports are crucial for business competitiveness. Imports of lower cost or higher-quality intermediates support productivity. Imports of lower price or high-quality final products support the economy's ability to meet consumer demands. The UK is highly integrated in global supply chains with 15.4% of all UK exports including imported components in 2016.[92]

As shown in recent years, access to imports from markets can be subject to disruption, leading to domestic bottlenecks in supply and production. In extreme cases, these bottlenecks can mean that key inputs are not available for businesses and that products are not available for consumers. In many cases, these lead to price increases.

The removal of tariffs and greater legal certainty provided by an FTA could support businesses to enter new, long-term, supply relationships with Indian suppliers, benefitting business productivity and consumers. For example, the modelling shows that the UK share of the Indian imports market could increase to 2.9% or 3.7% depending on the depth of the agreement, compared to 1.9% baseline estimate levels.

In addition, the FTA would support the diversification of import supply options available to UK businesses in the face of supply shocks in particular markets. This would support the economy to avoid future bottlenecks and thereby operate more efficiently on a more consistent basis. This benefit is not well accounted for in the modelling.

Small and Medium Enterprises (SMEs)

Small and Medium Enterprises (SMEs) may be defined as:

- Firms employing fewer than 250 employees; and
- Firms not exceeding either (a) £44 million in annual turnover or (b) an annual balance- sheet total of £38 million.

98% of businesses exporting goods in 2019 were SMEs, accounting for 45% of total UK exports. SMEs form a key part of the supply chain for larger UK and global firms, by producing intermediate goods used in manufacturing. In 2019, around 7,900 UK SMEs exported goods to India. On goods trade, these SMEs produce 31% of the UK's export value (in goods) to India and represent 80% of total UK goods exporters to India.[93]

Non-tariff measures (NTMs) to trade addressed in FTAs may have a greater impact on SMEs than on larger businesses. This is because SMEs may have more limited financial and human resource capacities than larger businesses. They may be less equipped to overcome the challenges posed by different regulatory frameworks, have less access to information to help them navigate through trade regulations and absorb the financial risks associated with international trade. This means that FTA provisions which reduce the fixed costs of exporting can provide particular benefits for SMEs. This can raise the number of smaller firms which find it profitable to export, helping to spur innovation and increase productivity.

91 In some instances, the exporting business may absorb the cost of the tariff, for example when there is a considerable domestic supply of a product, foreign firms may be forced to absorb tariff costs in order to remain competitive in the market or may not trade at all.
92 Source: All OECD, TiVA, December 2018.
93 HMRC. 'Trade in Goods by Business Characteristics' 2019 (accessed June 2021), this count excluded the unknown category which may include SMEs and firms with over 250 employees.

Voluntary costs for businesses in utilising the agreement

The one-off familiarisation and on-going administration cost to UK businesses trading under preferences are voluntary. Firms would have the option to choose whether to trade with businesses in India under preferential terms of an eventual FTA or under MFN terms. There is therefore no net cost to businesses for those who do not wish to trade under the agreement's preferences.

Consumers

Lowering tariff and NTMs in a UK-India FTA could benefit consumers directly through increased consumer choice, better product quality and lower prices.

Lower consumer prices can result from reductions in tariffs and regulatory restrictions which reduce the costs associated with cross-border trade. Consumers can also benefit indirectly from the lower costs and greater variety of imported intermediate goods that are used by firms to produce final consumption goods and services.

As a result of higher real wages for workers, the modelling estimates show that annual real consumer expenditure in the UK (a component of GDP) increases by around £2.1 billion, up to around £3.7 billion over the long term, depending upon the depth of the agreement. Annual UK imports from India are estimated to increase by around £4.6 billion, up to £9.5 billion over the long term, dependent upon the depth of the agreement.

Consumers could also benefit from lower tariffs on imported goods from India. In the absence of a UK-India FTA, an estimated £2.0 billion worth of UK imports of final goods from India would be subject to tariffs, with this figure growing as imports grow in future.[94,95]

Workers: labour market adjustment and protected groups

The modelling estimates that an FTA with India could increase real wages (wages in today's prices) by around 0.19% up to around 0.34% depending on the depth of the agreement. This is equivalent to around £1.7 billion up to around £3.0 billion annually when compared to 2019 levels, as workers benefit from higher productivity in the economy. The increase in wages is estimated to benefit workers of all skill types.

The modelling shows a marginal shift in the distribution of employment across sectors over the long run. It suggests that any reallocation of employment across sectors in the long run will be modest, with increases and declines all equal to or below 0.02%.

It would suggest a slight rebalancing away from textiles and other business services towards manufacture of electrical equipment and other machinery and equipment. These changes reflect the limited structural changes we expect to see in the economy overall.

Impact on UK labour market

Workers can benefit from FTAs in several different ways. Where FTAs can boost productivity within firms and sectors, and across the economy, this is likely to increase employment opportunities and worker incomes. Where FTAs lower consumer prices, this is likely to benefit workers in the form of higher real wages, meaning that they can purchase more even if wages were constant.

Trade liberalisation can also affect the structure of the economy over time. This can generate transitional costs for workers, who may move between jobs and sectors, as changes in the pattern of trade cause some sectors to expand and others to decline. The UK has one of the most dynamic and flexible labour markets in the world, which helps to facilitate adjustment and reduce transitional costs for workers.

The model estimates long run impacts, which is the time taken for the economy to fully adjust to the FTA. The model dœs not estimate the magnitude of any potential short run impacts and adjustments.

94 Estimates based on trade data from Eurostat for 2019 (accessed October 2020), for imports by the UK from India, classified as intermediate or final using Broad Economic Categories (Revision 5). Processing costs have been removed from this trade data.
95 Tariffs obtained from WTO TAO, supplemented by MacMaps.

As is common in modelling exercises, it is assumed that both the supply of labour and overall rates of employment and unemployment in the economy are fixed in the long run (i.e., they are assumed to be unaffected by the FTA). This is appropriate as over the long term, the labour market would be expected to adjust, and FTAs do not influence the underlying drivers of the long run employment rate.

Gains through increased wages

The modelling estimates that an FTA with India could increase the level wages (nominal wages adjusted for the impact of inflation) by around £1.7 billion up to around £3 billion in the long run, dependent upon the depth of an agreement. The increase in wages is estimated to benefit both unskilled and skilled workers.

Gains through changes in employment across sectors

The modelling shows a marginal shift in the distribution of employment across sectors over the long run.[96] It suggests that any reallocation of employment across sectors in the long run will be modest, with increases and declines all less than or equal to 0.02%. It would suggest a slight rebalancing away from textiles and other business services towards manufacture of electrical equipment and other machinery and equipment. This reflects a marginal reduction in these sectors share of total UK output as a result of an FTA. The shifts reflect a marginal shift to an existing growth path, rather than an expansion or contraction to today's employment levels.

Modern, dynamic economies change continuously in response to global developments. This causes an ongoing process of worker and job transition in the labour market. Lower trade barriers and greater import competition could accelerate this ongoing process.

The transition of employment across sectors has the potential to generate long run gains for workers, for example leading to higher wages. Some workers may also incur short term adjustment costs and periods of transitional unemployment. The UK has a dynamic and flexible labour market, helping to facilitate adjustment and reduce the transition costs for workers.

Implications for Protected Groups in the Labour Market

There is no estimated implication for protected groups in the labour market, except by sex where male workers are disproportionally concentrated in sectors where employment is estimated to fall relative to the baseline.

The representation of protected groups (in relation to age, sex, ethnicity, and disability) in sectors where employment falls relative to the baseline is broadly in line with the general population of the workforce.[97] The only exception to this is by sex; male workers are disproportionally concentrated in sectors where employment is estimated to fall relative to the baseline. Recently published experimental analysis by DIT and Fraser of Allander Institute shows that, in 2016, 64% of jobs directly and indirectly involved in exports were held by males, with the remaining 36% filled by females.[98]

Sex

- 47% of those in employment in the UK are female and 53% are male.[99]
- In scenario 1, 39% of the workforce in sectors where employment is estimated to fall relative to the baseline are female and 61% are male. In scenario 2, 34% of the workforce in sectors where employment is estimated to fall relative to the baseline are female and 66% are male.

Ethnicity

- 12% of those in employment in the UK are from an ethnic minority group and 88% report that they are white.
- In scenario 1, 14% of the workforce in sectors where employment is estimated to fall relative to the baseline are ethnic minorities background and 86% are white. In scenario 2, 12% of the workforce in sectors where employment is estimated to fall relative to the baseline are ethnic minorities while 88% are white.

Age

- 12% of those in employment in the UK are aged 16-24, 84% are 25-64, and 4% are over 65.

96 Employment is according to the ILO definition as specified by the relevant LFS indicator (ILODEFR). That is, a person is considered employed if they are 16 or over/ 16-64 and have been engaged for at least one hour within a 7-day reference period in any activity to produce goods or services. This also includes employed persons "not at work" i.e. those who did not work in the reference period due to temporary absence or working patterns.
97 Race is a protected characteristic under the Equality Act 2010. For the purposes of this analysis, we utilise data regarding ethnicity to consider this protected characteristic.
98 Evaluating the impact of exports on UK jobs and incomes
99 According to DIT Analysis of the ONS three-year pooled Annual Population Dataset (2016-2018).

- In both scenarios 1 and 2, the proportion of workers in sectors where employment is estimated to fall relative to the baseline who are aged 16-24 is around 10%. The proportion of workers in sectors where employment is estimated to fall relative to the baseline who are aged 65+ make up around 4%.

Disability

- Around 13% of those in employment in the UK report that they have a disability (as defined by the Equalities Act 2010).[100]
- In scenario 1, the proportion of workers in sectors where employment is estimated to fall relative to the baseline who have a disability is estimated to be around 12%. In scenario 2, the proportion of workers in sectors where employment is estimated to fall relative to the baseline who have a disability is estimated to be around 11%.

There are several limitations to the preliminary analysis. For example, the analysis is based on the structure of the UK workforce from 2016-18. This means it is not consistent with the CGE modelling results which reflect the global economy in the long run when the composition of the workforce may have changed. Added to this, we can expect to see the structure of Indian economy evolving over time, in ways that we can't currently predict, which may lead to different competitive pressures in the long term, compared to those reflected in our modelling.

Workers currently located in sectors where employment is estimated to be lower than would otherwise have been the case (in the absence of an FTA) may not necessarily be adversely affected by a UK-India FTA. For example, in some cases, workers who remain in the sector could benefit from increases in wages, owing to higher productivity in the sector. In addition, some of the adjustment may take place as workers leaving the labour market are not replaced, with new entrants more likely to find employment in sectors where employment is higher. Any workers who do transition across sectors may incur short-term adjustment costs or periods of transitional unemployment. However, they could also benefit from the creation of higher wage jobs in other sectors of the economy.

100 It is possible that non-response to this question in the Annual Population Survey affects the estimated proportion.

5. Economic and social development, labour standards and human rights

India's rapid economic growth has improved economic and social development. However, 11% of India's population in 2017 was estimated to live below the international poverty line.

The main macrœconomic impacts on India are:

- **A long run boost to Indian GDP. A UK-India FTA is estimated to increase India's GDP by the equivalent of around £3.7 billion when compared to projections of GDP in 2035 levels, up to around £8.6 billion, depending on the depth of the agreement.** This is equivalent to around 0.07% to around 0.16% respectively. The scale of impact is uncertain.
- **Better jobs.** The modelling estimates an increase in wages for Indian households by around 0.47% or around 0.95% depending on the depth of the agreement.
- **Textiles and apparel, and motor vehicles and parts are the sectors in India that are estimated to increase in GVA the most from an agreement.**

The GDP impact on developing economies in the region is estimated to be minimal (between 0.00% to -0.02% across Bangladesh, Pakistan, Sri Lanka and Indonesia) however there will be an impact on certain sectors to varying degrees.

Economic and social development

Impacts of FTAs on developing countries

India's rapid economic growth over previous decades has led to improvements in social development. Since 1990, life expectancy at birth has increased by over 10 years, average years of schooling has more than doubled and gross national income per capita has more than tripled.[101] Despite strong growth, the OECD projects that, on a per person purchasing power parity basis, India's GDP will remain below the levels projected for the UK and US in 2060. As of 2017 the World Bank estimated that up to 152 million people in India were living under the international poverty line of US$1.90 per day, which is equivalent to more than 11 percent of India's population.[102,103]

Trade is a driver of economic growth, and an expanding economy is one of the most effective means of raising incomes, supporting jobs and reducing poverty. Therefore, an FTA with India represents an opportunity to promote both growth and poverty reduction in India.

Impacts on GDP and trade in India

Free-trade agreements are mutually beneficial and the deeper an FTA, the greater the benefits generally are. This is because as barriers to trade fall, countries are able to export more to each other and source cheaper inputs leading to greater productivity and economic benefits.

Our modelling shows that India's annual GDP is estimated to increase in the long run by around 0.07%, up to around 0.16% compared to not having an agreement with the UK. This is equivalent to around £3.7 billion compared to 2035 projections of GDP, and £8.6 billion under a deeper agreement.[104,105] CGE modelling estimates that an FTA could increase wages in India by around 0.47% under scenario 1 or 0.95% under a deeper agreement. Summary results for the impact on India's economy are set out in the table below.

101 Data based on the Human Development Index (HDI), which is composite index calculated by the United Nations Development Program (UNDP). The index is calculated based on health: life expectancy at birth, education: expected and mean years of schooling, standard of living: GNI per capita.
102 US$1.90 (2011 PPP) per day per capita.
103 Poverty & Equity Brief India South Asia April 2021.
104 2035 projections for Indian GDP are calculated using the methodology described in the Global Trade Outlook, (September 2021). International Monetary Fund, World Economic Outlook Database, April 2021 US dollars. Annual average Spot exchange rate, US $ into Sterling.
105 For context, this is equivalent to £1.6 billion or £3.6 billion when compared to 2019 levels GDP.

Table 6: Summary of estimated long run impacts on India

	£bn and % change estimates, compared to 2035 projections	
	Scenario 1	Scenario 2
GDP	£3.7 bn (0.07%)	£8.6 bn (0.16%)
India's exports to UK	£5.2 bn (31%)	£10.9 bn (64%)
India's imports from UK	£8.8 bn (50%)	£16.7 bn (95%)
India's exports to the world	£6.4 bn (0.59%)	£13.8 bn (1.28%)
India's imports from world	£9.2 bn (0.67%)	£19.1 bn (1.39%)

Source: DIT modelling. Projections of Indian GDP in 2035 using the methodology as described in the Global Trade Outlook.

We can expect to see the structure of Indian economy evolving over time, in ways that we can't currently predict, which may lead to different competitive pressures in the long term compared to those reflected in our modelling. Therefore, the analysis presented above is subject to uncertainty.

The FTA has the potential to generate positive developmental impacts within the Indian economy. Access to cheaper inputs and higher quality products and services alongside greater UK demand for Indian exports could stimulate economic growth. The potential for productivity growth and competitiveness improvements from the implementation of the FTA are significant. The impact that these changes will have on poverty rates in India will depend, among other things, on the sectors affected and how these relate to low-income individuals as consumers, employees and producers.

DIT's estimated results indicate that the three sectors of the Indian economy that are expected to benefit the most from a UK-India FTA in the long run – due to reductions in UK tariffs and regulatory barriers to trade with India – are textiles and apparel; motor vehicles and parts; and construction. The UK tariff on final textile goods is up to 9.6%, which is applied on imports of apparel from India such as clothing, swimwear and accessories, such as scarves.[106] It is estimated that annual duties on Indian exports of textiles and textile articles to the UK were £120 million in 2019.

Academic literature indicates that a trade-driven expansion of the clothing and textiles industry could lead to poverty reduction through increased employment opportunities for women.[107] Paid employment can improve women's autonomy as well as their economic and social status.

FTA impact on third countries and other least developed countries (LDCs)

A UK-India FTA has the potential to affect the economies of certain least developed countries (LDCs), as well as of countries with close geographical proximity to India. The GDP impact on third countries, including developing economies in the region, is estimated to be minimal in most cases as seen in table 7, however there will be an impact on certain sectors to varying degrees.

Table 7: CGE results on Bangladesh, Sri Lanka, Pakistan, Indonesia and other LDC's[108,109]

Measure (%)	Bangladesh	Pakistan	Sri Lanka	Indonesia	Other LDCs
Scenario 1	0.00%	0.00%	-0.01%	0.00%	0.00%
	(£-0.01bn)	(£0.00bn)	(£0.00bn)	(£0.00bn)	(£-0.01bn)
Scenario 2	-0.01%	0.00%	-0.02%	0.00%	0.00%
	(£-0.02bn)	(£0.00bn)	(£-0.01bn)	(£-0.01bn)	(£-0.02bn)

Source: GDP Figures are based on IMF 2019 WEO nominal GDP

Whilst the table above shows a limited impact of the UK-India FTA on the GDP of neighbouring countries, there could be short- to medium-term detrimental effects on some developing countries' exports to the UK. This is because FTAs raise the potential risk of trade diversion – for example a reduction of developing countries exports to the UK as a result of India facing lower tariffs in the UK market.[110,111]

Analysis identifies the textiles, clothing, and footwear sectors in neighbouring countries as the ones more likely to be negatively impacted by greater UK – India trade liberalisation. These sectors are at a higher risk due to their relative high value in these neighbouring countries' exports to the UK. Such exports could be diverted to India.

106 Based on HS Section 11: Textiles and textile articles. UK import data from Eurostat, 2019, converting Euro into Sterling using Bank of England 2019 annual average spot exchange rate. UK tariff rates based on UKGT and UK GSP tariff schedules.
107 OECD (2011), Trade for Growth and Poverty Reduction: How Aid for Trade Can Help.
108 GDP Change in nominal GDP (2019), GDP Source: IMF WEO April 2021.
109 Values are marked as 0.00 if the model result rounds to less than 0.01 in absolute terms.
110 India currently trades under the General Framework of the UK's Generalised Scheme of Preferences (GSP), meaning it faces tariffs on certain exports to the UK. LDCs trade under the Least Developed Countries Framework of the GSP which gives duty free quota free access to UK markets on all goods other than arms and ammunition.
111 Preference erosion refers to the loss of competitive advantage an exporter enjoys in a foreign market due to preferential trade treatments for other countries. This can lead to trade diversionfor example where developing countries could see a reduction of their exports to the UK as a result of India facing lower tariffs in the UK market.

An example of a product in this sector is cotton t-shirts, where the UK imported £483 million from developing countries (excluding India): Bangladesh (£376.3 million), Pakistan (£26.3 million), Sri Lanka (£30.0 million), Cambodia (£21.9 million), and Mauritius (£14.2 million) – several of which are highly reliant on the UK market.[112,113] Comparatively, India exported £1.4 billion globally and £132.4 million to the UK.[114] We may therefore expect, in an ambitious scenario, an increase in UK imports of apparel from India which is associated with a partial reduction in UK imports from neighbouring countries which export similar products. Results from the CGE modelling corroborate this.

Table 8 presents a number of developing countries' dependency on goods trade with the UK and India. The analysis highlights South Asia and Africa as the two regions that could be most likely to be affected by a UK-India FTA, in part due to geographic closeness of India to South Asian economies and the long-standing relationship between African markets and the UK.

Table 8: Developing countries, dependency on goods trade with the UK and India combined[115]

High Dependency	Low dependency
Afghanistan, Bangladesh, Bhutan, Burkina Faso, Central African Republic, Chad, Comoros, Equatorial Guinea, The Gambia, Ghana, Guinea-Bissau, Kenya, Mauritius, Mozambique, Nepal, Nigeria, Somalia, Sri Lanka, Sudan, Tanzania	Armenia, The Bahamas, Cape Verde, Cook Islands, Cuba, East Timor, El Salvador, Kiribati, Lao PDR, Marshall Islands, Micronesia, Moldova, Mongolia, Nicaragua, Occupied Palestinian Territory, Palau, Tajikistan, Tonga, Tuvalu, Vanuatu

Source: DIT calculations using data from UN Comtrade, accessed May 2021.

Labour standards

The UK and India have a wide range of labour protections in place. The UK is a world leader in workers' rights and UK will continue to advocate for the highest standards and conditions for its citizens. A UK-India FTA will not impact on the UK's legislation related to UK labour matters.

Summary of UK and India labour standards

The UK will continue to advocate for the highest standards of worker's rights and working conditions for its citizens. As a founding member of the International Labour Organization (ILO) the UK has signed and ratified all 8 fundamental conventions detailed in the 1998 International *Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work*.[116] India has ratified 6 of the 8 fundamental conventions, shown in Table 9. Both of the fundamental conventions India have yet to ratify refer to freedoms to join a union and bargain collectively.

Table 9: Ratifications of ILO Fundamental Conventions

Convention	India	United Kingdom
C029 – Forced labour	Ratified	Ratified
C087 – Freedom of association and right to organise		Ratified
C098 – Right to organise and collective bargaining		Ratified
C100 – Equal renumeration	Ratified	Ratified
C105 – Abolition of forced labour	Ratified	Ratified
C111 - Discrimination	Ratified	Ratified
C138 – Minimum Age	Ratified	Ratified
C182 – Child labour	Ratified	Ratified

Source: ILO Normlex NORMLEX Information System on International Labour Standards.[117]

The UK has the following provisions for the areas raised above, including:

112 HS code 61091000: T-shirts, singlets and other vests of cotton, knitted or crocheted.
113 19% of Sri Lanka's and 15% of Mauritian cotton t-shirt exports go to the UK. Reliance on the UK market is calculated at the HS6 level and data sourced from WITS. UK import data sourced from HMRC, averaged 2017-2019.
114 Data sourced from TradeMap, average 2017-2019.
115 114 countries have been included in the analysis. Countries are listed in alphabetical order. High refers to the top 20 countries with the greatest share of goods trade with the UK and India. The highest value recorded was for Bhutan, where 85% of goods trade in 2017-2019 was with the UK (0.5%) and India (84.9%). Low refers to the bottom 20 countries. The lowest value recorded was for Marshall Islands, where less than 0.2% of goods trade in 2017-2019 was with the UK or India combined.
116 Fundamental Conventions are: C029 – Forced Labour Convention, 1930; C087 – Freedom of Association and Protection of the Right to Organise Convention, 1948; C098 – Right to Organise and Collective Bargaining Convention, 1949; C100 – Equal Renumeration Convention, 1951; C105 – Abolition of Forced Labour Convention, 1957; C111 – Discrimination (Employment and Occupation) Convention, 1958; C138 – Minimum Age Convention, 1973; C182 – Worst Forms of Child Labour Convention, 1999.
117 ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11001:0::NO:::

- The UK has legislative acts in place which provide for the right to collective bargaining and protections for employees who participate in official industrial action.[118]
- The UK has legislation in place which protects people from discrimination in the workplace and in wider society on the basis of age, race, sex, gender reassignment, disability, religion or belief, sexual orientation, marriage or civil partnership, pregnancy and maternity.[119]
- The UK has guaranteed access to a national minimum wage, which is enshrined in UK Law.[120] This wage is based on a worker's age. There is also a specific rate for apprentices.
- The UK has legislation in place which gives law enforcement the tools to fight modern slavery, including a maximum life sentence for perpetrators and enhanced protection for victims.[121]
- The UK has legislation in place which regulates the minimum age children can work and other protections for children at work. Children can only start full-time work once they've reached the minimum school leaving age – they can then work up to a maximum of 40 hours a week.[122]

Human rights

Of the nine fundamental human rights treaties identified by the Office of the United Nations High Commissioner for Human Rights (OHCHR), the UK has ratified seven and India has ratified six (Table 10).[123] The nine fundamental treaties cover: Civil and political rights; economic, social, and cultural rights; racial and gender-based discrimination; prohibition of torture and forced disappearances; and the rights of children, migrant workers, and persons with disabilities. India has signed but has yet to ratify the convention against torture and other cruel inhuman or degrading treatment or punishment (CAT). The UK and India both have yet to ratify the international convention for the protection of all migrant workers and members of their families (ICMW) & the international convention for the protections of all persons from enforced disappearance (ICPED). The UK government considers the rights from both these conventions to be covered by domestic legislation and therefore has no plans to ratify.[124] Recently it has become more common for FTAs to include provisions related to human rights, although it is not possible to assess the exact impact of an agreement on human rights prior to the conclusion of negotiations.[125]

Table 10: Ratification of fundamental human rights treaties

	Scenario 1	Scenario 2
International Convention on the Elimination of All forms of Racial Discrimination (ICERD)	Ratified	Ratified
International Covenant on Civil and Political Rights ICCPR	Ratified	Ratified
International Covenant on Economic, Social and Cultural Rights ICESCR	Ratified	Ratified
Convention on the Elimination of All Forms of Discrimination against Women CEDAW	Ratified	Ratified
Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment CAT		Ratified
Convention on the Rights of the Child CRC	Ratified	Ratified
International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families ICMW		
International Convention for the Protection of All Persons from Enforced Disappearance, ICPED		
Convention on the Rights of Persons with Disabilities CRPD	Ratified	Ratified

118 The Trade Union and Labour Relations (Consolidation) Act 1992 (as amended by the Trade Union Act 2016). in Great Britain and the Trade Union and Labour Relations (Northern Ireland) Order 1995 in Northern Ireland.
119 This is enshrined in the Equality Act 2010 in the UK, while there are equivalent provisions in Northern Ireland.
120 The National Minimum Wage Act 1998 and subsequent regulations set the National Minimum Wage and National Living Wage hourly pay rates . The rates change on 1 April every year. From 1 April 2022 the rates will be set at £6.83 for workers aged 18-20, £9.18 for workers aged 21-22 and £9.50 for workers aged 23 and above.
121 This is primarily enshrined in the England and Wales Modern Slavery Act 2015, Human Trafficking and Exploitation (Scotland) Act 2015 and Human Trafficking and Exploitation (Criminal Justice and Support for Victims) Act (Northern Ireland) 2015.
122 These protections are found in a number of pieces of legislation and local authority by-laws. Minimum age for full time work is provided by the Children and Young Persons Act 1933 in England and Wales, [tbc]. Restrictions on working hours are provided by the Working Time Regulations 1998 in Great Britain and the Working Time (Northern Ireland) Regulations 1998 in Northern Ireland.
123 Full details, including optional protocols available at: https://www.ohchr.org/en/professionalinterest/pages/coreinstruments.aspx
124 See reference 134.8 & 134.10 in the UK's response to Third Universal Periodic Review. https://www.gov.uk/government/publications/third-universal-periodic-review-uks-mid-term-report-on-recommendations
125 Idris, I. (2017). Human rights and governance provisions in EU and OECD country trade agreements with developing countries. K4D Helpdesk Report 103. Brighton, UK: Institute of Development Studies. https://www.gov.uk/research-for-development-outputs/human-rights-and-governance-provisions-in-oecd-country-trade-agreements-with-developing-countries

6. Environmental impacts

A UK-India FTA could impact on the environment through a variety of channels. This section sets out these potential impacts.

- **Possible environmental provisions within an agreement could support high environmental standards in both countries, depending on the outcome of negotiations**. This could include by promoting cooperation across a wide range of environmental issues; reaffirming commitments to Multilateral Environmental Agreements; preventing derogation from environmental laws to secure a trade advantage; and preserving the UK's right to regulate to meet the UK's climate commitments.
- **Overall greenhouse gas emissions associated with UK-based production are estimated to increase by around 0.08% to around 0.14% depending on the depth of a UK-India FTA**. This is equivalent to an increase of around 0.4 $MtCO_2e$ to around 0.7 $MtCO_2e$.
- **An FTA could increase transport-related emissions associated with increased trade flows**. Transport-related emissions associated with increased trade flows are estimated to increase by up to 21% or 36% depending on the depth of a UK-India FTA. This is equivalent to an increase of up to 0.8 $MtCO_2e$ or 1.4 $MtCO_2e$ each year. This increase is small when compared to 2018 UK production emissions of around 500 $MtCO_2e$. The UK is committed to being at the forefront of tackling maritime emissions.
- **The possible impact on carbon leakage is more uncertain, but estimates suggest that some risks exist in textiles and apparel**. Increased market access could facilitate higher levels of trade in sectors where climate mitigation policies differ between the UK and India. These effects will depend heavily upon how the UK and India's environmental policies develop over the coming decades, as well as external factors such as technological change.
- **A UK-India FTA provides opportunities to boost trade in environmental goods, which can speed the development and uptake of environmentally friendly production techniques**. Using the OECD's combined list of environmental goods classification, there are currently 30 and 240 products classified as environmental goods that are subject to tariffs by the UK and India respectively.
- **A UK-India FTA could increase water stress, water pollution and biodiversity loss** as a result of economic changes within the UK and India economies and shifts in global trade patterns. The risk of these impacts is usually higher in developing countries given wider impacts are not always priced in and accounted for by institutions in the developing phase.

The potential impact of an agreement on the environment

Assessing the environmental impacts of Free Trade Agreements and trade liberalisation more widely is complex. Trade agreements can influence a number of factors relating to climate change and the biosphere, including: the volume of greenhouse gas emissions, changes in land use within countries, air and water quality, biodiversity, rate of technological and infrastructural change through the uptake of environmental goods and services.

FTAs can affect the environment indirectly by expanding and redirecting economic activity. This may occur as trade liberalisation:

- Boosts economic growth, raising economic activity and its associated environmental degradation (scale effect).
- Changes the mix of a country's production and consumption (composition effect). If the sectors which expand are more environmentally harmful, other things equal, the composition effect could result in more environmental harm, and vice versa. If the sectors which expand the most are less environmentally harmful, the composition effect can offset some of the increase in environmental harm associated with increased economic activity overall.
- Changes the location of global production across countries, affecting the distance travelled by goods and the environmental impacts associated with transporting them from producers to consumers.
- Promotes the transfer and adoption of more efficient and environmentally friendly production techniques.

Trade liberalisation can also increase pollution and degradation of natural resources by amplifying existing market failures, especially in developing countries. Environmental externalities are often not completely priced in through regulations, so remain unaccounted for in market prices of traded goods. The result is a degree of environmental damage.

Climate change affects the availability of resources and can decrease the productivity of factors of production, such as labour, capital and land. Environmental impacts will likely have greater magnitude in the future should resources be more scarce and less productive.

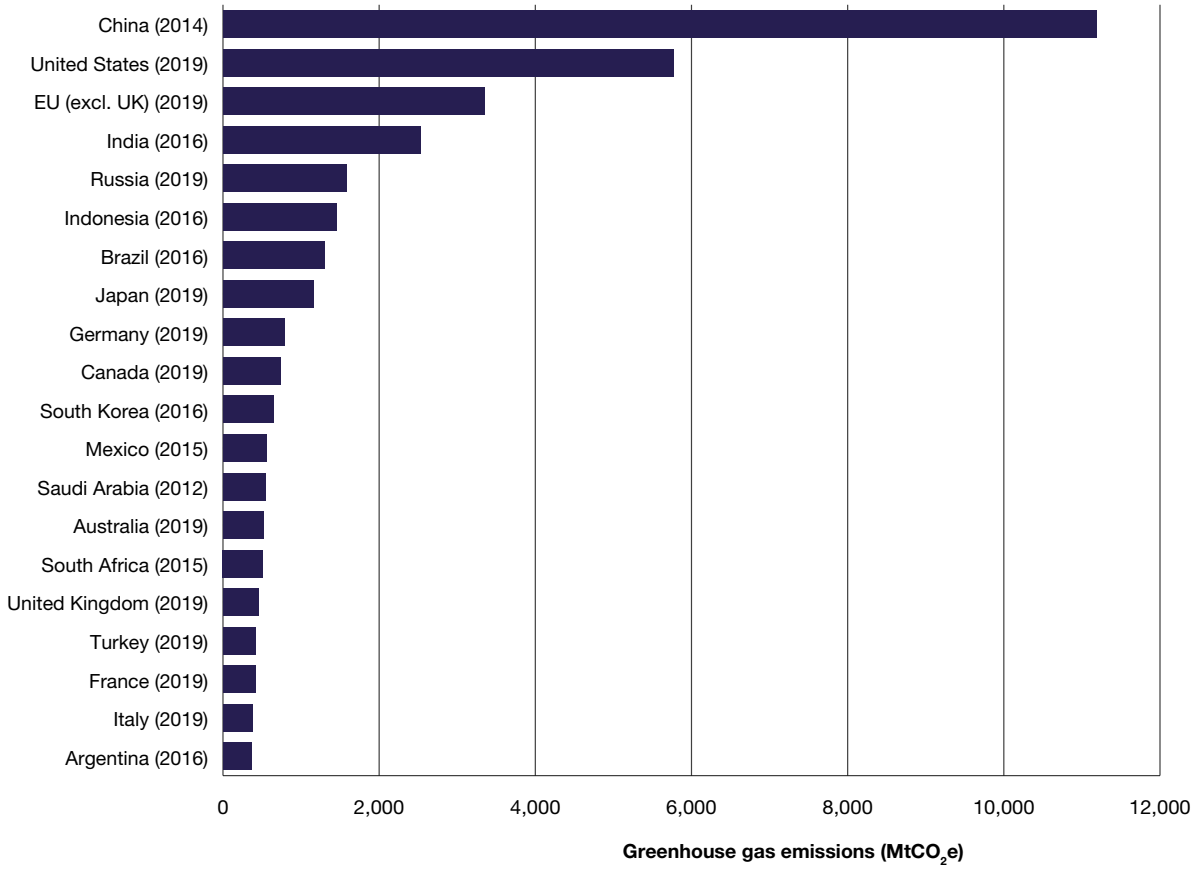
This section assesses the impact of an agreement on a range of environmental impacts, including greenhouse gas emissions, carbon leakage, air quality, and biodiversity.

Greenhouse gas emissions and climate change

The UK and India are the world's 6th and the 5th largest economies respectively.[126] UK CO_2 emissions account for around 1% of global emissions. Together, the UK and India accounted for 8.0% of global CO_2 emissions in 2018.[127] Countries' emissions tend to reflect their size, with the highest emissions coming from countries with the largest populations and land areas.

In the UK, greenhouse gas emissions are dominated by carbon dioxide, estimated to have accounted for 80% of the UK's total emissions in 2019 in Figure 8. Weighted by global warming potential, methane accounted for about 12% of UK emissions and nitrous oxide for about 5% of emissions in 2019. Fluorinated gases accounted for the remainder, around 3%.[128]

Figure 8: Territorial Greenhouse emissions reported to the UNFCCC (2019): G20 countries ($MtCo_2e$)

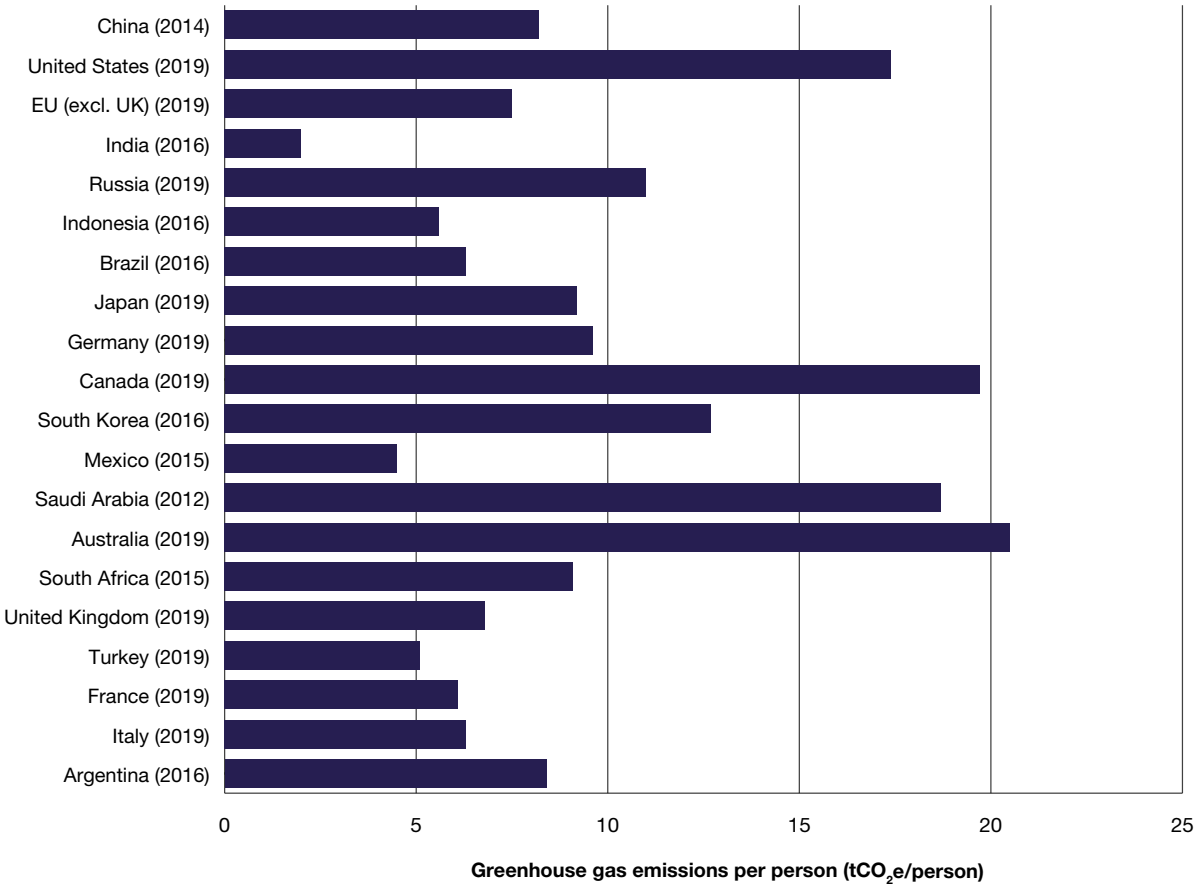


Source: United Nations Framework Convention on Climate Change (UNFCCC).

When adjusted for population, India has the lowest emissions per person in the G20 in the latest available data from 2016 as shown in Figure 9 below and Figure 8 above. In 2016, India had emissions of 2 tCO_2e per person. In contrast, the UK had emissions of around 7 tCO_2e per person in 2019. Differences in rates across countries tend to reflect differences in the sectoral composition of the economies (such as reliance on heavy industry), the level of development within a country, or the use of more carbon intensive fuels such as coal for electricity generation.

126 IMF: World Economic Outlook Database, April 2021.
127 OECD Data: Air and GHG Emissions.
128 BEIS, UK Greenhouse Gas Emissions, Final Figures: 2019 (February 2021).

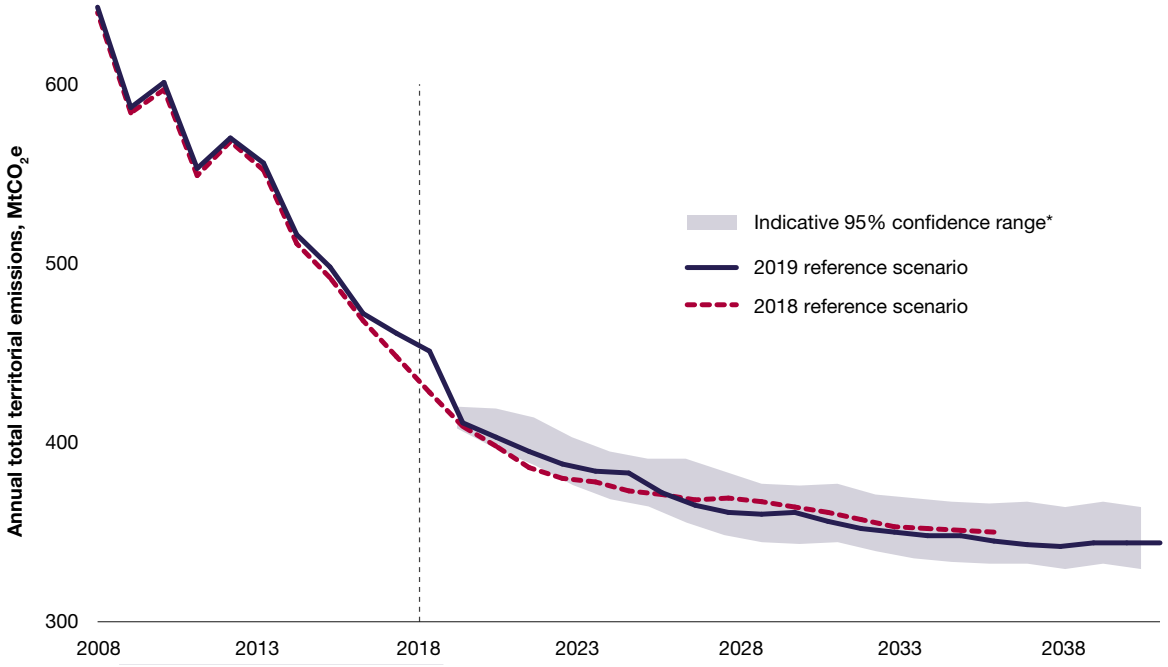
Figure 9: Territorial Greenhouse Gas Emissions per person: G20 countries (tCO_2e)



The UK and India have a number of commitments to reduce greenhouse gas emissions. UK emissions, which have fallen by around 44% since 1990, are projected to fall by a further 24% by 2040.[129]

129 BEIS: Updated energy and emissions projections 2019.

Figure 10: UK projected emissions, $MtCO_2e$



Source: BEIS, Updated energy and emissions projections: 2019 (October 2020).

* The uncertainty ranges are indicative and are based on EEP 2018. The figure includes LULUCF.

In 2019 the UK became the first G20 country to legislate binding commitments to bring all greenhouse gas emissions to net zero by 2050 to end its contribution to global warming. At COP26 in November 2021, Indian Prime Minister Modi announced a 2070 net zero target.

Since 1990, the UK has reduced its greenhouse gas emissions by 44% – faster than any other G7 economy and has committed to protecting 30% of UK land by 2030 to support the recovery of nature.[130] The UK has also laid legislation for our sixth carbon budget, a target which would reduce greenhouse gas emissions by 78% by 2035 compared to 1990 levels and for the first time, includes emissions from international aviation and shipping.[131] This commitment will take the UK more than three-quarters of the way to its 2050 net zero target.

The UK and India are already party to a number of the same international climate and environment agreements. These include the United Nations Framework Convention on Climate Change (UNFCCC), including the Paris Agreement and Kyoto protocol, as well as the Montreal protocol. Both countries also co-lead the Clean Energy Ministerial Industrial Deep Decarbonisation Initiative (IDDI) a global coalition of public and private bodies seeking to grow demand for low carbon industrial materials.[132]

Quantitative estimates of the impact on emissions as a result of the agreement

Overall greenhouse gas emissions associated with UK-based production could increase by around 0.08% to around 0.14% depending on the depth of a UK-India FTA. Higher emissions from increased economic activity are partly offset by a shift in output away from sectors with relatively high emissions.

Trade liberalisation boosts economic growth, raising economic activity and energy use. All else equal, the scale effect of economic activity and energy use will lead to higher levels of greenhouse gas emissions. Trade liberalisation also changes the mix of a country's production towards those products where it has a comparative advantage. The re-allocation of resources within a country is how trade improves economic efficiency and can also drive changes in emissions. The composition effect will result in less (more) greenhouse gas emissions if the expanding sectors are less (more) emission intensive than the contracting sectors.

130 https://www.gov.uk/government/news/pm-commits-to-protect-30-of-uk-land-in-boost-for-biodiversity
131 https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035
132 https://cleanenergyministerial.org/initiative-clean-energy-ministerial/industrial-deep-decarbonisation-initiative

Estimated output changes from CGE modelling and ONS environmental accounts data are used to estimate production change impacts from the FTA on greenhouse gas emissions, including CO_2 and Non-CO_2 emissions.[133]

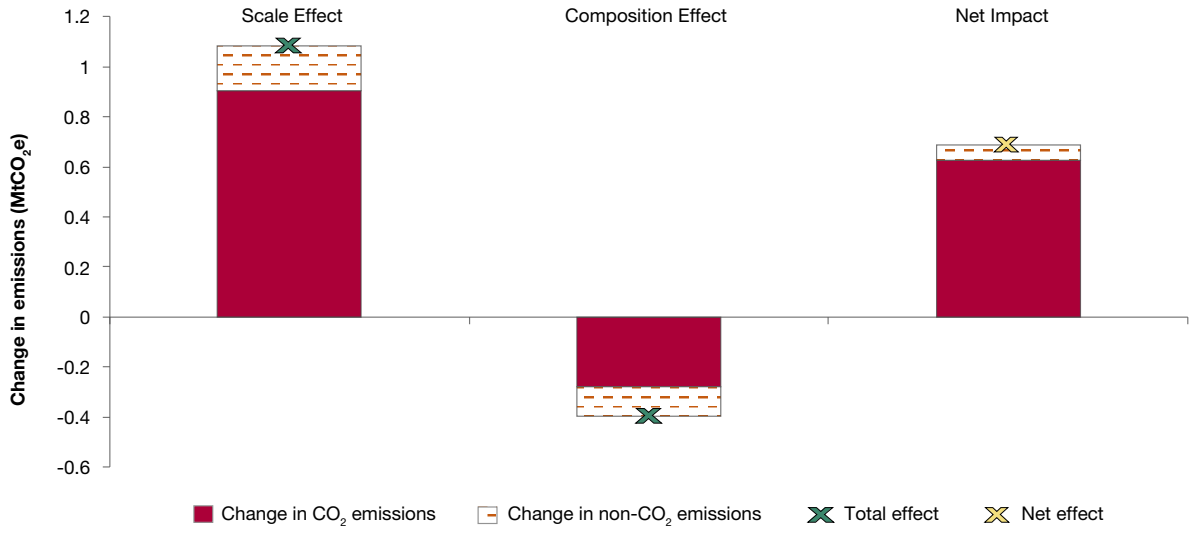
However, the quantitative assessment dœs not capture changes in consumption patterns or the emission intensity. Furthermore, the analysis dœs not reflect any improvements in emissions intensities over time in line with the UK's transition to Net Zero. This assessment also dœs not capture emissions from land use change or deforestation.

The estimated increase in economic growth resulting from a UK-India FTA, other things equal, is associated with an estimated increase in UK greenhouse gas emissions of between 0.1% to 0.2% under a deeper agreement, when compared to emissions levels in 2018 (the scale effect). This is equivalent to an increase of between around 0.5 $MtCO_2e$ to around 1.1 $MtCO_2e$. These estimates are based on 2018 data from the Department for Business, Energy, and Industrial Strategy (BEIS) and do not account for the projected long-term reduction in emissions intensity across sectors.

The estimated increase is offset to some extent by the estimated shift in output towards sectors with relatively lower emissions-intensity, which is estimated to reduce greenhouse gas emissions by around 0.02% to around 0.08% depending on the depth of a UK-India FTA relative to 2018 (composition effect). This is equivalent to a reduction of around 0.4 $MtCO_2e$ to around 0.5 $MtCO_2e$.

The overall estimated net impact is that a UK-India FTA could increase in greenhouse gas emissions by around 0.08% (0.4 $MtCO_2e$) up to around 0.14% (0.7 $MtCO_2e$). Figure 11 shows the impacts on UK emissions under a deeper UK-India FTA. However, this analysis does not account for emissions associated with greater transport activity that could result from implementation of the agreement. Analysis on transport emissions is presented in the following section.

Figure 11: The impact on UK emissions under a deeper UK-India FTA (scenario 2), by changes in scale and composition effect, and changes in CO_2 emissions and non-CO_2 emissions, compared to emissions in 2018



Source: DIT calculations.

133 ONS, UK Environmental Accounts: 2021 (June 2021).

The quantitative analysis dœs not provide an estimate of the impact on partner or global emissions which result from changes to global patterns of trade across third countries.

The estimates are high-level estimates and subject to a number of important limitations. For example:

- The estimates are based upon a snapshot of data for emissions across sectors. Therefore, the size of the scale and composition effects (in % terms) do not account for the projected decline in greenhouse gas emissions in various sectors, for example due to policy measures to deliver the UK's net zero commitment. Therefore, the estimates potentially over-estimate the eventual, long-run, changes in emissions resulting from the increased economic activity in both countries.
- They do not include several of the potential benefits of the FTA such as enhancing trade in environmental goods, spurring innovation and increasing the uptake and adoption of environmentally friendly production techniques (typically referred to as the 'technique effect'). This also means that the estimates potentially over-estimate the increase in emissions from the agreement.
- The estimates do not take into account the impacts on transport emissions, which are assessed below.
- The estimates do not take into account emissions due to deforestation or land use change.

The 'climate change' effect is also not accounted for. Climate change affects the availability of resources, especially food, water and energy.[134]

Trade-related transport emissions

A comprehensive agreement is expected to lead to an increase in transport emissions as a result of increased trade with India. Estimates suggest that the increase in emissions associated with transport of goods could be up to 0.8 $MtCO_2e$ or 1.4 $MtCO_2e$ each year depending on the depth of the agreement. For context, bilateral trade in goods and services is estimated to increase by 40% to 79%, depending on the depth of the agreement, when compared to projected levels in 2035. The estimates do not account for the future decarbonisation of international shipping.

Global international trade was linked with 8,800 $MtCO_2e$ or 27% of global CO_2 emissions from fuel combustion in 2015.[135] International transport is estimated to be responsible for 33% of world-wide trade-related emissions, with shipping freight alone accounting for 3% of global greenhouse gas emissions.[136,137]

The scale of emissions associated with international trade in goods reflects a complex combination of factors including: distance, weight (rather than value), and mode of transport. Different modes of transport vary greatly in their carbon intensity. Maritime freight is associated with far less emissions than aviation when transporting the same weight of goods over the same distance.

The UK is committed to being at the forefront of tackling maritime emissions. The UK was a leading voice in the negotiations at the International Maritime Organization in 2018, resulting in the first ever Greenhouse Gas Strategy for the sector, agreeing a target of reducing emissions by at least 50% by 2050.[138] Both the International Maritime Organization (IMO) and The International Air Transport Association (IATA) recognise that transport emissions are a significant driver of global emissions and have made commitments to improve the climate impact of maritime and aviation transport: The IMO have adopted mandatory measures to reduce emissions of various pollutants under their pollution prevention treaty (MARPOL), and the IATA have adopted a four-pillar strategy to address the global challenge of climate change.

In terms of weight, maritime freight accounted for approximately 99% of the volume of trade between the UK and India in 2019, whilst aviation freight only accounted for approximately 1% of the goods traded.

By increasing bilateral trade, a comprehensive agreement is estimated to lead to an average increase in annual greenhouse gas emissions of between 0.4 $MtCO_2e$ and 0.8 $MtCO_2e$ each year between 2020-2035 under scenario 1, and between 0.7 $MtCO_2e$ and 1.4 $MtCO_2e$ under scenario 2. This results from an estimated increase in the emissions associated with maritime and aviation freight between the UK and India of between 18% and 21% in the shallow scenario, and 30% and 36% in the deeper scenario, compared to a scenario without the agreement. This is small when compared to UK production emissions in 2018 of around 500 $MtCO_2e$.[139]

134 (CCC, Independent Assessment of UK Climate Risk, 2021. PWC, Climate change and resource scarcity, 2015.)
135 OECD – CO2 Emissions embodied in international trade and domestic final demand
136 A. Cristea, et al., Trade and the greenhouse gas emissions from international freight transport, Journal of Environmental Economics and Management (2012).
137 International Maritime Organization Fourth Greenhouse Gas Study 2020
138 DfT's Clean Maritime Plan, July 2019.
139 DIT calculations of UK production emissions which excludes UK consumption. 2018 ONS data for Greenhouse Gas emissions. https://www.ons.gov.uk/economy/environmentalaccounts

Table 11: Estimated impact of India FTA on trade-related maritime and aviation freight emissions under scenario 1

	Emissions from UK exports			Emissions from UK imports			Total
	Aviation	Maritime	Total	Aviation	Maritime	Total	
Average annual change ($MtCO_2e$)	0.1	0.1 - 0.3	0.2 - 0.4	0.1	0.1 - 0.3	0.2 - 0.4	0.4 – 0.8
Change relative to baseline (%)	52%	21%	23% - 26%	30%	13%	15% - 18%	18% - 21%

The range for maritime emissions is based on a sensitivity analysis looking at the shortest and longest typical routes ships may take between the UK and India.

Table 12: Estimated impact of India FTA on trade-related maritime and aviation freight emissions under scenario 2 (deeper FTA)

	Emissions from UK exports			Emissions from UK imports			Total
	Aviation	Maritime	Total	Aviation	Maritime	Total	
Average annual change ($MtCO_2e$)	0.1	0.2 - 0.5	0.3 - 0.6	0.2	0.2 - 0.5	0.4 - 0.7	0.6 – 1.3
Change relative to baseline (%)	93%	29%	33% - 40%	58%	24%	28% - 35%	30% – 36%

The range for maritime emissions is based on a sensitivity analysis looking at the shortest and longest typical routes ships may take between the UK and India.

The main drivers for this increase in transport emissions are the increased volume of bilateral trade; increased distance travelled by transported goods as trade shifts from partners that are more geographically close to the UK towards India; and the estimated changes in the composition of goods traded and associated modes of transport used.

Increased services trade from an FTA is not expected to have a significant impact on transport emissions. The impact has not been quantified as a large proportion of services trade does not involve any transport.[140]

The above analysis does not take account of any improvements we may expect to see in the emissions intensity of transport over time either in the baseline or resulting from an FTA. More details on methodology can be found in technical Annex 8.

Carbon Leakage

The displacement of GHG production emissions, because of differing climate rules and policies across jurisdictions, is known as 'carbon leakage'. Carbon leakage can be said to occur if all the following conditions are satisfied:

- Climate mitigation policies differ across jurisdictions.
- Emissions shift to a region with lower climate mitigation obligations.
- Shifts in production to a firm in a different jurisdiction lead to a sustained increase in emissions intensity, higher than it would have been had production not moved.

By enabling greater market access, an FTA could facilitate higher levels of trade and production in sectors where climate mitigation policies differ between the UK and India. Therefore, the above conditions for carbon leakage could be met following liberalisation if domestic UK production is displaced by more GHG intensive imports from India.

Based on the modelled outputs available, it is not possible to unpick the extent to which carbon leakage is responsible for changes in emissions levels relative to the effects of increased economic output (scale effect).

However, by looking at where sectoral production shifts are estimated to be greatest between the UK and India and where differences in the GHG intensity of production lie, an indication as to where carbon leakage risks can be generated. Based on this, estimates suggest that following trade liberalisation, the risk of carbon leakage to India is greatest in 'textiles and apparel'.[141] UK producers are expected to see

140 According to experimental data, Mode 4 trade made up around 11% of cross-border services trade (excluding Investment) with India in 2019.
141 To assess carbon leakage risk by sector 4 factors were considered: (1) The estimated change in Indian imports based on CGE modelling. (2) the estimated change in UK output based on CGE modelling, (3) the estimated change in Indian output based on CGE modelling. (4) The relative difference in GHG intensity of production between the UK and India based on a range of sources.

declining output whilst Indian producers see increasing output. Moreover, the emissions intensity of Indian production is significantly greater than the UK's across both sectors.[142] These factors combined explain why a carbon leakage risk is evident.

Marginal shifts in production from the UK to India are estimated to occur in some non-animal based agricultural sectors.[143] There is mixed evidence in differences in emissions intensity between the UK and India in these sectors, however these estimates do not include land-use change emissions which might represent a higher proportion of the total emissions in India's agricultural sector.[144]

Moreover, the relative difference in emissions intensity between the UK and India is unlikely to remain constant over the period in which a comprehensive FTA is implemented and beyond. The UK has pledged the joint largest (with the EU) relative decrease in GHG emissions compared to 1990 levels with targets set for 2035 and 2050. To meet these targets, the effective price of carbon in the UK will need to increase periodically over time. India has a net-zero target set for a later date of 2070. The effective carbon prices in the UK and India are therefore likely to diverge over the coming decades.

An increasing carbon price gap could widen the difference in the GHG intensity of production in the UK and India over time. The actual difference in GHG intensity is therefore likely to grow from the levels currently assumed over the period in which an FTA is implemented and beyond – potentially increasing the risks of carbon leakage over time.

It should be noted, however, that the pathway for emissions remains highly uncertain and will depend on how the UK and India's policy positions develop over the coming decades, as well as external factors such as technological change.

Opportunities for increased trade in environmental goods

Environmental goods and services refer to products and services with an environmental end use or benefit. Reducing trade barriers and increasing trade in environmental goods and services can increase their application and speed up the diffusion and take up of more environmentally friendly production techniques resulting in positive environmental and climate outcomes. The 2019 US Trade Administration's Environmental Technologies Top Markets Report identified high tariffs as a major barrier to environmental technologies businesses exporting or working in India.[145]

Trade in these goods and spread of technologies are one of the key ways in which FTAs could improve environmental outcomes.

There is no internationally agreed definition of environmental goods. This scoping assessment follows the OECD approach, using the Combined List of Environmental Goods.[146]

The UK and India currently impose tariffs on 30 and 240 products classified as environmental goods by the OECD's combined list of environmental goods respectively.[147] India's average tariff applied on environmental goods is around 10.2%.[148] India applies the highest average tariffs in 'cleaner or more resource efficient technologies and products' (14%) and goods involved in 'natural resources protection' (13%).[149] The highest tariff on an individual good is applied to electric vehicles (125%). A UK-India FTA could reduce tariffs on environmental goods subject to negotiations. However, in the case of India, the marginal impact of trade liberalisation in environmental goods is likely to be small, at least in the short-term. This is due to the relatively small proportion of goods affected, as the UK and India currently impose tariffs on environmental goods accounting for 0.6% and 4.4% of total products traded respectively.[150]

The UK applies a 14% tariff on the imports of bicycles, which are associated with cleaner, more resource efficient technologies and where UK imports from India totalled £5.3 million in 2019, accounting for 0.07% of total UK imports from India.

142 OECD TECO2 data.
143 Specifically – 'vegetables, fruit, & nuts', 'plant-based fibres', 'other crops', 'forestry', and 'dairy products'
144 OECD TECO2 data finds similar levels of emissions intensity across all agricultural sectors, although TECO2 does not account for Methane and Nitrous oxides, major sources of powerful GHGs in agriculture. Minor differences can be found at the sectoral level using GTAPe estimates, while the UN FAO dataset shows more emission intensity in India for 2 of the 5 sectors motioned above, specifically 'other crops', and 'dairy products'.
145 https://www.trade.gov/environmental-technologies-top-markets-report
146 REPORT ON A SET OF POLICY INDICATORS ON TRADE AND ENVIRONMENT, Joint Working Party on Trade and Environment, OECD, 2019.
147 HS6 product level aggregation.
148 Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.
149 These categories are based on OECD markers.
150 HS6 product level aggregation.

Impacts on natural capital and nature loss

Increased economic activity as well as increased production or trade in particular sectors or products can be associated with a wide range of environmental issues, beyond Greenhouse Gas emissions.

Air pollution

Air pollution is an important issue affecting human, animal and plant health in both the UK and India. Many air pollutants also contribute to climate change. Exposure to air pollution is one of the UK's biggest public health challenges, shortening lifespans and damaging quality of life for many people.[151] In India, poor air quality was linked to 1.67 million deaths in 2019, around 18% of total deaths. Indian cities feature prominently as amongst the most polluted world-wide. India's 1981 Air Act, which seeks to control air pollution , focuses on sources of pollution such as factories and power plants. However, it dœs not cover dispersed sources of pollution such as landfills, agricultural fields and vehicles.[152]

Many sources of air pollution are linked to economic activities including burning fossil fuels, industrial processes, transport, agricultural food production, wood fires and solvent use.[153]

Both the UK and India have domestic policies to address air quality. The UK has implemented a mix of regulatory frameworks and encouraged investment in cleaner processes and a shift towards cleaner forms of energy. Air quality has improved significantly in recent decades, but there are some parts of the UK where air pollution still exceeds the national limits, especially large metropolitan areas. The Environmental Performance Index (EPI) ranks the UK 14th among 180 countries for air quality. The UK has substantially improved its score over time.[154]

India ranks towards the bottom of Yale University's Environmental Performance Index for air quality. However, in 2019, India joined the UN Climate & Clean Air Coalition, and launched 'The National Clean Air Programme' with the aim to reduce PM2.5 and PM10 national levels by up to 30% by 2024, relative to the 2017 baseline.[155] In 2020 the Indian government created the Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, setting up a panel to coordinate the air pollution response across India's state governments.[156]

151 PHE, Health matters: air pollution, 2018.
152 India Gov, The Air (Prevention and Control of Pollution) Act, 1981
153 Defra, Air quality: explaining air pollution – at a glance, 2019.
154 See '10 year change' score.
155 UNEP, India joins the Climate and Clean Air Coalition, 2019.
156 https://prsindia.org/billtrack/the-commission-for-air-quality-management-in-national-capital-region-and-adjoining-areas-ordinance-2020.

Table 13: Environmental Performance Index (EPI) for air quality

Air Quality Indicators	India			UK		
	Rank	EPI Score	10 year Change	Rank	EPI Score	10 year Change
Air quality *	179	13.4	+0.4	14	84.7	+5.5
PM2.5 exposure	174	10.9	-4	18	75.4	+9.7
Ozone exposure[157]	179	-	-0.4	29	64.5	+3.7
Household solid fuels exposure	128	18.6	+6.6	1	100	-

Source: Environmental Performance Index (EPI).* Air quality is a composed indicator made of- household solid fuel use; PM2.5 average exposure, and PM2.5 exceedance of WHO thresholds.

The UK exports environmental goods to India that improve air quality, such as air handling equipment for extracting polluted air, corrosive gases or dust. In 2019, the UK's highest exported product to India associated with air quality, worth £32.6 million and accounting for 0.8% of total UK exports to India, was air pumps and other gas compressors.[158] These products face a tariff of 15%, whilst tariffs on other environmental goods in this area range from 7.5% to 15%. A UK-India FTA could potentially reduce tariffs on these goods, encouraging UK exports in these sectors. India currently receives GSP tariffs, therefore these goods are not currently subject to tariffs on exports of environmental goods that improve air quality.

The possible extra growth in the UK manufacturing sector is likely to cause an increase in CO_2 and non-CO_2 air pollutants (all else being equal), particularly in specific regions of the UK where production is concentrated. On the other hand, the agricultural sector could see lower levels of activity than without an FTA, which could lead to a modest reduction in CO_2 and non-CO_2 air pollutants.

In India, an estimated increase in GVA in the textiles industry could increase air pollutants (all else being equal). Numerous CO_2 and non-CO_2 pollutants are released as part of textile production processes such as heating, bleaching and fabric finishing operations.[159] The impacts are likely to be in regions where these industries are concentrated.[160]

The possible expansion of the agriculture sector, which is an input for the textiles sector, could lead to an indirect increase in air pollution, particularly under a deep agreement. It could also lead to a direct increase via poor agricultural practices, such as stubble farming.[161]

Water quality

Increased production for trade could put pressure on water resources and quality. Agricultural, industrial and urban pollution in particular can affect the chemical and ecological status of rivers, streams, lakes, estuaries, coastal waters and groundwater.[162]

Yale University's Environmental Performance Index (EPI) for sanitation & drinking water ranks the UK joint 1st among 180 countries. The same index ranks India 139th. The water resources index measures the extent to which the country is mitigating risks to aquatic ecosystems through treatment.[163] For this index, the UK and India rank 6th and 94th respectively. India accounts for 18% of the world's population and about 4% of the world's water resources.[164]

Table 14: Environmental Performance Index (EPI) for water quality

Water Quality and Use Indicators	India			UK		
	Rank	EPI Score	10 year Change	Rank	EPI Score	10-year Change
Sanitation & Drinking Water *	139	19.4	+8.9	1	100	+0.8
Water Resources **	94	2.2	-	6	98.5	-

* This indicator measures how well countries protect human health from environmental risks on two indicators: unsafe drinking water and unsafe sanitation.** A score of 100 indicates that a country has 100% of its population connected to a sewer system and 100% of household wastewater is treated, mitigating threats to aquatic ecosystems.

157 To ground-level ozone pollution.
158 HS: 841480
159 Forida P. Shariful et al., A study on the solutions of Environment Pollution and Worker's Health Problems Caused by Textiles Manufacturing Operations, 2020 BJSTR
160 Cotton map at: https://www.mapsofindia.com/top-ten/india-crops/cotton.html. Indian Textile map at: https://www.mapsofindia.com/maps/india/textilecenters.htm. India Leather map at: https://www.mapsofindia.com/maps/india/leather-industry.htm
161 Abdurrahman, M. I., Chaki, S., & Saini, G. (2020). Stubble burning: Effects on health & environment, regulations and management practices. Environmental Advances, 2, 100011.
162 Defra, 2015.
163 The wastewater index is based on a wastewater management index that measures the proportion of wastewater that undergoes at least primary treatment in each country, multiplied by the proportion of the population connected to a wastewater collection system.
164 Water Footprint Network. A guide to reducing the water footprint of cotton cultivation in India. A.Chapagain, R.Mathews, G.Zhang. 2017.

The proportion of freshwater withdrawal as a proportion of available freshwater resources is high in India (66%).[165] India ranks as the 13th most water stressed country globally,[166] and it is estimated that by 2030, India's demand for water will be 50% greater than its supply.[167] India's use of both surface and ground water is unsustainable and about one-third of districts are reporting critical or over-exploited ground water levels.[168]

In the UK, GVA increases in manufacturing sectors, transport, construction, chemicals, energy, manufacture of motor vehicles and beverages and tobacco may increase water pressures and affect water quality. While the overall impact on water resources and quality across all UK territory is difficult to estimate, increased output could bring regional negative impacts, especially in areas where there is localised water stress due to increased abstraction demands, such as Southern and Eastern England. However, improvements in the efficiency of water use could help mitigate some of these effects.

In India, the garment industry is one of the main drivers of water stress and water pollution – producing much higher rates than the Minimal National Standard.[169] The chemicals used in textile manufacturing can contaminate water sources.[170] In India, the estimated GVA increases in the textiles and apparel sector (by 1.4 to 3.6%) are likely to increase water pollution, all other things remaining equal. The construction sector is estimated to have the second largest GVA increase after the textile industry, and materials such as cement and steel have a high-water footprint.[171] Increased agricultural production – used as inputs for the textiles sector (e.g. leather, wool) – adds to the potential pressure on water resources and quality.

Marine habitats and fisheries

Trade in seafood has increased dramatically in recent decades and is amongst the most highly traded food commodities.[172] Both the UK and India share ambitions for improving marine habitats and supporting sustainable fishing practices.[173] Both actively participate in associated regional and international agreements including the MARPOL convention.[174] The UK implements national fishery policies to protect fish stock, but no comparable policies are in place in India.[175] However, the UK and India implement international illegal, unreported and unregulated (IUU) fishing regulations to varying degrees. India is not a signatory to the Agreement for Port State Measures – the first legally binding international agreement to specifically target IUU fishing.

The use of publicly funded fishing subsidies which incentivise overfishing and deplete fish stocks are a concern for both parties.[176] Under India's developing country status, its subsidies are exempt from certain WTO prohibitions relating to "Unreported and Unregulated Fishing", "Overfished stocks" and "Overfishing and Overcapacity" conditions.[177] India is also looking to extend the Exclusive Economic Zone (EEZ) limits at the WTO, which may result in less scrutiny of fisheries subsidies.[178,179]

Marine protected areas can help to address issues of overfishing, by conserving habitat and reducing the fishing pressure on stocks in specific locations. Marine protected areas account for 41.46% of UK EEZ and 0.06% of Indian EEZ in 2020.[180]

Aquaculture production is a significant part of the fishing industry in both the UK and India and accounts for 57% of India's total fish production, estimated to be worth £9.53 billion in 2018.[181] Aquaculture can in some cases lead to environmental impacts, such as polluting groundwater and coastal estuaries, increased risk of disease outbreaks, habitat destruction and the depletion of wild stocks.

A comprehensive FTA is expected to have limited impact on bilateral trade in fishing or food products (products containing fish). CGE modelling suggests limited overall impact on fish products given the absolute changes in GVA are small under both scenarios.

165 FAO AQUASTAT. The level of water stress: freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after considering environmental flow requirements.
166 World Resources Institute, Updated Global Water Risk Atlas Reveals Top Water-Stressed Countries and States. 2019.
167 CWMI Report, Composite Water Management Index, 2019.
168 Down to Earth, M. Nathan, 2021, Data from the Central Ground Water Board 2017.
169 Chakraborty, "Water pollution in India: an Input-Output Analysis", 2012.
170 S. S. Muthu, Water in Textiles and Fashion, chapter 2, 2019
171 P.W. Gerbens-Leenes, A.Y. Hoekstra, R. Bosman, The blue and grey water footprint of construction materials: Steel, cement and glass, 2018.
172 WTO, Trade and Fisheries: Key Issues for the World Trade Organization, 2021.
173 National Law School of India University, Coastal Regulation Zone: A Journey From 1991 Till 2019, 2020.
174 UN IMO, Status of IMO Treaties, 2020.
175 Defra, Sustainable fisheries for future generations, 2018.
176 OECD, 2019.
177 WTO, Special and Differential Treatment Communication, 2020.
178 An exclusive economic zone (EEZ), as prescribed by the 1982 United Nations Convention on the Law of the Sea, is an area of the sea in which a sovereign state has special rights regarding the exploration and use of marine resources, including energy production from water and wind.
179 Economic Times, India Proposes limited scope of WTO panel on fisheries subsidies, 2021.
180 OECD, Marine Protected Area.
181 OECD, Aquaculture production.

Forests

Forests play a key role in supporting ecosystems, and their removal or clearing leads to biodiversity loss as well as water and soil erosion. Forestry in the UK is the largest source of national carbon sequestration, removing 18 million tonnes of CO_2e in 2017.[182]

In 2020, woodland area in the UK covered 3.2 million hectares (m ha); 1.39m ha (43%) of which is independently certified as sustainably managed.[183] Forests cover 13% of the total land area in the UK, 10% in England, 15% in Wales, 19% in Scotland and 9% in Northern Ireland. In 2019-20 over 10,000 ha of newly created woodland was established in the UK.[184]

In Yale University's EPI, the UK ranked 117th for tree cover loss, down on a decade earlier. However, the UK Government manifesto commits to planting 30,000 ha of trees per year by 2025 across the UK.[185] The UK government has also pledged £50 million to the Woodland Carbon Guarantee to encourage woodland planting and develop the domestic market.[186] This is part of the 25 Year Environmental Plan introduced in 2018.

In comparison, India ranked 88th for tree cover loss in the Yale University's EPI. 2019, India's forest area stood at 71.2 million hectares (m ha), covering 22% of the total land area in India.[187] The Indian government committed in a draft National Forest Policy released in 2019 to increase forest or tree cover to a minimum of one third of the country.[188] However, government's support of coal mining expansion has brought concerns about deforestation and biodiversity loss in certain regions. Likewise, funding for enhanced carbon sequestration and the development of alternative fuel technologies has fallen short of targets, with only 30% having been allocated for use in the next five years.[189]

Table 15: Environmental Performance Index (EPI) for forestry

Forestry Indicators	India			UK		
	Rank	EPI Score	10-year Change	Rank	EPI Score	10-year Change
Ecosystem services	93	33.8	-8.1	115	28.3	-0.6
Tree cover gross loss	88	31.8	-9.2	117	24	-3.8

Source: Environmental Performance Index, 2020, India and UK EPI profile.

Almost three-quarters of tropical deforestation (which alone accounts for 95% of global deforestation) is driven by agriculture. CGE modelling suggests there could be an increase in UK imports of goods such as dairy, sugar, cane and beet, rice, oil seeds, vegetables and fruits, cattle, paper and rubber. However, both the current value of trade and projected GVA changes for these goods sectors are small. The impact on deforestation rates is difficult to estimate as it depends on various assumptions, specifics of the agreement, and economic factors.

Waste management

As countries grow and industrialise, they produce more solid waste as a result of production and consumption.[190] The volume of solid waste and effective waste management processes – such as those determining the disposal and recycling of goods – are an important determinant of the impact of increased economic activity on the environment.

The UK generated 222 million tonnes of total waste in 2018, an increase of 1.8% from the 218 million tonnes generated in 2016.[191] In comparison, India generates roughly 62 million tonnes of total waste per year, which is projected to increase to 165 million tonnes per year by 2030.[192] The UK produces more solid waste than India in a day on a per capita basis and exports significant level of waste to India for treatment there. Both the UK and India are parties to the Basel Convention, which puts controls on transboundary movements of hazardous wastes and their disposal.[193]

According to Yale University's Environmental Performance Indicator, the UK and India collect and treat 93% and 16% of their household and commercial waste respectively.

182 Office for National Statistics, UK natural capital accounts 2019, 2019.
183 Forest Research, "Forestry Statistics and Forestry Facts & Figures" Data: 2020.
184 Woodland Statistics – Forest Research.
185 Tree planting on the up in England, "Defra Media", 2020.
186 UK Government, Woodland Carbon Guarantee, 2019.
187 India State of Forest Report, 2019.
188 Climate Transparency Report 2020, India country profile.
189 Climate100630 Transparency Report 2020, India country profile.
190 World Bank, What a Waste: A Global Review of Solid Waste Management, 2012, p. 8–13.
191 Defra, UK Statistics on Waste, 2021, p.13.
192 India Environment Portal, Solid Waste Management Rules, 2016.
193 UN Basel Convention.

Table 16: Baseline indicators for waste management, India and the UK

Waste Management Indicators	India	UK
Solid waste generated in 2016 (kg per day per capita)	0.57	1.33
"Controlled solid waste" EPI Score (100 is the top score)	16.1	92.9

Sources: World Bank, "What a Waste 2.0" database; Environmental Performance Index (EPI).

The UK exports environmental goods to India that support management of solid and hazardous waste and recycling systems. In 2019, the UK's largest exported products to India associated with management of waste, worth £19.0m and accounting for 0.44% of total UK exports to India, were machines and mechanical appliances, such as for in-vessel composting systems and trash compactors. These products face a tariff of 7.5%,[194] whilst tariffs on other environmental goods in this area range from 0% to 10%. A UK-India FTA could potentially reduce tariffs on these goods, encouraging UK exports in these sectors.

The construction industry is an intensive producer of waste in the UK. CGE modelling suggests an agreement could increase construction activity, which may increase waste generation in the UK, all else being equal. Manufacturing can also cause chemical and hazardous waste, which require careful treatment.

The UK exports large volumes of waste to India for treatment (recovery or recycling). Four of the UK's top 20 exports to India are waste products totalling over £600m.[195] The impact of the agreement on the waste and recycling sector will be influenced by the agreement's impact on various economic sectors, as different sectors produce different volumes, and types, of waste. Trade in many recyclable goods, including paper products, may also increase under both scenarios. These increases may have relatively small effects on the environment in the UK, which has a recycling rate for paper of 65.6% compared with India's rate of under 30%.[196]

Biodiversity and ecosystems

Biodiversity is the variety of ecosystems and species, and the genetic diversity within them. The main direct causes of biodiversity loss around the world are: land use change; climate change; the pollution of ecosystems; invasive non-native species (INNS); and the over-exploitation of natural resources.[197] It is estimated that around 30% of all species' threats are due to international trade.[198]

The UK has a diverse mix of habitats and species with approximately 13% of the world's blanket bog and 20% of Europe's lowland heathland.[199] The main threats to habitats in the UK are habitat change (land use and condition) and pollution, as well as invasive species and climate change.[200] India's biodiversity and species abundance are very high with more than 45,000 plant species, and the country covers around 2.4% of the land in the world.[201]

India has experienced significant reductions in biodiversity and species levels over the last 10 years in both marine and land environments. [202,203,204] In the past 25 years land pressures have increased, and they are projected to do so in the future, especially for pastureland.[205,206] However, India has implemented several environmental policies and signed several multilateral agreements.[207]

The EPI includes the Ecosystem Vitality index which is divided into Biodiversity and Ecosystem Services.[208,209] The UK performs strongly (better than the Global West regional average) in Biodiversity with a score of 88, ranking it 6th overall.[210] India has a much lower average, below regional and world average, with a score of 33.7, ranking 148th overall. Both countries have below regional average scores for Ecosystem Services with India ranking 93rd and the UK 115th overall.

194 Tariff estimates based on tariff rates from WTO and MacMaps International Trade Centre, www.macmap.org. Tariff rates accessed July 2021.
195 HS4 codes 7204, 7602, 4707, 7404 (2017-2019 averages, ITC calculations based on UN COMTRADE statistics).
196 DEFRA UK Statistics on Waste (July 2021); Waste Management World, Recycling in India: A Market in Transition (May 2021).
197 IPBES.
198 Lenzen et al. (2012), International trade drives biodiversity threats in developing nations.
199 Blanket bog is an area of peatland with a variable depth of peat and is a natural carbon store- International Union for Conservation of Nature.
200 Convention on Biological Diversity, UK profile.
201 WWF, 2021. Living Planet report: India factsheet.
202 Central Marine Fisheries Research Institute (2019), Sarkar et al. (2019), Coral bleaching: a nemesis for the Andaman reefs.
203 EPI, India.
204 State of India's birds, 2020.
205 Roy et al., 2015, Development of Decadal (1985-1995-2005) Land use and land cover database for India.
206 Hinz et al., 2020, Agricultural Development and land use change in India.
207 Examples include the Basel convention, Cartagena Protocol and Nagoya Protocol.
208 Assesses the actions taken in each country to protect biodiversity. Comprised of seven indicators- Terrestrial biomes (national), terrestrial biomes (global), marine protected areas, Protected Areas Representativeness Index, Species Habitat Index, Species Protection Index, Biodiversity Habitat Index.
209 This recognises the important service ecosystems provide to human and environmental well-being. It comprises three indicators – tree loss cover and two new pilot indicators for 2020 – grassland loss and wetland loss.
210 Global West region includes: EU (Austria, Belgium, Germany, Denmark, Spain, Finland, France, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Sweden), UK, EFTA (Norway, Iceland, Switzerland), Canada, USA, Australia and New Zealand.

Table 17: Environmental Performance Index (EPI) for biodiversity and ecosystems

Biodiversity and Ecosystems Indicators	India			UK		
	Rank	EPI Score	10-year Change	Rank	EPI Score	10-year Change
Biodiversity & Habitat	148	33.7	-0.5	6	88	+19.3
Ecosystem Services	93	33.8	-8.1	115	28.3	-0.6

Source: Environmental Performance Index, 2020, India and UK EPI profile.

The agricultural and semi-processed food (especially meat products) sectors are the main source of land-use change. Changes to land use can cause habitat and biodiversity loss through land clearing and land degradation.[211] CGE modelling suggests that imports and exports between the UK and India of agriculture and processed food goods could significantly increase in response to an FTA, particularly a deeper FTA. In the UK, the impacts would be more limited due to lack of land for expansion, low remaining natural capital, and more stringent regulations. In India, significant biodiversity loss in marine and land environments over the last ten years means any further biodiversity loss could make reversing or restoring natural assets more costly, all else being equal.[212]

Whilst GVA changes are minor, the construction and chemicals sectors' imports and exports are projected to grow moderately under a low ambition FTA for both countries. Trade flows, are estimated to increase substantially in the textiles sector, particularly imports. These, and other goods manufacturing sectors which are expected to grow, could impact biodiversity through urbanisation and polluting air and waterways. For example, water pollution from the textiles industry could threaten marine environments – 35% of oceanic microplastic pollution worldwide originates from fast fashion.[213]

The UK has committed to tackling biodiversity threats as a member of the Convention on Biological Diversity (CBD) and within the UK Government 25-Year Environment Plan, in addition to several multilateral environmental agreements, such as the Convention on International Trade in Endangered Species. India partook to multiple international conventions and initiatives, including the Convention on Migratory Species, and the Convention on International Trade in Endangered Species.

211 WWF, Deforestation Fronts Drivers and Responses in a Changing World, 2021.
212 The Economics of Biodiversity, Dasgupta Review, Feb 2021.
213 The Economics of Biodiversity, Dasgupta Review, Feb 2021.

7. Uncertainty and sensitivity analysis

Many of the results throughout this scoping assessment are presented as central point estimates for clarity. However, the modelling results should not be interpreted as a precise estimate of what will happen; rather, they represent an indication of the direction of impacts and broad orders of magnitude.

Uncertainty affecting the scale of macroeconomic impacts

It is important to recognise that the scale of macrœconomic impacts, as well as the distribution across sectors and regions are subject to a high degree of uncertainty from various sources.

Uncertainty in the estimated impacts relating to the model and key parameters.

The scale of estimates for the macrœconomic impacts depends on the model structure, underlying data, key structural parameters (such as elasticities) and input assumptions (relating to the assumed scale of trade cost reductions). These influence the estimates and are all subject to uncertainty. For example, the elasticities in the model attempt to capture the behavioural response of businesses and consumers when faced with lower trade costs and a new set of relative prices in the economy. The model structure exerts the largest influence on the estimated impacts as this also determines the ways in which businesses in various sectors and consumers are assumed to respond to the trade agreement.

A set of sensitivity checks have been undertaken to investigate the robustness of the main estimated results, varying:

- The core parameters within the model,
- The estimates of the non-tariff measure reductions,
- Some of the model's structural assumptions.

In three separate steps the robustness of both scenarios have been tested. See Annex 1 for more details.

First, a statistical simulation was used to generate hundreds of estimates for the impact of the agreement based upon alternative, randomly sampled, values for trade elasticities. These govern the strength of model responses to a given reduction in trade barriers. The estimated results are relatively robust to the applied changes to trade elasticity across both core scenarios for the UK and India, all other things equal. In more detail, the analysis suggests that for scenario 1, the 90% confidence interval coincides with our central estimate when rounded to two decimal places. For the deeper agreement scenario the 90% confidence interval spans from 0.21% to 0.22%.

Second, a statistical exercise was run to test the robustness of our core scenarios to the applied NTM estimates. The findings suggest that estimates are relatively robust to the assumed changes in non-tariff measures: for the scenario 1 the 90% confidence interval coincides with our central estimate when rounded to two decimal places. For the deeper agreement scenario the 90% confidence interval spans from 0.22% to 0.23%.

Thirdly, a sensitivity analysis was conducted to test the method of implementing the non-tariff barrier reductions in the model. This relates to the nature of non-tariff measures, and the extent to which they may generate any benefits in the economy. This sensitivity test suggests that the applied assumption represents a conservative approach to the modelling: under the alternative specification in the deeper agreement scenario real GDP gains increase from 0.22% to 0.26% for the UK and from 0.16% to 0.18% for India, all else equal. Under scenario 1 the respective values increase from 0.12% to 0.14% for the UK and from 0.01% to 0.08% for India.

However, it is important to recognise that the ranges do not account for uncertainty in model structure nor the uncertainty associated with the underlying projections. None of the estimates account for the full range of potential dynamic impacts of the agreement nor exogenous factors (described further below) which are likely to exert a greater influence on the eventual impact of the agreement. These factors are, by nature,

difficult to quantify. They mean that it is possible, or even likely, that the eventual impacts of the agreement fall outside of the ranges suggested by the sensitivity exercises discussed above (which only capture the impact of uncertainty from modelling parameters or assumptions).

An uncertain future – exogenous factors affecting the eventual impact of the agreement

The CGE modelling provides ex ante estimates of the direction and broad orders of magnitude of the long-run impacts. The modelling is based on data for 2014 and, like many approaches to economic modelling, assumes 'all else remains equal'. That means that it assumes that factors outside of the modelling framework all remain the same. However, there are many geopolitical trends and changes to the UK and global economy which may continue over the long run (c.15 years and beyond). These may affect the eventual long-run impacts of the agreement in quantitatively important ways, including the extent to which the predicted impacts materialise.

These factors include, but are not limited to those discussed in DIT's Global Trade Outlook, such as:

- Global trends such as the increased importance of Asia and Africa to the global economy;
- Changing demographics and the rising global middle class;
- Geo-political developments and their impact on global value chains and UK-India trade in general.

It is not possible to quantify the impacts of these trends, but they may exert a large effect on the eventual impacts of the agreement. These and other sources of uncertainty mean that the impacts of the agreement are likely to differ from the central estimates and fall outside of the ranges estimated as part of the statistical exercise.

Uncertainty and sensitivities surrounding the impact on nations and regions

The impact on nations and regions of the UK are estimated by apportioning the estimated sectoral impacts from the CGE model to the nations and regions of the UK. These are apportioned using current output for each sector within each nation and region of the UK.

The apportionment approach means that the uncertainties affecting the sectoral impacts also affect the sub-national impacts. In addition, due to data availability, the national and regional impacts may also be subject to aggregation bias affecting the sub-national results.

In previous DIT analyses, the apportioned estimates have been adjusted using 'location quotients' in an attempt to account for local spending multipliers. The method is described further in Annex 4.[214]

There is some evidence to support the presence of regional multipliers resulting from changes in trade. These effects occur where tradable sectors and exporters pay higher wages and the expansion of exports leads to the creation of jobs in other non-tradeable sectors, through a 'local employment multiplier effect'.[215]

However, the estimates based upon this approach are now presented as a sensitivity analysis. The sensitivity analysis provides a broad indication of the direction of impacts if local economic effects were to persist in the long run. They are presented as a sensitivity analysis, rather than a central estimate because the scale and persistence of these multiplier effects is highly uncertain. On a conceptual level, they are particularly uncertain over the long-term horizon where in the CGE modelling framework, markets are assumed to adjust fully in the long term and that labour is mobile across regions, dissipating any local multipliers effects. On a practical level, there are limited examples in the literature where the local multiplier effects of trade policies have been estimated. As such, attempting to adjust the estimates for these potential impacts introduces additional uncertainty to the estimates.

In this case, the distribution of impacts is highly sensitive to the adjustments made to account for local spending multipliers. After including these adjustments, the estimated impacts are shown in Table 18. The estimated impacts excluding these adjustments can be found in Annex 3.

The distribution of impacts across nations and English regions is not found to be highly sensitive to adjustments made to proxy for local spending multipliers. The regional result that is found to be most sensitive to the adjustment is the estimated impact on the West Midlands in scenario 2. In the central estimates for scenario 2, the net GVA of the West Midlands is estimated to increase by 0.21%. Following the adjustment, the net GVA in the West Midlands is estimated to increase by 0.25%.

214 Location quotients are used to reflect how concentrated or specialised a sector is within a given nation or region.
215 These effects occur where tradable sectors and exporters pay higher wages and the expansion of exports leads to the creation of jobs in other non-tradeable sectors, through a 'local employment multiplier effect'. See, for example, Moretti (2010) "Local Multipliers" in American Economic Review: Papers & Proceedings 100 (May 2010): 1–7.

Table 18: Results for sensitivity analysis: estimated changes in UK nations and regions after adjusting for the potential for local multipliers (value added, long run % and £ million change)

Regions	Scenario 1		Scenario 2	
	% Change in GVA	Change in GVA £ million, 2019	% Change in GVA	Change in GVA £ million, 2019
East of England	0.05%	87	0.12%	197
East Midlands	0.07%	81	0.13%	143
London	0.05%	218	0.10%	467
North East	0.09%	48	0.18%	101
North West	0.08%	160	0.15%	278
South East	0.08%	224	0.14%	420
South West	0.11%	160	0.19%	268

Source: DIT CGE Modelling (2021). Note: Based on 2019 data.

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