EU's Single Market at 30

FRITZ BREUSS

Abstract

Post-war II European integration – until the Brexit - knew only one direction: an ever deeper economic, legal, and political unification. Up until then, European integration had become ever deeper, and the number of EU members constantly increased: in the 1960s, the tariffs fell for intra-trade between the six founding members of the EEC because of the creation of the Customs Union in 1968. The next big deepening effect of European integration was the establishing of EU's Single Market (SM) in 1993. The realization of the four freedoms (goods, services, capital, and people) were the centerpiece. The Economic and Monetary union (EMU), effective in 1999 with the introduction of the Euro in 2002 should complete the economic integration of the EU. As not all EU member states have taken over the Euro, the Single Market project (SMP) remains piecemeal. In addition to deepening integration, the EU has steadily expanded: from initially six to twenty-seven Member States. Reforms of the EU treaties accompanied the post-war integration process. The anniversary of 30 years of EU's SM offers the opportunity to evaluate what has been achieved and what still needs to be accomplished. With the SMP the EU started with a noble goal to create a free market comparable to that of the USA. Over the last decade, however, a series of crises have prevented the goals from being achieved: the global financial crisis 2008, the Great Recession 2009, followed by the Euro crisis in 2010. Ten years later, the COVID-19 crisis 2020/21 shocked Europe, followed by the energy crisis (connected with Russia's invasion of Ukraine) in 2022. The last two crises have even led to deviating from the path of the free-market economy and to embark – via emergency measures – into a controlled market economy, if not into a semi-planned economy. Nevertheless, overall, the creation of EU's SM had increased prosperity via an intensification of intra-EU trade.

Keywords: European Integration; Single Market; Lisbon Treaty; Model simulations
JEL Classification: C51, F15; O52.

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1. Introduction

The now called European Union, starting in 1958 as European Economic Community (EEC) with six founding Member States (MS) already had as one of its most ambitious goals the establishment of a "common market" in Europe. Only 35 years later, after the EEC transformed to the European Community (EC) and ultimately to the European Union (EU) in 1993, the EU launched the "single market" (SM).

After another 30 years, it is time to take stock of what has been achieved and want is still unfinished. In the following, firstly a brief history of the Single Market (SM) shows the development so far. Then, the achievements concerning the main features of the SM is reviewed. A literature review informs about the estimated economic impact of the SM. Finally, the outlook discusses the open questions how to reform the SM and the future challenges facing the EU's SM in view of the current multiple crises.

2. A brief history of the Single Market

The Treaty of Rome that came into force in 1958 already aimed at establishing a "common market" (see Table 1). Only parts of this goal were reached. On the one hand by the establishing of a "common market" for agriculture (later also fishery) via the Common Agricultural Policy (CAP) in 1962 and by the completion of the Customs Union in 1968 eliminating all tariffs for intra-EEC-trade. This implied a common external tariff and a common commercial policy (CCP).

The Merger Treaty of 1967 brought about the first institutional reform that unified the three communities, the European Coal and Steel Community (ECSC), the European Atomic Energy Community (Euratom) and the European Economic Community (EEC) to the Economic Community (EC).

With the Free Trade Agreements between the EC and the EFTA sates in 1973 a free trade area for industrial goods had been created by mid-1977 in Europe.

Starting with 1973 the EC began to expand: from EC6 to up to now (after the Brexit) 27 MS.

However, the grand goal of the founding fathers of the European integration, the creation of the "common market" was still open.

The impetus to finally establish a common or single market came from the fact that in the 1980s the European economies were lagging those of others in the west, particularly those of the United States.

Table 1: A brief history of EU's Single Market

Date	Event
01/01/ 1958	The **Treaty of Rome** (Signed on 25/03/1957): Article 1: Establishing a "European Economic Community" (EEC). Article 2: Task to establish a "Common Market"
1962	**Common Agricultural Policy (CAP)**: It implements a common system of agricultural subsidies and other programs. Since 1970, a separate Common Fisheries Policy (CFP) with an own structural policy fund is in place.
01/07/ 1967	**Merger Treaty** or **Brussels Treaty** (Signed on 8 April 1965): Treaty which unified the executive institutions of the European Coal and Steel Community (ECSC), European Atomic Energy Community (Euratom) and the European Economic Community (EEC). The Treaty implements a common Council and a common Commission for the three institutions: ECSC, Euratom, and EEC, now called European Community (EC).
01/07/ 1968	**Customs Union** of the EEC: No tariffs and non-tariff barriers to trade (NTB) between the 6 EEC member states. Members of the Customs Union impose a Common External tariff (CET) on all goods entering the EEC. This also implies a Common Commercial Policy (CCP).
01/01/ 1973	EEC-EFTA **Free Trade Agreements** abolishes tariffs on EC-EFTA trade in goods (except agricultural goods) until mid-1977. This creates a Free Trade Area EC-EFTA. 1st EC enlargement: EC6 enlarges by Denmark, Ireland, and the UK to become **EC9**.
01/01/ 1981	2nd EC enlargement: Greece becomes a member of **EC10**.
01/01/ 1986	3rd EEC enlargement: Portugal and Spain enter the **EC12**.
14/06/ 1985	**"Completing the Internal Market",** White Book of the European Commission.
01/07/ 1987	**Single European Act (SEA)**: First revision of the Treaty of Rome. (Signed on 17 and 28, February 1986). A core element of the SEA was to create a single market within the European Community by 1992
April 1989	The **Delors Committee (1988-1989)** for the Study of Economic and Monetary Union. Report in April 1989 on 'Economic and Monetary Union (EMU) in the European Community': 3 stages for achieving EMU.
October 1990	**"One market, one money":** benefits and costs of EMU. A study about the potential advantages and disadvantage when introducing a common curreny.
01/01/ 1993	**EU's Internal Market** is established
01/11 1993	**Maastricht Treaty** or Treaty on European Union (TEU; signed in Maastricht on 07/02/1992; effective on 01/11/1993): Title II, Article G (replacing Articles 2 and 3 of the Treaty of Rome), establishing a "Common Market"

	"Common Market" is now called "Internal Market" With the Maastricht Treaty two communities are created, • the "European Union" (**EU**) and • the "European Community" (**EC**). In Title I, Article A: *"The High Contracting Parties establish among themselves a 'European Union, herein after called 'the Union'"* In Title II, Article G: "The Treaty establishing the European Economic Community shall be amended … in order to establish a European Community". Article G, A. *"Throughout the Treaty 1) the term 'European Economic Community" shall be replace by the term 'European Community'."*
01/01/ 1994	**European Economic Area (EEA)** Agreement (Signed on 2 May 1992) established to extend EU's SM (partly) to MS of EFTA. After the EU enlargement 1995, only three EFTA MS (Iceland, Liechtenstein, and Norway) are EEA members. Switzerland, after voting against EEA membership on 06/12/1992 has instead bilateral agreements with the EU.
01/01/ 1995	4th EU enlargement: Austria, Finland, and Sweden become members of **EU15**. **Schengen Treaty** and Convention (effective: 16 March 1995)
01/01/ 1999	**Economic and Monetary Union (EMU):** Maastricht Treaty, Title VII: Economic and Monetary Policy (in Lisbon Treaty, Title VIII)
23-24/ 03/2000	**Lisbon Strategy**: The EU formulates a new strategic goal for the next decade: "*to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion."*
01/01/ 2002	**Euro** notes and coins are introduced. Euro becomes the official currency (legal tender) in 11 Euro area MS; since 2023 it is the official currency in 20 out of 27 EU MS.
01/05/ 2004	5th EU enlargement: The EU gets 10 new MS (**EU25**).
01/01/ 2007	6th EU enlargement: Bulgaria and Romani became MS of **EU27**.
01/12/ 2009	The **Treaty of Lisbon** amending the Treaty on European Union and the Treaty establishing the European Community (OJ C 306, 17/12/2007); signed on 13/12/2007 and entry into force on 1 December 2009: The treaty consists of two treaties: 1) The Treaty on European Union (**TEU**, the updated Maastricht Treaty 2) The Treaty on the Functioning of the European Union (**TFEU**), the updated Treaty of Rome TFEU, Part Three, Title I: "Internal Market", Article 26(2): "*The internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaties"*. Legal basis (general principles) of the Internal Market: Articles 4(2)(a), 26, 27, 114 and 115 of the TFEU.
03/03/ 2010	**Europe 2020:** An update of the Lisbon Strategy with new goal for the EU economy
April 2011	**SM Act I:** The Single Market Act presented by the Commission in April 2011 set out twelve levers to boost growth and strengthen confidence in the economy
October 2012	**SM Act II:** The Commission proposed a second set of actions to further develop the single market and exploit its untapped potential as an engine for growth.

01/07/ 2013	7th EU enlargement: Croatia became member state of **EU28**.
01/01/ 2021	**Brexit**: UK leaves the EU which shrinks to **EU27**.

On March 23, 1983, President Ronald Reagan announced the Strategic Defense Initiative (SDI), nicknamed the "Star Wars program". Although the SDI project never came to fruition, it had a tremendous political impact. Alone its announcement not only alarmed the then Soviet Union, but also Europe feared that it would fall behind the USA in terms of competition. Therefore, top leaders of European companies forced the EC leaders to act.
In 1985, the Commission of the European Communities (1985, p. 4) presented the White Paper "Completing the Internal Market" with the target, outlined already in the "Programme of the Commission for 1985" as its major task for the EEC: *"Unifying this market (of 320 million) presupposes that Member States will agree on the abolition of barriers of all kinds, harmonisation of rules, approximation of legislation and tax structures, strengthening of monetary cooperation and the necessary flanking measures to encourage European firms to work together."* The goals of the White Paper were then enshrined in the Single European Act (SEA), effective in 1987.

However, an internal or single market à la USA[1] is not completed if it not also is accompanied with a common currency. For this purpose, in 1988-89 the Delors Committee worked out the road map for an Economic and Monetary Union (EMU). The study "One market, one money" (Commission of the European Communities, 1990) evaluated the pros and cons of a common currency for the EU. With the Maastricht Treaty, effective on November 1, 1993, these ambitious goals, the creation of the SM and the introduction of a common currency - the Euro – was legalized.

On 1 January 1993 the EU started with the completion of the Single Market (SM)[2]. The SM project (SMP) was followed by the start of EMU in 1999 and the introduction of the Euro in 2002.

[1] In a comparison with EU's SM, Matthijs and Parsons (2022) claim that the US SM is also incomplete.

[2] The name of the "Single Market" changed over time. In the Treaty of Rome, it is called "Common market", in the Treaty of Maastricht, "Common market" is replaced by "Internal market". This name is also the official name in the latest, the Lisbon Treaty. The website of the European Union (https://european-union.europa.eu/priorities-and-actions/actions-topic/single-market_en) speaks of a "Single Internal Market". On its website, the European Commission (https://single-market-economy.ec.europa.eu/single-market_en) calls it "Single market" (https://ec.europa.eu/info/topics/single-market_en). Following Mario Monti (2010), in the following we use the expression "Single Market" (SM), except when quoting legal documents, which refer to the "internal market".

The European Council had to acknowledge twice that the development of the SM is not proceeding as favorably as predicted. Therefore, two growth-enhancing strategies (the Lisbon strategy of 2000, and the Europe 2020 strategy) were launched.
After several further enlargements (1995, 2004, 2007, 2013, and the Brexit in 2021), two reform packages (SM Act I, and SM Act II) aimed at further improving the functioning of the SM.

A setback with Brexit

The Brexit in 2021 not only reduced the number of MS from 28 to 27, but it also had a significant impact on the economic and political power of the EU. The size of the Single Market shrank by around 13% (measured as loss of population and GDP; see Breuss, 2021). With a smaller Single Market and less Member States the foreign policy importance of the EU also shrank. The UK was a member of NATO and without it the EU loses an important defense partner. With Brexit the EU lost also an important European member of the UN Security Council. The loss of around two percentage points of world GDP also weakens EU's negotiation power in future WTO negotiations.

3. Main features of the Single Market

In short, the EU officially describes the SM as: *"The internal market of the European Union (EU) is a single market in which the free movement of goods, services, capital and persons is assured, and in which citizens are free to live, work, study and do business"*[3].
The SM is the core of EU integration. Each incumbent is a member of it, and the first task of a new Member State (MS) is to enter the SM. Furthermore, the SM is never finished, it is a permanent "moving target". The basic idea is that with the SM the EU transforms from national heterogeneous markets with their own rules to a common or single market with common rules.

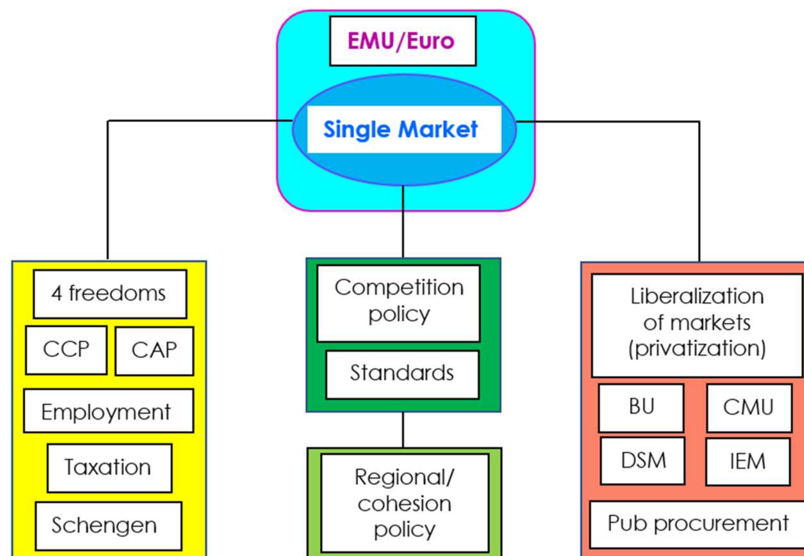
The Single Market Project (SMP) in the strict sense is defined in the TFEU, in the articles 4(2)(a), 26, 27, 101, 114 and 115 of the TFEU. The core are the four freedoms (free movement of goods, services, persons, and capital), accompanied with common rules on competition, taxation, and approximation of laws (Article 101 of TFEU).

[3] See: https://eur-lex.europa.eu/content/summaries/summary-24-expanded-content.html

The protracted Brexit negotiations have shown how complex the legal interdependence of an EU MS with the internal market already is (Breuss, 2021).

In a broader sense not only the four freedoms and competition policy constitute the SM (see Figure 1). A true single market also includes a common currency. The Economic and Monetary Union (EMU) – also still uncompleted - with the Euro and its components Banking union (BU) and Capital markets union (CMU) fulfills this goal. The SM encompasses all supporting policies that have a direct impact on the SM[4] such as taxation, employment, culture, social policy, education, public health, energy, consumer protection, transport, environment, and information society and media (see Figure 1). The Schengen Agreement supports one of the four freedoms, the Visa-free movement between MS. Regional or cohesion policy aims at equalizing the development in the EU member states. In addition, in the meantime the EU has created additional single markets, one for energy (IEM) and a single digital market (SDM).

Figure 1: EU's Single Market – in a broader perspective



BU = Banking union; CAP = Common agricultural policy; CMU = Capital markets union; CCP = Common Commercial Policy; DSM = Digital single market; IEM = Internal energy market.

Common rules and laws on public procurement complete the SMP. One of the key principles underpinning the SM is "mutual recognition"[5] of standards[6]. This principle –

[4] The EU Treaty's primary law on the internal market is implemented by SM directives. SM directives are legal acts which have an impact on the functioning of the SM, as defined in Article 26(2) of TFEU. The huge body Internal Market legislation is summarized by EUR-Lex: https://eur-lex.europa.eu/content/summaries/summary-24-expanded-content.html

[5] Mutual recognition communication, see: https://eur-lex.europa.eu/EN/legal-content/summary/mutual-recognition-in-the-eu-s-single-market.html

initialized by Cassis de Dijon case[7] - was introduced because a complete harmonization of national legislation would have been too complicated.

With the start of the Single Market, EU MS more and more privatized their economic sectors and opened them to Single Market competition. Nevertheless, in some countries there are still significant shares of "State-Owned Enterprises (SOEs). These are companies where for various reasons, the state exercises control. According to the studies of the OECD (2021) and the European Commission (2016) in most Member States, SOEs are still significant players in the energy and rail sectors as these sectors have only recently been open to competition. In Europe the scope of public ownership in various sectors of the economy is particularly extensive in some of the new Member States such as Poland, Croatia, Romania, and Slovenia. However, SOEs prominently feature also in some EU15 Member States such as France,

A not yet so common market

When evaluating the performance of the SM one must realize that it is far from being complete. Moreover, it suffers from several inequalities and inconsistencies:

(1) There is no real common market, but it consists of **regional heterogeneity** (see European Commission, 2022A; Maucorps et al., 2022).

(2) The ideal of "**one market, one money**" is still not yet reached. Only 20 out of 27 MS pay with the Euro.

(3) The EU is "**united in diversity**", that means also – in contrast to the SM of the USA – the lack of a common language.

SM not restricted to the EU27

The EU Single Market is a unified market with 450 million people compared to the USA with 330 million and China with 1,410 million. Through the Agreement on the European Economic Area (EEA) also three EFTA countries (Iceland, Liechtenstein, and Norway) and via bilateral agreements (Bilaterals I and II) also Switzerland take – with certain exceptions – part in EU's SM. The EFTA states profit already from free trade with the EU since the Free Trade Agreements as of 1973. To participate in the enlarged SM after 2004, the three EFTA[8]

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[6] European standardization regulation, see: https://eur-lex.europa.eu/EN/legal-content/summary/european-standardisation.html

[7] See the judgement of the European Court of Justice as of 20 February 1979: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A61978CJ0120

[8] See: https://en.wikipedia.org/wiki/European_Economic_Area

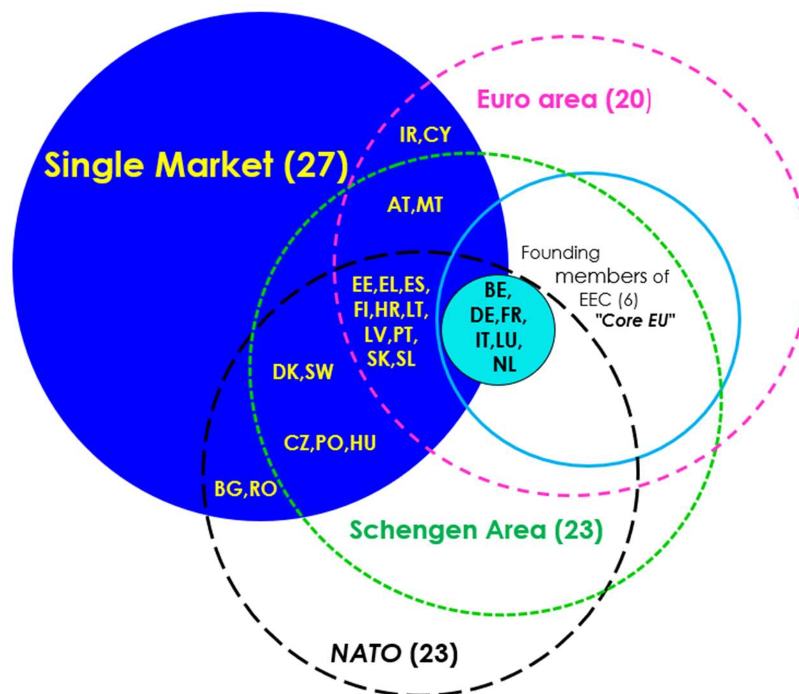
states plus Switzerland[9] pay grants to reduce social and economic disparities in the new EU MS in Eastern Europe.

With the Brexit the EU's market decreased by 13%, a loss of67 million. The UK no longer takes part in EU's SM, Through the EU-UK Trade and Cooperation Agreement the UK has preferential access to EU's SM (see Breuss, 2021).

Flexible integration or "Europe à la carte

Only the six founding EU MS take part in all integration steps since World War II (see Figure 2). Since 2023, 20 EU MS pay with the Euro. 23 take part in the Schengen process. 21 EU MS are also members of NATO. As a rule, each MS must take part in EU's SM. A country acceding to the EU must participate in the SM and adopt the respective acquis communautaire.

Figure 2: Flexible integration or "Europe à la carte" in EU27



Croatia is member of the Euro area and Schengen since 1 January 2023. Finland and Sweden will become NATO members in 2023.
Source: own drawing

3.1 The four freedoms – a short performance check

In TFEU, Part Three (Union Policies and Internal Actions), Title I, 'The Internal Market' rules the respective provisions in Article 26. In Paragraph (1) *"The Union shall adopt*

[9] See: https://en.wikipedia.org/wiki/Switzerland%E2%80%93European_Union_relations

measures with the aim of establishing or ensuring the functioning of the internal market, in accordance with the relevant provisions of the Treaties." In Paragraph (2)*: "The internal market shall comprise an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaties."* The TEU also defines one of EU's goals in Article 3 to *".... Establish an internal market"*.

In the following Titles and Articles of the TFEU the four freedoms and the right of establishment are ruled.

- Article 28 "Free Movement of Goods (Article 30 "Customs Union")
- Article 45 "Workers"
- Article 49 "Right to Establishment"
- Article 56 "Services"
- Article 63 "Capital and Payments"

To put into practice, the four freedoms fundamentally guaranteed in the TFEU, the EU institutions (European Parliament and Council)) must issue directives and regulations. The secondary law of EU's Single Market has now reached a considerable volume. This became evident in the case of Brexit. The UK had to transform around 20,000 types of EU law into national UK law.

At the inception of the SM in 1993, the starting conditions of the postulated four freedoms in the Maastricht Treaty were quite different. The least barriers – due to the completion of the Customs Union in 1968 - remained in the case of the freedom of movement of goods. The three other freedoms had to be realized step by step with additional regulations.

3.1.1 Freedom of movement of goods

In TFEU, Part Three (Union Policies and Internal Actions), Title II, 'Free Movements of Goods' rules the respective provisions in Article 28. In Paragraph (1) *"The Union shall comprise a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries."* The Customs Union is rules in Chapter 1, Article 30.

The cross-border goods trade between the EU MS already were freed from tariffs through the Customs Union as of 1968. One of the major obstacles for bilateral EU trade were the costs of border controls. These hurdles were eliminated with the launch of the SM in 1993.

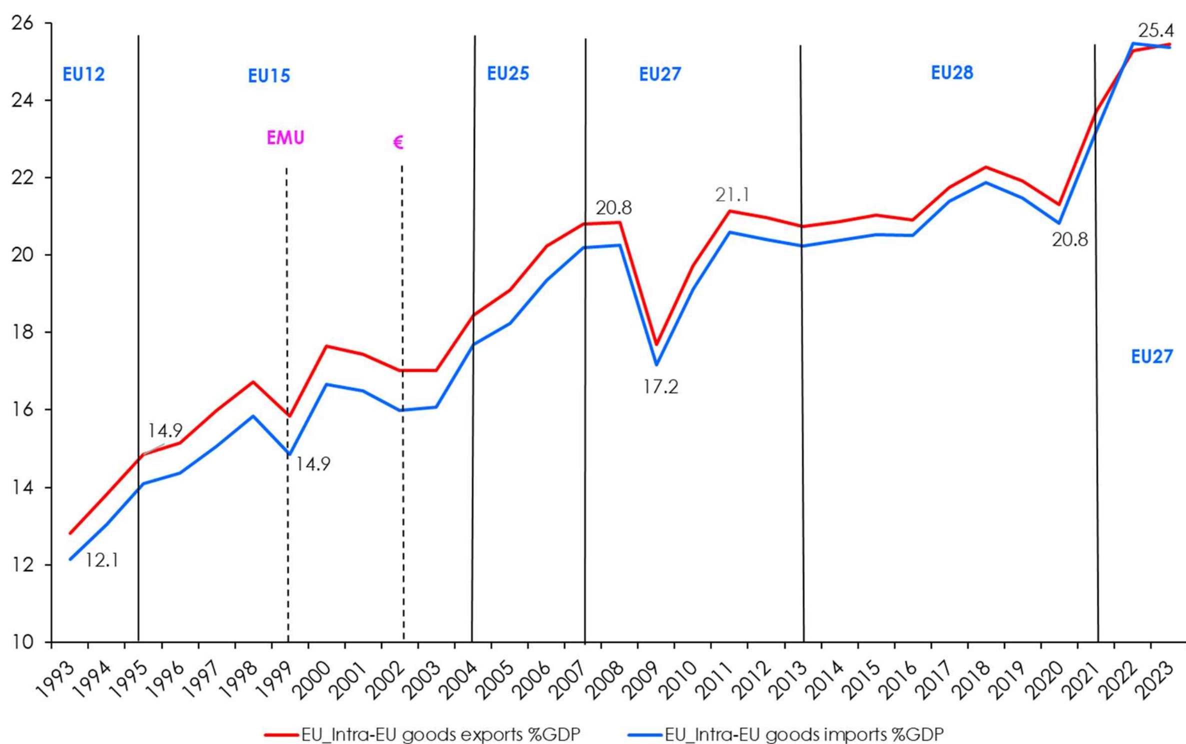
Additionally, there are still some non-tariffs measures (NTMs). With the Brexit in 2021, border controls in trade EU-UK were reintroduced.

What remained the outstanding feature of the expansion of the SM is the strong increase in intra-EU trade (see Figure 3). Of course, there were setbacks in times of a recession (2009 and 2020).

The increase of Intra-EU trade (in % of GDP) was strongest in the new EU MS. Whereas it increased by around ½% per year in the incumbent EU MS, it expanded by 1% or more in the new MS since 2004.

Openness to imports of goods (total goods imports in % of GDP) amounts to 32.7% in EU average (see Single Market Scoreboard[10]). There is a wide range between EU MS: reaching from 88% in Slovakia to 22% in Italy (Austria 40%, Germany 31%).

Figure 3: Percentage of EU-wide Intra-EU exports and imports of goods to EU-wide GDP, 1993 to 2023



The EU labels EU12, EU15, EU25, EU27, EU28 refer to the number of MS included in the EU-wide aggregate during the period for which the label is shown in the figure. Due to Brexit the number of the EU labels are less one (e.g., EU12 = EU11, etc.)
Source: Own illustration with AMECO data of the European Commission

The COVID-19 crisis has shown that the assets of a SM market (four freedoms) are not given: disruptions in the SM, such as border closures and breaks in integrated value chains

[10] See: https://single-market-scoreboard.ec.europa.eu/integration_market_openness/trade-goods-and-services

escalated, deeply affecting citizens and businesses. As documented in The Annual Single Market Report 2022 (European Commission, 2022B, p. 4), in the initial pandemic shock, intra-EU trade has been hit harder than extra-EU trade. The access of EU operators to Third Countries markets has helped the EU economy to cushion the impact of the crisis and helped the recovery both from a supply and demand perspective.

3.1.2 Right of Establishment

In TFEU, Part Three (Union Policies and Internal Actions), Title IV, Chapter 2 'Right to Establishment' rules the respective provisions in Article 49:

"...restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State shall be prohibited. Such prohibition shall also apply to restrictions on the setting-up of agencies, branches or subsidiaries by nationals of any Member State established in the territory of any Member State."

"Freedom of establishment shall include the right to take up and pursue activities as self-employed persons and to set up and manage undertakings, in particular companies or firms within the meaning of the second paragraph of Article 54 (...constituted under civil or commercial law ...), under the conditions laid down for its own nationals by the law of the country where such establishment is effected, subject to the provisions of the Chapter relating to capital.

The Right to Establishment is an additional regulation to the other freedoms, in particular to those for services, capital, and people.

3.1.3 Freedom of movement of services

In TFEU, Part Three (Union Policies and Internal Actions), Title II, Chapter 3 'Services' rules the respective provisions in Article 56: *"Within the framework of the provisions set out below, restrictions on freedom to provide services within the Union shall be prohibited in respect of nationals of Member States who are established in a Member State other than that of the person for whom the services are intended."*

Article 57 defines "Services" to include:

(a) activities of an industrial character;

(b) activities of a commercial character;

(c) activities of craftsmen;

(d) activities of the professions.

“Without prejudice to the provisions of the Chapter relating to the right of establishment, the person providing a service may, in order to do so, temporarily pursue his activity in the Member State where the service is provided, under the same conditions as are imposed by that State on its own nationals.”

This last paragraph addresses the issue of posting. This was regulated by the “Posted Workers Directive” of 1996[11].

Services account for about 70% of the GDP of the European Union (EU), and a similar share of employment. Nevertheless, the postulated free movement of services is still far from being fulfilled. It needed a separate Services Directive (SD) to eliminate the still existing barriers.

The Single Market Scoreboard (Figure 4) analyses annually the performance of EU’s MS concerning their performance of the integration in the SM. Figure 4 gives a quite heterogeneous picture. Even concerning the goods trade integration, founding members, like Germany, France, and Italy are below EU average. In the services trade most EU MS are below average.

Figure 4: Performance Indicators – Integration in EU’s goods and services market

Perf. Ind.	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK
indicator 1	27	42	32	16	45	20	20	38	12	15	16	13	26	51	22	14	37	28	36	15	35	33	24	24	21	51	63
indicator 2	26	41	31	8	52	22	20	35	10	16	16	12	16	53	38	14	35	27	31	15	43	35	21	21	20	52	70
indicator 3	12	17	8	23	8	5	12	16	7	4	8	6	12	12	25	4	13	96	10	60	14	7	9	8	8	12	9
indicator 4	13	16	11	30	8	5	13	18	12	7	7	6	20	13	34	4	17	116	12	71	15	8	12	10	7	14	9
indicator 5	38	58	52	35	58	31	29	51	30	26	26	24	43	66	30	22	58	34	51	37	53	43	35	36	30	63	84
indicator 6	28	42	32	23	39	18	20	42	15	14	16	14	35	49	17	13	39	30	40	20	28	30	27	27	21	50	56
indicator 7	15	23	9	38	10	10	22	18	10	0	14	10	9	14	83	6	14	118	10	82	20	7	8	8	14	12	10
indicator 8	12	18	6	20	7	6	12	14	6	0	9	6	5	11	61	4	9	77	7	49	12	6	6	7	9	9	9

	Above average	Average	Below average
[1] EU trade integration in **goods** (*levels*)	> 28.4%	28.4% – 14.2%	< 14.2%
[2] EU trade integration in **goods** (*change*)	> -1.4%	-1.4% – -2.8%	< -2.8%
[3] EU trade integration in **services** (*levels*)	> 10.6%	10.6% – 5.3%	< 5.3%
[4] EU trade integration in **services** (*change*)	> 5.3%	5.3% – 2.7%	< 2.7%
[5] Openness to imports of **goods** (*levels*)	> 43.6%	43.6% – 21.8%	< 21.8%
[6] Openness to imports of **goods** (*change*)	> -1.1%	-1.1% – -2.2%	< -2.2%
[7] Openness to imports of **services** (*levels*)	> 16.7%	16.7% – 8.4%	< 8.4%
[8] Openness to imports of **services** (*change*)	> 9.3%	9.3% – 4.7%	< 4.7%

Source: Single Market Scoreboard[12]

[11] Directive 96/71/EC of the European Parliament and of the Council of 16 December 1996 concerning the posting of workers in the framework of the provisions of services, OJ, L 18/1 of 21.1.1997.
[12] See: https://single-market-scoreboard.ec.europa.eu/integration_market_openness/trade-goods-and-services

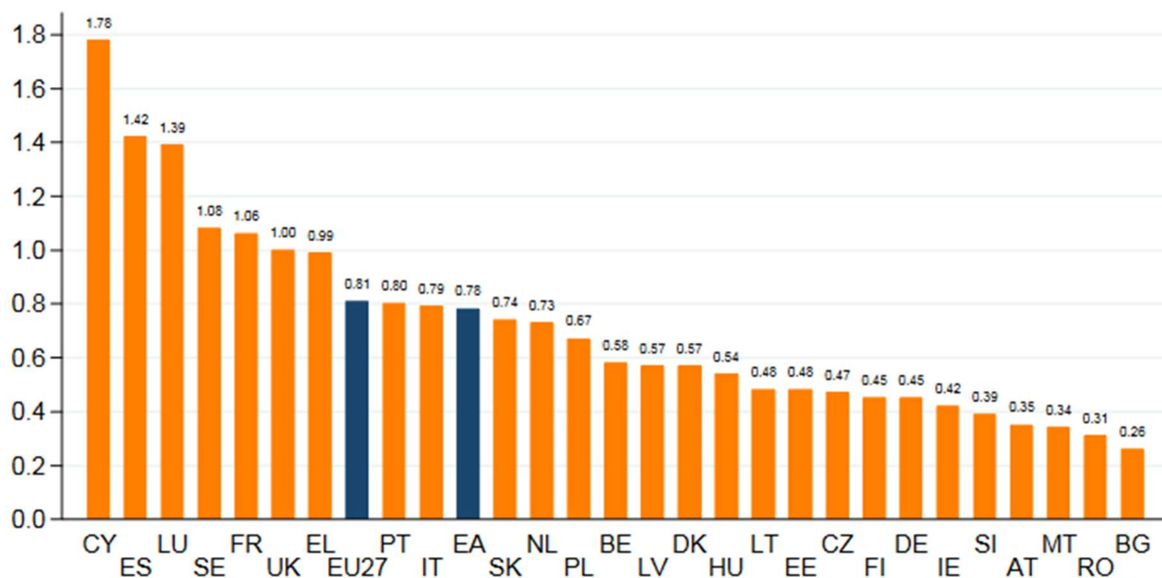
Whereas Intra-EU trade in goods amount to 25% of GDP, this share in the trade in services is only 8% of EU's GDP on average. Some countries, like Austria reach higher values (13%), some, like Germany lower values (5%).

Openness to imports of services (total services imports in % of GDP) lies way below those of the openness to imports of goods. EU average is only 12.6% (see Single Market Scoreboard[13]). Three countries stand out: Luxembourg with 120%, Malta with 80%, and Ireland with 70%. It follows Cyprus with 38%. Austria and Germany reach only EU average. The high outlier indicates that financial services (legal or illegal) play an important role in the three best-performing countries.

Services Directive

At the inception of the SM in 1993, the trade services were still disturbed by a big variety of barriers. Only after 16 years (in 2009), the implementation of the Services Directive (SD[14]) of 2006 brought an improvement (Breuss et al., 2008). However, the implementation varies from country to country.

Figure 5: The GDP impact of the implementation of the Services Directive



Source: Monteagudo et al., (2012), p. 30

Several studies were carried out to estimate the potential benefits of the implementation of the SD for trade and income. The EU study by Moneteagudo et al. (2012), estimated with the

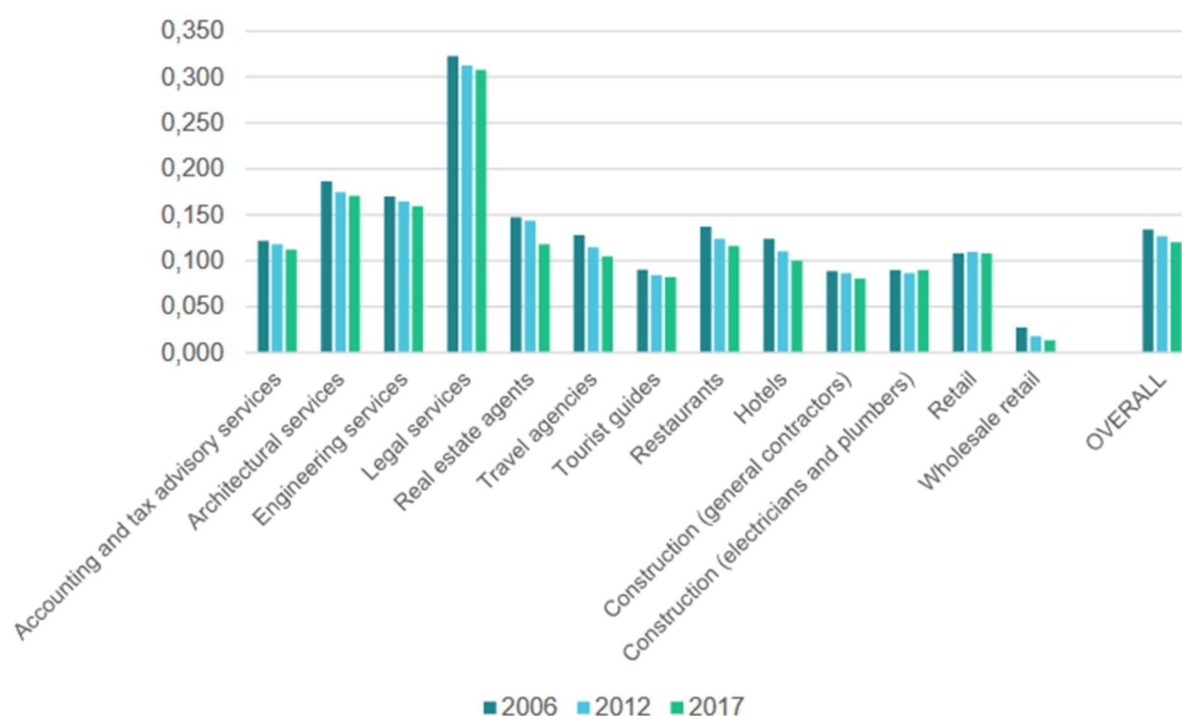
[13] See: https://single-market-scoreboard.ec.europa.eu/integration_market_openness/trade-goods-and-services

[14] Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376/36 of 27.12.2006. After a long discussion between the European Parliament and the Commission, the EU was adopted in 2006 and implemented by all EU countries in 2009.

EU Commission's QUEST model, find that the full implementation of the SD in all EU MS would lead to an increase of real GDP in the EU by 0.8 percentage points, The impact varies from below 0.4% in Bulgaria, Romania, Malta, Austria, and Slovenia, to about 1% in Greece, UK, France and Sweden, as well as 1.4% in Luxembourg, and 1.8% in Cyprus (see Figure 5).

Wolfmayr and Pfaffermayr (2022) estimated the impact of the implementation of the SD with a structural gravity equation, applying two dummy variables (SD and SOlVIT[15]). Firstly, the authors state that the implementation of the SD in 2009 had already led to an increase in bilateral EU services trade (+7%) and income in the EU (+0.2% weighted in 2018). Secondly, the "best implementation" scenario of SD would lead to the following potential results in the EU: intra-EU trade +10%, weighted income +0.4%.

Figure 6: Overall barriers evolution, EU27



Source: European Commission (2021B), p. 5

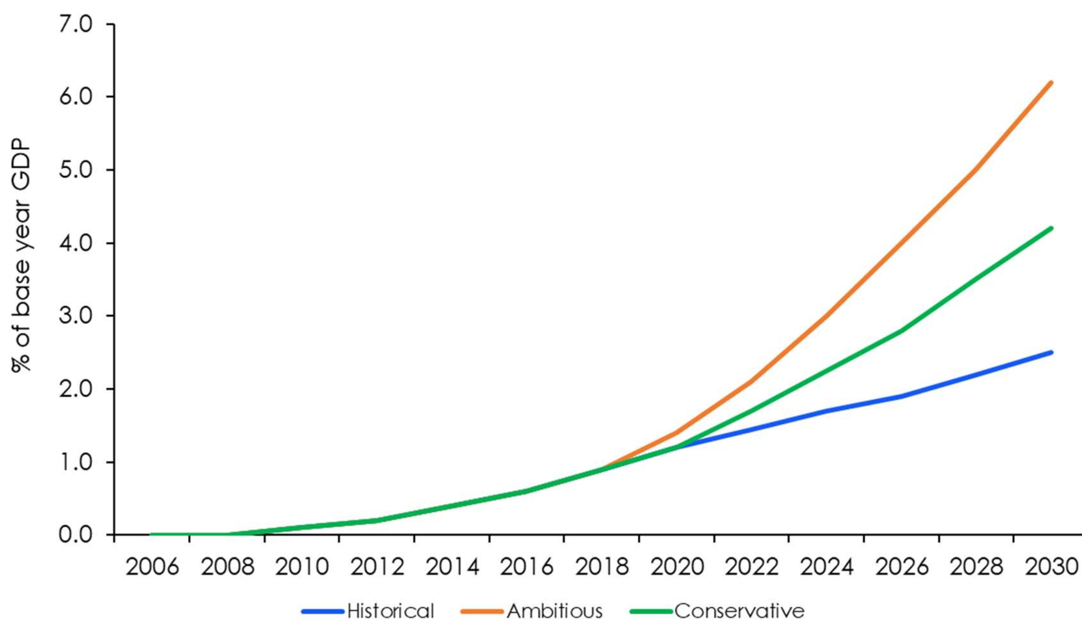
According to a recent study by the European Commission (2021B), since the adoption of the Services Directive in 2006, there was only a small decrease in absolute level of barriers

[15] The SOLVIT indicator (2010-2018) used by Wolfmayr and Pfaffermayr varies from 0.93 in Estonia to 0.82 in Portugal (Austria 0.84). A higher value of the indicator signals a lower frequency of problem cases in SOLVIT. SOLVIT (https://ec.europa.eu/solvit/index_en.htm) is a service provided by the national administrations. There is a SOLVIT centre in each EU Member State and in Iceland, Liechtenstein, and Norway. They work together via an online database. SOLVIT helps people and businesses who encounter difficulties in another EU Member State when public authorities do not apply EU legislation correctly. It is a faster, informal alternative to starting a court case, submitting a formal complaint to the Commission, or launching forward a petition. Due to the Brexit, the UK left SOLVIT.

and more reform efforts are needed to remove regulatory and administrative barriers faced by service providers when operating in the Single Market (see Figure 6).

Nevertheless, the study by Barbero et al (2022) shows that the realized removal of barriers between 2006 and 2017 (in Figure 7 "Historical" in blue) results in discounted cumulative gains of 2.1% of GDP by the year 2027. Additional ambitious reforms (in Figure 7 "Ambitious" in red) could generate an additional growth potential of up to 2.5% of GDP by 2027, resulting in a total cumulative gain in GDP of up to 4.65% by 2027.

Figure 7: Impact of removal of barriers in the services sector on EU GDP (Cumulative discounted GDP gains)



Sources: Barbero et al. (2022), p. 2 and European Commission (2022B), p. 20.

Even if one recognizes the remarkably positive assessment of the economic benefits of implementing the SD, it must be noted that the SD excludes essential sectors of the service sector. That means, a full liberalization – i.e., a complete implementation of the 'freedom of movement of services" as postulated in the TFEU, Title IV, Chapter 3 - should have even greater growth potential than estimated in the above-mentioned SD studies.

After a bitter struggle between Commission and European Parliament over which services shall be included in the SD, according to the agreed upon text, the Services Directive (SD) of 2006, Article 2 (2) shall not apply to the following services:

- Non-economic services of general interest;

- Financial services (banking, credit, insurance and re-insurance, investment funds); respective regulations are reported under chapter 3.1.4 Freedom of movement of capital.
- Electronic communications services and networks;
- Services in the field of transport, including port services (Title V of the TFEU);
- Services of temporary work agencies;
- Healthcare services;
- Audiovisual services (cinematographic services; radio broadcasting);
- Gambling activities;
- Activity connected with the exercise of official authority of Article 45 of the TFEU (free movement of workers);
- Social services relating to social housing, childcare and support of families;
- Private security services;
- Services provided by notaries and bailiffs, who are appointed by an official act of government;
- The SD shall not apply to the field of taxation.

3.1.4 Freedom of movement of capital

In TFEU, Part Three (Union Policies and Internal Actions), Title IV, Chapter 4 'Capital and Payments' rules the respective provisions in Article 63. In Paragraph (1) *"... all restrictions on the movement of capital between MS and between MS and third countries shall be prohibited"*. In paragraph (2), the same prohibitions apply to the payments between MS and third countries.

Interestingly, relatively late, namely only after the global financial crisis 2008 and the following Great Recession in 2009 as well as the Euro crisis in 2010 – the EU introduced secondary EU legislation to implement the provisions of the Treaty as mentioned above.

Payment Area: SEPA

With the Regulation[16] of 14 March 2012 the EU established a Single European Payment Area (SEPA). The project aims to develop common Union-wide payment services to replace current national payment services[17].

[16] Regulation (EU) No 260/2012 of the European Parliament and of the Council of 14 March 2012 establishing technical and business requirements for credit transfers and direct debits in euro and amending Regulation (EC) No 924/2009, OJ, L 94/22 of 30.3.2012.

Currently, there were 36 members in SEPA[18], consisting of the 27 EU MS, the four EFTA countries (Iceland, Liechtenstein, Norway and Switzerland), and the United Kingdom (also after Brexit). Some microstates participate in the technical schemes: Andorra, Monaco, San Marino, and Vatican City.

SEPA was introduced for credit transfers in 2008, followed by direct debits in 2009, and fully implemented by 2014 in the euro area (and by 2016 in non-euro area SEPA countries).

The legal framework for SEPA – which the ECB[19] helped to draw up in close cooperation with the European Commission – is based mainly on the Cross-border payments regulation, the Payment Services Directive (PSD/PSD2) of 2015[20], the SEPA migration end-date Regulation, and the Interchange Fee Regulation.

Thanks to the Single Euro Payments Area (SEPA), customers can now make cashless euro payments – via credit transfer and direct debit – to anywhere in the European Union, as well as several non-EU countries, in a fast, safe and efficient way, just like national payments.

The payment integration triggered by SEPA has contributed to the efficiency and competitiveness of the European economy by eliminating differences between national and cross-border payments by harmonizing standards in all the participating countries.

On 26 October 2022 the Commission adopted a legislative proposal to make *instant payments* in euro, available to all citizens and businesses holding a bank account in the EU and in EEA countries. Instant payments allow people to transfer money at any time or any day within ten seconds[21].

Banking Union

The banking union (BU)[22] is the biggest milestone in the integration of EU economies and institutions since the Economic and Monetary Union (EMU) was launched. The BU was initiated in 2012 as a response to the Euro crisis in 2010. It provides the essential underpinnings for financial stability and helps build crisis resilience and enhance risk monitoring and assessment. Moreover, the banking union addresses the fragmentation of financial markets within the euro area and contributes to breaking the negative feedback loop between bank debt and sovereign debt (“bank-sovereign vicious circle”). The banking union

[17] See also: https://europa.eu/youreurope/citizens/consumers/financial-products-and-services/payments-transfers-cheques/index_en.htm

[18] See: https://en.wikipedia.org/wiki/Single_Euro_Payments_Area

[19] See: https://www.ecb.europa.eu/paym/integration/retail/sepa/html/index.en.html

[20] Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC, OJ L 337/35 of 23.12.2015.

[21] See: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6272

[22] See: https://www.oenb.at/en/financial-market/three-pillars-banking-union.html

benefits above all smaller countries with a large share of cross-border banking activities, such as Austria.

The BU was planned to have three pillars, of which the third pillar is still pending[23]:

1) *Single Supervisory Mechanism (SSM)* – grants ECB[24] a leading supervisory role over banks in the euro area. SSM Regulation (EU), No 1024/2013 of 15 October 2013. Enter into force: 4 Nov 2013.
2) *Single Resolution Mechanism (SRM)* – including a Single Resolution Fund (SRF), filled by 31.12.2023. A Single Resolution Board. SRM Regulation (EU) 806/23014, of 15 July 2014. Entry into force on 19 August 2014
3) *European Deposit Insurance Scheme (EDIS)* – no consensus yet reached.

Breuss et al. (2015) confirmed with simulations with the QUEST model of the European Commission the stabilizing properties of the BU in case of financial shocks in the Euro area.

Capital Markets Union

Already the then new European Commission (President Jean-Claude Juncker) proposed in 2015 (European Commission, 2015A) as one of its goals to "upgrade the single market" the creation of a Capital Markets Union (CMU). In 2020 the Commission already published an CMU Action Plan. The goal of the Capital Markets Union (CMU) is to create a truly single market for capital across the EU. It aims to get investment and savings flowing across all Member States, benefitting citizens, investors and companies, no matter where in the European Union they are based.

Deepening the CMU is a complex task and there is no single measure that will complete it. Therefore, the rulings must make progress in all areas where barriers to the free movement of capital still exist.

In 2020 the Commission proposed the "Capital Markets Union Action Plan" in which it formulated four objectives[25]

1) Support a green, digital, inclusive, and resilient economic recovery by making financing more accessible to European companies
2) Make the EU an even safer place for individuals to save and invest long-term
3) Integrate national capital markets into a genuine single market

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[23] See: https://en.wikipedia.org/wiki/European_banking_union, and: https://www.oenb.at/en/financial-market/three-pillars-banking-union.html

[24] See: https://www.bankingsupervision.europa.eu/about/bankingunion/html/index.en.html

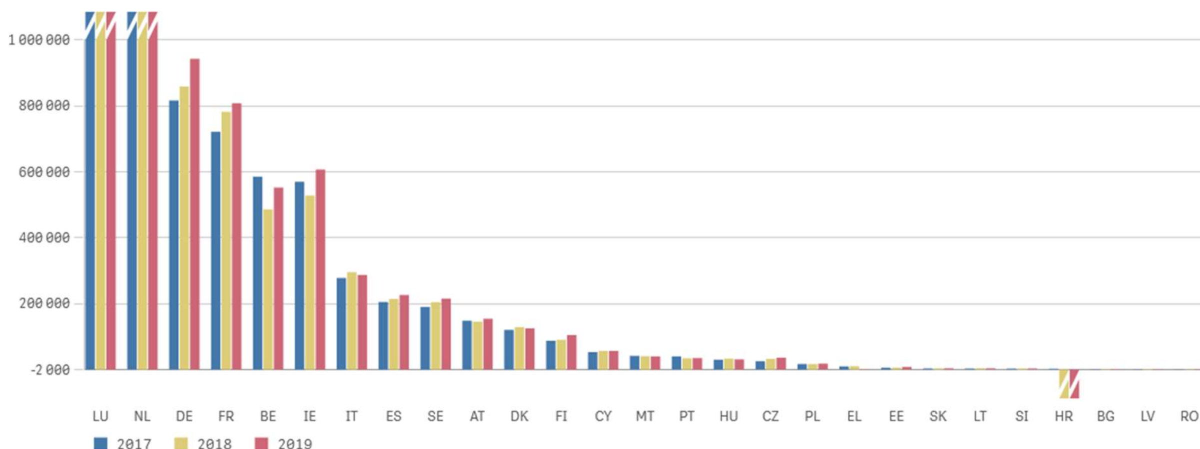
[25] See: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/capital-markets-union/capital-markets-union-2020-action-plan_en

On 25 November 2021 the European Commission adopted a package of measures to improve the ability of companies to raise capital across the EU and ensure that Europeans get the best deals for their savings and investments. Based on the 2020 Capital Markets Union Action Plan, the Commission issued four legislative proposals for this purpose[26].

(1) The European Single Access Point (ESAP): putting data at investors' fingertips
(2) Review of the European Long-Term Investment Funds (ELTIFs) Regulation: encouraging long-term investment, including by retail investors
(3) Review of the Alternative Investment Fund Managers Directive (AIFMD)
(4) Review of the Markets in Financial Instruments Regulation (MiFIR): enhancing transparency by introducing a "European consolidated tape" for easier access to trading data by all investors

According to the data of the Single Market Scoreboard Luxembourg, the Netherlands and Germany invest absolutely the most in other EU MS (see Figure 8).

Figure 8: EU capital integration 2017, 2018, and 2019 (Outward intra-FDI stocks in Euro)



Source: Single Market Scoreboard[27]

TARGET2

A specific instrument for the efficient capital movements within the Euro area is TARGET2, a real-time gross settlement (RTGS) system owned and operated by the Eurosystem[28]. Central banks and commercial banks can submit payment orders in euro to TARGET2, where they are

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[26] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6251
[27] See: https://single-market-scoreboard.ec.europa.eu/integration_market_openness/foreign-direct-investments-fdi
[28] See ECB: https://www.ecb.europa.eu/paym/target/target2/html/index.en.html

processed and settled in central bank money, i.e., money held in an account with a central bank. TARGET2 settles payments related to the Eurosystem's monetary policy operations, as well as bank-to-bank and commercial transactions.

Every five days, TARGET2 processes a value close to the entire euro area GDP, which makes it one of the largest payment systems in the world. More than 1,000 banks use TARGET2 to initiate transactions in euro, either on their own behalf or on behalf of their customers. Considering branches and subsidiaries, more than 52,000 banks worldwide and all their customers can be reached via TARGET2.

3.1.5 Freedom of movement of people

In TFEU, Part Three (Union Policies and Internal Actions), Title IV, Chapter 1 'Workers' rules the respective provisions in Article 45. In Paragraph (1) *"Freedom of movement for workers shall be secured within the Union" Paragraph (2) specifies: "Such freedom of movement shall entail the abolition of any discrimination based on nationality between workers of the Member States as regards employment, remuneration and other conditions of work and employment."*

But (Paragraph 4) these provisions shall not apply to employment in the public service. In each case of the four freedoms guaranteed by the TFEU law, the EU institutions had to issue directives and regulations to transform the fundamental provisions of TFEU law into practice. In case of the freedom of movement of people, Article 46 says: *"The European Parliament and the Council shall, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee, issue directives or make regulations setting out the measures required to bring about freedom of movement for workers, as defined in Article 45, in particular:*

(a) By ensuring close cooperation between national employment services;

(b) By abolishing those administrative procedures and practices ... which would form an obstacle to liberalization of the movement of workers;

(c) By abolishing all restrictions provided for either under national legislation or under agreements previously concluded between Member States ...;

(d) By setting up appropriate machinery to bring offers of employment into touch with applications for employment and to facilitate the achievement of a balance between supply and demand in the employment market ...;"

The realized freedom of people (workers, students) in the Single Market is reinforced – at least within the Euro area – by the introduction of the Euro.

EU Charter of Fundamental Rights

Additionally, to the basic rights of free workers movements in the Single Market guaranteed by the TFEU, in the case of workers, also the law declared in the "Charter of the Fundamental Rights of the European Union"[29] is important in the implementation of the workers freedoms. Only to pick out some articles of the EU Charter of Fundamental rights may illustrate this:

Article 15: Freedom to choose an occupation and right to engage in work

Article 16: Freedom to conduct a business

Article 18: Right to asylum

Article 31: Fair and just working conditions

Schengen Area

An additional impulse or improvement for the realization of the free movement of people is also the "**Schengen Agreement"** of 1985**[30]**. In the Lisbon Treaty (TFEU), Protocol No 19 says: *"NOTING that the Agreements on the gradual abolition of checks at common borders signed by some Member States of the European Union in Schengen on 14 June 1985 and on 19 June 1990, as well as related agreements and the rules adopted on the basis of these agreements, have been integrated into the framework of the European Union by the Treaty of Amsterdam of 2 October 1997."*

The border-free Schengen Area guarantees free movement to more than 400 million EU citizens, along with non-EU nationals living in the EU or visiting the EU as tourists, exchange students or for business purposes (anyone legally present in the EU). Free movement of persons enables every EU citizen to travel, work and live in an EU country without special formalities. Schengen underpins this freedom by enabling citizens to move around the Schengen Area without being subject to border checks.

Today, the Schengen Area encompasses 23 EU countries, except for Bulgaria, Cyprus, Ireland, and Romania (Croatia became a member in 2023). However, Bulgaria, and Romania are currently in the process of joining the Schengen Area and already applying the Schengen

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[29] See: https://ec.europa.eu/info/aid-development-cooperation-fundamental-rights/your-rights-eu/eu-charter-fundamental-rights_en; and: Charter of Fundamental Rights of the European Union, 2012/C 326/02, OJ C 326/391 of 26.10.2012.

[30] For a detailed overview of all information concerning the Schengen Area, see: https://home-affairs.ec.europa.eu/policies/schengen-borders-and-visa/schengen-area_en

acquis to a large extent[31]. Additionally, also the non-EU States, the EFTA countries Iceland, Norway, Switzerland, and Liechtenstein have joined the Schengen Area. In total, 27 European countries cover the Schengen area, 23 EU MS and four EFTA member countries.

Freer movement of Students and Researchers

Acompanying the measures for the free movement of workers, numerous initiatives were also started for students and scientists to use the free EU area more efficiently.

For the students ERASMUS[32] is a program for education, training youth and sport.

In the area of Universities, a European Higher Education Area (EHEA[33]) was launched in March 2010, during the Budapest-Vienna Ministerial Conference, on the occasion of the 10th anniversary of the Bologna Process.

At the Western Balkan Summit in Berlin on 3 November 2022 in the context of the Berlin Process (started in 2014) progress was reached on[34]: (1) an energy support packages of €1 billion; and (2) three new Common Regional Market agreements, facilitating freedom of movement and employment across the Western Balkan region of six states: Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia.

Unsolved Asylum problem

The huge influx of migrants in 2015, following a new wave in 2022, partly caused by the Russian invasion of the Ukraine revealed the weaknesses of EU's policy concerning migrants and asylum seekers.

On the website of the European Commission "Policy: Migration and asylum"[35] all aspects of the respective policy problems are mentioned. The main problem is the still nationalistic attitudes of the MS when it comes to the distribution of migrants.

Here, Schengen plays a role together with the "Dublin Regulation" which establishes which country is responsible for the asylum application process.

The Dublin Regulation (Regulation No. 604/2013; sometimes the Dublin III Regulation; previously the Dublin II Regulation and Dublin Convention) is a European Union (EU) law that determines which EU Member State is responsible for the examination of an application

[31] At EU's Justice and Home Affairs Council meeting on 8 December 2022, Croatia became full member of Schengen. The applications of Bulgaria and Romania, however, were blocked by Austria and the Netherlands (See: https://www.consilium.europa.eu/de/meetings/jha/2022/12/08-09/)

[32] See: https://erasmus-plus.ec.europa.eu/

[33] See: http://ehea.info/page-full_members

[34] See: https://ec.europa.eu/commission/presscorner/detail/da/ip_22_6478

[35] See: https://ec.europa.eu/info/policies/migration-and-asylum_en

for asylum, submitted by persons seeking international protection under the Geneva Convention and the EU Qualification Directive, within the European Union.

The Commission is permanently trying to reform Schengen and Dublin in view of the efficient process of asylum policy[36]. On the respective website it states:

"The EU has developed a new approach to better manage all aspects of migration. It aims to combat irregular migration and smuggling, save lives and secure the EU's external borders while still attracting talent and skills."

3.2 Effective while strong competition policy

In TFEU, Part Three (Union Policies and Internal Actions), Title VII, (Common Rules on Competition, Taxation and Approximation of Laws" Chapter 1 'Rules on competition" rules the respective provisions, in Section 1 'Rules applying to undertakings', in Section 2 'Aids granted by States'. Article 101, Paragraph 1 says: *"The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States, and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:*

(a) Directly or indirectly fix purchase or selling prices or any other trading conditions;

(b) Limit or control production, markets, technical development, or investment;

(c) Share markets or sources of supply;

(d) Apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(e) Make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts."

To enhance the importance of a strong competition policy to shield the internal market, the TEU and the TFEU has added Protocol 27: 'On the internal market and competition': *"... internal market as set out in Article 3 of the TEU includes a system ensuring that competition is not distorted".*

The EU's competition policy is an important accompanying check that there are fair competitive conditions in the internal market. The European Commission is the competition

[36] See the Common European Asylum System (CEAS): https://home-affairs.ec.europa.eu/pages/glossary/common-european-asylum-system-ceas_en

authority of the EU[37]. It ensures the correct application of EU competition rules. The competition policy instruments are: Antitrust, Cartels, Mergers, and State aid.

The EU competition policy is quite powerful. This is proofed in the case of antitrust and merger cases against the technology giants, like Apple and Google, which were punished with heavy fines[38].

Economic impact of more competition

The creation of EU's Single Market should have had an impact on competition. Greater trade openness (increased intra-EU trade) has increased competition and lowered prices. Firms lost market power to raise mark-ups of their prices over their marginal costs, which has a positive impact on output. According to the study by Badinger (2007) mark-ups went up in most service industries of EU's SM since the early 1990s, confirming the weak state of the Single Market for services and provoked an additional liberalization program of services in the EU, the Services Directive (SD) of 2006[39]. In the manufacturing sectors, however, mark-ups declined on average by 26%. In't Veld (2019, p. 812) uses this figure in his counterfactual simulations of the impact of non-SM. Mion and Ponattu (2019 apply a new quantitative trade model (NQTM) of the global economy under monopolistic competition. Quantitative trade models incorporate the channels through which trade affects consumers, firms and workers and provide a mapping from trade data to welfare (See Costinot and Rodriguez-Clare, 2014). The NQTM is used to evaluate the impact of the trade boosting effects of the SM on productivity, markups (more competition), product variety, and welfare. They find that the higher competition on the grand EU SM has reduced markups by around 2% (Germany) to 3 1/2% Austria.

There are recent studies by the European Commission (Cai et al., 2021, p. 12), demonstrating that EU's strict competition policy had a considerable impact on GDP. The authors used European Commission's QUEST III model to evaluate the macroeconomic impact of competition policy enforcement. Accordingly, prices (GDP deflator) decreased by 0.2 ppts after 5 years and real GDP increased by 0.3 ppts. See also an overview over similar studies by Ilzkovitz and Dierx (2021).

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[37] See the "Competition" websites of the European Commission: https://ec.europa.eu/info/topics/competition_en; and : https://competition-policy.ec.europa.eu/index_en; see also the website "Competition" of the European Union: https://european-union.europa.eu/priorities-and-actions/actions-topic/competition_en

[38] See the cases on the website: https://ec.europa.eu/competition/elojade/isef/index.cfm

[39] The European Commission is now working with EU countries to further improve the single market for services (see: https://ec.europa.eu/growth/single-market/services/services-directive_en).

With a political economy model of market regulation Gutiérrez and Philippon (2018) show that countries in a Single Market like those of the EU willingly promote a supranational regulator that enforces free markets beyond the preferences of any individual country. European institutions (the European Commission) are more independent and enforce competition more strongly than any individual country ever did. Countries with ex-ante weaker institutions benefit more from the delegation of competition policy to the EU level. Over the last two decades, U.S. markets have gradually become less competitive. Today, European markets are more competitive than those in the United States which invented modern antitrust in the late nineteenth and early twentieth century. By 1950 it was clear to most observers that American markets were more competitive that European ones. The creation of EU's Single Market with its fierce competition policy brought the turning point (see European Commission (2022B).

3.3 Policies supporting the SM

The Single Market is the backbone of EU integration. The word "internal market" occurs 60 times in the text of the treaties TFEU and TFEU. Its importance is further increased – at least in those MS which have introduced the Euro – by a common currency. Furthermore, it is supported by the following policies.

1) The Common Agricultural Policy (CAP), ruled in the TFEU, Part Three (Union Policies and Internal Actions), Title III: 'Agriculture and Fisheries'. The CAP started already in 1962.
2) Regional or cohesion policy, ruled in the TFEU, Part Three (Union Policies and Internal Actions), Title XVIII: 'Economic, Social and Territorial Cohesion'.
3) Taxation, ruled in the TFEU, Part Three (Union Policies and Internal Actions), Title VII: 'Common Rules on Competition, Taxation and Approximations of Laws', Chapter 2: 'Tax provisions'. Article 110 essentially rules the harmonization of indirect taxations[40]. Direct taxation is still a competence of the MS.
4) Industrial policy (a protective shield against unfair foreign competition).
5) Trade policy – Common Commercial Policy (CCP): (border adjustment mechanism).
6) EU Budget[41] - Single Market highlight.

[40] See the Taxation website of the European Union: https://european-union.europa.eu/priorities-and-actions/actions-topic/taxation_en; and the Taxation website of the European Commission: https://ec.europa.eu/info/policies/taxation_en

[41] See the website of the European Commission "EU budget": https://ec.europa.eu/info/strategy/eu-budget_en

Industrial policy – protection against unfair competition

Increased globalization - although it has slowed down due to the various crises (GFC 2008/09, COVID-19 pandemic 2020, Energy crisis 2022) – went hand in hand with unfair foreign competition. This hampered EU's SM and especially the export-oriented European industry. Industry and Single Market is combined at the website of the European Commission ("Internal Market, Industry, Entrepreneurship and SMEs"[42]).

The European Commission, based on its "European Industrial Strategy"[43] initiated several legal instruments to make the SM more resilient and shield its industry against unfair foreign competition; just to mention a view:

- Screening of FDI in the EU: Regulation (EU) 2019/452 of 19 March 2019
- White Paper on foreign subsidies in the Single Market: 17 June 2020[44]
- Cyber security: proposal for a directive on measure for a high common level of cybersecurity across the Union of 16.12.2020[45].
- Proposal for a directive on corporate sustainability due diligence in case of global value chains[46]: 23 February 2022
- Single Market Emergency Instrument (SMEI): 19 September 2022[47]

An additional (administrative) hurdle for EU companies could bring the new reporting rules for EU companies. On 28 November 2022 the Council for Industry and Trade gave its final approval to the Corporate Sustainability Reporting Directive (CSRD)[48].

The application of the regulation will take place in four stages:

- reporting in 2025 on the financial year 2024 for companies already subject to the Non-Financial Reporting Directive (NFRD) 2014/95/EU of 22 October 2014;
- reporting in 2026 on the financial year 2025 for large companies that are not currently subject to the NFRD;

[42] See: https://single-market-economy.ec.europa.eu/index_en

[43] See: https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en

[44] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1070; see also the report by the European Parliament on the "future of EU international investment policy" of 25.5.2022: https://www.europarl.europa.eu/doceo/document/A-9-2022-0166_EN.html. On 28 November 2022 the EU Council approved the Foreign Subsidies Regulation to tackling distortive foreign subsidies on the internal market (See: https://www.consilium.europa.eu/en/press/press-releases/2022/11/28/council-gives-final-approval-to-tackling-distortive-foreign-subsidies-on-the-internal-market/

[45] See: https://eur-lex.europa.eu/resource.html?uri=cellar:be0b5038-3fa8-11eb-b27b-01aa75ed71a1.0001.02/DOC_1&format=PDF

[46] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1145

[47] See: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_5443

[48] See: https://www.consilium.europa.eu/en/press/press-releases/2022/11/28/council-gives-final-green-light-to-corporate-sustainability-reporting-directive/

- reporting in 2027 on the financial year 2026 for listed SMEs (except micro undertakings), small and non-complex credit institutions and captive insurance undertakings;
- reporting in 2029 on the financial year 2028 for third-country undertakings with net turnover above 150 million in the EU if they have at least one subsidiary or branch in the EU exceeding certain thresholds.

Trade policy

EU's common trade policy was from the beginning inherently linked to EU's Single Market. In TFEU, Part Five (External Action by the Union), Title II, 'Common Commercial Policy (CCP)' rules the respective provisions in Article 206: "*By establishing a customs union in accordance with Articles 28 to 32, the Union shall contribute, in the common interest, to the harmonious development of world trade, the progressive abolition of restrictions on international trade and on foreign direct investment, and the lowering of customs and other barriers*." Article 207 sets out the rules on EU trade policy.

On 18 February 2021, the European Commission sets course for an open, sustainable, and assertive EU trade policy for the coming years[49]. The Commission puts *"sustainability at the heart of its new trade strategy, supporting the fundamental transformation of its economy to a climate-neutral one".*

This new trade strategy follows those of 2015, called "Trade for all"[50] and those following the EU trade policy review of 16 June 2020[51].

In view of the ambitious EU climate goals in "Fit for 55"[52] climate program, the EU has to protect its Single Market against unfair climate competition from abroad. For this purpose, a vehicle is discussed: The Carbon Border Adjustment Mechanism (CBAM). On 15 March 2022, the Council reached agreement (general approach) on the CBAM regulation, which is one of the key elements of the European Union's 'Fit for 55' package[53]. On 13 December 2022, the European Parliament[54] reached a provisional agreement with Council to set up an EU CBAM to combat climate change and prevent carbon leakages.

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[49] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_644
[50] See: "Trade for all". Towards a more responsible trade and investment policy, 2015: https://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf
[51] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1058
[52] See: https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/
[53] See for details on the website of the European Council: https://www.consilium.europa.eu/en/press/press-releases/2022/03/15/carbon-border-adjustment-mechanism-cbam-council-agrees-its-negotiating-mandate/; and the European Commission: https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661
[54] See: https://www.europarl.europa.eu/news/en/press-room/20221212IPR64509/deal-reached-on-new-carbon-leakage-instrument-to-raise-global-climate-ambition; and: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7719

According to the deal reached, an EU CBAM will be set up to equalize the price of carbon paid for EU products operating under the EU Emissions Trading System (ETS) and the one for imported goods.

The new bill will be the first of its kind. It is designed to be in full compliance with World Trade Organisation (WTO) rules. It will apply from 1 October 2023 but with a transition period where the obligations of the importer shall be limited to reporting. To avoid double protection of EU industries, the length of the transition period and the full phase in of the CBAM will be linked to the phasing out of the free allowances under the ETS.

CBAM will cover iron and steel, cement, aluminium, fertilisers and electricity,

Before the end of the transition period the Commission shall assess whether to extend the scope to other goods at risk of carbon leakage, including organic chemicals and polymers, with the goal to include all goods covered by the ETS by 2030. They shall also assess the methodology for indirect emissions and the possibility to include more downstream products.

The governance of CBAM will be now more centralized, with the Commission in charge of most of the tasks. By the end of 2027, the Commission will do a complete review of CBAM including an assessment of progress made in international negotiations on climate change, as well as the impact on imports from developing countries, in particular the least developed countries (LDCs).

The EU Single Market is constantly challenged by unfair trade practices by third countries. A current example is the US Inflation Reduction Act of 2022 (IRA) which was implemented by the Biden administration (signed into law on 16 August 2022) to curb inflation by reducing the deficit, lowering prescription drug prices, and investing into domestic energy production while promoting clean energy[55]. The law, as passed, will raise USD 738 billion and authorize $391 billion in spending on energy and climate change, USD 238 billion in deficit reduction, three years of Affordable Care Act subsidies, prescription drug reform to lower prices, and tax reform. The law represents the largest investment into addressing climate change in United States history. It also includes a large expansion and modernization effort for the Internal Revenue Service (IRS). According to several independent analyses, the law is projected to reduce 2030 U.S. greenhouse gas emissions to 40% below 2005 levels. The projected impact of the bill on inflation is disputed. Overall, the IRA contains USD 500 billion in new spending and tax breaks that aim to boost clean energy, reduce healthcare costs, and increase tax revenues.

[55] For details, see: https://en.wikipedia.org/wiki/Inflation_Reduction_Act_of_2022

The IRA represents the most aggressive action addressing climate change in US history and includes tax incentives designed to lower costs for working families, grow the clean energy economy, and strengthen America's supply chains. According to the IRA qualified for a tax credit for electric vehicles assembled in North America of up to USD 7,500[56].

The European industry fears an unfair US competition by this "Buy American" doctrine implemented into the IRA. 20% of German industrial players from the famous Mittelstand (medium-sized companies) are currently pondering relocation their production sites to third countries due to the high energy prices and tax incentives elsewhere." (EURACTIVE, 30 Nov 2022).

On 26 October 2022, the European Commission launched a US-EU Task Force on the IRA. The Task Force will address specific concerns raised by the EU related to the IRA[57]. Both sides agreed on the importance of close coordination to support sustainable and resilient supply chains across the Atlantic, including to build the clean energy economy. On 5 December 2022[58], the EU and the US held the third Ministerial Meeting of the Trade and Technology Council (TTC) in College Park, Maryland to address common challenges (e.g., the irritation about the IRA) and responds to global crises (e.g., Russia's unprovoked war of aggression against Ukraine).

The TTC is a key forum to deepen transatlantic cooperation to facilitate trade and develop global standards on technology and security. Geostrategic challenges, including Russia's unprovoked war of aggression against Ukraine, have reinforced the importance of close coordination under the TTC. In a speech on 4 December 2022 at the College of Europe in Bruges, President von der Leyen[59] addressed the European concerns with IRA and offers cooperation with the USA but urges also counter measures in Europe in order to cushion competitive disadvantages. The EU regulations for public investments would have to be relaxed. In addition, additional European funds are needed to promote clean technologies and cooperation with the USA, for example in setting industry standards and purchasing critical raw materials.

The Brussels Effect

The regulatory tools to govern the EU Single Market automatically exerts the need to foreign companies (all IT multinationals, Amazon, Apple Facebook (Meta), Google, Microsoft) to

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[56] See the information on Electric Vehicle tax credit under the newly enacted IRA of the U.S. Department of the Treasuries: https://home.treasury.gov/news/press-releases/jy0923

[57] See: https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_6402

[58] For details about these talks, see: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_7433

[59] See: https://ec.europa.eu/commission/presscorner/detail/en/speech_22_7487

apply the EU Single Market rules to operate at one of the most powerful marketplaces in the world.

The “Brussels Effect” - a phrase first coined by Bradford in 2012 - offers a novel account of the EU by challenging the view that it is a declining world power. Anu Bradford (2020) explains in her book how the EU exerts global influence through its ability to unilaterally regulate the global marketplace without the need to engage in neither international cooperation nor coercion.

For many observers, the European Union is mired in deep crises (COVID-19, energy crises). Between sluggish growth, Brexit, and the rise of Asian influence, political turmoil following Russia’s invasion of Ukraine answered with severe sanctions against Russia; the EU is seen as a declining power on the world stage. Bradford (2020) argues the opposite: the EU remains an influential superpower that shapes the world in its image. By promulgating regulations that shape the international business environment, elevating standards worldwide, and leading to a notable Europeanization of many important aspects of global commerce, the EU has managed to shape policy in areas such as data privacy, consumer health and safety, environmental protection, antitrust, and online hate speech. And in contrast to how superpowers wield their global influence, the Brussels Effect absolves the EU from playing a direct role in imposing standards, as market forces alone are often sufficient as multinational companies voluntarily extend the EU rule to govern their global operations. The Brussels Effect shows how the EU has acquired such power, why multinational companies use EU standards as global standards, and why the EU's role as the world's regulator is likely to outlive its gradual economic decline, extending the EU's influence long into the future.

Why is there no Peking or Washington Effect, but only a Brussels Effect? Bradford (2020) explains this by the lacking political will in the USA (the want to intervene in the market as less as possible) and in China. China has not yet the necessary legal institutions. Lastly, three ingredients are necessary for an effect like the Brussels Effect: (i) a large market, (ii) a regulatory capacity, and (iii) the political will. The EU is the only power that meet these three criteria.

Bradford (2020), however, also mentions three common criticisms against the Brussels Effect:

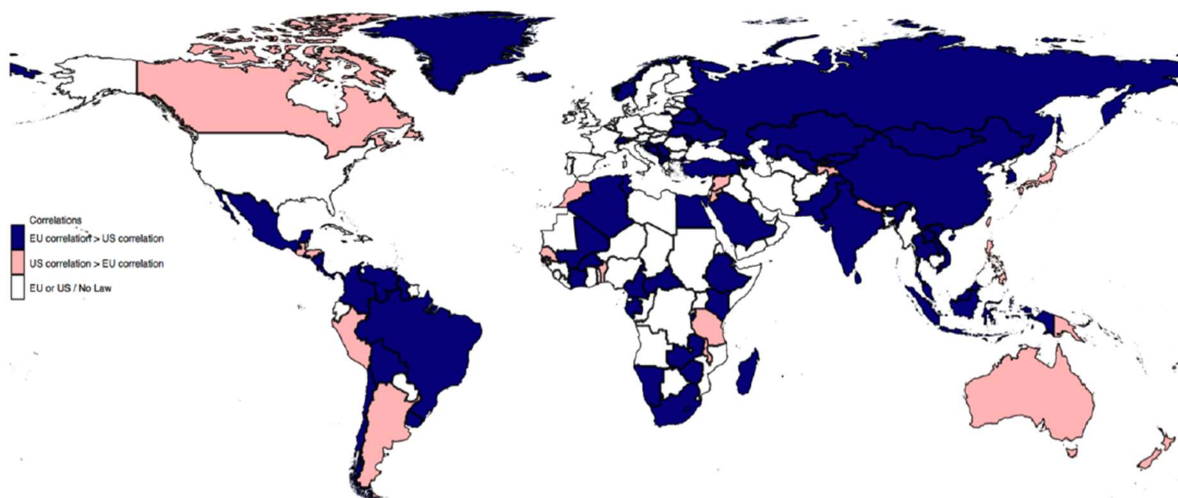
1) Regulatory is costly and deters innovations. Because there is more regulation in Europe, there is more competition in Europe than in the USA.
2) The strict EU SM regulations, introduced primarily to rule the Single Market, exert indirectly a trade protectionist power against third countries (see Bradford, 2015). The US

companies innovate, and the EU makes law cases against the major IT companies from Apple, Meta to Google.

3) The Brussels effect is a manifestation of European regulatory imperialism: the EU is writing the rules for the world.

Figure 9 shows the global spread of the “Brussels Effect”. It maps countries based on whether their correlation of competition law to the European Union or to the United States was higher in 2010. Among the countries whose substantive competition regulations more closely resemble U.S. laws are states with strong cultural and legal ties to America, including Australia, Canada, and New Zealand. Important jurisdictions like Japan also have laws that are more like those of the United States than to those of the European Union. However, there are many more countries in every region of the world that have laws exhibiting higher correlations with the European Union than with the United States. These include important regional leaders in competition law and major emerging markets, including Brazil, China, India, Mexico, Russia, South Africa, and South Korea.

Figure 9: World map of countries with higher correlation to the US or the EU competition law in 2010



Competition law is coded for 36 variables of four groups: authority, merger control, abuse of dominance, and anticompetitive agreements. This figure maps each country based on whether it had a higher correlation to the United States or to the European Union in 2010. Countries are not shaded if they did not have a competition law in 2010, if there is no coding of their competition law, or if they are EU MS or the United States.
Source: Bradford et al (2019), Figure 4.

Bradford et al. (2019) also examine the extent to which various national laws replicate the language used in the EU and US competition law. This also influences the correlations of competition law with those of the EU or the US.

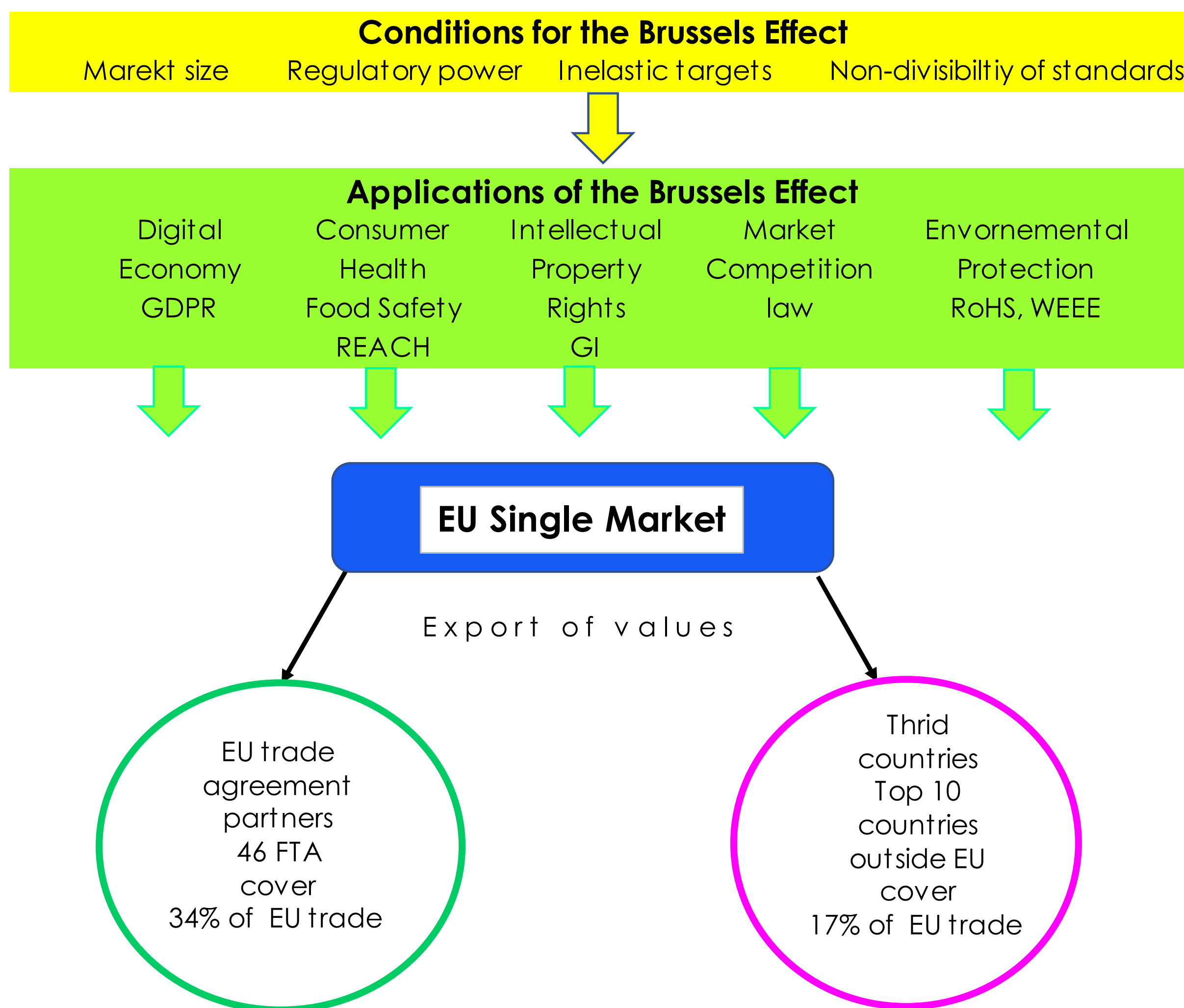
Although the above analysis has focused on competition law, the implications go well beyond it (see Bradford et al., 2019). Regulatory races between US and EU authorities are common in many policy fields. To take one example, the European General Data Protection Regulation (GDPR) entered into force in May 2018. Immediately, small, and large firms around the world altered their privacy practices. In addition, numerous diverse countries, as well as US states, have copied or are in the process of copying this EU template. Many of these dynamics driving the imitation of EU competition law (via the push factor "Brussels Effect") also apply to the field of privacy. Moreover, as with the European competition law model, the European privacy law model places less trust in the market than does its American equivalent, and in so doing appeals to governments around the world. Compared to the myriad sectoral laws on privacy in the United States, the European Union's privacy regulation is detailed, comprehensive, and easy to copy, thus serving as an effective off-the-shelf template for others to replicate. In sum, the European Union is winning the race for the globalization of various economic rules, Europeanizing the global regulatory environment in ways and to the extent that few have understood.

Figure 10 gives an overview of the Brussels effect in the context of EU trade policy. The far-reaching regulatory framework, building the cornerstone of EU's SM demands a robust system of enforcement and regulatory convergence. In terms of the external reach of EU legislation, integration motives, especially EU accession and access to the Single Market, have driven the closest alignment with EU regulations, while regulatory cooperation within the new generation of free trade agreements (FTAs) focuses on mutual recognition, conformity assessment and a regulatory cooperation dialogue rather than alignment. Besides trade facilitation regulatory efficiency and reductions of compliance and regulatory costs seem to be the main driving forces for equivalency and adequacy agreements. Beyond formal agreement the regulatory reach of the EU builds on voluntary alignment with EU regulations in specific areas.

Through multilateral network effects the EU may also succeeded in exporting its regulations to third countries (or companies) outside the framework of international agreements. These transmission paths potentially reinforce the Brussels Effect as other countries find it beneficial to adopt the same standards or put in place less trade-hindering non-tariff measures. This increases the global influence and competitiveness of the EU by providing a regulatory framework for these countries in specific areas. Overall, the ten most important trading partners of the EU outside the framework of international agreements are responsible for roughly 17% of EU external goods trade, lifting an enormous potential for the

Brussels Effect to spread across third countries. Figure 10 portrays these interlinkages of the EU's influence towards regulatory globalization by providing a comprehensive overview in terms of essential conditions, network effects and policy domains that help understanding the Brussels Effect.

Figure 10: Brussels Effect in the context of EU trade policy



GDPR = General Data Protection Regulation; REACH = Registration, Evaluation, Authorization and Restriction of Chemicals; GI = Geographical Indication in the context of Intellectual Property Right (IPR); RoHS =Restriction of Hazardous Substances Directive; WEEE = Waste Electrical and Electronic Equipment Directive.
Source: Simplified version of Christen et al. (2022), p. 12

Christen et al. (2022) attempt to quantify the Brussels Effect from an economic point of view which was postulated by Bradford (2012, 2020) primarily from a legal standpoint. They analyze to what extent the Brussels Effect can be observed in the network of EU trade agreements. They then derive untapped potentials of a “Brussels Effect 2.0” for EU trade policy.

The study by Christen et al. (2022) applies a two-step approach: a gravity model, and a general equilibrium trade model. In the first step, they estimate structural gravity models for trade data provided by WTO's structural gravity database covering the years from 1980 (1995) to 2016 and 132 countries. The empirical specifications of the gravity model control for (direct) trade policy measures including EU membership, the formation of free trade agreements and WTO formation and accession. On top of these, the potential direct trade effects of three candidate variables for a potential Brussels Effect are estimated:

1) an indicator which takes on a value of one if two trading partners have a free trade agreement with the EU in force but do not share a common free trade agreement;
2) a unilateral indicator which is one for all bilateral international trade relationships not directly covered by a trade agreement whenever the trading country has a free trade agreement with the EU in force;
3) the overall number of non-tariff trade policy measures issued by the importing country.

The empirical findings for the three alternative measures suggest that only the number of non-tariff trade policy measures (NTMs) exhibits an economically and statistically significant effect on cross-border trade flows, ten additional NTMs imposed by the importing economy decrease exports to this destination by approximately 0.5%. Furthermore, countries forming a free trade agreement with the EU engage less in issuing NTMs. Having a free trade agreement with the EU in force, decreases the number of unilateral non-tariff barriers signed by the EU's trading partner between 24% and 29%.

In the second step, the general equilibrium KITE trade model is used. It is a standard new quantitative trade model with many sectors and many industries and delivers the main findings: the reduction of NTMs induced by EU trade agreements has had very moderate welfare effects. This holds even for EU member countries, e.g., Austria losing only 0.004% in the absence of the NTM reduction. The effects of expanding the non-tariff measure reducing effect of EU trade agreements to all countries that have not yet signed an agreement with the EU are found to be slightly larger than the existing agreement's non-tariff measure effect. The magnitude of both European welfare gains and sectoral composition shifts would, however, still be of a very minor magnitude, with Austria e.g., gaining 0.007% in welfare.

Single Market in EU budget

In April 2021, the Council and Parliament adopted the EU's single market programme for the years 2021 to 2027[60]. The new programme consolidates a range of activities that were previously financed separately into one programme in order to manage them more efficiently. It also includes new initiatives to improve the functioning of the single market. The programme's total budget is €4.2 billion[61].

In the Multiannual Financial Framework (MFF) 2021-2027, chapter 3: Single Market totally amounts to €6.6 billion at current prices[62]. €4.2 billion are reserved for the Single Market Program (inclusive COSME[63]).

4. The economic impact of EU's SM

The SM project (SMP) together with the Euro project is he most complex economic integration project ever. It is therefore not surprising that not a one for all method is able to catch the whole range of implications of the SM plus the Euro.

4.1 The economic performance since the start of the SM

The EU's SM is the world's largest interconnected market, comprising more than 500 million people and 27.5 million companies (European Commission, 2020A, p. 6). Today it is almost universal knowledge that the creation of the SM brought economic benefits and promoted prosperity. How much? This is an open question. Before turning to the estimates of SM effects, a short overview of the economic performance of the EU and its MS during the last three decades.

Increased growth after enlargements

When comparing EU growth rates over time one must take into consideration that the EU – due to the steady enlargements – increased its composition: more MS also meant a larger SM and more GDP. This is demonstrated in Figure 11.

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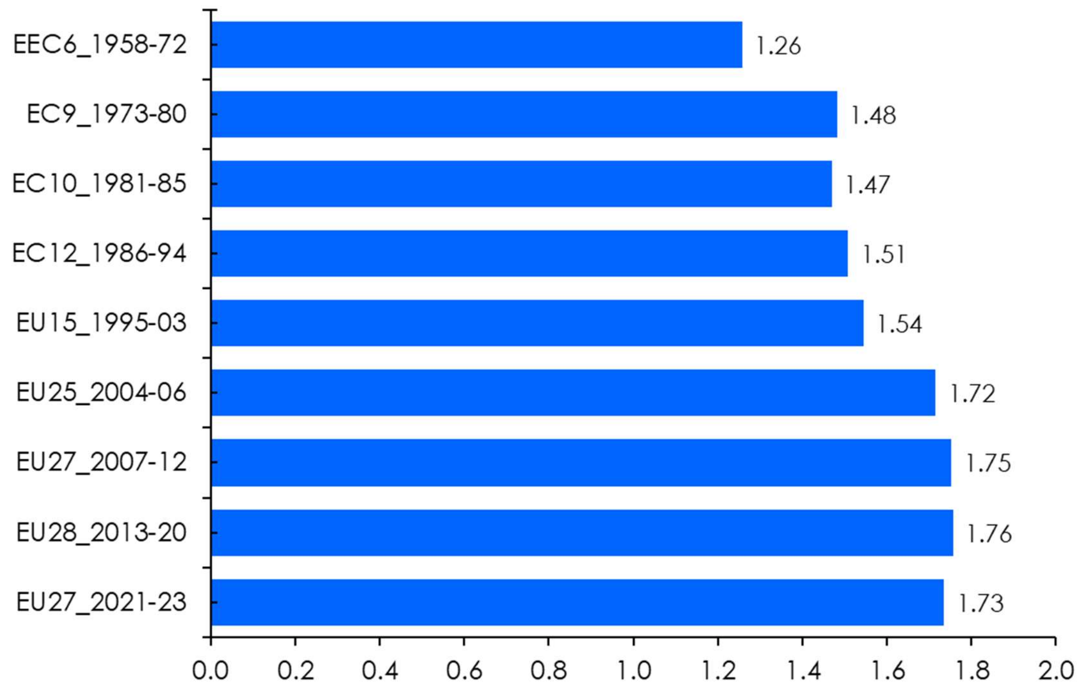
[60] See: https://www.consilium.europa.eu/en/policies/deeper-single-market/

[61] See: https://www.consilium.europa.eu/en/press/press-releases/2021/04/13/council-adopts-position-on-4-2-billion-single-market-programme-for-2021-2027/

[62] See details in the MFF 2021-2027: https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/mff_2021-2027_breakdown_current_prices.pdf

[63] COSME – Europe's programme for small and medium-sized enterprises; see: https://single-market-economy.ec.europa.eu/smes/cosme_en

Figure 11: EU economic growth changed after enlargements (average growth rates p.a. of real GDP*) in %: 1993-2023)



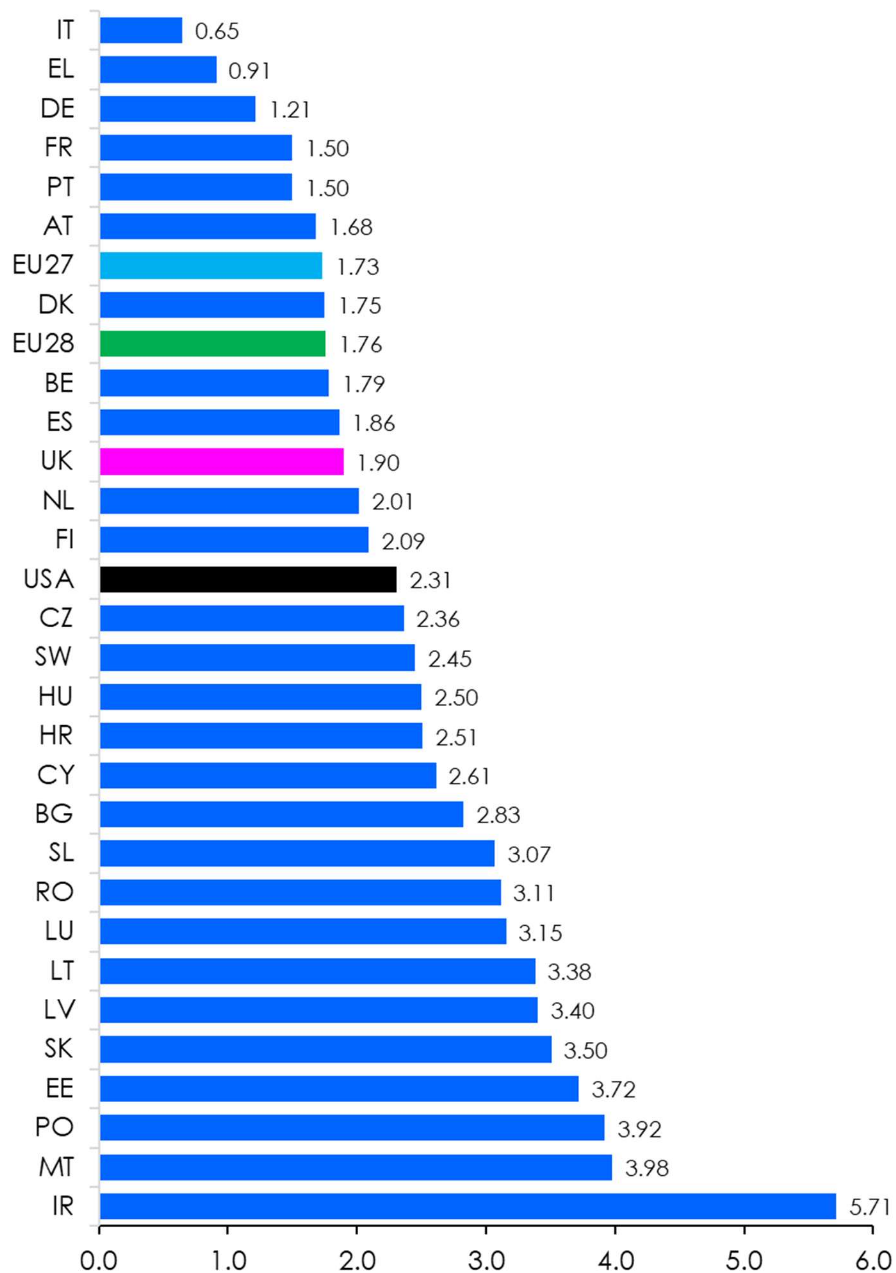
*) GDP, PPP exchange rate, real, US$: 2015 Prices)
Source: Oxford Economics

The six founding EEC MS (EEC6_1958-72) exhibit the lowest averages rates of growth of real GDP over the last 30 years. The EU28 (EU_28_2013-20) – before the Brexit – would have reached the highest average economic growth since 1993. The first jump in the growth rates occurred with the first enlargement 1973, when Denmark, Ireland, and the UK entered the EC (EC9_1973-80). The second significant jump was after the grand enlargement in 2004.

GDP growth varies across the EU

EU's real GDP increased by an annual growth rate of 1.7% since the inception of the SM (see Figure 12). However, there is a huge disparity. Italy with 0.6% experienced the lowest GDP growth rate, Ireland (+6%) the highest. Generally, the new EU MS which entered the EU only after 2004 grew faster than the incumbent MS. There is still a growth gap of ½ ppt between the EU and the USA.

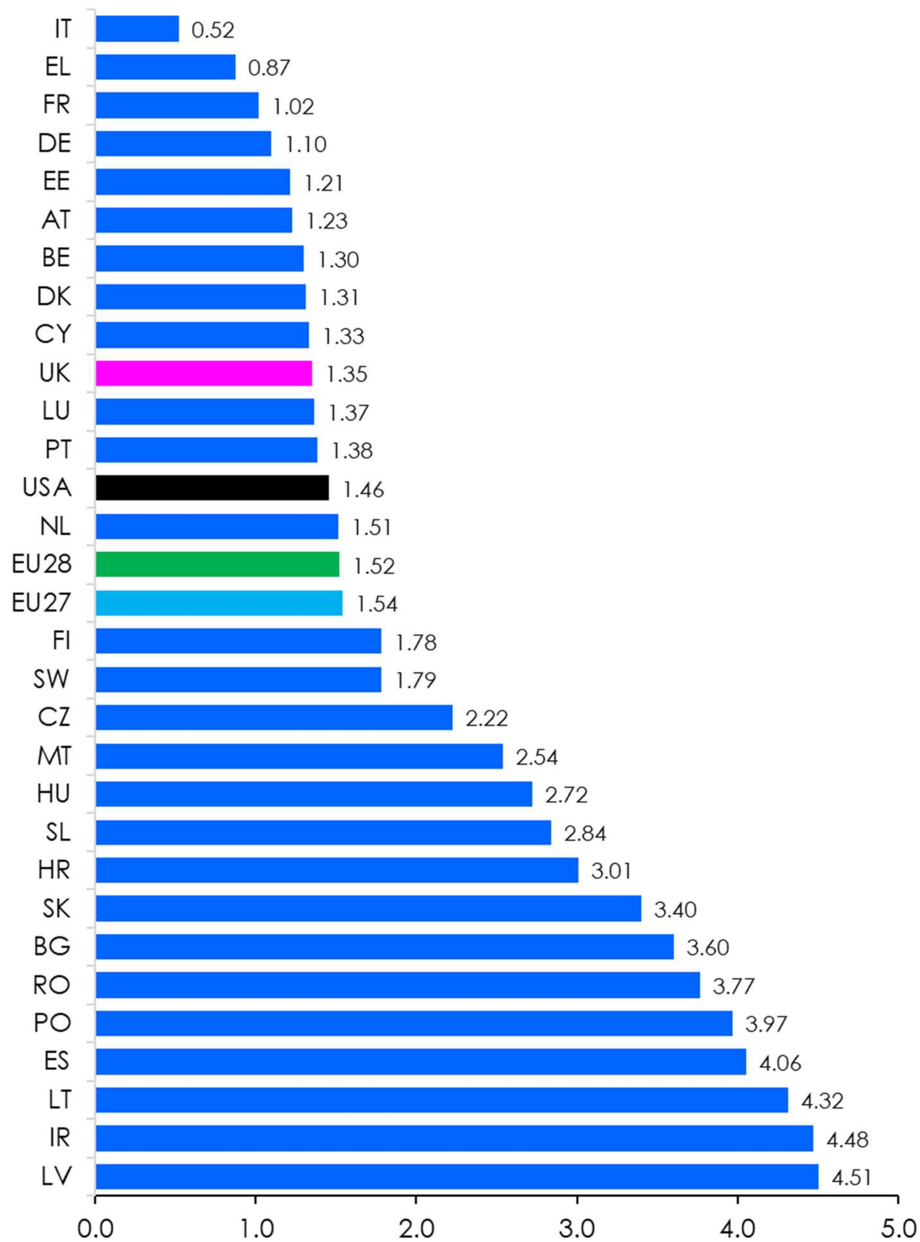
Figure 12: Growth of real GDP*) p.a. in %: 1993-2023



*) GDP, PPP exchange rate, real, US$: 2015 Prices)
Source: Oxford Economics

Whereas in the period 1993 to 2023 average real GDP growth increased by 1/2 ppts faster in the USA than those in EU27, this growth gap nearly closes if one considers real GDP per capita (see Figure 13). The reason is that average annual population growth is much higher in the USA (+0.8%) compared to the EU27 (+0.2%).

Figure 13: Growth of real GDP per capita p.a. in %: 1993-2023

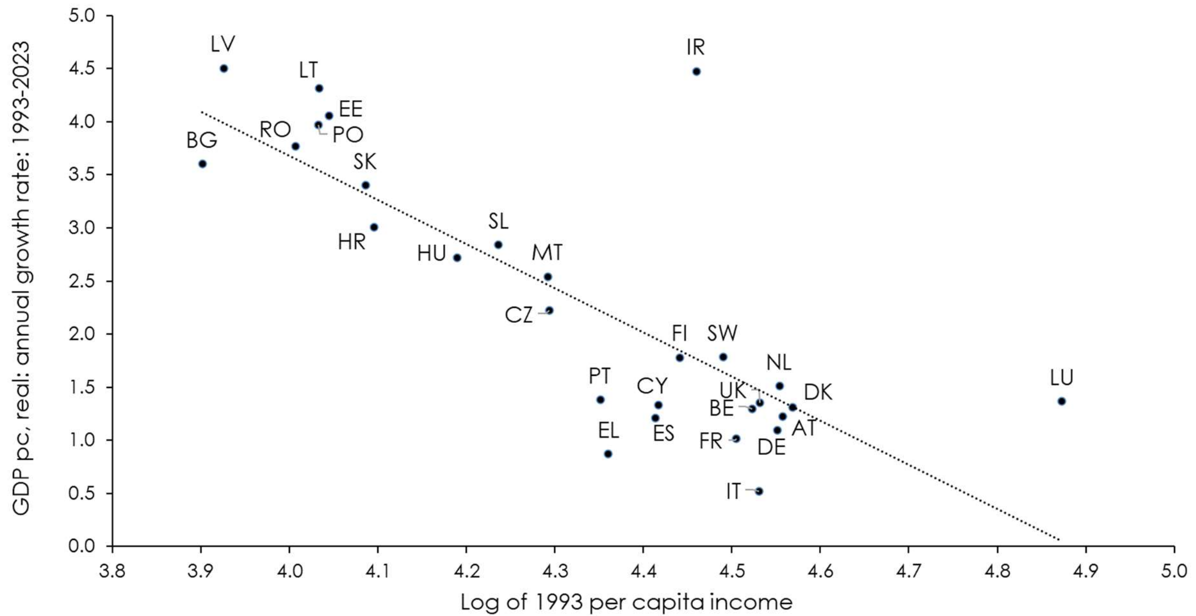


Source: Oxford Economics

Convergence of income incomplete

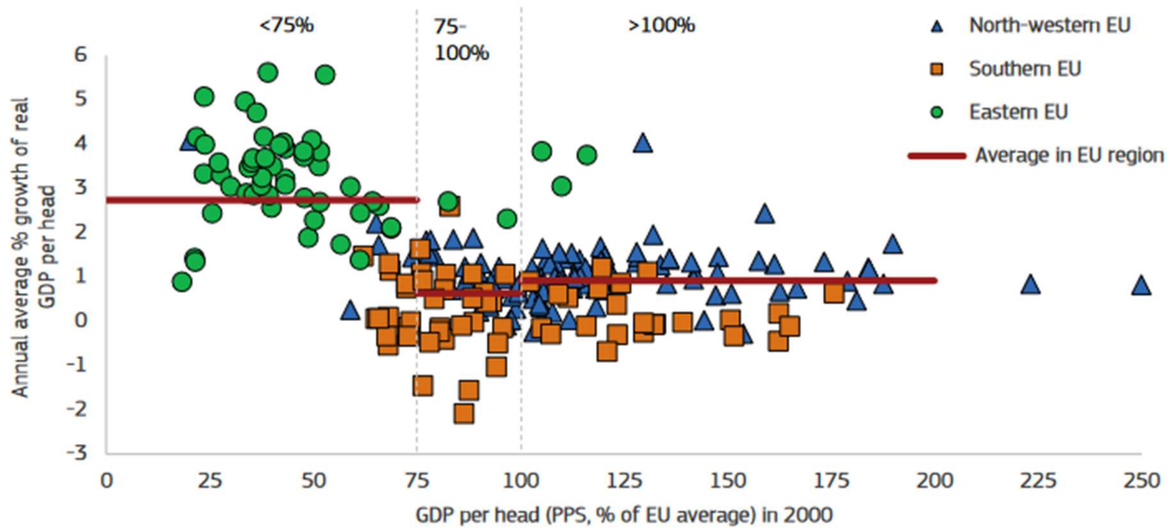
The EEC started with a rather homogeneous group of six countries. This pattern of development remained nearly unchanged until 2003. The big divide in the development occurred with the grand enlargement waves after 2004. Since then, the EU consists of rich MS in the west and poor MS in the east. Although the new MS continuously caught up with higher growth rates, the convergence of income in the EU is still not yet completed (see Figure 14) at a national level. Figure 15 demonstrates this situation at a regional level.

Figure 14: Convergence of income in EU member states (Real GDP per capita: 1993-2023)



Source: Oxford Economics

Figure 15: Annual growth in real GDP per head in EU regions by level of development, 2001-2019



Source: European Commission (2022A), p. 36

In its most recent Cohesion Report, the European Commission (2022A) states that not all regions in the EU with a GDP per head below the average are catching up (see Figure 13). Some of the patterns are in line with convergence theory. Many of the regions with GDP per head below 75% of the EU average in 2000 displayed strong growth over the subsequent 19 years, demonstrating rapid catching-up. These regions are mainly those in eastern EU MS. Conversely, many of the southern EU regions failed to achieve comparably high growth rates.

A non-negligible number of southern regions experienced a reduction in GDP per head over the period, even if their initial GDP per head was below 75% of the EU average. Consistent with convergence theory, regions with above-average GDP per head in 2000 tended to have lower rates of growth.

Convergence of price levels slowed down

If the Single Market of the EU would converge to a homogeneous market, the price levels of all (or most) goods and services should be the same in all EU MS. Then, the "law of one price (LOOP)" should apply. The LOOP states that in the absence of trade frictions (such as transport costs and tariffs), and under conditions of free competition and price flexibility (where no individual sellers or buyers have power to manipulate prices and prices can freely adjust), identical goods sold in different locations must sell for the same price when prices are expressed in a common currency. This law is derived from the assumption of the inevitable elimination of all arbitrage. Such a market is the ultimate goal of EU's SMP. As the SM is far from being near this ideal, there are still price divergences.

A growing EU through enlargements by – especially in since 2004 – only rather poor countries is confronted with this income and price inequality for a long time. In this situation, the Balassa-Samuelson (BS)[64] effect is almost a necessary condition. There is a tendency for consumer prices to be systematically higher in more developed countries (the old EU15 MS) than in less developed countries (the new EU MS in Eastern Europe). This so-called "Penn effect" is explained by the BS effect: Accordingly, the greater variation in productivity between developed and less developed countries in the traded goods sectors which in turn affects wages and prices in the non-tradable goods sectors (services).

The BS effect can be estimated by estimating an equation relating the logarithms of relative prices to the logarithms of relative GDP per capita. Own calculations with data from Oxford Economics for the 19 MS of the Euro area give the following results: in the year 1995 the elasticity is 0.74 (R2=0.86). in the year 2023 the elasticity goes down to 0.35 (R2=0.62). This means that in the Euro area a considerable catchup process has taken place in which the prices converged.

A correlate to the beta convergence of income in the EU (see Figure 12) is the convergence of price levels. Beta convergence means the negative relationship between the income level in 1993 and its growth rate between 1993 and 2023 as in Figure 12. The estimated beta has a value of -0.01744.

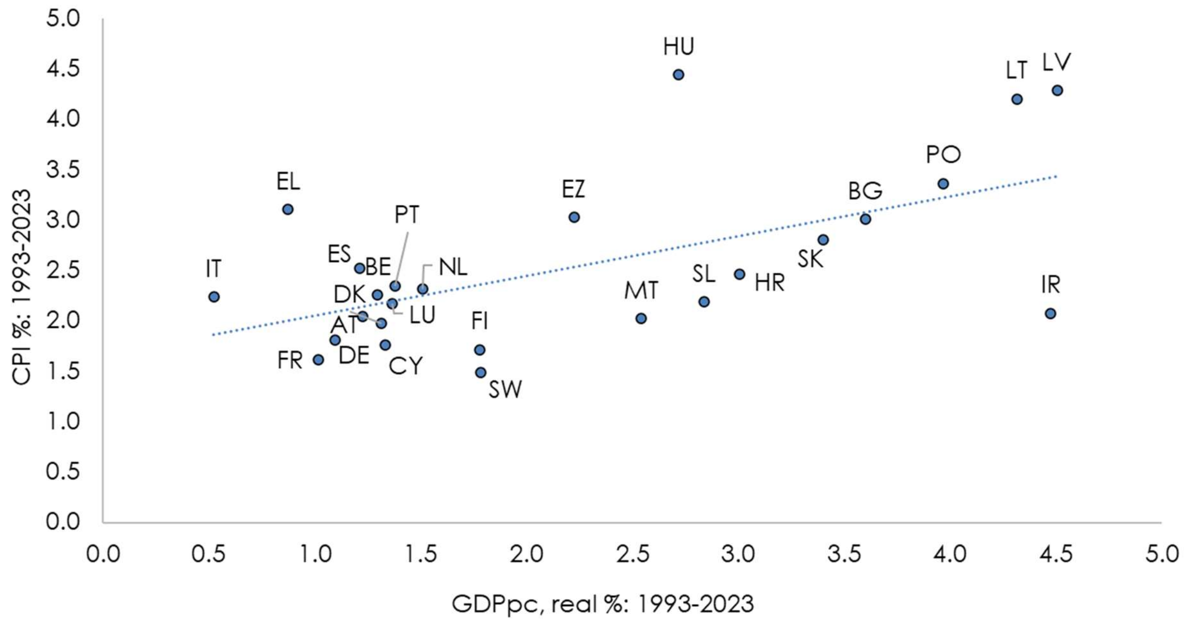
[64] See Breuss (2003), and: https://en.wikipedia.org/wiki/Balassa%E2%80%93Samuelson_effect

Halka and Lesczczynska-Paczesna (2018) investigated price convergence in the EU MS using disaggregated price level indices in the period 1999-2016. Accordingly, prices of both tradable and nontradable goods (services) had a significantly lower dispersion in 2016 than in 1999. The convergence was faster in the case of countries with price level below the average, which the authors interpreted as catching up. However, the analysis shows that most prices converged only up to 2008. The reason could be the disturbances caused by the global financial crisis in 2008. Estimations of price convergence from 1999 to 2008 delivered beta values between -0.051 (consumer goods) to -0.076 (semidurable goods), but for consumers services only – 0.025. Estimations over the whole period (1999-2016) resulted in much lower beta values (around – 0.02), and beta for consumer services are insignificant. Generally, this shows that price level convergence was strong between 1999 (the start of EMU) and 2008. Due to the disturbing effects of the global financial crisis, after 2008 the price level convergences slowed down.

Due to a lack of data, it is difficult to evaluate the convergence or divergence of price levels in EU's SM. It is easier to study the convergence of Inflation rates of consumer prices (CP). The average CPI inflation rate in EU27 between 1993 and 2023 (in the MS which entered the EU later from the date of EU membership) was 2.4%. The highest inflation rate (+11.6%) exhibited Romania, followed by Estonia (+7.1%) and Hungary (+4.4%). Nine of the new EU MS registered the highest inflation rates (Greece was number seven with +3.1%). In the period 1993-2023, the standard deviation of CPI inflation of MS of EU27 was 2.8. It jumped to 4.0 in the energy crisis year 2022. The general pattern of inflation performance of the average of 1993-2023 - that in poor countries inflation increases faster than in wealthier countries – remained the same in the energy crisis year 2002. However, it became more pronounced. Around EU average of an inflation rate of 9.1%, the range augmented from 5.3% in France to over 20% in the Baltic states. If one takes out the outliers Estonia and Romania the correlation between the inflation rates of EU MS in 2022 and those in the period 1993-2023 is high with a coefficient of. 0.74.

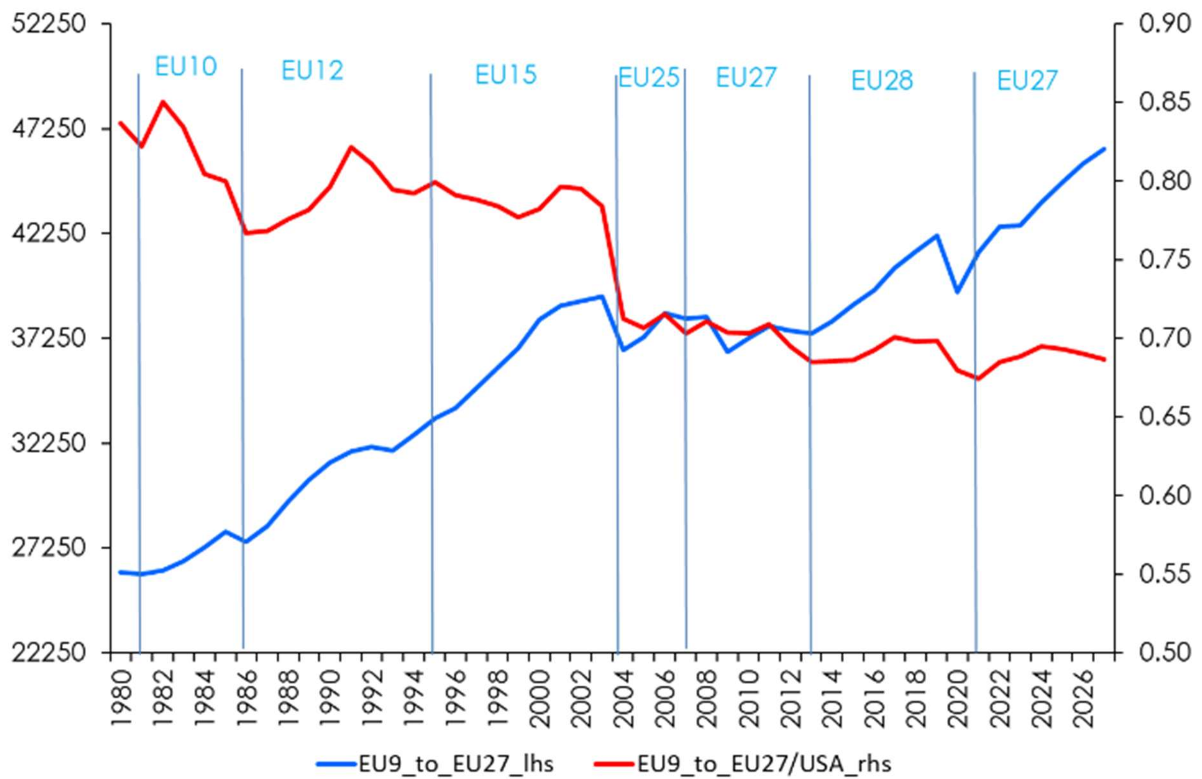
Following the Balassa-Samuelson hypothesis, there is a considerable correlation between inflation rates and per capita income growth over the period 1993-2023 with data for EU25 (EU27 minus the outliers Estonia and Romania) (see Figure 16). The correlation coefficient is R2=0.32.

Figure 16: Faster growing MS exhibit higher inflation (Consumer price inflation rates vs GDP per capita growth rates in %: 1993-2023)



EU25 data = EU27 minus the outliers Estonia and Romania
Source: Oxford Economics

Figure 17: Income increase in EU, however gap vis à vis USA gets bigger after EU enlargements (1980-2026)



Left scale: GDP per capita: PPP exchange rate, real, USD 2015; right scale: GDP pc EU/GDP pc USA
Source: Oxford Economics

GDP gap with the USA widens with EU enlargements

A still unexplained phenomenon, called by Breuss (2014) the "EU Integration Puzzle" is the increasing opening of the income gap between the EU and the USA (see Figure 17). Europe, especially the EU, has been characterized - until Brexit - by a steady increase in integration (deepening and expansion) since World War II. According to the standard integration theory, that should have led to more growth. However, the United States, which did not have these growth-enhancing integration effects, still experience stronger economic growth. The growth gap vis à vis the USA widened considerably after the grand enlargements after 2004.

4.2 Model estimations of SM effects

A whole bunch of studies evaluated *ex ante* the deepening steps of European integration: the start with EU's Single Market in 1993, the creation of the Economic and Monetary Union (EMU) in 1999 with the introduction of the euro in 2002, and the possible effects of the grand enlargement of the EU, starting in 2004.

Before the start of the Single Market, the "Cecchini Report" commissioned by the Commission of the European Communities (1988, p. 197) postulated a total effect of the completion of the SM of cumulative 4.5 percentage points (with a range of 3.2 to 5.7 ppts) more real GDP after seven years and a decline of inflation of cumulative 6.1% (range -4.5% to -7.7%). The economic impulses stem from four integration effects:

(1) Abolition of frontier controls (+0.4 ppts more GDP).
(2) Opening up public procurement (+0.6 ppts).
(3) Liberalization of financial services (+1.5 ppts).
(4) Supply side (economies of scale) effects (+2.1 ppts).

After seven years it turned out that the expected growth effects could not be reached. Therefore, a new effort was made with the "Lisbon Strategy" (Lisbon European Council, 2000). It postulated a new growth strategy which should make the EU to the fastest growing economy in the world within a decade. Unfortunately, the global financial crisis 2008 with the following Great Recession in 2009 made it impossible to reach the Lisbon goal. In 2010, the EU announced a new growth strategy, "Europe 2020" for the next decade (European Commission, 2010A). Again, the COVID-19 pandemic crisis prevented from achieving the ambitious goals.

In the planning phase of EMU with the aim of introducing a common currency, an extensive study, "One market, one money", commissioned by the Commission of the

European Communities (1990) evaluated the benefits and costs of EMU. The study expected a stabilization of prices, the need for policy coordination, macroeconomic stability through fixing exchange rates. The study evaluated several aspects of the economy and policy needed for creating EMU, however, it did not deliver a single forecast about the GDP growth effects of EMU and the common currency.

Table 2: The impact of EU's Single Market: Model estimations

Authors	Method	Scale	EU27	Austria	Germany
			Cumulative increase in ppts*)		
			1995 to 2017		
London Economics (2017)	Econometric estimations	GDP, real per capita	1.0 (0.05)	1.7 (0.08)	1.6 (0.07)
			2000 to 2014		
Felbermayr et al. (2018)	ifo trade model	GDP, real[1] per capita	6.6 to 8.6 (0.5-0.6)	6.2 to 8.0 (0.4-0.6)	3.9 to 5.2 (0.3-0.4)
			2010 to 2016		
Mion-Ponattu (2019)	CGE model	GDP, real per capita	3.2 (0.53)	3.9 (0.65)	2.7 (0.45)
			in the medium to long-run		
in 't Veld (2019)	QUEST DSGE model	GDP, real	8.7 (0.87)	11.8 (1.18)	7.9 (0.79)
			in the medium to long-run: 2014 data		
Mayer et al. (2019)	Structural gravity model	Welfare[2] (GDP pc)	2.0 to 8.2 (0.2-0.8)	2.2 to 9.6 (0.2-1.0)	1.3 to 5.7 (0.1-0.6)
			in the medium to long-run: 2014 data		
Breuss (2021)	GTAP10 CGE model	GDP, real[3] based on NTM effects	0.5 to 2.8 (0.1-0.3)	0.8 to 4.9 (0.1-0.5)	0.4 to 3.1 (0.0-0.3)
			1993/95 to 2022		
Breuss (2022B)	Integration Macro-model	GDP, real[4]	20.6 (0.71)	13.3 (0.46)	15.7 (0.54)

*) Numbers in parentheses are annual growth figures.
1) The from-to values relate to undoing the SM (low) and (high) if all other integration steps (Customs Union, Euro, Schengen, other RTAs) were reversed. The published version (Felbermayr et al., 2022) expresses welfare effects of "Undoing Europe" in changes of real consumption.
2) The from-to values relate to three scenarios: MFN (back to WTO rules), RTAs (regional trade agreements), and EEC (remove SM).
3) The from-to values relate to Armington (low) and Melitz (high).
4) EU27 is the arithmetic mean of the results of 10 EU MS.

Less studies cared about the outcome of these fundamental integration steps. This review describes only briefly the most important recent studies which primarily deal with the impact of EU's Single Market[65]. Similarly, to the ex-ante studies also those done *ex post* apply a variety of methods: model-based studies and econometric analyses. Whereas the model-based

[65] Badinger and Breuss (2011) give an overview of the literature on studies, which quantify the effects of Post-War economic integration.

ex post evaluations of EU's Single Market find that the growth effects for trade and GDP are positive, econometric studies like those of Andersen et al. (2019) find no significant effect of European integration on economic growth[66].

Table 2 gives an overview of the most recent estimations of potential economic effects of EU's SM. The estimations are executed with a variety of methods: from an econometric approach to model-based calculations. First, it shows the cumulative effects on real GDP or on real GDP per capita, followed (in parenthesis) by the annual growth rates (calculated by dividing the cumulative values with the number of years of the estimations)

Econometric approach

London Economics (2017) uses an econometric model to measure the impact of EU's Single Market. It provides an estimate by relating five variables of interest to the summary indicator of Single Market integration, constructed by seventeen different indicators. The five variables of interest are: (1) Gross Domestic Product (GDP, measured by GDP per capita), (2) household consumption (measured by household consumption per capita), (3) employment (measured by employment rate), (4) productivity (measured by growth of total factor productivity), and (5) investment (measured by gross fixed capital formation). London Economics (2017) estimate its model for all EU Member States for the period 1995 to 2015 (except for Croatia, Malta, and Luxembourg). Overall, the results suggest that Single Market integration since the completion of the Single Market Plan (SMP) has had a direct, positive, and statistically significant impact on the growth of per capita GDP, per capita consumption and employment, and total factor productivity. Whilst the SM had no direct impact on investment, the growth of Single Market integration still had an indirect effect: the increase of GDP, in turn stimulates investment. The resulting estimates show that EU GDP per capita is 1.0% higher than it would have been without an increase in integration since 1995. Broken down to annual growth rates (see Table 2), EU's SM would have increased GDP per capita only by around 0.1%. This annual growth rate is the lowest compared to other studies in Table 2. Moreover, there are almost 1.9 million additional jobs. If the beginning of the Single Market would have started already in 1990 (i.e., pre-SM), then the impact of the Single Market would have been even greater. GDP per capita would then have been 1.7% higher.

The longer a country is a member of EU's Single Market, the higher are the growth effects. As a result (London Economics, 2017, p. 35 and 37) the impact of Single Market integration on GDP per capita in 2015 since the completion of the SMP (1993) or since the accession of

[66] According to the survey by ÖGfE (2022), in Austria primarily large companies profited from EU's SM.

new Member States (MS) was highest in Austria (+1,7%) and lowest in Greece (-0,3%). The incumbent Germany increased its level of GDP per capita by 1,6%. The best performance of the new MS after the grand EU enlargement in 2004 was the Czech Republic (+0,8%). The countries which only entered the EU in 2007, like Bulgaria (+0.02%) and Romania (+0.1%) could not yet profit from EU accession.

Breuss (2022B) applies a simple econometric integration model to estimate the impact of European integration (single market, EMU plus Euro, EU enlargements) for selected EU MS. Thirty years SM have contributed to a cumulative real GDP in the EU by 20.6% or a growth of 0.7% per year (see Table 2). The major impulse of the integration effects stem from an increase of intra-EU trade after creating the Single Market.

The other models use different methods (from the ifo trade model – a new quantitative trade model (NQTM) - to CGE models, over DSGE models and structural gravity models). Common is all following studies that they determine the economic SM effects (GDP, welfare) by the increase of growth in intra-EU trade in goods (see Figure 3) and (sometimes) also services. As shown by Costinot and Rodriguez-Clare (2014) quantitative trade models allow the mapping of trade effects to GDP and welfare. Most of the models identify the SM effects with the abolition of non-tariff measures (NTMs). Mion and Ponattu (2019), in't Veld (2019) and Breuss (2022B) also consider competition effects of the SM. Felbermayr et al. (2018) and Breuss (2022B) take also into account trade-enhancing effects of EMU/Euro. Only Breuss (2022B) also considers the net-budget constellations of EU MS vis à vis the EU budget.

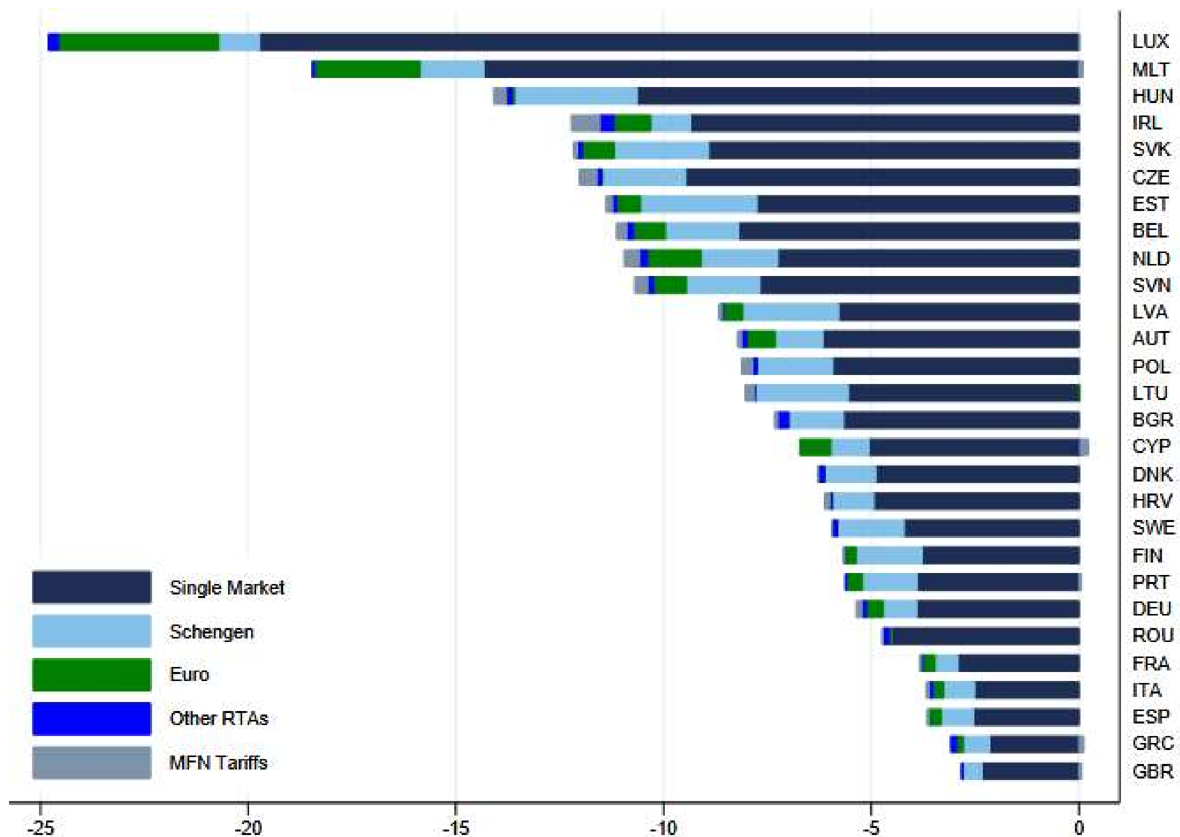
If the results are broken down into annual growth rates of GDP and GDP per capita, the following picture emerges: On average EU's SM led to more GDP growth ranging from 0.1% (London Economics, 2017; Breuss, 2021) to 0.9% (in't Veld, 201).

New quantitative trade model

Felbermayr et al. (2018) conduct simulation experiments that shed light on the economic benefits arising from various steps of European integration. Hence, they simulate the economic consequences of "undoing Europe" or the cost of disintegrating the EU (Felbermayr et al, 2022). For this purpose, they use the ifo trade model, a computable general equilibrium (CGE) model, termed in the literature as "New Quantitative Trade Model" (NQTM). The model features 43 countries and 50 goods and services sectors with data from the World Input-Output Database (WIOD) over the period 2000-2014. "Undoing Europe" is simulated by looking at seven different counterfactual scenarios: (1) collapse of the European Customs Union (tariff-free trade replaced by MFN tariffs), (2) dismantling the European Single

Market, (3) dissolution of the Eurozone, (4) breakup of the Schengen Agreement, (5) undoing all RTAs with third countries, (6) complete collapse of all European integration steps, (7) complete EU collapse including the termination of fiscal transfers.

Figure 18: Change in real income in % for various scenarios, Baseline year 2014



Source: Felbermayr et al. (2018), p. 27

Felbermayr et al (2018)[67] evaluate a doomsday scenario, namely what would happen after "undoing Europe", i.e., if all integration steps of the EU since World War II (Customs Union, SM, Euro, Schengen, and other RTAs) would be reverted. The separate integration steps have different effects (see Figure 18). The largest losses of income per capita in the base year 2014 would result from the dissolution of the Single Market which is at the heart of EU integration (Felbermayr et al., 2018, p. 24), followed by undoing Schengen and the Euro. The largest losses (after Luxembourg) would occur in the new EU MS in eastern Europe.

The complete collapse of all EU integration steps would have significant welfare losses in the medium to long-run. Income per capita of the EU would shrink cumulatively by 6 1/2% to 8 ½%. However, on an annual basis, the negative effects (-1/2% decline of GDP per capita)

[67] In the published version of this paper, Felbermayr et al. (2022, p. 16) measure welfare not in changes of real income as in Figure 18 but in changes of real consumption. Nevertheless, the quantitative results give a similar pattern as in Figure 18.

would not that large (see Table 2). But heterogeneity would exist across countries. Luxembourg (-23.3%) would suffer the most, followed by Malta (-17.8%) and the new EU Member States, which acceded the EU in 2004 like Hungary (-14.2%) and the others in the range of around -11%. From the three EU newcomers in 1995, Austria (-6.2%) would suffer from the end of the EU more than Finland (-3.8%) and Sweden (-4.2%). Germany (-5.2%) would lose less than the EU on average.

In scenario (7), when fiscal (net) transfers from the EU budget stop, in the biggest net receiver EU MS, e.g., Bulgaria, Hungary, Poland, and Romani the welfare losses of "undoing Europe" world double (Felbermayr et al., 2018, p. 24; 2022, p.17). Interestingly, Felbermayr et al. (2018) find that not only net receivers would lose welfare in scenario (7) but also the net payers MS like Austria and Germany of around one percentage point of GDP.

According to Felbermayr (2018, p. 2), the elimination of all EU integration steps would lower intra-EU trade by some 40%. Membership in the EU has boosted intra-EU goods trade by some 36% and services trade by some 82%. Felbermayr et al. (2022, p. 2), however estimate that a complete "undoing Europe would reduce intra-EU trade by only around 25%.

Dynamic stochastic general equilibrium model

In't Veld (2019) evaluates the macro-economic benefits of EU's Single Market by applying the European Commission's QUEST dynamic stochastic general equilibrium (DSGE) model. The model used in this simulation exercise is a multi-country version of the QUEST model. QUEST is a structural macroeconomic model, derived from micro-principals of dynamic intertemporal optimization. It distinguishes between a tradable and non-tradable sector, both importing inter-mediate goods, and models bilateral trade flows of traded goods. In't Veld only reports long-run effects.

In't Veld (2019) simulates two counterfactual scenarios, which should capture the non-SM effects:

1) *Effects of trade barriers:* in the SM simulation the author adds most-favored nations (MFN) tariffs and non-tariff barriers (NTB) although at the start of the SM the EU has already eliminated the MFN tariffs in intra-EU trade. The increase in trade costs of around 13% reduces intra-EU trade (intra-EU imports) by 20-30%, while total imports fall by about 20%. The fall in imports is larger than that in exports. The increase in trade costs not only affects trade flows but has a direct impact on domestic demand and hence on GDP (in the long run -6.6% for EU28). In the QUEST model, lower GDP is mostly a productivity effect, which is the result of lower investment.

2) *Effects of lower competition:* Greater trade openness of the SM has increased competition and lowered prices, and the re-establishment of trade barriers (as in scenario (1) above) is likely to reduce competitive pressures. If one assumes that the undoing of the SM would lead to an increase of mark-ups in manufacturing by 26% (no effect in the services sectors), real GDP of EU28 would be lower by 2.1%.

Summing up the results of the two above mentioned scenarios gives the total long-run effects of the counterfactual non-Single Market (In't Veld, 2019, p. 814). Real GDP in EU28 would be lower by 8.7% or 0.9% per year (see Table 2). The effects differ from country to country. The biggest losses would occur in Luxembourg (-20.5%), followed by Slovakia (-19.3%), Czech Republic (-18.5%), Belgium (-18%) and Hungary (-16.5%). Austria (-11.8%) would suffer more than Finland and Sweden (both -7.7%). The large incumbent Member States France (-7.1%), Germany (-7.9%) and Italy (-6.8%) would lose less than the EU on average.

In't Veld's (2019) estimates are comparable to those of Mayer et al. (2019) and Felbermayr et al. (2018), who use gravity trade models to estimate the trade and welfare effects from European integration. Mayer et al. (2019) report large trade effects and welfare losses for the EU of 2% to 8% (or 0.2% to 0.8% per year; see Table 2). Felbermayr et al. (2018) report income per capita effects for their Single Market disintegration scenario that are on average 6 1/2% to 8 ½% for the EU (see Table 2). While the country ranking in these two studies show strong similarities to those of In't Veld, their welfare or income per capita effects appear lower than In't Veld's GDP effects. Part of this difference are due to the competition effects included in the results of In't Veld, but not in that of the two other studies.

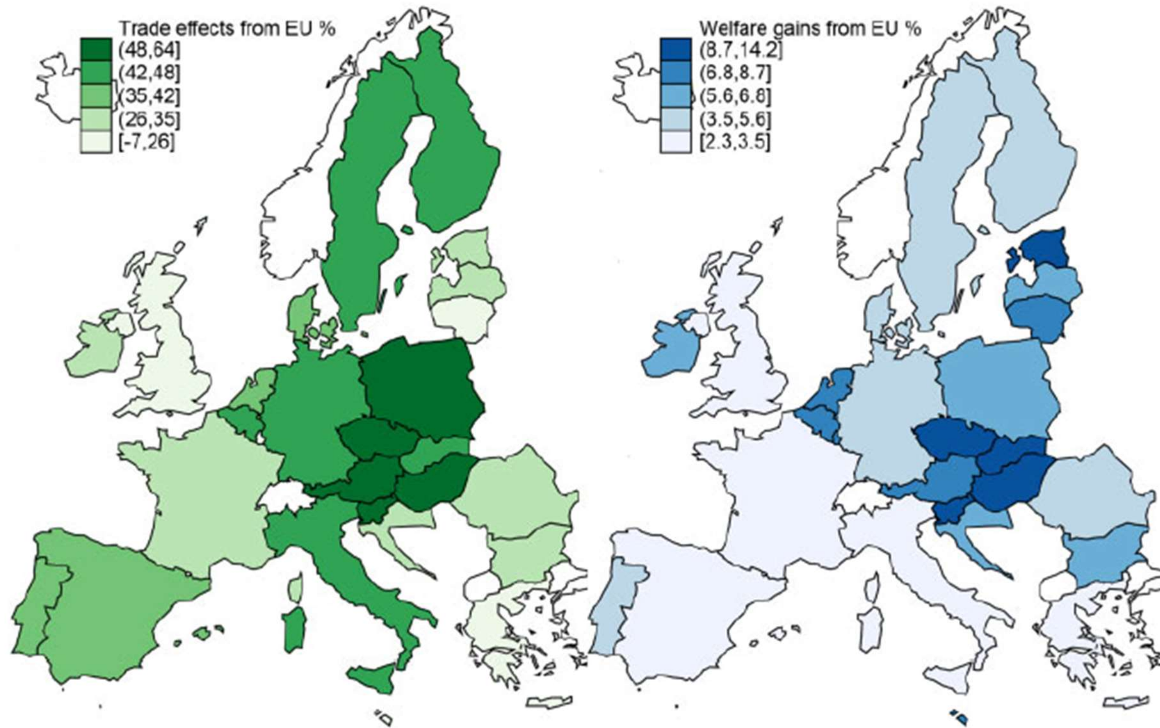
Structural gravity model

Mayer et al. (2019) revisit the famous study by Cecchini, "The cost on non-Europe" (Cecchini, et al., 1988; Commission of the European Communities, 1988) and apply for this purpose a state-of-the art structural gravity model[68]. Figure 19 sums up the main results concerning the trade and welfare effects of EU's SM. The left panel of Figure 19 depicts the Intra-EU trade increase – largest in the new EU MS: Poland, Czech Republic, Slovakia, and Hungary; but also, in Austria. The right panel of Figure 19 shows the welfare gains: Welfare gains from EU integration are significantly larger for small open economies than for large EU

[68] Oberhofer (2021) also uses a structural gravity approach together with the ADAGIO model of Wifo, to evaluate the integration effects of 25 years EU membership of Austria, Finland, and Sweden. Accordingly, average real GDP growth between 1995 and 2014 was 0.6% in Austria, 0.2% in Finland, and 0.1% in Sweden.

members. It is also very striking that Eastern European countries have been major winners in the integration process.

Figure 19: The effect of European integration on trade and welfare.



Source: Mayer et al. (2019), p. 150.

Computable general equilibrium models

Mion and Ponattu (2019) apply a computable general equilibrium (CGE) trade model to study the economic benefits of the EU's Single Market (SM) for countries and regions across Europe. The model captures the impact of the trade boosting effects of the SM on productivity, markups, product variety, welfare, and the distribution of population across European countries and regions. The CGE model includes ingredients such as costly trade, love of variety, heterogeneous firms, labor mobility as well as endogenous markups and productivity. The authors use data on trade in goods (services) coming from the COMTRADE (ITS) database provided by the United Nations (Eurostat) for the period 2010-2016. The simulations are conducted for EU countries and European regions (283 NUTS2 regions), and for 14 other countries of the Organisation for Economic Co-operation and Development (OECD) and BRIC (Brazil, Russia, India, and China) trading partners.

The long-run country results (Mion and Ponattu, 2019, p. 12) show that the SM provides higher welfare, higher productivity, and lower markups to all its members while at the same time countries outside the SM are actually (slightly) worse off because of the existence of the

common market. The country results show a considerable heterogeneity. Overall, the long-run (in the period 2010-2016) welfare (income per capita) gains due to EU's Single Market, are cumulated 3% for the EU (or 1/2% per year; see Table 2). The effects are highest in Belgium (+4.4%) and Luxembourg (+4.3%), followed by the Czech Republic (+4.0%), Austria and Slovenia (each +3.9%). Finland (+2.5%) and Sweden (+2.8%) could profit less from EU accession. The large incumbent EU Member States, like France (+3.1%), Italy (+2.8%) and Germany (+2.7%) rank in the middle of welfare benefits of the EU.

Own simulations (Breuss, 2021; Table 2) of an "Undoing the EU" scenario are comparable to those of In't Veld (2019). The simulations with a computable general equilibrium (CGE) model, executed with the CGEBox of Britz (2019) and Britz and Van der Mensbrugghe (2018). The version 10 of the GTAP database (2014) is based on data from 2014. The model consists of twenty sectors and twenty countries. In contrast to In't Veld (2019) this model simulates the "Undoing the EU" only with one scenario, namely the re-introduction of non-tariff measures (NTMs) between the EU Member States. The elimination of NTMs constitutes the core of EU's Single Market, starting in 1993. The problem with the implementation of NTMs is that they are only rough estimates. The most recent estimated NTMs stem from Arriola et al. (2020). The re-introduction of NTMs leads to a reduction in trade and economic growth. Intra-EU trade would shrink by 18% (Armington version) to 27% (Melitz version)[69]. This translates into a medium run reduction of real GDP in EU28 by 0.5% (Armington) to 2.8% (Melitz) or 0.1% to 0.3% per year (see Table 2). Ireland would be the big loser: GDP loss of 1.2% to 8%. Austria would lose disproportionally (-0.8% to -4.9%); Finland (-0.6% to -3.3%) and Sweden (-0.7% to -3.4%). The GDP losses are lower in these simulations than those of In't Veld, mainly because this model does not re-introduce MFN tariffs. Due to the completion of EU's customs union in the 1960s MFN tariffs were no longer existent in the case of intra-EU trade.

An outlier

Andersen et al. (2019) evaluate the contribution of EU membership to economic growth. Asking the question whether it has been worthwhile to join the EU to trigger prosperity, they econometrically regress economic growth (annual growth rate of real GDP per capita) to a dummy variable for EU membership (taking the value of 1) with different data bases (OECD, Penn World Tables (PWT), World Development Indicators (WDI)) for periods since 1960

[69] The CGEBox allows to simulate the GTAP model in an Armington and in a Melitz version. The Armington model is based on the premise that each country produces a different good and consumers would like to consume at least a one of each country's goods. The Melitz version considers firm heterogeneity, firm entry and exits in the industry as a whole and on specific trade linkages, and love-of-variety effects by different agents, resulting in monopolistic competition.

with and without the crises years (financial crisis 2009, Euro crisis 2010) and various econometric panel approaches (with and without considering convergences or catch-up effects). Lastly, the authors (Andersen et al. (2019), p. 233) conclude that *"this paper has been unable to reject the null hypothesis that 'EU membership has zero impact on economic growth'"*.

In evaluating 25 years of EU's Single Market, Breuss (2020, p. 329) comes to a contrary conclusion. Using smart EU indicators and regressing these to real GDP per capita results in a significant impact of EU integration on EU's economic growth. Accordingly, EU28 could increase real GDP per capita since 1993 by 0.5% per year, in the whole period of European integration (1958-2019) only by 0.3% per year.

In its own way the Anderson et al. study underlines the so-called "EU integration puzzle." (Breuss, 2014). It states that it is difficult to explain why the EU – despite a steady deepening of integration since World War II – could not achieve higher economic growth than the United States. This contradicts all predictions of the various integration theories and most ex-ante studies evaluating the growth-enhancing effect of EU integration, especially those of EU's Single Market.

In addition to the methods just reported for estimating SM effects, there are alternative methods to evaluate the economic impact of EU integration.

Breuss (2020) uses a growth equation to evaluate the EU integration effect by using an integration indicator (reduction of tariffs and NTMs).

Popular is also the so-called Synthetic Control Method (SCM) to evaluate the SM effects by comparing the actual development of GDP with a control group which does not belong to the EU (see Brookman et al., 2015; Campos et al., 2014; Gasparotti et al., 2019; Puzello et al., 2018; Breuss 2019).

Several studies use integration indicators to evaluate the EU integration effects (König and Ohr, 2013; Bertelsmann Stiftung, 2014; Peterson et al, 2014; London Econmics, 2017). The European Parliament (see Pataki, 2014) also revisited the Cost of Non-Europe.

4.3 The growth impact of cohesion policy

When one speaks of the EU Single Market, one means, on the one hand, a common market for all 27 EU MS. But the national markets are divided into regional units. And it is precisely to this topic that EU regional or cohesion policy is devoted.

In the preamble of the TEU the "internal market" and "cohesion" is mentioned in the same statement: "*DETERMINED to promote economic and social progress for their peoples, taking into account the principle of sustainable development and within the context of the accomplishment of the internal market and of reinforced cohesion and environmental protection, and to implement policies ensuring that advances in economic integration are accompanied by parallel progress in other fields.*"

Article 174 of the TFEU then rules the concrete design of policies concerning "Economic, social and territorial cohesion". The regional or cohesion policy based on these rulings by the primary law in TFEU is the second most important item in the EU budget (Chapter 1.2), alongside that for the CAP.

EU Cohesion Policy contributes to strengthening economic, social, and territorial cohesion in the European Union. It aims to correct imbalances between countries and regions. It delivers on the Union's political priorities, especially the green and digital transition.

What has cohesion policy delivered

In its 8th Cohesion Report: Cohesion in Europe towards 2050 the European Commission (2022A) summarizes the results concerning the reduction of disparities as follows:

• Since 2001, less developed eastern EU regions have been catching up with the rest of the EU, leading to a substantial reduction of the GDP per capita gap. However, some regions in southern and south-western Europe have been stagnating.

• By 2023, the GDP per capita of less developed regions is estimated to be up to 5% higher thanks to support from cohesion policy.

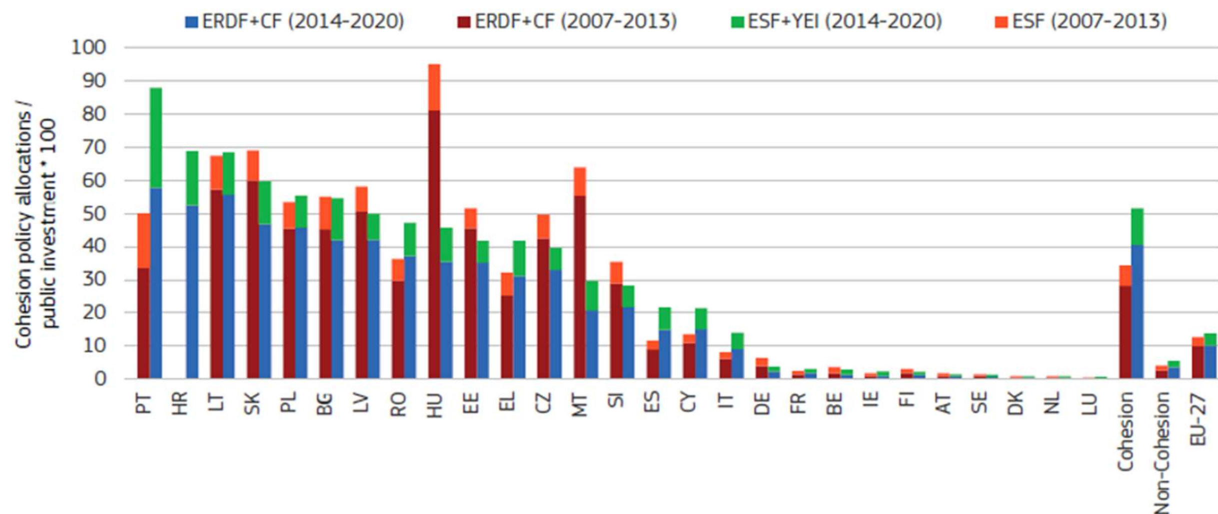
• By 2023, the GDP per capita gap between the top and the bottom regions is estimated to fall by 3.5%

Cohesion policy is the EU's main source of investment in economic and social development across the Union. It is financed by three funds, the European Regional Development Fund (ERDF), the Cohesion Fund (CF) and the European Social Fund (ESF; see Figure 20).

The ERDF, the largest of the three, is allocated to regions (at the NUTS 2 level) based on their GDP per head and other indicators such as the unemployment rate. Less developed regions (defined as those with GDP per head below 75% of the EU average) receive the most; transition regions (with a level between 75% and 90% of the average) receive the next largest amount; and more developed regions - the remaining ones - receive the smallest amount. In

addition, some of the ERDF is also allocated to European transborder co-operation (Interreg), providing support to border regions; large areas in the EU covering several Member States, such as the Danube or Baltic Sea regions; and regions in different Member States adopting a joint approach to tackling common issues.

Figure 20: Cohesion policy funding relative to government investment in Member States in the 2007-2013 and 2014-2020 periods



Source: European Commission (2022A), p. 243.

The CF, allocated at the national level, is restricted to Member States with gross national income (GNI) below 90% of the EU average, and is limited to financing investment in transport, environmental infrastructure, and energy. The ESF, the main source of finance for investment in people, is also allocated at the national level to Member States, taking account of their population, unemployment, and levels of education.

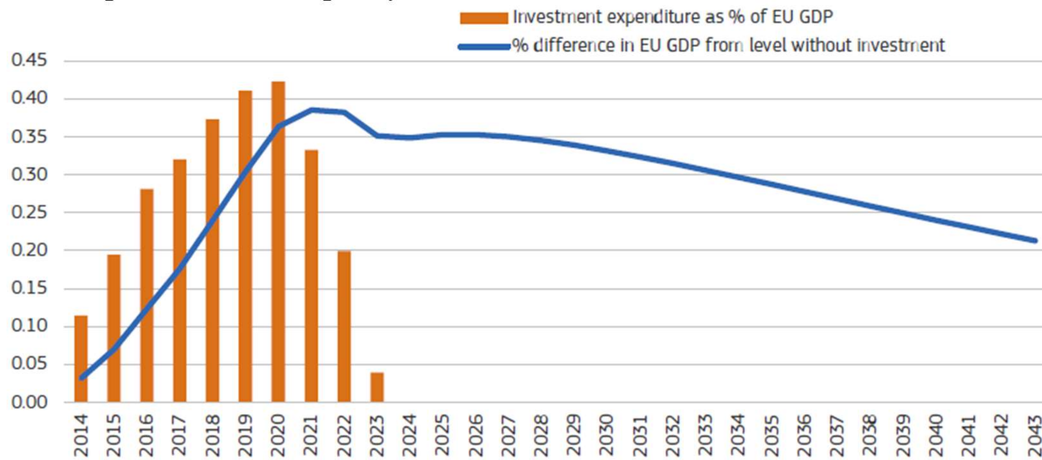
This was supplemented in 2014–2020 by the Youth Employment Initiative (YEI), to provide support to young people under 25 not in employment, education, or training (NEETs) living in regions where youth unemployment was over 25% in 2012.

In 2014–2020, the investment financed by the three funds was aimed at supporting 11 broad priorities, or thematic objectives.

The European Commission (2022A) in its latest, the eight report on economic, social, and territorial cohesion reports on model simulations about the impact of cohesion policy investments on EU's GDP (see Figure 21). The model simulations suggest that cohesion policy in 2014–2020 had an increasingly positive effect on EU GDP over the period of expenditure, reaching a peak in 2021 when GDP is estimated to be 0.4% higher than it would

be without it. The estimated impact continues to be substantial long after the end of the implementation period because of the supply-side effects.

Figure 21: Impact of cohesion policy investment: 2014-2020, on EU GDP, 2014-2043



Source: European Commission (2022A), p. 297.

In the medium and long run, increases in productivity and in stocks of private and public capital, as well as reductions in transport costs, continue stimulating economic activity and GDP. Even 30 years after the initial investment, GDP is still estimated to be 0.2% higher than it would be if the investment had not taken place.

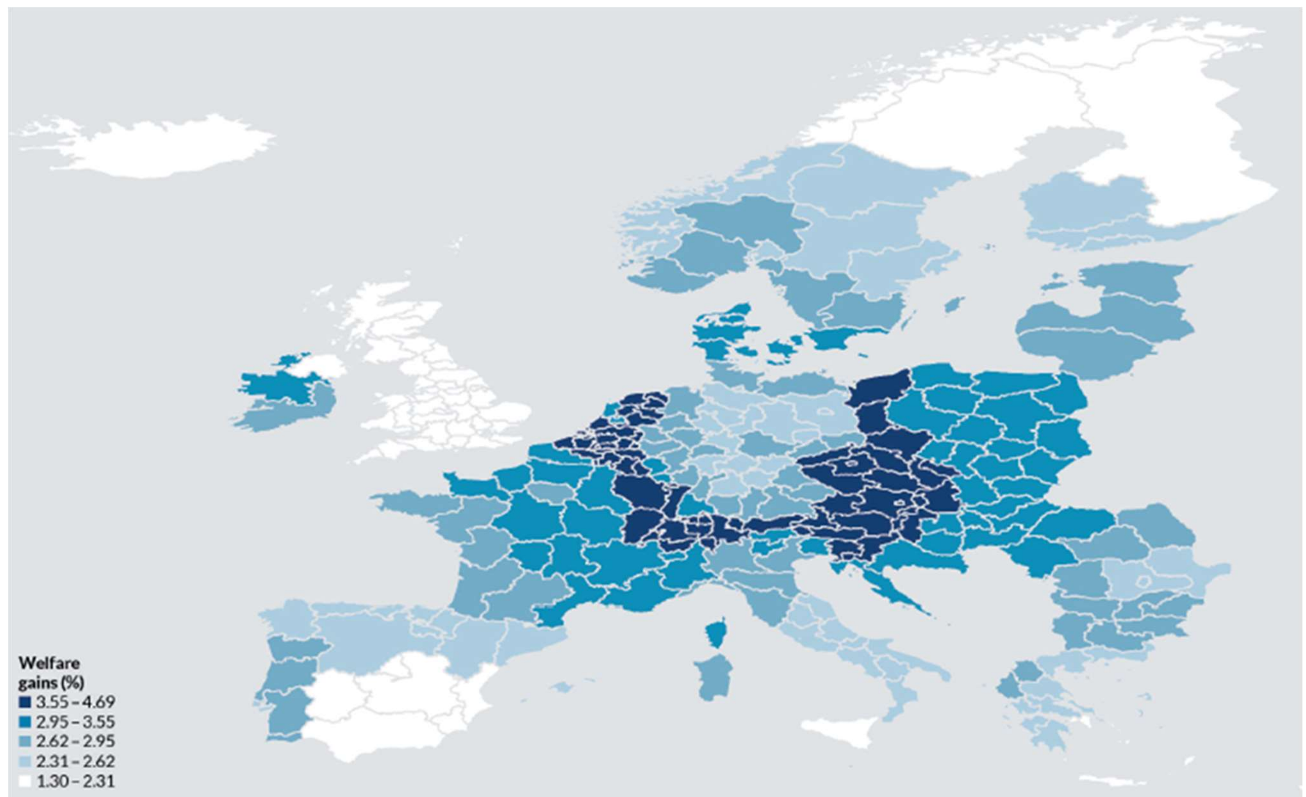
During the implementation period, the impact is mainly the result of demand-side effects from increased investment and consumption, whereas after the programmes come to an end the impact comes solely from the supply-side effects on labour and total productivity, reductions in transport costs, and the increased private and public capital stocks.

However, the estimated impact of the policy shows wide regional variations both at the end of the implementation period and in the longer term. This reflects differences in the scale of funding regions received, the fact that the policy mix varies markedly from one region to another (even within the same Member State), and the features of the regional economies themselves - including how they are placed to benefit from spill-over effects (which also affect the magnitude of the policy impact).

The question remains, how much of the results of this regional model simulations is implicitly included in the overall results reported in Table 2. Only one of the model simulations reported there, the study by Mion and Ponattu (2019) evaluates EU's SM for countries and regions. The country results reported in Table 1 are only the average of EU (and those for Austria and Germany). However, the key results at the country level, also masks a substantial amount of within-country heterogeneity. Regions within countries are

asymmetrically exposed to trade integration, depending on their geographic position, competitiveness, size, and the country they belong to. Together with the rest-of-the-world countries the authors run the model for 297 regions in total (283 NUTS2 regions, and 14 other OECD and BRIC trading partners). The results vary from region to region (see Figure 22).

Figure 22: Per capita welfare gains (in %) from the trade boosting effect of EU's SM, NUTS 2 regions



Source: Mion and Ponattu (2019), p. 16

The regional welfare gains in Figure 22 resemble a pattern referred to in the regional research literature as the "blue banana". The participation in EU's SM has the highest welfare improvements in the regions along the Rhine in the West and in the new MS in the East.

Although the official Cohesion reports by the European Commission are critical about the progress of cohesion in EU's regions, studies by independent research groups are even more critical. An example is the recent study by Maucorps et a. (2022). Evaluating EU's regional policy for twin transition - "green" and "digital" – they conclude that in this modern policy targets many less developed regions will fall behind the more developed ones.

Large European cities and other high-tech regions could pull even further ahead in the future, while rural areas and regions with CO2-intensive industry could fall behind. The

digital and green transition, as the European Union is striving for, reinforces this development. But the effect can be mitigated by an EU funding policy tailored to regions.

5. Finetuning the Single Market with Acts I and II SM

The Single Market of the EU is a project with a moving target. The basic goals are specified by the TFEU. Their realization (implementation) is tough and tedious. Therefore, the SM Project requires constant adjustment, also because the external framework conditions (e.g., caused by external shocks and crises) keep changing.

The first thorough review was made after seven years of SM with the "Lisbon strategy" (Lisbon European Council, 2000). While not fulfilling its goals[70], a new strategy, "Europe 2020" followed (European Commission, 2010). Both strategies failed to reach its goals due to external crises: in case of the Lisbon strategy, it was the Great Recession in 2009, in case of the Europe 2020 it was the COVID-19 pandemic crisis in 2020[71].

In the meantime, several studies made suggestions to improve the functioning of the SM. A new strategy for the SM was presented by Mario Monti (2010). Consequently, the European Commission worked out two Internal Market Acts[72].

Single Market Act I:

Reminding that 2012 will mark the 20th anniversary of the single market, launched in 1992 under the leadership of Jacques Delors, the European Commission (2010B) published a Booklet, titled "Single market Act for a highly competitive social market economy",

The Single Market Act I[73] presented by the Commission in April 2011 set out twelve levers to further develop the Single Market, reflecting the comprehensive approach that both Mario Monti (2010) and the European Parliament advocated in their respective reports on the future of the Single Market. It announced a set of twelve key actions and 50 complementary actions to boost growth and strengthen confidence. Two Competitiveness Council meetings, one on 10 December 2010 (Council of the European Union, 2010), the other on 30 May 2011 (Council of the European Union, 2011) underlined the importance of relaunching the Single Market.

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[70] A critical review of the "Lisbon Strategy" was carried out by Kok(2004).

[71] For a first assessment of the "Europe 2020 Strategy", see: Walesiak et al. (2021).

[72] See the Website of the European Commission: Internal Market, Industry, Entrepreneurship and SMEs: https://single-market-economy.ec.europa.eu/single-market/single-market-act_en

[73] See: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0206&from=EN

Without giving up the goals of the Europe 2020 Strategy (sustainable growth, smart growth, and inclusive growth), the Commission has already taken several major actions in the form of the seven flagship initiatives of the Europe 2020 Strategy: the 2011 Energy Efficiency Plan; the review of the Small Business Act for Europe: Reforms in the field of financial services regulation will continue.

The 12 levers to boost growth and strengthen confidence are (European Commission, 2011):

1) Access to finance for SMEs
2) Mobility for citizens (recognizing professional qualifications)
3) Intellectual property rights
4) Consumer empowerment (alternative dispute regulation)
5) Services (revision European standardization system)
6) Networks (energy and transport infrastructure)
7) The digital single market (mutual recognition of electronic identification and authentication
8) Social entrepreneurship (social investment funds)
9) Taxation (Review of the Energy Tax Directive)
10) Social cohesion (enforcement in practice of the Posting of Workers Directive)
11) Business environment (simplification of the Accounting Directives)
12) Public procurement

Single Market Act II:

Since the adoption of the first Single Market Act in April 2011, the Commission has presented proposals for its twelve key actions and for 36 of its 50 complementary actions (see Annex II). In October 2012, the Commission proposed a second set of actions (Single Market Act II[74]) to further develop the single market and exploit its untapped potential as an engine for growth.

The Single Market Act II's Communication builds upon the first Single Market Act and identifies four drivers around which to focus key actions. The four drivers for new growth put forward in this Communication are:

1. Developing fully integrated networks in the Single Market (Rail transport, maritime transport, air transport, energy);

[74] See: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0573&from=EN

2. Fostering mobility of citizens and businesses across borders (Mobility of citizens, access to finance, business environment);
3. Supporting the digital economy across Europe (Services, a digital Single Market);
4. Strengthening social entrepreneurship, cohesion, and consumer confidence (Consumers, social cohesion, and social entrepreneurship).

In order not to get the impression that all the plans of SM Act I and II are solely hot air, the Communication of SM Act II lists two annexes: Annex I with a list of SM Act II actions; Annex II with SM Act I status of actions.

Upgrading the Single Market

The many crises since the global financial crisis in 2008 (the Great Recession 2009, followed by the Euro crisis in 2010) messed up SMA's fine plans. The European Commission (2015A)[75] took a new attempt in 2015 to "upgrade the SM".

After the new European Commission (President Jean-Claude Juncker) came into office in November 2014 it responded to the new challenges. It made increasing jobs, growth, and investment its top priority. Accordingly, a deeper and fairer SM should be secured by the following measures (European Commission, 2015A, p. 1):

- *Investment Plan for Europe* – Juncker Plan - (European Fund for Strategic Investments")
- *European Energy Union* (ensure that consumers and businesses have access to secure, affordable and climate-friendly energy[76])
- *Digital Single Market* Strategy (a connected digital SM should improve access for consumers and business to online goods and services)
- *Capital Markets Union* (should results in lower costs of borrowing, improved start-up financing and a broader investor base)
- *Trade for All*[77] (redesign of Europe's trade and investment policy as a reaction to the strong criticism of the lack of transparency in connection with TTIP, which President Trump canceled in 2017)
- *Circular Economy* package
- *Labour Mobility* package
- *Tax* (avoiding loopholes in national tax regimes)

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[75] See: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015SC0202&from=EN

[76] In 2022, these targets sound like a mockery given the failure of the "merit order" pricing system for electricity (especially after Russia's invasion of Ukraine).

[77] European Commission (2015B): https://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf

- *SM for Road transport*
- Better regulation

Greening of EU's Single Market

Following the European elections in May 2019, the EU set several priorities that shape the political agenda until 2024.

European Union priorities 2019-2024

The European Council[78] set out four priority areas in its 2019-2024 strategic agenda to guide the work of the EU institutions over the next 5 years:

1) Protecting citizens and freedoms
2) Developing a strong and vibrant economic base
3) Building a climate-neutral, green, fair and social Europe
4) Promoting European interests and values on the global stage

European Commission's priorities 2019-2024

The President of the Commission (Ursula von der Leyen) determined six political priorities for its current 5-year mandate[79]. These are derived from the Council's strategic agenda and from discussions with the political groups of the European Parliament:

1) European Green Deal
2) A Europe fit for the digital age
3) An economy that works for people
4) A stronger Europe in the world
5) Promoting our European way of life
6) A new push for European democracy

European Green Deal

The new European Commission (President Ursula von der Leyen) started in 2019 – besides the other five priorities, mentioned above - with a with new goal named the *"European Green Deal"*[80] with a grand investment plan, "NextGenerationEU[81] Recovery Plan[82]". This ambitious plan got mixed up by two severe crises: the COVID-19 pandemic

[78] For details, see: https://european-union.europa.eu/priorities-and-actions/eu-priorities_en
[79] See: https://ec.europa.eu/info/strategy/priorities-2019-2024_en
[80] See: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
[81] See: https://next-generation-eu.europa.eu/index_en
[82] Details about the "Recovery Plan for Europe", see: https://ec.europa.eu/info/strategy/recovery-plan-europe_en

crisis in 2020-2021, followed by the energy crisis in the wake of Russia's invasion of Ukraine on February 24, 2022.

In spite (or because) of the multitudes of crises Europe is confronted with, by the end of 2002, the EU has reached agreements on the essential parts of the "Green Deal" program. On 18 December 2022, the European Parliament and the Council reached a provisional agreement to strengthen the EU Emissions Trading System (ETS)[83]. The ETS should be applied to new sectors and a Social Climate Fund will be established. This deal is a fundamental step towards reaching the EU's commitment ("Fit for 55") to reduce net greenhouse gas emissions by at least 55% by 2030. At the same time the Social Climate Fund will help to ensure that the transition is fair.

The EU ETS puts a price on CO_2 and lowers the permitted level of emissions every year in sectors including power and heat generation, energy-intensive industrial sectors, and commercial aviation. The new agreement will reduce emissions from the EU ETS sectors by 62% by 2030, compared to 2005 levels**.** This represents a substantial increase of 19 percentage points compared to the 43% reduction under the existing legislation. The speed of annual emission reductions will also increase**,** from 2.2% per year under the current system to 4.3% from 2024 to 2027 and 4.4% from 2028. The Market Stability Reserve, which stabilizes the carbon market by removing surplus allowances, will be strengthened. The agreement will gradually phase out free emission allowances to certain enterprises and phase in the Carbon Border Adjustment Mechanism (CBAM) between 2026 and 2034 for the sectors covered. This follows the provisional deal reached on CBAM by European co-legislators on 13 December 2022[84].

The deal also includes shipping emissions in the EU ETS, making the EU the first jurisdiction to put an explicit carbon price on emissions from the maritime sector. To support Member States in their efforts to reduce emissions from buildings and road transport, and certain industrial sectors a new separate emissions trading system will start from 2027 for relevant fuel use. While so far emission reductions in those sectors have been insufficient to put the EU on a firm path towards its goal of reaching climate neutrality by 2050, the new system will ensure cost-effective reductions and generate revenue that will be available to Member States and for support under the Social Climate Fund.

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[83] For details about the Green Deal Agreement, see: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_7796

[84] See: https://www.europarl.europa.eu/news/en/press-room/20221212IPR64509/deal-reached-on-new-carbon-leakage-instrument-to-raise-global-climate-ambition; and: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7719

The *EU Emissions Trading System (ETS)*[85] is a cornerstone of the EU's policy to combat climate change and its key tool for reducing greenhouse gas emissions cost-effectively. It is the world's first major carbon market and remains the biggest one. Currently, the ETS covers the following sectors and gases:

- carbon dioxide (CO_2) from
  - electricity and heat generation,
  - energy-intensive industry sectors including oil refineries, steel works, and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids and bulk organic chemicals,
  - commercial aviation within the European Economic Area;
- nitrous oxide (N_2O) from production of nitric, adipic and glyoxylic acids and glyoxal;
- perfluorocarbons (PFCs) from production of aluminum.

The deal between European Parliament and the Council on a more ambitious ETS, reached on 18 December 2022, covers three major goals[86]:

1) *Phasing out free allowances to companies:* The free allowances to industries in the ETS will be phased out as follows: 2026: 2.5%, 2027: 5%, 2028: 10%, 2029: 22.5%, 2030: 48.5%, 2031: 61%, 2032: 73.5%, 2033: 86%, 2034: 100%.
   The CBAM will be phased in at the same speed that the free allowances in the ETS will be phased out. The CBAM will therefore start in 2026 and be fully phased in by 2034.
2) An *ETS II for buildings and transport:* A separate new ETS II for fuel for road transport and buildings that will put a price on emissions from these sectors will be established by 2027. In addition, ETS II could be postponed until 2028 to protect citizens, if energy prices are exceptionally high. Furthermore, a new price stability mechanism will be set-up to ensure that if the price of an allowance in ETS II rises above 45 EUR, 20 million additional allowances will be released.
3) Financing the green transition:
   - The *Innovation Fund*, will be increased from the current 450 to 575 million allowances.
   - The *Modernisation Fund* will be increased by auctioning an additional 2.5% of allowances that will support EU countries with GDP per capita below 75% of the EU average.

[85] See: https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en
[86] See: https://www.europarl.europa.eu/news/en/press-room/20221212IPR64527/climate-change-deal-on-a-more-ambitious-emissions-trading-system-ets

All national revenues from auctioning ETS allowances shall be spent on climate related activities.

- The newly created *Social Climate Fund* will help to support the most vulnerable.

The European Green Deal is also called by the Commission as our lifeline out of the COVID-19 pandemic. One third of the €1.8 trillion (at 2018 prices) investments from the NextGenerationEU (NGEU) Recovery Plan, and the EU's seven-year budget will finance the European Green Deal.

A study by the ECB (Bankowski et al., 2021) estimated the macroeconomic impact of the NGEU instrument (total €750 billion, of which grants €390 billion and €360 billion loans) on the euro area. Spain could increase real GDP by 2 ppts by 2030, followed by Italy (+1.5%) and France and Germany (each +0.5%). Breuss (2022A) evaluated the economic impact of the respective amounts for NGEU investments in Austria (grants €3.5 billion at current prices). Inclusive the spillovers of other NGEU recipients (above all from Germany and Italy), Austria's real GDP could be stimulated by 0.35%.

Europe's digital future

For some time, but primarily since the initiatives of the SM Acts I and II, the EU aims at building a Single Digital Single Market (DSM). As mentioned in the European Commission's priorities for 2019 to2024, Europe should be made fit for the digital future. To fulfill this task several legal efforts have been made. As part of the "European digital strategy" two initiatives stand out: The Digital Services Act (DSA) and Digital Markets Act (DMA) aim to create a safer digital space where the fundamental rights of users are protected and to establish a level playing field for businesses.

The European Commission proposed two legislative initiatives to upgrade rules governing digital services in the EU in a package[87]: the Digital Services Act (DSA) and the Digital Markets Act (DMA). The Commission made the proposals in December 2020 for the DSA and the DMA and on 25 March 2022 a political agreement was reached on the Digital Markets Act (DMA) and on 23 April 2022 on the Digital Services Act (DSA).

Together they form a single set of new rules that will be applicable across the whole EU to create a safer and more open digital space.

The DSA and DMA have two main goals:

[87] See: https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package

1. to create a safer digital space in which the fundamental rights of all users of digital services are protected;
2. to establish a level playing field to foster innovation, growth, and competitiveness, both in the European Single Market and globally.

The DMA rules entered into force on 1 November 2022. The rules of the DMA Regulation (EU) 2022/1925[88] shall apply from 2 May 2023. The DSA rules entered into force on 16 November 2022. The rules of the DSA Regulation (EU) 2022/2065[89] shall apply from 17 February 2024.

Digital services include a large category of online services, from simple websites to internet infrastructure services and online platforms.

The rules specified in the DSA primarily concern online intermediaries and platforms. For example, online marketplaces, social networks, content-sharing platforms, app stores, and online travel and accommodation platforms.

The DMA includes rules that govern "gatekeeper" online platforms in digital markets. To introduce more competition in this area, the EU has installed the Digital Markets Act (DMA) aiming to ensure that these platforms behave in a fair way online. According to Bloomberg (see: Neue Zürcher Zeitung, 16.12. 2022, p. 23) Apple is the first "gatekeeper" who will bow to the DMA and wants to allow third-party companies to bring applications to iPhones and iPads via their own app stores from 2023 onwards next year.

Further progress has been made in the project of "Shaping Europe's digital future"[90]. On 23 June 2022 the European Data Governance Act (DGA) entered int force[91]. After a 15-month grace period it will be applicable from September 2023. The DGA is fully in line with EU values and principles, will bring significant benefits to EU citizens and companies. A key pillar of the "European strategy for data", the "Data Governance Act" seeks to increase trust in data sharing, strengthen mechanisms to increase data availability and overcome technical obstacles to the reuse of data. The DGA will also support the set-up and development of common European data spaces in strategic domains, involving both private and public

[88] See: Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), OJ L 265/1 of 12.10.2022.

[89] See: Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Serves Act), OJ L 277/1 of 27.10:2022.

[90] See the respective website of the European Commission: https://digital-strategy.ec.europa.eu/en/policies

[91] See European Commission's website "Shaping Europe's digital future": https://digital-strategy.ec.europa.eu/en/policies/data-governance-act; and: Regulation (EU) 2022/868 of the European Parliament of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act), OJ L 152/1 of 3.6.2022.

players, in sectors such as health, environment, energy, agriculture, mobility, finance, manufacturing, public administration and skills.

Existing barriers to the SM

At its meeting of 21-22 March 2019, the European Council[92] has invited the Commission to identify obstacles that keep the single market from integrating further and from providing a level playing field to businesses attempting to benefit from it. The European Council concluded that the single market should be further deepened and strengthened.

Following this request, the European Commission (2020A) undertook a thorough study, to identify and address still existing barriers to the SM. Obstacles were included in this study if a significant percentage of surveyed businesses and/or if different sources consistently reported them as an obstacle. The Commission used external surveys and reports as sources, e.g., by Eurochambres, World Bank Group, "Doing Business 2019", national chambers of commerce like Austrian Chamber of Commerce, internal and external databases, like European Commissions, 'Annual report on European SMEs', SOLVIT, ECB, 'Investment Barriers', European Enterprise Network, Intellectual Property DME Scoreboard, etc.

Already in 2019, the Commission issued a report on the performance of the single market in the context of the European Semester[93], relying mostly on indicators related to the integration of the Single Market.

The list of barriers is so numerous and detailed that even the Commission was unable to give a general summary. The study divides the barriers in practical, general, and sectoral barriers and obstacles.

Given the fact that the surveyed institutions still report so many errors and obstacles after 30 years of SM, one must conclude that the SM is far from being complete.

6. The EU acting in crises

Since the start in 1993, the EU and thus the SM have been shaken by three major crises:

1) The global financial crisis (GFC) in 2008, followed by the Great Recession in 2009 plus the Euro crisis in 2010.
2) The COVID-19 pandemic crisis in 2020/2021.

[92] See: https://data.consilium.europa.eu/doc/document/ST-1-2019-INIT/en/pdf
[93] See: https://ec.europa.eu/info/publications/2020-european-semester-single-market-performance-report_en

3) The Energy crisis in 2022, following the Russian invasion in the Ukraine.

The European Commission acted in each crisis quite flexibly. On the one hand the strong rules of the Stability and Growth Pact (SGP) have been relaxed or suspended temporarily. But the main burden to cushion the recessive effects was taken by the EU MS[94]. Already when the Great Recession was looming, in December 2008 the European Commission responded by proposing the coordinated European Economic Recovery Plan (EERP)[95] to restore confidence and bolster demand by strategic investments and measures to shore up business and labor markets. For this purpose, *"the SGP was applied in a flexible and supportive manner, so that in most MS the automatic fiscal stabilizers were allowed to operate unfettered"*. Additionally, the EU *"has provided guidance as to how state aid policies – including to the financial sector could be shaped so as to pay respect to competition rules"* (European Commission, 2009B, p. 2).

GFC 2008, Great Recession 2009, and Euro crisis 2010

The GFC was primarily triggered in the USA (subprime crisis, banking crisis) and had then a negative impact worldwide, but above all in Europe. In his State of the Union 2912 Address to the European Parliament on 12 September 2012, José Manuel Durão Barroso (2012), the then-President of the European Commission identified three main causes for the GFC and the following Euro crisis:

- Unsustainable public debt (*public debt crisis*)
- A lack of competitiveness in some MS (*macro-imbalances crisis*)
- Irresponsible practices in the financial sector (*banking crisis*).

The EU MS provided significant financial support to cushion the recession. Breuss (2016) in an analysis of the causes, effects and policy responses speaks in this context of "Keynes reloaded".

In Europe, the Great Recession in 2009 was followed by a Euro area crisis in 2010. This crisis triggered a series of ad hoc rescue measures to avoid a Eurozone breakup and provided the impetus for significant reforms in economic governance (European Commission, 2017B; Juncker et al., 2015). The "New Economic Governance" can be grouped into measures in the context of the a) "European Semester" (Six pack, Two Pack, Fiscal Compact, Euro Plus Pact;

[94] For a comprehensive overview of the measures, see European Commission, 2009A and 2009B.
[95] See European Commission (2009B). The results of QUEST model simulations of the fiscal stimulus under the EERP on page 70.

Europe 2020, Single Market Acts), and b) "rescue measures" (Rescue measures by MS, EFSF, ESM; Financial supervision system: ESFS, ESRB-ECB, EBU)[96].

COVID-19 crisis 2020/21

In early 2020, after the outbreak of the COVID-19 pandemic, the EU economy slipped into a sharp recession due to drastic shut-down measures by MS. The EU economy rebounded strongly in 2021. In 2023 the EU economy entered the third year of the COVID-19 pandemic, overshadowed by another – the energy – crisis.

Whereas the major crisis-preventive measures were taken at national levels, at EU level three precautious measures were taken to keep the SM working:

(1) To enable MS to go beyond the limits of the SGP its rules were deactivated.

(2) Furthermore, the Commission had to grant exceptions to the strict competition rules.

(3) To avoid a backdrop into national versus common actions the Commission initiated a joint vaccine procurement.

(1) SGP – "general escape clause"

The general escape clause of the SGP was activated by the European Commission on 23 March 2020. The decision on its deactivation was based on an overall assessment of the state of the economy, with the level of economic activity in the EU or euro area compared to pre-crisis levels (end-2019) as the key quantitative criterion (see: European Commission (2021A). With its "Fiscal policy guidance for 2023" the European Commission (2022C) – based on the 2022 winter forecast, the escape clause will be extended until the end of 2023.

(2) Competition: state aid crisis framework

After the outbreak of the COVID-19 crisis the Commission changed the state aid rules (see European Commission, 2020B). The temporary framework for state aid measures to support the economy after the outbreak of the COVID-19, targeted, effective, and rapid state aid were allowed from 19 March until 31 December 2020.

On 12 May 2022, the European Commission[97] announced that it will phase-out the State aid COVID "Temporary Framework" adopted on 19 March 2020 and last amended on 18 November 2021, enabling MS to remedy a serious disturbance in the economy in the context of the coronavirus pandemic. The State aid COVID Temporary Framework will not be

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[96] For details, see Breuss (2016), P. 343.

[97] See: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_2980

extended beyond the current expiry date, which is 30 June 2022 for most of the tools provided. The existing phase-out and transition plan will not change, including the possibility for Member States to provide specific investment and solvency support measures until 31 December 2022 and 31 December 2023 respectively, as already announced in November last year.

(3) EU's COVID-19 strategy

After the outbreak of COVID-19 in Europe in March 2020, there was urgent need for a vaccine. Vaccine development usually takes more than 10 years. In the case of COVID-19 mRNA vaccines were developed within one year. At the end of 2020 the European Medicines Agency (EMA) could authorize three vaccine types.

On 17 June 2020 the European Commission (2020C) published its "EU Strategy for COVID-19 vaccines". It rested on two pillars:

- Securing sufficient production of vaccines in the EU and sufficient supplies for its MS through Advance Purchase Agreements (APAs) with vaccine producers via the emergency Support Instrument (ESI). Additional support came from instruments of the European Investment Bank.
- Adapting EU's regulatory framework to the urgency and making use of existing regulatory flexibility to accelerate the development, authorization by EMA and availability of vaccines with high quality, safety and efficacy.

There was a risk that the highly integrated because closely interlinked SM could be severely disrupted by national egoism through national purchases of vaccines and by border closures (foreclosure) due to the COVID-19 pandemic.

On 21 December 2020, the European Commission approved first COVID-19 vaccines (BioNTech/Pfizer)[98]. Until now the European Commission has secured up to 4.2 billion doses of COVID-19 vaccines so far[99]. The Commission has so far given six conditional marketing authorizations for the vaccines developed by BioNTech and Pfizer (mRNA), Moderna (mRNA), AstraZeneca (adenovirus), Janssen Pharmaceutica NV (adenovirus), Novavax (protein) and Valneva (inactivated virus vaccine) respectively, following the European Medicines Agency's (EMA) positive assessment of their safety and efficacy. Several other vaccines are at different stages of assessment by the EMA.

[98] See: https://www.eu2020.de/eu2020-en/news/article/european-commission-approves-first-covid-19-vaccine/2430420

[99] See: https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans_en

Energy crisis 2022 and Russia's war against Ukraine

After a sharp decline in GDP in the first COVID-19 year in 2020, the European economy picked up steeply in 2021. Starting already during the sharp upswing by the end of 2021 inflation - fueled by extraordinary increases in energy prices after Russia's invasion of Ukraine - reached higher rates than seen in several decades. The global economy and especially those in Europe because of its high energy dependency on Russia are experiencing multiple crises.

High inflation plus stagnation gives a stagflation mix. The war in the Ukraine together with the economic sanctions against Russia disrupts the European economies more than other world regions and causes a Cost-of Living crisis (IMF, 2022).

Similarly, to the early reactions to the COVID-19 crisis, the MS try to solve the energy price crises with national measures, and hence disturb massively the functioning of the SM.

In this situation the EU acts with the following measures, concerning the SM (procurement, and competition policy), and macroeconomically (SGP):

(1) Joint procurement of gas imports and price cap

The European Council on its meeting 20-21 October 2022) demands a joint procurement of gas imports in EU (European Council, 2022). On 24 November 2022, The EU energy ministerial council agrees on the content of the proposal for a Council regulation[100] on further temporary emergency measures to contain high energy prices and improve security of supply. The legal base of such measures is Article 122(1) of the TFEU. It enables the Council to decide on a proposal from the Commission and in a spirit of solidarity between Member States, upon the measures appropriate in the economic situation, in particular if severe difficulties arise in the supply of certain products, notably in the area of energy. The high risk of a complete halt of Russian gas supplies and the extreme increase in energy prices undermining the Union's economy constitute such severe difficulties.

The EU energy ministers' agreement includes the following issues[101]:

1) *Joint purchasing:* MS and energy companies are allowed to purchase gas jointly on global markets by pooling (aggregating) demand at EU level. This can be executed

[100] See the Council Regulation enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders as of 9 December 2022: https://data.consilium.europa.eu/doc/document/ST-14065-2022-INIT/en/pdf

[101] See: https://www.consilium.europa.eu/en/press/press-releases/2022/11/24/further-measures-to-tackle-the-energy-crisis-council-agrees-on-joint-purchases-of-gas-and-a-solidarity-mechanism/

through a gas purchase planform. Anyway, Russian gas will be excluded from joint purchasing. The Commission announced in its communication of 18 May 2022 entitled "REPowerEU plan" the setting up of an *EU Energy Purchase Platform* together with the MS for the common purchase of gas, liquefied natural gas (LNG) and hydrogen.

2) *Filling gas storage:* This is vital to ensure security of supply in the Union as prescribed by Regulation (EU) 2022/1032 of 30 June 2022. The target was a gas storage of up to 90% by 1 November 2022.
3) *Solidarity in purchasing and distribution:* Demand aggregation and joint purchasing should strengthen Union solidarity not only by jointly purchasing gas but also by distributing it to those who are in danger. This mechanism should support particularly those undertakings that were previously purchasing gas only or mainly from Russian suppliers (e.g., Austria, Germany, the new EU MS in Eastern Europe) by helping them to obtain supplies from alternative natural gas suppliers or providers in advantageous conditions, because of the demand aggregation and joint purchasing.

By 23 January 2023, ESMA and ACER will publish a preliminary data report concerning the introduction of the market correction mechanism. ESMA and ACER will assess the effects of the market correction mechanism on financial and energy markets and on security of supply, to verify whether the key elements and the scope of the market correction mechanism are still appropriate in the light of financial and energy market and security of supply developments and submit reports to the Commission by 1 March 2023. The Commission shall then propose amendments to exclude hubs other than the TTF from the regulation in case their inclusion has negative effects on the functioning of the mechanism, no later than 31 March 2023.

The regulation will enter into force on 15 February 2023. The regulation is temporary and will apply for one year.

On 19 December 2022 the EU Energy Council reached a political agreement on a Council regulation that sets a market correction mechanism to protect citizens and the economy against excessively high prices[102].

The *Market Correction Mechanism for the gas market* will be *automatically activated* if the following 'market correction event' occurs:

- The month-ahead price on the Title Transfer Facility (TTF) exceeds 180€/MWh for three working days, and

[102] See. https://www.consilium.europa.eu/de/press/press-releases/2022/12/19/council-agrees-on-temporary-mechanism-to-limit-excessive-gas-prices/

- The month-ahead TTF price is 35€ higher than a reference price for LNG on global markets for the same three working days.

The mechanism will apply as of 15 February 2023. The Agency for the Cooperation of Energy Regulators (ACER) will constantly monitor the markets and if it observes that a market correction event has occurred, it will publish a 'market correction notice' on its website.

The Council regulation also provides a *Suspension Mechanism:* If risks to security of energy supply, financial stability, intra-EU flows of gas, or risks of increased gas demand are identified, the market mechanism will be suspended. The Commission, ESMA and ACER will constantly monitor and review the functioning of the market correction mechanism from the day of entry into force of the regulation on 1 February 2023. At any time, when such risks or market disturbances materialise, the Commission will adopt an implementing decision to suspend the market correction mechanism. The market correction mechanism will be suspended, notably if gas demand increases by 15% in a month or 10% in two months, LNG imports decrease significantly, or traded volume on the TTF drops significantly compared to the same period a year ago.

This reached agreement on the gas market correction mechanism is a compromise between the 15 EU hardliners, led by France, Spain, and Greece, and the more skeptical countries (Austria, German, Hungary, Netherlands, Bulgaria), led by Germany. The latter feared that a too low a gas price cap would endanger the deliveries of LNG suppliers. On 22 November 2022, the European Commission took a much more cautious position when proposing a new EU instrument (Market Correction Mechanism) to limit excessive gas price spikes, by suggestion a gas price cap (safety price ceiling) of €275 on the month ahead TTF-derivatives[103].

The newly agreed upon safety price ceiling of 180€/MWh of 108 Euro. End of August 2022 the gas price in Europe reached the peak with 340E/MWh.

(2) State aid temporary crisis framework extended

On 28 October 2022, the European Commission[104] has adopted an amendment to the State aid Temporary Crisis Framework to enable Member States to continue to use the flexibility foreseen under State aid rules to support the economy in the context of Russia's war against

[103] See: https://ec.europa.eu/commission/presscorner/detail/en/IP_22_7065
[104] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6468

Ukraine[105]. The Temporary Crisis Framework was adopted on 23 March 2022 and first amended on 20 July 2022, to complement the Winter Preparedness Package and in line with the REPowerEU Plan objectives[106]. This plan was presented by the European Commission in response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine. The REPowerEU is a plan for (i) saving energy, (ii) producing clean energy, and (iii) diversifying EU's energy supplies. It is backed by financial and legal measures to build the new energy infrastructure and system of Europe.

(3) SGP – "general escape clause"

In its "Fiscal policy guidance for 2023" The European Commission (2022C) announced that the so-called "general escape clause" of the SGP will continue to apply in 2022. This will allow fiscal policy to adjust to the evolving situation to address the immediate challenges posed by this crisis. Based on the Commission 2022 winter forecast, the general escape clause is expected to be deactivated as of 2023.

(4) EU sanctions against Russia

In response to Russian President Putin's unprecedented and unprovoked military attack against Ukraine on 24 February 2022, the EU has put in place a comprehensive and robust package of restrictive sanctions[107] designed to:

- cripple the Kremlin's ability to finance the war
- impose clear economic and political costs on Russia's political elite responsible for invasion
- and diminish its economic base.

The measures are smart and targeted, hitting Russia where it hurts (with maximum impact on the Russian political elite) and are well coordinated with our allies and with G7. The sanctions concern people and entities and comprise measures in of the financial, the energy, the transport sectors, dual-use goods, and advanced technology items, as well as trad restrictive measures: export and import bans.

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[105] The European Commission has approved a €1.1 billion Austrian scheme to support companies facing increased energy costs in the context of Russia's war against Ukraine. The scheme was approved under the State aid *Temporary Crisis Framework,* adopted by the Commission on 23 March 2022 and amended on 20 July 2022 and on 28 October 2022, based on Article 107(3)(b) of the Treaty on the Functioning of the European Union (TFEU), recognising that the EU economy is experiencing a serious disturbance (https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6994)

[106] For details to the REPowerEU Plan, see: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

[107] See The European Commission's Website "EU Solidarity with the Ukraine": https://eu-solidarity-ukraine.ec.europa.eu/eu-sanctions-against-russia-following-invasion-ukraine_en

The sanctions, however, have not only a considerable impact in the targeted country Russia, but also in the targeting countries, primarily in Europe with its strong energy dependency from Russia. Until the end of 2022, the EU has implemented nine packages of sanctions against Russia[108].

Economic Forecasts after two crises: COVID-19 and Energy

The three crises the EU was confronted with since 2008/09 have the following characteristics (see Table 3):

Table 3: EU27's economic performance during three severe crises: 2009, 2020, 2022

Crises*)		GFC						COVID		Energy	
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
GDP, real, %	0.6	-4.3	2.2	1.8	-0.7	-0.1	1.8	-5.7	5.4	3.3	0.3	1.6
Unemployment rate, %	7.4	9.3	10.1	10.1	11.1	11.6	6.8	7.2	7.0	6.2	6.5	6.4
Headline inflation rate, %1)	3.7	0.8	1.8	2.9	2.6	1.3	1.4	0.7	2.9	9.3	7.0	3.0
Core inflation rate, %2)	2.4	1.3	1.0	1.7	1.8	1.3	1.4	1.3	1.8	5.8	5.9	3.3
Public debt in % of GDP	65.0	75.7	80.5	82.3	86.6	88.7	79.2	91.5	89.4	86.0	84.9	84.1

*) GFC = global financial crisis 2008, causing the Great Recession in 2009; COVID = the COVID-19 pandemic crisis in 2020; Energy = the energy crisis plus Russia's invasion of Ukraine
1) Harmonized index of consumer prices (HICP)
2) All-items HICP, excluding energy and unprocessed food; the values 2008-2013 are averages of the Euro area
Sources: European Commission (2022E) and AMECO database

1) The *global financial crisis (GFC)* and the following Great Recession in 2009 is characterized by a stark drop in real GDP because of the breakdown of many banks and a strong increase in unemployment. Inflation was subdued during the Great Recession 2009. Because of the pro-Keynesian fiscal rescue operations in many countries which could afford it, government debt increased sharply. Interestingly, real GDP dropped less in the USA in 2009 (-2.6%) than in the EU (-4.3%) although the GFC was caused in the USA (Breuss, 2016).
2) The *COVID-19 crisis* in 2020/21, fought by strict lockdowns, led again to a stark drop in real GDP – especially at the beginning of the crisis in the first quarter of 2020. Due to generous fiscal rescue measures (e.g., also parttime arrangements) unemployment did not increase dramatically. However, the already high levels of public debt (above the SGP target of 60% of GDP) received a new boost. Inflation remained subdued. The COVID-19 crisis affected the US economy in 2020 (real GDP -2.8%) also less badly as the EU (-5.7%).

[108] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6994

3) The *energy crisis* plus the *war in the Ukraine* followed sharply the COVID-19 crisis and lead primarily to a dramatic increase of inflation in 2022. This was due primarily to a shortage of energy (gas, electricity), not at last because of a squeezing of energy deliveries from Russia, as a tit for tat because of the Western sanctions against Russia. The consequence of the high inflation and the expected stagnation in 2023, a stagflation is expected. In 2022 headline inflation significantly outperformed core inflation (without energy and food). More than 1/3 of the inflation rate is due to price push of energy shortage. 2/3 goes back to domestic factors or expansionary monetary stance of the ECB. The US economic performance in 2022 (real GDP 1.8%) and 2023 (0.7%) – although not hit as hard as Europe from the Ukraine war – exhibited a similar pattern as in the EU (2022 3.3%; 2023 0.3%; see Table 3). The near stagnation of real GDP follows in 2023 (USA 0.7%, EU 0.3%). As at the same time inflation - although declining - remains high, the rare constellation of a stagflation is to be expected in Europe and in the United States. Although the EU governments have taken several fiscal policy measures (price caps, subsidizing the high energy costs) to mitigate the impact of high energy prices, the government balances and the public debt is less negatively affected as in the case of the previous crises. Public debt in % of GDP even declines since 2021 (see Table 3).

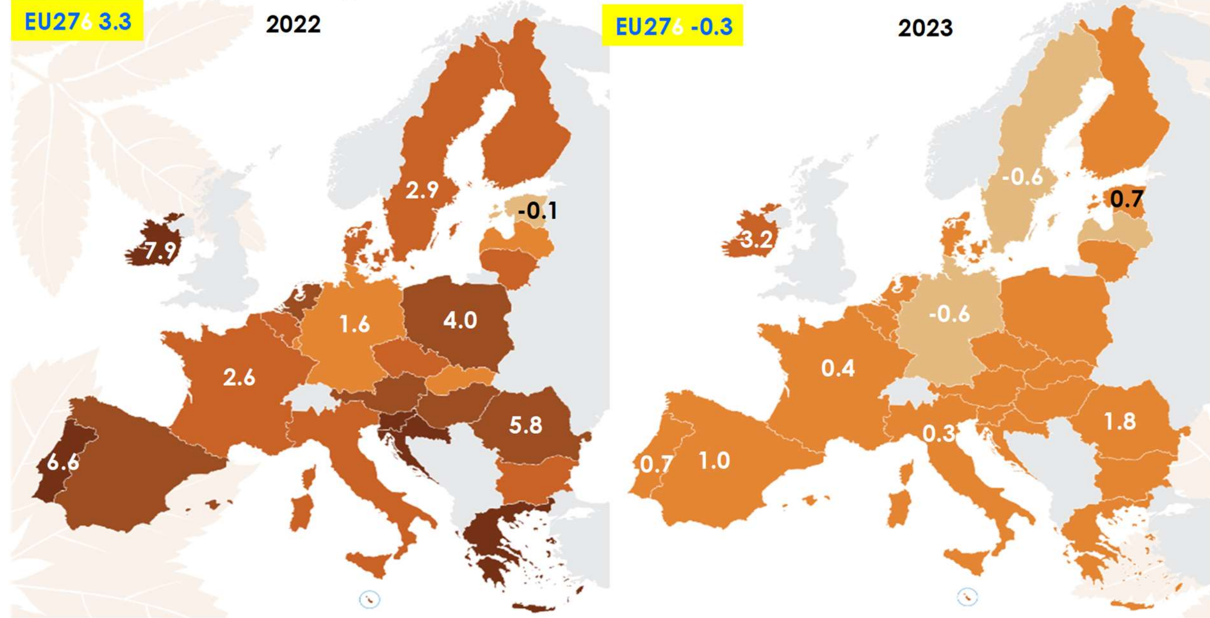
Surprisingly, although Russia is subjected with the strictest sanctions imposed by the West, its economic performance in 2022 (real GDP -3.3%) and 2023 (-2.0%) is not as disastrous as expected. In the war-affected Ukraine where most of the infrastructure was destroyed by the Russians, a dramatic fall in real GDP is forecast for 2022 (-30.9%), and – because no end of the war is in sight - there is not much hope for improvement in 2023 (-2.3%).

The data in Table 3 of the past development and of the forecast for 2023 and 2024 are taken from the latest forecast of the European Commission (2022E). Other international institutions made similar forecasts (see IMF, 2022; OECD, 2022; Oxford Economics 2022).

Around the real GDP growth in EU average of 3.3% in 2022, there is a considerable spread in the MS (see the EU growth map in Figure 23). It ranges from the highest growing countries Ireland (7.9%), Portugal (6.6%), Slovenia (6.2%), Greece and Croatia (each 6.0%) to Estonia with a shrinking real GDP (-0.1%). But also, Latvia and Slovakia (each 1.9%), Germany (1.6%), and Luxembourg (1.5%) reach only a GDP growth below 2%. Austria's GDP grows by 4.6%.

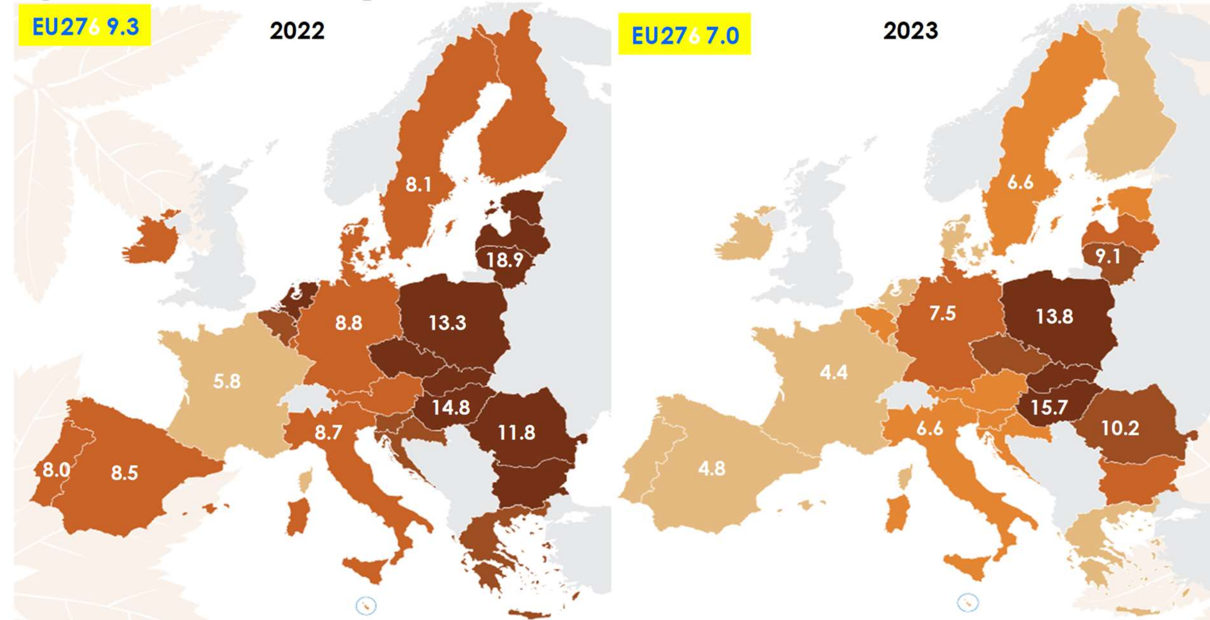
In 2023 because of the energy crisis, real GDP nearly stagnates in EU average (0.3%). Only Ireland (3.2%) and Malta (2.8%) can avoid a stagnation. Some MS not only stagnate but suffer from recession: Germany (-0.6%), Latvia (-0.3%), and Sweden (-0.6%). Austria's economy stagnates with a rate of those of EU average (0.3%).

Figure 23: EU growth map: real GDP growth, %



Ukraine: 2022 -30.9%, 2023 -2.3%; Russia: 2022 -3.3%, 2023 -2.0%
Source: European Commission (2022E); Ukraine and Russia forecast: Oxford Economics

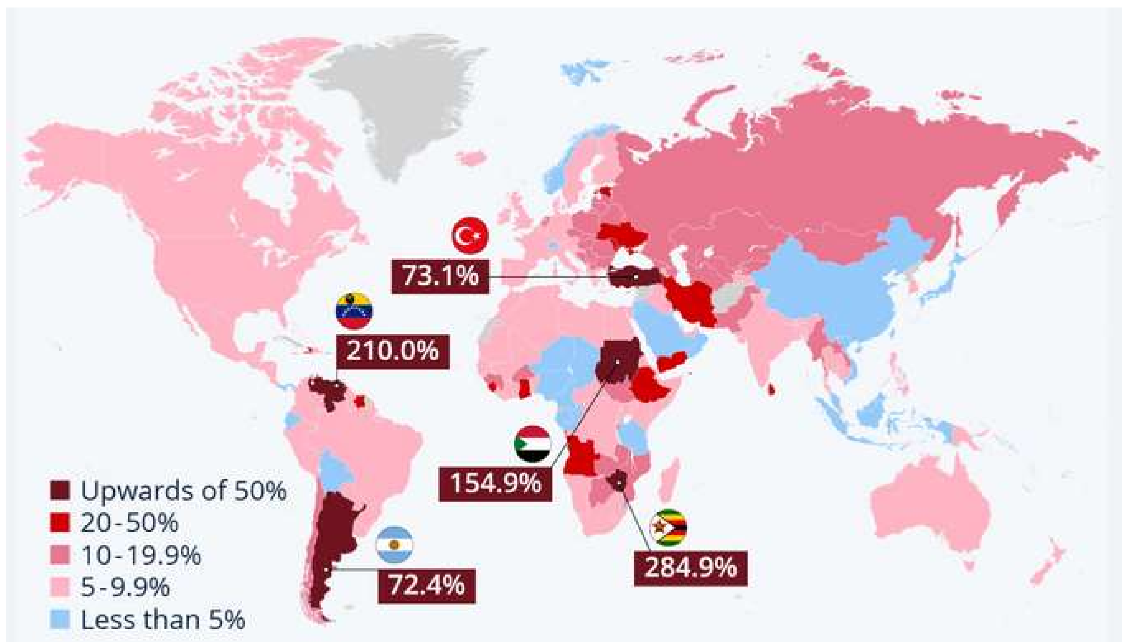
Figure 24: EU inflation map: annual HICP inflation, %



Ukraine: 2022 20.5%, 2023 22.4%; Russia: 2022 13.7%, 2023 4.8%
Source: European Commission (2022E); Ukraine and Russia forecast: Oxford Economics

Like the dispersion of real GDP growth around the EU average, inflation (9.3%) rates in 2022 also vary from MS to MS (see the EU inflation map in Figure 24). The highest inflation pressure is felt in the Baltic states: Estonia (19.3%), Lithuania (18.9%), and Latvia (16.9%). The lowest inflation rate of the harmonized consumer price index (HICP) registers France (5.8%), and Malta (6.1%), mainly because of price caps on gas and electricity prices. Several MS have inflation rates around 8%: Cyprus and Portugal (each 8%), Ireland (8.3%), Germany (8.8%), Luxembourg (8.4%), Spain (8.5), Austria (8.7%).

Figure 25: The global inflation outlook for 2022



Source: Statista, based on IMF data.

Currently, inflation is not just an EU problem, but a global one. This shows the global outlook of inflation in Figure 25. Whereas in 2022, Europe (EU 9.3%) and in the United States (7.9%) have inflation rates still below 10%, in other world regions the inflation rates are much higher. Turkey reaches already an inflation rate of 70% and above. In some African and Latin American countries, the rates surpass even the 100% level.

Europe's Internal Energy Market put to test in 2022

In the desire to continuously expand the general internal market, the plan was pushed to also build an internal energy market. To harmonize and liberalize the EU's internal energy market, measures have been adopted since 1996 to address market access, transparency and regulation, consumer protection, supporting interconnection, and adequate levels of supply. These measures aim to build a more competitive, customer-centered, flexible, and non-

discriminatory EU electricity market with market-based supply prices. The EU aims with the IEM to guarantee security of the supply of electricity, gas and oil, as well as the development of trans-European networks (TEN) for transporting electricity and gas. The legal basis are the Articles 114 and 194 of the TFEU.

To achieve the goals of the IEM, already four Energy Packages have been adopted[109]. In June 2019, a Fourth Energy Package consisting of one directive (Electricity Directive 2019/944/EU), and three regulations: the Electricity (2019/943/EU), the Risk-Preparedness Regulation (2019/941/EU) and the EU Agency for the Cooperation of Energy Regulators (CER) regulation (2019/942/EU).

The Fourth Energy package introduces new electricity market rules to meet the needs of renewable energies and to attract investments. It provides incentives for consumers and introduces a new limit for power plants to be eligible to receive subsidies as capacity mechanisms. It also makes it a requirement for the MS to prepare contingency plans for potential electricity crises and increases ACER's competences in cross-border regulatory cooperation when there is the risk of national and regional fragmentation. The fifth energy package, *"Delivering the European Green Deal",* was released on 14 July 2021 with the aim of aligning the EU's energy targets with the new European climate ambitions for 2030 and 2050; the debate on its energy aspects is ongoing.

Merit order

Very high prices in electricity markets have been observed since September 2021. As set out by the EU Agency for the Cooperation of Energy Regulators (ACER) in its final assessment of EU wholesale electricity market design in April 20221, this is mainly a consequence of the high price of gas, which is used as an input to generate electricity. Natural gas-fired power plants are often needed to satisfy the demand for electricity when the demand is at its highest during the day or when the volumes of electricity generated from other technologies such as nuclear, hydro or variable renewable energy sources do not suffice to cover demand. This is due to the current "merit order" system determining the electricity prices.

The escalation of the Russian military aggression against Ukraine, a Contracting Party of the Energy Community, since February 2022 has led to gas supplies declining markedly. The Russian invasion of Ukraine has also caused uncertainty on the supply of other commodities,

[109] See: https://www.europarl.europa.eu/factsheets/en/sheet/45/energiebinnenmarkt

such as hard coal and crude petroleum, used by power-generating installations. This has resulted in substantial additional increases in and volatility of the price of electricity.

With the Commission Regulation 2017/2195/EU)[110] the so-called *"merit order"* system was legally introduced as the system for price setting in the energy market, specifically to set prices for electricity.

In the energy industry, the term 'merit order' describes the sequence in which power plants are designated to deliver power**,** with the aim of economically optimizing the electricity supply. The merit order is based on the lowest marginal costs. On the electricity exchange, supply and demand determine the prices at auction. The **'market-clearing price' (MCP)** is the lowest bid to buy power that is still accepted in an auction. The power plant with the most expensive marginal costs – the marginal power plant – determines the price on the exchange for all power plants involved. Since the price hike of natural gas due to the restrictions of supply from Russia, the highest marginal costs, and hence the price for electricity is determined by the power plants producing electricity with natural gas.

To counter these price damaging effects EU's MS started separately with systems to cap the gas and/or electricity prices. Further isolated emergency actions would heavily disturb the functioning of the SM. Portugal and Spain cap the gas prices. Germany wants to relieve the economy and private households from the high gas and electricity prices with a massive fiscal package (EUR 200 billion).

Therefore, the EU reacted with emergency measures. On 6 October 2022, the Council formally adopted emergency measures to reduce energy prices[111]:

- *Electricity demand reduction*: voluntary overall reduction target of 10% of gross electricity consumption (5% in peak hours)
- *Cap on market revenues for inframarginals*: cap at 180 euros/MWh for electricity generators. Such operators have made unexpectedly large financial gains. This is because of the *merit order* system, in which coal and gas set the prices for electricity. Although the merit order system does not work in the crisis of high gas prices, the Council Regulation says in Article 7(2)(d), that the measures shall *"not distort the functioning of electricity wholesale markets, and in particular, not affect the merit order and the price formation on the wholesale market."*

[110] See: Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, OJ L 312/6_of 28-11.2017. For an explanation of the (currently) malfunktioning merit order system, see: Monopolkommission (2022).

[111] See: https://www.consilium.europa.eu/en/press/press-releases/2022/10/06/council-formally-adopts-emergency-measures-to-reduce-energy-prices/; and: Proposal for a Council Regulation on an emergency intervention to address high energy prices, Council of the European Union, No. Cion doc. 12249/22 INIT, 30 September 2022.

- *Solidarity levy* for fossil fuel sector: a mandatory solidarity contribution on the profits of businesses active in the crude petroleum, natural gas, coal, and refinery sectors. Levy on taxable profits in fiscal year 2022 and/or 2023, which are above a 20% increase of the average profits since 2018.
- *Retail measures for SMEs*: MS may set a price for the supply of electricity to SMEs.

These emergency measures apply from 1 December 2022 to 31 December 2023. The reduction targets of energy consumption apply until 31 March 2023.

Economic policy coordination in times of the energy crisis

On 22 November 2022, the Commission has launched the 2023 European Semester cycle of economic policy coordination[112]. As responsible for the Economic policy coordination in the EU, the Commission has issued guidance to help tackle the energy crisis and make Europe greener and more digital. The package draws upon the Autumn 2022 Economic Forecast which showed that after a strong first half of the year, the EU economy has now entered a much more challenging phase. While swift and well-coordinated policy action during the COVID-19 pandemic is paying off, the fallout from Russia's invasion of Ukraine confronts the EU with multiple and complex challenges. Historically high energy prices, high inflation rates, supply shortages, increased debt levels and rising borrowing costs are affecting business activity and eroding households' purchasing power.

These challenges call for coordinated action to secure adequate and affordable energy supply, safeguard economic and financial stability, and protect vulnerable households and companies while preserving the sustainability of public finances. At the same time, rapid action is needed to boost potential growth and quality job creation and deliver on the green and digital transitions. Economic policy coordination through the European Semester will help Member States achieve these objectives by setting priorities and providing clear and well-coordinated policy guidance for the year to come.

The recommendations include the following points:

- *Annual Sustainable Growth Survey:* The Recovery and Resilience Facility (the centrepiece of NextGenerationEU), with a budget of €723.8 billion in grants and loans, is continuing to provide a steady stream of investments in European businesses, infrastructure, and skills, and is supporting an ambitious reform agenda until 2026. As of today, the Commission has endorsed 26 national Recovery and Resilience Plans, all of which have been approved by the Council. So far, payments disbursed under the Facility amount to over €135 billion.

[112] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7072

- *REPowerEU:* The EU's plan to rapidly phase out the EU's dependence on Russian fossil fuels, will mobilise additional resources to increase the resilience of EU energy systems and prevent energy poverty through targeted investments and reforms.
- *Opinions on the draft budgetary plans of euro area Member States*
- *Euro area recommendation*
- *Alert Mechanism Report*
- *Proposal for a Joint Employment Report*
- *Post-programme surveillance reports*
- *Ireland, Greece, Spain, Cyprus and Portugal* conclude that all five Member States retain the capacity to repay their debt.

7. The future of EU’s Single Market

Reviewing EU’s Single Market over the last 30 years have revealed its benefits and unfinished goals. The many crises of recent years have also shown that the EU is flexible when necessary. For example, when interpreting the competition rules and the strict fiscal rules. The EU and its institutions also jumped in when there was the risk that the “common” of the SM would be abandoned in favor of national action (e.g., in the last two crises, the COVID-19, and the energy price crises).

The SM Project has a moving target. Nobody knows exactly, where it should end. One benchmark is the SM of the USA. In comparison, EU’s SM is still lacking some ingredients, which are: a common language, and a common currency which is applied by all 27 EU MS. Moreover, one big difference remains: the United States are a federal state, while the European Union is just a union of states.

In a Commission’s White Paper, Jean-Claude Juncker (European Commission, 2017A) developed five scenarios for the future for the EU27 by 2025, in each of which the SM plays a central role:

- 1. *Carrying on:* SM is strengthened, including in the energy and digital sectors; the EU27 pursues progressive trade agreements.
- 2. *Nothing but the SM:* SM for goods and capital strengthened; standards continue to differ, free movements of people and services not fully guaranteed.

- 3. *Those who want more do more:* As in scenario 1, SM is strengthened and the EU27 pursues progressive trade agreements; in addition, more cooperation in EMU; further "enhanced cooperation" under Article 20 TEU; additional budgets made available by some MS for the areas where they decide to do more.
- *4. Doing less more efficiently:* Common standards of the SM set to a minimum, but enforcement is strengthened in areas regulated at EU level; trade exclusively dealt with at EU level.
- *5. Doing much more together*: SM strengthened through harmonization of standards and stronger enforcement; trade exclusively dealt with at EU level. The EU speaks with one voice on all foreign policy issues; a Europeans Defense Union is created; modernized EU budget and increased backup by own resources; a euro area fiscal stabilization function is operational.

Since these scenarios were formulated, the EU has gone through two dramatic crises: COVID-19 pandemic and Energy price crisis. Therefore, the recent EU proposals aim to make the SM more resilient.

Resilience of the Single Market

The day after the Commission laid the foundations for a new "European industrial strategy"[113] on 10 March 2020, the World Health Organization announced the COVID-19 as a pandemic. This forced the Commission to adapt its strategy. The update focuses now on what lessons have been learned by the COVID-19 crisis. Increased attention is given to small and medium enterprises (SMEs).

New actions will strongly benefit SMEs and start-ups, whether it be from a strengthened Single Market, reduced supply dependencies or the accelerated green and digital transitions. The Strategy also includes some measures dedicated to SMEs such as on increased resilience, combating late payments, and supporting solvency.

The COVID-19 pandemic has affected the opportunities offered by the SM. Businesses and citizens suffered from border closures, supply was disrupted, and predictability was often lacking. To address these issues, the Commission has proposed three stages:

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[113] See: https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en#resilience-of-the-single-market

- *Single Market Emergency Instrument (SMEI):* to provide a structural solution to ensure the availability and free movement of persons, goods, and services in the context of possible future crises.
- *Deepening the SM:* explore harmonization of standards for key business services, as well as strengthening the digitalization of market surveillance and other targeted measures for SMEs.
- *Monitoring the SM:* an annual analysis of the state of the SM, including across 14 industrial ecosystem.

EU SM Program 2021-27

In April 2021, the Council and Parliament adopted the EU's single market programme for the years 2021 to 2027[114]. The main objectives are to:

- increase the effectiveness of the single market
- support the competitiveness of EU businesses, in particular SMEs
- enable the development of high-quality European standards
- empower and protect consumers
- promote human, animal and plant health and animal welfare
- establish a framework for financing high-quality statistics

The new program consolidates a range of activities that were previously financed separately into one program to manage them more efficiently. It also includes new initiatives to improve the functioning of the single market. The program's total budget is **€4.2 billion.** On 13 April 2021, the Council adopts position on €4.2 billion Single Market program for 2021-2027[115]. This position was then included in the MFF 2021-2027 in chapter 3: Single Market.

SMEI

On 19 September 2022, the European Commission (2022D) presented the new Single Market Emergency Instrument (SMEI)[116], already announced in 2020. Europe should be equipped with a robust toolbox to preserve free movement and availability of relevant goods and services. The EU should become crisis-proof. This crisis governance framework aims to

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[114] See: https://www.consilium.europa.eu/en/policies/deeper-single-market/

[115] See: https://www.consilium.europa.eu/en/press/press-releases/2021/04/13/council-adopts-position-on-4-2-billion-single-market-programme-for-2021-2027/

[116] See: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_5443

preserve the free movement of goods, services and persons and the availability of essential goods and services in the event of future emergencies, to the benefit of citizens and businesses across the EU. While the SM has proven to be best asset in crisis management, the COVID-19 pandemic has highlighted structural shortcomings hampering the EU's ability to effectively respond to emergency situations in a coordinated manner. Unilateral measures caused fragmentation, worsening the crisis, and affecting particularly SMEs.

The SMEI complements other EU legislative measures for crisis management like the Union Civil Protection Mechanism, as well as EU rules for specific sectors, supply chains or products like health, semiconductors, or food security, which already foresee targeted crisis response measures. It establishes a well-balanced crisis management framework to identify different threats to the Single Market and ensure its smooth functioning by:

- Creating a crisis governance architecture for the SM (monitoring mode): Setup a coordination and communication network between Commission and Ms.
- Proposing new actions to address threats to the SM (vigilance mode): monitoring supply chains, identifying strategically important goods and services, and building up strategic reserves. Free movement in the SM will be upheld through a "blacklist" of prohibited restrictions.
- Allowing last-resort measures in an emergency (action mode): the Commission may make use of tools which will require a separate activation step (firms must accept priority rated orders for crisis-relevant products).

"Well meant" is not exactly or necessarily the same as "well executed". One gets this impression when one reads the skeptical media reactions on the announcement of SMEI. Many observers criticized that after 30 years of a free SM, the Commission seems to turn the wheel back to a situation of a planned or semi-planned economy (see Neue Zürcher Zeitung, 20.09.2022, p. 25). However, the Commission seems to have looked at similar crisis systems in the United States.

8. References

Andersen, T.B., Barslund, M. & Vanhuysse, P. (2019), Join to Prosper? An Empirical Analysis of EU Membership and Economic Growth, *KYKLOS, Volume* 72, Issue2, May 2019, 211–238.

Badinger, H. (2007), "Has the EU's Single Market Programme Fostered Competition? Testing for a decrease in mark-up ratios in EU Industries", *Oxford Bulletin of Economics and Statistics*, Volume 69, Issue 4, August 2007, 497-519.

Badinger, H., Breuss, F. (2011), The Quantitative Effects of European Post-War Economic Integration, in: M. N. Jovanovic (Ed.), *International Handbook on the Economics of Integration, Volume III: Factor Mobility, Agriculture, Environment and Quantitative Studies*, Cheltenham UK and Northampton MA, USA: Edward Elgar, 2011, 285-315.

Bankowski, K., Ferdinandusse, M., Hauptmeier, S., Jacquinot, P., and Valenta, V. (2021): „The Macroeconomic impact of the next Generation EU instrument on the euro", ECB, Occasional Paper Series, No. 255, January 2021.

Barbero, J., Bengyuzov, M., Christensen, M., Conte, A., Salotti, S., Trofimov, A. (2022), A RHOMOLO Assessment of the Impact of Regulation in the EU Services Sector, Territorial Development – JRC Policy Insights, Series, European Commission, February 2022.

Barroso, José Manuel Durão (2012): State of the Union 2012 Address. European Parliament, 12 September 2012.

Bertelsmann Stiftung (2014), *20 Jahre Binnenmarkt, Wachstumseffekte der zunehmenden europäischen Integration, Gütersloh, 2014.*

Bradford, A. (2012), "The Brussels Effect", Northwestern University Law Review, 107(1), 1-68.

Bradford, A. (2015), "Exporting standards: The externalization of the EU's regulatory power via markets", International Review of Law and Economics, 42(C), 2015, 158-173.

Bradford, A. (2020), The Brussels Effect. How the European Union Rules the World, Oxford University Press, 2020.

Bradford, A., Chilton, A., Linos, K., Weaver, A. (2019), "The global dominance of European competition law over American antitrust law", Journal of Empirical Legal Studies, Vol. 16, Issue 4, November 2019, 731-766.

Breuss, F. (2003), Balassa-Samuelson Effects in the CEED: Are they Obstacles for Joining the EMU?, Forschungsinstitut für Europafragen, WU Wien, IEF Working Paper Nr. 52, May 2003.

Breuss, F. (2014), Das „EU-Integrationspuzzle", Ökonomenstimme, 13 August 2014: http://www.oekonomenstimme.org/artikel/2013/09/die-groesse-der-kleinen-in-der-eu/.

Breuss, F. (2016), "The Crisis in Retrospect: Causes, Effects and Policy Responses", in: Harald Badinger and Volker Nitsch (editors), Routledge Handbook of the Economics of European Integration, Routledge, London and New York, 2016, 331-350.

Breuss, F. (2019), 20 Jahre Euro: eine Währung für alle? (*20 years of Euro: a currency for all?*), ÖGfE Policy Brief, 06/2019, 27. März 2019.

Breuss, F. (2020), Die Europäische Union als Prosperitätsgemeinschaft („The European Union as a community of prosperity"), in: P.-C. Müller-Graff (Hrsg.), *Kernelemente europäischer Integration ("Core Elements of European Integration")*, Schriftenreihe des Arbeitskreises Europäische Integration e.V., Band 100. Berlin, 2020, 301-336.

Breuss, F. (2021), Die Folgen des Brexit für Österreich und die EU, FIW Policy Brief, Nr. 49, März 2021 (https://fiw.ac.at/fileadmin/Documents/Publikationen/Policy_Briefs/49_FIW_Policy_Brief_Breuss.pdf).

Breuss, F. (2022A), "Der Europäische Aufbauplan – die österreichische Sichtweise", in: Peter Hilpold, Walter Steinmair, Andreas Raffeiner (Hg.): *„Österreich und die EU im Umbruch – Eine Nachlese zur Festschrift für Heinrich Neisser"*, Facultas-Verlag, Wien, 2022, 15-36

Breuss, F. (2022B), "In search of the "right" integration effects: from complex to simple modeling", Atlantic Economic Journal, published online: 27 December 2022 (https://doi.org/10.1007/s11293-022-09751-8).

Breuss, F., Fink, G., Griller, S. (eds.) (2008), Services Liberalisation in the Internal Market, Springer, Wien-New York, 2008.

Breuss, F., Roeger, W., in ‘t Veld, J. (2015), “The stabilising properties of a European Banking Union in case of financial shocks in the Euro Area”, European Economy, Economic Papers 550 | June 2015.

Boockmann, B., Felbermayr, G., Kohler, W., Aichele, R. (2015), 20 Jahre Österreich in der Europäischen Union – Herausforderungen und Optionen für die Zukunft, Studie des ifo-Instituts gemeinsam mit dem IAW Tübingen im Auftrag des Bundesministeriums für Wissenschaft, Forschung und Wirtschaft, München, 9. Juni 2015.

Cai, M., Canton, E., Cardani, R., Dierx, A., Di Dio, F., Pataracchia, B., Pericoli, F., Ratto, M., Rocchi, P., Rueda Cantuche, J., Simons, W. &Thum-Thysen, A. (2021), *Modelling the macroeconomic impact of competition policy: 2020 update and further development,* European Commission, Brussels, 2021 (With the contribution of Fabienne Ilzkovitz (ULB)) (https://competition-policy.ec.europa.eu/system/files/2022-03/kdaq22001enn_macroeconomic_impact_of_competition_policy_2021.pdf).

Campos, N.F., Coricelli, F., Moretti (2014), Economic Growth and Political Integration: Estimating the Benefits from Membership in the European Union Using the Synthetic Counterfactuals Method, IZA Discussion Paper 8162, April 2014.

Cecchini, P., M. Catina and A. Jacquemin. (1988). The European Challenge: The Benefits of a Single Market, Wildwood House, London, 1988.

Christen, E., Meyer, B., Oberhofer, H., Hinz, J., Kamin, K., Wanner, J. (2022), The Brussels Effect 2.0. How the EU Sets Global Standards with its Trade Policy, FIW-Research Report, No 07, October 2022.

Commission of the European Communities (1985), Completing the Internal Market, White Paper from the Commission to the European Council (Milan, 18-29 June 1985), C0MC85) 310 final, Brussels, 14 June 1985.

Commission of the European Communities (1988), The Economics of 1992. An assessment of the potential economic effects of completing the internal market of the European Community, European Economy, No. 35, March 1988 (*“Cecchini Report”*).

Commission of the European Communities (1990), One market, one money: An evaluation of the potential benefits and costs of forming an economic and monetary union, European Economy, No. 44, Brussels, October 1990.

Costinot, A., Rodríguez-Clare, A. (2014), "Trade Theory with Numbers: Quantifying the Consequences of Globalization", in Gopinath, G., Helpman, E., Rogoff, K. (Eds.), Handbook of International Economics, Volume 4, Amsterdam, Elsevier, S. 197-226.

Council of the European Union (2010), Conclusions on the Single Market Act: 3057th COMPETITITVENESS (Internal Market, Industry, Research and Space) Council meeting, Brussels, 10 December 2010.

Council of the European Union (2011), Conclusions on the priorities for relaunching the Single market. 3094th COMPETITITVENESS (Internal Market, Industry, Research and Space) Council meeting, Brussels, 30 May 2011.

European Commission (2009A), The EU’s Response to Support the Real Economy During the Economic Crisis. An Overview of Member States’ Recovery Measures, Brussels, European Economy, Occasional Papers, 51, July 2009.

European Commission (2009B), Economic Crisis in Europe: Causes, Consequences and Responses, European Economy, 7, Brussels, 2009.

European Commission (2010A), Europe 2020. A strategy for smart, sustainable and inclusive growth, Communication from the Commission, Brussels, COM(2010) 2020 final, 3.3.2010.

European Commission (2010B), Single Market Act for a highly competitive social market economy, Brussels, 2010.

European Commission (2011), Single Market Act: Twelve levers to boost growth and strengthen confidence: “Working together to create new growth”, Communication from the

Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, COM(2011) 206 final, Brussels, 13.4.2011.
European Commission (2012), Single Market Act II: Together for new growth, Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, COM(2012) 573 final, Brussels, 3.10.2012.
European Commission (2015A), Upgrading the Single Market: more opportunities for people and business, Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, COM(2015) 550 final, Brussels, 28.10.2015.
European Commission (2015B), Trade for All. Towards a more responsible trade and investment policy, Brussels, 2015.
European Commission (2016), State-Owned Enterprises in the EU: Lessons Learnt and Ways Forward in a Post-Crisis Context, European Economy, Institutional Paper 031, July 2016.
European Commission (2017A), White Paper on the Future of Europe. Reflections and scenarios for the EU27 by 2025, Brussels, 1 March, 2017.
European Commission (2017B), *Reflection paper on the deepening of the Economic and Monetary Union,* Brussels, 31 May 2017.
European Commission (2020A), Identifying and addressing barriers to the Single Market, Accompanying the document: Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. Commission staff working document, SWD(2020) 54 final, Brussels, 10.3.2020.
European Commission (2020B), State aid rules and COVID-19. The Temporary State Aid Framework rules applicable to aid for research and testing of coronavirus relevant products, Brussels, 2020.
European Commission (2020C), EU Strategy for COVID-19 vaccines, Communication from the Commission to the European Parliament, the European Council, the Council and the European Investment Bank, Brussels, COM(2020) 245 final, 17.6.2020.
European Commission (2021A) One year since the outbreak of COVID-19: fiscal policy response, Brussels, COM(2021)105 final, 3 March 2021.
European Commission (2021B), Mapping and assessment of legal and administrative barriers in the services sector. Summary report, Brussels, 2021.
European Commission (2022A), Cohesion in Europe towards 2050. Eighth report on economic, social and territorial cohesion, Brussels, 2022.
European Commission (2022B), Annual Single Market Report 2022. Commission Staff Working Document, SWD(2022) 40 final, Brussels, 22.2.2022.
European Commission (2022C), Fiscal policy guidance for 2023. Communication from the Commission to the Council, Brussels, COM(2022) 85 final, 2.3.2022
European Commission (2022D), Crisis-proofing the Single Market: equipping Europe with a robust toolbox to preserve free movement and availability of relevant goods and services (Single Market Emergency Instrument – SMEI), Brussels, 19 September 2022 (https://ec.europa.eu/commission/presscorner/detail/en/IP_22_5443)
European Commission (2022E), European Economic Forecast. Autumn 2022, Institutional Papers 1987, November 2022.
European Council (2022), European Council meeting (20 and 21 October 2022) – Conclusions, Brussels, 21 October 2022.
Felbermayr, G., Gröschl, J., Heiland, I. (2018). Undoing Europe in a New Quantitative Trade Model. ifo Working Papers 250. January 2018.
Felbermayr, G., Gröschl, J., Heiland, I. (2022), "Complex Europe: Quantifying the cost of disintegration", Journal of International Economics, Vol. 138, September 2022, 1-28.

Gasparotti, A., Kullas, M. (2019), 20 Jahre Euro: Verlierer und Gewinner, cepStudie,cep – Zentrum für Europäische Politik, Freiburg, Februar 2019.

Gutiérrez, G. & Philippon, Th. (2018), How European Markets became free: a study of institutional drift, *NBER Working Paper Series,* No. 24700, Cambridge, MA, June 2018 (https://www.nber.org/system/files/working_papers/w24700/w24700.pdf).

Halka, A., Leszczynska-Paczesna, A. (2018), "Price convergence in the European Union – What has changed?", Economic Modeling, 79, 2019, 226-241.

IMF (2022), World Economic Outlook: Countering the Cost-of-Living Crisis, Washington, October 2022.

Ilzkovitz, F. & Dierx, A. (2021), Ex-post economic evaluation of competition policy: The EU experience, *VOXEU_CEPR*, 27 August 2020 (https://voxeu.org/article/ex-post-economic-evaluation-competition-policy-eu) on 29 August, 2022.

in 't Veld, J. (2019), "The economic benefits of the EU Single Market in goods and services", Journal of Policy Modeling, Vol. 41, Issue 5, September-October, 2019, 803-818.

Juncker, J.-C., Tusk, D., Dijsselbloem, J., Draghi, M., Schulz, M. (2015), *Completing Europe's Economic and Monetary Union*, (The Five Presidents' Report), Brussels, 22 June 2015.

König, J., Ohr, R. (2013), "Different Efforts in European Economic Inegration: Implications of the EU Index", Journal of Common Market Studies, Vol. 51, No. 6, 2013, 1074-1090.

Kok, W. (2004), Facing the challenge: The Lisbon strategy for growth and employment, Report from the Highl Level Group chaired by Wim Kook, Brussels, November 2004.

Lisbon European Council (2000), Lisbon European Council, 23 and 24 March 2000, Presidency Conclusions (https://www.europarl.europa.eu/summits/lis1_en.htm) (Lisbon Strategy)

London Economics (2017), The EU Single Market: Impact on Member States. Study commissioned by the American Chamber of Commerce to the EU (AmCham), London 2017.

Matthijs, M. and Parsons, C. (2022) "Single-Market Power: How Europe Surpassed America in the Quest for Economic Integration", Foreign Affairs, May/June 2022(https://www.foreignaffairs.com/articles/europe/2022-04-19/single-market-power).

Maucorps, A., Römisch, R., Schwab, Th., Vujanovic, N. (2022), The Future of EU Cohesion: Effects of the Twin Transition on Disparities across European Regions, Bertelsmann Stiftung, October 2022.

Mayer, T., Vicard, V. & Zignago, S. (2019). The cost on non-Europe, revisited, *Economic Policy,* Volume 34, Issue 98, April 2019, 145-199.

Mion, G. and Ponattu, D. (2019), Estimating economic benefits of the Single Market for European countries and regions, Policy Paper Bertelsmann Stiftung, Gütersloh, May 2019.

Monopolkommission (2022), Strommärkte weiterentwickeln, Preisbremse wettbewerbskonform ausgestalten, Policy Brief, Ausgabe 10, Oktober 2022.

Monteagudo, J. Rutkowski, A., Lorenzani, D. (2012), The economic impact of the Services Directive: A first assessment following implementation; European Economy, Nor. 456, Brussels, June 2012.

Monti, M. (2010), A New Strategy for The Single Market: At the Service of Europe's Economy and Society, Report to the President of the European Commission, Jose Manuel Barroso, Brussels, 9 May 2010.

Neue Zürcher Zeitung (2022), „Brüssel will in Krisen mit planwirtschaftlichen Massnahmen den Binnenmarkt erhalten. *Unternehmen sollen mit einem neuen Notfallinstrument zur Produktion gewisser Güter gezwungen werden können",* 20. September 2022, p. 25.

OECD (2021), Ownership and Governance of State-Owned Enterprises. A Compendium of National Practices 2021, Paris, 2021.

OECD (2022), Economic Outlook, 112, November 2022.

ÖGfE (2022), ÖGfE-Umfrage: 30 Jahre Binnenmarkt – Österreicher:innen schätzen die Vorteile des gemeinsamen Marktes“, 5.-7. Dezember 2022 (https://oegfe.at/category/umfrangen/).
Oxford Economics (2022), Global Economic Model Forecast, November 2022 (https://www.oxfordeconomics.com/).
Pataki, Z. (2014), The Cost of Non-Europe in the Single Market. ‘Cecchini Revisited’: An overview of the potential economic gains from further completion of the European Single Market, EPRS, European Parliamentary Research Service, European Added Value Unit, Brussels, September 2014.
Peterson, Th., Bähmer, M., Weisser, J. (2014), 20 Jahre Binnenmarkt, Wachstumseffekte der zunehmenden europäischen Integration., Bertelsmann Stiftung, Zukunft soziale Marktwirtschaft, Policy Brief 02, 2014.
Puzzello, L., Gomis-Porqueras, P. (2018), “Winners and losers from the €uro”, European Economic Review, Vol. 105, September 2018, 129-152.
Walesiak, M., Dehnel, G., Obrebalski (2021), “Assessment of the Europe 2020 Strategy: A Multdimensional Indicator Analysis via Dynamic Relative Taxonomy”, Energies, 14 August 2021.
Wolfmayr, Y., Pfaffermayr, M. (2022), The EU Services Directive: Untapped Potentials of Trade in Services”, FIW Research Reports, No. 3, July 2022.

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