BIEM

A.Y. 2024/2025

B.LAB HANDOUTS

EUROPEAN ECONOMIC POLICY

-FIRST PARTIAL-

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European Economic Policy

1st Partial Exam

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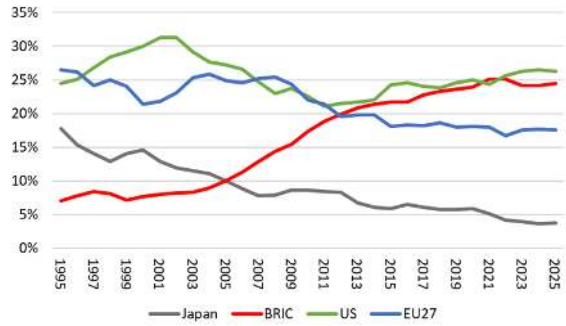
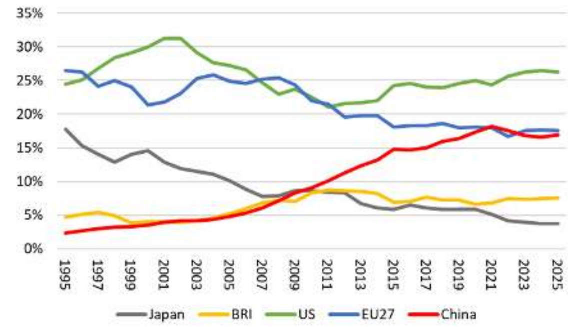
CH 1: EU in the Global Arena

Key Economic Indicators (2024 IMF Data)

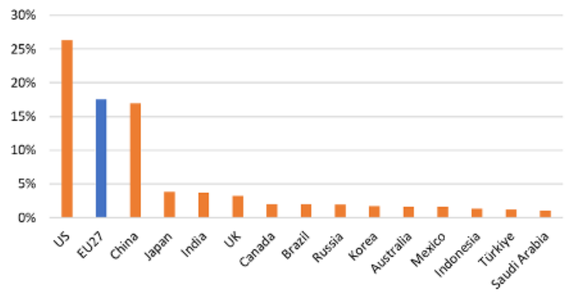
- **US**: GDP: $29,168 billion, Population: 336 million, GDP per capita: $86,601
- **EU-27**: GDP: $19,403 billion, Population: 449 million, GDP per capita: $43,194
- **China**: GDP: $18,273 billion, Population: 1,409 million, GDP per capita: $12,969

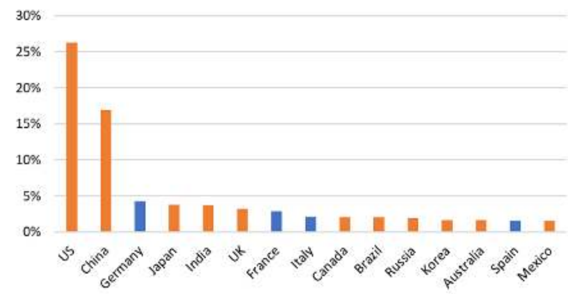
From the first graph we can see that **BRIC** seems to be a very **strong union**, but the rise in the red curve is due to China as we can se from the second graph.





We can see that if we reason as EU we are the second most powerful union of countries, while if we reason on an individual basis, we would be really less influential.





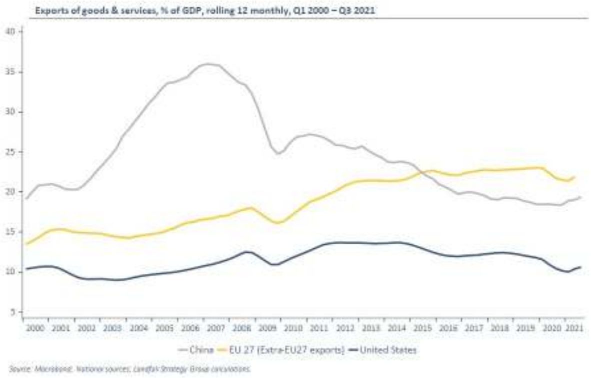
GDP serves as a **proxy** for **assessing the potential size of an export market**. It provides a broad sense of **how large an economy is** and its **economic influence**. However, there is an ongoing debate on whether GDP should be the primary measure, as factors like **happiness** and **well-being** may provide **alternative indicators** of economic success. Despite these discussions, GDP remains widely used because it is relatively **easy** to **measure**.

A **proxy** is something that allows you to estimate a variable that is not directly observable in the data. For example, if you want to determine how many people want to go to the beach, you might use the number of sunny days as a proxy. Similarly, GDP acts as a proxy for estimating the total production of a country, as directly measuring every economic activity is difficult.

One of the first actions taken by **President Trump** was to **withdraw from an international agreement** (Trans Pacific Partnership), signaling a **shift in trade policy**.

By looking at the graph below we can say that:

- China had a very important increase in the openness of its economy. This is because China joined the WTO in 2000-2001, integrating further into global trade networks
- Even when excluding intra-EU trade, the EU trades more globally than the US, highlighting its significance in international commerce.



In general, the size of a national economy affects:

- **Global influence** and **trade agreements**
- **Investment attractiveness**
- **Living standards** and **social policies**

The EU represents 5.4% of the world's population but accounts for 18% of global GDP.

The EU accounts for 50% of global welfare expenditure.

More than 20% of global trade flows come from the EU (excluding intra-EU trade).

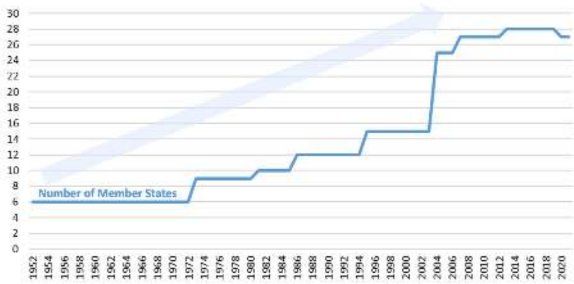
EU financial markets are about 120% the size of U.S. markets, with 50% of global banking assets.

The EU is one of the three large markets of the world, the largest trading partner, and a key player in financial markets, with the most advanced welfare system and living standards.

EU History: Widening and Deepening

WIDENING

From the graph we saw many members willing to take part of the EU but one, the UK.



The early steps

- **Post-WWII reconstruction** led to the idea of a "United States of Europe". It was a mess, there were disaster in terms of human capital and economic terms.
- **Marshall Plan (1948)**: U.S. economic aid in exchange for coordinated European policies. The US offered strong financial assistance to reconstruct: Marshall plan. We just finished one war and there was risk of additional wars coming from east. We want a strong Germany but it was also worrying. We wanted to protect the safety of the continent.
- **European Coal and Steel Community (ECSC) (1951)**: Belgium, France, Germany, Italy, Netherlands, and Luxembourg placed coal and steel under supranational control to prevent future conflicts.
- **European Economic Community (EEC) (1957, Treaty of Rome)**: A **customs union** promoting the "four freedoms": movement of goods, services, capital, and people.

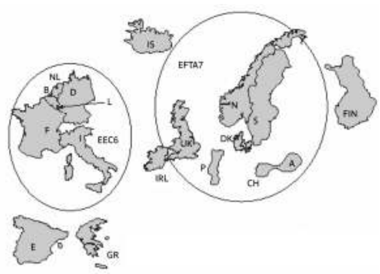
There are **2 major agreements**:

- **Free trade area FTA**: you have free trade among your partners. Despite trading fro free with one countries, you can apply tariffs to other countries.
- **Custom union**: situation in which you have the same structure of countries, you still decide tor tarde for free with one country and you decide to coordinate with respect of the world. Common External Tariff.

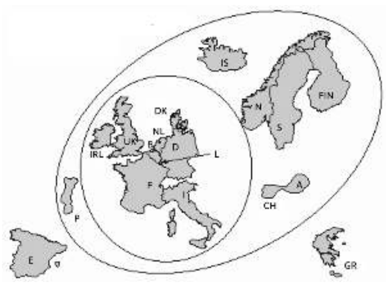
(MFN is when you decide to apply the most favorable tariff to the member states.)

By the late 1960s 2 non overlapping circles

- **EEC6** European Economic Community: Belgium, France, Italy, Luxembourg, Netherlands, West Germany
- **EFTA7** European Free Trade Agreement: Austria, Denmark, Norway, Portugal, Sweden, Switzerland, UK



- Within the EEC, trade barriers were eliminated among member states, allowing tariff-free exports. In contrast, firms from European Free Trade Association (EFTA) countries faced tariffs when exporting to the EEC, causing **trade discrimination**. EG: British firms exporting to Germany had to pay tariffs, while French exports to Germany were tariff-free.
- The **GDP** (potential market size) of the **EEC** was significantly **larger than EFTA's**, making it a more lucrative market. Additionally, **income growth in the EEC was twice as fast as in EFTA countries**, further enhancing its attractiveness to exporters.
- The **economic benefits of EEC membership** created political momentum in EFTA countries to join the EEC to **avoid further trade disadvantages**.



- The UK applied for membership in 1961, followed by Denmark, Ireland, and Norway.
- **Charles De Gaulle**, the French President, **vetoed the UK's membership twice** in the 1960s, citing concerns about British alignment with the U.S. and its economic compatibility with the EEC.
- In 1973, the UK, Denmark, and Ireland successfully joined the EEC. Norway held a referendum but decided not to join, maintaining its EFTA membership.

With the **first enlargement** (1973), the EEC moved from 6 to 9 members while the EFTA maintained 7 members thanks to the entrance of Iceland and Finland (however much smaller than Denmark and the UK).

The expansion of the EEC

Thanks to positive political developments, Greece joined in 1981 (EEC10), Spain and Portugal in 1986 (EEC12). Deeper integration in EEC strengthened the 'force for inclusion' in remaining EFTA nations.

The **European Economic Area (EEA)** initiative was launched in 1989 to **extend European single market of the EEC to remaining EFTA nations**. Today, the EEA is made of 27 members of the EU and three of the four member states of the EFTA (Iceland, Liechtenstein and Norway).

The **fourth enlargement** adds Austria, Finland, Sweden in 1995 and leads to the EC15 (With the Maastricht Treaty, 1993, the EEC was renamed the **European Community** to reflect that it covered a wider range than economic policy).

The fall of the Berlin Wall and of the USSR

At the end of WWII, while the US was providing aids to western Europe under the Marshall Plan, the **Soviets** had installed left-wing governments in the countries of eastern Europe liberated by the Red Army.

The **Warsaw Pact** (1955) was a collective defense treaty established by the Soviet Union and Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania. The Warsaw Pact embodied what was referred to as the Eastern bloc, while NATO and its member countries represented the Western bloc.

This changes **at the end of the 80s**:

- End of 1989: democracy in Poland, Hungary, Czechoslovakia; fall of the Berlin Wall (built in 1961).
- 3 October 1990: German re-unification.
- End of 1990: independence of Estonia, Latvia and Lithuania;
- End of 1991: the Union of Soviet Socialist Republics (USSR) breaks up.

The Cold War ends and, with it, the military division of Europe ends.

Reuniting East and West Germany

At first, no promise of membership but free trade agreements with promises of deeper integration and some financial aid.

In June 1993 the European Council set the **Copenhagen criteria** for accession of Central and Eastern European Countries (CEECs):

1. **Political stability** of institutions that guarantee democracy, the rule of law, human rights and respect for and protection of minorities;
2. **A functioning market economy** capable of dealing with the competitive pressure and market forces within the Union;
3. **Acceptance of the Community *acquis*** (**EU law in its entirety**) and the ability to take on the obligations of membership.

CEEC nations plus Cyprus and Malta joined the EU in 2004 followed by Romania and Bulgaria in 2007.

The three Copenhagen criteria **still apply today**.

Becoming a member of the union

If a country wants to join the EU:

1. **European Identity**: The country must be geographically and politically European, as specified in Article 49 of the Treaty of the EU. It must also sign an **Association Agreement** that includes an accession clause.

2. **Application Submission**: The country must submit a formal application, which needs **approval** from the **Council of the EU** (unanimously), after **consultation** with the **European Commission** and receiving **consent** from the **European Parliament**.

3. **Copenhagen Criteria Compliance**: The country must meet the first two Copenhagen criteria:

   - **Political Stability**: Guarantee democracy, rule of law, human rights, and minority protections.

   - **Economic Functionality**: Possess a market economy capable of withstanding competition and market forces within the Union.

4. **Adopting EU Laws (Community Acquis)**: The candidate must fully adopt EU law, divided into 35 policy chapters (e.g., transport, energy, environment). Each chapter is negotiated individually.

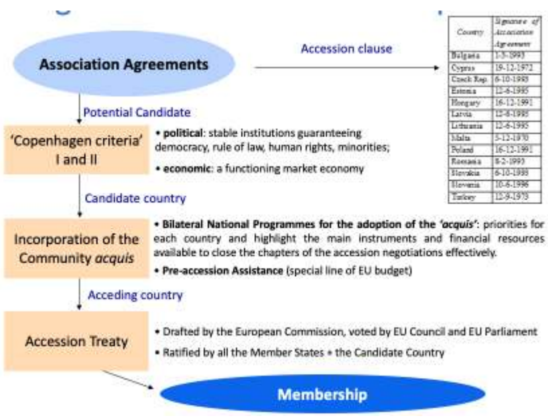
5. **Accession Treaty Ratification**: The treaty, drafted by the European Commission, requires **approval** by the Council of the EU and the European Parliament and **ratification** by all existing member states and the acceding country.

The procedure:

- **Monitoring**: The European Commission monitors the candidate's progress in adopting EU laws and meeting commitments, including any benchmarks.

- **Guidance**: The candidate receives guidance during the process to ensure alignment with membership responsibilities. This also reassures current members about the candidate's readiness.

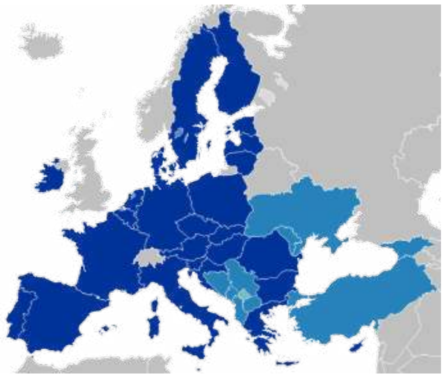
- **Reporting**: The Commission provides updates to the EU Council and European Parliament through strategy papers, regular reports, and clarifications on conditions for progress.



Balkan Countries in the EU: Croatia (Joined in 2013), Slovenia (Joined in 2004), Bulgaria (Joined in 2007), Romania (Joined in 2007), Greece (Joined in 1981)

Kosovo declared its **independence** from Serbia in 2008. Its independence has not been recognized by Serbia and five EU member states: Cyprus, Greece, Romania, Slovakia and Spain

These countries oppose recognition due to various domestic and international concerns, including separatist movements within their own territories.

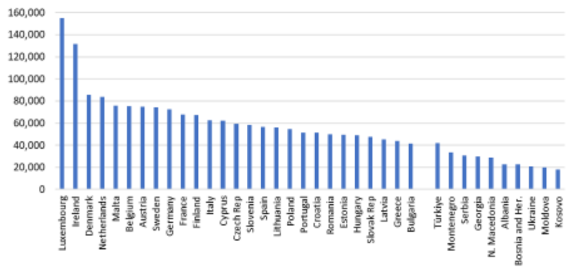


Current members

Candidate countries: Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, and Serbia, Ukraine, Türkiye (in 2018, accession negotiations came to a standstill).

Potential candidate countries (These countries have not fulfilled all the criteria necessary to open accession negotiations or submitted an application to join the EU): Kosovo

The graph highlights significant economic disparities across Europe. Luxembourg and Ireland lead with the highest GDP per capita, reflecting strong economies and high living standards. Western European countries dominate the middle to high-income categories, while Eastern European and Balkan countries, including Kosovo, Albania, and Serbia, lag behind with much lower GDP per capita. The gap is particularly evident between EU members and candidate countries like Türkiye and Ukraine, showcasing the challenges of economic convergence in the region.



The big enlargement (2004) after the Cold War

For many years, efforts have been made to prepare for the accession of 10 Central and Eastern European and Mediterranean countries to the EU. Despite challenging negotiations, these efforts demonstrate a shared commitment to unifying Europe and overcoming the division caused by the Iron Curtain, which persisted for over half a century until the collapse of the Soviet Union in 1991.

Romano Prodi paid tribute to the resilience of these nations' peoples, who maintained hope even during Stalinism's darkest days. Since the fall of the Berlin Wall in 1989, they have undergone a peaceful transformation grounded in democratic values, now a shared European heritage.

The case of Türkiye

Türkiye, with a population of 84 million, has a long history of engagement with the EU. It applied for EU membership in 1987 and was declared eligible in 1997, having satisfied the political and economic Copenhagen criteria. Its relationship with the EU dates back to 1959 and includes the ***Ankara Association Agreement of 1963***, which laid the groundwork for a Customs Union. This Customs Union was fully established in 1995, enabling **free trade between Türkiye and the EU** and **harmonizing external tariffs**.

Accession negotiations formally began in 2005 but were **frozen in 2018**. The EU has raised significant concerns about the **deterioration of democracy**, the **rule of law**, **fundamental rights**, and **judicial independence in Türkiye**. These concerns are compounded by Türkiye's **refusal to recognize Cyprus** and its **failure to remove barriers to the free movement of people and goods**. Specific issues include:

- **Discriminatory visa regimes** against **Cypriot** nationals while waiving short-stay visa requirements for other EU countries.
- **Restrictions on direct transport links and trade** with **Cyprus**.

Additionally, Türkiye's **refusal to adopt EU-aligned restrictive measures against Russia**, combined with its **supportive rhetoric toward Hamas** after the attacks on Israel on 7 October 2023, has further **strained relations**. These issues highlight the significant political and diplomatic challenges hindering Türkiye's EU accession process.

The case of Ukraine

Ukraine officially **applied** for EU membership on 28 February 2022, just four days after the Russian invasion began. On 17 June 2022, the European Commission issued its opinion on membership applications from Ukraine, Georgia, and Moldova. In light of this, Ukraine was granted **candidate** status on 23 June 2022, following a unanimous decision by the EU's 27 Member States.

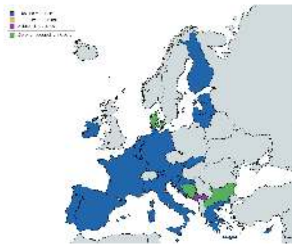
However, candidate status was **contingent** on Ukraine implementing key reforms, such as:

- Establishing **transparent selection** procedures for **judges** of the **Constitutional Court**.
- **Strengthening efforts** to **combat corruption**.
- Enacting and enforcing **anti-money laundering legislation**.

Progress in these areas enabled the European Council to approve the start of accession negotiations on 15 December 2023. The formal launch of negotiations occurred with the first intergovernmental conference on 25 June 2024. Moving forward, the European Commission must evaluate Ukraine's readiness to open negotiations in specific policy areas, ensuring alignment with EU laws and standards.

EU, Eurozone, Schengen, NATO … what is what

European Union (EU)



Economic and Monetary Union (EMU): All EU member states participate in the EMU, coordinating economic policy to achieve the EU's economic goals.

Eurozone: A subset of 20 EU member states that have adopted the euro as their official currency, replacing their national currencies. These countries share a unified monetary policy governed by the European Central Bank (ECB).

Schengen Area

Purpose: Abolishes internal border checks within the Schengen Zone to ensure free movement of people across participating countries.\n

External Borders: Enforces a unified set of rules for external border controls for visitors entering for short stays (up to 90 days).\n

Temporary Controls: In cases of serious threats to public policy or internal security, internal border controls can be temporarily reinstated by Schengen countries.

North Atlantic Treaty Organization (NATO)

Formation: Established in 1949 as a military alliance between North America and Europe.

Members: Currently includes 32 countries, with Finland joining in 2023 and Sweden in 2024.

Objective: To protect the freedom and security of its members through political and military means.

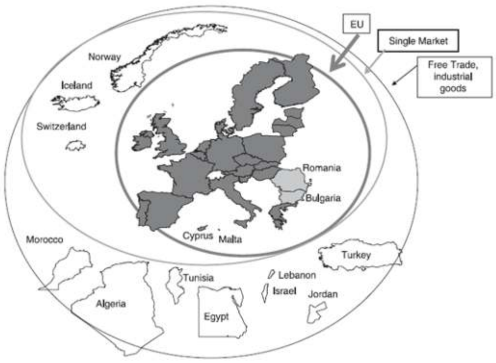
Cooperation with the EU: NATO and the EU collaborate in areas such as crisis management, capability development, political consultations, and supporting mutual partners.

The diagram below illustrates the **Euro-Mediterranean Trade Bloc**, highlighting the EU's economic integration and its extended trade agreements.

- **Core EU Members**: Represented by the darker shaded region, EU countries fully participate in the Single Market, allowing free movement of goods, services, capital, and labor.
- **Non-EU European Partners**: Countries like Norway, Iceland, and Switzerland are outside the EU but have free trade agreements, particularly for industrial goods.
- **Mediterranean Partners**: Nations such as Morocco, Algeria, Tunisia, Egypt, Lebanon, Israel, Jordan, and Turkey engage with the EU through the Pan-Euro-Med cumulation system, focusing on free trade for industrial goods.

This setup demonstrates the EU's efforts to build a layered network of economic partnerships, fostering trade and integration with both European and Mediterranean regions.

FIGURE 11
Euro-Med Trade Bloc with PECS Extended to Meds



DEEPENING (policies at EU level)

The EU operates based on competences defined by its **treaties**. These competences determine whether the EU, the member states, or both have the authority to legislate and implement policies. They are categorized into exclusive, shared, and supporting competences.

- **EXCLUSIVE Competence**: In these areas, only the EU has the authority to legislate and conclude international agreements. Member states cannot act independently. Key areas include:
  - **Customs Union**: Management of trade across borders and common customs policies.
  - **Competition**: Regulation of competition to ensure fair practices within the internal market.
  - **Monetary policy for member states who use the Euro**: The EU sets interest rates and aggregates monetary policies for countries using the euro, ensuring consistent rates for borrowing and financial stability.
  - **Conservation of fisheries and other resources under the Common Fisheries Policy**: Under the Common Fisheries Policy, the EU oversees the sustainable use of marine resources.
  - **Common Commercial Policy**: Regulation of trade with non-EU countries, including tariffs and trade agreements.
- **SHARED Competence**:
  1. member states can't exercise competence where the EU has done so in the following areas:
     - **Internal market**: Coordination to ensure free movement of goods, services, capital, and labor.
     - **Economic, social and territorial cohesion**: Promoting regional development and reducing disparities in well-being and prosperity among subnational regions.
     - **Agriculture and fisheries, excluding the conservation of marine biological resources**: Policies excluding marine conservation.
     - **Consumer protection**: Ensuring the safety and rights of consumers.

- **Transport**: Establishing EU-wide transport networks and regulations.
- **Energy**: Policies ensuring energy security, sustainability, and integration.
- **Security, justice and home affairs**: Coordination on issues like migration, policing, and judicial cooperation, though fiscal policy remains with member states.

2. EU and member states share competence in the following areas:
    - **R&D and outer space**: Both the EU and member states collaborate on innovation and space exploration.
    - **Development and humanitarian aid**: Some common policies exist, but member states maintain a degree of autonomy.

- **SUPPORTING Competence**: The EU can only support, coordinate, or supplement member states' efforts without interfering with their authority. Key areas include:
  - **Tourism**: Promoting tourism across the EU while respecting national strategies.
  - **Education**: Supporting educational initiatives and fostering collaboration between systems.
  - **Culture**: Encouraging the preservation and promotion of European cultural heritage.
  - **Administrative cooperation**: Helping member states streamline administrative processes.
  - **Human health**: Supporting public health policies and responding to cross-border health threats.
  - **Civil protection**: Coordinating disaster prevention and response across member states.

Economic Integration and the Evolution of the European Union

Economic integration in Europe began with the creation of a **free trade area** (FTA) and a **customs union**, achieved by the 6 founding members of the **European Economic Community (EEC)** by 1968. This formed the basis for deeper integration through the gradual development of the European Internal Market, built on three key pillars:

1. **Four Fundamental Freedoms**: Free movement of **goods**, **services**, **workers**, and **capital**: Ensures that firms and consumers across the region can equally access markets, with opportunities to buy, sell, and invest throughout the area. Labor and capital owners are free to allocate their resources to any economic activity anywhere within the internal market.
2. **Common Policies Where Necessary**: The EU acts strictly within the **competences conferred upon it by the Treaties**, while areas not delegated to the EU (e.g., social policies, welfare, taxation) remain under the jurisdiction of member states.
3. **Harmonized Rules and Procedures**: The establishment of a **unified body of EU law** to ensure consistent rules and procedures across member states, fostering stability and predictability in the internal market.

Coordination beyond trade

Some **coordination of monetary and exchange rate policies** was introduced to support the goals of economic integration. Alongside this, institutions, laws, and decision-making processes were developed to facilitate cross-border cooperation and governance.

Despite significant progress, the full realization of a **common market** was not achieved by the early **1990s**, and efforts to complete the **Internal Market** continue to this day.

The Union Era and the Euro

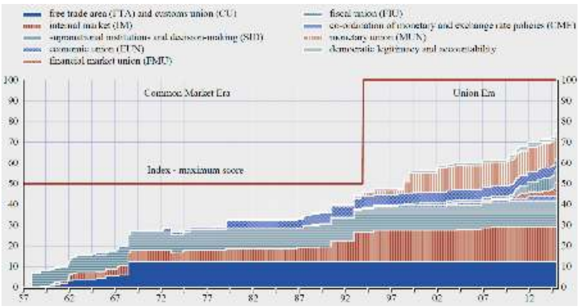
The Union Era was marked by the establishment of the **Economic and Monetary Union** (EMU) and the introduction of the **euro** (€) as a single currency. This era represented a deeper level of integration, with mechanisms to coordinate national economic policies. However, the initial EMU framework faced challenges. It struggled to manage shocks from the global financial crisis and contributed to internal vulnerabilities, setting the stage for the euro area crisis.

Institutional Integration: Two Key Periods

A 2015 study quantified the depth of EU integration from the 1950s to 2014, dividing it into two key periods:

1. **The Common Market Era (1958–1993)**: Spanning from the implementation of the Treaty of Rome to the Treaty of Maastricht, this period focused on establishing the internal market and building the **foundation for cooperation**. Integration goals during this era were represented by a maximum achievable score of 50.

2. **The Union Era (1993–2014)**: Beginning with the Treaty of Maastricht, this era introduced the Economic and Monetary Union, further expanding the scope of EU competences. The integration index doubled to a maximum achievable score of 100, reflecting the broader ambitions of the EU.

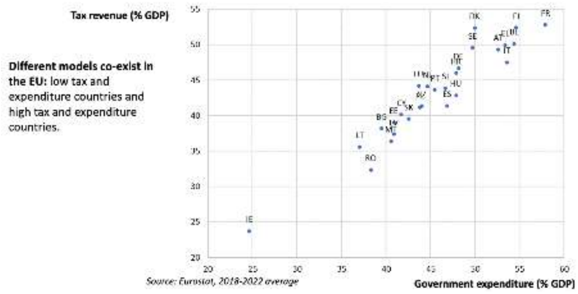


THE OMITTED ELEMENTS

The EU is renowned for its achievements in establishing the single market, single currency, and implementing common policies in areas such as trade, competition, agriculture, and monetary policy. However, several critical aspects remain primarily under the jurisdiction of individual member states, posing **challenges to further integration**.

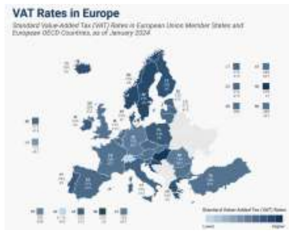
1. **Social Policies and Taxation**

- **National Competence**: Social policy areas, including welfare, health, education, labor market regulation, and pensions, are largely managed by individual member states.
- **Diverging Sensitivities**: EU nations have diverse views on how these policies and taxes should be structured, making harmonization politically challenging.
- **Economic Implications**:
  - In **low-tax countries**, workers benefit from higher net salaries but must pay for services (e.g., education, healthcare, transportation) that are not provided by the government.
  - Conversely, **high-tax countries** typically offer comprehensive welfare systems, funded by taxes, reducing the need for out-of-pocket expenditures.



- **Market Adjustment**: National wage levels tend to adjust to offset disparities, minimizing unfair advantages between low-tax and high-tax countries.

2. **Taxation Frameworks in the EU**: While taxation policies largely remain a national prerogative, the EU enforces minimum thresholds and introduces rules to ensure consistency across the single market. Two primary tax systems illustrate this balance:



- **Value Added Tax (VAT)**: A consumption tax applied to the value added at each stage of production. Businesses receive tax credits for VAT already paid along the supply chain, making it a tax on final consumption borne by the end consumer. EU Standards:
  - Minimum VAT rate: 15% for goods and services.
  - Reduced VAT rates (minimum 5%) and exemptions for specific goods/services, such as food, medicines, books, and activities like healthcare, education, and insurance.
  - Member states retain the ability to set their own standard VAT rates above the EU minimum.

- **Corporate Income Tax (CIT)**: A direct tax primarily regulated by member states, allowing flexibility in national tax rates. EU-level initiatives aim to prevent tax evasion and avoid distortions in the single market, promoting fair competition.

3. **Harmonization Challenges**: Achieving top-down harmonization in social policy and taxation is inherently complex due to the diverse economic and political landscapes of member states. The question remains: Is harmonization necessary, or can market forces and national autonomy effectively address disparities?

The key principles of the EU

Though the powers of the EU have expanded (the deepening dimension), the aim of the EU is not to intervene in every field. The exercise of EU competences is subject to three fundamental principles:

- **The principle of conferral**: The EU can **only act within the limits of the competences conferred upon it by member states in the EU Treaties**. These competences are aimed at achieving the objectives explicitly outlined in the Treaties. Areas not delegated to the EU remain under the jurisdiction of national governments.
- **The principle of subsidiarity**: In areas of non-exclusive competences, the EU can act only if the objectives of the proposed action:
  - Cannot be sufficiently achieved by individual member states.
  - Can be better achieved at the EU level: This ensures that the EU intervenes only when it is more effective and efficient than actions taken at national, regional, or local levels.

  EG: Transport:

  - The EU has competence in transnational transport projects, such as developing common infrastructures and transport corridors (TEN-T) and harmonizing technical standards across member states.
  - Urban transport (e.g., taxi regulation) remains under the authority of local or national governments.

  The Court of Justice of the EU (CJEU) ruled that Uber should be classified as a taxi service rather than a digital platform. Uber provides a direct transport service and exercises significant influence over pricing. As a result, when Uberpop was introduced in the EU, it faced bans in Italy, Germany, and France but initially operated in Czech Republic, Estonia, and Poland. The service is now discontinued across the EU.
- **The principle of proportionality**: The **scope and content of EU actions must not exceed what is necessary to achieve the objectives of the Treaties**. This ensures that EU intervention is limited to the degree required to effectively address the issue, avoiding unnecessary overreach.

EU Institutions

European Commission

Role: Acts as the **executive and bureaucratic** arm of the EU.

Key Functions:

- Promotes the **general interest of European integration**, in light of the Treaties.
- **Manages EU finances**: collects revenues, proposes the annual budget, and administers expenditures.
- **Proposes new laws and policies** ("powers of initiation").
- **Oversees the execution of laws and policies**; can take non-compliance cases to the CJEU.
- **Represents the EU in international organizations** like the WTO.

Structure:

- Composed of **27 Commissioners**, **one from each member state**, each responsible for a specific policy area (e.g., environment, trade, competition).
- Led by a **President** (currently Ursula von der Leyen) who sets the **agenda**, **chairs meetings**, and **distributes portfolios** among Commissioners and can launch major new policies.
- Commissioners serve a **renewable 5y term**.

The Council of the EU

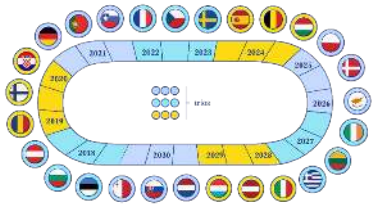
Role: Represents **national governments**; works with the European Parliament in decision-making.

Structure: Composed of **national ministers meeting in 10 configurations** depending on the topic (e.g., General Affairs, Ecofin). The **Presidency rotates among member states every 6 months** (currently held by Poland). Relevant EU Commissioners also attend meetings.

Decision-Making Modes:

- **Simple Majority**: For procedural matters.
- **Qualified Majority Voting (QMV)**: Requires approval from **55% of member states** (15/27) representing **65% of the EU population**. Most common mode. It avoids the formation of coalitions, respecting smaller countries as well as the majority of the people.
- **Reverse Qualified Majority Voting (RQMV)**: Used for **sanctions**; decisions are approved unless overturned by a qualified majority.
- **Reverse Reinforced Qualified Majority**: At least **72% of MS** (20/27) representing at least **65% of the EU population** are needed to object to the Delegated Act: i.e., non-legislative acts adopted that serve to amend or supplement the non-essential elements of the legislation (e.g., EU Taxonomy).

- **Unanimity**: Required for **treaty changes**, **taxation**, or **multi-annual financial framework** (MFF) or if the Council wants to change a Commission proposal against the opinion of the Commission.



European Council

Role: Sets the EU's **overall political agenda** but does NOT legislate.

Structure:

- Composed of the **Heads of State or Government** of **member states**, plus the **President of the European Commission**.
- Led by a **President** (currently António Costa), elected for a **renewable 2.5y term**.

Functions: Provides strategic direction through conclusions adopted during meetings. Handles sensitive issues like defense cooperation (e.g., PESCO in 2017).

In the European Council meeting of 15 December 2016, EU leaders emphasized the need for Europe to take greater responsibility for its security. The Council welcomed the European Defence Action Plan, highlighting the importance of involving member states in strengthening European defense and security policies.

The Commission was invited to propose the establishment of a European Defence Fund by 2017 to support joint development of defense capabilities among member states.

This initiative gained urgency after Donald Trump questioned NATO's relevance in March 2016, prompting the EU to take a more proactive stance on defense.

As a result, in 2017, the EU launched Permanent Structured Cooperation (PESCO) with 25 member states (Denmark and Malta opted out). PESCO aims to enhance defense cooperation, ensuring the EU can handle complex missions and improve security for its citizens.

EU BODY		NON EU BODY
European Council	**Council of the EU**	**Council of Europe**
Meeting of 27 EU member states leaders (heads of state and government).	Meeting of 27 EU national government ministers grouped by policy area.	This is an international organization, based in Strasbourg, which was created in 1949 and now includes 46 European countries.
It is an institution of the EU.	It is an institution of the EU.	It is not an institution of the EU.
It does not negotiate or adopt EU laws.	It negotiates and adopts EU laws. In most cases, the Council decides together with the European Parliament through the ordinary legislative procedure.	Set up to promote democracy, human rights, and the rule of law.

EU BODY		NON EU BODY
European Council	**Council of the EU**	**Council of Europe**
It defines the EU's overall political direction and priorities, traditionally by adopting conclusions.	Depending on the issue under discussion, it takes its decisions by: simple majority, qualified majority or unanimity.	Home to the European Convention on Human Rights and the European Court of Human Rights – among many other things.
The European Council usually decides by consensus (i.e. no member opposes the adoption).	The presidency of the Council is assigned to a member state that changes every six months.	
The President is elected by the European Council by a qualified majority.		

The European Parliament

Role: Shares **legislative powers** with the **Council of the EU**; **directly represents EU citizens**.

Structure:

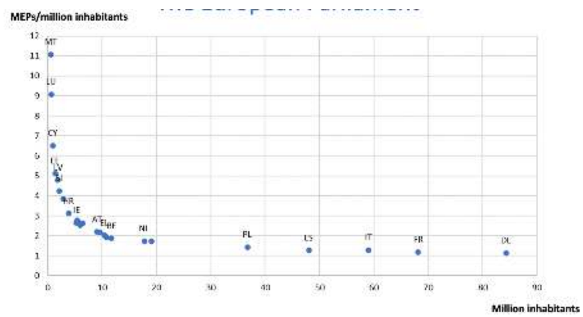
- Composed of **720 Members** of European Parliament (MEPs) elected every five years.
- Seats are distributed by **degressive proportionality** (e.g., Germany has 96 seats, while Malta, Cyprus, Estonia, and Luxembourg have 6 each).
- MEPs are organized into **political groups** (currently eight, including EPP, SD, Greens, and others) based on ideology rather than nationality.
- Offices are located in **Luxembourg** (administration), **Brussels** (committees), and **Strasbourg** (plenary sessions), though this arrangement is often criticized as inefficient.

Functions:

- **Debates, amends, and votes on legislation**.
- Works through **permanent** and **ad-hoc committees** (e.g., environment, budget).

Germany has the highest number (96) of Members while Malta, Cyprus, Estonia, Luxembourg have the lowest (6).

	Population	MEP allocation with proportionality	Actual MEP allocation with degressive proportionality	MEPs per million inhabitants
Germany (DE)	85 million	170	96	1.14
Malta (MT)	0.5 million	1	6	11
DE/MT ratio	170	170	16	



There are currently **eight political groups** in the European Parliament: European People's Party (**EPP**), Progressive Alliance of Socialists and Democrats (**SD**), Patriots for Europe (**PfE**), European Conservatives and Reformists (**ECR**), **Renew** Europe, **Greens**/European Free Alliance, The Left group in the European Parliament - **GUE/NGL**, Europe of Sovereign Nations (**ESN**).

Some Members do not belong to any political group and are known as non-attached Members (**Non-Inscrits**).

There are incentives for MEPs to organise in political groups: the political advantages of working together with like-minded colleagues, groups spokespersons speak first in debates, and Groups receive a staff allocation and financial subsidies

The CJEU

Role: Ensures **EU law is applied fairly and consistently** across all member states.

Functions:

- Rules on the **constitutionality of EU law**.
- **Advises national courts on EU law interpretation**.
- **Resolves disputes** involving EU institutions, member states, corporations, or individuals.

Structure:

- **Court of Justice**: **Handles preliminary rulings**, **annulments**, and **appeals**.
- **General Court**: Focuses on **competition law**, **state aid**, **trade**, **trademarks**, and related matters.

European Central Bank (ECB): Manages monetary policy for Eurozone members. Ensures price stability and oversees financial institutions.

EU Court of Auditors: Audits the EU's finances, ensuring the budget is correctly implemented.

EU Law and Decision Making

The EU's legal system is unique in its **supranational nature**, making it **far more integrated and powerful than the legal frameworks of other international organizations**. Key aspects of EU law include the following principles:

1. **Direct Effect**: EU law creates rights that citizens can directly invoke in their domestic courts. EG: Individuals can use EU law to challenge national legislation that violates EU rules.
2. **Primacy**: EU law takes precedence over national, regional, or local laws in member states. Even the highest courts of a member state (e.g., Germany's constitutional court) can be overruled by EU law.
3. **Autonomy**: The EU legal system operates independently from the legal systems of its member states, ensuring its uniform application across the Union.

Nowadays, 70% of national laws in a given member state, on average, originate directly or indirectly from the EU. In business law, this percentage is even higher, making it crucial for businesses to understand EU legislation.

Sources of EU Law

1. **Primary Sources**:
   - **Treaties**: Define the EU's objectives, institutional roles, and competences.
   - The EU can only act within the powers granted by the treaties.
   - Amendments to treaties require unanimous agreement and ratification by all member states through their national procedures.
2. **Secondary Sources**:
   - **Regulations**: The most powerful form of EU law; they are immediately binding across all member states.
   - **Directives**: Set mandatory goals but leave the method of implementation to member states, typically within a specified timeframe and with reporting obligations to the Commission.
   - **Decisions**: Binding, but specific to particular member states, institutions, or companies.
   - **Recommendations and Opinions**: Non-binding guidance, offering interpretations to aid in the application of regulations, directives, and decisions.

The Treaty of the EU: objectives and tools

Objectives of the EU:

- **Peace and Well-Being**: Promote peace, its values, and the well-being of its people.
- **Freedom, Security, and Justice**: Provide an area without internal frontiers, ensuring free movement of people while maintaining border controls, asylum, and crime prevention.

- **Balanced Economic Growth**: Foster sustainable development through balanced economic growth, price stability, and a competitive social market economy with full employment and environmental protection.
- **Social Justice and Equality**: Combat exclusion, discrimination, and promote social justice, solidarity across generations, and equality.
- **Economic and Territorial Cohesion**: Strengthen cohesion and solidarity among member states while respecting cultural and linguistic diversity.
- **Global Contribution**: Contribute to international peace, security, sustainable development, free trade, poverty eradication, and the protection of human rights.

Tools of the EU:

- **Internal Market**: Create a unified market enabling free trade and economic integration.
- **Economic and Monetary Union (EMU)**: Establish a common currency (euro) for economic stability and cohesion.
- **International Relations**: Promote EU values globally through partnerships, international law adherence, and respect for UN principles.
- **Legislative Powers**: Use the competences conferred by treaties to achieve objectives efficiently and appropriately.

The EU legislative process involves various procedures that engage its institutions. These procedures determine how laws and policies are proposed, debated, and adopted.

1. **Ordinary Legislative Procedure**: Default Procedure: Known as the co-decision procedure before the Treaty of Lisbon (2009), this is the standard method for adopting EU legislation. Key Features:
   - **Equal Role**: Both the **Council of Ministers** and the **European Parliament** have an equal say in the legislative process.
   - **Amendments**: **Both institutions can propose amendments to a legislative proposal**.
   - **Decision-Making**: Laws require approval from both bodies, ensuring a balance between the interests of member states and EU citizens.
2. **Special Legislative Procedures**: When the Treaties specify otherwise, alternative procedures are used. An example is **Assent Procedure**:
   - Used for matters where **member states retain greater control**.
   - The European **Parliament** has a limited role: it can only **approve or disapprove a proposal but cannot amend it**.
   - The Council of the EU has the final decision-making power, giving member states more influence over specific issues.

CH 2: The EU Green Deal

The key takeaway is that, regardless of the system, dataset, or time range used, the evidence remains consistent and compelling. Global temperatures remained relatively stable for an extended period, but **since the 1960s**, a **significant upward trend has emerged**. Additionally, some regions of the world experience higher temperatures than others. Moreover, there is a clear correlation between rising temperatures and economic activity.

1. **Rising Sea Levels**: Sea levels are expected to rise, putting large parts of several major cities at risk of inundation. Coastal communities will face increased flooding and land loss.
2. **More Extreme Weather Events**: **Hurricanes** and other storms are likely to become stronger and more frequent. **Floods** and droughts will become more common, leading to severe water imbalances across regions.
3. **Increased Risk of Wildfires and Water Shortages**: Some regions will experience more severe droughts, increasing the likelihood of wildfires, lost crops, and shortages of drinking water. Less freshwater will be available, as glaciers—which store about three-quarters of the world's freshwater—continue to shrink.
4. **Spread of Diseases**: Warmer temperatures will facilitate the spread of mosquito-borne diseases such as malaria and dengue. Once considered a tropical disease, dengue has been reported in Europe, including Italy, due to the northward migration of mosquitoes driven by changing weather patterns.
5. **Disruptions to Ecosystems and Biodiversity Loss**: Some species will migrate farther north or become more dominant in certain areas. Others, like polar bears, may struggle to adapt and face extinction due to the loss of their natural habitats.
6. **Regional Disparities in Climate Impact**: In Europe, a clear North–South divide is emerging:
   - **Southern countries** will face harsher consequences, including higher temperatures, droughts, and agricultural losses.
   - **Northern Europe** will be relatively less affected, though still experiencing climate-related changes such as shifting ecosystems and increased precipitation.Cities at high risk sea level

Anthropogenic climate change refers to the **long-term alteration of global or regional climate patterns primarily due to human activities**. The most significant contributor is the emission of greenhouse gases (**GHGs**) from activities such as fossil fuel combustion, deforestation, and industrial processes, which intensify the greenhouse effect and lead to global warming.

The Intergovernmental Panel on Climate Change (IPCC) report provides compelling evidence that:

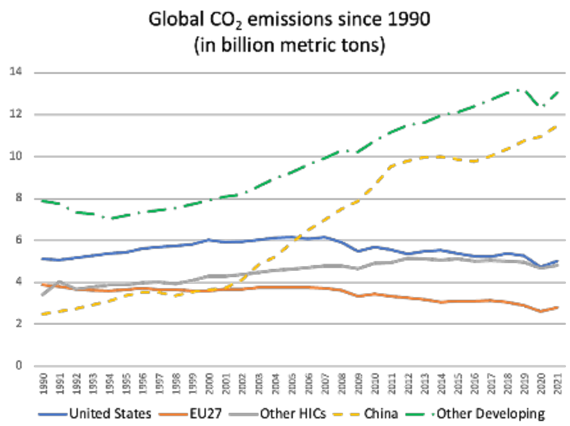
- **Human activities** have contributed to approximately 1.1°C of global warming since the pre-industrial period (1850–1900).
- **Projected warming**: Over the next 20 years, global temperatures are expected to reach or exceed 1.5°C of warming if emissions continue at the current rate.

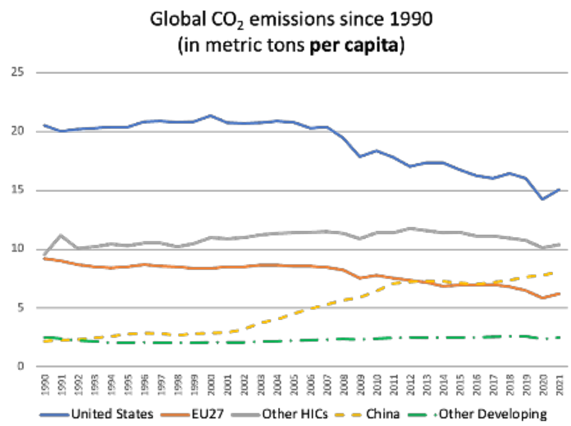
- This assessment is based on **advanced observational datasets** that analyze historical warming trends and the scientific **understanding of how the climate system responds to greenhouse gas emissions**.

The IPCC highlights that **each ton of CO_2 emissions contributes to global warming**, reinforcing the urgent need for emission reductions to mitigate climate change impacts.

Key Insights from the CO_2 Emissions Graphs

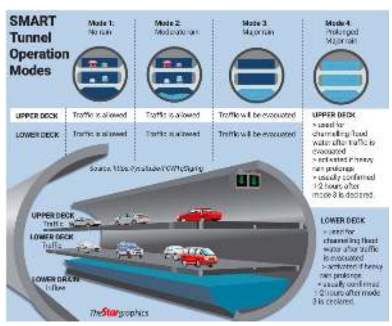
- **Total Emissions (Left Graph)**: While developed nations historically led emissions, China and other developing countries have seen significant growth since 2000.
- **Per Capita Emissions (Right Graph)**: The U. and high-income countries still emit far more CO_2 per person than developing nations.
- **The Dilemma**: Should developing countries limit growth, or should historically high emitters take the lead in reducing emissions?
- **Conclusion**: Climate action must balance historical responsibility, economic development, and sustainability.





Thera are 2 things that can be done:

1. **Adaptation**: **Adjusting to the effects of climate change** by:
    - **Reducing risks** from sea-level rise, extreme weather, and food insecurity.
    - **Implementing strategies** to protect communities and ecosystems from expected climate impacts.



2. **Mitigation**: **Reducing climate change** by:
    - **Lowering greenhouse gas emissions** (e.g., cutting fossil fuel use in energy, transport, and industry).
    - **Enhancing carbon sinks** (e.g., protecting forests, restoring ecosystems, and improving soil carbon storage).

The 2030 Agenda for Sustainable Development

Adopted by all UN Member States in September 2015, the 2030 Agenda is built around **17 Sustainable Development Goals** (SDGs), a global call for action to address critical challenges through international cooperation.

- The SDGs aim to **end poverty**, **improve health**, **education**, and **economic growth**, and **reduce inequality**, while simultaneously **tackling climate change** and **promoting environmental sustainability**.
- Climate-related goals are embedded across multiple SDGs, reinforcing their importance in global policymaking.
- The SDGs also serve as a **policy framework for international collaboration**, including initiatives like the Conference of the Parties (**COPs**), helping the EU and other regions advance their values and objectives on a global scale.

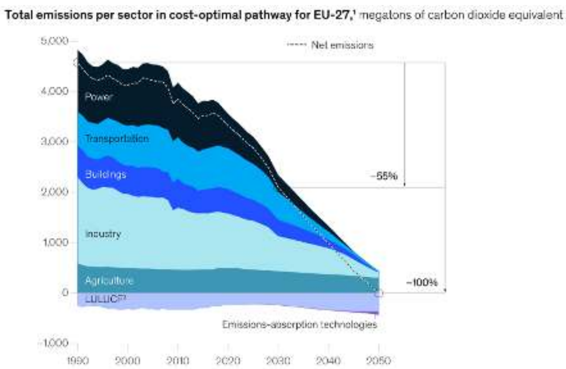
The European Commission and the SDGs

The European Commission (EC) integrates the Sustainable Development Goals (SDGs) into all its proposals, policies, and strategies.

- As shown in the figure, all 17 SDGs are aligned with one or more of the six headline ambitions outlined in President Ursula von der Leyen's Political Guidelines.
- These priorities form the political framework on which von der Leyen secured the European Parliament's majority approval in July 2019.
- This approach ensures that sustainability remains a core principle of EU policymaking, reinforcing commitments to economic, social, and environmental progress.
- **December 2019**: The European Commission (EC) **adopts** the **European Green Deal**, a sustainable growth strategy aimed at addressing climate change while fostering economic transformation.
- **Final Goal (2050)**: Achieve **climate neutrality**, meaning zero net carbon emissions across the EU.

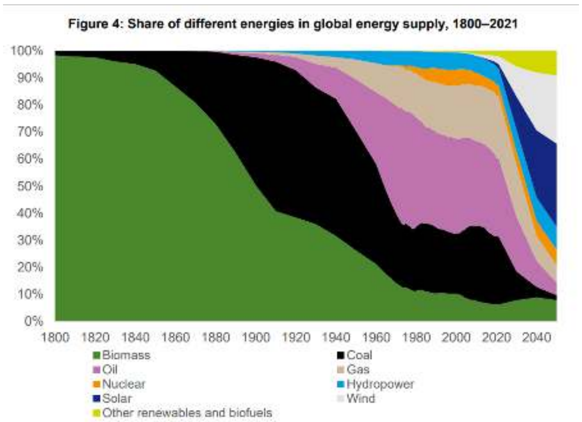
- **Intermediate Target (2030)**: **Reduce** net greenhouse gas emissions **by at least 55%** compared to 1990 levels. 2021: Adoption of the "Fit for 55" package, a set of policies designed to meet this ambitious target.
- Key Instruments:
  - The ***European Climate Law***, enshrining climate neutrality into legislation.
  - Over **50 concrete actions**, including regulatory measures, financial incentives, and innovation-driven policies.

This comprehensive approach positions the EU as a global leader in climate action, integrating sustainability with economic resilience and social equity.



The Evolution of Energy and Industrial Revolutions

- **First Industrial Revolution (Coal)**: The rise of coal fueled industrialization, becoming the dominant energy source by the mid-19th century, particularly in the UK, before spreading globally within six decades.
- **Second Industrial Revolution (Hydrocarbons)**: The shift to oil and gas drove advancements in transportation, including the widespread adoption of cars and airplanes.
- **Renewable Energy Today**: **Renewables**, including hydropower, currently make up 13.5% of the world's primary energy supply.
- **Future Outlook (IEA, 2022)**– Under a net-zero scenario, **renewables** are projected to surpass 30% of total primary energy supply by 2030, marking a critical transition toward sustainability.



The European Green Deal: Initial 2020 Proposals

1. **European Green Deal Investment Plan**:
   - Combines EU resources with instruments to mobilize private capital for green investments.
   - Includes the Just Transition Mechanism, providing targeted support to EU countries facing challenges due to their industrial structure.
2. **European Industrial Strategy**: Aims to drive the transition to a green and digital economy, enhancing sustainability and competitiveness.
3. **Sustainable Agriculture & Biodiversity**: Farm-to-Fork Strategy & EU Biodiversity Strategy:
   - Promote a more sustainable food system.
   - Reduce reliance on pesticides and fertilizers.
   - Restore ecosystems by reshaping agricultural practices.
4. **Clean Energy Transition**: EU Strategy for Energy System Integration & **Hydrogen** Strategy:
   - Support alternatives to fossil fuels and promote renewable energy sources.
5. **Sustainable Finance & Corporate Responsibility**: EU Taxonomy for Sustainable Activities:
   - Defines a list of environmentally sustainable economic activities to prevent greenwashing.
6. **Circular Economy Action Plan**: Focuses on infrastructure improvements and policies to enhance resource efficiency and waste reduction.

Circular Economy

The current economic system is mostly linear, where products are produced, used, and discarded. The circular economy aims to extend the life cycle of materials and products by sharing, leasing, reusing, repairing, refurbishing, and recycling, thereby minimizing waste.

The EU Circular Economy Action Plan (March 2020)

1. **Sustainable Products as the Norm**: Products in the EU market must be longer-lasting, easier to reuse, repair, and recycle, and incorporate recycled materials instead of primary raw materials.
2. **Empowering Consumers**:
   - Consumers gain access to reliable information on product durability and reparability.
   - Strengthening the "Right to Repair", ensuring repairability as a default option.
3. **Targeting High-Resource Sectors**: The plan focuses on industries with high circularity potential, including: Electronics & ICT, Batteries & Vehicles, Packaging & Plastics, Textiles, Construction & Buildings, Food Sector
4. **Reducing Waste and Promoting Secondary Resources**: Prioritizing waste prevention and ensuring discarded materials are transformed into high-quality secondary resources.

The European Climate Law

The European Climate Law establishes the **legal framework for achieving the EU's climate neutrality goal by 2050**. It ensures that **all EU policies align with climate objectives** and provides a structured approach to emissions reductions and climate adaptation.

Key Provisions of the Climate Law

1. **Enhancing Carbon Sinks**: Strengthening land use, land-use change, and forestry (LULUCF) regulations (entered into force in May 2023) to increase carbon sequestration.
2. **Scientific Advisory Board on Climate Change**: A new independent body providing scientific advice to ensure evidence-based policymaking.
3. **Stronger Adaptation Measures**: Vulnerability assessments and resilience plans to strengthen adaptation strategies.
4. **Policy Coherence Across Sectors**: Ensuring all EU policies align with the climate neutrality objective. Engaging economic sectors to develop sector-specific roadmaps for decarbonization.
5. **Climate Targets & Roadmaps**:
   - **2030 target**: Reduce net greenhouse gas emissions by at least 55% (compared to 1990 levels).
   - **2040 target**: Will be set considering the EU's greenhouse gas budget for 2030-2050.

Legislative Actions to Implement the Climate Law

To meet these targets, the European Commission introduced key legislation, including:

1. **Reinforcing the EU Emissions Trading System (ETS)**: Expanding ETS to buildings, road transport, aviation, and maritime sectors.
2. **Effort Sharing Regulation (ESR)**: Sets binding annual emissions reduction targets at the national level for agriculture, buildings, and transport.
3. **Land Use & Deforestation-Free Regulations**: Strengthening LULUCF regulation and introducing rules for deforestation-free products.
4. **Energy & Efficiency Reforms**: Revising Energy Efficiency & Renewable Energy Directives. Launching the "Renovation Wave" to improve the energy efficiency of public and private buildings.
5. **Zero-Emission Transport**: New CO_2 standards: Only zero-emission cars can be sold in the EU from 2035.
6. **Carbon Border Adjustment Mechanism (CBAM)**: Introducing carbon pricing on imports to prevent carbon leakage.
7. **Energy Taxation Directive**: Updating minimum tax rates on diesel, gasoline, and electricity to encourage cleaner energy consumption.

The EU's emission trading scheme (ETS)

Established in **2005**, the **EU Emissions Trading System (ETS)** is the world's first and largest international ***cap and trade*** scheme, designed to limit and reduce CO_2 emissions from heavy industry and power generation.

How the ETS Works

1. **Cap on Emissions**:
   - The EU sets a total cap on CO_2 emissions for heavy industry and power plants.
   - Firms receive emission allowances, either auctioned or allocated for free.
2. **Trading Mechanism ("Cap and Trade")**:
   - **Exceeding Emissions**: A company that emits more CO_2 than its allocated allowances must buy additional allowances from firms with a surplus.
   - **Lower Emissions**: A company that emits less can sell or bank excess allowances for future use.
3. **Enforcement and Compliance**: At the end of each year, companies must surrender enough allowances to cover their total emissions. Failure to comply results in heavy fines.
4. **Market Flexibility & Cost Efficiency**: The cap ensures allowances have market value. Trading allows emissions to be reduced where it is most cost-effective, encouraging firms to adopt cleaner technologies.

Sectors Covered

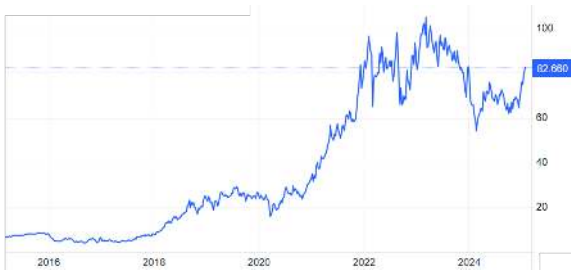
Currently, the ETS applies to:

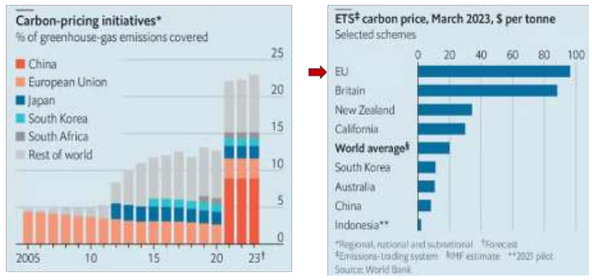
- Electricity generation
- Energy-intensive industries (e.g., refineries, steel, and aluminum production)

Future expansions are expected to include buildings, transport, and maritime sectors under ongoing EU climate policies.

The ETS remains a key instrument in the EU's strategy to achieve carbon neutrality by 2050 while maintaining economic efficiency.

ETS: the cost of emitting one ton of CO2(EUR)





- On 1 October 2023, the EU's **Carbon Border Adjustment Mechanism (CBAM)** entered its transitional phase, aiming to prevent carbon leakage, a key challenge in global climate policy.
- **Carbon leakage** occurs when companies **relocate carbon-intensive production to countries with weaker climate regulations**, or when **EU-made products** are replaced by **higher-emission imports**. This undermines EU climate efforts and global emission reduction goals.
- CBAM ensures that **imported goods face a carbon price similar to EU-produced goods, preventing unfair competition**. Initially applies to imports of: Cement, Iron & Steel, Aluminum, Fertilizers, Electricity, Hydrogen.
- The transitional phase will be reviewed before the definitive system is fully implemented.
- CBAM aligns with the EU's climate neutrality targets, ensuring a level playing field while encouraging global carbon pricing and emissions reduction.

Following Russia's invasion of Ukraine, the European Commission introduced the **REPowerEU Plan** to **reduce dependence on Russian fossil fuels** and **strengthen Europe's energy resilience**. The plan focuses on four key actions:

1. **Diversifying Energy Supply**: Finding alternative energy sources and suppliers to reduce reliance on Russian energy imports.
2. **Securing Affordable Energy Supplies**: Increasing gas storage capacity to ensure energy affordability and stability for European consumers.

3. **Saving Energy**: Implementing EU-wide agreements to reduce gas demand, improve efficiency, and encourage energy-saving measures.
4. **Investing in Renewables**: Accelerating massive investments in renewable energy to transition towards cleaner and more sustainable energy sources.

This initiative aligns with the EU's climate goals while ensuring energy security, affordability, and sustainability for the future.

EU rules to curb deforestation

The European Commission aims to restore Europe's natural ecosystems, including forests, soils, wetlands, and peatlands, to enhance CO_2 absorption and storage. A circular and sustainable management of these resources will:

- Improve living conditions and environmental health
- Create quality jobs
- Provide sustainable energy sources

EU Forest & Biodiversity Strategies

- The **EU Forest Strategy** enhances the quantity and quality of forests, adapting them to climate change and extreme weather.
- The **EU Biodiversity Strategy** commits to planting 3 billion additional trees by 2030.

EU Regulation on Deforestation-Free Products (In force since 29 June 2023)

To combat global deforestation linked to EU consumption, new regulations impose strict rules on firms trading specific products. Covers 7 key commodities:

- Cattle, cocoa, coffee, oil palm, rubber, soya, and wood
- Derived products like meat, leather, chocolate, palm oil, soybeans, paper, and printed books

From 30 December 2025, businesses must comply with three key requirements:

- **Deforestation-Free**: Products must not come from land deforested or degraded after 31 Dec 2020.
- **Compliance with Local Laws**: Must meet legal standards of the production country.
- **Due Diligence Statement**: Companies must prove negligible risk of non-compliance.

Effects of the green industrial revolution

The green transition represents a major opportunity for European industry, driving innovation, sustainability, and economic growth by creating new markets for clean technologies and products.

Key Impacts Across Industries

- Energy, transport, construction, and renovation will undergo transformation, fostering entirely new value chains.
- This shift will generate sustainable, local jobs across Europe.

Investment Needs for the Green Transition

- The EU estimates €520 billion in additional investment per year until 2030, plus €210 billion by 2027 to reduce energy dependence.
- This results in a €5 trillion investment from 2021 to 2030 (~€500 billion per year).

Draghi Report on European Competitiveness (September 2024)

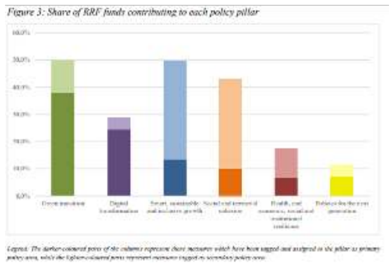
- Former ECB President Mario Draghi presented a comprehensive report to European Commission President Ursula von der Leyen, analyzing economic challenges and providing strategic recommendations.
- The report estimates €450 billion per year (2025–2030) in additional investment needs to support the green transition and European competitiveness.

The Green Industrial Revolution is not only an environmental necessity but also a catalyst for economic transformation, requiring unprecedented investment and strategic policy shifts.

Financing the Green Transition

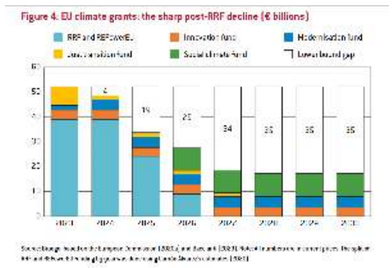
The MFF 2021-2027 allocates ~€1.1 trillion, with at least 30% dedicated to climate-related action, marking the largest climate-focused EU budget ever.

Next Generation EU: A Post-COVID Recovery Fund



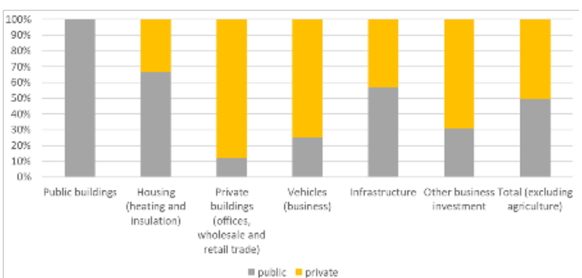
- Introduced as a temporary funding scheme within the MFF to support economic recovery after the COVID-19 crisis.
- The Recovery and Resilience Facility (RRF) is the main funding instrument under Next Generation EU.

Recovery and Resilience Facility (RRF):



- Funds distributed to EU Member States based on their individual Recovery and Resilience Plans (RRPs).
- Each national plan must allocate at least 37% of funds to climate-related initiatives.
- RRF funding ends in 2026, reinforcing the need for efficient and timely investments.

Private vs public financing of the GD



The **Social Climate Fund (SCF)** will mobilize €72.2 billion from 2025 to 2032 to support those most affected by the EU's expanded Emissions Trading System (ETS). Key Objectives:

- Support households, transport users, and micro-enterprises impacted by the costs of the new ETS.
- Promote energy efficiency by funding building renovations, clean heating, and cooling systems.
- Provide direct income support to vulnerable households to ease the transition.
- Finance zero- and low-emission mobility, ensuring access to affordable and sustainable transport.

The Future of EU Competitiveness and Climate Action

On 29 January 2025, the European Commission introduced the Competitiveness Compass, outlining a vision for Europe as a global leader in innovation, clean technology, and climate neutrality.

Key Upcoming Initiatives:

1. **The Clean Industrial Deal**: A competitiveness-driven decarbonization strategy to secure the EU as a top location for manufacturing. Supports energy-intensive industries, clean tech development, and circular business models.
2. **The Affordable Energy Action Plan**: Aims to lower energy prices and costs, ensuring economic sustainability and competitiveness.
3. **The Industrial Decarbonisation Accelerator Act**: Speeds up the decarbonization of energy-intensive industries, making them more sustainable and globally competitive.
4. **Clean Trade and Investment Partnerships**: Secures access to critical raw materials, clean energy, sustainable transport fuels, and clean technologies through global partnerships.

CH 3: Topics in International Trade Theory

Theory of Economic Integration

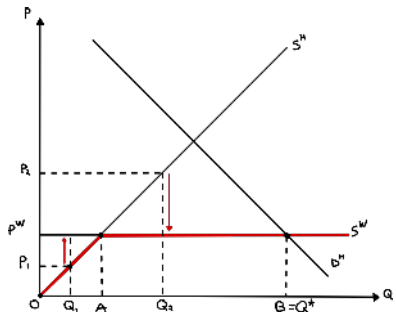
The theory of economic integration studies how intermediate situations between pure protectionism and free trade affect efficiency in the use of resources for every country.

Consider (IN THE **SHORT RUN**):

- one **country H**
- one **homogeneous good**, produced both at home as well as somewhere else in the world.
- **perfect competition**
- **insignificant transport costs**
- upward sloping domestic supply S^H
- world supply S^W perfectly elastic at price P^W => **small country hypothesis**

FREE TRADE

The graph represents the situation.



The line in **RED** is the actual Aggregate Supply:

- For $Q < A$ is the Domestic Supply
- For $Q > A$ is the World Supply

By looking at Q axis:

- OA = Domestic supply
- OB = Domestic demand
- AB = Imports from Rest of the World

PROTECTIONISM

We can distinguish three main tools through which protectionism can be implemented:

- **Tariffs**: specific or ad valorem. It can be calculated according to **two main formulas**:
  - **Ad valorem**: $P_H = P_W(1 + t)$

EG: If $P_W = 40€$ and $t = 20\,\%$ $P_H = 40€(1 + 0.2) = 48€$

- **Specific**: $P_H = P_W + T$

EG: If $P_W = 40€$ and $t = 8€$ $P_H = 40 + 8 = 48€$

P_H **is the price after the tariff.**

We will mostly consider **SPECIFIC** tariffs in this set of slides.

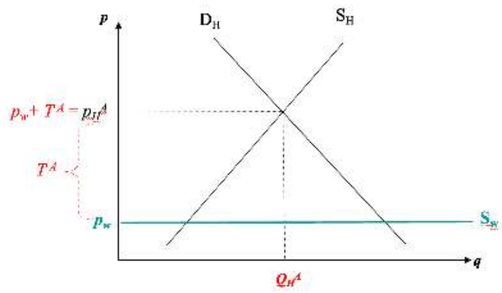
- **Quotas**: quantitative restrictions, e.g. to imports.
- **Non-Tariff Barriers** (NTBs): e.g. safety standards

AUTARKY - PROHIBITIVE TARIFF

A prohibitive tariff is a tariff rate **so high** that **it raises the price of an imported good to the cost of domestic production**. This type of tariff **completely eliminates imports**, as foreign products become too expensive for consumers.

It is considered a **dynamic tariff**, as it sets the market equilibrium at the prohibitive level, ensuring that no imports enter the domestic market.

$P_W + T^A = P_H^A$



The superscript ″ stands for autarky.

T^A is the ***prohibitive*** (**specific**) **tariff**.

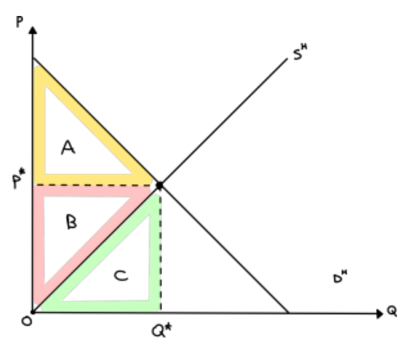
Q_H^A = **Domestic supply** = **Domestic demand** => **autarky**

There are **NO imports** from the Rest of the World

Recap about Welfare

Consumer:

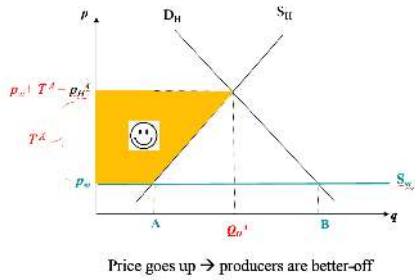
- A+B+C=benefit of consuming the good
- B+C=cost of buying
- **A=Consumer Surplus** (ABOVE P, BELOW D)



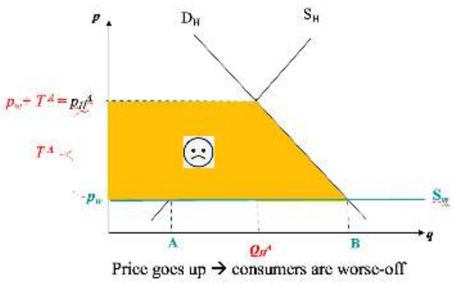
Producer:

- B+C=Revenues
- C=Cost of Producing
- **B=Producer Surplus** (BELOW P, ABOVE S)

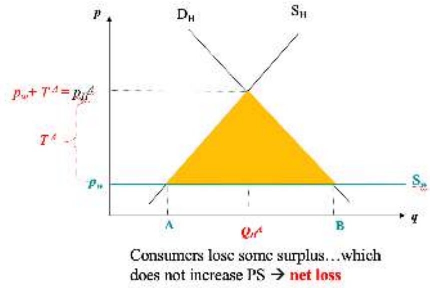
Change in CS & PS



Change in PS



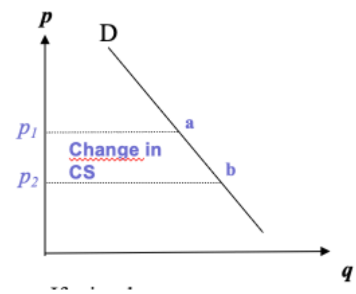
Change in CS

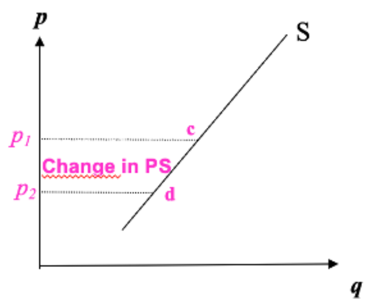


Change In total Welfare

If $P\downarrow$ **consumers are better off** by the area in figure on the left (trapezoid p1p2ba)

If $P\downarrow$ **producers are worse off** by the area in figure on the right (trapezoid p1p2cd).



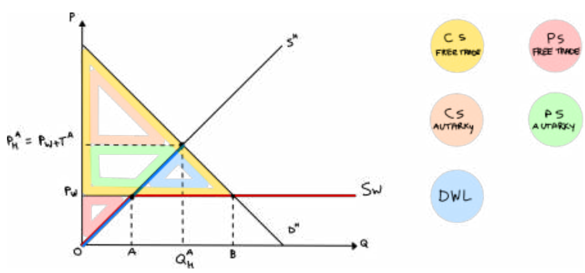


The net gain for the country is the difference between these two areas.

NOTE: in case the government is involved (tariff revenues), we have to take into account that, too!!

Autarky vs Free Trade

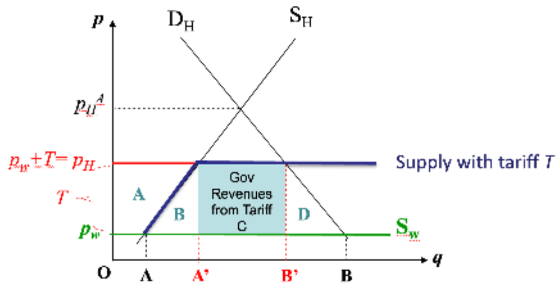
Now we compare AUTARKY with FREE TRADE in terms of **WELFARE**. In the image below you can see the different areas for both the free trade and autarky.



AUTARKY - NON-PROHIBITIVE TARIFF

A **NON-prohibitive tariff** is a tariff rate set at a level that ↑ **the price of an imported good** but does **NOT eliminate imports entirely**. Instead of making foreign products too expensive for consumers, it ↓ the quantity of imports by making them **relatively less competitive compared to domestically** produced goods.

This type of tariff is considered a **moderate trade barrier**, as it allows imports to continue entering the market while providing some level of protection for domestic producers. The market equilibrium is adjusted, but foreign products remain available at a higher price.



For a **specific tariff**: $P_H = P_W + T$

For an ad **valorem tariff**: $P_H = P_W(1 + t)$

Welfare:

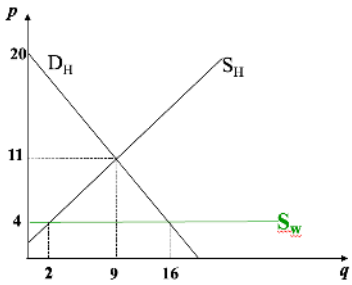
- $\Delta CS = -A - B - C - D$
- $\Delta PS = +A$
- $\Delta GS = +C$
- $\Delta Welfare = -B - D$

OA' = Domestic Supply

OB' = Domestic Demand

$A'B'$ = Imports from Rest of the World (smaller than AB)

Numerical Example



1. No Trade – Full Protection (Autarky)

When no trade is allowed, country H operates in **autarky**, meaning it produces and consumes only domestically produced goods.

Market Equilibrium in Autarky

- The **demand curve** in country H is given by:
  $q = 20 - p$
  where q is the quantity demanded and p is the price.
- The **domestic supply curve** is given by:
  $q = p - 2$
  where q represents the quantity supplied at price p .

Finding the Equilibrium Price and Quantity:

To determine the equilibrium, set **demand** = **supply**:

$$20 - p = p - 2$$

Solving for p:

$$20 + 2 = 2p$$

$$p = 11$$

Now, substituting $p = 11$ into the demand function:

$$q = 20 - 11 = 9$$

Thus, in the absence of trade:

- **Equilibrium price**: $p_H^A = 11$
- **Equilibrium quantity**: $Q_H = 9$

At this price, consumers buy exactly what domestic producers supply, meaning **there are NO imports**.

Prohibitive Tariff (T = 7)

If country H wanted to **block all imports and maintain this autarkic equilibrium** while still allowing international trade, it could impose a **tariff that raises the price of imported goods to at least** $p_H^A = 11$.

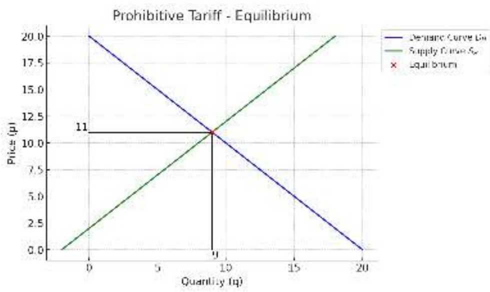
- The world price is $p_W = 4$.
- To make imported goods just as expensive as domestic goods, the tariff must be:

$$T^A = p_H^A - p_W = 11 - 4 = 7$$

- With this prohibitive tariff $T^A = 7$, imports become too expensive, and **consumers will only buy domestic goods**.

This results in an **autarkic market**, where:

- **No foreign goods enter**.
- **Domestic production remains at 9 units**.
- **The price remains high at** $p_H^A = 11$.



2. Free Trade

Now, assume country H **removes all trade barriers** and **allows free trade** at the world price $p_W = 4$.

How Free Trade Changes the Market:

I. Find **New Domestic Demand** at $p_W = 4$:

$$q = 20 - 4 = 16$$

Consumers in country H now demand 16 units at this lower price.

II. Find **Domestic Supply** at $p_W = 4$:

$$q = 4 - 2 = 2$$

Domestic producers only produce 2 units at this lower price because they cannot compete with cheaper imports.

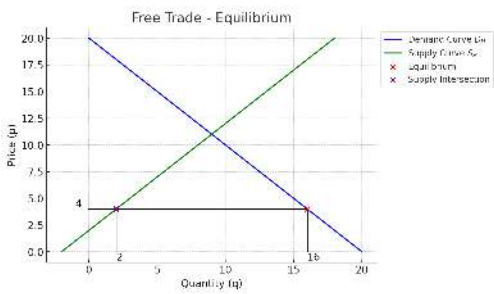
III. Calculate **Imports**: Since domestic production is 2, and total demand is 16, the country must import:

$$16 - 2 = 14$$

Thus, under free trade:

- Price falls to $p_W = 4$.
- **Total consumption** ↑ to 16.
- **Domestic production** ↓ to 2.
- **Imports** ↑ to 14.

Consumers benefit from lower prices and higher availability of goods, but **domestic producers suffer** because they now supply much less.



3. Protectionism with a Non-Prohibitive Tariff

Instead of full free trade or complete protectionism, country H imposes a **moderate tariff** $T = 3$ to protect domestic producers while still allowing imports.

Effect of the Tariff:

- The domestic price of imports **increases** from $p_W = 4$ to:

$$p_H = p_W + T = 4 + 3 = 7$$

- This **reduces total demand**, as consumers now face a higher price:

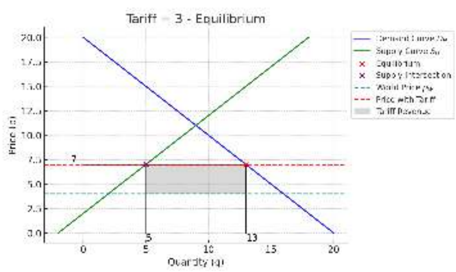
$$q = 20 - 7 = 13$$

- The higher price **encourages more domestic production**:

$$q = 7 - 2 = 5$$

- The remaining demand is **met by imports**:

$$13 - 5 = 8$$



Comparison of the Three Scenarios

Scenario	Price (p_H)	Domestic Production	Total Demand	Imports
Autarky (No Trade)	11	9	9	0
Free Trade	4	2	16	14
Tariff $T = 3$	7	5	13	8

- With a tariff $T = 3$, the domestic price rises from 4 to 7, helping local producers increase their output from 2 to 5.
- However, imports drop from 14 to 8, reducing the availability of foreign goods.

Prohibitive Tariff

If the tariff were set to T = 7 , the price of imports would rise to:

$$p_H = p_W + T = 4 + 7 = 11$$

At this price:

- Total demand falls to 9 ($q = 20 - 11$).
- Domestic producers supply 9 ($q = 11 - 2$).
- Imports drop to 0, effectively eliminating foreign competition.

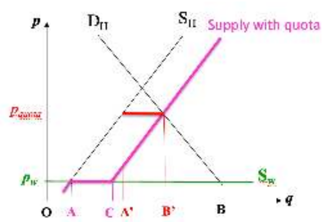
PROTECTIONISM - QUOTAS

An import quota is a **quantitative restriction** on the amount of a good that can be imported, typically implemented to protect domestic producers. Governments issue licenses to specific agents (individuals or firms) allowing them to import a limited quantity of the good.

Effects of an Import Quota:

1. **Supply Curve Shift**:
   - The quota ↑S^H by a fixed amount (**AC**).
   - This causes the supply curve to shift **rightward**, represented by the **pink line** in the graph.
2. **New Market Equilibrium**:
   - At the initial world price P_W, demand exceeds domestic supply plus imports.
   - Because imports are restricted, the price increases until the market clears at the new equilibrium price P_{quota}.
   - A quota ↑ the domestic price from P_W (world price) to P_{quota}, similar to a tariff.
   - **Domestic consumption** ↓ $(OB' < OB)$.
   - **Domestic production** ↑ $(OA' > OA)$ due to the higher price.
   - **Imports** ↓ $(A'B' < AB)$ as the quota limits the quantity allowed into the country.

The main impact of a quota is to **benefit domestic producers by increasing their output**, while consumers face higher prices and reduced availability of the good. It also limits international trade by restricting imports.



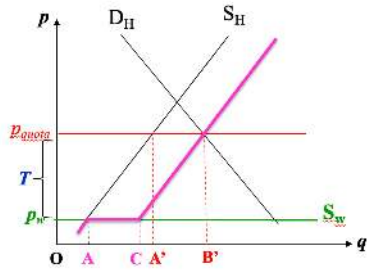
A tariff and a quota can have equivalent effects on price, consumption, and production.

If the government had imposed a tariff, raising the price by the same amount, the effect would be similar:

$$T = P_{quota} - P_W$$

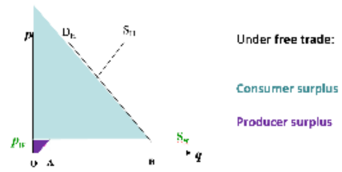
Bhagwati's Equivalence Theorem (1965) states that **for every quota**, there **exists an equivalent tariff under specific assumptions** (e.g., perfect competition).

Key difference: **Unlike a tariff, a quota does not generate revenue for the government— instead, importers or license holders capture the gains**.

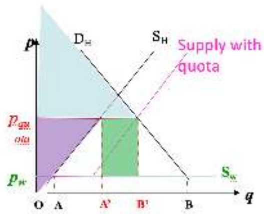


Welfare with Free Trade and with a Quota

Under free trade, **CS** is maximized, and the price remains at P_W.



With quotas, price rises to P_{quota}, reducing CS and altering the distribution of gains.



The green rectangle in the graph represents **quota rents**, **economic gains that arise due to restricted imports**. These rents can be **captured by different groups** depending on how the quota is implemented:

1. **Home Importers (not producers)** → Gain quota rent
   - Importers buy goods at the world price P_W but sell them at the higher domestic price P_{quota}.
   - The difference between these prices represents quota rent, a form of economic profit.
2. **Home Government** → Gains if it auctions **licenses**
   - If the government sells **import licenses** (e.g., through **competitive bidding**), it captures the quota rent as revenue.
   - This can partially offset the negative effects of the quota, **similar to a tariff**.
3. **Foreign Exporters** → Gain if they control quota licenses

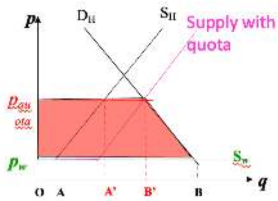
- If foreign firms hold the licenses, they benefit by selling at P_{quota} instead of P_W.
- This allows them to capture the quota rent, potentially benefiting foreign producers over domestic consumers.

Key takeaways:

- Who gets the quota rent depends on the policy design:
  - If **licenses are given for free** to importers or foreign firms, they capture the rents.
  - If the government auctions licenses, it captures the rents as revenue.
- Granting **licenses to foreign exporters** means a **loss of potential revenue for the home country**. If quota rights are given away to foreign firms, the home country loses the green rectangle in the diagram.

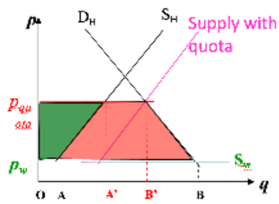
From Free trade to a Quota: the Welfare changes

When the quota A'B' is in place, compared to free trade, Home experiences: a loss in **CS**.



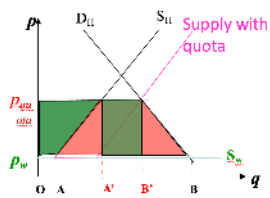
When the quota A'B' is in place, compared to free trade, Home experiences:

- a **loss in CS**
- a **gain in PS**

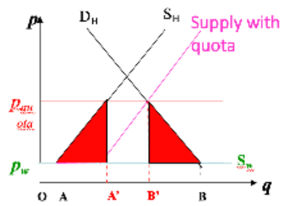


When the quota A'B' is in place, compared to free trade, Home experiences:

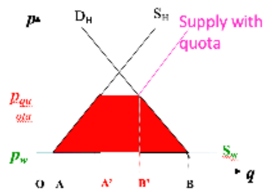
- a **loss in CS**
- a **gain in PS**
- An additional gain for country Home if:
  - Domestic agents buy at pw and resell at pquota > pw (quota rent), or
  - The government sells import licenses.



When the quota A'B' is in place, compared to free trade, Home experiences a **DWL** (the two red triangles) as a net effect: some surplus that was for consumers in free trade, is lost.



The DWL also includes the quota rents if foreign agents (e.g., exporters) sell at P_{quota} without paying for a license.



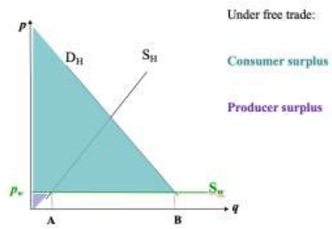
Welfare with Free Trade and with a Tariff

Under free trade:

CS (blue area) is maximized because consumers can purchase goods at the lower world price P_W .

PS (purple area) is relatively small because domestic producers must compete with lower-priced imports.

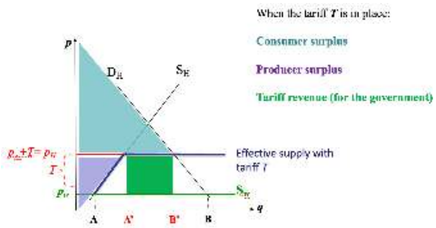
There is **no DWL** because resources are allocated efficiently.

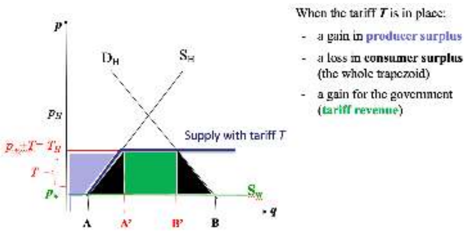


With a Tariff:

- The government imposes a tariff T , which increases the domestic price from P_W to P_W + T .
- Effects on different groups:

1. **Consumers lose surplus** (shaded trapezoid) because they now pay a higher price for goods.
2. **Producers gain surplus** (shaded in purple) since they receive a higher price for their goods and supply more.
3. The **government collects tariff revenue** (green rectangle).
4. **DWL** appears (black areas), representing lost efficiency in the economy.





NON TARIFF BARRIERS (NTBs)

- **Non-Tariff Barriers (NTBs)** are trade restrictions that do not involve tariffs but instead rely on rules and regulations imposed by countries to control industrial production, safety standards, environmental protection, and consumer welfare.
- **Sanitary and Phytosanitary (SPS) Measures**: refer to restrictions aimed at food safety, health protection, and disease prevention.

  Purpose:

  - Prevent the spread of diseases.
  - Ensure the safety of food and agricultural products.

  Examples:

  - EU bans hormone-treated meat and chlorine-washed chicken for food safety reasons.
  - Kinder Eggs are banned in the U.S. due to choking hazard concerns.
- **Technical Measures**: include product labeling, environmental regulations, and technical quality standards that manufacturers must meet.

  Purpose:

  - Ensure product safety and quality.
  - Protect consumers and the environment.

  Examples:

  - Labeling requirements for food and consumer goods.
  - Restrictions on flammability and harmful chemicals like azo dyes in textiles.

Impact of NTBs

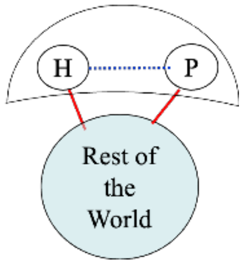
Legitimate benefits	Trade barriers
Protects health and safety.	Increases costs for producers.
Ensures environmental sustainability.	Creates complex compliance requirements.

Free Trade Areas and Custom Unions

Regional Integration Agreements (RIAs) are trade agreements between countries that **aim to reduce barriers to trade among their members**. These agreements play a key role in globalization and are permitted under WTO rules (Article XXIV of GATT). One of the most prominent examples of an RIA is the European Union (EU). As of January 2020, there were 303 RIAs in force, and today, more than one-third of global trade takes place within these agreements.

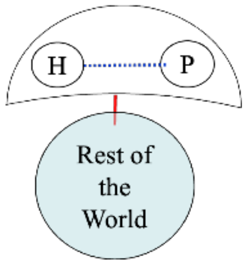
There are two main types of trade agreements within RIAs that both serve to facilitate trade among member states, but they differ in how they regulate external trade policies:

Free Trade Areas (FTAs): **countries agree to eliminate tariffs and trade barriers among themselves** while **maintaining the freedom to set their own individual tariffs on imports from non-member countries**. This allows members to benefit from free trade within the group while maintaining control over their external trade policies.



A well-known example of an FTA is ***NAFTA*** (now ***USMCA***), which facilitates trade between the U., Canada, and Mexico. Within this agreement, goods move freely between the three countries, but each nation maintains its own tariff system for trade with the rest of the world.

Customs Unions (CUs): like an FTA, **removes internal trade barriers among its members**. However, what differentiates a CU is that **all member countries adopt a common external tariff (CET) when trading with non-member nations**. This means that regardless of which country imports a good, the same tariff applies across the entire union.



A key example of a CU is the ***European Union***, which established a unified external trade policy in 1969. This approach provides a higher level of economic integration compared to an FTA, as it eliminates competition between member states regarding external trade policies and strengthens their bargaining power in global trade negotiations.

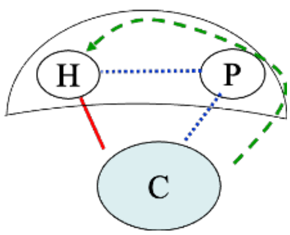
Trade Deflection

In a **FTA**, countries remove tariffs between themselves but retain the freedom to set independent tariffs on non-members. This flexibility can create opportunities for trade deflection, where **goods are rerouted through an FTA country to avoid tariffs**.

Example of Trade Deflection

Consider three countries:

- Home (H) – The U.S.
- Partner (P) – Mexico
- Country C – The European Union



Mexico (P) has FTAs with both the U.S. (H) and the EU (C), meaning that:

- Trade between Mexico and the U.S. is duty-free.
- Trade between Mexico and the EU is also duty-free.
- However, there is no FTA between the U.S. and the EU, so tariffs still apply to direct trade between H and C.

This creates an incentive for companies in Europe (C) to first export duty-free to Mexico (P) and then re-export to the U.S. (H) without tariffs. This practice is called (**direct**) **trade deflection**, a loophole that allows businesses to bypass tariffs by taking advantage of overlapping FTAs.

Trade Deflection Is an Issue because:

- It **undermines the original intent of tariffs**, allowing businesses to avoid duties legally.
- It **distorts trade flows**, as goods are rerouted inefficiently.

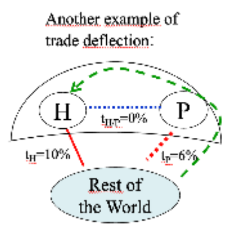
To prevent this, **Rules of Origin (RoO)** are implemented in FTAs to determine whether a product qualifies for tariff-free trade within the agreement. A product is said to ***originate*** in a country **only if a significant portion of its value is created there**. Goods from non-member countries (e.g., C) that enter the FTA must still pay tariffs when entering H, even if they pass through P first.

In a **CU**, there is no **need to check Rules of Origin** because all members apply a common external tariff (e.g., the EU).

In an **FTA**, however, **customs checks are necessary** to verify the origin of goods and prevent trade deflection.

Real-World Application:

- Suppose the U. (H) and Mexico (P) have an FTA with zero tariffs on each other's goods.
- If China (C) exports goods to Mexico (P), it faces a 6% tariff.
- If those goods are re-exported to the U.S. (H) without significant transformation, they should still pay the U.S. tariff (10%), ensuring fair trade and preventing abuse of the FTA system.



There is **no universal standard for Rules of Origin**. Instead, each FTA defines its own RoO, although many agreements share common provisions (as noted by the WTO). While product-specific rules vary by sector, **general rules typically apply across all industries**.

There are 2 basic criteria for determining the origin of products:

1. **Wholly Obtained or Produced**: applies to **natural resources**, **agricultural products**, and **raw materials**. Goods must be **entirely grown**, **harvested**, or **extracted** within the member country.
   - **EG**: Plants grown and harvested in a country, Animals born and raised within the territory, Fish caught in territorial waters of an FTA member state.

2. **Sufficient Working or Processing (Sufficiently Transformed)**: For more complex manufactured goods, additional criteria define whether enough transformation has occurred within the FTA country:
    - **Change in Tariff Classification**: If a product's final classification falls under a different tariff heading than its imported components, it qualifies as originating.
    - **Percentage of Regional Value Content**: A minimum percentage of the product's value must be generated within the FTA region.

These criteria help ensure that **products cannot be simply assembled or slightly modified in an FTA country to claim tariff-free status**.

FTAs vs CU: which one to choose?

The decision to establish a **FTA** or a **CU** depends on a combination of economic efficiency, political considerations, and strategic trade objectives. While FTAs offer greater flexibility, CUs provide stronger bargaining power in international trade.

1. **NAFTA/USMCA (FTA)** – U.S., Canada, Mexico
    - **NAFTA** (now USMCA) was established as an FTA, allowing Mexico and Canada to negotiate independent trade agreements (e.g., their FTAs with the European Union).
    - **Rules of Origin** (RoO) prevent third-country exports from bypassing tariffs by entering the U.S. via Canada or Mexico.
2. **The European Union (CU)**: The EU has been a CU since 1969, following its creation in the 1957 Treaty of Rome.

EU-Turkey trade relations have followed the Customs Union model since 1995.

The EU-Korea trade agreement (2014), however, is structured as an FTA, allowing both parties to retain independent trade policies.

Why Did the EU Choose a Customs Union Over an FTA?

A key reason for choosing a CU rather than an FTA was to **strengthen the EU's collective bargaining power in global trade**. If the EU had remained an FTA, each country would have maintained independent tariffs and trade policies, keeping them "small" players in international trade negotiations. By forming a CU, the EU acts as a single economic entity, gaining leverage in negotiations with major trading partners such as the U.S. and China.

How Does a CU Strengthen Bargaining Power?

- As a CU, the EU can **credibly threaten to raise the Common External Tariff (CET) on imports**.
- The **credibility** of this threat comes from the fact that the **EU, as a large market, might benefit from imposing a moderate tariff unilaterally**.
- This makes external countries **more likely to offer reciprocal tariff reductions during trade negotiations**.

Why Did the U.S. Choose an FTA (NAFTA/USMCA) Instead of a CU?

Unlike the EU, the U.S. opted for an FTA with Mexico and Canada rather than forming a Customs Union. The main reasons include:

1. **Preserving trade policy independence**: The U. wanted full control over its external tariffs, rather than agreeing to a common tariff with Mexico and Canada.
2. **Differences in economic structure**: The economies of the U., Canada, and Mexico vary significantly, making a unified external tariff impractical.
3. **Flexibility to negotiate separate trade agreements**: As an FTA, NAFTA/USMCA members can individually negotiate deals with other countries (e.g., Mexico's FTA with the EU).

Why Did the EU Choose an FTA with Korea Instead of a CU?

The EU-Korea agreement (2014) was structured as an FTA, rather than a CU, primarily because:

- The EU and Korea wanted to **retain their own external trade policies with other nations**.
- A CU would have required Korea to **adopt the EU's Common External Tariff (CET)**, limiting its ability to negotiate independent trade agreements.
- Given the **geographical and economic differences**, a full CU would have been **too restrictive for Korea's global trade strategy**.

Economic vs. Political Considerations

- From a purely **economic perspective**, **FTAs are generally more efficient than CUs** because they allow **greater flexibility in trade policy**.
- However, from a **political and strategic standpoint**, **CUs can offer stronger collective bargaining power** by presenting a unified trade front.

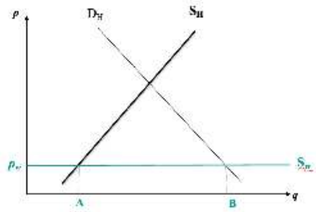
The choice between an FTA and a CU ultimately depends on each country's economic priorities, political willingness, and trade strategy.

Large Country & Terms of Trade Effects of a Tariff

Recall our initial hypothesis

Consider a country H that produces and imports a homogeneous good, under the following assumptions

- perfect competition
- insignificant transport costs
- upward sloping domestic supply SH
- Perfectly elastic world supply S^W at P_W => **small country hypothesis**

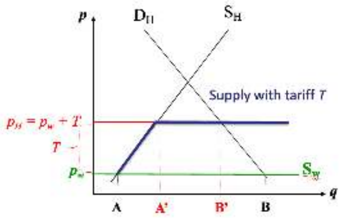


The ***small*** country assumption implies that the price of imports is fixed at the world price P_W, regardless of how much the country imports. This is because **a small country cannot influence world prices**, as its **demand is negligible relative to the global market**.

When we consider a small country:

- **under free trade**: home consumers pay P_W and foreign producers receive P_W
- **with a tariff**:
  - home consumers pay $P_H = P_W + T$
  - foreign producers receive P_W
  - The government collects tariff revenue, represented by the area $T \cdot A'B'$ in the diagram.

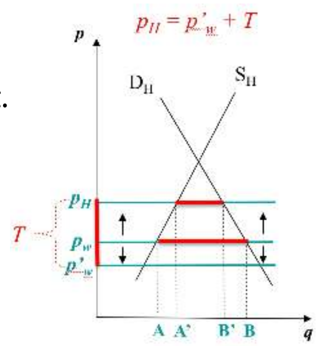
Since S^W is perfectly elastic, the **entire burden of the tariff falls on domestic consumers**, as they **must pay a higher price for imports**.



What happens if we relax the small country hypothesis?

If **country H is large**, imposing a tariff T on imports will ↓ its demand for imports, which in turn ↓ the world price. Unlike the small country case, where tariffs do not affect global markets, a large country's trade policy influences world demand and supply.

1. A **wedge** is **created between the domestic price and the foreign price** → This wedge is equal to the tariff T, just like in the small country case.
2. However, instead of remaining fixed at P_W, the world price ↓ to P'_W because the large country's ↓ demand impacts global markets.
3. **Changes in Domestic and Global Markets**:
   - ↑ in domestic price for consumers ($P_H > P_W$).
   - ↑ in domestic production ($OA' > OA$) as local producers expand output.
   - ↓ in imports ($A'B' < AB$) as fewer foreign goods are purchased.
   - ↓ in global demand and a resulting drop in the world price ($P'_W < P_W$).

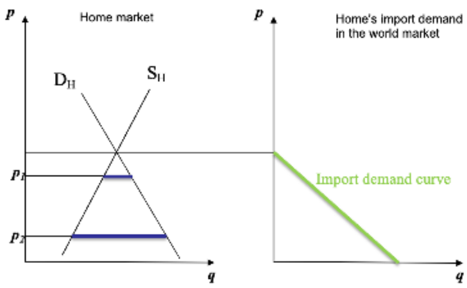


Large country: Home's import demand curve

The import demand curve represents the **excess demand for a good at different price levels** in the world market. It is derived from the interaction between domestic demand and domestic supply in the home country.

The **domestic demand curve** D_H represents the total quantity consumers want to buy at different prices. The **domestic supply curve** S_H represents the quantity domestic producers are willing to supply.

If the domestic price is P_1, domestic supply is lower than domestic demand, **creating excess demand**. The difference between demand and supply at any given price represents the **quantity of imports needed to satisfy home consumption**. The **import demand curve** shows **how much the home country needs to import at different prices**. It is downward-sloping because as the P_W ↓, the quantity of imports ↑c



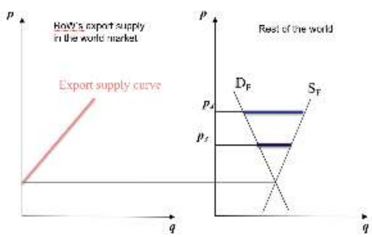
Rest of the World's Export Supply Curve

The export supply curve represents the excess supply of a good from the rest of the world (RoW) available for international trade. It reflects the quantity of a good foreign producers are willing to sell in the world market at different price levels.

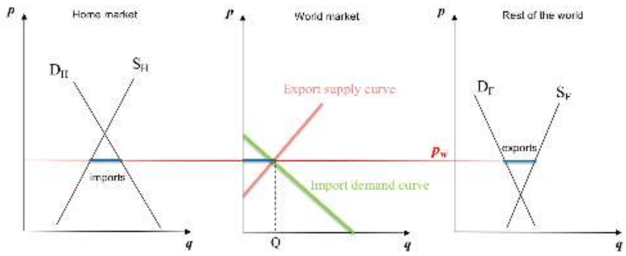
The **foreign demand curve** (D_F) represents the quantity foreign consumers wish to buy at different prices. The **foreign supply curve** (S_F) represents the quantity foreign producers are willing to produce at different prices. The equilibrium price in the rest of the world is determined where D_F and S_F intersect.

If the world price rises to P_4, **foreign producers supply more than foreign consumers demand**, creating excess supply available for export. If the world price falls to P_3, **foreign producers ↓ supply** while **foreign demand ↑**, shrinking the quantity available for export.

The **export supply curve** slopes upward, meaning that as the world price ↑, foreign producers are willing to export more. Conversely, a lower world price reduces incentives for exports, as domestic markets absorb more of the supply.



Here you can see the 2 graphs together.



What if the home country introduces a tariff on imports?

When a large country imposes a tariff on imports, it **affects both domestic and world markets** by creating a **wedge** between the domestic price and the world price.

$P_H = P'_W + T$

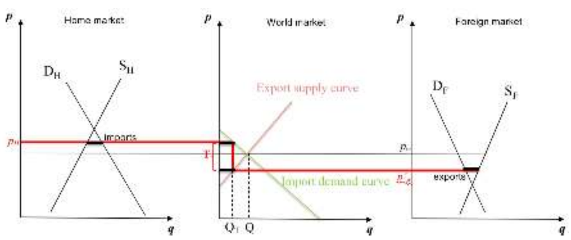
1. **Home**:

   - **Domestic price increases**: The price in the home market ↑ to: $P_H = P'_W + T$
   - where P'_W is the new, lower world price after the tariff is imposed.
   - **Consumers ↓ demand**, and **domestic producers ↑ supply**: this results in fewer imports, which ↓ from Q to Q_T.

2. **RoW**:

   - **Producers in RoW supply ↓**, and **foreign consumers demand ↑**: This leads to a ↓ in exports from Q to Q_T.
   - The world price ↓: the new equilibrium in the world market is reached at a lower price:
   - $P'_W < P_W$
   - This happens because the home country's lower demand for imports reduces global demand, forcing foreign producers to lower prices.

Decline in the foreign export price: Since foreign producers must now sell at a lower price, **not all the tariff's burden falls on home consumers**. Instead, **some of the cost is absorbed by foreign suppliers**.



If Home were a **small country**, it would **not affect the world price**. In this case:

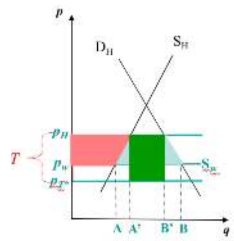
- The **full burden** of the tariff would fall entirely **on home consumers**.
- The **foreign export price** would remain **unchanged** at P_W.

Welfare analysis: free trade vs tariff comparison when the importing country is large

CS ↓: Consumers face higher prices and reduced consumption, leading to a welfare loss.

PS ↑: Domestic producers benefit from higher prices and increased production, improving their welfare.

GS ↑: The government collects tariff revenue from imports, which can be redistributed or used for public spending.

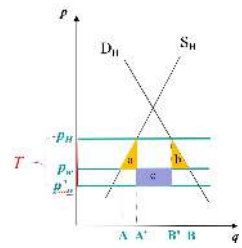


The **areas (a + b)** represent the **efficiency loss** due to:

- **Area (b)**: Consumers buying less at higher prices.
- **Area (a)**: Domestic production replacing more efficient foreign production.

The **area (c)** represents the **Terms of Trade gain**:

- The tariff ↓ the foreign export price, meaning the home country pays less for imports.
- This only occurs if the home country is large enough to affect world prices.



Net Effect:

- The overall welfare impact is **c – (a + b)**, which is ambiguous.
- A **moderate tariff ↑ national welfare** if the **Terms of Trade gain (c) > the efficiency loss (a+b)**.

From CU to the Common Market

The EU, as a CU, benefits from **greater bargaining power in trade negotiations** by acting as a ***large country***. This allows the EU to potentially gain from imposing moderate tariffs unilaterally, making economic integration beneficial.

Until now, we assumed that production could not be relocated among CU members. However, **if economies of scale exist**, firms might find it more cost-effective to **concentrate production** in a **single location within the CU**, maximizing efficiency.

What if, within a Customs Union, producers from country H could freely relocate production to P?

To enable this, additional rules must be established to allow the free movement of factors of production (labor and capital). This leads to the formation of a **Common Market**, characterized by the four fundamental freedoms: Free movement of **goods, services, capital and labor**

A Common Market naturally follows a CU when economies of scale become relevant, enhancing efficiency and competitiveness within the integrated region.

CH 4: EU Trade Policy

Goals and tools and institutional aspects

The EU's trade policy is a cornerstone of its external action, aimed at ensuring **free and fair trade** both within the EU and globally. Since the ***Treaty of Rome*** (1957, effective 1958), EU member states have:

- **Established a CU**: A unified EU trade policy toward non-EU countries to facilitate trade liberalization (e.g., EU's role in the WTO and bilateral trade agreements).
- **Created a single market**: Removing internal trade barriers among member states.
- **Adopted a consistent internal and external trade approach**: Ensuring that trade within the EU and with the rest of the world aligns with common principles.

Goals and Tools of EU Trade Policy

The EU, as the **world's largest trader**, promotes trade liberalization as a driver of global growth. Key mechanisms:

- **WTO Membership**
- **Bilateral** and **Regional Trade Agreements**
- **Trade** as a **Foreign Policy Tool**

The ***Lisbon Treaty*** (2009) explicitly recognizes trade policy as an integral part of the EU's external action. Article 3(5) of the TEU states that the **EU must promote its values and interests globally**, including **free trade**, **sustainable development**, and **human rights protection**.

EU Institutions and Trade Policy: Exclusive Competence

The EU's CU was its first major step toward **economic integration** and requires **political coordination**. The Treaty of Rome granted **supranational powers to the EU's institutions**: **exclusive competence**. The EU alone sets trade policy; member states cannot sign independent trade deals. Initially focused on tariffs, it now includes services, investment, and IP rights (expanded under Lisbon Treaty).

The EU Trade Negotiation Process

1. **Scoping Exercise**: The **European Commission** consults **stakeholders** (businesses, NGOs, civil society, the Council, and Parliament). The process can be initiated by the Commission or at the request of the **European Council**.
2. **Council Approval & Mandate**: The Commission submits a draft proposal with negotiating directives. If the **Council** approves, it grants a mandate to negotiate (**QMV** applies).
3. **Council Unanimity Rule**: Some trade issues require unanimity, such as:
    - Trade in services and intellectual property (if linked to EU internal market rules).
    - Cultural and audiovisual services, where diversity concerns exist.

4. **Final Agreement & Ratification**: Once negotiations conclude, the **Council ratifies the agreement (QMV still applies)**. The **European Parliament** must give its **consent** (cannot amend the text but has **veto power**). The process is similar to the **U. Trade Promotion Authority** (TPA), where **Congress can only approve or reject agreements without amendments**.

Some agreements require approval from national parliaments (e.g., EU-Singapore FTA, EU-Canada FTA). These agreements, known as ***mixed agreements***, include policy areas beyond EU exclusive competence (e.g., portfolio investments and investor-state dispute settlements ISDS). For mixed agreement, the EU-part enters into force provisionally once approved by the Council and the European Parliament, without waiting for the ratification by all European national parliaments. Once all national parliaments approve it, the EU applies the agreement in full.

The EU's **exclusive competence** includes:
- Trade in **goods** (including regulatory matters).
- Trade in **services** (including mutual recognition and transport services).
- **Intellectual Property** (IP) rights related to trade.
- **Public procurement rules**.
- Foreign Direct Investment (**FDI**) (market access & investment protection).
- Trade and **sustainable development policies**.
- **Termination of member states' bilateral investment agreements** (for areas under exclusive EU control).

National Governments & EU Trade Policy

While the EU controls trade policy, **national governments still influence decisions**.

EG: **France delaying trade deals** (2022 Presidential Elections):

France convinced the EU to postpone trade deals with Chile and New Zealand until after its April 2022 elections. President Emmanuel Macron feared opposition candidates would use concerns over increased chicken (Chile) and lamb (New Zealand) imports to mobilize farmers and anti-globalization groups.

The delay angered pro-trade EU members. The EU-Chile deal was especially important for securing lithium supplies, reducing reliance on China for electric vehicle production.

EU and the WTO

The WTO (1995) regulates trade between nations, replacing GATT. It aims to:

- Promote **higher living standards**, full employment, and economic growth.
- **Expand trade in goods and services globally**.
- Ensure the **sustainable use of resources** while protecting the environment.
- Consider **different levels of economic development** among member countries.

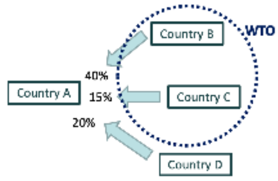
The WTO can be seen as a:

1. **Negotiation Forum:** WTO members negotiate trade agreements to promote **free and fair trade**. The WTO currently has **164 member countries**. **Observer nations** include Algeria, Belarus, Ethiopia, Iran, Serbia, Somalia, and Sudan. Countries **not even observers** include North Korea and Eritrea. WTO agreements can be ***multilateral*** (involving all WTO members) or ***plurilateral*** (involving a subset of WTO members).
   - The **Uruguay Round** (1986-1994) established most of the WTO's current rules.
   - The **Doha Development Agenda** (2001) aimed to address trade and development issues but remains unfinished and uncertain due to political challenges.
2. **Dispute Resolution Mechanism**: The WTO **handles trade disputes** when **one member believes another is violating an agreement**. Countries can file **complaints** against unfair trade practices and request formal dispute resolution.

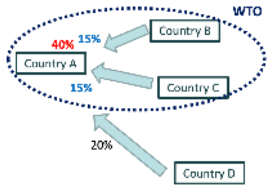
The principles of the WTO:

1. **Reciprocity**: WTO members have **symmetric rights** and **obligations** and should negotiate mutually beneficial reductions of trade barriers. **Tariff reciprocity is dynamic**: it is about how tariffs change over time rather than their absolute values. **Countries rarely impose identical tariffs on each other**: Each WTO member has its own tariff profile.
   EG: Country A might apply 10% tariffs on imports from Country B, while Country B applies 12% tariffs on imports from Country A.
2. **Consensus**: No decision is made if any member formally objects. Even though there are 164 members, negotiations often happen within **coalitions** (e.g., the Cairns Group of agricultural exporting countries).
3. **Single undertaking**: All WTO agreements are negotiated as a single package. ***Nothing is agreed until everything is agreed***. Countries cannot selectively accept parts of an agreement.
4. **Non-discrimination**:
   - **National Treatment**: foreign goods must be treated equally to domestic goods.
   - **MFN Treatment**: Countries must offer the same trade benefits to all WTO members as they do to their most favored trading partner.
5. **Tariff bindings**: Once a country negotiates and agrees on a tariff reduction, it becomes bound and cannot be raised above the agreed level.

The MFN treatment:



- **Before** joining the WTO: A country can set **different tariffs on imports from various countries** at its discretion.
  EG: Country A (non-WTO member) can impose different tariffs on imports from WTO members B and C.



- **After** joining the WTO: Country A must apply the "**best conditions**" (lowest tariff) to **all WTO members**.
  EG: If Country A previously imposed a 15% tariff on imports from Country C, it must now apply this same rate to all WTO members.

  MFN tariff for Country A = 15% (applied uniformly to all WTO members).

WTO members retain their own tariff structures when they join but must apply them **consistently** across all members. **Tariff elimination is a long-term WTO objective**, but MFN tariffs remain the highest that members charge each other unless they sign a preferential trade agreement (e.g., FTA).

EG: If Country A and Country B sign a Free Trade Agreement (FTA), they can apply lower tariffs to each other while still applying MFN tariffs to other WTO members.

Difference between:

- **Bound Tariff**: The **maximum tariff rate a country agrees not to exceed under WTO rules**. Set through negotiations when a country joins the WTO or during trade rounds.
- **Applied Tariff**: The actual tariff a country chooses to impose, which can be lower but not higher than the bound tariff.

EG: If Country A's bound tariff is 30%, it can apply a 20% tariff but cannot exceed 30% without violating WTO rules.

WTO members **can adjust applied tariffs** as long as they do **not exceed their bound levels**. If a member **raises its applied tariff above the bound level**, other WTO members **can file a dispute** for non-compliance.

EU tariffs, bilateral agreements and the GSP

The EU trade policy includes a combination of **bilateral agreements**, **tariff structures**, and **special preferential programs** to regulate trade with third countries. These agreements lower trade barriers, promote investment, and support sustainable economic growth while balancing the interests of EU producers and global trading partners.

Bilateral Agreements

The EU negotiates its own trade agreements with individual countries or regional groups. These agreements set **lower tariffs than the default MFN tariffs imposed on WTO members**, making them **Preferential Trade Agreements (PTAs)**.

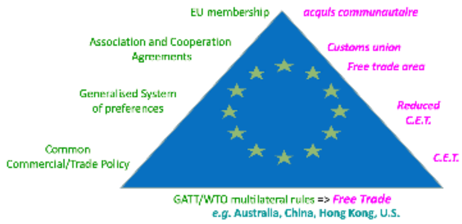
Types of Agreements Signed by the EU:

- **FTAs**: Offer **mutual tariff reductions and deeper economic integration**.
  EG: Mexico (2000), South Africa (2000), Chile (2003), Korea (2010), Canada (2016), Japan (2018), Singapore (2019).
- **CUs**: Establish a **common external tariff (CET)** but allow **free trade among members**.
  EG: Andorra (1991), San Marino (1992), Turkey (1995).
- **Deep and Comprehensive FTAs**: Include **provisions on foreign direct investment (FDI)**, **intellectual property**, and **regulatory cooperation**.

Current EU FTA Negotiations: Ongoing with Australia, Philippines, Indonesia, and broader focus on the Asia-Pacific region.

The Pyramid of Preferences: EU Trade Hierarchy

The EU prioritizes trade relationships based on levels of preferential access:



- **Top of the Pyramid**: EU Membership: Full integration with zero trade barriers.
- **Bottom of the Pyramid**: MFN Tariff (CET - Common External Tariff): The default WTO tariff applied when no special trade agreement exists.

Countries with FTAs, Customs Unions, or GSP programs benefit from progressively lower tariffs than those facing default MFN tariffs.

The Generalized Scheme of Preferences (GSP): Trade for Development

The WTO allows developed countries to **grant trade preferences to developing countries** (violating MFN under special conditions). The EU implements the GSP program to **support economic growth** in developing nations by reducing or eliminating tariffs.

Three Levels of the EU GSP System

1. **Generalized Scheme of Preferences (GSP)**: **Unilateral reduced MFN tariffs for a list of developing countries**.
   EG: Indonesia, India, Kenya, Vietnam.
2. **GSP+ (Enhanced Preferences)**: **Deep tariff cuts** or full removal for countries implementing international agreements on **human rights**, **labor rights**, **environmental protection**, and **good governance**.
   EG: Bolivia, Mongolia, Pakistan, Philippines, Sri Lanka.
3. **Everything But Arms (EBA) Initiative**: **Full duty-free**, quota-free access to the EU for all products **except arms**.
   EG: Bangladesh, Eritrea, Ethiopia, Gambia, Haiti, Nepal, Senegal.

EU as global partner: non regional FTAs

The EU pursues broad economic partnerships beyond regional trade. The focus is on investment, regulatory alignment, and intellectual property rights. Recent Comprehensive FTAs: Mexico, Chile, South Africa, South Korea, Japan.

EG: EU-Korea FTA

It eliminates 98.7% of duties within 5y. It covers trade in services (telecommunications, environmental, financial, legal). It includes common rules for protecting foreign direct investment.

Not all industries benefit equally: FCA CEO Sergio Marchionne opposed the EU-Korea FTA, arguing that cheap Korean imports hurt European carmakers while European exports to Korea were limited to luxury vehicles.

EG: EU - Mercosur FTA

The EU and Mercosur (Argentina, Brazil, Paraguay, and Uruguay) have been negotiating an FTA for over two decades, with discussions starting in 1999 and gaining momentum in 2016. A political agreement was reached in June 2019, but finalization was delayed multiple times due to political shifts and environmental concerns.

The EU-Mercosur trade deal faced **delays** and opposition due to political changes and environmental concerns. **Argentina's new leadership** (Milei) and **France's stance on Amazon deforestation** contributed to postponements. EU farmers protested, fearing cheap Mercosur agricultural imports would undermine their profits, especially given the EU's green policies. While some European governments resisted the agreement, the EU Commission remained committed to finalizing a balanced deal, ensuring agricultural protections. Eventually, negotiations were concluded, marking a significant step in EU-Mercosur trade relations.

The agreement will **boost trade and investment**, **eliminating tariff and non-tariff barriers** while ensuring stable regulations on intellectual property, food safety, competition, and sustainability.

Strategic Importance:

- Supports **EU's de-risking strategy**, reducing reliance on China for critical raw materials.
- Mercosur provides **key resources for the EU's green transition** (lithium, rare earths, nickel, etc.).
- Encourages European **firms to integrate Mercosur into supply chains** by removing high tariffs.

Under the new agreement:

- 91% of EU exports to Mercosur will be duty-free.
- Gradual tariff reductions will allow Mercosur industries time to adjust.

Next steps in the approval process:

- The agreement requires legal review, translation, and approval by the Commission and Parliament.
- Political resistance from EU farmers and environmental activists may still pose challenges.

WTO and Trade Remedy Measures

While **free trade enhances efficiency and innovation**, unfair practices can distort competition:

- **Dumping**: when a **firm exports a product** at a **price lower than its normal value** (domestic price or production cost + profit), causing or **risking serious injury to the importing country's industry**.
- **Subsidies**: when a **government provides financial benefits to certain firms**, creating unfair advantages in domestic or international markets. While subsidies can support legitimate policies (e.g., social programs), they can distort competition.
- Putting the **national security** of the importing country at risk.

The WTO allows countries to **impose trade remedy measures** to counteract these distortions:

- **Anti-dumping duties**: **temporary tariff increases** to offset dumping (exporting at below-market prices).

  EG: **Leather Shoes from East Asia to Europe**

  The European Commission investigated allegations that China and Vietnam were dumping leather shoes in the EU market, selling them below fair value due to state intervention (e.g., cheap finance, tax holidays, non-market land rents, and improper asset valuation).

  Dumped imports caused **significant injury to EU producers**, leading to a 30% decline in European footwear production.

  The **EU imposed anti-dumping duties** to counteract unfair pricing and protect domestic manufacturers. The duties were **temporary** and **adjusted over time**, ensuring fair competition without excessively disrupting trade.

  This case illustrates how state-backed pricing advantages can distort markets, leading to anti-dumping measures to restore fair competition within international trade.

- **Countervailing duties**: tariff increases to counteract unfair subsidies provided by foreign governments.

  EG: **Subsidy Dispute: Boeing vs. Airbus (EU vs. US)**

  The EU and US have long disputed state subsidies given to Airbus and Boeing, arguing that these unfairly distorted competition in the aviation industry.

  - **US claims against the EU**: Airbus received illegal government loans from France, Germany, Spain, and Britain to develop the A350 and A380.
  - **EU claims against the US**: Boeing benefited from state support, NASA funding, and an $8.7 billion tax break from Washington state for the 777X.

  WTO Rulings:

  - **Airbus subsidies were illegal**: The US was authorized to impose $7.5 billion in tariffs on EU imports.

- **Boeing subsidies were illegal**: The EU was authorized to impose $4 billion in tariffs on US imports.

Resolution: In 2021, the US and EU agreed to suspend retaliatory tariffs for five years, aiming to create fairer competition in the aviation sector.

This case highlights how government subsidies can disrupt international trade, leading to WTO disputes and trade retaliation until negotiated resolutions are reached.

- **National security**: **protectionism with tariffs**. The GATT (Article XXI) allows countries to take trade-restricting measures if they believe it is necessary for national security. However, this provision is **vague** and **self-judging**, meaning **any country could invoke it to bypass WTO rules**, potentially leading to trade protectionism.

EG: US Steel & Aluminum Tariffs

The US imposed tariffs (25% on steel, 10% on aluminum), citing national security concerns and arguing that global oversupply, mainly from China, threatened American steel producers.

International Reactions

- China, Canada, Mexico, and the EU retaliated with countermeasures.
- Harley-Davidson relocated some production outside the US due to rising costs.
- The EU challenged the US tariffs at the WTO, leading to a dispute.

WTO Ruling & US Response: The WTO panel ruled in 2022 that US steel tariffs violated WTO rules. The US rejected the ruling, arguing that the **WTO has no authority to judge national security measures** and appealed the decision to the non-functioning Appellate Body, effectively avoiding compliance.

Economic Impact

- **Tariffs ↑ domestic steel prices**, leading to higher costs for US manufacturers.
- **Some firms delayed projects** or **switched materials** due to rising costs.
- **US producers struggled to compete globally** due to higher costs vs. cheap Chinese steel.

US-EU Steel Truce (2021): To ease tensions, during the G20 in Rome the US and EU reached a deal:

- US **remove tariffs on a quota of 4.4 million tons of EU steel** but kept them beyond that quota.
- EU **suspended retaliatory tariffs on US exports** (e.g., motorcycles, bourbon, jeans).
- **Withdrawal of WTO cases on both sides**.
- Both sides committed to **negotiating carbon standards** for steel imports and tackling global overcapacity.

The US steel case illustrates the risks of invoking national security exceptions, as **it can justify protectionism and destabilize global trade**. The dispute also highlights the WTO's struggle to enforce rules when powerful nations reject its authority.

WTO and Trade Agreements

The WTO dispute settlement system **resolves trade conflicts** when a country alleges another has violated trade commitments.

A WTO member (the complainant country) can follow the dispute settlement process that consists, if a consultation goes unsuccessful, in:

1. the establishment of a panel to hear the dispute and to issue a report to be adopted by the **Dispute Settlement Body (DSB)**;
2. The appeal of the panel report in front of the **Appellate Body**.

Since the Obama Administration (2009-17), the US blocked the appointments of members of the Appellate Body, who serve a four-year term, thus paralyzing it (the US mainly criticizes its "broader authority to over-reach the rules"). Thus, a country that loses at the DSB-level can avoid compliance by appealing to a **non-functioning Appellate Body**.

To counter this, 23 WTO members (now 54), including the EU and China, created the **MPIA** (2020) as a temporary alternative for appeals. However, without a fully functional Appellate Body, WTO enforcement remains weakened, requiring institutional reform or a US policy shift.

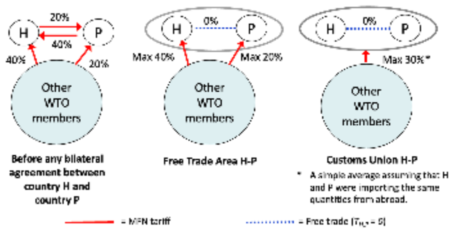
Bilateral Agreements and the MFN principle

The EU and New Zealand (NZ) are WTO members, each applying different MFN tariffs on clothing (EU: 11.5%, NZ: 9.7%). They are negotiating an FTA to eliminate these tariffs bilaterally.

Under MFN rules, **tariff elimination should extend to all WTO members**, as **non-discrimination is a core principle**. However, **FTAs are allowed as exceptions if they meet two conditions**:

1. Tariffs and trade barriers must be reduced across nearly all sectors (not selectively).
2. Third-party countries should not face new restrictions compared to pre-agreement conditions.

If these conditions are met, the **bilateral FTA** is **WTO-compliant** despite deviating from MFN principles.



WTO and bilateral/regional agreements

Why WTO members are so active in negotiating bilateral/regional trade agreements?

Since 1995, WTO multilateral negotiations have stalled due to:

- The failure of the Millennium Round (1999) and the Doha Round (2001).
- The difficulty of reaching consensus among 164 countries.
- A shift from tariff negotiations to sensitive issues like labor and environmental standards.
- The emergence of coalitions (e.g., developed vs. developing countries), creating divisions.

Why a network of bilateral/regional trade agreements is not a perfect substitute for a WTO multilateral agreement?

- **Unbalanced power dynamics**: Larger economies can impose terms on smaller ones (divide et impera strategy).
- **Trade diversion**: Countries outside FTAs lose market access despite being more efficient exporters.
- **Regulatory complexity**: Overlapping FTAs create administrative burdens (e.g., Rules of Origin) that increase trade costs.

While bilateral and regional agreements offer flexibility, they lack the broad, synchronized trade benefits of WTO-led multilateral agreements.

CH 5: GVCs and the new EU Trade Strategy

Global Trade Openness: Eras of Globalization

- **Industrialization** (1800s–1914): Rising trade openness.
- **Wars & Protectionism** (1914–1945): Trade collapse due to WWI, Great Depression, and WWII.
- **Fixed Exchange Rates** (1945–1980s): Gradual recovery under Bretton Woods.
- **Liberalization** (1980s–2008): Rapid trade growth from globalization and deregulation.
- **Recent Slowdown** (post-2008): Stagnation after the financial crisis, with rising protectionism.

Trade **within** geopolitical **blocs** (East or West) has **surpassed trade between them**, a trend accelerated by the Ukraine war. WTO data shows **trade flows** now **realigning along political lines**.

Globalization and Global Value Chains (GVCs)

Three Waves of Globalization

1. **Before WWI**: First phase of globalization.
2. **After WWII**: Trade recovery and expansion.
3. **After the Cold War**: Digitalization and trade liberalization accelerate globalization.

Trade has outpaced GDP growth due to **globalization** and **liberalization**. The 2008 financial crisis caused a temporary dip, but trade rebounded.

Key Drivers of Globalization

1. **Tariff Reduction**: Declining tariffs have lowered prices and increased trade.
2. **ICT Revolution**: Lower communication costs enhance global production coordination.
3. **Transport Cost Reduction**: Advances in air and sea transport (e.g., containerization) improve trade efficiency.

The Shift from Traditional to Modern Trade

- **Traditional Trade/Globalization 2.0**: A **country produces a *final* good and exports it**. Trade occurs **between independent firms**, with minimal international collaboration in production.
- **GVCs/Globalization 3.0**: **Production is fragmented across multiple countries**, with different locations handling different stages. ***Intermediate* goods** and services cross multiple borders before becoming final products. Instead of just goods moving, **supply chains, capital, and expertise** are now **internationalized**. This shift is driven by:
  - **Lower trade barriers**, **ICT** and **transport costs**, and **FDI liberalization**.
  - A trade-off between **Proximity** (staying close to consumers to ↓ risk) and **Confrontation** (offshoring to ↓ costs but ↑ exposure to trade barriers and risks).

Today, 56% of goods trade and 73% of services trade in OECD countries involve intermediates (raw materials, components, or partially assembled products). Since 2000, intermediate trade has tripled to over $10 trillion annually.

The **VALUE CHAIN** is the full range of activities firms engage in to bring a product from conception to the final customer.

- **Primary Activities**: Logistics, operations, marketing, sales, and customer service.
- **Support Activities**: Infrastructure, human resources, technology development, and procurement.

Key Characteristics of GVCs

- **Fragmented** and **dispersed production** across multiple locations.
- **Specialization**: Countries focus on specific tasks rather than entire products.
- **Global supplier networks** managed by multinational corporations.

GVCs depend on **low costs** and **high visibility**. High communication and transportation costs hinder efficiency, while distance from suppliers complicates monitoring.

Factors Influencing Sourcing Decisions

- Labor costs
- Access to key inputs & skilled workforce
- Supplier ecosystems & infrastructure
- Institutional quality (e.g., IP protection, regulations)
- Proximity to large markets (reducing logistics costs)

GVCs maximize efficiency but ↑ exposure to risks:

- **Natural disasters** (e.g., earthquakes, pandemics).
- **Geopolitical tensions** (e.g., trade wars, sanctions).
- **Supply chain bottlenecks** (e.g., China and India dominate over 70% of global pharmaceutical exports).
- **Industries most at risk**: Electronics, semiconductors, textiles, pharmaceuticals.

Strategic Considerations: Global vs. Regional Value Chains

- **Over-reliance on a single country ↑ risks**; firms should diversify sourcing to avoid supply shocks.
- **REGIONAL value chains** (e.g., food & beverages, fabricated metals) are **less exposed** and offer **greater stability**.
- **Full integration isn't always ideal**: firms must balance **proximity to consumers** vs. **offshoring for cost advantages**.

The Future of Value Chains

Crises like COVID-19, Russia's invasion of Ukraine, and China's supply chain dominance have exposed vulnerabilities in GVCs. Governments and firms are now prioritizing resilience over cost efficiency.

From 'Just-in-Time' (JIT) to 'Just-in-Case' (JIC)

- **JIT**: Minimal inventory, fast deliveries to cut costs.
- **JIC**: **Stockpiling key materials to prevent disruptions**, even at higher costs.

Key Strategies for a Resilient Supply Chain

- **Diversification**: Expanding supplier networks across multiple countries to mitigate risk.
- **Nearshoring**: Moving production closer to key markets to reduce disruptions.
- **Reshoring**: Bringing manufacturing back to the home country.
- **Friendshoring**: Strengthening trade with trusted allies.
- **De-coupling**: Cutting ties between US-centric and China-centric economies.
- **De-risking**: A softer approach to de-coupling, maintaining economic ties while reducing strategic dependence.

The Gravity Model of Trade

Jan Tinbergen's Gravity Model explains trade flows:

- **Trade ↑ with economic SIZE**: Larger economies trade more due to greater demand and supply.
- **Trade ↓ with DISTANCE**: Higher transport costs and cultural differences reduce trade.

However, technological advancements and improved logistics have made regionalization more relevant, though not entirely replacing global trade.

The new EU Trade Strategy

The EU adjusted its trade strategy after COVID-19 due to four key challenges:

1. **WTO Dysfunction**: The Doha Round stalled, and the **Appellate Body is paralyzed** as the U.S. blocks judge appointments, preventing dispute resolution.
2. **U.S. Trade Policy Shift**: Trump imposed **tariffs**, even on **EU goods**, challenging the global system.
3. **China's WTO Membership**: Hopes for liberalization were unmet; **China still heavily subsidizes firms** and **dominates EU antidumping cases**.
4. **COVID-19 Disruptions**: Lockdowns halted manufacturing and shipping, while national security concerns led to **export restrictions on essential goods** (PPE, ventilators, vaccines).

In 2020, the EU Commission introduced ***Open Strategic Autonomy***, aiming to:

- Maintain **open trade** while ↓ **reliance** on key foreign suppliers (e.g., medicines, raw materials).
- Balance **cooperation** with **protection** from unfair trade.
- Strengthen the **euro** and **diversify supply chains** to prevent future crises.

However, Alan Beattie (FT) criticized the term as contradictory, attempting to appease both free traders and protectionists.

In 2021 the European Commission outlined **six policy priorities**:

1. **WTO Reform**: Restore a fully functioning dispute settlement system with a reformed Appellate Body.
2. **Green Transition & Sustainability**: Introduce trade policies like the **Carbon Border Adjustment Mechanism (CBAM)**.
3. **Digital Trade & Services**: Push for WTO agreements on digital trade, including **data flow** and **privacy rules**.
4. **Regulatory Influence ("Brussels Effect")**: Use EU regulations as global standards in trade.
5. **Stronger Partnerships**: Deepen economic ties with neighboring and developing countries, particularly in Africa.
6. **Trade Agreement Enforcement**: Ensure compliance with agreements on **tariff reductions**, **market access,** and **labor/environmental standards**.

China dominates the global EV battery supply chain, particularly in material processing, cell components, and battery production. Even if raw materials (e.g., cobalt from the Democratic Republic of Congo) are sourced elsewhere, China controls **refining and manufacturing**, making true independence difficult.

Even if countries reduce reliance on China for raw materials, they still depend on its production capacity. Achieving full autonomy remains unrealistic.

CH 6: EU Single Market

With the ***Treaty of Rome*** (1957), EU member states committed to:

- **Removing trade barriers between them**.
- Establishing a **CU**(1968).
- Initiating the **Single Market** process.

A Single Market eliminates economic frontiers between countries, ensuring four fundamental freedoms: **free movement** of **goods**, **services**, **capital**, and **people**. It expands business opportunities, increases competition, and provides consumers with wider choices and lower prices.

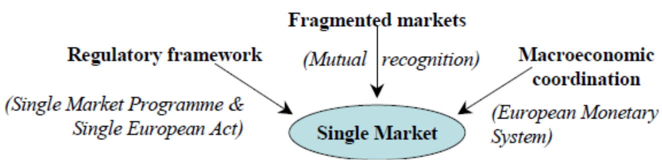
Market integration means that **products**, **services**, and **factors** of **production move across countries under the same conditions as within domestic markets**. Price differences should only reflect transport and transaction costs. However, **markets are shaped by physical** (oceans, mountains), **economic** (transport and transaction costs), and **legal** (tariffs, regulations) **barriers**.

For **full integration**, states must ensure:

- **Abolition of legal restrictions**: No tariffs, quotas, or legal monopolies (EU Single Market).
- **Fair competition**: No state aid or protectionism favoring domestic firms (EU Competition Policy).
- **Reduction of physical barriers**: Improved transport infrastructure (Trans-European Networks).
- **Lower economic costs**: Exchange rate stability and a shared currency (Economic and Monetary Union).

To maximize benefits, two key distortions must be eliminated:

1. **Market fragmentation** due to **NTBs** and **regulatory differences**.
2. **Negative macroeconomic spillovers**, such as **financial instability** affecting cross-border trade.



Key Concepts of the EU Single Market

- **Four Fundamental Freedoms**: Free movement of goods, capital, services, and labor.
- **Level-Playing Field**: Equal competition regardless of nationality.
- **Liberalization**: Removing government-imposed barriers (e.g., licenses, authorizations) to open markets.
- **Ownership Neutrality**: No obligation to privatize state-owned enterprises (SOEs), but SOEs cannot receive unfair advantages.

EG: While SOEs are legal, they must compete fairly:

- France: Owns Areva and 15.01% of Renault.
- Germany: Owns Deutsche Bahn, and Lower Saxony controls 20% of Volkswagen votes.
- Italy: Owns 30.2% of Leonardo and 30.1% of ENI.

Steps Toward the European Single Market

1. **Elimination of Tariffs and Quotas**: The first step in market integration was removing tariffs and quotas between EU member states. However, this alone was insufficient, as Non-Tariff Barriers (NTBs) continued to fragment markets.

2. **Addressing Non-Tariff Barriers (NTBs)**: NTBs include national regulations on industrial production, safety, environmental standards, and consumer protection (e.g., sanitary and phytosanitary measures, technical standards like labeling).

   The ***Treaty of Rome*** introduced a harmonization program to **align national laws through directives and regulations**. However, progress was slow due to unanimity voting in the Council of the EU, which gave each country veto power. This made **decision-making slower than innovation**, as each country pushed for its own national standards.

   EG: The Cassis de Dijon Case (1979): A Turning Point

   A German company sought to import Cassis de Dijon liqueur from France but was denied because German law required fruit liqueurs to have at least 25% alcohol, while Cassis contained 15-20%.

   The CJEU (Court of Justice of the EU) ruled that Germany had to allow the product, establishing the principle of mutual recognition. This principle states that:

   - **Products legally produced in one EU country must be accepted in all others**, as national laws are considered equivalent.
   - This eliminated many NTBs but was still **not enough** for full economic liberalization, requiring **harmonization** of laws.

3. **Harmonization of Legislation**: Certain services (e.g., local transport, retail banking, mobile telecom) are **non-tradable**, meaning foreign firms must **establish a local presence** rather than exporting services. However, **national regulations** often **blocked or restricted** their entry. Examples include:

   - **Italy** requiring dentists to obtain certification from an Italian authority.
   - **Germany** restricting airport landings to German airlines.
   - **Varying telecom rules** across EU countries.

   A **common regulatory framework** was needed to ensure the right of establishment, allowing firms and individuals from any EU country to operate freely in another member state.

The EU also set **common health, safety, and environmental standards**, ensuring that products meeting these rules could be freely sold in the Single Market. This process required harmonizing legislation across member states.

In 1985, the European Commission identified 282 directives and regulations necessary to remove two major obstacles:

- **Cost-increasing barriers**: Delays at borders, customs administration, and compliance with different national regulations.
- **Market entry restrictions**: Barriers preventing firms from operating in regulated sectors (e.g., insurance, civil aviation, public procurement).

To facilitate approval, member states amended the Treaty of Rome with the Single European Act (SEA), which took effect in 1987.

- **Qualified Majority Voting (QMV)** replaced unanimity in the Council for single market legislation, speeding up decision-making.
- **Unanimity** remained required for fiscal policies, freedom of movement, and workers' rights.

By 1992, all 282 directives and regulations were approved, marking the completion of the Single Market framework.

In 1985, the Council Resolution introduced a new system for **technical harmonization and standardization**, ensuring that:

- **EU-level directives** set general principles on **health**, **safety**, and **environmental protection**.
- **Technical standards** were defined by specialized committees such as **CEN** (standardization), **CENELEC** (electrotechnical standards), and **ETSI** (telecommunications).
- This marked the rise of **comitology**, a system where expert committees assist the European Commission in decision-making.

Services Liberalization

Liberalization of Services: The Proposal (2004)

The **1990s** saw the **liberalization of key service sectors** (aviation, telecoms, energy), previously dominated by national monopolies. These reforms followed a **sector-specific** (vertical) **approach**.

In **2004**, the European Commission proposed a **broader** (horizontal) **directive** to liberalize **other services**, including:

- Consulting, real estate, recruitment, legal and fiscal advice.
- Travel agencies, health care, tourism, leisure, and sports services.

Goal: **Facilitate cross-border service provision** by applying the ***country of origin principle,*** a company follows the laws of its home country, even when operating in another EU country.

However, France and Germany fiercely opposed it, calling it ***ultra-liberal*** and an invitation to ***social dumping*** (i.e., workers from low-wage EU countries undercutting wages and welfare standards in higher-wage nations).

Liberalization of Services: The Compromise (2006)

To gain approval, the final ***Services Directive*** removed the country of origin principle and reduced the number of covered services. Under the new rules:

- A Polish dentist wanting to practice in Germany must comply with German regulations and taxation.
- **Goods remain fully liberalized** (e.g., a Polish-made car can be sold in Germany with no restrictions), but services **still face barriers** (e.g., professional qualifications and local licensing).

The **soft liberalization** of services required **member states to simplify procedures**, abolish **discriminatory requirements** (e.g., nationality restrictions), and reduce barriers.

However, many obstacles persist:

- There are still 6,000 national rules on professions in the EU.
- Some states **refuse to recognize foreign qualifications** without re-certification.

To address this, the EU introduced:

- **Automatic recognition of qualifications** for key professions (nurses, doctors, pharmacists, architects, etc.).
- **The European Professional Card (EPC)** for specific jobs (e.g., physiotherapists, real estate agents, mountain guides).

The "Brussels Effect": EU Rule-Making Beyond Europe

The ***Brussels effect***, coined by Anu Bradford (Columbia University), refers to how **EU regulations shape global markets**, influencing product standards and business practices worldwide because:

- The EU is a **massive market**, so global firms adopt EU rules to maintain access.
- **Foreign governments often align** with EU regulations to facilitate trade.
- The **EU does not actively export its laws**, but its market size compels compliance.

EG:

- **Apple**: Adopted EU privacy rules globally rather than maintaining separate compliance systems.
- **Twitter**: After signing the EU Hate Speech Code, it updated its global content policies.
- **Global industries**: EU regulations influence timber harvesting (Indonesia), pesticide use (Cameroon), food safety (Brazil), and factory standards (China).

From December 28, 2024, all small electronic devices sold in the EU must use USB-C (laptops by April 2026).

- Apple is the biggest loser, as it must abandon Lightning cables for iPhones sold in the EU.

- Apple resisted, arguing it would stifle innovation (€1.5B loss vs. €13M environmental benefit).
- The EU estimates that chargers contribute 11,000 tons of electronic waste annually.

Is the single market delivering?

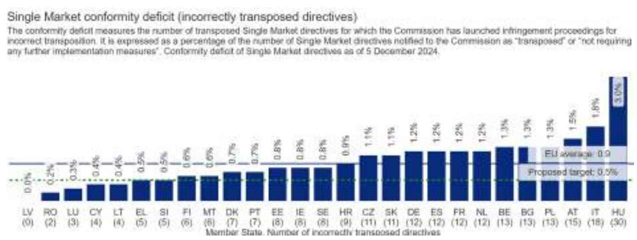
The EU Single Market is largely governed by **directives**, which set framework laws that require national adaptation. However, **transposition into national law** has often been slow and inconsistent, leading to:

- **Delays in implementation**, preventing the full realization of market integration.
- An **uneven playing field**, where some countries apply EU rules more effectively than others.

To address this, the European Commission (EC) monitors compliance and can:

- **Track transposition deficits**, urging non-complying states to accelerate implementation.
- **Impose fines via the CJEU** for persistent violations.

For controversial or critical policies (e.g., banking regulations), the EU increasingly uses regulations instead of directives. Unlike directives, regulations are immediately binding in all member states without national transposition, ensuring uniform application from the moment they are published in the Official Journal of the European Union (OJEU).



The economic rationale of the single market

The EU Single Market (ESM) generates both static and dynamic gains, driving economic growth through efficiency, competition, and resource reallocation.

1. **Static Gains**: Improved Efficiency & Competition

   By **reducing barriers and costs**, the **ESM enhances allocative efficiency** across the EU:

   - Firms and consumers can **do business with the most efficient partners** across borders.
   - The market selects ***winners:*** firms that scale up, benefiting from **economies of scale** (i.e., larger production volumes reduce average costs, leading to lower prices for consumers).
   - **Even *losers* (inefficient firms)** have opportunities:
     - **Workers and capital** can shift to **more productive sectors** within the same country.
     - The **free movement of labor and capital** allows them to **relocate to another EU country** for better opportunities.

- **State aid rules** permit **government support for firms** under specific conditions to enhance competitiveness without distorting the market.

2. **Dynamic Gains**: Growth Through Capital Accumulation

   The ESM fosters long-term growth by increasing investment in both physical and human capital, enhancing overall productivity.

   This process can be understood through ***Solow's Growth Model*** (Nobel Prize, 1987). Key assumptions of the Solow Model:

   - GDP depends on three key inputs: **Labor** (L), **Capital** (K) and **Total Factor Productivity** (TFP) (the efficiency with which labor and capital are used).
   - Annual **output** is either **consumed** or **saved** (invested) in fixed proportions.
   - A **closed economy** with no trade.
   - **Full employment** (all available labor is used).
   - **Decreasing marginal returns**: as labor or capital increases, their additional contribution to GDP diminishes.
   - **TFP** is **exogenous**, meaning it is a residual factor not directly explained by capital and labor.

The Single Market optimizes resource **allocation**, creating a more **competitive**, **larger-scale economy** that:

- ↓ **costs** for consumers.
- ↑ **innovation and investment** in more productive industries.
- **Facilitates labor and capital mobility**, ensuring resources are reallocated efficiently across the EU.
- **Drives long-term growth** by boosting capital accumulation and productivity.

Intuitions

Demand for goods in an open economy:

$$Y = C + I + G + NX$$

We are in a closed economy, so $X = IM, NX = 0$:

$$Y = C + I + G$$

There is no Government, so $T = G = 0$, thus:

$$Y = C + I$$

Eq 1

We have constant savings:

$$C = (1 - s)Y$$

Eq 2

where s is the saving rate ($0 \leq s \leq 1$).

Substituting Equation 2 into Equation 1 we obtain:

$$Y = C + I = (1 - s)Y + I$$

$$Y = Y - sY + I$$

$$sY = I$$

This means **Total Savings** (sY) must equal **Investments** (I).

As $Y\uparrow$, $S\uparrow$ and $I\uparrow$ as well, fueling economic growth.

Basics of Solow Model

The Standard **Production function** is

$$Y = f(K, L)$$

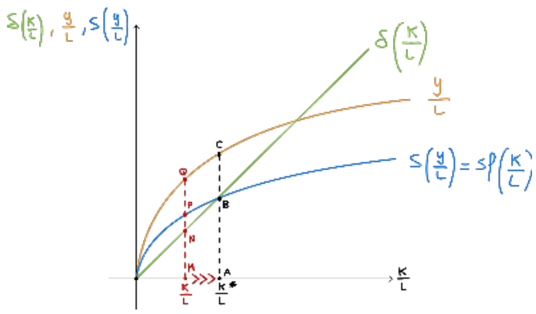
But we need Per Capita terms, so we divide everything by L and we obtain:

$$\frac{Y}{L} = f(\frac{K}{L})$$

$AC =$ production

$AB = Dep = S = I$

$BC =$ consumption



$MQ =$ production

$PQ =$ consumption

$MP = S = I$

$MN =$ depreciation

$I > Dep$

Dynamic of Capital:

$$\frac{\Delta K}{L} = \underbrace{s\boxed{f(\frac{K}{L})}}_{\text{Savings}} - \underbrace{\delta(\frac{K}{L})}_{\text{Depreciation}}$$

$$\frac{Y}{L}$$

To maintain production, firms must invest enough to replace depreciated capital.

Steady State Equilibrium: We have a dynamic equilibrium at which:

$$\frac{\Delta K}{L} = 0 \iff sf(\frac{K}{L}) = \delta(\frac{K}{L})$$

Total savings equal depreciation, ensuring **stable capital stock**.

Output per worker is maximized given existing conditions.

Long Term Growth:

Consider a $\frac{K}{L} < (\frac{K}{L})^*$

This leads to:

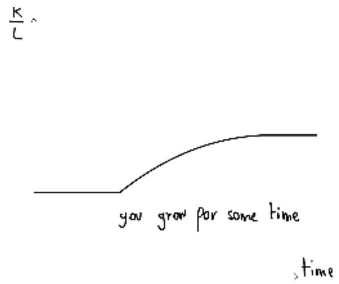
$$\frac{\Delta K}{L} > 0$$

That leads to:

$$\frac{\Delta Y}{L} > 0$$

The intuition behind is the following: $S \uparrow, I \uparrow, K \uparrow \; Y \uparrow$

Economic growth continues until the steady state is reached. Beyond steady state, **only TFP growth** can sustain **further long run growth**.



Implication of the Single Market

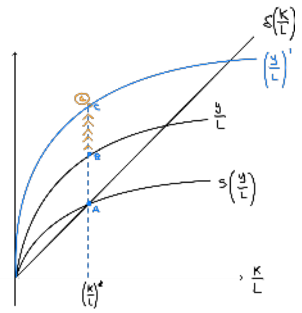
We move from Y to Y' with $Y' > Y$ (larger market) $\Longrightarrow \frac{Y'}{L} = f\,\frac{K}{L}$ bigger than $\frac{Y}{L} = f\,\frac{K}{L}$

We have several implications:

- Agents can choose most efficient partners.
- Worse firms exit the market
- Higher economies of scale

From here you will se different graphs. It is meant to understand the passages. The final graph is the comprehensive one.

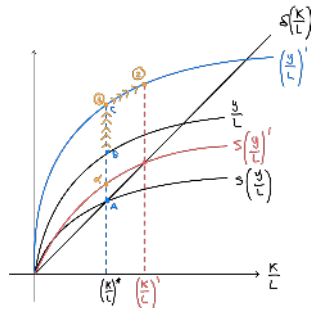
1. **Allocation effect**: More efficient allocation of resources: static gains $\Longrightarrow$ upward shift of production function to $(\frac{Y}{L})'$



2. **Medium Run Growth Bonus**: Since saving is a function of Y: $s(\frac{Y}{L})' > s(\frac{Y}{L})$

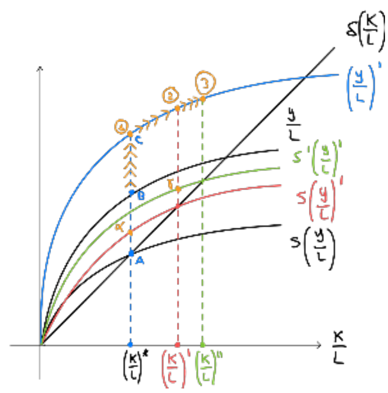
   $I > D$ (point α)

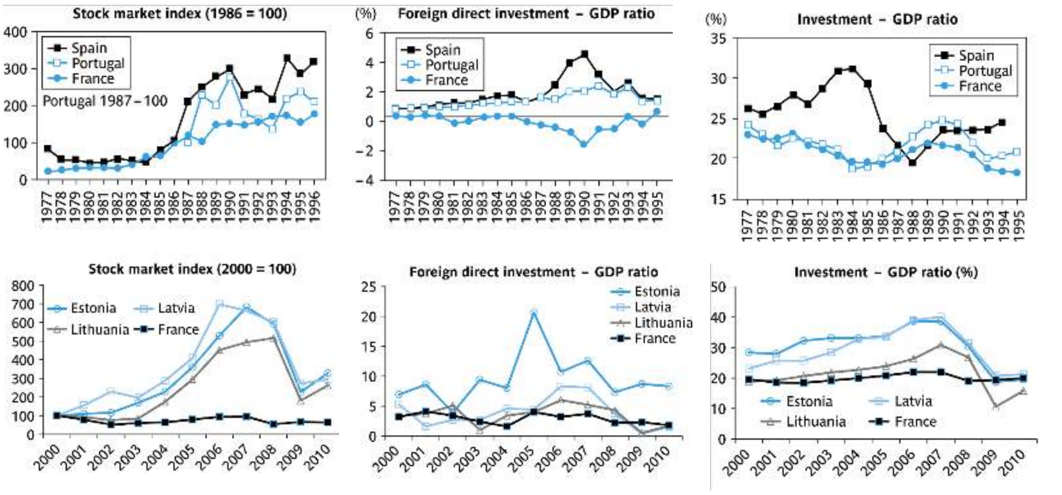
   $\frac{K}{L}$ ↑ until new equilibrium $(\frac{K}{L})'$



3. **Medium Run Growth Bonus**: Now also efficiency in the financial sector ↑ ($S' > S$). You pay less fees on your commercial bank account.

   $s'(\frac{Y}{L})' < s(\frac{Y}{L})'$ (point γ). Additional growth $\frac{K}{L}$↑ with $\frac{K''}{L}$





Towards a Capital Market Union

Despite free capital movement being an EU pillar since 1958, **financial markets remain fragmented** due to differences in company law, securities law, insolvency procedures, and access to collateral. This reduces **competition**, **economies of scale**, and **efficiency**.

The EU also has **high bank dependency** compared to the U.S.:

- **Bank loans** account for 14% of firms' liabilities in the EU vs. 3% in the U.S.
- **Corporate bonds** account for 4% in the EU vs. 11% in the U.S.

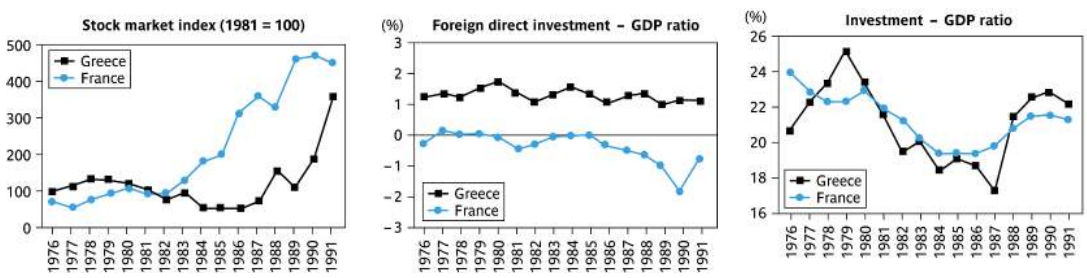
This means **small firms struggle to access alternative financing**, especially post-2008 when **cross-border lending declined** and banks focused on national markets.

Despite its economic size, the **EU lacks the financial dynamism of the U.**, resulting in **fewer unicorns** (start-ups valued over $1B). European start-ups often relocate to the U. for scaling opportunities.

First launched in 2015, the CMU aimed to unify EU capital markets but made little progress. In 2020, the Commission re-launched the CMU to support post-COVID recovery and finance the green and digital transitions.

CMU 2020 Action Plan: Key Actions

1. **Increasing visibility for cross-border investors**: Establishing a **European Single Access Point (ESAP)** for financial and sustainability-related corporate data.
2. **Encouraging public listings**: Making stock market listings attractive again.



3. **Improving financial literacy**: Empowering EU citizens in investment decisions.

4. **Enhancing transparency**: Creating a **consolidated tape** to provide **accurate**, **comparable price data** for EU-traded securities.

The Impact of Economic Integration

Accession countries (new EU members) provide a **natural experiment on the effects of integration**, showing:

- **Stock market growth** due to increased efficiency, profits, and expected dividends.
- **Higher investment-to-GDP ratios** as capital allocation improves.
- **Improved foreign direct investment (FDI)** as markets open up.

Can Integration Lead to Permanently Higher Growth?

A **qualified yes**, under three conditions:

- If **Technological progress** is boosted by integration.
- If **Stronger competition** drives continuous productivity gains.
- If **Structural reforms** enhance growth potential.

Empirical Evidence:

- **Baldwin (1989)**: Estimated 0.5% permanent extra GDP growth per year.
- **EU Commission (1996)**: Estimated 1% permanent extra GDP growth per year.

CH 7: EU Competition Policy

Competition in the European Single Market

The Role of Competition in the Single Market

The European Single Market promotes competition by ensuring **economic freedom** and **efficient resource allocation**. **Competition** must be **fair**, firms should 'fight' in a level-playing field and should not abuse their powers.

Economic **integration** + **liberalization** $\Longrightarrow$ ↑ **competitive pressure**, $\Longrightarrow$ firms need to **restructure** (M&A or exits) $\Longrightarrow$ **incentives for collusion** among firms and **state subsidies** to struggling national companies. To counteract these risks, the EU developed an **ad-hoc competition policy**.

EU Competition Policy

Perfect competition is an economic ideal, ensuring **efficiency** and **consumer welfare**. Although real markets rarely meet its strict conditions, it remains a **benchmark for policymakers**.

The EU's competition policy protects **consumers**, **businesses**, and **markets** from **anticompetitive behavior**, ensuring that **even large multinational firms comply with EU rules**. The system is similar to US laws (Sherman Act, Clayton Act, etc.), but **goes beyond antitrust** to regulate mergers and state aid.

Monopolies, or concentrated markets, might not be dangerous for consumers' welfare (economies of scale, contestable markets, innovation).

A case-by-case approach is needed (only a few per-se prohibitions).

The Structure of EU legislation

Antitrust (Restrictive Practices & Abuse of Dominance)

- Art. 101 TFEU: Prohibits agreements that restrict competition (cartels, collusion).
- Art. 102 TFEU: Prevents firms in a dominant position from abusing market power (e.g., predatory pricing, unfair conditions).

Merger Control: Regulation 139/2004: Prevents mergers that could reduce competition in the EU.

State Aid Control: Art. 107-109 TFEU: Prohibits government subsidies that distort competition, unless justified under specific conditions.

Community Dimension

EU competition rules only apply when a **competition issue affects trade between Member States** (cross-border economic activities).

National authorities handle purely domestic issues, following the subsidiarity principle.

The Institutions of EU Competition policy

The **European Commission** enforces competition rules, with powers to:

- **Investigate companies** (inspections, hearings).
- **Impose fines for violations**.
- **Grant exemptions** in specific cases.

The **Council of the EU** and the **European Parliament** have no direct role in competition enforcement.

Decisions by the Commission can be challenged in the **General Court**, with final appeals to the **CJEU**.

Who is Subject to EU Competition Rules?

The EU's competition policy applies to all ***undertakings***, any entity engaged in economic activity, regardless of legal status. This includes ***parent*** and ***subsidiary*** firms, as seen in Commercial Solvents (1974), where a **51% subsidiary's conduct** was attributed to its parent company.

For enforcement, **market power** is a key factor:

- **Market share** is a common proxy but not the only consideration.
- Competition law applies when a firm's actions **impact trade between EU countries**.

The EU's competition policy ensures a fair, efficient, and integrated market, preventing monopolistic behavior and undue government intervention.

The Definition of the Relevant Market

Market definition helps assess **market power** by identifying the boundaries of competition. Firms often try to define the market as broadly as possible, while regulators ensure that this definition is accurate and does not distort competition concerns.

Two Dimensions of Market Definition

1. **Product Market**: Includes products/services that consumers see as interchangeable or substitutable, based on:
    - Characteristics
    - Prices
    - Intended use (Principle of Substitutability)
2. **Geographic Market**: The area where firms supply and consumers demand goods/services under similar competitive conditions. A market is defined geographically if conditions differ significantly from surrounding areas.

Substitutability and the SSNIP Test

The **SSNIP test** (Small but Significant Non-transitory Increase in Price) assesses **demand substitution**. It tests whether consumers would **switch to substitutes** if the price of a product increases by 5-10% permanently.

- If customers switch, the market must include substitutes.
- If customers continue buying despite the price increase, the product is in a separate market.

EG:

- **Pasta Market**: If a 10% price increase in pasta leads customers to buy more rice, the two belong to the same market.
- **Banana Market (United Brands Case)**: A 10% price increase in bananas remained profitable because consumers did not switch to other fruits. The banana market is separate, as it has unique characteristics (softness, taste, easy handling).

Restaurants vs. Bars:

- **Lunch**: People want a quick meal, making bars and restaurants part of the same market.
- **Dinner**: Dining is an experience, making bars not a substitute for restaurants.

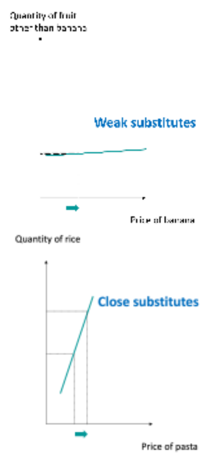
Geographical Market Definition

Consumer preferences, transportation costs, and cultural barriers influence geographic market size:

- **Retail banking**: Regional market (BAI/Banca Popolare di Lecco, 1993).
- **Oil industry**: Global market (BP Amoco/Arco, Exxon/Mobil, 1999).
- **High-value, low-transport cost products**: Large markets (e.g., aircraft: Airbus vs. Boeing).
- **Low-value, high-transport cost products**: Smaller markets (e.g., sugar: Napier Brown-British Sugar, 1988).

As a rule of thumb, the ***size of the market is in inverse proportion to the product's transportation costs relative to the value of the product***: a product with a high value and a low transportation costs will have a large geographical market and vice-versa as in Napier Brown-British Sugar (1988) where UK constituted a separate market.

Cross-Price Elasticity and Market Definition



Cross-price elasticity of demand measures how demand for one product responds to a price change in another:

- **Positive elasticity**: Products are substitutes.
- **Negative elasticity**: Products are complements.

$$E_{A,B} = \frac{\text{\%Change in Quantity Demanded for Good A}}{\text{\%Change in Price of Good B}}$$

Using the SSNIP test:

- If a price ↑ in Product 1 is profitable (no substitution), Products 1 and 2 are in different markets.
- If a price ↑ in Product 1 is unprofitable (customers switch to Product 2), they belong to the same market.

What does EU competition policy control?

Agreement between firms

An agreement is different from a merge, in this case firms keep their own independence.

Firms often sign agreements, which can be:

- **Vertical** (e.g., manufacturer-distributor agreements).
- **Horizontal** (e.g., cooperation between competitors for a joint project).

Or:

- **Legal Agreements**: If they **improve production/distribution without harming competition** provided that consumers are allowed a fair share of the resulting benefit.
- **Illegal Agreements**: Any agreement that **restricts competition** (Article 101 TFEU). **Hardcore Restrictions**: Price-fixing and territorial protection clauses are always illegal.

An agreement does **NOT need to be in writing or formally signed**.

- If firms attend **meetings** aimed at reducing competition, they can be fined (e.g., Cartonboard case, 1998).
- **Industry associations** can be used as a front for collusion. Such actions might include promotional campaigns, market research, standard setting, and even charitable functions on behalf of workers in the industry. These associations may also act as a front for collusive activity.

  Belasco (Cooperative Association of Belgian Asphalters): The association engaged in **price-fixing**, **market-sharing**, and **quota allocation,** restricting competition in Belgium's roofing felt market. Despite including benign measures like **bans on bribes** and **joint advertising**, the enforced pricing rules and penalties made it a clear cartel.

- Even **non-binding recommendations** can be considered a decision restricting competition (e.g., Fire Insurance case).

  Fire Insurance: Although labeled as a non-binding recommendation, the Commission ruled that it effectively functioned as a binding decision influencing market behavior. Simply informing members of the recommendation was enough to constitute an anti-competitive agreement.

Concerted practices: Cartels and Tacit collusion

Concerted practices (collusion) involve firms coordinating behavior to **raise prices above competitive levels**. Concerted practices generally have an ***HORIZONTAL*** dimension.

- **Explicit collusion**: Direct communication in a **cartel**.
- **Tacit collusion**: Firms **implicitly** coordinate pricing or market behavior **without direct communication**.

Conditions Favoring Collusion

- **Homogeneous products** (easier to coordinate prices).
- **Few market players** (easier to monitor and control competitors).
- **Entry barriers** (preventing new competitors from disrupting collusion).
- **Information sharing** (price announcements, trade associations).
- **Stable market conditions** (less uncertainty makes collusion sustainable).

Parallel price increases by firms are not automatically prohibited: they could be a response to common market conditions, such as rising input costs. However, the Commission investigates whether price changes result from a coordinated effort, analyzing whether market conditions facilitate collusion. These include:

- **Product homogeneity** (similar goods make it easier to coordinate prices),
- **Number and importance of undertakings** (fewer firms increase the likelihood of coordination),
- **High entry barriers** (preventing new competitors from disrupting price-fixing),
- **Information sharing** (price announcements, trade associations, discounts),
- **Market stability** (low variability makes collusion easier to sustain).

Fines and Enforcement

Firms involved in illegal agreements (cartels) face **fines** **up to 10% of their total global turnover**. Since finding direct evidence of a cartel is difficult, the Commission relies on **whistleblowers** to expose violations. The leniency program incentivizes firms to confess:

- The **first firm to submit decisive evidence gets total immunity from fines**.
- **Other cooperating firms may receive fine reductions** based on their level of cooperation.

Beyond fines, **private enforcement** allows any business or consumer harmed by a cartel to seek damages in national courts. If the Commission has ruled that a cartel existed, victims can use this decision as proof to support their claims.

Case (NO EXAM) - Cartel of LCD Panel Producers (2010)

Six firms (Samsung, LG Display, AU Optronics, Chimei InnoLux, Chunghwa Picture Tubes, HannStar) colluded to fix LCD panel prices.

- Tactics: Price agreements, shared production plans, and market conditions.
- Meetings: 60+ "Crystal meetings" held in Taiwan.
- Penalty: €649 million in fines.
- Leniency: Samsung received full immunity for whistleblowing, avoiding a potential $22 billion fine.

Case (NO EXAM) - Cartel of Rechargeable Battery Producers (2016)

Firms (Sony, Panasonic, Sanyo, Samsung) colluded to fix lithium-ion battery prices.

- Tactics: Agreed on price hikes in response to rising cobalt costs and shared commercially sensitive data.
- Penalty: €166 million in fines.
- Leniency: Samsung again received full immunity, avoiding a $30.5 billion fine.

Case (NO EXAM) - Sotheby's & Christie's Price-Fixing Cartel (1990s)

The two major auction houses colluded for 7 years to inflate commission fees.

- Penalty: Sotheby's fined €20.4M in the EU and $45M in the US; Chairman Alfred Taubman jailed for one year.
- Leniency: Christie's escaped fines for cooperating.

Case (NO EXAM) - Cartel of Canned Vegetables (2019)

Four companies (Bonduelle, Coroos, Groupe CECAB, Conserve Italia) fixed prices, set quotas, and divided markets for canned vegetables.

- Penalty: €31.7M for Coroos & Groupe CECAB, €20M for Conserve Italia.
- Leniency: Bonduelle avoided fines by revealing the cartel.

Vertical agreements - Less dangerous than the horizontal ones

Vertical agreements (e.g., distribution, franchising) occur between companies at different levels of the supply chain. They can be:

- **Anti-competitive** if they restrict suppliers or buyers (e.g., exclusive supply/purchase agreements).
- **Pro-competitive** if they help market entry or prevent free-riding.

The **Block Exemption Regulation (BER)** allows most vertical agreements if **market share is below 30%**, ensuring inter-brand competition remains effective. Unlike cartels, they are not outright illegal but monitored to prevent market distortions.

Case (NO EXAM) - The single market cannot be divided

The European Commission investigated Sanrio (Hello Kitty products) and NBC Universal (Minions, Jurassic World, Trolls) for restricting cross-border and online sales of licensed merchandise within the EU Single Market.

- Sanrio fined €6.2 million (July 2019).
- NBC Universal fined €14.3 million (January 2020).

These restrictions violated EU competition rules, as companies cannot prevent traders from selling freely across EU member states.

Abusive Behaviours of Dominant Firms

In the EU, firms holding a **dominant market position** are **NOT illegal**, but **their abusive behavior is**. A firm is considered dominant if:

- **Market share exceeds 40%** (dominance is almost certain above 70%).
- **Competitor structure** (dominance is stronger if competitors are fragmented).
- **Entry barriers** (low barriers weaken dominance).
- **Consumer bargaining power** (e.g., national health systems purchasing medical devices).

Types of Abuse

- **Exploitative abuse**: Using **market power to exploit customers** (e.g., excessive pricing).
- **Exclusionary abuse**: **Hindering competition** through **non-merit-based means** to increase dominance and later engage in exploitative abuses.

The exclusion of competitors is not an end in itself, but a firm's strategy to increase its dominance (ie, increasing its market share) to undertake exploitative abuses that can increase its profitability.

Fines & Commitments

- Firms abusing dominance can be **fined up to 10% of global turnover**.
- **Commitment decisions**: Instead of fines, firms agree to **stop anti-competitive behavior to restore normal market conditions**. They are considered speedier than formal sanctions (prohibition decisions) in restoring normal competitive market conditions.
  - If the Commission, after consulting market participants, finds these commitments sufficient, it takes a decision to make them legally binding.
  - If the companies breach commitments they can be fined.

Case (NO EXAM) - Unfair Pricing: Excessive Prices (Aspen Pharmacare, 2021)

Between 2012-2018, Aspen raised prices of six cancer drugs by 300%-1,500% in the EU, exploiting its dominant position. Threatened to withdraw drugs if national health systems refused price hikes. Rather than facing a fine, Aspen settled with the Commission, agreeing to cut prices by 73% across the EEA.

Case (NO EXAM) - Unfair Pricing: Predatory Pricing (Michelin, 2001)

Michelin held over 50% market share in France for replacement and retread tires. Used complex rebate systems to tie dealers to its products, blocking competitors. Fined €19.76 million for abusing dominance and foreclosing competition.

Case (NO EXAM) - Price Discrimination (AB InBev, 2019)

AB InBev restricted Belgian retailers from importing cheaper Jupiler beer from the Netherlands.

Altered packaging (e.g., removing French labeling) to impede cross-border sales.

Fined €200 million for anti-competitive price discrimination.

Refusal to Supply and the Essential Facility Doctrine

A facility (e.g., telecom network, airport) is ***essential*** if competitors cannot operate without it.

The owner cannot use control over it to block competition in a related market (e.g., telecom provider restricting competitor call services).

Four conditions for an essential facility case:

- **Monopolist controls** the facility.
- **Competitors cannot replicate** it.
- **Access is denied** to competitors.
- **Providing access is feasible**.

Case (NO EXAM) - Essential Facility Doctrine (Frankfurt Airport, 1998)

Flughafen Frankfurt/Main AG denied access to ground-handling services, citing space limitations. The Commission ruled that refusing access to an essential facility (airport services) was an abuse. Frankfurt Airport breached Article 102 TFEU.

Case (NO EXAM) - Tying (Microsoft, 2004)

Bundled Windows OS with Windows Media Player (WMP), leveraging near-monopoly in OS market. Forced PC manufacturers to pre-install WMP, foreclosing competition. Fined €497 million and required to offer a Windows version without WMP.

Case (NO EXAM) - Google Shopping

The Commission investigated Google's alleged favoritism toward its own Google Shopping service in search results, disadvantaging competitors. Google held a 90% market share in EU search services.

- Issue: Google required competitors to pay for inclusion in Google Shopping via an auction system, while prioritizing its own service.
- The Commission fined Google €2.42 billion for abusing its dominance by illegally favoring Google Shopping. Google appealed, but in 2021 the General Court upheld the decision, confirming the abuse. The Court of Justice confirmed the Commission's ruling, reinforcing the fine and Google's liability.

Case (NO EXAM) - Android

The European Commission fined Google €4.34 billion for abusing its dominance in mobile operating systems.

- Issue: Google forced manufacturers to pre-install Google Search and Chrome on Android devices, restricting competition.
- It also banned "Android forks", preventing manufacturers from selling devices with modified Android versions (e.g., Amazon's Fire OS).
- Impact: The Commission argued that pre-installed apps create a status quo bias, making users less likely to switch to competitors.
- The General Court upheld the decision, confirming Google's anti-competitive practices.

This case highlights how Google used Android's dominance to reinforce its search and browser market power, limiting consumer choice.

Case (NO EXAM) - Amazon Antitrust Case

The European Commission accused Amazon of abusing its dual role as both a marketplace operator and a retailer.

- Issue: Amazon had access to non-public data of third-party sellers (e.g., sales, demand trends, shipping info).
- Unfair Advantage: Amazon allegedly used this data to adjust its own product offerings and compete unfairly against independent sellers.
- Impact: This practice harmed smaller retailers, allowing Amazon to prioritize its own products and dominate best-selling categories.

The case highlights concerns over big tech companies controlling both platforms and competition, raising issues of fairness and market power abuse in digital marketplaces.

Concentrations (M&A)

The concept of **concentration** in EU competition law refers to situations where **2 or more independent firms merge** or **where one firm acquires control over another**. **Market power concentration** is a **natural consequence** of European economic integration, as companies merge or acquire others to scale up, reduce costs, or develop new products more efficiently. While such processes can **improve competitiveness** and bring benefits to consumers through lower prices and better quality goods, they also pose **risks** if they lead to **excessive market dominance**.

Assessment Process

The European Commission plays a central role in assessing mergers that might significantly impede effective competition, particularly if they create or strengthen a dominant position in the market.

- **Notification**: Companies involved in a concentration that exceeds certain thresholds must notify the Commission before proceeding with the merger.

- **Phase I Investigation (25d)**: it collects information from the **merging firms** and **competitors**, examines market conditions, and calculates market shares. If no concerns arise, the merger is approved.
- **Phase II Investigation**: launched if there are potential risks to competition.

A key tool used to assess market concentration is the **Herfindahl-Hirschman Index (HHI)**, which measures **market dominance by summing the squares of individual firms' market shares**. It gives proportionately greater weight to the market shares of the larger firms. Although it is best to include all firms in the calculation, lack of information about very small firms may not be important because such firms do not affect HHI significantly. While the absolute level of the HHI can give an initial indication of the competitive pressure in the market post merger, the change in the HHI (known as Δ) is a useful proxy for the change in concentration directly brought about by the merger.

- **Post merger HHI<1000**: No concern
- **1000<post merger HHI<2000 (Δ<250)** or **Post merger HHI>2000 (Δ<150)**: unlikely to identify horizontal competition, but further analysis (Phase II) is required when:
    - One or more merging parties are important innovators in ways not reflected in market shares.
    - Indications of past or ongoing coordination, or facilitating practices, are present.
- **1000<post merger HHI<2000 (Δ>250)** or **Post merger HHI>2000 (Δ>150)**: further analysis required.
- **Post merger HHI=10000**: its the extreme case, the one with a **monopolist**.

Structure pre-merger		
7 firms	Market share (%)	
a	20	400
b	20	400
c	20	400
d	10	100
e	10	100
f	10	100
g	10	100
	pre-merger HHI	1600

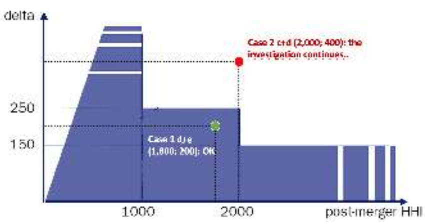
Case 1: d+e merger		
6 firms	Market share (%)	
a	20	400
b	20	400
c	20	400
d+e	20	400
f	10	100
g	10	100
	post-merger HHI	1800
	Delta	200

Case 2: c+d merger		
6 firms	Market share (%)	
a	20	400
b	20	400
c+d	30	900
e	10	100
f	10	100
g	10	100
	post-merger HHI	2000
	Delta	400

EG:

Case 1: d+e: The relevant market is still sufficiently fragmented on the supply side, a merger like this is usually cleared.

Case 2: c+d: The relevant market gets significantly concentrated on the supply side, a merger like this needs additional investigation.



Once the Commission completes its assessment, there are three possible outcomes:

- **Unconditional Approval**: If the merger does not pose competition concerns, it is cleared.
- **Approval with Remedies**: If concerns exist, the companies may propose corrective measures to maintain competition.
- **Prohibition**: In rare cases, when no suitable remedies exist, the merger is blocked. Out of over 9,500 merger notifications, only 33 have been prohibited.

If the Commission identifies competition **issues**, merging firms can provide **justifications** or **offer remedies**:

- **Efficiency Defense**: The merger may increase efficiency, leading to lower prices or innovation that benefits consumers.
- **Failing Firm Defense**: If one of the merging firms is in financial distress and would exit the market anyway, the merger may be allowed.
- **Commitments & Remedies**: Companies may be required to divest assets, grant access to essential facilities, or take other steps to maintain a competitive market structure.

Remedies must be **clear-cut and effectively enforceable.** The Commission prefers structural solutions (such as selling off parts of the business) over behavioral commitments (such as promises to maintain fair competition), as structural changes are easier to enforce and provide lasting market corrections.

Case (NO EXAM) - Alitalia and KLM (1999)

Issue: Proposed alliance would create dominance on Amsterdam–Rome & Amsterdam–Milan routes.

Concern: No viable substitutes for direct routes + airport congestion limited new entrants.

Remedy: 336 weekly slots released at Schiphol, Malpensa, Fiumicino to facilitate competition.

Case (NO EXAM) - Olympic Air and Aegean Airlines (2011, 2013)

2011: Blocked due to 90% market share in Greek domestic air transport.

Reason: Slot releases not effective (Greek airports not congested).

2013: Approved under failing firm defense—Olympic Air would have exited the market anyway.

Case (NO EXAM) - Google and Fitbit (2020)

Concern: Google could misuse health data from Fitbit for advertising.

Commitments:

- No Google Ads use of Fitbit data (including GPS & sensor data).
- User control over sharing Fitbit data with Google services.

Duration: 10-year legally binding commitments.

Case (NO EXAM) - Microsoft and Activision Blizzard (2023)

Issue: Microsoft could block rivals (PlayStation) from accessing Activision games.

Remedy: 10-year free licenses to:

EU consumers: streaming via any cloud gaming service.

Cloud gaming providers: allowing distribution of Activision Blizzard games.

Case (NO EXAM) - Amazon and iRobot (2023-2024)

Concern: Amazon could favor its own products and block rival robot vacuums from its marketplace.

Commission's action: Statement of Objections issued in November 2023.

Outcome: Amazon abandoned the deal in January 2024.

State Aids

Why Control State Aids?

State aid refers to **advantages granted by public authorities to specific firms or industries**, giving them selective benefits. This disrupts competition in the European Single Market (ESM) by distorting the ***level playing field***.

Key concerns of state aid:

- It delays necessary restructuring without ensuring firms regain competitiveness.
- Unsubsidized firms face unfair competition, leading to potential job losses.
- The overall market suffers inefficiencies, weakening the EU's economic competitiveness.

Since the EU promotes **free and fair competition**, state aid is generally **illegal**, except **when justified for economic development purposes**. The European Commission **monitors** and **regulates** how member states use taxpayer funds.

When is State Aid Legal?

State aid is always legal when:

- **For social purposes**: Aid granted to individual consumers without discrimination based on product origin.
- **For natural disasters**: Financial assistance to firms affected by earthquakes, floods, or similar crises.

State aid can be **legal** (but must be **notified** and **approved** by the Commission) when it serves broader **economic or social objectives**, such as:

- **Supporting disadvantaged regions** where living standards are low or unemployment is high.
- **Funding projects of European interest** or responding to serious economic disturbances.
- **Boosting specific economic activities or sectors** (e.g., innovation, green energy).

- **Promoting culture and heritage conservation**.

State Aids Control: the Procedure

The European Commission has **strong investigative powers and decision-making authority** over state aid.

- **Member States must notify** the Commission **before implementing** any new state aid measures.
- They must **wait for Commission approval** before granting the aid.
- **Exceptions to notification** requirements include:
  - **Block Exemption**: Automatic approval for aid in certain areas (e.g., local transport, broadband).
  - **De minimis aid**: Small subsidies (≤200,000 EUR per firm over 3 years) are not considered distortive.
  - **Previously approved aid schemes**: Aid that falls under an already authorized national support program.

When is State Aids compatible?

The EU evaluates state aid compatibility based on economic justifications, primarily market failure and merit goods.

- **Market failure**: When markets fail to allocate resources efficiently, state intervention can correct this (e.g., funding R&D, venture capital, environmental investments).
- **Merit goods**: Essential goods that society values highly but markets may underprovide (e.g., education, healthcare, transportation, communication, welfare, housing).

Unlike pure public goods, **merit goods can be** provided by the market but may require **state support** to ensure broader social benefits. The government **subsidizes these areas** based on public interest and long-term economic goals.

Case (NO EXAM) - Ireland and Apple (State Aid & Tax Rulings)

Background: The Commission investigated Apple's tax arrangements in Ireland (2014) and concluded (2016) that two tax rulings (1991, 2007) granted by Ireland to Apple reduced its tax burden illegally under EU state aid rules. Apple Sales International and Apple Operations Europe, both paper companies with no real operations, were allocated €87 billion in profits over a decade. Apple's effective corporate tax rate dropped from 1% (2003) to 0.005% (2014).

Commission's Decision (2016):

- Ireland's tax deal with Apple gave the company a selective advantage, violating EU competition rules.
- Ireland was ordered to recover €13 billion + interest in unpaid taxes from Apple (2003-2014).

Challenges to the Ruling:

- The amount Apple owed could be reduced if other countries (e.g., Germany, India) demanded tax payments on profits recorded in Apple's Irish subsidiaries.
- The US could also claim a share by requiring Apple to pay higher R&D contributions to its US parent company.

Court Rulings:

- July 2020: The General Court annulled the Commission's order, ruling that the Commission failed to prove Ireland's tax rulings involved discretionary state aid.
- Commission's Appeal: The Commission challenged the ruling, arguing that Apple's selective tax benefits harmed fair competition in the EU.
- September 2024: The Court of Justice confirmed the Commission's original decision, reaffirming that Ireland's tax treatment of Apple constituted illegal state aid.

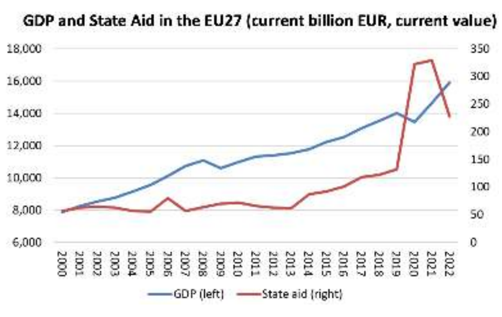
Broader Implications:

- The case highlights corporate tax avoidance in the EU and the difficulty of enforcing tax fairness.
- EU officials stress the importance of closing loopholes and ensuring multinational corporations pay their fair share of taxes to prevent unfair advantages and secure public revenue.

A New Era for State Aids:

In recent years, the EU has progressively expanded the scope for State aid, especially in response to crises.

- **2008 Financial Crisis**: Allowed Member States to recapitalize financial institutions and provide support to stabilize the banking system.
- **COVID-19 Pandemic**: Marked a shift towards large-scale economic support, beyond crisis management.
- **Green Transition**: Since March 2023, the Temporary Crisis and Transition Framework (TCTF) enables aid for key sectors like batteries, solar panels, hydrogen, carbon capture, zero-emission vehicles, and energy-efficient buildings to support the EU's net-zero targets.



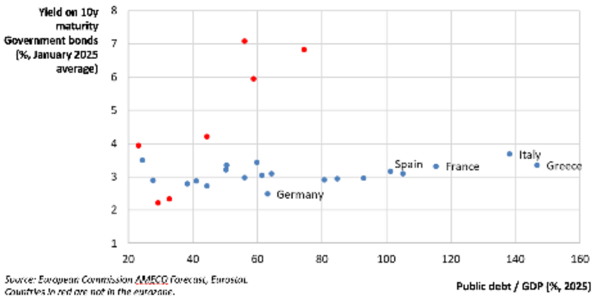
This move comes as global competition for green investments intensifies. The US Inflation Reduction Act (IRA), with $369 billion in tax credits, incentivizes domestic production of EVs, batteries, and renewable energy components, increasing the risk of European firms relocating to the US.

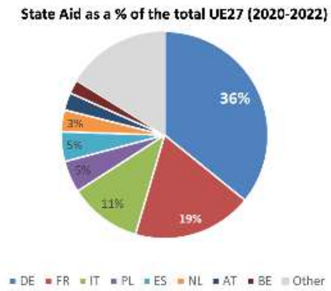
State Aids may increase inequality within the EU

However, **not all EU countries have the same fiscal capacity** to provide State aid. Wealthier nations like **Germany** and **France** can offer greater subsidies than more indebted countries like **Italy** or **Greece**, leading to concerns over **market distortions within the EU**.

To mitigate this, the **European Commission proposed an *EU Sovereignty Fund***, aiming to finance State aid at the **EU level** rather than relying solely on national budgets. However, the proposal remains under discussion, with no approval yet from the Council.

The EU's approach to State aid is evolving, balancing **economic competitiveness**, **fairness**, and **sustainability**, while ensuring Europe remains a leader in the global green economy.





CH 8: Common Agricultural Policy

Origins and Objectives

Why Agriculture?

Agriculture represents 1.8% of the EU's Gross Value Added and 3.6% of its labor force (2023), but it holds a **disproportionate weight in EU policy**. Today, CAP accounts for over **30% of the EU budget** (down from >70% in the 1970s), making it the **most financially significant policy**.

Agriculture is mostly a **family-run sector**, with over 90% of work in countries like Ireland, Malta, and Poland provided by family members. It is also a **highly sensitive political and economic issue**, linked to **poverty reduction**, **trade**, **development cooperation**, and **recurring disputes** among Member States.

Importance of agriculture:

Table 9.1 Importance of agriculture, 1955 vs. 2009

	Agriculture's share of GDP (%)		Agriculture's share of employment (%)	
	1955	2009	1955	2009
Belgium	7.9	0.6	9.3	1.5
Luxembourg	9.3	0.2	19.4	1.4
Netherlands	11.4	1.3	13.2	2.8
Germany	8.0	0.5	18.5	1.7
France	11.4	1.2	26.9	2.9
Italy	20.7	1.5	40.0	3.7
EEC6	11.5		21.2	
UK	4.8	0.5	4.6	1.1
Denmark	18.4	0.7	24.9	2.5

In 1955 low level of productivity (GDP share < employment share)

The British exception (long history of free trade -> downsizing of the sector)

The call for a policy

After WWII, Europe transitioned from an **agricultural** to an **industrial** economy, leading to ↑ labor demand in cities and pressure for rural workers to migrate. However, **farming remains risky** due to weather dependence, price fluctuations, and long production cycles.

Additionally, EU farmers generate a ***positive externality*** providing **public goods** beyond food production, such as **environmental protection**, **rural development**, and **high-quality food safety standards**, justifying state intervention rather than a purely market-driven approach. In one word: **multi-functionality**.

The EU faced **2** policy **options**:

- **No intervention**: letting the market drive massive rural-to-urban migration.
- **Intervention**: guiding agricultural transformation while protecting its multifunctional role.

  Ad hoc policy:

  - Europe needed a strong and healthy agricultural sector and the memory of food shortages over WWII was still vivid.
  - 1957: The ***Treaty of Rome*** set the **CAP's general objectives**.

- 1958: The ***Stresa Conference*** established the **policy's guiding principles**.
- 1960: The **first CAP mechanisms were adopted** by the 6 founding Member States.
- 1962: The **CAP officially came into force**.

The objectives of the CAP in the Treaty (Art. 39 TFEU)

The Treaty outlined five key goals:

- ↑ **agricultural productivity** through **technical progress** and **efficient use of resources**.
- **Ensure a fair standard of living** for farmers, particularly by increasing their individual earnings.
- **Stabilize markets** to avoid excessive price fluctuations.
- **Ensure food availability** across the EU.
- **Provide consumers with affordable food** at reasonable prices.

The Original Framework and Principles

At its inception, each EU country had different national agricultural policies, requiring a compromise for integration. The CAP was structured around three fundamental principles:

- **Unified Market**: Free movement of agricultural products within the EU.
- **Community Preference**: EU products given priority over imports.
- **Financial Solidarity**: CAP costs are entirely covered by the EU budget, not individual states.

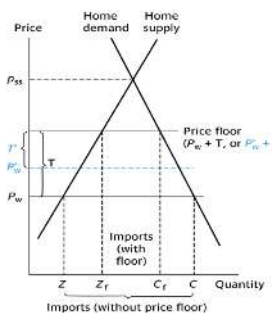
These principles ensured **market integration**, **protection of EU farmers**, and **collective financing**, laying the foundation for what remains one of the EU's most complex and politically charged policies.

Price Support

The original tool: price support mechanism

The price support mechanism is a key policy tool used in the **early years of the CAP** to **stabilize agricultural prices and incomes.** This system was implemented through a price floor and tariffs (Common External Tariffs - CETs) to prevent imported goods from undercutting EU agricultural prices.

- **Without a price floor**:
  - imports would enter at the world price P_W
  - the quantity imported would be ZC
- **With the price floor**:
  - The EU sets a minimum price ($P_W + T$ or $P'_W + T'$) through a tariff (T or T') ensuring farmers get a ↑ price than the world markets, and therefore a stable income.
  - As a result the **import** quantity ↓ from ZC to $Z_f C_f$
  - As P_W changes, tariffs were adjusted to maintain stability.



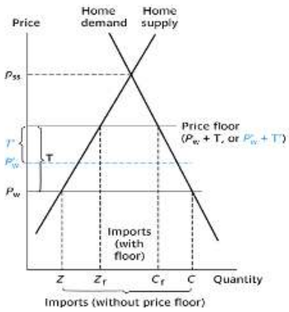
Welfare Effects

CS: loss equal to **A** + **C1** + **B** + **C2**.

PS: gain equal to **A**, as they receive higher prices.

GS (EU): collects tariff revenues (area **B**).

DWL: C1 and C2 represent inefficiencies



As the P_W changes, **only tariffs change** (and thus the level of protectionism). EU consumption and imports are stable.

Early Results and Subsequent Problems

Initially, the CAP was well received for providing:

- **Higher and stable prices for farmers**: Increased farmers' income.
- **Tariff revenues** (via CETs) generated income for the EU budget.
- **Consumer trade-offs**: Although food prices were higher than in the Rest of the World (RoW), there was greater food availability and lower import dependency.

However, **post-war productivity gains led to problems**:

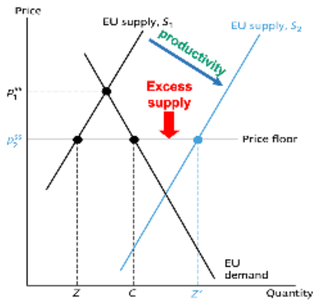
- **Guaranteed prices** encouraged **overproduction**, leading to surpluses.
- **Growth of the agrochemical industry** (pesticides, herbicides, fertilizers) fueled agricultural expansion.
- **Output grew much faster than consumption**, leading to excess food production.
- **No price fall occurred**: Prices remained above world levels, leading to distorted markets.
- The EU **became a net exporter of agricultural products**, sometimes requiring costly subsidies to dispose of surpluses.

The Excess of Supply

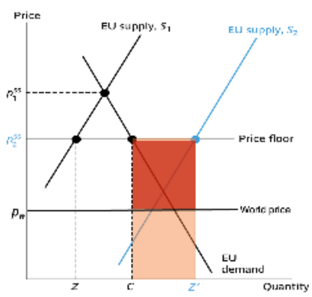
The positive supply shock, i.e. S shift to the **right**, combined with a **fixed price floor**, leads to excess of supply (CZ').

Note how the price floor is now above the equilibrium price: a case of a more than prohibitive tariff !!

- **Guaranteed Sales at High Prices**
  - Farmers were incentivized to **produce more** since they were **assured that their products would be bought at a high price**.
  - Unlike typical markets, where S and D dictate price, the CAP system artificially maintained higher prices, protecting farmers' incomes.
- **Excess Supply Creation**
  - As productivity ↑ (supply shift from S_1 to S_2 in the graph), **EU farmers produced more than the market could absorb**.
  - Since D remained stable while S ↑, a large excess supply (CZ') emerged.
- **Market Distortions and Budget Costs**
  - The EU had to intervene by purchasing the surplus at the price floor, leading to the infamous "butter, wheat, and beef mountains" (i.e., large stockpiles of unsold goods).
    EG: By 1985, the EU stored 18.5 million tonnes of cereals, equating to 70 kg per citizen—most of which went to waste.



- **Dumping through Export Subsidies**
  - To solve the storage problem and reduce budgetary strain, the **EU started selling excess supply abroad at P_W** (which were much lower than the CAP price floor).
  - Since P_W was lower than the EU price floor, the **EU refunded the difference to exporters,** a practice known as **export subsidies** (shown in the second graph, where the dark red area represents exports).
  - This artificially supported EU farmers at the expense of taxpayers, while distorting international trade.

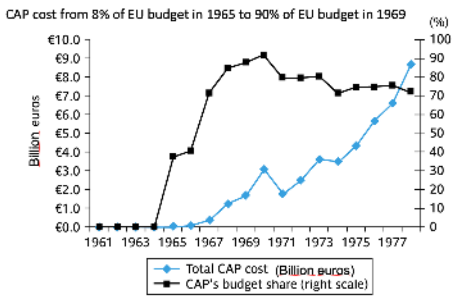


The Cost of the Excess of Supply: The Need for a CAP Reform

The price support mechanism under the CAP led to severe **distortions** in the agricultural market. While initially designed to protect farmers and ensure food security, the system created **inefficiencies**, **trade distortions**, and **social inequalities,** ultimately requiring reform.

Key Problems of the Price Support System:

- **Distorted Market Signals**: Farmers **no longer responded to supply and demand forces**. Instead of adjusting production to consumer needs, they **relied** on **guaranteed prices set by the EU**. Farmers became **dependent on EU governments** rather than on market demand.
- **International Trade Distortions and Dumping**: **EU market closure** hurt producers in the rest of the world, especially in developing countries. **Dumping** (selling surplus EU products cheaply on global markets through export subsidies) depressed international prices, making it harder for non-EU farmers to compete. **WTO rules prohibit dumping** when subsidized by governments, but before the 1994 Uruguay Round, no restrictions existed for agricultural goods.
- **Consumer Burden and Inequality**: **Higher food prices** due to CAP policies disproportionately affected poorer consumers, who spend a larger share of their income on food. **Regressive effects**: The rich were less impacted, while **the poor bore the brunt of inflated prices**.
- **Environmental and Quality Issues**: The incentive to produce as much as possible led to overuse of chemicals, monocultures, and soil depletion. Quantity was prioritized over quality, affecting biodiversity and food sustainability.
- **Uneven Distribution of Benefits**: **Larger farmers** benefited the most from price support, while small farmers struggled. 80.5% of farmers received only 15.5% of total CAP payments, while just 19.5% of farmers captured 84.5% of subsidies. This contradicted CAP's goal of sustaining small farmers and rural communities, leading many smallholders to abandon agriculture.



Driver of reform in 1992

Endogenous Drivers (Internal Pressure):

- **Decreasing support within the EU**: Environmental concerns and human health risks made the existing policy less acceptable. Overproduction (leading to "butter mountains" and "wine lakes") became a major issue. CAP was expensive and inefficient, consuming a large share of the EU budget.

- **Impact of EU Enlargement (1980s)**: Greece (1981), Spain and Portugal (1986) joined the EU, significantly increasing the agricultural workforce eligible for subsidies. More recipients of support made the system even more costly and unsustainable.

Exogenous Drivers (External Pressure):

- **Uruguay Round Negotiations (1986-1994)**: GATT Agreement: For the first time, international trade talks included agriculture liberalization. Countries, including the EU, were pressured to reduce trade-distorting subsidies. Dumping practices (selling surplus at artificially low prices due to subsidies) were challenged.

The Bottom Line: By the early 1990s, CAP's price support system was no longer viable—it was too costly, harmful to international trade, and faced internal opposition. However, eliminating subsidies completely was politically impossible, so a new approach was needed.

The Reform Process: From Price Support to Income Support

1. ***MacSharry Reform (1992)***: Shift from price support to direct income support for farmers.
2. ***Reforms Before the "Big Enlargement" (1999, 2003)***:
   - **Decoupled income payments**: Payments no longer tied to production, reducing incentives for overproduction.
   - **Cross-compliance**: Farmers receiving subsidies had to meet environmental and food safety standards.
   - **Degression**: Gradual reduction of direct payments for the largest farms.
   - **Rural development**: More focus on supporting rural economies, infrastructure, and sustainable farming.
3. ***Modern CAP (2014-2020 & 2021-2027 Multiannual Financial Frameworks - MFFs)***:
   - **Further strengthened decoupling**: Direct payments fully separated from production.
   - **Expanded cross-compliance**: Stricter rules on environment, animal welfare, and food safety.
   - **Degression and capping**: Reducing payments to large landowners to favor smaller farms.
   - **Greater focus on rural development and climate change**: CAP now promotes sustainability, biodiversity, and carbon reduction.

Income Support

From price support to income support: Reducing Market Distortions

The ***1992 MacSharry Reform*** marked a major shift in the CAP by reducing price support (via the CET) and introducing direct income support to compensate farmers.

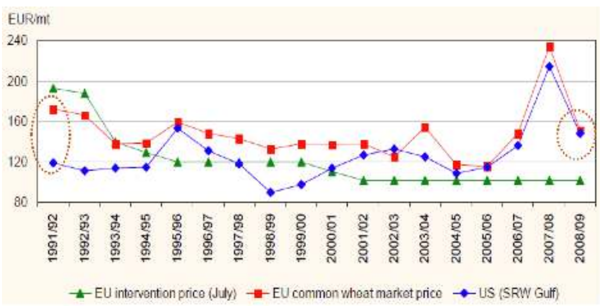
Why was Direct Income Support More Attractive?

- **Less Market Distortion**: Prices were now set by market forces, rather than by EU authorities.
- **Fairer Distribution of Costs**: Instead of higher consumer prices, citizens contributed progressively through taxes via the EU budget.
- **Increased Market Access**: Lower CETs allowed more imports, opening the EU market to global competition.

However, **initial income support** was **still linked to production**, incentivizing farmers to **maximize output**, leading to **continued overproduction**.

The Effects of Price Cuts and Market Liberalization

- **EU prices started converging to world market prices**.
- **Large price reductions** (e.g., wheat -50%, sugar -40%, rice -57%, beef -30%).
- **Overproduction fell**, ↓ surplus stocks.
- The EU **transitioned from net exporter to net importer** for some products (e.g., beef, sugar).
- **Most competitive sectors gained global market share**.
- The reform allowed the EU to **finalize the Uruguay Round** (1994) under GATT.



Drivers of Further Reform in 1999

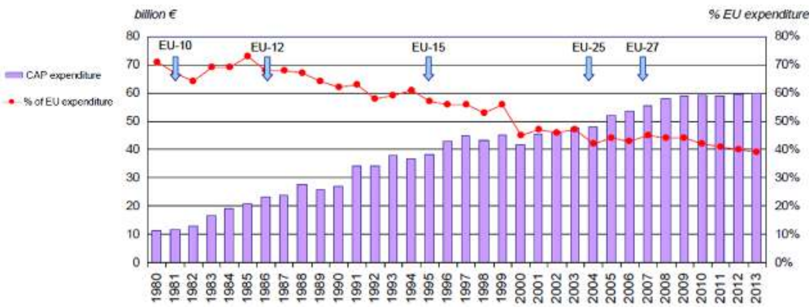
- **Endogenous Driver (Internal Pressure)**: **Overproduction still occurred** due to subsidies being linked to production. **Environmental and food safety risks** ↑ (e.g., the "mad cow" crisis).
- **Semi-Exogenous Driver (EU Enlargement)**: 2004 & 2007 enlargements (12 new countries, mostly agricultural economies). Extending full income support to new members would strain the EU budget. Central and Eastern European farmers never benefited from price support, so income support was a crucial replacement.

⟹ A new reform was needed to address these challenges.

The 1999-2003 Reforms: Decoupling Income Support

- **Decoupling Subsidies**: **Payments** no longer **tied** to production but **to fair income levels**. A fair income should be that resulting from a correct exploitation of the land/cattle available to the farmer, taking into account the need to preserve the environment and the guarantee of food quality and safety.
- **Cross-Compliance**: Farmers had to meet environmental, food safety, and animal welfare standards to receive subsidies. This linked **public subsidies to public goods**.
- **Degression & Young Farmers Support**: Larger farms received lower payments to favor small farmers. Special support for **young farmers** to ensure generational renewal.
- **Rural Development (2nd Pillar of CAP)**: Shifted focus from subsidizing production to supporting rural economies and sustainability.

⟹ Enlargement doubled the number of farmers, but CAP expenditure as a % of the EU budget actually decreased!



Today's CAP: 2023-2027

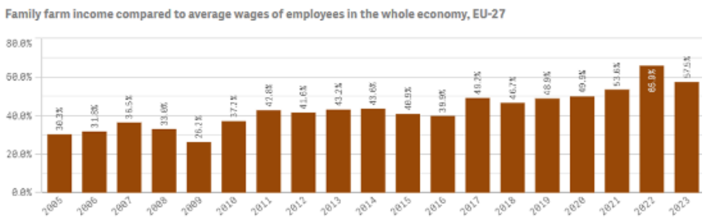
Objectives:

1. Fair income for farmers
2. Boost competitiveness
3. Strengthen farmers' position in the food chain
4. Climate change
5. Environmental care
6. Preserve landscapes & biodiversity
7. Support young farmers
8. Support rural communities
9. Protect food quality & health standards
10. Promote knowledge & innovation

Key Changes

- **Higher Environmental Ambitions**:
  - 3% of arable land for biodiversity/non-productive use.
  - 25% of direct payments for eco-schemes (e.g., organic farming).
  - 35% of rural development funds for climate, biodiversity, and animal welfare.
  - 40% of CAP funds linked to climate action, aligning with EU biodiversity targets.
- **Addressing Farmers' Income Gap**: Farmers' income lags behind salaries in the rest of the economy. CAP aims to strengthen farmers' economic resilience while ensuring sustainability.

$\Longrightarrow$ Today's CAP prioritizes income fairness, sustainability, and rural development over direct production support.



Geographical Indications

Geographical Indications (GIs) are **labels that protect the authenticity and quality of products** originating from specific regions. They apply to **agricultural products, foodstuffs, wines, spirits, and handicrafts** that have unique characteristics linked to their place of origin.

GIs are **important** because:

- Protect against name misuse and imitation
- Ensure consumer trust by reducing information asymmetry
- Support producers by giving them an exclusive marketing tool
- Encourage agricultural diversity and traditional production methods

The EU enforces GI protection across all member states, preventing unauthorized use and imitation.

Types of Geographical Indications

1. **Protected Designation of Origin (PDO)**: **All production stages** (farming, processing, and preparation) **must occur entirely in the defined geographical area.**

   EG: Aceto Balsamico Tradizionale di Modena (Traditional Balsamic Vinegar of Modena), Parmigiano Reggiano (Italy), Feta (Greece), Prosciutto di San Daniele (Italy)

2. **Protected Geographical Indication (PGI)**: At least one stage of production, processing, or preparation must take place in the specified region. More flexible than PDO, allowing some sourcing of ingredients from outside the region.

   EG: Aceto Balsamico di Modena (Balsamic Vinegar of Modena), Münchener Bier (Germany), Scotch Beef (UK), Scottish Farmed Salmon

GIs in International Trade Agreements

The EU includes GIs in trade agreements to **protect European products from imitation in global markets**. Without these protections, foreign producers could exploit famous European names, misleading consumers and undercutting authentic EU producers.

Examples of Trade Agreements with GI Protection:

- **EU-Canada (CETA)**: 140+ European GIs protected
- **EU-Japan Agreement**: 200+ European GIs recognized (including Kobe beef & sake from Japan)
- **EU-China Agreement (2020)**:100 EU GIs and 100 Chinese GIs mutually recognized

These agreements prevent counterfeits and misuses of protected names outside the EU.

The EU also prohibits misleading ***evocations*** of GIs, meaning **products cannot use names, images, or branding that indirectly reference a GI**.

EG:
Parmigiano Reggiano (PDO) vs. Parmesan: Only cheese made in Parma using traditional methods can be called Parmigiano Reggiano. The term ***Parmesan*** has been banned in the EU.

Queso Manchego (PDO) vs. Imitations → Non-authentic Manchego cheese cannot use Don Quixote imagery on packaging, as it evokes La Mancha, misleading consumers.

Case (NO EXAM) - The Balsamic Vinegar of Modena

1. **PGI (Protected Geographical Indication)** - "Balsamic Vinegar of Modena"
   - Only one stage of production must occur in Modena.
   - Ingredients can be sourced elsewhere.
   - Less strict regulations than PDO.
2. **PDO (Protected Designation of Origin)** - "Traditional Balsamic Vinegar of Modena": Strict requirements:
   - Only cooked grape must (no added vinegar, colorants, or preservatives).
   - Aging: Minimum 12 years in wooden barrels.
   - "Extra-old" version: 25+ years aged.
   - More complex and rich flavor, with a stronger link to Modena's traditional methods.

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