

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of Economics**



**Master's Thesis**

**The Impact of Brexit on the British Economy**

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## DIPLOMA THESIS ASSIGNMENT

Bc. Julia-Maria Fink

World Economy

Thesis title

**The impact of Brexit on the British economy**

### Objectives of thesis

The United Kingdom has left the European Union after a 47-year long lasting membership. The main reason for this decision was the so called "Brexit" referendum, which was held in 2016. It was not until 2020 that the negotiations resulting in the trade agreement finally parted the United Kingdom from the European Union.

Various types of changes in regulations and legislations were applied, which had an impact on the country's economy, migration, labour market etc. The UK has left the European Union with all its institutions to regain the option to freely establish its own rules independently from the European Union. A topic which was particularly resonating amongst the British and was one of the crucial reasons to even hold such a referendum was the immigration. Since one of the main pillars the EU stands on is the freedom of movement of EU nationals, large streams of people from mainly Eastern-European countries migrated to the UK in the past. The UK has become a popular destination for workers and students. However, in connection to the newly established migration policies and visa-processes, the incoming streams of migrants started to alter.

To gain a British work or study visa applicants now need to count with rather high costs. Therefore, particularly interesting changes might have been happening on the field of academic migration since most students tend to belong to low- or lower- income groups of people. The work-visa process is based on a point system, Additionally, recognition of professional qualification will not be automatic as it used to be before.

This paper will be aimed to describe the evolution of the situation the UK was in prior to the Brexit referendum and will contribute to outline what has happened lately since we now can already see effects of the applied measures connected to the country's new migration policy with a focus on the academic and work migration.

### Methodology

The processing of the thesis can be divided into a few steps.

The outline of the thesis is as follows:

1. Introduction
2. Aim of the thesis and Methodology

3. Literature review

4. Analytical part

5. Conclusion

In the Introduction, the author will shortly introduce the topic and explain why this topic is relevant to be studied.

In the following section, the Aim of the thesis, the author will specify her research questions, aims and the potential contribution of his work to the current research.

The creation of the literature review will follow. This part will provide a detailed overview of the literature and the current state of knowledge focusing on the situation related to the United Kingdom and the Brexit. It will critically analyse the most relevant studies, including methods used, results found, and limitations. Methodologically, this part of the thesis will be the analysis of documents.

The literature review creates a background for the author to specify the methods used for the analytical part of the thesis. The chapter Methodology will describe all of the methods; it will also include a description of the obtaining data and its processing before the analysis.

In the following step (analytical part), the author will use the knowledge gained during the literature study with the methods specified in the previous section to analyse the obtained data. This part is the core component of the thesis. This part of the thesis will include the analysis results and comparison (discussion) with other authors focusing on the same topic. This part can also include recommendations for policymakers or other stakeholders.

In the final part (conclusion), the author will summarise her findings, mention the limitation of the research and include possible further research

## The proposed extent of the thesis

60 – 80 pages

## Keywords

Economy, Great Britain, European Union, referendum,

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## Recommended information sources

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### **Declaration**

I declare that I have worked on my master's thesis titled "The impact of Brexit on the British economy" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the master's thesis, I declare that the thesis does not break any copyrights.

In Prague on 30.11.2023\_\_\_\_\_

## **Acknowledgement**

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# The Impact of Brexit on the British Economy

## Abstract

This master's thesis examines the impact of the United Kingdom's 2016 referendum and the subsequent Brexit on migration streams alteration and net migration in the UK. The UK's act of leaving the European Union was connected to a series of complex negotiations resulting in inevitable obstacles, some of which, notably the Northern Irish Protocol, are still presently being revised by the current British Prime Minister Rishi Sunak.

Within the paper qualitative research was conducted employing the descriptive method covering a broad range of topics connected to the European Union and its common history with the United Kingdom, the factors which might have led to the Brexit referendum, its background, and the effects of it on migration.

A correlation analysis was utilized to examine the interconnections and compare the evolution of various variables over time, encompassing net migration figures, public opinion on migration, chosen figures of EU funds, the Brexit referendum results, work migration and academic migration. The previously mentioned variables were often wise investigating the migrant groups from the EU and from non-EU countries separately.

Our results show that with rising figures of incoming migrants, the public opinion in Britain increasingly perceived migration as an issue. Brexit and the newly applied immigration regulations have not caused the net migration figures to decline significantly, however the incoming streams of EU migrants dropped heavily, instead the non-EU migration figures grew.

**Keywords:** Brexit, Economy, Migration, Academic Migration, Work Migration, Migrants, the United Kingdom of Great Britain and Northern Ireland, the European Union, Referendum, Public Opinion

# Vliv Brexitu na britskou ekonomiku

## Abstrakt

Tato diplomová práce zkoumá dopad referenda z roku 2016 ve Spojeném království a následného Brexitu na transformaci migračních toků a čistou migraci ve Velké Británii. Opuštění Evropské unie Spojeným královstvím bylo spojeno s řadou složitých debat vedoucích k neodvratným obtížím, z nichž některé, zejména Severoirský protokol, jsou v současné době stále předmětem revize pod vedením současného britského premiéra Rishi Sunaka.

V rámci práce byl proveden kvalitativní výzkum s využitím popisné metody pokrývající širokou škálu témat spojených s Evropskou unií a její společnou historií se Spojeným královstvím, faktory, které mohly vést k referendu o Brexitu, jeho pozadí a dopady na migraci.

Byla použita korelační analýza k prozkoumání vzájemných souvislostí a srovnání vývoje různých proměnných v čase. Zmíněná analýza zahrnuje čísla čisté migrace, veřejné mínění o migraci, vybrané ukazatele fondů EU, výsledky referenda o Brexitu, pracovní migraci, akademickou migraci. Zmíněné proměnné byly často zkoumány zvláště pro migranty z EU a zemí mimo EU.

Naše výsledky ukazují, že s rostoucím počtem příchozích migrantů veřejnost ve Velké Británii stále více vnímá migraci jako problém. Brexit a nově zavedená imigrační opatření nezpůsobily výrazný pokles čisté migrace, ale přílivové toky EU migrantů výrazně poklesly, zatímco množství migrantů ze zemí mimo EU vzrostlo.

**Klíčová slova:** Brexit, Ekonomika, Migrace, Akademická migrace, Pracovní migrace, Migranti, Spojené království Velké Británie a Severního Irska, Evropská Unie, Referendum, Veřejné Mínění



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# 1. Introduction

The United Kingdom has left the European Union in 2020 after a 47-year long lasting membership. The reason for this act was the so called “Brexit” referendum, which was held in 2016. This referendum offered the British citizens, who at that point in time had the legal right to vote given by the rules for this particular referendum, the option to decide whether the country shall exit the European Union or remain a member. The majority voted to leave. Nevertheless, it was not until the end of January 2020 that the negotiations resulting in the trade agreement finally parted the United Kingdom from the European Union.

A topic which was particularly resonating amongst the British and was one of the crucial driving factors to even hold a referendum, was the immigration. Since one of the main pillars the EU stands on, is the freedom of movement of EU nationals, large streams of people from mainly Eastern-European countries migrated to the UK over the past couple of years. The UK has become a popular destination for foreign workers and students.

After the withdrawal from the EU various types of changes in regulations and legislations were applied, which had an impact on the country’s economy, migration, labor market and many other fields.

The UK has left the European Union with all its institutions to regain the option to freely establish its own rules, without having to obey anyone but their own government. However, when considering that a large part of the British trade consists of interactions with the countries of the European Union a few obstacles appeared once the country left the single European market. In connection to the newly established migration policies and visa-processes, the incoming streams of migrants also started to alter.

To gain a British work or study visa applicants now need to count with rather high costs. Therefore, particularly interesting changes might have been happening on the field of academic migration since most students tend to belong to low- or lower- income groups of people. Additionally, the UK has left the EU’s Erasmus Mobility funding program, that offers the youth grants, teaching, research, networking, and policy debate opportunities.

The work-visa process is now based on a point system, which uses a special algorithm to calculate one’s value on the current British labor market consisting of various facets and modules, which have been determined to be relevant.

This paper will be aimed to describe the evolution of the situation the UK was in prior to the Brexit referendum and will contribute to outline what has happened lately since we

now can already see effects of the applied measures connected to the country's new migration policy with a focus on the EU and non-EU migration with special attention to academic and work migration. The referendum and Brexit mentioned above have prompted the exploration of the following research questions:

Is there an interconnection between the UK's public opinion about migration and the number of migrants incoming?

Did the amount of invested funds into a region by the EU influenced the Brexit referendum voters' decision-making process in that given region?

Did the ratio of EU and non-EU workers alter after Brexit?

Did the number of higher education students with an EU domicile studying in the United Kingdom decline after Brexit?

## **2. Objectives and Methodology**

### **2.1 Objectives**

The main goal of this thesis is to comprehensively explore migration patterns in the United Kingdom in connection to the topic of “Brexit”, which is the act of the United Kingdom leaving the European Union in 2020 after a referendum that was conducted in 2016.

Particularly it is aimed to explore the opinion towards migration of the British citizens since the public has -within the referendum - made the decision to leave the EU. It examines whether the EU funding of a certain sphere in a region influenced the there residing people to vote in favor of remaining in the EU or whether maybe the age in a region is a relevant factor determining the referendum’s results in a region. Furthermore, the effects it brought to the UK in terms of migration stream alternation after the United Kingdom has left the European Union and has started to control the streams of migrants employing their own policies and regulations. The alternation of the migration from the EU and from the rest of the world is being examined on different examples including work migration and academic migration.

The research is relying on a combination of online and traditional sources. The primary focus is on secondary sources, with an emphasis on statistical data to provide a robust foundation for our analysis.

### **2.2 Methodology**

This paper is clearly displaying the high complexity and various interconnections the topic of migration has, hence it is clear that no single source could map it out in a sufficient manner. Nevertheless, upon reviewing the available sources, together, they outline a more understandable picture. Most of the sources are online articles, research papers and news pages from authors based in Britain and the EU.

This thesis strives to provide a deeper understanding by combining theoretical background, developmental graphs, information gathered from numerous research papers and online articles, statistical research, as well as a discussion and conclusion.

Since the time frame the thesis is investigating on is highly influenced by the COVID-19 pandemic, it is very difficult to measure exactly which effects are to be traced back to the

Brexit referendum and its measures and what was caused by the pandemic. For such an analysis it would require an advanced econometric model to be made.

Additionally, it is to be stressed, that throughout the sources it is obvious that often wise the research departments changed the methodology, ways of gathering and analysing data after the UK has left the European Union. This leads to the timeseries often ending soon after the Brexit referendum or after the act of leaving with no successor to be found.

An extensive literature review of existing literature on the development of migration streams in the UK, the public opinion on the matter - which is crucial since the decision to leave the European Union was made by the public within the referendum in 2016 - and additional connected topics was conducted. Providing the background of the European Union, its relationship and history with the UK, its organs, the countries, which have previously left the EU, the topic of referendums overall, the Brexit referendum, what led to it and what followed, the development, milestones, and current guidelines of migration. It is encompassing both online sources and relevant books identifying key themes, methodologies, and gaps in the current research landscape.

The relevant source selection:

1. **Online Sources:** Reputable online databases (Science direct, Springer, Google Scholar, Research Gate, Taylor and Francis online), government reports (Office of National Statistics and Archives of the EU), and academic journals to gather up-to-date information on migration trends, policies, and socio-economic impacts were utilized. The researcher employed advanced search techniques to identify relevant statistical datasets, ensuring the incorporation of the latest available figures.
2. **Books:** Identified relevant books addressing migration in the UK to gain historical context and nuanced perspectives. Additionally, qualitative insights and theoretical frameworks from selected books to complement statistical findings were employed to secure the complex outline of the matter in the most suitable way. However, due to the topic being fairly recent, online source outweigh books because of their availability and accessibility.

Statistical Research:

1. **Data Collection:** Leveraged official government databases, such as the Office for National Statistics (ONS) and the Archives of the EU, for primary statistical data with the addition of specialized migration databases and surveys to gather demographic, economic, and social indicators necessary.
2. **Data Analysis:** Statistical methods, including regression analysis, correlation analysis and data visualization, to interpret trends and patterns were applied to the carefully chosen datasets, followed by statistical findings with qualitative information from literature sources for a comprehensive understanding, which were cross referenced.

It was crucial to merge statistical results with insights from literature to construct a holistic narrative of the topic of migration in the UK and public opinion in connection to “Brexit”. Examined correlations, causations, and implications derived from the combined dataset.

After careful consideration of the underlying data, it is necessary to stress that all the data included into the thesis is apart from the “Brexit” referendum and the measures connected also influenced by other factors.

Highly influencing was the COVID-19 crisis, prompting economies worldwide to implement safety precautions to safeguard public health by introducing lockdowns and similar restrictions. The start of the global COVID-19 pandemic would be dated back to early 2020 when the virus began to spread.

The first lockdown in the UK was in March 2020, the second in November 2020 and the third in January 2021. In-between of the lockdowns the public was asked to be cautious, non-essential businesses were restricted in functioning, the governments all over the world introduced various ways how to battle the pandemic, which heavily impacted the global trade, migration, and many other fields of human existence.

Given that the timeframe under investigation is vastly shaped by the COVID-19 pandemic, it is challenging to exactly attribute effects to either the hereby examined Brexit referendum and the consecutive measures applied after leaving the EU or the pandemic.

Furthermore, it is to be emphasized that across most included sources, there is a noticeable trend of research departments frequently altering their methodologies after Brexit. Therefore, many timeseries conclude shortly after the Brexit referendum or the actual

departure without a subsequent successor. This fact has been acknowledged and limitations in the data sources, potential biases, and constraints in statistical methodologies have hereby been disclosed. Further detailed information about the datasets in use are being explained in the upcoming section where each and every dataset and their according methodologies have been described.

Sources, which were used to process this paper are always cited and compliance with ethical standards in data usage has been secured.

As to the future research recommendations, it is to be stressed that although the number of sources writing about the topic of Brexit, migration and the matters connected, the scientific background is rather weak. Unfortunately, most of the research conducted regarding Brexit so far are examining the impact the shift has had on the economy rather than migration. These papers tend to take migration as a constant and do not investigate on the human factor behind it. There are many articles talking on one hand about theories and on the other about obvious circumstances, however when searching for actual gathered datasets it is hard to find a relevant base to build research on. Most of the sources are either ending after or soon after the Brexit referendum or are working with vague migration estimates, because prior to the UK leaving the EU, it was challenging to monitor the streams of migrants, which now becomes more transparent thanks to the visa process established.

### **2.2.1 Comparison of GDP in Greenland, Algeria, and the United Kingdom**

The gathered dataset was downloaded from the World Bank national accounts data, and OECD National Accounts data files. According to the dataset description World Bank staff assesses the national accounts' quality with the intention of instituting adjustments, if necessary, in order to achieve a better consistency following international standards. However, noteworthy discrepancies remain between the above-mentioned international standards and the actual status.

The Gross domestic product (GDP) of countries, who have exited the EU in the past has been compared within a graph. The GDP was used to mirror each, and every chosen country's sum of value added by all its producers. The mentioned value-added stands for the amount of gross output of producers less the value of intermediate goods and services consumed in production, before accounting for consumption of fixed capital in production.



The final figures are calculated without taking in account deductions for depreciation of fabricated goods or for depletion and degradation of natural resources.

The Dataset ranges from 1970 to 2021 and is being limited by the measurements provided for Greenland, which only covers this particular timespan.

The data was gathered on annual basis and are measured in constant 2015 prices, expressed in U.S. dollars. However, as domestic currencies are used in the countries in question, the figures had to be converted on the base of a single year conversion by official exchange rates.

### **2.2.2 Share of people who think Brexit was the right or wrong decision**

The dataset used was gathered by the Statista Research Department in the timespan from the 26th of January 2020 till the 25th of October 2023. The included 2,035 respondents were adults – 18 years of age and older – from all over the United Kingdom. The respondents were asked to answer the question: “In hindsight, do you think Britain was right or wrong to vote to leave the European Union?”, whereas they have had option to answer in three different ways – that it was right to leave, that it was wrong to leave or that they don’t know. The results are displayed in percent. The gathered sample was weighted by age interlocked with gender and education, political attention, social grade, 2019 recalled vote interlocked with region and EU referendum recalled vote. The poll was carried out online.

### **2.2.3 The United Kingdom’s transactions with the European Union**

D. Clark from the Statista Research Department has based his timeseries of the UK transactions with the European Union from 1973 to 2019 (in million GBP) on the official report named “The UK's contribution to the EU Budget” of the House of Commons, which was released in January 2021. The values are being measured in cash prices. This dataset is bind to the region of the United Kingdom and the European Union.

The timeseries depicts how the contributions the UK made to the EU were spread over the years of membership comparing them to the amounts of public sector receipts (funding) and the rebates/refunds - as a correction for when the UK was making relatively large net contributions to the EU. The Receipts, which had been included do not include private

sectors receipts. These are often after competitive processes being directly allocated by the European Commission.

The Financial Settlement between the UK and the EU secured, that the UK would still be contributing to the EU Budget in 2020 as if it was a member state, although formally the UK has left the EU on the 31st of January 2020. However, as the timeseries shall show the development throughout the entire period of the UK's membership in the EU, which lasted from 1973 to 2019 taking in account full years, the contributions from 2020 were not considered.

#### **2.2.4 Number of applicants for undergraduate study at universities in the United Kingdom**

The Migration Observatory at the university of Oxford has constructed the within this thesis adapted timeseries of the number of applicants for undergraduate study at UK universities, where the applicants in question were divided by domicile (EU and non-EU) based on the UCAS 2021 Cycle Applicant Figures. The dataset ranged from 2012 to 2021.

The domicile of the surveyed persons refers to the applicant's declared country of permanent residence. According to Poole and Kiers (1978, online) explanation, the term domicile is not synonymous with the word residence or nationality. However, it is possible that they can go hand in hand with each other, e.g., an individual may have a French domicile, be a French resident and a French national. The applicants are split into 2 groups depending on the domiciled country's membership in the EU - EU and non-EU. Both categories exclude UK-domiciled applicants.

#### **2.2.5 Number of Long-term work immigration**

The timeseries depicting the Number of Long-term work immigration by domicile from 1991 to 2019 was adapted from the migration observatory at the University of Oxford and primarily gathered by the Office for National Statistics.

According to the United Nations, which the Office of National Statistics draws the definition from, a long-term international migrant is as follows: *"A person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence,"* (UN, 1998, online)

The Long-Term International Migration (LTIM) figures are produced from the International Passenger Survey (IPS) estimates, which offer the total subtraction of long-term migration inflow and outflow of the data gathered on the territory of the United Kingdom.

The sample survey stems from a voluntarily conducted survey, which is being obtained at all principal transportation routes, that the UK has. The gathered results are then grossed up by weighting chosen relevant factors. Hence the in the survey included figures are estimates not exact measurements.

The number of skilled work visas would have been an alternative to using this dataset, however it is apparent that before the post-Brexit system was introduced, these figures would show low values compared to the measurements after the new policies were applied as those would reflect migrants from the EU, which under free movement did not require visas.

Contributing to the correct geographical deployment of the incorporated migration is the Labor force survey (LFS). This source helps the IPS estimates with the inflow data calibration.

The 2 examined groups divided by domicile to EU migrants and non-EU migrants are based upon the division of immigrants given by their country of origin, where EU membership of the migrant's state of origin at the time, when the migration took place, is the decisive factor.

This particular survey uses 95% confidence intervals to indicate the reliability of IPS estimates.

## **2.2.6 Total net migration of the United Kingdom**

The dataset in question displays the timeseries of net migration of the United Kingdom in time (from 1950 to 2023) comes from the figures gathered by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2022) that annually presents the latest global set of demographic estimates and projections. The update version of UNData which was used within this paper was released on 07.10.2022.

The dataset figures represent an essential demographic indicator – net migration - spanning over the period from 1950 to 2023. It is encompassing the global scale, development groups, regions, subregions, and countries or areas with a population exceeding 1,000 in 2021 at the point of measurement. In the areas where the population was below

1,000 inhabitants in 2021, only figures related to population size and growth are included. This in 2021 revised dataset includes estimates and projections spanning a 150-year timeline, categorized into estimates (1950-2021) and projections (2022-2100). However, for the sake of this thesis only the figures till 2023 were used as that is the year this thesis was written.

UNData offers a sample set of summary indicators, while more detailed data was not necessary to be included for the sake of this paper.

### **2.2.7 Net migration of the United Kingdom by domicile**

The dataset capturing the net migration in the UK divides the migrants into groups based on their domicile – EU, non-EU and British. The dataset was gathered annually (every Q4) by the Office for National Statistics in the United Kingdom over the timespan from 1991 to 2022. The Statista research department then adapted it into a graph.

The International Passenger Survey (IPS) estimates of long-term migration inflow and outflow of the UK Data is the primary source used to compile the EU Work Migration and the Non-EU Work immigration figures.

It is a sample survey being conducted voluntarily at all principal transportation routes, where the results are afterwards being grossed up by weighting chosen relevant factors. The included figures are therefore estimates instead of exact measurements.

The Labor force survey (LFS) additionally provides a geographical outline of the migrants for purposes of IPS inflow data calibration.

The division of the 3 examined groups was conducted by the domicile of the migrants. There are British, EU migrants and non-EU migrants. The belonging to a certain group depends on the migrant's home-country, where either they are British or the factor of the EU membership of the state of origin at the time, when the migration took place, is the decisive factor.

The surveys confidence level is 95%.

### **2.2.8 Estimated net migration of EU citizens to the United Kingdom**

The Office of National Statistics' (2023, online) dataset, which the Migration Observatory took and used to construct the within this thesis adapted Graph 8: Estimated net migration of EU citizens to the UK (per year) follows the below described methodology.

In order to estimate the migration of EU nationals, the Office of National Statistics relies on the Methods for measuring international migration using Registration and Population Interaction Database (RAPID) administrative data.

Developed by the Department for Work and Pensions (DWP), RAPID serves as a unified platform providing a comprehensive view of citizens' interactions across DWP, HM Revenue and Customs (HMRC), and local authorities via Housing Benefit. Covering individuals with a National Insurance number (NINo), RAPID summarizes the number of weeks of "activity" within these systems for each person in each tax year. Records are categorized as either long-term or short-term based on patterns of interactions with the tax and benefits system. For identifying long-term immigrant students, we use the Higher Education Statistics Agency (HESA) dataset and HMRC Pay as You Earn Real Time Information (PAYE RTI) data.

RAPID is provided to the Office for National Statistics (ONS) annually in Quarter 3 (July to Sept) for the preceding tax year.

The IPS was reinstated in January 2021. Estimates from January 2021 to December 2022 are being used instead. To cover the period when the IPS was suspended (March to December 2020), the state space model (SSM) time series analysis was employed. This method utilizes available IPS and administrative data, using their relationship to estimate missing IPS data.

### **2.2.9 Percentage of people who see immigration as one of the most important issues**

Clark (2023, online) from the Statista Research Department conducted a study in the region of the United Kingdom, which was measuring the Percentage of people who see immigration as one of the most important issues in the UK over the timespan of 1990-2022. The release date of the dataset was in June 2022.

The exact research question, which was used within the Telephone interview was as follows: "What do you as the most/other important issue facing Britain today?" Multiple answers were possible.

The respondents were of a total count of 1000 and were 18 years old and older (Adults in the United Kingdom).

There are various studies to be found dating far back into the 1960's that were examining the public opinion on migration. However, the alterations in question wording over the years cause that these cannot be viewed as a single cohesive continuum.

### **2.2.10 The United Kingdom's Total Trade by Countries of the European Union and the rest of the World**

Based on data processed by Jeffries (2023, online) from the Research department of the Office of National Statistics, a graph has been constructed within this paper to provide the information about the United Kingdom's Total Trade by Countries of the European Union and the rest of the World in current prices million £ and Non-Seasonally Adjusted. The timeseries' span is from 1997 to 2021.

The gathered data consists of an aggregated quarterly goods and services estimate and combines the most recent estimates for goods and services split by country. Whereas for the sake of this thesis the countries were divided into two groups – countries of the European Union and the rest of the World.

The data of goods and services is uniform for both annual global aggregates and quarterly breakdowns and is in alignment with trade data releases in the Quarterly National Accounts, Quarterly Sector Accounts, and Quarterly Balance of Payments on September 29, 2023.

These figures represent the ONS' most accurate estimation of bilateral UK trade flows.

### **2.2.11 Income inequality amongst the Top 10% and Bottom 50% of adults in the United Kingdom**

The source - The World Inequality Database (WID)- offers graphs displaying various types of indicators that help the reader to better understand the situation in a chosen country. The graph chosen to support this thesis' idea involves the pre-tax national income inequality amongst the Top 10% and Bottom 50% of equal-split adults in the United Kingdom ranging from 1980 to 2020.

WID involves a wide range of data sources, including national accounts, survey data, fiscal data, and wealth rankings. This complex approach facilitates a more precise tracking of the evolution of income or wealth across all levels.

The dataset's methodology is grounded in the framework of Distributional National Accounts (DINA). Primarily the objective of the WID is to systematically amalgamate and harmonize diverse data sources, encompassing national income and wealth accounts, household income and wealth surveys, fiscal data from income, inheritance, and wealth taxes (where applicable), along with wealth rankings.

### **2.2.12 Statistical Analysis**

The practical part consists of several statistical analyses which have been conducted in the program SPSS, later described based on the results and compared to other studies within the discussion section.

Correlations of 2 variables seemed to be the most suitable way how to test the retrieved datasets. The primary goal of the statistical analysis was to examine the relationships between two included variables X and Y using for example the Pearson correlation coefficient. This method aims to quantify the strength and direction of a linear relationship between the variables.

It was first necessary to clearly define the two variables for each test, which was made, that would be under investigation, ensuring they are ordinal or at least ordinal in nature for the prerequisites of this test to be fulfilled. The datasets used were retrieved from reliable sources and were representing samples of various social and migration associated phenomenon.

Since the Pearson coefficient is sensitive to extreme values, if necessary, the data was normalized. Prior to the execution of the Person test, it was made sure that the datasets had a linear relationship between the variables. An assessment regarding the homoscedasticity was made, ensuring the residuals' variability is constant across all levels of every chosen independent variable.

The results are based on a calculation with n pairs of values (xi, yi). The correlation coefficient ranges within the interval  $\langle -1;1 \rangle$ . This tests p-value (associated with the correlation coefficient) is crucial. If the p-value  $< \alpha$  (where  $\alpha$  is the chosen significance level), the correlation examined is considered statistically significant. When interpreting the monotonic relationship between the variables the values that are close to +1 indicate a strong positive monotonic relationship, suggesting that when the value of one variable increases, the value of the other variable increases as well. On the other hand, values close to -1 suggest

a strong negative monotonic relationship, meaning that if one variable shall grow the other declines. Values near 0 suggest a weak or no monotonic relationship.

The coefficient's formula is as follows:

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X}) (Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2} \sqrt{\sum_{i=1}^n (Y_i - \bar{Y})^2}}$$

Picture 1: Formula of the Pearson correlation coefficient (Adapted from: Hindls, 2007)

However, not all analysis could be based on the above explained Pearson coefficient as it was not suitable for all the tested datasets since according to Fraenkel and Wallen (2009) it requires a minimum of 30 measurements. Some datasets under examination however have not had a sufficient number of figures, which led to using the Spearman's rank-order correlation coefficient using the following formula:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

Picture 2: Formula of Spearman's rank correlation coefficient (Adapted from: Fraenkel & Wallen, 2009)

- $\rho$  = Spearman's rank correlation coefficient
- $d_i$  = difference between the two ranks of each observation
- $n$  = number of observations

### 2.2.13 EU funds to support the labor market per thousand inhabitants

The source for the main dataset of EU Funds was the cohesion open data platform (online), which provides transparent data to EU taxpayers on the use of EU budget funds. The values of Implementing active and preventive measures on the labor market was chosen to display the support the labor market in the given region has had in thousands of EUR. This variable was chosen as it lies close to the overall topic of the diploma thesis and taking



the entire range of various funds would be a topic, which would be too broad and wouldn't anymore support the desired outcome. The values are from 2013 as no dataset closer to 2016, when the Brexit vote was held was available.

In order to be able to use the chosen dataset, the initial unit setup which these measures were taken in - Nomenclatures of Territorial Units for Statistics 2 (NUTS 2) - had to be manually converted to Nomenclatures of Territorial Units for Statistics 1 (NUTS 1), which is superordinated to NUTS 2.

The below table 1 lists the NUTS 1 used within this paper.

UK REGIONS ACCORDING TO NUTS 1
<ul style="list-style-type: none"><li>• North East England</li><li>• North West England</li><li>• Yorkshire and the Humber</li><li>• East Midlands</li><li>• West Midlands</li><li>• East England</li><li>• Greater London</li><li>• South East England</li><li>• South West England</li><li>• Wales</li><li>• Scotland</li><li>• Northern Ireland</li></ul>

*Table 1: UK Regions according to NUTS 1 (Adapted from: Office for National Statistics, online)*

Additionally, the amounts of EU Funds to every NUTS 1 had to be divided by the number of inhabitants the NUTS 1 region had in 2013, when the funds were measured. The number of inhabitants used comes from the Office for National Statistics of the UK Annual mid-year population estimates released for 2013.

For the most suitable outlook of the dataset Thousands of inhabitants were used to divide the amount of funds for Implementing active and preventive measures on the labour market for every NUTS 1 region.

#### **2.2.14 Percentage of people, who voted to leave the European Union in the Brexit referendum divided into NUTS 1**

The Electoral Commission (2019, online) has a full dataset on the results of Brexit referendum from 2016 divided into NUTS 1. These are the exact results, which were collected via the Commission's results collation system (RCS) or directly from Counting Officers and Electoral Registration Officers.

### **3. Literature Review**

#### **3.1 The European Union & the UK**

The development of the currently functioning setup of the European Union involves several milestones, that had to be met in order to secure peace and international partnership (Europe Direct Strasbourg, online).

After the end of the second world war Winston Churchill came with the concept of creating a kind of United States of Europe, where Germany and France would lead the way and the UK would stand back and observe rather than engage (Helm, 2016, online).

The year 1951 marked the beginning of a certain grade of international cooperation with the signature of the Treaty of Paris, which established the Coal and Steel Community. The founding members of this community were: Germany, Belgium, France, Italy, Luxembourg, and the Netherlands. This cooperation was established for the sake of interconnecting the heavy industries so none of the member countries would have the option to produce weaponry and attack the remaining members (Abelshausen, 1994).

In 1957 the same set of states gathered to establish the European Economic Community (EEC) and the European Atomic Energy Community (Europe Direct Strasbourg, online). The treaty of Rome was signed, where the UK solely sent one observer to the signing process (Bulmer & Quaglia, 2018, online).

During the Stockholm convention in 1960 an agreement was signed by Britain, Switzerland, Sweden, Norway, Denmark, Portugal, and Austria establishing the European Free Trade Association which promoted the free trade and economic integration in-between of its member states (EFTA, online). This cooperation offered an alternative for countries who were not members of the earlier mentioned EEC (Tognina, 2019, online).

In 1961 Britain first applied for membership in the predecessor of the EU since the then prime minister, Harold Macmillan, believed that it could be harmful shall the UK remain excluded from this international cooperation. Even than certain Eurosceptics spoke out about the UK losing its independency and thousands of years of history on the grounds that Britain would enter (Helm, 2016, online).

A common custom unit underneath the EEC was introduced in 1968, which led to the elimination of customs duties for member countries (European Commission, online).

The first wave of enlargement of the EEC from 1973 contained countries of northern Europe – amongst which the United Kingdom and Denmark are to be found - who as a result

were both forced to give up their membership in the EFTA. However, the UK was facing unpleasant troubles with the accession at first. In 1963 and 1967 the then French president Charles de Gaulle rejected the UK's applications to enter the union (Bulmer & Quaglia, 2018, online).

During the second press conference held on the topic of Britain's membership rejection in 1967 he expressed his concerns that the UK was not ready to be a member of the community since firstly they confirmed accepting the full extent of the current setup eligibly without any restrictions, however later they ask for negotiations to be led. He was afraid they would not be able to join "without breaking what exists". The UK's chronic balance of payments driven by imports being much higher than exports, the following devaluation of the Sterling and the fact that they have one of the "reserve currencies" making it rather prone to external instabilities (Goldsmith, 2017, online).

Obvious reasons of economic instability were nonetheless not the only reason Charles de Gaulle was afraid of the country joining (Tognina, 2019, online).

He felt that the French non-profitable farming industry, which back then made up to 25% of the French economy and provided for about 1/5 of the French society was threatened by the well-functioning efficient agriculture in the UK. Considering the importance of agriculture in the French economy 1962 they incorporated the concept of the common agricultural policy (also called CAP) into the already existent alliance, which was designed to merge the markets of the member states and - up to a certain grade - help protect the members' trade and guarantee a unified price level of agricultural goods. Considering that the UK's agricultural products were more efficiently produced, they also were sold for better prices hence the French feared that the Brits would refuse to accept these conditions and needed to implement the policy prior to the UK entering the EEC (Tognina, 2019, online).

Nevertheless, after Charles de Gaulle resigned, the United Kingdom entered the EEC in 1973. When joining Britain had to adjust to the full range of valid rules and regulations the members were compiling over the years of existence at once. This large change had serious consequences on the UK's core functioning concepts (Goldsmith, 2017, online).

After the British labor party regained power in 1974 the conditions of the UK within the EEC were altered, and the prime minister promised to hold a referendum in regards to the membership (Helm, 2016, online).

As of 1975 a referendum was submitted for the public to decide whether or not the UK shall remain in the European Economic Community or leave. Contrary to the 2016 vote the then 67% of the British folks decided to remain (Helm, 2016, online).

A few waves of enlargement followed and another major agreement – the Schengen agreement - has been signed in 1985, which nowadays allows travelers to travel amongst the member countries without mandatory identity checks (Europe Direct Strasbourg, online).

This agreement allows EU citizens to be treated equally in every member state of the EU in terms of the following:

- *„Access to employment*
- *Working conditions*
- *Taxation*
- *Access to training*
- *Access to trade unions*
- *Access to (for example) housing, education, education for their children“* (Citizens information, 2022, online).

In 1988 Margret Thatcher, the then British prime minister, held a speech in which she criticized the idea of the EEC to become the United States of Europe. She argued by giving the example of the Soviet Union and its centralized legislative processes and the community going in this direction, despite the obvious fact that success derives from power dispersion and decision-making away from the center. She claimed for example as well that she is against abolishing border controls since they were according to her a mean to protect the citizens and stop the movement of drugs, terrorists, and illegal migrants (Palmer, 1998, online).

However, aside from largely contributing to the shape of the setup of the community, her decision making during her 11-year long tenure is one of the reasons leading to the UK's current state of economy. The most significant legacy she has left behind is probably her radical concept of privatization, which become popular amongst many countries because it increased the size and efficiency of the international market (Parker, 2012, online).

Despite of the general success, the effects of these measures amongst others negatively impacted the Railway system as it was overtaken by several companies, who were not in proper alignment. Most challenges leading to major rail accidents were solved whatsoever. The British government also sold several water and sewer agencies, however implemented

interventions regarding the prices resulting in efficiency and service quality immensely stagnating (Edwards, 2017, online).

Some experts claim that control over a natural resource shall not be put into the hands of someone with profit on his mind. Environmental scandals, poor water management and network insufficiency is a problem the UK is battling with till the present days (Inman, 2021, online).

All along with the spread of privatization, technical innovations and other changes that were shifting the shape of the world a need arose to make living and working for European citizens within the interconnected states more efficient. Thanks to the Treaty of Maastricht signed in 1992 the EU citizenship was established (Citizens information, 2022, online). The three pillars of the European Union were established adding justice and home affairs and foreign and security policy to the existing European community (EUR-Lex, 2018, online).

2002 marked the establishment of the Eurozone, which meant that the countries entering this zone had to accept the Euro as their official mean of payment (Europe Direct Strasbourg, online).

When in 2016 a single referendum rapidly changed the climate in regard to the European union in the UK. The people in the United Kingdom were supposed to vote, whether they want their country to remain in the European union or leave. With a voter turnout of 72 % - 51.9 % of voters were in favor of leaving (Europe Direct Strasbourg, online).

This decision started a big wave of negotiations and resulted in the United Kingdom leaving the European Union on 31 January 2020. Throughout the period between the referendum (23 June 2016) and the final step of leaving the EU (31 January 2020) the UK changed its prime minister 3 times - David Cameron, Theresa May, Boris Johnson (Europe Direct Strasbourg, online).

## **3.2 European Institutions**

The fundamental institutions, which started the European Union were established in the 1950s. This group contained the Commission, the Court of Justice, the Council, and the Assembly, which later changed to the European Parliament as a newly established political experiment (Haas, 2004, online).

This body is nowadays particularly relevant to any enlargement attempts since not only every member state needs to agree with the accession of an applicant, but also the European Parliament decides whether the applying state is to be accepted or not (European Parliament, online).

Since the establishment of predecessor of the EU, we have gone through seven waves of enlargement, the exit of Algeria, Greenland, and the Brexit – the within this paper discussed exit of the United Kingdom. To the present moment the union counts 27 members and several candidates for membership (European Commission, 2023). As time goes by new institutions such as the European Border and Coast Guard Agency, European External Action Service, European Council, and the European Central Bank were additionally introduced (Brooks and Geyer, 2020, online).

The main common discussion points of the European institutions have been the following in the recent years: the Euro crisis, the refugee crisis, the global climate emergency, and Brexit (Brack and Guerkan, 2020, online). Additionally, very recently the European society has been featuring the topics of the Corona virus (COVID-19) response, the global food security, the energy crisis, and the Ukraine war (European Commission, online).

They are often being criticized – emphasis on the European Commission - for a “democratic deficit” often pointing out their technocratic style of policymaking (Majone, 1998, online). This point of critique was also used within the “Take back control” campaign being run by the “Leave” side promoting the UK’s exit from the EU (Haughton, 2017, online).

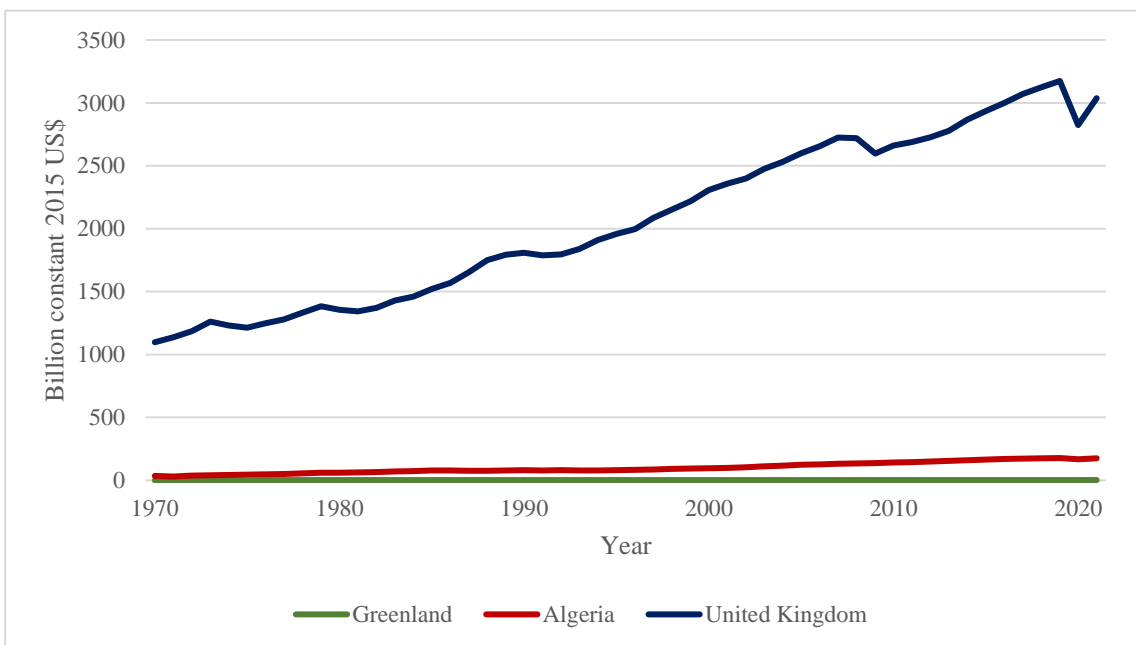
### **3.3 Withdrawals from the European Union**

According to Article 50 of the Lisbon Treaty on the European Union it holds true that “*Any Member State may decide to withdraw from the Union in accordance with its own constitutional requirements*” (Lisbon Treaty, 2007).

The UK is not the first country to exit the European Union. After obtaining independence Algeria left in 1962 and in 1985 Greenland has left the European Community after being a member for twelve years. Initially the countries become member states as territories belonging in the case of Greenland to Denmark and in the case of Algeria to France. However, after the introduction of home rule in Greenland in 1979 a referendum

was held in 1982 which resulted in the majority of voters deciding to leave the European Union (World Atlas, 2019, online).

Nevertheless, these cases cannot be compared to the case of the United Kingdom leaving the EU as Greenland remains till the present days an autonomous territory of the Kingdom of Denmark (Eur-Lex, online) and as per Graph 1 below the GDP (Billion constant 2015 US\$) of both the countries in question - as it is obvious when looking at the lines - lies significantly under the level of the UK – Algeria counts 174,03 Billion US Dollars as of 2021, Greenland 2,75 Billion \$ and the UK 3.04 trillion US Dollars (The World Bank, online).



*Graph 1: Comparison of GDP (Billion constant 2015 US\$) in Greenland, Algeria, and the United Kingdom (Adapted from: The World Bank, 2021, online)*



## 3.4 Referendums

A referendum is an electoral mean, which allows the public, which is eligible to vote to express their opinion on governmental policies and proposed legislations. Usually, it gives the voter the option to approve or reject a certain legislative action (Britannica, online).

### 3.4.1 Referendum guidelines in the United Kingdom

According to the British Government's official website a referendum is a vote on a single given and explicitly explained issue. The particular rules that apply for every referendum are to be agreed prior to the vote. Main guidelines can be adjusted e.g., who can vote and which criteria the winning argument has meet in order to be valid (gov.uk, 2022, online).

Generally, however voters must:

- *“be registered to vote,*
- *be 18 or over on the day of the referendum (“polling day”)*
- *be a British, Irish or Commonwealth citizen*
- *be resident at an address in the UK or Gibraltar (or a British citizen living abroad who has been registered to vote in the UK in the last 15 years)*
- *not be legally excluded from voting“* (gov.uk, 2022, online).

### 3.4.2 The 2016 Brexit Referendum

The United Kingdom was a member of the EU for 47 years. However, according to the Congressional Research Service (2018, online) Eurosceptic tendencies arose within the member states of the European Union feeding from a wide range of challenges of Political and Economic notion. This led to David Cameron winning the elections in 2013 with his conservative party by promising the British public that he would seek to renegotiate the UK's relationship with the EU and then give the British people the chance to vote within a referendum (BBC, 2016, online).

Simionescu et al (2015) claim that the vote was vastly influenced and in fact unveiled the great impact that mass media and its culture hold over the public.

In 2016 the Brexit Referendum was held, where the British public was asked the question “Should the United Kingdom remain a member of the European Union or leave the

European Union” (Greenaway & Milner, 2018, online). As per the valid guidelines for referendums held in the United Kingdom, the government could have adjusted the voting conditions prior to the vote. They could have given citizens of 16 years of age the right to vote within this particular referendum to have more inclusive results. Also, they could have set a minimal voter turnout or minimal vote percentage in favor of the winning argument for the result to be valid. Nevertheless, they did not take these options in account which later resulted in a wave of experts and commoners criticizing the credibility of this vote (Brusenbauch Meislová, 2021, online).

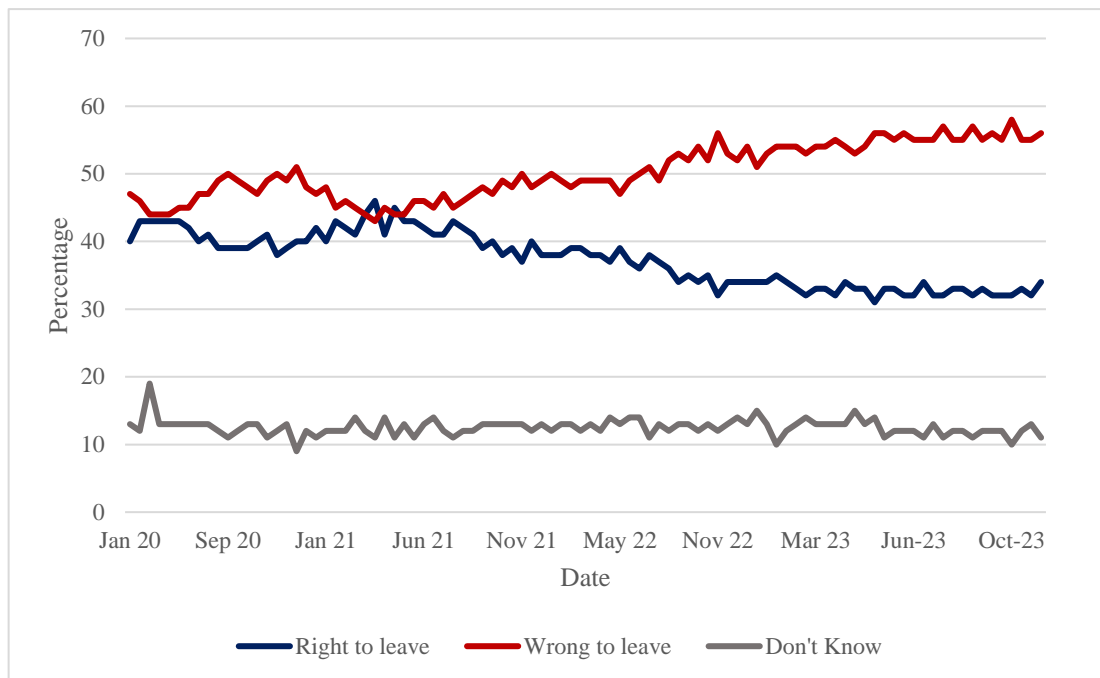
The Brexit referendum had a voter turnout of 72 % with 51.9 % of voters being in favor of leaving (Europe Direct Strasbourg, online). Initially, opinion polls suggested that the status quo – remaining in the EU – would get the majority of votes. However, contrary to everyone’s belief voters chose to leave the EU and after the election results have been published David Cameron has announced, that he will step down as prime minister (BBC, 2016, online).

Some politicians - including the prime minister in office after David Cameron Theresa May - suggested that a second referendum on Brexit shall be held (Johnston, 2018, online). Many reasoned this with the public’s missing awareness and understanding of the consequences given by the wireway from the European union (Greenaway & Milner, 2018, online). Additionally, it was to be weighed, whether such an important decision is to be put in the public’s hands (Brusenbauch Meislová, 2021, online).

A study was conducted in spring 2015 by the Eurobarometer, which suggests that according to the results of this survey featuring about 1,000 respondents per EU member state, Britons seem to be among least knowledgeable about the EU at the time when the referendum was held (Eurobarometer, 2015, online).

The results have been vastly influenced by the publicly more seen (compared to the opposing “Britain Stronger in Europe” campaign) and resonating “Leave” Marketing Campaign, which was supported by many prominent politicians like Boris Johnson and Michael Farage, who could together target a broad range of voters (Brusenbauch Meislová, 2021, online).

Copeland stresses, that the official campaign, “Leave” consistently stayed on point on both the key frame in use and its components. In contrast, the campaign of “Britain Stronger in Europe” employed no fewer than five different frames, which were frequently internally cluttered, thereby diminishing the campaign benefits of repetition for the electorate.



Graph 2: Share of people who think Brexit was the right or wrong decision 2020-2023

(Adapted from: Statista, 2023, online)

Graph 2 suggests that according to a study conducted by the Statista Research Department over the timespan of the past 3 years (January 2020 to October 2023) where British were asked the question “In hindsight, do you think Britain was right or wrong to vote to leave the European Union?”. It is obvious that at first when Britain actually left the EU in January 2020, the majority of respondents were convinced that it was a good decision till about June 2021 when the trend of respondents rather doubting the decision of leaving started rising. At the present moment – last measurement on the 25th of October 2023 – 34 % of respondents think it was right to leave, 56 % think it was wrong to leave and 11 % do not know. Over the entire timespan of the conducted study, the group of indecisive respondents has generally ranged between 11 and 14 % (Statista, 2023, online).

The Statista Research Department (2023, online) claims, that the declining support of Brexit heavily correlates with the fall in the government’s approval ratings, particularly since the era of former Prime Minister Boris Johnson. On the other hand, what might have influenced the boom in support in Spring of 2021, was the - compared to other major EU countries – fast rollout of the COVID-19 vaccinations.

Some of the crucial topics that made the base of the arguments used throughout the leave campaign were for example connected to the centralized decision-making regarding the mandatory contributions and the subsequent redistribution of funds, the customs union or migration (Kovacevic, 2019, online).

This statement is supported by a quote from an article Boris Johnson, the then prime minister of the UK, wrote – published by the Daily Mail on the second anniversary of Brexit in 2022, “*We have taken back control of our money, our borders, and our laws. We have done more than 60 free trade deals,*” (Johnson, 2022, online). However, Sidaway & Bachmann (2021, online) claim, that UK’s geopolitical position is the most uncertain since the 1940s after Brexit. Latorre et al. (2020, online) also stress that while EU based businesses still have the chance to compensate for the reduction in trade with the UK, the UK loses its advantageous entry to the EU market and will no longer be eligible to benefit from EU trade agreements with other countries. Stressing that recovering lost trade with the EU through dealings with third-party nations will be challenging.

Supporters of Brexit often wise criticized the contribution the UK was obligated to make to the EU, and they argued that it would have been better to keep the money and have the British Parliament decide about the needed expenditures (Lee, 2016, online).

The sum of these contributions made by the member states all along with import duties on products from outside the EU, a new contribution based on waste coming from non-recycled plastic packaging, and fines for businesses who fail to comply with EU rules are the EU’s sources of income (European Union, online).

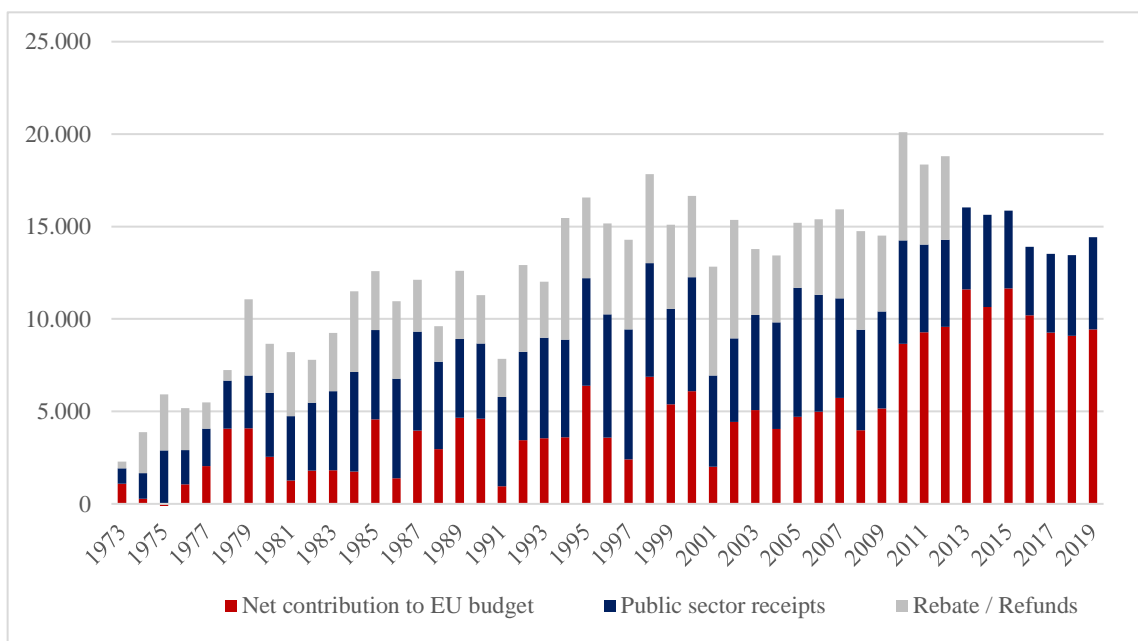
This budget is then being redistributed amongst the member states according to a centralized long-term plan, which aims to support development and invest into key areas. Since within the EU, as an international system, wealthier members tend to have a strong preference for domestic redistribution, the EU budget suffers from low capacity (Citi & Justesen, 2020, online).

Although up to a certain extend funding might come back to the country the ways to channel it are clearly defined by the EU’s strategy. “*The EU budget is primarily an investment-focused budget, with an emphasis on allocating resources towards specific EU-wide goals, rather than duplicating national budget allocations,*” (Downes, Moretti & Schreie, 2017, online).

As we can see the Graph 3 below depicts statistically how the contributions the UK made to the EU were spread over the years of membership comparing them to the amounts

of public sector receipts (funding) and the rebates/refunds - as a correction for when the UK was making relatively large net contributions to the EU (Keep, 2022, online).

However, there is to be stressed that the former UK's net contribution shall not be understood as some sort of final statement about the total economic effect the UK used to benefit from thanks to the membership in the EU. It is solely to be taken as an amount of direct financial flows into the EU's budget, which, for example, does not cover the benefits the businesses based in contributor countries have from being in the EU's single market (Keep, 2022, online).



*Graph 3: UK transactions with the European Union from 1973 to 2019 (in million GBP)  
(Adapted from: Statista, 2023, online)*

The concept of the EU is strongly connected to a common market and therefore also a customs union. This collaboration quite essentially secures the EU to be perceived as a single market. For importers from non-EU countries this means that member states of the EU have a common approach to tariffs and duties – once goods passed the customs of one member state successfully, they can be traded freely amongst all the member states (Morris, 2020, online).

Within any trade negotiations the EU is considered a whole, which might result in less favorable conditions of some members in particular branches than if they would try to negotiate their own terms with that given country. Although, this is not always the case, this

is one of the arguments the Leave campaign was working with. Considering the economic strength of the UK compared to the EU, the UK is not such a strong player, hence some countries might offer better conditions (Morris, 2020, online).

Since Brexit, the UK has re-gained the option to make its own trade deals with other countries. According to the Trade and Cooperation Agreement – the currently valid guideline structuring the relationship of the EU and the UK as a result of Brexit – the UK has a free trade agreement with the EU. This secures that no tariffs or customs will be imposed when mutually trading goods, however this advantage comes with extra bureaucracy (customs declarations) and a need to prove how and where the goods were produced (Morris, 2020, online).

In future, shall the health and security standards for certain product categories grow apart, companies engaging in trading activities will face the struggle of a possible difference in regulations of obligatory security standards given by the EU varying from the ones valid in the UK. The EU for instance follows the Restriction, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation. Companies in the UK no longer have to follow these rules as the UK has left the EU. However, as soon as their goods shall access the EU the regulations are to be followed (Assent, online).

Foster (2021, online) stresses that on the field of scientific research, it is particularly important for the EU and the UK to stay in alignment. According to him a framework for future cooperation is necessary in order to maintain the over the past few decades developing international partnership. However, research in the United Kingdom is suffering not only from the loss of collaboration with former EU colleagues, but also because of holders of European Research Council grants, were forced to move to the EU in order to continue their research without losing their funding (nature, 2023, online).

As previously mentioned additionally to the argument of taking back control over the trade deals, the Britons aimed to control the streams of migrants coming to the UK more efficiently. Before Brexit European citizens had the option to enter the UK, live and work there with no need of visa or extensive border controls and vice versa. Nowadays the rules have changed – per 180 days there is a 90-day long visa-free period, which allows the British to spend this time in the EU and EU passport holders the same conditions in the UK. In regard to the long-term migration arrangements the point-based immigration system was newly established where the UK grants EU and non-EU citizens the same treatment (BBC, 2021, online).

<b>STUDENTS</b>	<b>SKILLED WORKERS</b>
<p>£348 to apply for a student visa from outside the UK</p> <p>£475 to extend or switch one from inside the UK</p> <p>The UK is excluded from the Erasmus Exchange program</p>	<p>between £610 and £1,408 per person - unless an individual has skills the country is short of</p> <p>People applying for visas will also have to pay a health surcharge of £624 per person per year unless they are healthcare workers.</p>

*Table 2: Visas and immigration - Current costs of visa applications to enter the UK for students and skilled workers (Adapted from: gov.uk, online)*

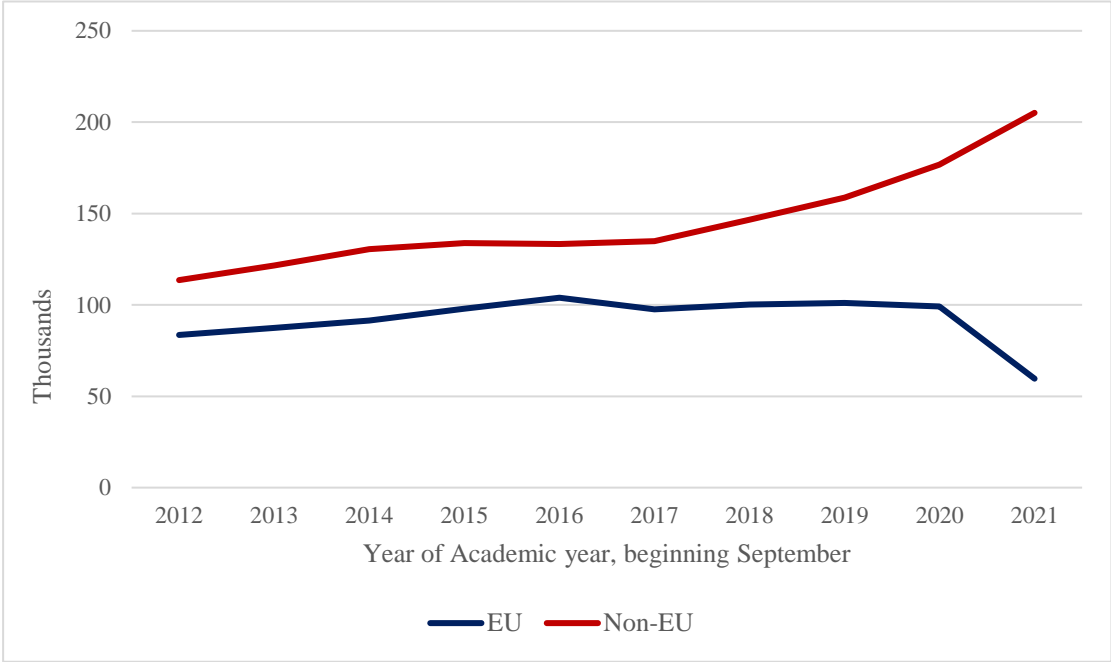
Contrary to the already mentioned option European Citizens have had in the past to study and work in the UK just like in any other European country unlimited and for free, now with the new regulations they are obligated to undergo the visa process just like non-EU citizens. Table 1 summarizes current rules that apply for students and workers from abroad, who decide to go to the United Kingdom (gov.uk, online).

Not only the costs connected to the visa process but also the requirements, which had to be met in order to be eligible to even apply for the visa, were particularly worrisome to people engaging in scientific research. In 2020, when the Immigration Bill was returned to the House of Commons, concerns were expressed in regard to the required minimum income necessary to apply for the visa as it would have been challenging for low-income technicians which are essential members to every research team to relocate. In response the threshold was lowered, and exceptions were allowed (Foster, 2021, online).

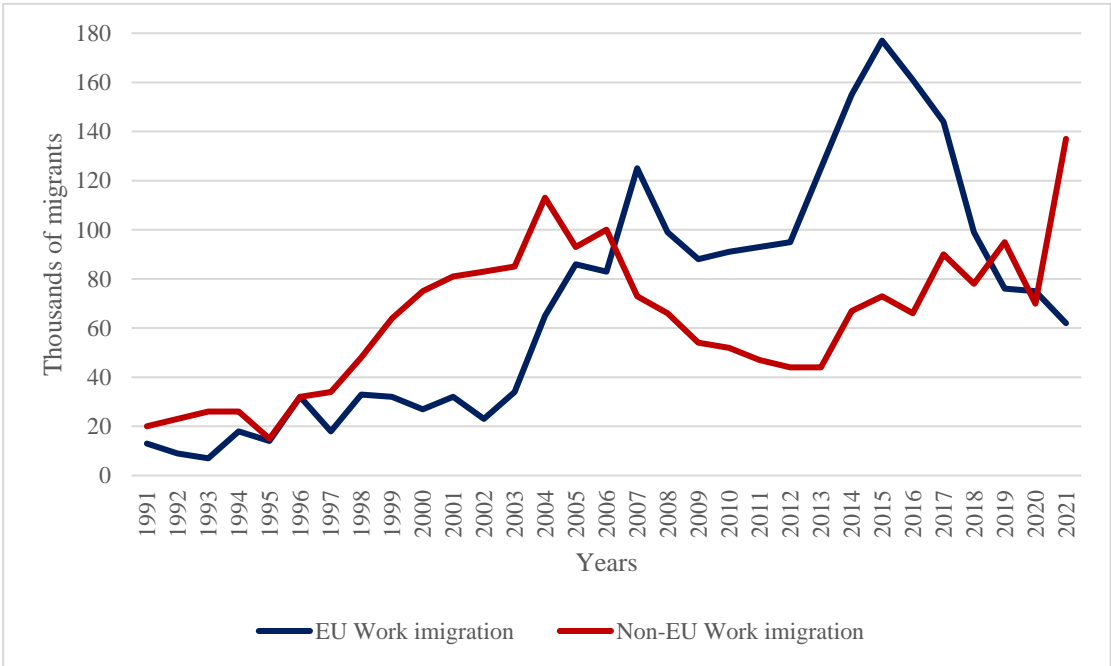
International collaboration between the UK and the EU was working well over the past decades, however the UK being excluded from the Erasmus Exchange program will cause a major loss in relationship between academic staff. Nevertheless, the UK introduced the unilateral Turing scheme, which has a similar concept to the reciprocal Erasmus network, however it only offers outward mobility (Highman Et al., 2023, online).

### 4. Migration

Graph 4 all along with Graph 5 show that as well as the academic migration, the work migration has been impacted by the Brexit referendum.



Graph 4: Number of applicants for undergraduate study at UK universities, by domicile (Adapted from: The migration observatory, 2023, online)



Graph 5: Number of Long-term work immigration, by domicile (Adapted from: The migration observatory, 2022, online)



On the horizontal X axis, of Graph 4 we find the variable of time representing the included academic years from 2012 to 2021 (academic years beginning Sept). Whereas the number of applicants for the final academic year included, which was to begin in September 2021 is the sum of the amounts of undergraduate study applicants applying by the following three UCAS deadlines: October 2020, January 2021, and June 2021. The vertical Y axis is mapping the number of applicants in thousands.

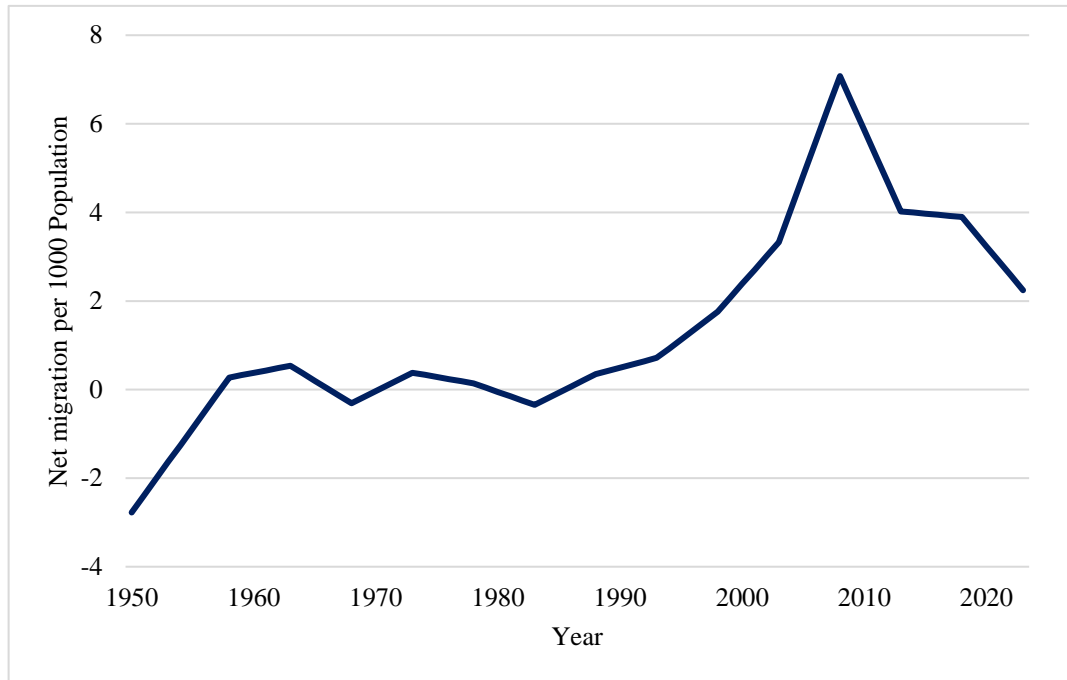
Graph 5 displays the timeseries of Numbers of Long-term work immigration dividing the migrants into 2 groups - EU and Non-EU depending on their declared domicile.

Partly the Covid-19 restrictions starting in 2020 might have influenced the decision-making process of all the migrants, however especially in the trend of the EU work migration – captured in Graph 5 – it is obvious that the figures start declining right after the Brexit referendum was held and even before any agreement and changes in legislation were put into force. In 2019 when the dataset information ends, EU work migration was declining and at that point on a level of 76 thousand in total and non-EU work migration 95 thousand with a rising trend.

According to the Office of national statistics (2017, online) the majority of EU nationals coming to the UK for work, were likely to already have a job upon arrival and compared to the previous years, since the Brexit referendum in 2016 the figure of people, who come to the UK looking for a job, has more than halved.

Graph 4 shows, that when the last measurement of the number of applicants for undergraduate study at UK Universities was taken in 2021 the students with a non-EU country of origin counted 205,120 thousand and there were 59,630 thousand with an EU domicile. A significant cut is to be observed on the curve of the European applicants after the changes in regulations connected to Brexit and the Covid-19 pandemic, which have not had any negative impact on the curve of non-EU applicants.

The last displayed measurement of the academic year of 2020/2021 was the final year, where EU applicants could benefit from the home free status and had access to student finance through the tuition loans system. The data for the following year is not yet to be found, however the decline due to the significant rise of cost will be apparent (Highman Et al., 2023, online).

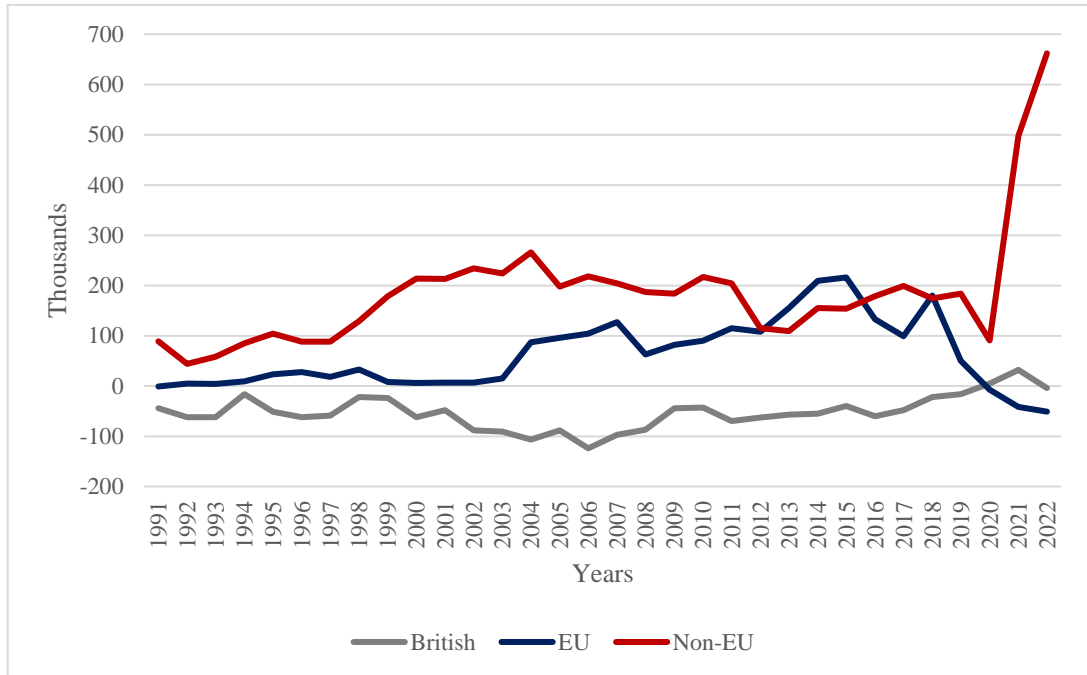


*Graph 6: Net migration of the UK in time (Adapted from: macrotrends, 2023, online)*

The UK has been a popular location for people to migrate to over the past decades. When the net migration figure is above 0, as it has been since the 90s, migration is adding to the total population. However, Graph 6 suggests, that since 2008 the till then increasing trend of the number of migrants coming to the UK per 1.000 inhabitants started its downfall (macrotrends, 2023, online).

The historical data displayed in the Graph 6 suggest that when reaching its peak in 2008 the UK's net migration rate was 7.077 per 1.000 Population. Which is compared to the current net migration of 2.240 in 2023 a 68.34 % decline (macrotrends, 2023, online).

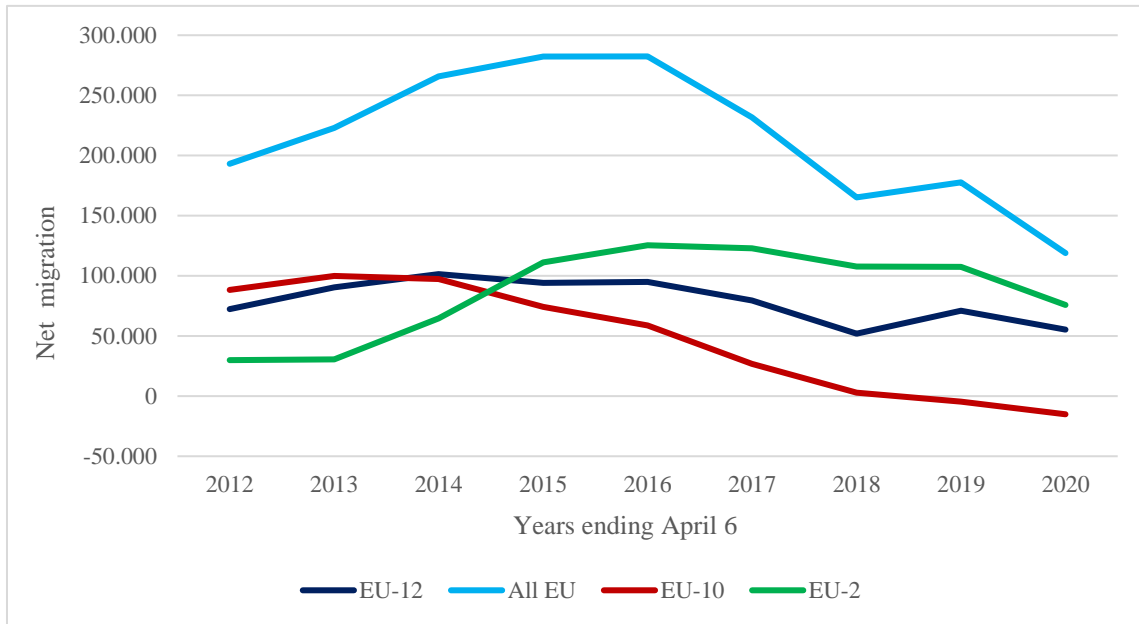
Since the 2004 wave of EU enlargement created one immigration peak, followed by an increasing trend, the financial crisis and global credit crunch of 2008 changed the direction of the migration curve. After the economy has slightly recovered from the impact of the financial crisis, the net migration has stabilized. Brexit has vastly influenced primarily the number of EU citizens in the UK. The outcome of the 2016 Brexit referendum as well as other possible factors like the loss of value of the Pound Sterling has made the numbers of EU immigration drop yet again before any political agreement was even made (the migration observatory, 2023, online).



*Graph 7: Net migration in the UK 1991-2022, by domicile (Years measured in the 4th quarter of every year) (Adapted from: Clark, 2023, online)*

In order to understand which changes the United Kingdom’s migration has undergone over the past decades it is necessary to divide the migrants into groups according to their domicile. Graph 7 divides the net migration figures by domicile into British, EU and non-EU migrants and displays their development over time. Particularly interesting is the end of the time series as the EU migration drops and the non-EU net migration figures suddenly - after a large decrease to 91 thousand in 2020, probably due to the Covid-19 pandemic – rapidly grow to 498 thousand in 2021 and 662 thousand in 2022.

The line depicting the British net migration remains more or less on a constant level over the measured timeframe. No major inconsistencies are to be observed here.



*Graph 8: Estimated net migration of EU citizens to the UK, per year (Adapted from: The migration observatory, 2023, online)*

When depicting the EU migration figures in Graph 8 member states of the EU were divided into groups according to the wave of accession, they were part of:

- All EU (27 current members): Austria, Estonia, Italy, Portugal, Belgium, Finland, Latvia, Romania, Bulgaria, France, Lithuania, Slovakia, Croatia, Germany, Luxembourg, Slovenia, Cyprus, Greece, Malta, Spain, Czechia, Hungary, Netherlands, Sweden, Denmark, Ireland, Poland
- EU-12: Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and (United Kingdom – belongs to this group of states, is however for logical reasons not included in this statistic)
- EU-10: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, Malta, Cyprus and Slovenia.
- EU-2: Bulgaria and Romania (eurostat, 2020, online)

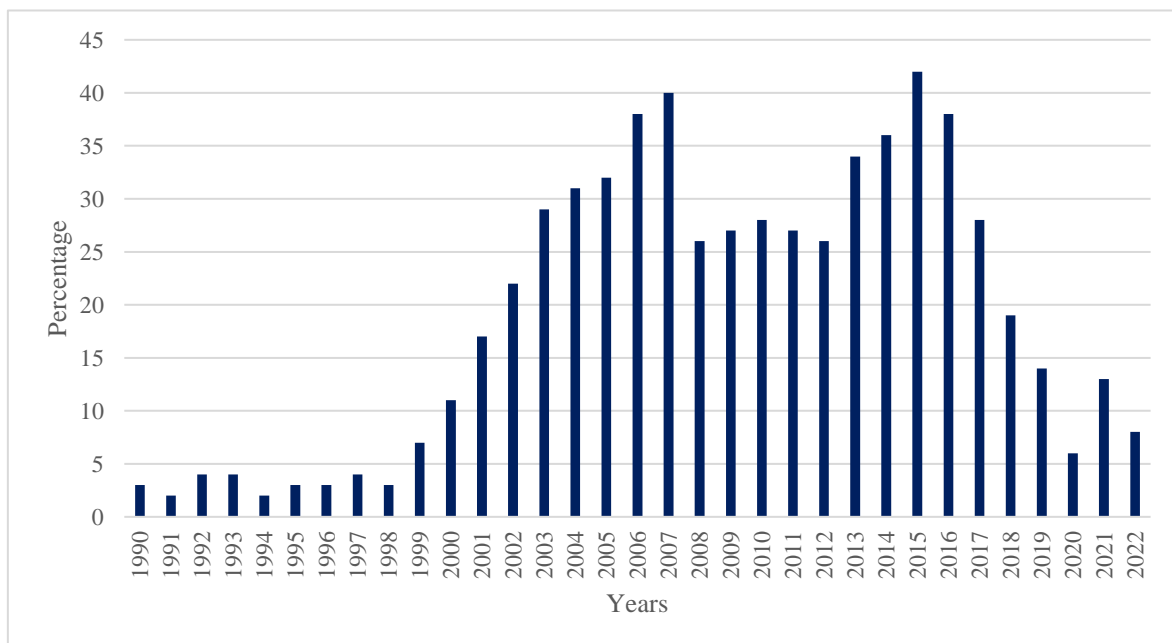
One can see that a particularly large decline in net migration was amongst the citizens coming from eastern European countries driven largely by the Polish, who were however still ranked as the top EU nationality of migrants living in the UK in 2020 (The migration observatory, 2023, online).

In 2004, when the wave of the mentioned EU-10 group joined the EU, the United Kingdom was an attractive location to choose - since contrary to for example Germany and

France, the Tony Blair's Labour government has not introduced any temporary measures on potential incoming migrants from these member states (Lowe, 2020, online).

A significant decline in net migration figures is to be observed in the EU-12 and EU-10 groups. This trend might be caused by these economies expanding, thus more appealing job opportunities arising and maybe also the decline in the value of the pound might be driving factors (Office of national statistics, 2017, online)

From their accession in 2007 the EU2 citizens had to face certain labor market restrictions placed on them. Throughout the first year of their stay in the UK, working Bulgarian and Romanian citizens needed to be holding an accession worker card r could opt for one of two lower-skilled quota schemes. Other Bulgarian and Romanian citizens were eligible to apply for a registration certificate, giving proof of a right to live in the UK. The labor market limitations for EU2 migrants in the UK were effective until January 1, 2014. During this period, the UK permitted entry for highly skilled and skilled workers, along with a restricted number of low-skilled workers, primarily designated for the agricultural and food-processing sectors (Office of National Statistics, 2017, online).



*Graph 9: Percentage of people who see immigration as one of the most important issues in the UK 1990-2022 (Adapted from: Clark, 2022, online)*

As the Graph 9 on the top describes in connection to large migration figures, comes resistance of the initial inhabitants. The situation was especially crucial around the time of the referendum, where according to the Graph above the peak of 42% was reached in 2015 followed by another high value of 38% in the year of the referendum.

In connection to the topic of the Brexit referendum, it is particularly relevant to highlight that the United Kingdom consists of four constituent countries: England, Scotland, Wales, and Northern Ireland and the votes for and against leaving the European Union were unevenly distributed amongst these regions within the United Kingdom. Whilst the results depicted in Picture 1 below clearly show that the majority of English voters indeed voted in favor of leaving the European Union, in Scotland and Northern Ireland the voters favored staying (BBC, 2021, online).

*“After several polls in the run-up to the referendum put Remain slightly ahead. Remain was anticipated to win until early results from Northeast England showed that Leave had performed far better than expected, with this pattern replicated throughout the country,”* (Statista Research Department, 2023, online).



Picture 3: EU Referendum Results (Source: BBC, 2021, online)

*“The Scottish electorate rejected independence by a margin of 55% to 45% in a referendum held on 18 September 2014. The independence question rose back up the agenda as a result of the EU referendum in June 2016, at which 62% of Scottish voters cast their ballots in favour of Remain”* (Institute for Government, online).

*“The Scottish government, led by the Scottish National Party, is committed to holding an independence referendum before the end of 2023. Re-joining the European Union will be central to its independence ambitions”* (Nicola McEwen, 2022, online).

To enforce these ambitions it would mean, that several aspects about the currently valid Brexit arrangements would have to be renegotiated as this would cause Britain to have another land border with a member of the European Union. (Nicola McEwen, 2022, online).

However, one of the troubles holding back the Scottish government from a second independence referendum is the fact that they would probably not get permission from the UK government to even hold the referendum and the results would therefore not be recognized as valid. Scottish independentists are therefore investigating on how to lawfully run a vote without the UK’s consent (Furniss, 2021, online).

Ireland is an island consisting of Northern Ireland – belonging to the territory of the United Kingdom – and the Republic of Ireland, which is an autonomous country and a member of the European Union. However, it has not always been this way (The Nations online, online).

The Troubles were a thirty-year lasting – beginning in the late 1960’ and ending in 1998 – ethno-nationalist conflict taking place on the grounds of the currently known Northern Ireland. The main cause of issue was the position of Northern Ireland.

On one side fought the Unionists and loyalists, who wanted Northern Ireland to be a part of the United Kingdom against the Irish nationalists and Republicans, who intended to make Northern Ireland join united Ireland instead. This war had more than 3.500 people dying before the “Good Friday Agreement” which put an end to the conflict. It was signed in 1998 (Peace Builder, online).

Since this conflict ended inter-communal tensions grew and the situation is considered to be rather unstable (Peace Builder, online). With the tense atmosphere in mind intentions arose to treat the delicate matter of Northern Ireland within Brexit especially calculatedly.

Equally to Scotland, the territories of Northern Ireland holding a direct land border to the Republic of Ireland voted within the Brexit referendum against leaving the European

Union (Europe Direct Strasbourg, online). However, since they are – unlike the rest of the United Kingdom - connected to an EU Member through a direct land border which additionally is fragile as seen in the past a special protocol had to be dedicated solemnly to Northern Ireland (BBC, 2021, online).

“The Protocol on Ireland and Northern Ireland” is a document, which was contained in the Withdrawal Agreement of the UK from the EU (Citizens Information, 2021, online).

*“The Protocol sets out the following:*

- *The Common Travel Area between Ireland and the UK continues to be recognized along with the rights it grants to Irish and British citizens,*
- *Goods moving between Ireland and Northern Ireland will not have any customs, tariffs, or other restrictions placed on them,*
- *Goods moving from Northern Ireland to another part of the UK and vice versa now require additional paperwork and checks”* (Citizens Information, 2021, online).

### **3.5 Effects**

Within the period between the British vote to leave the EU and the actual act of Brexit the United Kingdom has been led by 3 different Prime ministers. Firstly, David Cameron, who has announced the referendum in the first place and stepped back shortly after the results have been declared. Theresa May, who has taken part in the negotiations. However, since she has not been able to agree on further steps with her then parliamentary deputies, she has called for a snap election shortly after. Lastly, Boris Johnson – the last Prime minister of the United Kingdom, who has fulfilled his promise to the British to “get Brexit done” (Brusenbauch Meislová, 2021, online).

Although Brexit was done, the United Kingdom will not get the entire freedom and autonomy they probably hoped for. Any country has to rely on international trade, and this is not possible unless the country has international agreements with its trading partners, which create security as well as boundaries and restrictions for all the trading partners involved (Brusenbauch Meislová, 2021, online).

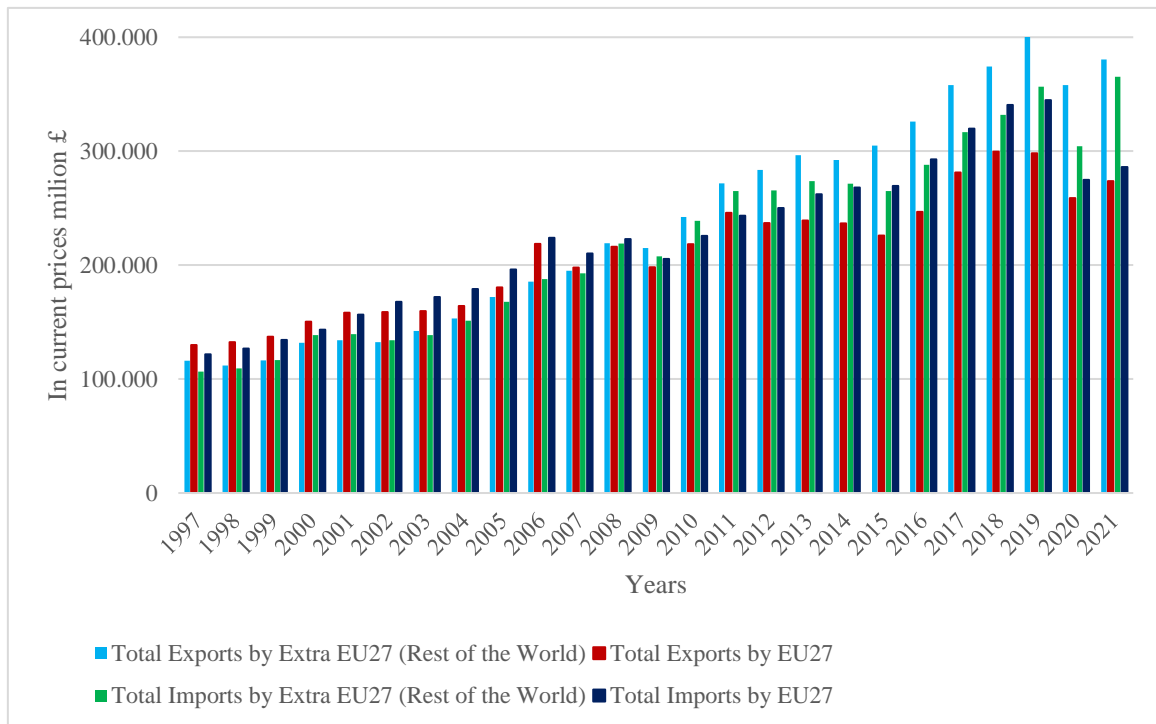
According to Edgington (2022, online) as of September 2022 the United Kingdom has signed trade deals and agreements in principle with 71 countries and one with the EU. He



stresses, that most of these trade agreements have a base in the agreement the UK has had with that given country in the past when it still was a member of the EU.

Amongst Britain’s top five trading partners by total trade, which makes over 42% of the UK’s total trade there were in 2020 the United States (13.9%), Germany (10.8%), China (4.91%), the Netherlands (6.77%), and France (6.04%) (OEC, online). Gasiorek et al. (2018, online) was already forecasted a large impact on the Euro - British trade back in 2018 estimating an overall reduction in UK manufacturing output with high tech and medium–high tech sectors being at a large risk.

Brexit supporters particularly hoped for a British-US American trade deal, which could lead to more favourable business conditions, however this has not yet the case with this agreement pending (Edgington, 2022, online).



*Graph 10: UK Total Trade by EU Countries and the rest of the World (in current prices million £, Non-Seasonally Adjusted) (Adapted from: Jeffries, 2023, online)*

Graph 10 suggests the development of the trading activities amongst the UK and the countries of the European Union (Total EU27) and the UK and the rest of the World excluding the European Union (Total Extra EU27) from 1997 till 2021. It is not possible to exactly distinguish which effect the Brexit referendum and the following changes of the country’s policies had on these figures and what is to be connected to the Covid-19 pandemic

that caused harm to economies worldwide. Additionally, it is necessary to mention that there had been periods throughout the years 2020 and 2021, where the UK's national lockdown was imposed in response to the coronavirus (COVID-19) pandemic, announced on the 23th March 2020, and the subsequent easing of restrictions from the beginning of June 2020 (Jeffries, 2023, online).

The Trade and Cooperation agreement between the European Union and the United Kingdom is a result of the Brexit negotiations. It came into force on 1.1.2021. *“It covers a wide range of issues including institutional arrangements, trade in goods and services, travel, transport, fisheries, social security coordination, law enforcement and judicial cooperation, union programs, and dispute settlement”* (Salvatici & Winters & Fusachia, 2021, online).

Amongst the matters that have not been involved into the agreement are for example detailed structured regulations in the fields of safety and defense. Additionally, the sector of services, which is very significant for the UK's economy as it contributes with a great share to the UK's gross value added (Brusenbauch Meislová, 2021, online).

The British Fish have really become a symbol of independence within the Brexit negotiations. Currently we are in a transition period of 5 years, whereas after this transition period annual renegotiations will be held about the rights to fish in British waters (Brusenbauch Meislová, 2021, online).

One of the negative effects which the United Kingdom has been facing right after the successful establishment of the post-Brexit regulations was the reality of insufficient capacity in domestic food production, supply chains based on the just-in-time principle and labor market challenges, which had weakened the UK's food system and traffic jams at the borders, where lorries were trying to cross the border to get to the United Kingdom but were being heavily delayed as the border controls held them back from passing (Garnett & Doherty & Heron, 2020, online).

Moreover, multiple companies e.g., Jaguar started leaving the country due to operational restrictions and moving to the European mainland (e.g., the Netherlands, Slovakia). Additionally, there was a vast shortage of labor forces from mostly the eastern European countries especially in the sector of in services as the newly established policies only allows foreign workers to carry out the occupation they have applied for when filling in their work visa (Brusenbauch Meislová, 2021, online).

A very current topic that has been opened by the now prime minister of the United Kingdom Rishi Sunak is the renegotiation of the Northern Ireland Protocol. This shall be solving 3 main challenges: *“the application of EU law in Northern Ireland to ensure no return of the hard border with the Republic of Ireland, the role of the European court of justice, and checks on goods crossing the Irish sea”* (O’Carroll, 2023, online).

## 5. Practical Part

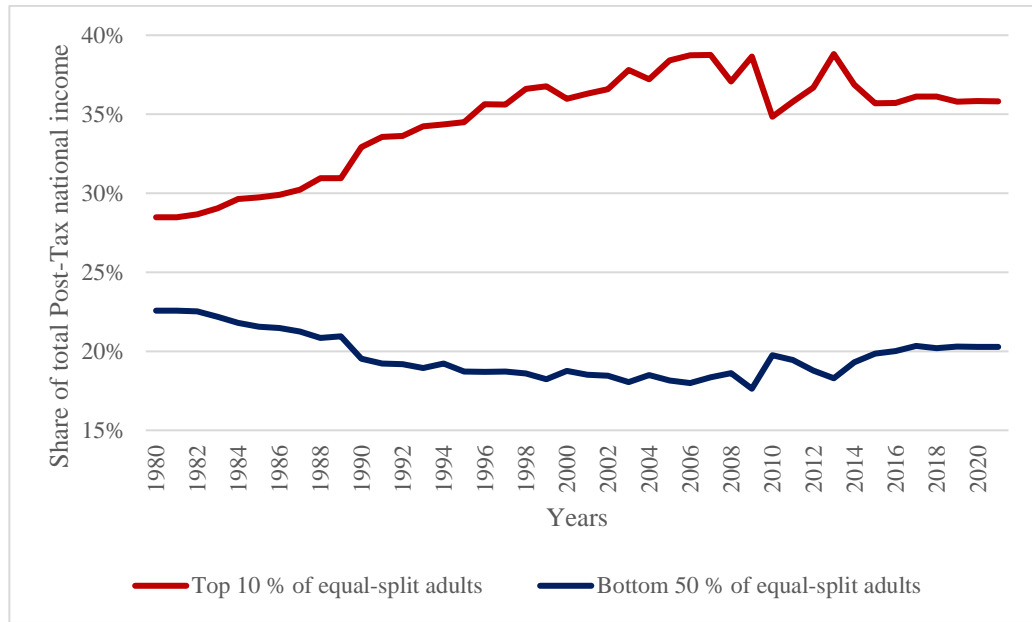
Surely there had been plenty of arguments why the majority of voters within the Brexit referendum had chosen to leave the European union. Amongst the ones that may have influenced the people the most are according to the sources listed within this paper:

- The customs union being regulated centrally by the EU
- The contribution into the European Funds and their relocation
- The Centralized Immigration Policy

However, Dhingra (2016, online) argues, that the major change in public opinion could come from the rising economic stress the working class suffers from. Within the Brexit vote numerous voters might have intended to show their anger regarding Britain's overall political setup and unsuccessful economic policymaking. As Dhingra stresses this fact shall not be surprising as although the economy has grown, the inequality between poor and rich grew larger.

This assumption is being supported by the Graph 11 below, that shows how the Top 10 % of the richest and the Bottom 50 % of the poorest citizens in the United Kingdom grew apart when considering the percentage in share of total Pre-Tax national income.

The X axis indicates the timespan over which the dataset ranges. The dependent variable displayed on the Y axis shows the share of total pre-tax national income in percent. One line represents the top 10 % of equal-split adults and the second line stands for the bottom 50 % of equal-split adults.



*Graph 11: Pre-tax national income inequality amongst the Top 10% and Bottom 50% of equal-split adults in the United Kingdom, 1980-2020 (Adapted from: World inequality database, 2023, online)*

Dhingra (2016, online) further claims that the lower the wage growth in a specific area, the higher the likelihood that the local people were to vote for the UK to leave the EU. Unfortunately, he points out, these voters were the ones depending on the EU trade, investment, and transfers the most. Leave voters, so he suggests, also tended to be poorer and less educated than the average.

Within this paper we have conducted a test, whether there is any correlation to be found between the amount of EU Funds in the field of Implementing active and preventive measures on the labor market in thousands of EUR per a thousand people in the given Nomenclature of Territorial Units for Statistics (NUTS) and the percentage of voters voting for the option to leave the European Union in that NUTS.

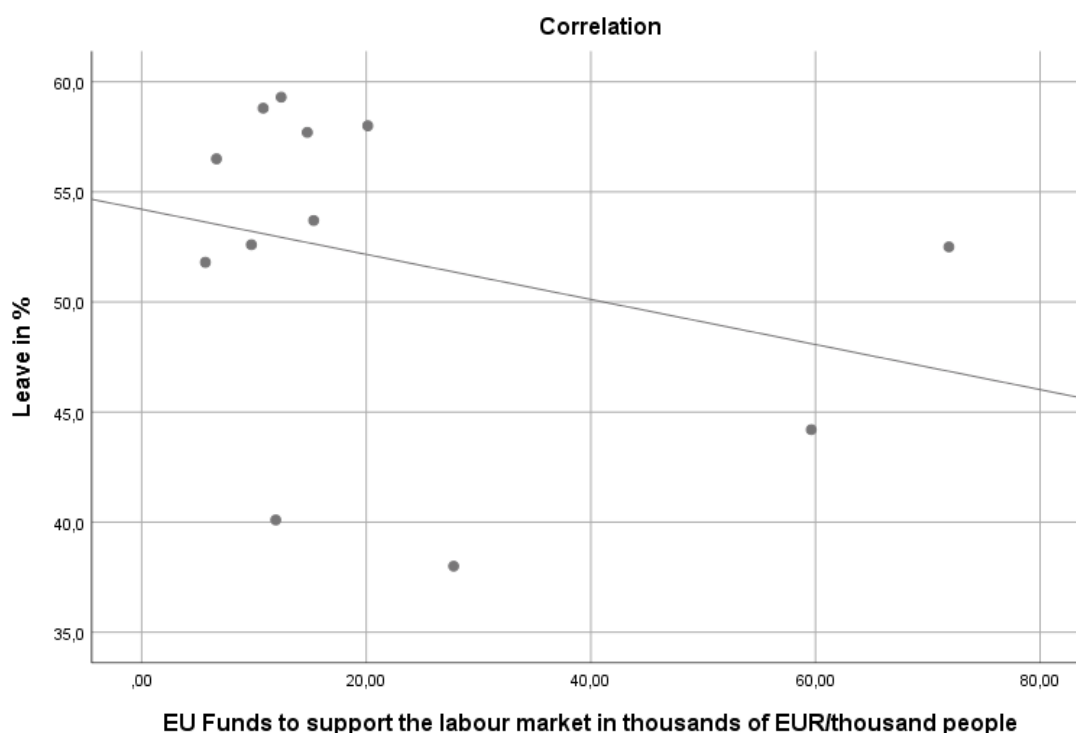
It is meant to oppose Dhingra’s statement and examine whether the funds from the European Union, which were aimed to support the labor market, that particularly affect less developed areas and lower income households somehow influenced the decision-making process of the impacted people into voting to stay in the European Union.

The table 3 below, which displays the results of the test resulted in Spearman’s rank correlation coefficient having the value -0.217, which suggests a very weak inverse proportion in-between of the variables. Meaning that there is a slight tendency that the higher the EU Funds to support the labor market in thousands of EUR/thousand people in the given

Nomenclature of Territorial Units for Statistics (NUTS), the lower the percentage of voters voting for the option to leave the European Union, which would support our theory. However, the value of the P-Value connected to the correlation coefficient happened to be 0,499 (Table 3), which means that the statistical significance is not proven. Hence, no conclusions can be drawn from this model.

<b>Correlations</b>				
			EU Funds to support the labor market in thousands of EUR/thousand people	Percentage of Leave voters
Spearman's rho	EU Funds to support the labor market in thousands of EUR/thousand people	Correlation Coefficient	1,000	-,217
		Sig. (2-tailed)	.	,499
		N	12	12
	Percentage of Leave voters	Correlation Coefficient	-,217	1,000
		Sig. (2-tailed)	,499	.
		N	12	12

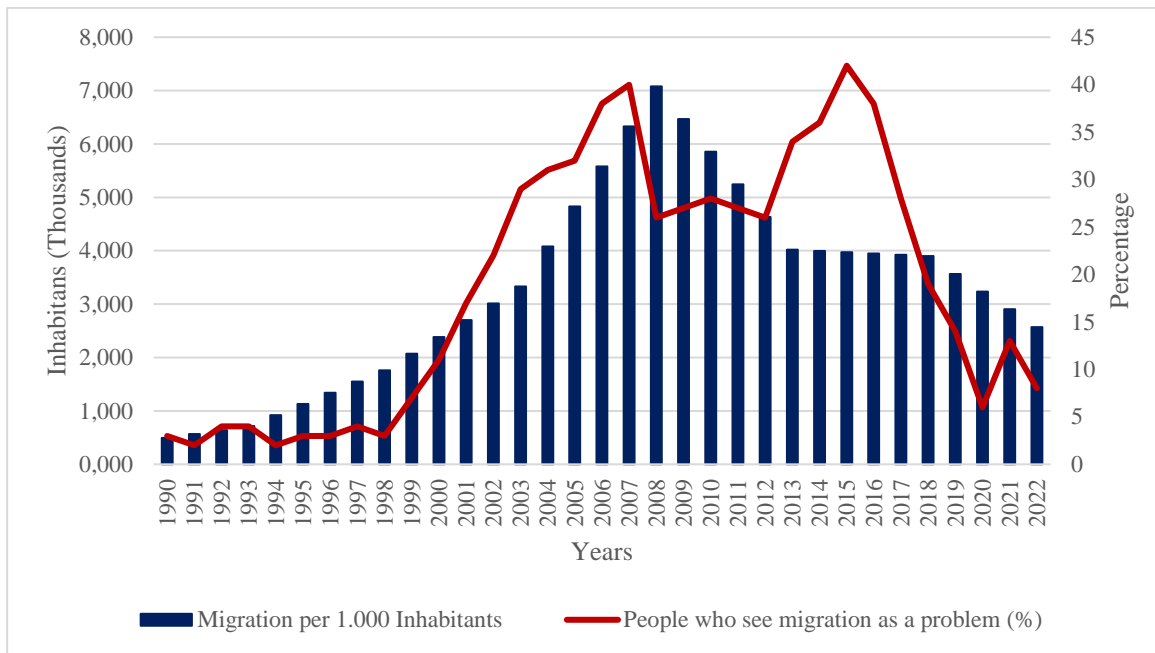
*Table 3: Results of the correlation analysis between the variable EU funds in the field of Implementing active and preventive measures on the labor market in thousands of EUR per thousand inhabitants and the variable displaying the percentage of people, who voted to leave the European Union in the Brexit referendum divided into NUTS 1 (Own work: Processed in SPSS)*



*Graph 12: The relationship between the variable EU funds in the field of Implementing active and preventive measures on the labor market in thousands of EUR per thousand inhabitants and the variable displaying the percentage of people, who voted to leave the European Union in the Brexit referendum divided into NUTS 1 (Own work: Processed in SPSS)*

The Brexit referendum results vary from area to area as already stated, this might have also other reasons. The territories in Northern Ireland holding a direct land border to the Republic of Ireland voted within the Brexit referendum against leaving the European Union. However, since they are – unlike the rest of the United Kingdom - connected to an EU Member through a direct land border which additionally is fragile as seen in the past the Northern Ireland Protocol had to be added to the Brexit Agreement. This Protocol is currently being reshaped and renegotiated to fit the needs of the people the most.

As a result of an extensive literature research apparently one of the most resonating arguments against the EU membership was the EU’s approach towards migration questions. The UK has experienced a large inflow of migrants particularly once the new member states of the European Union in Eastern Europe were admitted to the EU - Polish movers, so Přívara et al. (2019, online), being the largest national group.



*Graph 13: Composed graphs of Percentage of people who see immigration as one of the most important issues in the UK and Net migration of the UK 1990-2022(Adapted from: macrotrends, 2023, online & Clark, 2022, online)*

The displayed Graph 13 puts two important factors, which were relevant to the Brexit vote into each other’s context – the Percentage of people who see immigration as an important issue in the UK and the Net migration of the UK within the same time frame. Here it is clearly visible that with the rising net migration figures, more people reportedly perceive migration to be an important issue.

The percentages lowered around the financial crisis; however, the migration wasn’t affected at first, then it started to have a long-term decreasing trend. During the measured period, around the time of the campaign that was launched before the Brexit vote was held, the concerns about immigration was the highest (42% in 2015).

Although the migration figures are more or less constant over the period from 2013 to 2018 until they start declining in 2019, it is interesting to see that there is a major Expanding inclination for the resistance towards the issue of migration starting in 2012 and growing till 2015 - just a year before the Brexit referendum was conducted.

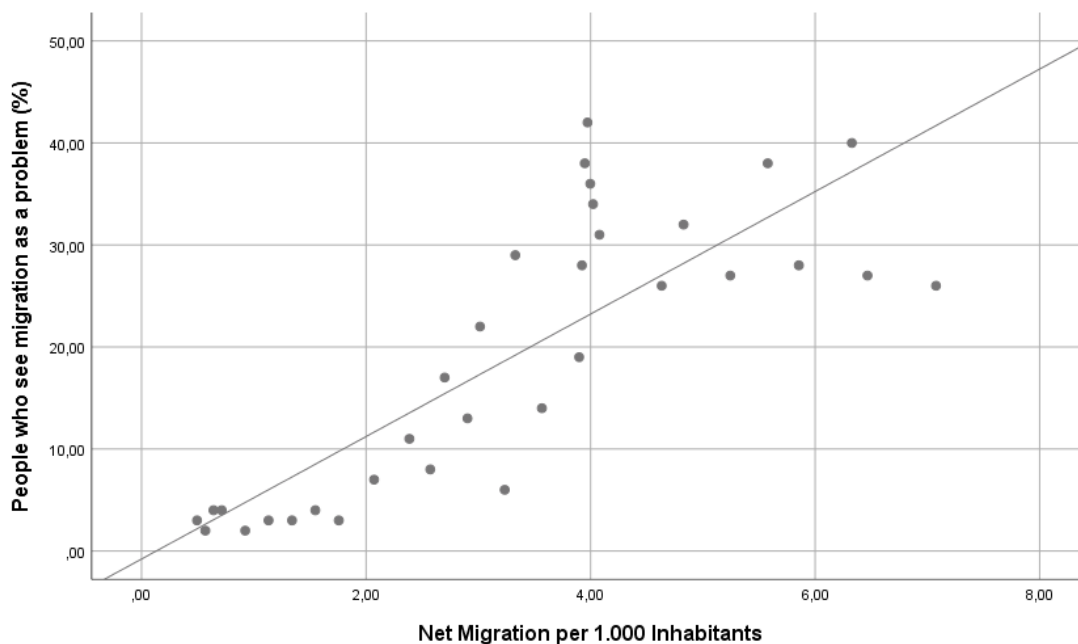
Graph 13 was also subject to a statistical test, where the aim was to find out whether there is a statistically significant relationship between the variables Net migration per thousand Inhabitants and People who see migration as one of the most important issues in the UK in percent. The test chosen was a correlation analysis, where the Pearson Correlation Coefficient was used.



The Pearson Coefficient's value measured was 0,817 (Table 4). This is indicating a strong positive correlation between the included variables. As the variable Net Migration per 1,000 inhabitants increases, the dependent variable depicting the percentage of people perceiving migration as a significant problem also increases. The correlation coefficient value is statistically significant at the 5% level of significance, with a p-value < .001 (Table 4).

<b>Correlations</b>			
		Net Migration per 1.000 Inhabitants	People who see migration as a problem (%)
Net Migration per 1.000 Inhabitants	Pearson Correlation	1	,817**
	Sig. (2-tailed)		<.001
	N	33	33
People who see migration as a problem (%)	Pearson Correlation	,817**	1
	Sig. (2-tailed)	<.001	
	N	33	33
**. Correlation is significant at the 0.01 level (2-tailed).			

*Table 4: Results of the correlation analysis between the variable Net migration of the United Kingdom per 1.000 Inhabitants and the variable Percentage of people who think that immigration is one of the most important issues facing Great Britain from 1990 to 2022 (Own work: Processed in SPSS)*



*Graph 14: The relationship between the variable Net migration of the United Kingdom per 1.000 Inhabitants and the variable Percentage of people who think that immigration is one of the most important issues facing Great Britain from 1990 to 2022 (Own work: Processed in SPSS)*

The scatter diagram seen within Graph 14 represents data points, where each spot represents a value corresponding to the parameters given in the combined datasets. The line visualizes a rising pattern. This again supports the already mentioned positive correlation between the two included variables.

Concluding these results, it is necessary to stress that there obviously is a trend that the more migrants there are, the worse the issue of migration is perceived. However, which aspects are to be considered when examining the timeframe of 2013 to 2018.

Schmidtke (2021, online) stresses the influence of the very viral Leave campaign, which substantially influenced public opinion throughout the examined period. He points out that the campaign aimed to support the British Euroscepticism. In addition, so Green (2007, online) the British economy benefitted from the incoming migrants and the recruitment of foreign workforce, and its integration can be considered successful.

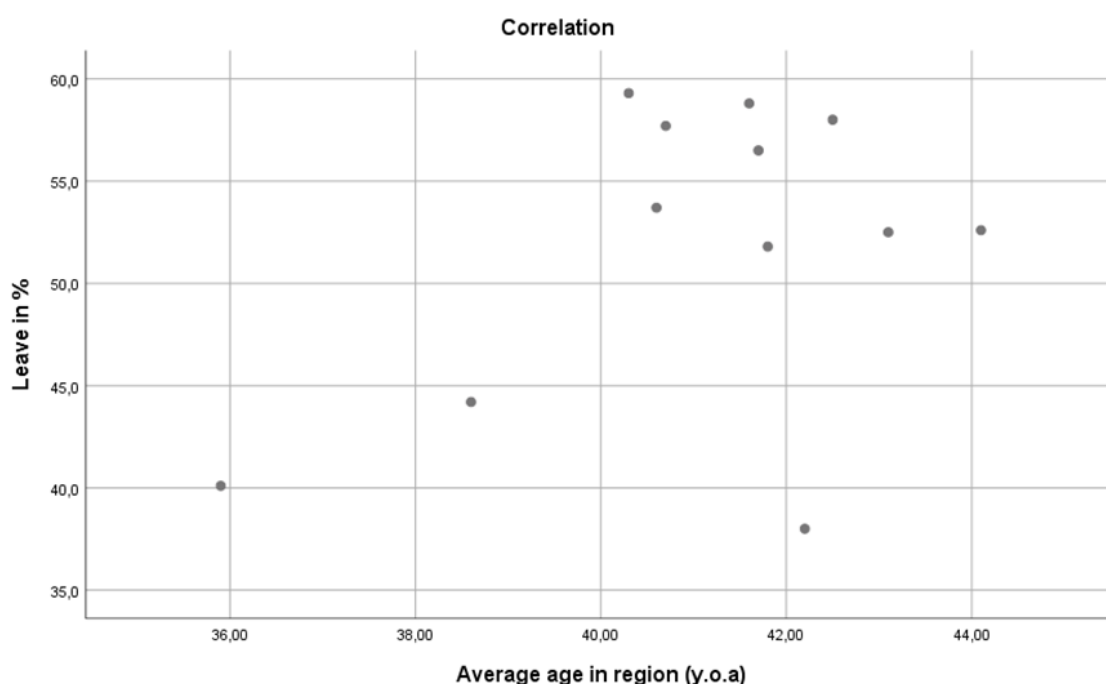
The British media was supporting the threatening narrative of irregular migration, which has been broadcasted until after the Brexit referendum, so Georgiou & Zaborowski (2017, online). As Heidenreich et al. (2019, online) claim, the strongest frame around the ‘European Refugee Crisis’ was before the Brexit referendum and around June 2016, the refugee-related crisis is even put into the context of Brexit.

With this information on mind, it might be interesting to investigate the following correlation. As the time spent consuming information coming in different forms and on diverse platforms varies depending on the age of the consumer.

Within the below correlation displayed in Table 5 it was intended to find out whether regions, where the average age is higher might have voted for the UK leaving the EU. As Pehlivanoglu et al. (2022, online) suggest that elder people might rather struggle with the challenge of news veracity detection. Additionally, in this regard, the intergenerational redistribution favors the elderly since the average age in all the European countries tends to be increasing (Klien et al., 2021, online). Nevertheless, when examining the correlation between the average age in a region and the percentage of voters which voted for the UK to leave the EU, no correlation was detected according to the value of the Spearman coefficient, which was 0 suggesting the independence of the chosen variables. The within table 5 below included P-Value correlation coefficient is 1, meaning that its statistically insignificant.

<b>Correlations</b>				
			Average age in NUTS 1 region (y.o.a)	Leave in %
Spearman's rho	Average age in NUTS 1 region (y.o.a)	Correlation Coefficient	1,000	,000
		Sig. (2-tailed)	.	1,000
		N	12	12
	Leave in %	Correlation Coefficient	,000	1,000
		Sig. (2-tailed)	1,000	.
		N	12	12

*Table 5: Results of the correlation analysis between the variable average age in a NUTS1 region (y.o.a) and the variable displaying the percentage of people, who voted to leave the European Union in the Brexit referendum divided into NUTS 1 (Own work: Processed in SPSS)*



*Graph 15: The relationship between the variable average age in a NUTS1 region (y.o.a) and the variable displaying the percentage of people, who voted to leave the European Union in the Brexit referendum divided into NUTS 1 (Own work: Processed in SPSS)*

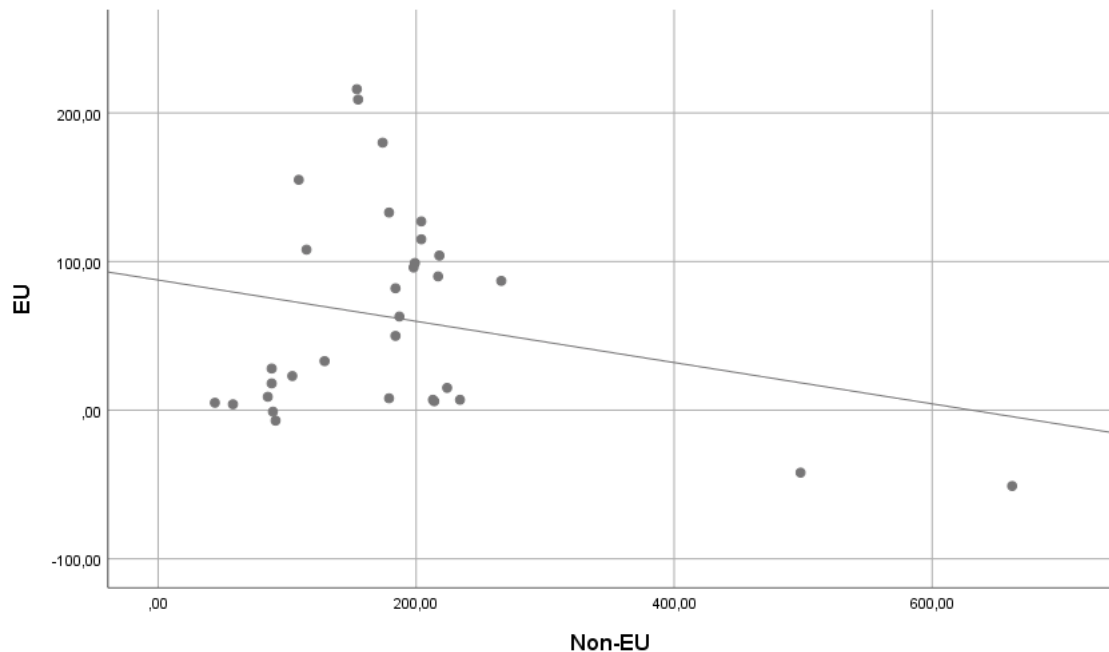
However, the correlation might not be visible using this chosen input of datasets, because all the population in British regions being generationally evenly spread and the average age oscillating around 41 years of age except the region of Greater London, which happens to be significantly younger (35,9 years of age). It would have been interesting to see how different age groups voted within every Nomenclatures of Territorial Units for Statistics and then examine the factors influencing their decision-making processes, however that is not part of this paper.

There might be plenty of reasons why the migrants have chosen to migrate and why they picked the United Kingdom as their destination, nevertheless it is interesting to look at the different streams and examine whether some shocks and changes in behavior are to be found likewise in migrants originating from the countries of the European Union and the ones coming from elsewhere in the world. The following correlation analysis will show whether the same set of shocks and economic changes the UK was experiencing through the period of 1991 to 2022 had similar effects on both the groups of migrants. This analysis is based on the datasets of Net migration in the UK 1991-2022, by domicile, where the migrants have been divided into 3 groups initially – EU, Non-EU and British. For the sake of this correlation analysis the British migrants were excluded.

Yet, according to the Pearson Correlation Coefficient, the relationship between the migration development of citizens from the EU and outside the EU has not been proven. The value of the correlation coefficient was -0.240 (Table 6), which indicates a weak indirect dependency, which is statistically insignificant at the level of significance 5% according to p-value with a value of 0.187.

Correlations			
		EU	Non-EU
EU	Pearson Correlation	1	-,240
	Sig. (2-tailed)		,187
	N	32	32
Non-EU	Pearson Correlation	-,240	1
	Sig. (2-tailed)	,187	
	N	32	32

*Table 6: Results of the correlation analysis of Net migration in the UK 1991-2022 by domicile divided into the variables EU countries and non-EU countries (Own work: Processed in SPSS)*



*Graph 16: The relationship between the variable Net migration in the UK 1991-2022 by migrants from EU countries and non-EU countries (Own work: Processed in SPSS)*

The scatter plot depicted in Graph 16 shows, that the unregularly distributed dots show close to no tendency or point into no specific direction. Hence it can be said that it appears as if the two groups of migrants – EU migrants and non-EU migrants do not get influenced by the same set of shocks and their migration patterns exhibit differences in development.

Since the previous test has proven, that migrant from within the European Union and from countries outside of the European Union do not share the same trend in migration development and are apparently being driven by other factors, it is necessary to examine whether the countries within the European union are even sharing a similar trend or whether there are significant differences when examining these groups among each other as well.

In the below included correlation analysis, the relationship between the estimated net migration of EU citizens to the UK, per year over the period of 2012-2020 is being examined. The countries have been divided into 3 groups according to the wave of accession they were part of - EU-12, EU-10, and EU-2.

Countries belonging to the 3 groups are as follows:

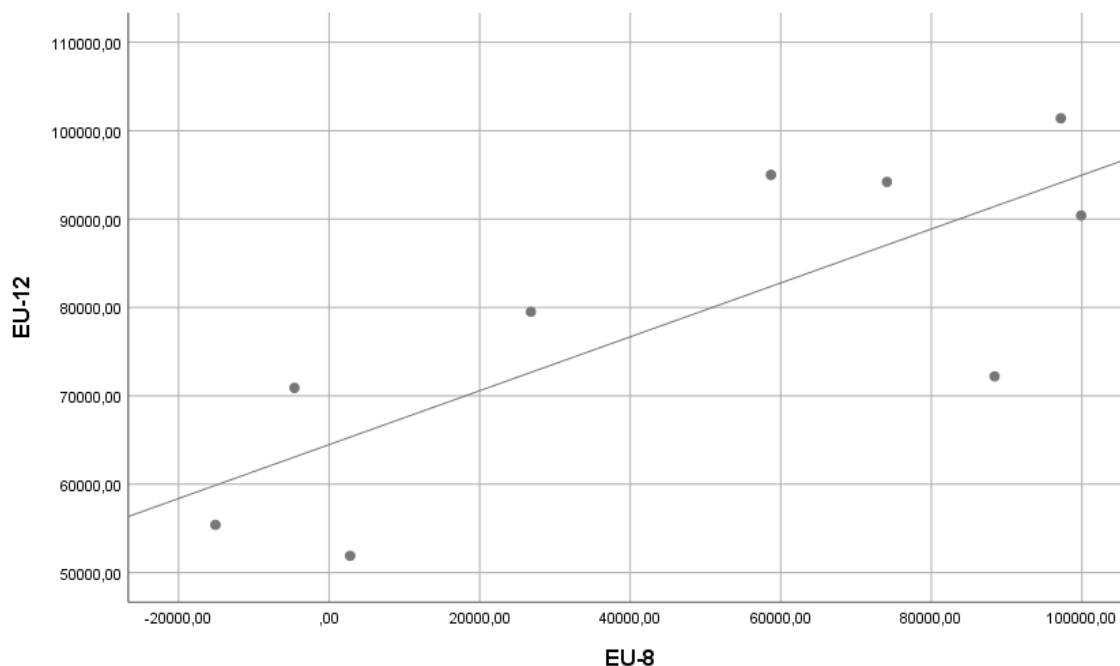
- EU-12: Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and (United Kingdom – belongs to this group of states, is however for logical reasons not included in this statistic)
- EU-10: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, Malta, Cyprus and Slovenia.
- EU-2: Bulgaria and Romania (eurostat, 2020, online)

The results of the correlation coefficients analysis are included in the following Table 7. The correlation of net migration between EU-12 and EU-10 citizens turned out to be statistically significant at a 5% significance level of p-value of 0.012. The value of the correlation coefficient is 0.786 and indicates a medium direct dependency. The correlation between net migration of EU-12 and EU-2 citizens is statistically insignificant with a p-value of 0.913, as well as an insignificant correlation between net migration of EU-10 citizens and EU-2 with a p-value of 0.136.

Correlations				
		EU-12	EU-10	EU-2
EU-12	Pearson Correlation	1	,786*	-,043
	Sig. (2-tailed)		,012	,913
	N	9	9	9
EU-10	Pearson Correlation	,786*	1	-,537
	Sig. (2-tailed)	,012		,136
	N	9	9	9
EU-2	Pearson Correlation	-,043	-,537	1
	Sig. (2-tailed)	,913	,136	
	N	9	9	9

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 7: Results of the correlation analysis of Net migration in the UK 2012-2020 by domicile divided into the variables according to the wave of accession-EU-12, EU-10 and EU-2(Own work: Processed in SPSS)



Graph 17: The relationship between the variable Net migration in the UK 2012-2020 by migrants divided into the variables according to the wave of accession-EU-12 and EU-10 (Own work: Processed in SPSS)

The correlation introduced in Graph 17 shows the relationship between the countries of EU-12 and EU-10 that seem to have similarities in development regarding the UK's net

migration from 2012-2020. However, it also needs to be stressed that the two groups in question are much larger and much more diverse in background than group EU-2. Since the remaining correlations resulted in being insignificant, the Graphs depicting these correlations were excluded from this paper.

The migrant domicile that stands out in terms of numbers in the United Kingdom is the Polish. Many Poles have decided in the past to move to the UK and build a life there. However, there are major studies like Burrell and Schweyher (2019, online) conducted, which highlight the challenging position the migrants find themselves in, describing it as a hostile environment with welfare bordering policies connected to many fields of life including the interactions at Job Centers, banks, and other governmental institutions. After Britain announced Brexit, many concerns were raised, amongst them the former Polish defense minister Janusz Onyszkiewicz (2017, online) stressed that shall the UK leave the EU and the Polish migrants shall be send back to Poland, it will cause major harm to the Polish economy by raising the unemployment, lowering remittances coming from migrants residing in the UK. Additionally, he mentioned, that Poles are mainly employed in the construction and trade industries as well as in other low skilled sectors, including parts of hospitality and in housekeeping will in this scenario be missing in the UK.

Onyszkiewicz (2017, online) also states, that after Brexit, young Poles will probably be unable to pursue their studies in the UK for financial reasons. It will cause them to stop seeking higher education in the country. British universities, so he says, are likely to experience a decline in student enrollment, impacting both student numbers and tuition fees.

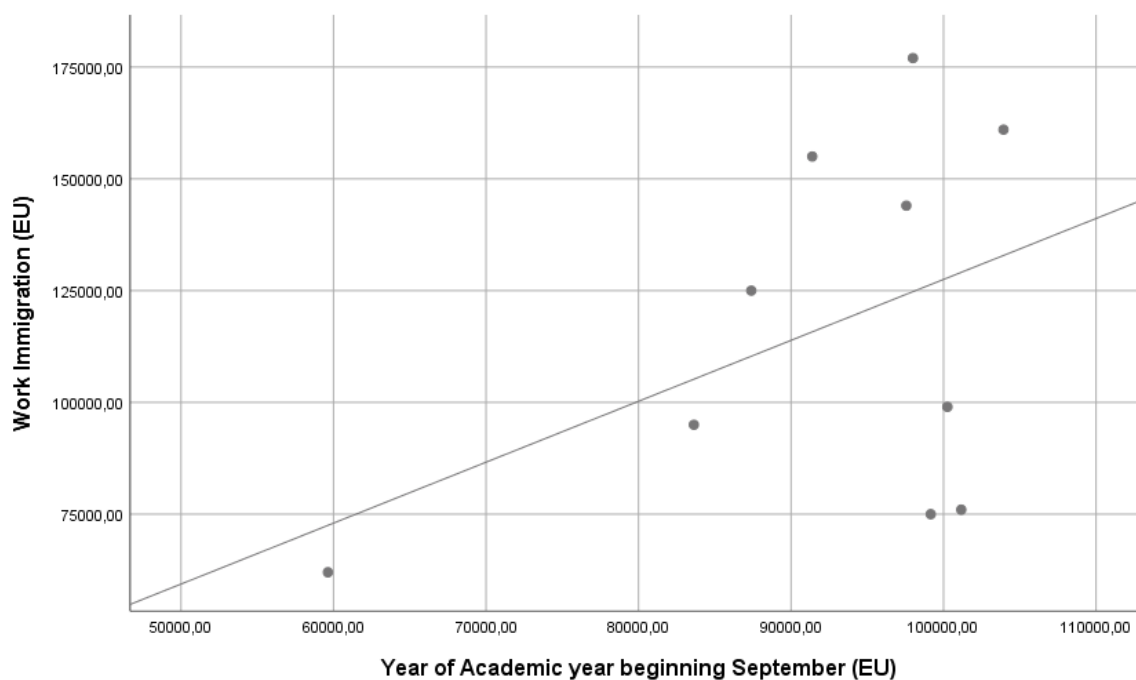
At the present moment, it is visible, that there has been a decline in net migration figures after the Brexit referendum's results were announced and after actual policy changes were inflicted. Whether the workers and higher education students were indeed influenced in the same manner and by the same shocks, will be examined in the 2 following tests.

The connection between work immigration of EU citizens and the number of EU citizens applying to study at UK universities is being examined by the Pearson correlation Coefficient, that resulted in 0,438 with a p-value of 0.206. According to p-value, the correlation between variables is statistically insignificant. The conclusion can be drawn, that this relationship could not be proven.



Correlations			
		Work Immigration (EU)	Applicants for undergraduate study at UK universities (EU)
Work Immigration (EU)	Pearson Correlation	1	,438
	Sig. (2-tailed)		,206
	N	10	10
Applicants for undergraduate study at UK universities (EU)	Pearson Correlation	,438	1
	Sig. (2-tailed)	,206	
	N	10	10

*Table 8: Results of the correlation analysis of the variables Long-term work immigration (EU only) and Number of applicants for undergraduate study at UK universities (EU only) (Own work: Processed in SPSS)*



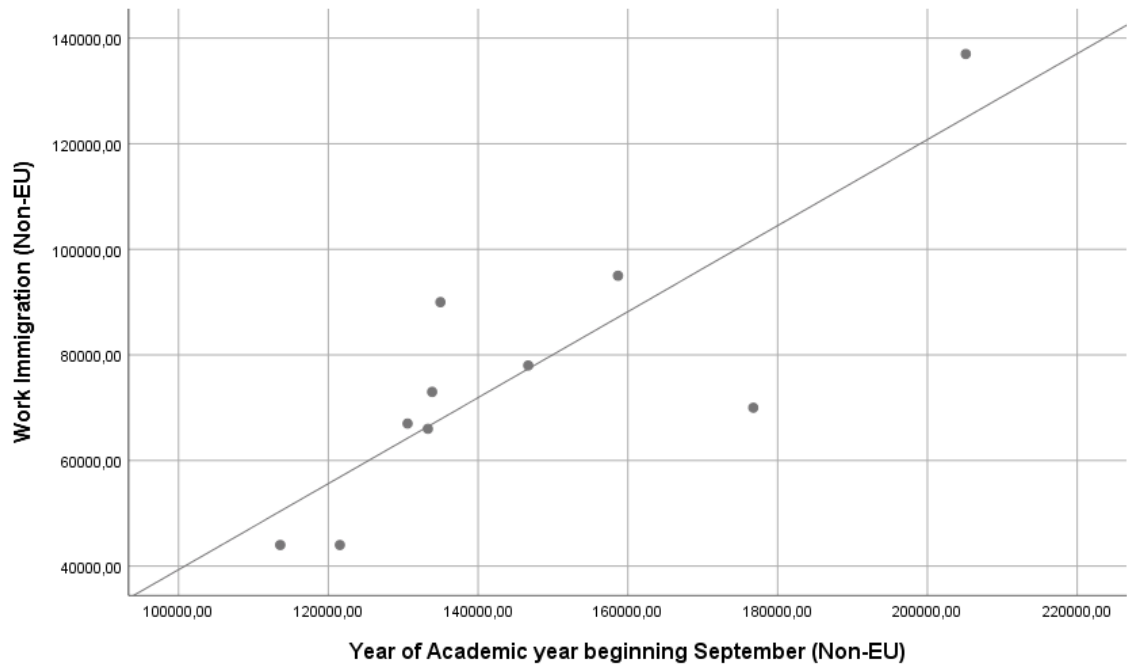
*Graph 18: The relationship between the variables Long-term work immigration (EU only) and Number of applicants for undergraduate study at UK universities (EU only) (Own work: Processed in SPSS)*

The scatterplot suggests however, that there is a certain trend and relationship between the chosen variables, which would indicate a direct dependency. Nevertheless, the test came out statistically insignificant and therefore no further conclusions can be drawn from this correlation.

The examination of the relationship between Work immigration of non-EU citizens and the number of non-EU citizens applying to study at UK universities is also investigated using Pearson correlation coefficient, which came out 0.837 with p-value 0.003 (Table 9). According to p-value, the correlation between variables is statistically significant. There is a strong direct dependency between the variables.

<b>Correlations</b>			
		Work Immigration (Non-EU)	Year of Academic year beginning September (Non- EU)
Work Immigration (Non-EU)	Pearson Correlation	1	,837**
	Sig. (2-tailed)		,003
	N	10	10
Year of Academic year beginning September (Non- EU)	Pearson Correlation	,837**	1
	Sig. (2-tailed)	,003	
	N	10	10
**. Correlation is significant at the 0.01 level (2-tailed).			

*Table 9: Results of the correlation analysis of the variables Long-term work immigration (Non-EU only) and Number of applicants for undergraduate study at UK universities (Non-EU only) (Own work: Processed in SPSS)*



*Graph 19: The relationship between the variables Long-term work immigration (Non-EU only) and Number of applicants for undergraduate study at UK universities (Non-EU only) (Own work: Processed in SPSS)*

In contrast to the results from the correlation between the variables work immigration of EU citizens and the number of EU citizens applying to study at UK universities, the relationship between the work immigration of non-EU citizens and the number of non-EU citizens applying to study at UK universities is substantial. The results are statistically significant and as can be seen in a scatter graph, that with the growth of one variable, the variable of the other grows as well.

## 6. Results and Discussion

Although there is an extensive body of literature available on the topic of economic impacts of Brexit, unfortunately for this paper, the majority of studies concentrate on trade-related effects. Meanwhile, migration is often either entirely disregarded or approached with overly generalized assumptions even though the human factor is majorly influencing the economic health of a country.

The in 2016 conducted Brexit referendum marked the United Kingdom's exit from the European Union, including its concept of free movement. This significant shift, which surprised the rest of the continent and a large count of British politicians alike, can up to a certain extend be traced back to the escalating hostility toward the topic of migration.

The Migration Observatory (2023, online) points out, that the escalating influx of immigration from the EU, following the accession of the "A10 countries" to the EU, coincided with a noticeable shift in public sentiment between 2001 and 2016. Evans & Mallon (2019, online) and Plummer (2019, online) agree and add that this disfavor later intensified by the South-North flows resulting from the global financial crisis of 2008 worsened the popular sentiment. The rejection of EU migrants, and migrants in general, as fellow citizens entitled to full welfare benefits started developing (D'Angelo, 2023, online).

Evans & Mallon (2019, online) even go as far as to say that the political decision which led to the large immigration figures after the EU's 2004 accession wave, paved the way for a new dimension of party competition and a surge in popular support for the United Kingdom Independence Party (UKIP), ultimately leading up to the 2016 EU Referendum.

Within this thesis it was confirmed that there is a robust positive correlation clearly indicating that as net migration figures rise, an increasing number of people reportedly perceive migration as an important issue.

Nevertheless, this correlation does not hold true for the entire examined timeframe. The percentages of people perceiving migration to be one of the UK's biggest issues decreased around the time of the financial crisis. Surprisingly, migration did not decrease throughout that period, it grew hitting its peak in 2008 instead. Thereafter it eventually started exhibiting a long-term decreasing trend.

During the entire within this thesis included timespan (1990-2022), particularly around the campaign preceding the Brexit vote, concerns about immigration reached their peak, culminating at 42 % in 2015.

While migration figures remained relatively constant from 2013 to 2018 before starting to decline in 2019, an intriguing observation is the substantial growing inclination toward resistance to the issue of migration from 2012 to 2015 - just a year before the Brexit referendum took place.

Schmidtke (2021, online) emphasizes the influential role of the highly viral „Leave“ campaign, which significantly shaped public opinion during the examined period. He notes that the campaign aimed to boost anti-immigration sentiments and British Euroscepticism. Controversially, as Green (2007, online) suggests, the British economy in fact benefited from incoming migrants, and the recruitment of foreign workers, along with their successful integration.

The British media actively contributed to a threatening narrative surrounding irregular migration, a narrative that persisted even after the Brexit referendum, as noted by Georgiou & Zaborowski (2017, online).

Torres (2019, online) wrote that throughout the 2015 refugee and migration peak, migration policy once again took center stage as the continent witnessed a significant surge in arrivals, with numbers reaching a million. Since then, migration flows across the Mediterranean have seen a drastic reduction, totaling 390,000 in 2016 (with over 360,000 arriving by sea), 184,316 in 2017, and 141,472 in 2018. Italy and Greece found themselves on the frontline of the crisis, grappling with the arrival of thousands at their shores and borders. She stresses that the indelible images of migrants, refugees, and asylum seekers arriving in Germany have become ingrained in the collective memory of Europeans, influencing the trajectory of politics both within the country and across the continent (Torres, 2019, online).

Conveniently, the post-Brexit migration policy is well-designed to address this specific issue since it is set to impose restrictive measures specifically targeting refugees. Despite the UK's proclaimed commitment to addressing the 'refugee crisis' in Europe, it's noteworthy that the country has, in reality, admitted a relatively small number of asylum seekers (Schmidtke, 2021, online).

As Greenaway and Milner (2018, online) argue people's attention is a highly valuable resource, which is progressively being captured by media. According to Heidenreich et al. (2019, online), the most significant media framing around the 'European Refugee Crisis' occurred before the Brexit referendum, with the crisis being contextualized within Brexit around June 2016.

Agovino et al. (2021, online) conducted a study of the Effect of Media News on Radicalization of Attitudes to Immigration, where they found out that there is a negative correlation between pro-immigration attitudes and both media coverage and the negative tone of news. Notably, this correlation is statistically significant only among individuals with high trust in the media. For those with low trust, increased coverage of immigration and a negative news slant intensify pre-existing preferences and beliefs regarding immigration, leading to a more extreme pro-immigration index for individuals on the political right. Conversely, individuals on the left experience the opposite effect.

Moreover, the Migration Observatory (2023, online) examines the effect of education and age on the opinion about migration with the results being that younger people and people with university degrees incline a more positive approach compared to older people and people with lower levels of education. Dražanova (2021, online) implies, that disparities between older and younger individuals probably stem from distinct historical and social contexts in which people have undergone socialization rather than just age.

As a part of this paper there was an analysis conducted to explore whether regions with a higher average age tended to vote for the UK's exit from the EU. In connection to the previously mentioned highly influential „Leave“ campaign as a case in point Pehlivanoglu et al. (2022, online) suggest that older individuals might face challenges in detecting the veracity of news. Furthermore, in the context of intergenerational redistribution, the elderly benefit as the average age across European countries tends to rise (Klien et al., 2021, online).

However, upon examining the correlation between the average age in a region and the percentage of voters favoring the UK's exit from the EU no correlation was identified. This might have been caused by the average age not being the right variable to build this test on since the average age does not vary across the UK significantly (but the region of Greater London).

Amongst the socio-economic factors being relevant to the voters' decision-making process it is interesting to mention that Dhingra (2016, online) and Carreras (2019, online) came to the conclusion, that in areas with lower wage growth, there was a higher likelihood of local residents taking the risk and voting for the UK to leave the EU. Paradoxically, Dhingra (2016, online) notes, these voters were the ones most dependent on EU trade, investment, and transfers. Additionally, he suggests that Leave voters tended to have lower income and education levels than the average population, which the Migration Observatory (2023, online) supports with their research results.

This thesis investigated whether the more a person sees the impact of the funds the membership in the EU brings along, the more they tend to want to remain eligible to receive these funds, hence vote to remain. However, the results have turned out to be statistically insignificant, although a weak negative correlation has been found, which would be in favor of the hypothesis outlined above.

According to the Migration Observatory (2023, online) in the year leading up to the EU referendum, spanning from June 2015 to June 2016, immigration consistently emerged as the most significant issue confronting the country, reaching its peak at 42% in 2015.

In June 2016, the month of the EU Referendum, 48% of individuals identified immigration as a crucial issue. However, its significance gradually waned, with fewer people mentioning immigration in the subsequent years (the Migration Observatory, 2023, online).

Portes & Springford (2023, online) conclude, that in general, the establishment of the new system is operating in line with the assurances made by Leave advocates. EU citizens are no longer provided an automatic right to work in the UK and must now apply for visas just like individuals from other parts of the world. They say, that while the conditions of the new system are relatively liberal, excessively liberal according to O'Brien (2022, online), they prove too demanding to offset the absence of free movement in low-skilled sectors, resulting in labor shortages, which Sumption (2021, online) claims as well. The response of employers to these shortages is still uncertain, and it will take time for adjustments to occur. However, a probable outcome involves a combination of increased wages and prices, along with reduced output, particularly in jobs that are challenging to automate (Portes & Springford, 2023, online).

## **5.1 Work Migration**

Before Brexit, most analyses and research indicated that the new point-based migration system would lead to a substantial decline in work migration. The UK government's Long-term economic analysis (HM Government, 2018) modeled the impact of net migration from the European Economic Area falling to zero, estimating a reduction of GDP by 1.8% over 15 years and a per capita GDP reduction of 0.6%. Home Office modeling (Home Office, 2018) forecasted a decrease in the number of EU workers in the UK by 200,000 to 400,000 by 2025, resulting in a GDP reduction of 0.4% to 0.9%, and a GDP per capita reduction of 0.1% to 0.2%.

Regardless of all the previously mentioned analysis conducted prior to Brexit and their results, the overall economic effects of immigration are modest, claims Walsh (2020, online). He stresses, that the Migration Advisory Committee (2020, online) has consistently discovered, that while migration has marginally expanded the overall size of the UK economy, it has had minimal influence on gross domestic product per person, wages, or employment.

The new system, which has equalized the two-tier system by applying the same rules to new work migrants regardless of country of origin (except for those from Ireland), has resulted, as anticipated, in a significant reduction in EU migration and an increase in non-EU migration, so Portes & Springford (2023, online). Their analysis suggests that while overall migration is currently at least at pre-pandemic levels, there remains a notable "shortfall" in migration for work. The results show that non-EU migration has indeed increased significantly, primarily by expanding visa numbers in sectors and occupations that were already relatively open, especially the health sector, rather than by extending the use of the system to sectors that previously relied on EU migrants.

The Office of National Statistics (2021, online) released an analysis in 2021, which implies a significant underestimation of EU migration and an overestimation of non-EU migration during the examined period of 2012–2020, so Portes (2022, online). He comments that his research suggests an additional 800,000 net EU migrants compared to the initially reported estimates. In alignment with this trend, the number of applications to the EU Settlement Scheme, designed for EU nationals residing in the UK before January 1, 2021, to secure permanent residence, has far surpassed expectations. Despite the gov.uk's (2018, online) population-based estimate of 3.5–4.1 million eligible applicants, around 5 million people have been granted settled or pre-settled status, with a substantial number of additional applications still being processed (Portes, 2022, online).

Sumption (2021, online) writes that the implementation of the new system coincided with a tumultuous period in the UK economy and labor market. As most COVID-19-related restrictions and regulations were lifted in early 2021, there was a sharp rise to be witnessed on the curve of labor demand, leading to notable shortages and bottlenecks. Much of this disruption stemmed directly from the pandemic's impact and the subsequent reopening (Sumption, 2021, online and Ravikumar & Muvia, 2023, online). Sumption (2021, online) adds that there was a significant net emigration of workers of EU origin during the pandemic.



Although, the EU and non-EU migrants now need to adhere to the same set of rules and regulations when undergoing immigration to the UK, their migration development patterns over time were influenced by different factors and were exposed to a unique set of shocks. In accordance with this, the two within this thesis examined timeseries of EU and non-EU immigration figures do not exhibit correlation.

McCurdy (2023, online) implies, that the increase in non-EU migrants can be attributed to various distinctive factors, including the impact of the Ukraine war (leading to higher numbers departing through humanitarian routes) and the lifting of Covid-19 restrictions (resulting in an increase in the number of incoming students).

It is vital to investigate whether if non-EU and EU countries do not exhibit a common trend, if at least within the EU countries share similar development patterns or if notable differences emerge when comparing these groups. According to the correlations conducted within this paper, the migrants from EU-12 and EU-10 countries seem to follow a similar trend. Meanwhile, EU-2 countries are likely affected by the labor market restrictions imposed during their accession period until 2014.

Portes (2022, online) explains, that compared to the non-EU migrants, predominantly entering for work (though not universally), who typically engage in occupations that exhibit higher skill levels than the UK average, the individuals coming from EU10 and EU2 countries are more likely to be employed in low-skill occupations.

## **5.2 Academic Migration**

As an important subordinate topic to this thesis academic migration was examined. Academic migration involves the movement of not only students, but also scholars, researchers, and academic personnel, which tend to exhibit the pattern of not establishing permanent residence in the UK but more likely return to their home county or continue migrating (The Migration Observatory, 2023, online).

Park (2020, online) explains, that in several local authorities, which are characterized by significant student populations, the net internal migration level declined in the year leading up to mid-2019. Portes (2022, online) suggests that the shift to predominantly online teaching in many universities may have influenced the decisions of numerous foreign students who opted not to come to or return to the UK.

After the lifting of COVID-19 restrictions, there were changes in the composition of incoming international students. From the included dataset it is visible that there has been a significant reduction in the number of EU applicants for undergraduate study, with a 40% decline in applications for the 2021 academic year compared to the previous academic year.

The Migration observatory (2022, online) even reports a 51% decline in 2022 compared to 2020. They comment that this decrease occurred despite a rise in applications from non-EU international students, indicating that Brexit, which specifically impacted EU citizens is likely a contributing factor alongside the back then still ongoing restrictions responding to the global pandemic. Reportedly the factors influencing the determinative process include considerations such as the visa application process and higher international student tuition fees, which are to be found in the EU Exit Student Finance Policy (Department for Education, 2022, online).

Within this thesis the development of academic migration (represented by the number of applicants for undergraduate study at universities in the UK) over time was compared to the trend of the work migration in the same time frame, whereas the migrants were divided into EU and non-EU as they were being exposed to the same set of factors. No link has been found comparing work and academic migration examining the group of EU migrants, however, a significant positive correlation between work immigration of non-EU citizens and the number of non-EU citizens applying to study at UK universities was confirmed.

No clear reason for these results has been found. Some authors, however mentioned that non-EU migrants tend to migrate with their families when heading to the UK, whereas EU citizens are more flexible especially when considering the distance back home.

Overall research dedicated to exploring the topic of academic migration majorly expresses concerns about the UK's exit from the Erasmus mobility network. It is necessary to stress that of course, academic migration does not solely consist of students as those were only chosen for this analysis for representational purposes. The articles highlight the importance for students, scientists, and academic personnel alike to collaborate and take part in international projects. Apart from the increased probability of active researchers leaving the UK, Şanlıtürk et al. (2022, online) found a different trend of the British scholars tend to want to remain in the UK or even return back shall they now live abroad.

In association to this issue, Highmana et al. (2023, online) draws attention to the resource flows not being the most crucial aspect, but the consequences this change will have on the UK's demographic composition. This, in turn, has profound effects on its internal diversity, external connections, and the ongoing evolution of its cultural identity. With a substantial reduction in the influx of individuals into UK higher education, the country no longer exerts the same magnetic pull for talent as it did when explicitly positioned within Europe, benefiting from European schemes and subsidies that facilitated inward mobility.

To recap, any type of research operates on a global scale, transcending national boundaries, and the UK stands to face challenges if its research data lacks visibility.

## 7. Conclusion

Current research on Brexit has primarily concentrated on the consequences and the economic impact of it. The studies either do not involve the topic of migration or work with it as a constant. So far EU migrants have been getting a little more attention than non-EU migration patterns in the context of Brexit studies. There are few papers that specifically focus on work migration, but hardly any examine students or academic personnel. Moreover, migration journals have, up to now, shown a notable absence of discussions regarding the effects of Brexit on the UK and EU migration frameworks, as well as a lack of exploration into the interconnected dynamics of work migration and academic migration.

The within this thesis conducted research suggests that there has been a certain grade of Euroscepticism in the United Kingdom from the very beginning of its membership in the EU (1973) – or rather its predecessor the European Economic Community. The UK ultimately left the EU in January 2020 after the British people voted for it in the 2016 Brexit referendum, and the negotiations about future cooperation were finalized. However, some obstacles emerged and are presently being revised by the current British Prime Minister Rishi Sunak.

Since the public opinion is crucial in any kind of referendum, it has interlaced the whole thesis. Wrapping up, many factors can influence an individual's decision-making process – whether it is age or the person's background. However, based on the research within this thesis migration-stream-inflow and its media representation played an important role.

It is undeniably true that the „Leave“campaign went much more viral than the campaign run by the remain advocates.

In the early 2000's the thought of migration being a problem started to resonate in the minds of the British once larger streams of migrants from mainly EU-10 countries started to head to the UK. Around the year 2015 the refugee migration crisis was used to underline the issue of immigration, although minor numbers of these migrants actually came to the UK.

Once the results of the Brexit referendum were released - before changes in regulations were even applied – many migrants already decided to leave. Then during the period of the global COVID-19 pandemic, large streams of migrants have departed for various reasons. Often wise because they have lost their job and living in the UK might have been connected

to higher costs than in their home countries. Also, at certain points during the pandemic the UK has become a large center of infection.

After there were no more COVID-19 restrictions in place and many migrants have left the UK with barely anyone incoming throughout the pandemic, the UK found itself facing major issues linked to missing workforce especially on lower skill positions. Succeeding a troublesome phase of workforce shortage, the new point-based immigration system was implemented, and the migration streams started to alter. Contrary to many beliefs, migration did not significantly decline as a whole. The new system secured the UK the right to pick whom to grant access.

It was discovered that academic migration and migration for work do not necessarily determine each other. Although overall the post-Brexit development suggests that both EU academic migration and EU work migration declined, they follow different trends, and no correlation has been detected. On the other hand, non-EU academic and labor migration do share similarities.

In general research dedicated to exploring the topic of academic migration vastly oscillates around the UK's exit from the Erasmus mobility network. The articles highlight the importance for students, scientists, and academic personnel alike to collaborate and take part in international projects.

To conclude the UK's point-based immigration system meets the demanded outcome for EU citizens to no longer be automatically eligible to work or study in the UK. They must obey the immigration rules just like individuals from other parts of the world. Nevertheless, this process seems to be challenging for EU migrants, which leaves the UK exhibiting labor shortages in low-skilled sectors. Permanent solutions to these problems are yet to be found and despite the promises of a global Britain with many new trading opportunities, the UK's currently suffers a large backlash against the social diversity.

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## 9. List of pictures, tables, graphs and abbreviations

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## 8.4 List of abbreviations

Brexit – consisting of the words “Britain” and “Exit”, the act of the United Kingdom leaving the European Union

EU – European Union

NUTS - Nomenclatures of Territorial Units for Statistics

ONS – Office of National Statistics

RAPID - Registration and Population Interaction Database

UK – United Kingdom

y.o.a – years of age