Mergers: Commission opens in-depth investigation into proposed merger between Praxair and Linde

Commissioner Margrethe **Vestager**, responsible for competition policy, said: *"Gases – like oxygen and helium – are crucial inputs for a large variety of products we use every day. Manufacturers need to buy these gases from a small number of suppliers. We will carefully assess whether the proposed merger between Praxair and Linde would lead to higher prices or less choice for European consumers and businesses."*

Praxair and Linde are two of the four largest companies active worldwide across the whole supply chains of industrial, medical and speciality gases. For example, they both supply carbon dioxide, which is widely used in the carbonated drinks industry and oxygen, which has a wide variety of uses from steel production to medical oxygen in hospitals and patient homes. They also supply helium, a gas that is necessary for the proper functioning of Magnetic resonance imaging (MRI) scanners.

The transaction would reduce the number of major players active worldwide and in Europe for the supply of these and many other gases to just three. Other players in the market only have regional, national or local presence and lack the technical and financial capabilities to compete on an equal footing.

In addition, there is no indication that competition could be fostered by new entrants, due to the very high investment necessary to establish a meaningful position in the market.

The Commission's preliminary competition concerns

At this stage, the Commission is concerned that the proposed transaction would reduce the competitive pressure in markets covering a significant part of the activities of Praxair and Linde. In particular, the Commission is concerned that there is a risk of price increases due to the increased market power of the merged entity, or the increased likelihood of coordination between the remaining players in the markets.

In particular, the Commission's initial market investigation raised competition concerns for the supply of industrial gases, medical gases (and related services), speciality gases, as well as the supply of helium.

The market investigation confirmed that only the four main players have the engineering capabilities necessary to bid for the largest tonnage projects (i.e. the construction of dedicated gas production units on customer manufacturing sites). It also confirmed that only they have the necessary access to sources of helium worldwide to be competitive. Customers fear that the reduction of the major players from four to three would significantly deteriorate their ability to obtain critical inputs and products at competitive prices.

The Commission will now carry out an in-depth investigation into the effects of this transaction to further explore its initial concerns.

The transaction was notified to the Commission on 12 January 2018. The Parties have decided not to submit commitments to address the Commission's preliminary concerns. The Commission now has 90 working days, until 4 July 2018, to take a decision. The opening of an in-depth investigation does not prejudge the outcome of the investigation.

Companies and products

Linde, headquartered in Germany, is active worldwide in the supply of industrial gases, medical gases, speciality gases and related services, including engineering.

Praxair, headquartered in the United States, is active in the supply of industrial gases, medical gases, speciality gases and related services, as well as surface-coating technologies. It has operations in North and South America, Asia and Europe.

Merger control rules and procedures

The Commission has the duty to assess mergers and acquisitions involving companies with a turnover above certain thresholds (see Article 1 of the Merger Regulation) and to prevent concentrations that would significantly impede effective competition in the European Economic Area or any substantial part of it.

The vast majority of notified mergers do not pose competition problems and are cleared after a routine review. From the moment a transaction is notified, the Commission generally has 25 working days to decide whether to grant approval (Phase I) or to start an in-depth investigation (Phase II).

In addition to the current transaction, there are 5 ongoing Phase II merger investigations: the proposed acquisition of Cristal by Tronox, the proposed acquisition of Ilva by ArcelorMittal, the proposed merger of Essilor and Luxottica, the proposed acquisition of Monsanto by Bayer, and the proposed creation of a joint venture by Celanese and Blackstone.

More information will be available on the competition website, in the Commission's public case register under the case number **M.8480**.

European Defence Fund delivers new

[pan-European research projects]

Elżbieta **Bieńkowska,** Commissioner for Internal Market, Industry, Entrepreneurship and SMEs said: *"The European Defence Fund is essential to bring more cooperation between defence companies and the military in the European Union and to ensure Europe's strategic autonomy. The pan-European collaborative defence research projects supported by the Fund are designed to ensure Europe's technological leadership, lay the foundations for future defence capabilities and support a more innovative and competitive European defence industry."*

The **Ocean2020** project supports maritime surveillance and interdiction missions at sea and to that end will integrate drones and unmanned submarines into fleet operations. The information acquired will be combined with conventional systems to build up a comprehensive picture of developing situations for military commanders.

The project will be run by a consortium led by Leonardo S.p.A, bringing together 42 partners from 15 EU countries. It will receive a grant of around €35 million. In 2019, the project will stage two real-life demonstrations – one in the Baltics led by the Swedish navy and one in the Mediterranean led by the Italian navy.

Three other projects that aim to improve soldiers' equipment were each awarded grants in the range of €1 to 3 million:

- **ACAMSII** will develop adaptive camouflage that will protect soldiers against sensors operating in several wavelength ranges.
- **Gossra** will improve the compatibility of complex system elements (e.g. sensors or digital goggles) carried by soldiers.
- **Vestlife** seeks to develop ultralight body armour for dismounted soldiers.

The grant agreements for these projects will be signed in the coming weeks.

Today's announcement on support for these defence research projects comes on the opening day of the annual Munich Security Conference, where President **Juncker** will present further steps to promote a stronger Europe on security and defence. The President will be accompanied by Vice-President Frans **Timmermans**, Commissioners Johannes **Hahn**, Elżbieta **Bieńkowska**, and Julian **King**.

Background

Under the research strand of the European Defence Fund, €90 million will be allocated to defence research grants fully and directly funded from the EU budget (2017-2019). Projects to be funded have been selected following the first call for defence research proposals in 2017. In December 2017, the first grant agreement was signed with the [PYTHIA consortium]. This project aims to identify key trends in the fast evolving world of innovative defence technologies.

The Commission will also soon adopt the defence research work-programme for 2018 and ask the European Defence Agency to open the new calls for defence research proposals for this year. These calls will focus on electronic design technologies for defence applications and a European high-power laser effector. This next batch of research grants for defence will be signed by the end of 2018.

As announced in June 2017, the Commission will come forward with a proposal to establish, post 2020, a €1.5 billion per year European Defence Fund to support defence capabilities, out of which an estimated annual budget of €500 million will be dedicated to defence research, making the EU one of the biggest defence research investors in Europe.

More information on the projects

Ocean 2020: the project aims to enhance situational awareness in a maritime environment by using manned and unmanned systems and building a complete picture on the basis of many different inputs. Defence Ministries in **Estonia, France, Greece, Italy, Lithuania, the Netherlands, Portugal, Spain, Sweden** and **the United Kingdom** are involved. The industrial partners are: Indra, Safran, Saab, MBDA, PGZ/CTM Hensoldt, Intracom-IDE, Fincantieri and Qinetiq. Research centres include Fraunhofer, the Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (TNO), the Centre for Maritime Research and Experimentation (CMRE NATO) and the Italian Istituto Affari Internazionali (IAI).

ACAMSII: this project will develop adaptive camouflage for soldiers that will protect them against sensors operating in several wavelength ranges. Partners **from France, Germany, Lithuania, the Netherlands, Portugal** and **Sweden** are involved. Participating companies are from the textile, aerospace and defence system integrators sectors: CITEVE, Damel and Safran. Research centres are the Swedish Totalförsvarets forskningsinstitut (FOI), Fraunhofer, and the Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (TNO).

GOSSRA: this project focuses onensuring thatcomplex system elements worn by soldiers work together. Soldiers are equipped with a range of devices which are required to work together. The project aims to create a methodology for specifying how components connect, making it much easier to develop new devices that can work with existing equipment. Partners from **Germany, Italy, the Netherlands, Poland, Portugal, Spain** and **Sweden** will run the project. The companies involved are Rheinmetall, Indra, GMV aerospace and defence, Leonardo, Larimart and Saab; SMEs Tekever and iTTi and the research institute Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (TNO).

Vestlife: the goal of this project is to create protective clothing for soldiers. It will work on developing clothes that are effective for defence purposes, but lighter, more flexible and comfortable at the same time. Partners from **Finland, Italy, the Netherlands, Portugal** and **Spain**, together with companies CITEVE and FY-composites, research institutes AITEX and TECNALIA are involved. Two small and medium enterprises (SMEs) BRAPA and Petroceramics are also taking part in the project.

CALENDRIER du 19 au 25 février 2018

(Susceptible de modifications en cours de semaine)

Déplacements et visites

Lundi 19 février 2018

Agriculture and Fisheries Council

Eurogroup

Mr Frans **Timmermans** receives Mr Wopke Hoekstra, Minister of Finance of the Netherlands.

Mr Frans **Timmermans** meets with Mr Wouter Koolmes, Minister of Social Affairs and Employment of the Netherlands, in Brussels.

Ms **Mogherini** receives Mr Robert Phillips Corker Jr., United States Senator and Chairman of the Senate's Committee on Foreign Relations.

Ms **Mogherini** receives Mr Nasr Al-Hariri, General Coordinator and Head of the negotiating team of the Syrian Negotiation Commission (SNC).

Ms **Mogherini** receives Mr Jeffrey D. Feltman, United Nations Under-Secretary-General for Political Affairs.

Mr Maroš **Šefčovič** receives Mr Nicolas Hulot, Minister for the Ecological and Inclusive Transition of France.

Mr Jyrki **Katainen** receives Mr Nicolas Hulot, Minister of Ecological and Inclusive Transition of France.

Mr Jyrki **Katainen** receives Mr Bruno Le Maire, Minister of Economy and Finance of France.

Mr Jyrki **Katainen** receives Ms Elina Kalkku, Under-Secretary of State for Development Cooperation and Development Policy of Finland.

Mr Jyrki **Katainen** meets Mr Joseph Daul, President of the European People's Party, in Brussels.

Mr Jyrki **Katainen** attends a working dinner with the Ministers of Finance belonging to the European People's Party, in Brussels.

Mr Günther H. **Oettinger** in Berlin, Germany: on a tour to gather views on the Future of EU finances and the post-2020 Multiannual Financial Framework (MFF); delivers a keynote speech at the Handelsblatt Global Business Day.

Mr Neven **Mimica** participates in the EU-UNDP High-Level Policy Dialogue, in Brussels.

Mr Neven **Mimica** receives Ms Elina Kalkku, Under-Secretary of State for Development Cooperation and Development Policy of Finland.

Mr Miguel Arias **Cañete** receives the CEOs of the European Automobile Manufacturers' Association – ACEA.

Mr Miguel Arias **Cañete** receives Mr Adan Amin, Secretary General of the International Renewable Energy Agency (IRENA).

Mr Miguel Arias **Cañete** participates in the launching event of the IRENA (International Renewable Energy Agency) – EU report "Renewable Energy Prospects in the EU", in Brussels.

Mr Miguel Arias **Cañete** receives Mr Nicolas Hulot, Minister for the Ecological and Inclusive Transition of France.

Mr Karmenu **Vella** receives Ms Carola Schouten, Deputy Prime Minister and Minister of Agriculture of The Netherlands.

Mr Karmenu **Vella** receives Mr Nicolas Hulot, Minister for the Ecological and Inclusive Transition of France.

Mr Vytenis **Andriukaitis** receives Mr Nicolas Hulot, Minister for the Ecological and Inclusive Transition of France.

Ms Marianne **Thyssen** receives Mr Wouter Koolmees, Dutch Minister of Social Affairs and Employment.

Ms Marianne **Thyssen** participates in the 2018 European Parliamentary Days, in Brussels.

Ms Marianne **Thyssen** gives a speech at the Construction Confederation (Confederatie Bouw) of Leuven and Brussels-Flemish Brabant, in Leuven.

Mr Tibor **Navracsics** participates in and speaks at the Stakeholder Consultation Meeting: Reviewing the European Agenda for Culture, in Brussels.

Ms Margrethe **Vestager** in Copenhagen, Denmark: participates in the morning briefing of PensionDanmark; participates in a panel debate at a CBS Case Competition event – "Navigating in International Politics".

Mr Carlos **Moedas** in Berlin, Germany; meets with Dr. Georg Schütte, German State Secretary at the Federal Ministry of Education and Research; has a working lunch with Presidents of the Alliance of Science Organisations in Germany and meets with Mr Lars-Hendrik Röller, German economist.

Mr Julian **King** receives Ms Angels Bosch Camprecios, President of the European Confederation of Police (EuroCOP).

Ms Mariya **Gabriel** in Berlin, Germany: European Film Forum Berlinale 2018.

Mardi 20 février 2018

Economic and Financial Affairs Council

President Jean-Claude **Juncker** receives Mr Stephan Weil, Minister-President of Lower Saxony.

President Jean-Claude **Juncker** receives Mr Hartwig Löger, Minister of Finance of Austria.

Mr Frans **Timmermans** delivers a keynote speech at the 2nd annual Circular Economy Stakeholder Conference, in Brussels.

Mr Frans **Timmermans** receives Mr Jeremy Darroch, CEO of Sky Group.

Mr Frans **Timmermans** receives Ms Nelleke Vedelaar, Chair of the Partij van de Arbeid (PvdA).

Mr Andrus **Ansip** receives Mr Philip Malloch, new Chair of the Board of ETNO (European Telecommunications Network Operators' Association).

Mr Maroš **Šefčovič** receives Mr Henrik Henriksson, President and CEO of Scania.

Mr Maroš **Šefčovič** participates in the conference on 'Energy security and the economic benefits', organised by the European Climate Foundation, at the European Parliament, in Brussels.

Mr Maroš **Šefčovič** gives a keynote speech at the launch of the Friends of the European Battery Alliance, at the European Parliament, in Brussels.

Mr Jyrki **Katainen** receives a delegation from the Greek Tourism Federation.

Mr Jyrki **Katainen** receives Ms Anne-Mari Virolainen, Minister for Trade and Development of Finland.

Mr Jyrki **Katainen** delivers concluding remarks at the Circular Economy Stakeholder Conference, organised by the European Commission and the European Economic and Social Committee, in Brussels.

Mr Günther H. **Oettinger** delivers an introductory speech on the Multiannual Financial Framework at the European Parliament plenary session.

Mr Günther H. **Oettinger** receives Mr Pier Carlo Padoan, Italian Finance Minister, to discuss the Multiannual Financial Framework.

Mr Günther H. **Oettinger** receives Mr Stephan Weil, Minister President of the State of Lower Saxony.

Mr Günther H. **Oettinger** participates in ECOFIN debates on the Council's discharge recommendation and Council's priorities for the 2019 budget, in Brussels.

Mr Günther H. **Oettinger** gives a speech at a dinner event at the Representation of the State of Lower Saxony, in Brussels.

Mr Günther H. **Oettinger** gives a speech at the Conference of Regional Banks from the State of Hessen, in Brussels.

Mr Johannes **Hahn** receives Mr Hartwig Löger, Federal Minister of Finance of Austria.

Mr Johannes **Hahn** receives Mr Achim Steiner, Administrator of the United Nations Development Programme.

Mr Neven **Mimica** participates in the informal meeting of the Foreign Affairs Council – Development.

Mr Miguel Arias **Cañete** receives Mr Emilio Bruquetas Serantes, Managing Director of Reganosa.

Mr Miguel Arias **Cañete** receives Ms Isabella Lövin, Minister for International Development Cooperation and Climate, and Deputy Prime Minister of Sweden.

Mr Miguel Arias **Cañete** receives Mr Marc Pons I Pons, Counselor for Territory, Energy and Mobility of the regional Government of the Balearic Islands, and Mr Joan Groizard, Director General for Energy and Climate change of the regional Government of the Balearic Islands.

Mr Karmenu **Vella** receives Mr Jeremy Darroch, Chief Executive Officer of Sky Group.

Mr Karmenu **Vella** delivers a speech at the Circular Economy Stakeholder Conference, organised by the European Commission and the European Economic and Social Committee, in Brussels.

Mr Karmenu **Vella** receives Ms Elisabeth Köstinger, Federal Minister for Sustainability and Tourism of Austria.

Mr Vytenis **Andriukaitis** attends a breakfast event of the American Chamber of Commerce to the EU on the new Health Technology Assessment (HTA) proposal and antimicrobial resistance, in Brussels.

Mr Vytenis **Andriukaitis** receives Ms Elisabeth Köstinger, Minister for Agriculture, Forestry, the Environment, Water Management and Tourism of Austria.

Mr Vytenis **Andriukaitis** gives a speech at the European Risk Forum Conference: "Scientific Integrity – Public Policy and Better Regulation at the University

Foundation", in Brussels.

Mr Dimitris **Avramopoulos** receives representatives of the Greek Tourism Confederation (SETE).

M. Pierre **Moscovici** participe à la conférence «Masters of Digital 2018 » organisé par Digital Europe à Bruxelles, où il prononce un discours sur la fiscalité du numérique.

M. Pierre **Moscovici** reçoit Mme Marie-Guite Dufay, Présidente du conseil régional de Bourgogne-Franche-Comté à Bruxelles.

Mr Phil **Hogan** delivers a speech at a workshop on "Pathways to policy changes on water in agriculture", organised by the Organisation for Economic Co-operation and Development (OECD) and the European Commission, in Brussels.

Mr Phil **Hogan** receives representatives from Janssen: Pharmaceutical Companies of Johnson & Johnson.

Mr Phil **Hogan** receives members of the House of Lords.

Ms Violeta **Bulc** receives Ms Sabrina Soussan, Chief Executive Officer (CEO) of Siemens.

Ms Violeta **Bulc** meets with Mr Crister Fritzson, Chairman of the Community of European Railways.

Ms Violeta **Bulc** participates in the ceremony of the European Railway Award 2018, in Brussels.

Ms Elżbieta **Bieńkowska** delivers a speech at the Circular Economy Stakeholder Conference, organised by the European Commission and the European Economic and Social Committee, in Brussels.

Ms Elżbieta **Bieńkowska** and Mr Tibor **Navracsics** deliver speeches at the exhibition "European Excellence in Tourism: Friuli Venezia Giulia", European Parliament, in Brussels.

Ms Věra **Jourová** speaks at the event Breaking the Glass Ceiling organised by BSA | The Software Alliance.

Mr Tibor **Navracsics** participates in the "InterRail Roundtable" at European Parliament, in Brussels.

Ms Corina **Creţu** gives a keynote speech at the event "Global technology, local jobs", in Brussels.

Ms Corina **Creţu** receives Mrs Viorica Dancilă, Prime Minister of Romania.

Ms Margrethe **Vestager** receives Mr Carlo Calenda, Minister of Economic Development of Italy.

Ms Margrethe **Vestager** receives Mr Makan Delrahim, United States Assistant Attorney General for the Antitrust Division in the US Department of Justice.

Ms Margrethe **Vestager** receives Mr Mário Centeno, Minister of Finance of Portugal.

Mr Carlos **Moedas** delivers a keynote speech at the launch event "Science Research and Innovation Performance of the EU 2018 Report", in Brussels.

Mr Carlos **Moedas** delivers a keynote speech at the European Energy Forum dinner-debate, at the European Parliament, in Brussels.

Mr Julian **King** participates in an exchange of views with the European Parliament Delegation for relations with the United States, in Brussels.

Mr Julian **King** receives Mr Jeremy Darroch, Chief Executive Officer of Sky Group.

Ms Mariya **Gabriel** receives Mr Christian Van Thillo, CEO of De Persgroep nv.

Ms Mariya **Gabriel** delivers a speech at DIGITALEUROPE's Masters of Digital 2018 Conference, in Brussels.

Ms Mariya **Gabriel** receives Mr Jeremy Darroch, Chief Executive Officer of Sky Group.

Ms Mariya **Gabriel** receives Ms Tsveta Karaiancheva, President of the National Assembly of Bulgaria.

Ms Mariya **Gabriel** participates at the 1st trilogue on SatCab, in Brussels.

Ms Mariya **Gabriel** receives Mr Matt Brittin, Google's President for Europe.

Mercredi 21 février 2018

College meeting

President Jean-Claude **Juncker** receives Ms Viorica Dăncilă, Prime Minister of Romania.

President Jean-Claude **Juncker** delivers a speech in the European Parliament at an event marking the centennial of Lithuania.

Ms Frederika **Mogehrini** receives Mr Edward Nalbandian, Minister of Foreign Affairs of the Republic of Armenia.

Mr Andrus **Ansip** receives Ms Margarete Schramböck, Federal Minister for Digital, Business and Enterprise of Austria.

Mr Valdis **Dombrovskis** receives the Board of Directors of the Greek Tourism Federation.

Mr Günther H. **Oettinger** receives representatives of Deutsche Bank.

Mr Johannes **Hahn** receives Mr Zied Ladhari, Minister of Development, Investment, and International Cooperation of the Republic of Tunisia.

Mr Johannes **Hahn** receives Ms Margarete Schramböck, Federal Minister for Digital and Economic Affairs of Austria.

Mr Johannes **Hahn** receives Mr Fathallah Sijilmassi, Secretary General of the Union for the Mediterranean.

Mr Karmenu **Vella** receives Mr Rashid Sumaila, Professor and Director of the Fisheries Economics Research Unit at the University of British Columbia Fisheries Centre.

Mr Karmenu **Vella** receives Mr Henryk Kowalczyk, Minister of Environment of Poland.

Mr Karmenu **Vella** delivers a speech at the Conference on implementation of the EU’s Common Fisheries Policy, organised by The Pew Charitable Trusts, in Brussels.

Mr Christos **Stylianides** receives Mr Yiannis Retsos, President of the Board of the Greek Tourism Confederation.

Mr Christos **Stylianides** receives Mr Justin Forsyth, Deputy Executive Director of the United Nations International Children’s Emergency Fund (UNICEF).

Mr Christos **Stylianides** receives Mr Bob Rae, Special Envoy for Myanmar of Canada.

Mr Phil **Hogan** inMunich, Germany: addresses a high-level event on “Agriculture on its way towards the 22nd Century – Modern, Sustainable, Competitive and Socially Anchored”.

Ms Elżbieta **Bieńkowska** receives Mr Yiannis Retsos, President of the Board of the Greek Tourism Confederation.

Ms Věra **Jourová** receives Mr Karl von Rohr, Member of the Board of Deutsche Bank.

Mr Tibor **Navracsics** participates in and gives a closing speech at the European Festivals Association Round Table, in Brussels.

Mr Tibor **Navracsics** signs the Agreement for Cooperation between the European Commission and the Union of European Football Associations (UEFA) in the presence of First Vice-President Frans **Timmermans**, in Brussels.

Ms Corina **Creţu** receives Mr Dario Nardella, Mayor of Florence.

Ms Margrethe **Vestager** receives Mr Joe Mizzi, Minister for Energy and Water Management of Malta.

Ms Margrethe **Vestager** receives Ms Margarete Schramböck, Minister of Digitalisation and Economy of Austria.

Mr Julian **King** delivers a keynote speech at the AmCham EU event ‘Building a transatlantic response on cyber resilience', in Brussels.

Ms Mariya **Gabriel** receives Mrs Margarete Schramböck, Federal Minister for Digital and Economic Affairs of Austria.

Mr Mariya **Gabriel** receives a delegation of International Association of STM Publishers (STM).

Jeudi 22 février 2018

President Jean-Claude **Juncker** delivers a speech to the plenary of the Centre for European Policy Studies Ideas Lab, in Brussels.

Mr Maroš **Šefčovič** delivers a keynote address at the EU Covenant of Mayors Ceremony, and participates in the panel discussion on 'Cities and industry joining forces to speed-up the climate and energy transition', in Brussels.

Mr Maroš **Šefčovič** participates, via video conference, at the Slovak National Convention on the Future of Europe.

Mr Maroš **Šefčovič** delivers a speech at day 1 of the EU Industry Day, in Brussels.

Mr Valdis **Dombrovskis** in Berlin, Germany (until 23/02): delivers a speech at the High-level conference on sustainable finance, organised by the European Commission Representation in Germany and the German Institute for Economic Research; meets with Mr Peter Altmaier, Head of the Federal Chancellery and Federal Minister for Special Tasks, and Federal Minister of Finance of Germany; meets with members of committees of the Bundestag.

Mr Jyrki **Katainen** receives Mr Suma Chakrabarti, President of the European Bank for Reconstruction and Development (EBRD).

Mr Jyrki **Katainen** delivers the opening keynote address of the EU Industry Days 2018, organised by the European Commission and participates in the High-Level Industrial Roundtable, in Brussels.

Mr Jyrki **Katainen** receives Mr Marc du Bois, CEO of Spadel.

Mr Jyrki **Katainen** receives Mr Jean-Pierre Raffarin, Chairman of Fondation Prospective et Innovation.

Mr Jyrki **Katainen** receives Mr Fabio Gallia, CEO of Cassa Depositi e Prestiti.

Mr Jyrki **Katainen** attends a meeting of the Presidency of the European People's Party, in Brussels.

Mr Günther H. **Oettinger** receives representatives of Daimler AG.

Mr Günther H. **Oettinger** participates in a panel discussion with the Minister President of the State of Baden-Wurttemberg and others at the opening of ARENA2036, in Germany.

Mr Johannes **Hahn** receives representatives of the Upper Austria Agricultural Chamber.

Mr Johannes **Hahn** receives Ms Beate Hartinger-Klein, Federal Minister of Social Affairs of Austria.

Mr Johannes **Hahn** receives Mr Suma Chakrabarti, President of the European Bank for Reconstruction and Development (EBRD).

Mr Neven **Mimica** meets with representatives of EU Overseas Countries and Territories in the context of the 16th Annual OCT-EU Forum, in Brussels.

Mr Neven **Mimica** meets with Mr Roch Marc Christian Kaboré, President of Burkina Faso; Mr Idriss Déby Itno, President of Chad; meets with Mr Mohamed Ould Abdel Aziz, President of Mauritania; Mr Moussa Faki Mahamat, Chairperson of the African Union Commission; Mr Suma Chakrabarti, President of the European Bank for Reconstruction and Development.

09:30 Mr Miguel Arias **Cañete** participates at the EU Covenant of Mayors Ceremony, in Brussels.

12:00 Mr Miguel Arias **Cañete** receives Mr Suma Chakrabarti, President of the European Bank for Reconstruction and Development (EBRD).

Mr Karmenu **Vella** in Bucharest, Romania (until 23/02): meets with Ms Graţiela Leocadia Gavrilescu, Vice Prime Minister, and Minister of the Environment; meets with Mr Ioan Deneş, Minister of Water and Forests; meets with Mr Petre Daea, Minister of Agriculture and Rural Development.

Mr Vytenis **Andriukaitis** delivers a speech at the Ambrosetti Club Europe, in Brussels.

Mr Vytenis **Andriukaitis** receives representatives of the EU Dog & Cat Alliance.

Mr Vytenis **Andriukaitis** receives Ms Beate Hartinger-Klein, Minister of Social Affairs of Austria.

Mr Vytenis **Andriukaitis** delivers a speech at the Copa-Cogeca Presidia meeting (European farmers and European agri-cooperatives).

Mr Dimitris **Avramopoulos** in Washington D.C., United States (till 23/2): meets with Mr Antonio Guterres, Secretary-General of the United Nations; with Mr Miroslav Lajcak, Minister of Foreign Affairs of Slovakia and President of the United Nations General Assembly for the 72nd session; and with Mr. Vladimir Voronkov, Under-Secretary-General of the United Nations Counter-Terrorism Office.

Ms Marianne **Thyssen** gives a speech at the Construction Forum, in Brussels.

Ms Marianne **Thyssen** receives Ms Beate Harting-Klein, Minister of Labour, Social Affairs, Health and Consumer Protection of the Austrian Federal Government.

M. Pierre **Moscovici** reçoit la délégation de chefs d'entreprises français de la Fondation Prospective et Innovation à Bruxelles.

Mr Christos **Stylianides** receives Mr Dan Kersch, Minister of the Interior of Luxemburg, and Mr Romain Schneider, Minister for Cooperation and Humanitarian Action of Luxemburg.

Mr Christos **Stylianides** meets with Mr Jan Jambon, Minister of the Interior of Belgium, in Brussels.

Mr Christos **Stylianides** receives Mr Roland Kobia, EU Special Envoy for Afghanistan.

Mme Violeta **Bulc** reçoit Mme Elisabeth Borne, Ministre chargée des Transports, auprès du ministre d'Etat, ministre de la Transition écologique et solidaire de la République Française.

Mme Violeta **Bulc** participe à la remise des prix du European Startup Prize à Bruxelles.

Ms Elżbieta **Bieńkowska** receives Mr Karl-Heinz Lambertz, President of the Committee of the Regions.

Ms Elżbieta **Bieńkowska** delivers a welcoming speech at a High-Level Industrial Roundtable "Industry 2030", in Brussels.

Ms Věra **Jourová** receives Mr Jacques Toubon, Human Rights Defender of France.

Ms Věra **Jourová** receives Mr Michael O'Flaherty, Director of the European Union Agency for Fundamental Rights.

Ms Věra **Jourová** receives Ms Beate Hartinger-Klein, Federal Minister of Labour, Social Affairs, Health and Consumer Protection of Austria.

Ms Corina **Creţu** in Rome, Italy: meets with Mr Claudio De Vincenti, Minister responsible for Territorial Cohesion and Southern Italy; delivers a speech at the launch of the book 'Come Fratelli', on the integration of Romanians in the Italian society.

Ms Margrethe **Vestager** receives Mr Martin Merrild, President of the Danish Agriculture and Food Council.

10:05 Mr Carlos **Moedas** delivers a keynote speech at the Covenant of Mayorsfor Climate & Energy 2018 Ceremony: "From Paris to Katowice: Speeding up the transition towards decarbonised and resilient cities"; and launches the 2018 edition of the European Capital of Innovation #iCapital Awards, European Parliament, Brussels.

14:30 Mr Carlos **Moedas** delivers a keynote speech and attends the "Ideas Lab Agenda 2018" conference organised by CEPS (Centre for European Policy Studies), in Brussels.

Mr Julian **King** receives Mr Francis Taylor, former Undersecretary for

Intelligence and Analysis in the United States Department of Homeland Security.

Mrs Mariya **Gabriel** participates at the Working Breakfast Digital Agenda Intergroup, in Brussels.

Mrs Mariya **Gabriel** delivers a speech at the High-Level Lunch and Hearing "Preserving Democracy in the Digital Age" at the European Political Strategy Centre, in Brussels.

Mrs Mariya **Gabriel** receives Mr Harry McCann, Executive Director Digital Youth Council.

Vendredi 23 février 2018

09:00 President Jean-Claude **Juncker** hosts the High-Level Conference on the Sahel, in Brussels. Ms Frederica **Mogherini** co-chairs, Mr Neven **Mimica** also attends.

President Jean-Claude **Juncker** participates in the Informal meeting of the 27 Heads of State or Government, in Brussels.

Mr Frans **Timmermans** receives Mr Enrico Giovannini, Director of Alleanza Italiana per lo Sviluppo Sostenibile (ASviS), Ms Bettina Laville, President of Le Comité 21 and Mr Pier Virgilio Dastoli, European Partners for the Environment

Mr Maroš **Šefčovič** chairs and delivers a speech at the Clean Energy Industrial Forum at day 2 of the EU Industry Day, in Brussels.

Mr Valdis **Dombrovskis** in Berlin, Germany: meets with Mr Wolfgang Schäuble, President of the German Bundestag; Ms Katarina Barley, Federal Minister for Family Affairs, Senior Citizens, Women and Youth, and Federal Minister of Labour and Social Affairs of Germany; participates in the conference Zukunftsstrategien für Sparkassen, organised by Handelsblatt.

Mr Jyrki **Katainen** receives Mr Erkki Liikanen, Governor of the Bank of Finland and former European Commissioner for Budget, personnel and administration.

Mr Günther H. **Oettinger** delivers a speech at Volkshochschule Landkreis Konstanz e.V., in Germany.

Ms Cecilia **Malmström** in Gothenburg, Sweden: delivers a speech at the Global Business Gate Day on: "Global trends in trade policy: what is needed to trade tomorrow?".

Mr Neven **Mimica** meets with representatives of EU Overseas Countries and Territories in the context of the 16th Annual OCT-EU Forum, in Brussels.

Mr Neven **Mimica** holds a speech at the 16th Annual Overseas Countries and Territories-EU Forum, in Brussels.

10:15 Mr Miguel Arias **Cañete** in Madrid, Spain: meets with Mr Miguel Angel

Ballesteros Martín, General Director of the Spanish Institute of Strategic Studies (IEEE).

Mr Karmenu **Vella** in Bucharest, Romania: meets with Ms Rovana Plumb, Minister of European Funds; meets with Ms Gabriela Firea, General Mayor of Bucharest; chairs a Roundtable with Mayors on GreenWeek2018.

Mr Dimitris **Avramopoulos** in Washington D.C., United States: meets with Mr Tom Bossert, United States Homeland Security Advisor.

Ms Marianne **Thyssen** receives Mr Troels Lund Poulsen, Minister of Employment of Denmark.

M. Pierre **Moscovici** participe au Ideas Lab: Reconstructing the Union organisé par Centre for European Policy Studies à Bruxelles.

Mr Phil **Hogan** receives the Presidents of 4 farming unions from the United Kingdom.

Ms Elżbieta **Bieńkowska** delivers a speech at European Industry Day 2018, in Brussels.

Mr Tibor **Navracsics** in Budapest, Hungary: attends the gala dinner of the International Paralympic Committee.

Ms Margrethe **Vestager** receives Mr Troels Lund Poulsen, Minister of Employment of Denmark.

12:15 Mr Carlos **Moedas** delivers a keynote speech on Industry and Innovation at the EU Industry Day, in Brussels.

14:00 Mr Carlos **Moedas** visits the EU Industry Day 2018 exhibition in Covent Garden, in Brussels.

14:30 Mr Carlos **Moedas** takes part together with Mr Ambroise Fayolle, Vice-President of the European Investment Bank (EIB), in the Signing Ceremony of the Northvolt InnovFin Energy Demo Project, in Brussels.

Samedi 24 février 2018

Dimanche 25 février 2018

Prévisions du mois de février:

26/02 Foreign Affairs Council

26/02 Transport, Telecommunications and Energy Council on energy

26/02 EU-Kazakhstan Cooperation Council

27/02 General Affairs Council (Art. 50)

27/02 General Affairs Council

27/02 Informal meeting of foreign affairs ministers on trade, in Sofia

28/02 Informal meeting of education, youth, culture and sport ministers on culture, in Sofia

Permanence DG COMM le WE du 17 au 18 février 2018:

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Wikipedia

Last week I was asked some questions at a meeting based on wildly inaccurate information about myself and my views. I was told the basis for the questions came from Wikipedia so I looked up my entry.

I understand it is not the done thing to correct your own entry, so instead for greater accuracy I will record here where the entry is factually inaccurate, and also where it is particularly misleading.

Factual errors

I am not currently the co chairman of the Conservative Party Policy Review on Competitiveness. That job ended in 2010.
I do not act as the Leave means Leave pressure group spokesman
I am not Corporate Affairs Adviser at Concentric PLC
I have not been non executive chairman of Mabey Securities this decade
I completed and received a D Phil – not a PHD – at All Souls College, Oxford, not at St Anthony's
I was elected to a fellowship by examination at All Souls in 1972 which led on later to a Distinguished fellowship.
I did not write an investment column "recommending investors pull their money out of the UK"

Misleading impressions

I have never spoken or written against civil partnerships and gay marriage and am not proposing any change to current laws. I regard the debate about capital punishment as being over and do not support its reintroduction. I never spoke or wrote in its favour.

Benoît Cœuré: Trade as an engine of growth: Prospects and lessons for Europe

Speech by Benoît Cœuré, Member of the Executive Board of the ECB, NBRM High Level International Conference on Monetary Policy and Asset Management, Skopje, 16 February 2018

I thank you for inviting me to speak here in Skopje today[1]. I would like to take this opportunity to discuss an issue which I believe is key for the economic future of Europe and particularly relevant here, in the Western Balkans: the prospects for trade as an engine of growth.

For several years now, global trade growth has puzzled many observers. While global trade grew at about twice the rate of GDP before the crisis, it has slowed measurably since then and has often grown at the same rate as, or even below, that of global output. However, in 2017, world import growth once again outpaced world GDP growth. The euro area is benefiting from this recovery, with export growth the highest in many years.

In my remarks this morning, I will argue that the rebound in trade mainly reflects cyclical factors. Accommodative monetary policies worldwide have succeeded in boosting growth and investment and, with them, global imports. Structural headwinds remain, however. Maturing global value chains, geographical shifts in trade and an accelerating push towards more automation make it less likely that trade can again expand at the pace observed during the pre-crisis boom.

To the extent that trade helps lift growth, policymakers have a role to play in providing an environment that is conducive to trade. At the same time, they need to ensure that appropriate systems are in place to support workers affected by secular shifts in both trade flows and labour demand.

Rebound in world trade

Let me start with a few facts and charts.

Last year, global imports expanded by 5%, the strongest growth in seven years. On the left-hand side of my first slide you can see that the rebound in global trade was broad-based, with both emerging and advanced economies contributing in roughly equal proportions. On the right-hand side you can see that this by and large reflects the fast broadening of the global economic expansion. At the end of last year, 75% of the economies worldwide experienced growth above their three-year averages. In 2016, this share was below 30%. So, the global economy is in a much more robust state today than it was just a few years ago.

The breakdown of extra-euro area exports also shows that the current synchronous expansion is fertile ground for a strong rebound in trade. You can see this on the left-hand side of my next slide. By the end of last year, euro area exporters had expanded their business with virtually all of our main trading partners.

Growing demand from China, and emerging Asia more generally, as well as recovering demand from commodity exporters are once more contributing to, rather than subtracting from, export growth. One exception to this benign picture is the United Kingdom, where Brexit repercussions might already be showing through in the data.

Trade has also gained momentum within the euro area. You can see this on the right-hand side. Although intra-euro area export growth is currently somewhat weaker than extra-area growth, we can see that exports are today contributing more evenly to growth across euro area countries. It is no longer only a few Member States that are benefitting from a booming global economy.

In particular, structural reforms and internal devaluation in formerly stressed economies, together with a protracted period of weak domestic demand during the crisis years, have prompted more firms in these economies to improve their competitiveness and thereby profit from a rise in foreign demand, both inside and outside the currency union.

This is perhaps best illustrated by the share of exports in GDP on the left-hand side of my next slide. Last year, compared with the period 2000 to 2007, this share rose strongly in Ireland and Slovenia, while Portugal, Greece and Cyprus also managed double-digit gains. This supported the economic recovery and helped to reduce unemployment.

A natural side effect of these changes was a notable widening of the euro area’s current account surplus. You can see this on the right-hand side. Almost all Member States that entered the financial crisis with large current account deficits are today reporting current account surpluses. Of the euro area’s 19 Member States, 13 have current account surpluses.

But the chart also illustrates clearly that the rebalancing has remained limited to formerly stressed economies. Up until recently, current account surpluses have continued to rise in Germany and in the Netherlands, the two export powerhouses in the euro area. While these surpluses undoubtedly reflect strong underlying fundamentals in terms of competitiveness, they also reflect an imbalance between domestic savings and investment. Higher domestic investment would therefore be a constructive way to address large current account surpluses and, at the same time, to prepare for future challenges.

Now, does the current trade recovery bode well for the future? What are the prospects for global and euro area trade? Will we return to an environment where trade growth persistently outpaces GDP growth?

In answering these questions, I will distinguish between cyclical and structural factors.

Cyclical factors affecting trade growth

As for the cyclical factors, empirical evidence suggests that economic growth alone is often not a sufficient condition for strong trade growth. Indeed, trade did not start to lift off before we saw a nascent recovery in global investment, which had weakened significantly after the Great Recession.

On my next slide you can see that in advanced economies the share of public and private investment in output declined sharply with the advent of the crisis and has remained well below pre-crisis levels since then. For emerging markets, the investment share had been rising but it has plateaued in recent years.

So, the composition of growth matters for trade. Investment in particular has a relatively high import intensity.[2] As a result, a slowdown in investment demand typically has a disproportionately large adverse impact on trade, relative to other GDP components. It is therefore no coincidence that the recovery in trade last year was led by exports of capital goods and intermediate goods, both key inputs to investment. You can see this clearly in the case of the euro area on the right-hand side.

The implication is that future trade growth will depend to some extent on the sustainability of the current investment recovery. For sure, continued accommodative financial conditions and business optimism will continue to support investment and hence trade. The United States has also just lowered its taxation of capital, which can be expected to further boost growth in capital formation. In the euro area, investment is expected to remain robust due to rising corporate profits, high levels of expected earnings, and an increasing need to modernise the capital stock. Indeed, according to Eurosystem staff projections, investment in the euro area is expected to increase by just over 10% until the end of 2020.[3]

So, overall, we can be confident that investment growth, and the current broad-based economic expansion more generally, will continue to support international trade in the coming years.

Structural factors affecting trade growth

Yet, while the cyclical pick-up in trade remains supportive, structural headwinds may prevent rates of trade growth returning to the levels we observed in the two decades prior to the crisis. In short, empirical evidence suggests that the factors that have supported extraordinary trade growth rates in the past were special and are likely, by and large, to have run their course.[4]

For example, rapid financial deepening in emerging economies, and better access to capital markets, has helped boost trade growth in the past. But research suggests that there are likely diminishing marginal effects of finance on trade growth.[5] In other words, there appears to be a threshold – when private sector credit reaches around 100% of GDP – beyond which financial deepening no longer contributes meaningfully to trade growth.

But by far the strongest factor behind the boost in trade growth prior to the crisis, but which now appears to be waning, is the international outsourcing of production processes via so-called global value chains.

I would like to focus on this factor in the remainder of my remarks.

Global value chains involve production processes being split into a number of intermediate steps, mainly in order to exploit international factor income differences. As a result, production has become dispersed across countries, and mechanically increased the amount of trade that took place for a given final output. You can see this clearly on my next slide. In the past, we have seen a close relationship between global value chain growth and the share of imports in total output.

The global integration of China, for example, not only increased its exports to developed economies, but it also increased its imports of raw materials and intermediate goods from neighbouring emerging economies. This boosted overall world trade relative to output.

However, as you can see on the same slide, since the crisis we have seen a levelling-off of participation rates in global value chains. In other words, the share of global value chain related exports and imports in total trade has stabilised. This means that the support for world trade from global value chains has recently faded.

The important question to ask then is whether this levelling-off will be temporary or more permanent. In the view of ECB researchers, there are at least three factors that suggest that the slowdown in global value chain formation is likely to persist, at least in the short term.

The first factor relates to supply-chain risks.

You will recall that the 2011 earthquake and tsunami in Japan caused severe supply disruptions. Some companies discovered, the hard way, that supply chains were not transparent, rather like the fault lines in securitisation that caused the great financial crisis. In short, suppliers hired sub-contractors, who themselves hired sub-contractors, and so on. As a result, an OECD report suggests that supply chains are increasingly designed to contain risks as well as costs.[6] Often, this implies shorter and more transparent value chains. And given the intimate relation between digitalisation and trade, this trend could be amplified further in the future by rising cyber risk and risks to data integrity.

The second factor relates to shifts in comparative advantages.

In the past, wage differentials for unskilled labour made the international fragmentation of production processes worthwhile. Some of those wage differentials are now less marked as emerging economies continue to develop. In China, for example, real wages have increased by a factor of ten since 1995.

The implications for trade are twofold. First, as the Chinese and other emerging market economies mature and incomes grow, there is a rising shift from investment to consumption. This results in a lower trade intensity of demand. We already see that Chinese import growth has slowed markedly.

The second implication is that outsourcing of production processes has become less profitable. In the short term, this is unlikely to unravel existing value chains that also benefit from important supplier network effects – that is, from local upstream and downstream inputs and services. But in the long run it might lead to businesses reconsidering their offshoring practices.

This brings me to my third point.

Shifts in comparative advantage could simply mean that other, less developed economies will take over from the more mature economies at the lower end of global value chains, following the traditional “flying geese” pattern. Like nomads, firms move on and global value chains move with them. Lumpy technological change could even help some of these economies leapfrog and jump directly to the most advanced stage of technology – the so-called “advantage of backwardness”.[7]

I would like to suggest, however, that the fourth industrial revolution – and the associated increase in automation and the use of artificial intelligence – may mark a move away from this model.

The reason is that the increased use of robots has the potential to modify the relative factor intensities in the production of certain goods and services and may thereby sever the link between, say, cheap labour and the location of unskilled manufacturing activities.[8] Put simply, if robots can deliver the same output more cheaply, more efficiently and closer to the consumer, then firms may have fewer reasons to spread production across countries.[9]

In other words, robots could turn global value chains on their head and cause firms to reconsider offshoring practices. A survey by the Boston Consulting Group, for example, revealed that more than 70% of senior manufacturing executives in the United States consider that robotics improve the economics of local production.[10]

Lower automation costs are a key ingredient of this rethinking. Indeed, while the cost of labour is rising in traditional low-cost developing economies, the cost of robots has fallen sharply. By some estimates, the average price of industrial robots has declined by about 40% over the past ten years and is projected to decline considerably further.[11]

And the potential for automation is enormous. A recent McKinsey report suggests that 60% of global manufacturing activities, and 81% of manufacturing hours, could be automated using existing technology.[12] This is not just a topic for the future. We are already seeing clear signs of accelerating automation.

According to data from the International Federation of Robotics, the global supply of industrial robots grew by 19% on average between 2009 and 2016. It is forecast to increase further by almost 80% by 2020, bringing the total stock of robots to around three million.

Of course, technological progress also changed the way we produced goods and services in the past. But because the current breakthroughs – just think of 3D printers, autonomous vehicles or cognitive computing – are virtually unprecedented in scope and scale, the “march of the machines” may potentially render a significant share of the international fragmentation of trade redundant, particularly in the manufacturing sector.

The rise of automation may therefore accelerate a process that Dani Rodrik termed “premature deindustrialisation” in developing economies.[13] This term describes a pattern whereby developing economies see their manufacturing base shrink at a level of income that is far below the level attained by advanced economies before they started to deindustrialise.

This means two things. First, the impact of reshoring and the automation of unskilled manufacturing processes on developing countries’ labour markets could be significant. The International Labour Organization recently estimated that around two-thirds of jobs in the textile, clothing and footwear industry in Indonesia are at risk of automation.[14] For Cambodia, the figure is 90%.

Second, automation may become a headwind to the catching-up process of developing countries. Historically, productivity in the manufacturing sector has tended to converge to the global frontier more easily than that in other sectors. Manufacturing was thus traditionally a sector that allowed developing economies to catch up with advanced economies. China is certainly a case in point. But to the extent that automation accelerates the decline in manufacturing, it may force countries to consider the development of other growth models.

None of this is to say that technological progress is bad and should be stopped. On the contrary, if managed wisely, the fourth industrial revolution has the potential to lift global income levels and to improve the quality of our lives. After all, technological progress remains the engine of both growth and aggregate employment, although often in an increasingly disruptive way.

Historical evidence provides some cause for optimism. A recent study on German manufacturing, for example, finds that automation accounts for around a quarter of the manufacturing jobs lost between 1994 and 2014.[15] But these jobs were fully offset by higher employment in the services sector. Moreover, manufacturing workers in positions with greater exposure to robots were more likely to stay at their current workplace, although not necessarily in the same job and usually at the cost of lower wages.

Such compositional changes have taken place in the past too. For instance, the share of US employment in agriculture fell by 56 percentage points between 1850 and 2015. New technologies may bring new opportunities too. The McKinsey report I mentioned estimates that by 2030, around 10% of labour demand will be for positions that barely exist today, for example AI specialists and big data analysts.[16]

This transition is unlikely to be swift or easy, however. History also provides many examples of how changes in relative sectoral demand can create large and long-lasting divergences in labour market outcomes. The European Union is a case in point. There are regions where high rates of unemployment have persisted for decades following the decline of employment in certain industries, such as coal mining and steel production.

In the end, the transition will be governed by the extent to which employment creation in new sectors keeps pace with the automation of jobs in existing sectors. And it will depend on the ability of workers to acquire new skills, and potentially to relocate geographically, so that they can transfer between sectors – and on how they can be empowered to do so.

Policy implications and conclusions

With this in mind, let me conclude with some policy implications.

The first is that automation implies that protectionist policies aimed at preventing – and reversing – job losses among low-skilled workers in manufacturing are unlikely to achieve their aim.

This is because reshoring, forced or not, is ultimately the outcome of regained competitiveness and changes in relative factor intensities. Production then becomes more capital and skill-intensive and is unlikely to create many new jobs for low-skilled workers. Higher tariffs are also less effective than they were in the past, given that intra-firm trade has grown substantially. As a result, higher tariffs may well reduce domestic profitability.

In other words, policymakers need to adapt to the changing nature of global trade. As Richard Baldwin points out in his recent book, the focus on the flow of goods between countries is misplaced. The current round of globalisation relies on the flow of know-how across borders.[17] As such, whereas previous industrial revolutions tended to affect mainly low-skilled workers, the current information revolution makes even mid-skilled jobs insecure.

The second implication is that policymakers need to help new industries to grow and develop. This is particularly important for services, which already account for two-thirds of global GDP and employment, and represent many of the potential growth sectors in the age of digitalisation and automation. Research by the ESCB’s CompNet research network shows, for example, that many EU services sector firms are far behind the productivity frontier.[18]

Reallocating capital and labour towards more productive firms would help boost overall competitiveness and support employment.

For the EU, this means completing the Single Market for services. The same CompNet research points to the potential benefits of increased trade in services. Firms that have just started to export are, on average, about 15% more productive, 30% larger and pay 10% higher wages than non-exporting firms in the same narrowly defined sector. Not only are exporting firms more productive at the outset, they increase their productivity in their first year of exporting by more than comparable non-exporting firms.[19]

But policy actions must go beyond trade initiatives. In Europe, we need comprehensive policy action, at both EU and national level, to support workers who have lost their jobs due to technological shifts and facilitate employment in emerging industries. Certainly, this involves ensuring adequate education and retraining programmes to help smooth the transition to new employment. But it also means continuing to address structural rigidities in labour markets that may prolong and amplify secular shifts in labour demand. This includes fostering labour mobility across EU countries. Freedom of movement of workers is undoubtedly an engine of growth.

But we should also be realistic. Not everyone will benefit from the technological changes, and new solutions are needed to address these challenges. Continued high structural unemployment in some European countries shows that this is an area where policymakers have not been successful in the past.

The third implication is that the challenges of automation go far beyond employment. History corroborates this view. Technological progress in the early part of the 19th century was accompanied by a long period of stagnation in real wages, even though output per worker increased sharply.[20] The late 19th century also witnessed a prolonged period of deflation brought about by technological improvement that was unpopular at the time, even though it was accompanied by strong output growth.[21]

The Western Balkan economies share many of the opportunities and challenges that I have discussed. Lower GDP per capita raises the opportunity to leapfrog and jump directly to the digital economy, as well as the risk of being hurt by reshoring and premature deindustrialisation. Trade openness in the region remains below that of other comparable economies in central, eastern and south-eastern Europe. This may in part reflect institutional factors, such as the effectiveness of the judiciary system or infrastructure development needs, but may also reflect competitiveness bottlenecks, including of the type I mentioned earlier. Addressing these bottlenecks at a national and at a regional level will foster trade, improve access to new, larger markets and, ultimately, accelerate convergence and income growth in the region.

Thank you.