



# REMINDER

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS  
IN NARRATIVES, DEBATES AND EU REFORMS

## European Media Migration Report: How Media Cover Migration and Intra-EU Mobility in Terms of Salience, Sentiment and Framing

### REPORT

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# Executive Summary

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The aim of this report is to offer a broad overview of migration (both immigration and emigration) discourses in European media for researchers in comparative media and migration studies in the coming years. It also aims at those involved in journalistic news production as well as policy decisions related to European migration in general, and intra-European migration and mobility in particular. We focus on the concepts of salience, sentiment and framing to qualify dynamics in media discourses in seven European countries – Spain, the United Kingdom, Germany, Sweden, Poland, Hungary and Romania – using semi-automated approaches to computational media analysis.

In our report, we tackle three main gaps in the existing work: (i) a lack of comparative studies dealing with European migration media discourses of the last decade(s); (ii) insufficient attention to the intricacies of multilingual text analysis in computational text analysis; (iii) insufficient evidence on country-specific differences in discourses about intra-European mobility and migration compared to migration discourses more generally.

Based on our key findings on patterns in media coverage dynamics between countries in general and the differences in overall migration coverage, as well as intra-European migration coverage between sending and receiving countries in Europe, we urge future research to continue in this large-scale, comparative and multilingual avenue, to allow for the detection of further patterns within as well as between countries and contexts.



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Executive Summary	2
Introduction	4
Migration in the Media: A Short Overview	8
Seven Countries, Seven Media Systems and Migration Contexts	12
Data and Methods	22
Analyses	32
I.    Visibility of Migration Coverage	33
II.   Relative Sentiment of Migration Coverage	39
III.  Visibility of Intra-European Migration	45
IV.  Relative Sentiment of Intra-European Migration	51
V.    Framing of Overall and Intra-European Migration Coverage	57
Conclusions	64
Limitations	67
Concluding Remarks	69
Literature	71
Appendix	84



# Introduction

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The principle of free movement allows citizens of the European Union (EU) to cross EU borders to live, work, or travel in other EU member states. It is one of the “four freedoms”, and a fundamental principle of the EU.<sup>1</sup> Furthermore, the European Economic Area (EEA) extends free movement beyond just EU member states to include Iceland, Liechtenstein and Norway, and a bilateral agreement enables the same for Switzerland. As of 2017, free movement is highly appreciated by EU citizens (81% are in favour of it); more than half (57%) perceive it as the most positive outcome of European integration (Commission of the European Communities, 2017). Free movement and migration within a large part of the European continent was facilitated even further by the Schengen agreement, wherein ratifying countries decided to gradually abolish physical barriers, and eliminate border controls.<sup>2</sup> At the same time, this agreement has set measures to strengthen the external borders of the Schengen area (e.g. the European Border and Coast Guard Agency Frontex), and thus harmonize possibilities and rules for immigration into the EU.

However, since the so-called “refugee crisis” in 2015 (from now on referred to as refugee crisis), free movement within Europe and migration into the EU are fiercely debated topics, both in politics and the public domain, including in the media.

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<sup>1</sup> See also the other freedoms: the free movement of goods, capital and services.

<sup>2</sup> Note that, while not all EU members are part of the Schengen area and vice versa, there is a large overlap between the two groups. Some EU member states have deliberately opted out of the Schengen agreement (e.g. Ireland and the United Kingdom), other EU members are now in the midst of negotiations or final preparations to join it (e.g. Bulgaria, Croatia, Cyprus and Romania). Furthermore, there are some countries that are not part of the EU, which have signed the Schengen agreement (e.g. Iceland, Liechtenstein, Norway and Switzerland). There are also the European microstates Monaco, San Marino and Vatican City, which have not signed the Schengen agreement but are de facto part of the Schengen Area.



Some would argue that media discourses and public perceptions of intra-European migration, for example coverage of the movement of people from Poland to the United Kingdom (see Spigelman, 2013), may have paved the way for the Brexit referendum in 2016 (Hobolt, 2016). Nevertheless, ever since 2010, even before the height of the aforementioned crisis period and in the aftermath of the financial crisis, immigration has been perceived as one of the four most important issues facing the EU (Commission of the European Communities, 2018),<sup>3</sup> with several EU member states now seriously questioning the future of the free movement of persons (Ruhs, 2015; Ruhs, 2017).

Without a doubt, the media play a crucial role in linking politics and citizens, as only a small fraction of citizens will experience or observe the immediate ramifications of policy decisions first hand (Walgrave & de Swert, 2007). This holds particularly true when it comes to EU policy, which may be even more detached from citizens' everyday lives (Boomgaarden et al., 2010). In the past, media coverage has been shown to influence citizens' attitudes towards the EU (van Spanje & de Vreese, 2014) and, for instance, their support for further EU enlargement (de Vreese & Boomgaarden, 2006; Schuck & de Vreese, 2006). In the final analysis, the struggle over migration within and into the EU will depend on what people and the different publics in each member state hear, read and learn about this issue – among others – through the media.

Immigration is one of the most decisive issues for the future of the EU and has been subject to fierce debate in recent years. Therefore, it is important to investigate types of information that the ultimate “souverain” – the ordinary European citizen – receives, and how such information may differ for people living in different EU member states and media environments, as well as how public discourses about

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<sup>3</sup> Other important issues were unemployment, terrorism (which is often tied to immigration in public discourse) and the state of the economy.



immigration may have changed over the course of time. In short, in order to better understand public discourses on the topics of free movement, migration, and their dynamics over time, a systematic empirical overview of European<sup>4</sup> media coverage on these issues is needed. This is why we ask:

*RQ: How do migration discourses in European media differ within and between countries over time?*

To specifically address the topic of free movement, and thereby go beyond previous accounts of media coverage of migration, the main goal of this deliverable is to map media discourses on migration in Europe by contrasting general migration media coverage against media coverage about intra-European migration.

#### *Operational Definition*

Intra-European Migration Coverage: Any news article that refers at least once to immigration or emigration between EU member states or within the Schengen area, as well as to free movement.

In order to comprehensively map media coverage, we compare the salience and sentiment of coverage pertaining to the two different concepts of migration (i.e. general migration vs. intra-European migration), as well as investigate the salience and corresponding sentiment of specific, migration-related media frames. We will do so based on two different text corpora. They consist of traditional mass media coverage published in different European countries and over different periods of time. In a first step, we will investigate media coverage from a historical perspective between the years 2003 and 2017. In a second step, we will focus on the period

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<sup>4</sup> If not specified otherwise, the term “European” will be used as an umbrella term for countries that participate in the European single market.



around the so-called European refugee crisis, the years 2013 until 2017. For this second analysis, we will consider a larger set of media outlets and countries.<sup>5</sup> Our means of analysis consists of computer-assisted methods of content analysis. Based on our country selection, the text corpora analysed in this report originate from Spanish, English, German, Swedish, Polish, Hungarian, and Romanian text sources.

In order to better understand how European media discuss migration, this report will focus on three main sets of analyses:

- Part 1: Comparing the **salience** of *migration media discourses* in general with that of *intra-European migration* in particular.
- Part 2: Comparing the **sentiment** of *migration media discourses* in general with that of *intra-European migration* in particular.
- Part 3: Comparing the **framing** of *migration media discourses* in general with that of *intra-European migration* in particular.

First, we provide a short review of the state of the art in media research about immigration in the European context. Second, we give a short outline of the immigration and media contexts of the seven countries studied in this deliverable. In the third section, we discuss both the data and methods used for the analyses. Fourth, we present the abovementioned empirical analyses. Comparisons will take place between countries and over time/between periods of analysis. Finally, we discuss the collected findings and their implications for our current understanding of European media discourse on migration, as well as any insights found regarding the possible dynamics of media and public opinion formation.

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<sup>5</sup> Note that this differentiation is not only being made based on different research interests but is also due to restricted data availability.



# Migration in the Media: A Short Overview

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A recently-published literature review finds that immigration and migrant groups tend to be negatively represented in European media, with conflict-centred coverage, which may consequently increase anti-immigrant sentiment and anti-immigrant voting within media audiences. However, as the authors argue, one of the central shortcomings in this strand of the literature is a lack of systematic country comparative analyses (see Eberl et al., 2018). In the following, we will discuss some of the most relevant findings in the field concerning the salience, sentiment and framing of migration media coverage – as well as the state of the field concerning comparative analyses.

## Salience

When it comes to the salience of migrant groups in the media, studies have shown that – even before the refugee crisis in 2015 – the most salient group of immigrants tends to be asylum seekers. Media coverage may thus distort public perception of immigration in a country by over-emphasizing a specific group compared to others and compared to their actual size in that specific country (Blinder, 2015; Lubbers, Scheepers & Wester, 1998; Ruhrmann, Sommer & Uhlemann, 2006; Strömbäck, Andersson & Nedlund, 2017). This issue becomes even more problematic in light of research that shows how making specific migrant groups more visible in the media can increase out-group hostility towards that group, and anti-immigration attitudes in the native media audiences (e.g., van Klingereren, Boomgaarden, Vliegthart & de Vreese, 2015; Sniderman, Hagendoorn & Prior, 2004). Furthermore, in a more recent study, Hartevelde, Schaper, De Lange, and van der Brug (2018) show that the visibility of the refugee crisis in European media coverage increased citizens' Euroscepticism.



## Sentiment

When it comes to the sentiment towards migrant groups in the media, studies have shown that news coverage about migration tends to be strongly negative (e.g. Esser, Engesser, Matthes & Berganza, 2017; Igartua et al., 2007); more in tabloids than in quality newspapers (e.g. Cheregi, 2015; Kroon et al., 2016). Concurrently, Schlueter, Meuleman and Davidov (2013) find a strong correlation between the negativity of immigration-related news and citizens' immigration-related threat perceptions. Similarly, Boomgaarden and Vliegenthart (2009) show that such negative and conflict-centred media coverage leads audiences to perceive the issue of immigration as more problematic.

## Framing

When it comes to framing, most studies that deal with news coverage of immigration focus on issue-specific frames, and thus often analyze the importance of economic, welfare, cultural, or security considerations in migration coverage (e.g. Strömbäck et al., 2017). Some studies additionally analyze the valence of these frames in a cost/threat vs. benefit comparison (e.g. de Vreese et al., 2011; Schuck & de Vreese, 2006; Strömbäck et al., 2017). While Eastern Europeans are more often portrayed as a threat to the economy and welfare system, Chouliaraki and Zaborowski (2017) find that refugees are depicted in the context of antipathy toward Islam, or terrorism, which relates to cultural and security threat-framing. In an experimental framing effects study, Igartua and Cheng (2009) expose participants to news stories that included either a negatively-valenced security frame (e.g. increased crime rate) or a positively-valenced economic frame (e.g. increase in labour force). The findings indicate that news stories may not only negatively, but also *positively* influence audiences' perceptions about immigration. In a working paper, Eberl et al. (2018)



show that the valence – positive or negative – of immigration media framing will influence audiences’ support for freedom of movement accordingly.

## **Comparative Research**

A lack of comparative studies plagues the field of media and migration research. The field tends to have a strong focus on the United Kingdom, and very few research projects include more than two countries (see Eberl et al., 2018 for more detail). Those who do often examine differences of migration news coverage between countries, with reference to whether a country is categorized as a sending (i.e. negative net migration rate) or receiving country (positive net immigration rate).

Caviedes (2015), for example, found country differences in migration framing, with the economic frame being more prevalent in the UK than in Italy or France. Similarly, Heidenreich, Lind, Eberl and Boomgaarden (2019) found shared patterns across different parts of the European media landscapes in the framing of the so-called 2015 “refugee crisis”, and argue that receiving countries tend to have a more diverse set of media frames than sending countries. Balabanova and Balch (2010) found that sending states have a greater interest in supporting international human rights for migrant workers than receiving countries, and will thus adapt the respective media framing. Unfortunately, findings tend to differ from one study to the next, so a clear comparative pattern remains elusive. Berry, Blanco and Moore (2016), for example, analyse press coverage on the “refugee crisis” and show that there is considerable variation between countries, with the Swedish press being the most positive towards arriving irregular migrants and the UK press the most negative. Whether such findings may hold beyond the specific case of irregular migration remains unclear.



## Summary

In sum, the visibility of different groups of migrants or the immigration issue in general may differ strongly throughout media environments, and this may not always reflect real world developments (Jacobs et al., 2018). Although the salience of migrants and migration may differ across media landscapes, the sentiment of media coverage on the subject tends to be very negative when compared to that of other news topics (Esser et al., 2017). Furthermore, because media coverage frequently fixates on a small set of often negatively-valenced and issue-specific frames (e.g. security and crime), framing of migration in the media is not necessarily diverse. However, little is known about migration coverage in regards to comparative patterns across Europe, and even less about other kinds of migrant groups or different concepts of migration (e.g. general migration vs. intra-European migration). Thus, in order to deepen our understanding of the media discourse on migrants and migration, a systematic analysis between countries and across time is needed.



# Seven Countries, Seven Media Systems and Migration Contexts

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Media coverage in different countries may be strongly dependent on the country's media system and political context (Hallin & Mancini, 2003), particularly when it comes to migration coverage (Berry et al., 2016). The political context of a country, of course, also includes that country's migration history. For this reason, we present here a short overview of the media and political context, in particular the migration history, of each of the countries under examination (Spain, UK, Sweden, Germany, Poland, Hungary and Romania).

## United Kingdom

Belonging to the group of Central European or Democratic Corporatist model of media systems, the UK shows high levels of press circulation, strong public broadcasting and relatively moderate political parallelism (Brüggemann et al., 2014). Similar to Spain, interventionism is high in the UK; in contrast to Spain, however, tolerance is not a core value of journalists and is thus not being promoted in British media coverage (Mertens et al., 2019).

In contrast to other European countries, the peak in recent irregular migration to the UK was not during the so-called 2015 refugee crisis. Instead, asylum applications increased around the early 2000s (mainly from outside of Europe). This was followed by a particular rise in immigration from Poland after it joined the EU, which reached its peak in 2007 just before the financial crisis of 2008 – after which immigration from Poland dropped again (Spigelman, 2013). Still, as early as during the 2010 election,



immigration was identified by political parties as the most relevant topic to campaign on (Griessler, 2017).

With immigration being one of the most dominant political issues over the past 20 years, the country witnessed a dominantly negative media discourse on immigration, both concerning intra-European migrants, refugees as well as immigration more generally (e.g. Smart et al., 2007; Spigelman, 2013). Furthermore, research shows that between 2006 and 2015 immigration was the "most salient topic in the UK public debate" (Allen, 2016, p.2). Negative news coverage on immigration has particularly increased since 2010, when the Conservative-led government took office. A further clear increase in coverage about intra-European migration took place when the transitional labour market arrangements for Romania and Bulgaria had ended. This led to a public discourse on migration that may have contributed to the eventual outcome of the Brexit referendum (Allen, 2016; Hobolt, 2016). Research also shows that it is British tabloids, in particular, which fuel anti-immigrant discourse (e.g., Berry et al., 2016; Matthews & Brown, 2012; Statham, 2002).

## **Spain**

The Spanish media system can be classified as belonging to the Mediterranean or Polarized Pluralist model, similar to other southern European countries (e.g. Italy and Greece). In such a media system, political parallelism and the interdependencies between politics and the media tend to be high (Hallin & Mancini, 2004). Promoting tolerance can be of particular importance in such countries, echoing a journalistic culture of interventionism (Berganza, Lavín & Piñeiro-Naval, 2017; Mertens et al., 2019).



Spain was a “country of immigration” between 1990 and 2010. This also included high levels of irregular migration (Cebolla-Boado & González, 2013). From 2000 to 2007, it was particularly the booming of construction and tourism industries that led to increased immigration. Concerning intra-EU and Schengen migration, the largest groups of migrants come from Romania (i.e. mainly worker migration) and the United Kingdom (i.e. mainly pensioners). Other groups include Moroccans and migrants from Latin American countries (Arroyo-Pérez et al., 2014). It was the 2008 economic crash and the subsequent economic recession that brought an end to increased immigration in Spain, and even motivated a more defensive immigration policy against irregular migration (Cebolla-Boado & Gonzáles, 2008; Seoane Pérez, 2017). At the same time, the crash led to increased emigration from young and highly skilled Spaniards, which effectively induced a long-term transformation of the national labour market (Gonzales Enriquez & Martínez Romera, 2017).

Since political parallelism in the country is high, the framing of migration also strongly depends on the ideology of each news outlet (Igartua, Muñiz & Cheng, 2005). Still, more generally, the media discourse on immigration is said to be similarly negative as in other European countries; however, there is less explicit racism and xenophobia due to a legacy of leftist solidarity following the Franco dictatorship (van Dijk, 2005). Similarly, coverage during the 2015 refugee crisis was comparatively positive, as it gave irregular migrants a voice and portrayed them as victims rather than perpetrators (Seoane Pérez, 2017). Finally, extreme-right and strongly anti-immigrant positioned rhetoric has only become a notable political force at the end of 2018 (i.e. after our period of analysis), with the surge of the extreme right party Vox.



## Germany

Similar to the United Kingdom, the Federal Republic of Germany belongs to the Democratic Corporatist model of media systems. The media system is additionally known for a particularly strong printed press circulation and regional diversity in newspapers. While political parallelism may be above average, the state plays a pivotal role in ensuring pluralism in the media system (e.g. through press subsidies and a strong public broadcaster; Brüggemann et al., 2014; Mancini & Hallin, 2004).

Germany is the most populous country in the EU, with over one fifth of its population having a so-called “migration background” (Statistisches Bundesamt, 2014). In the 1950s and 1960s, immigration to Germany came mainly from Southern Europe and Turkey. Later, in the early 2000s, the government would start an initiative to attract highly skilled workers, particularly from non-EU countries (Hollifield, 2004). During these years, Germany started to embrace its new identity as a so-called “immigrant country” – although it had been one for a while already (Bauder, 2008). However, the country decided to wait for 7 years before opening its labour market to the new Eastern European EU member states after the Eastern enlargement of 2004. After that, public anti-immigrant rhetoric started to increase (Kohlmeier & Schimany, 2005). Already during the years before the refugee crisis, the question of how to integrate immigrants – specifically those from Muslim countries – into German society began to dominate political discourse (Becker & el-Menouar, 2012). Later, during the crisis itself, Germany was registering more asylum applications than any other EU member state. This may be due – among other things – to migrants associating the country with a strong economy, good education and employment opportunities (Brückner et al., 2016).



Finally, after Angela Merkel's well-known assertion "Wir schaffen das" ("we can do this") on August 31 2015, irregular migrants from Africa and the Middle East became the main focus of the political and media discourse on migration (see Heidenreich et al., 2019). Although journalists and editors in Germany may tend to be more tolerant towards immigration, they are said to be hesitant when it comes to interventionism and thus, to actively promoting tolerance in their reporting (Mertens et al., 2019).

## Sweden

The country is a prime example of the Northern media culture, with a strong public broadcast system, a strong press market, high levels of journalistic professionalism and press subsidies, and low levels of political parallelism (Brüggemann et al., 2014). While journalism in Sweden is tolerance oriented, journalists do not necessarily adhere to interventionist ideals and therefore may refrain from taking a clear political stance on matters relating to migration (Mertens et al., 2019).

Sweden has the largest foreign-born population of the Nordic countries. In fact, it has been an important target destination in the past, for refugees during the Balkan crisis in 1992, as well as during the Iraq war in the 2000s (Bucken-Knapp, 2017). However, while Sweden has long been a "model of a tolerant, egalitarian, multicultural welfare state" (Schierup & Ålund, 2011:p.1), street riots in multi-ethnic suburban areas would disturb this picture, starting in 2008-2009, around the time of the financial crisis. As social anxieties in the country increased, so did scapegoating in the form of anti-immigrant discourse (Mylonas, 2012). In 2014, even before the height of the refugee crisis, the Swedish Prime Minister Frederik Reinfeldt made his position (and that of the country) on immigration and irregular migration clear. He appealed to the Swedish people to "open [their] hearts' towards refugees, thus to be sympathetic to people seeking refuge" (Bucken-Knapp, 2017). A few months later, Sweden was



among the European countries with the highest share of asylum applications, and the anti-immigrant Sweden Democrats greatly increased their vote share, thus shifting the immigration narrative in Sweden.

As one of the few longitudinal studies, Strömbäck, Andersson and Nedlund (2017) find that migration coverage in Sweden between 2010 and 2015 already had a strong focus on refugee migration, whereas labour migration was covered sparsely. Anti-immigrant discourse in politics and the media have since been normalised as part of public discourse – particularly when compared to the early 2000s (Berry et al., 2016).

## **Poland**

As one of the post-communist countries in our sample, Poland doesn't easily fit into the well-established media system categorization by Hallin and Mancini (2004). While Dobek-Ostrowska (2012) place Poland within the Polarized-Pluralist ideal type, Castro Herrero and colleagues (2017) set the Eastern European countries apart and sub-categorize them into three clusters. According to their analyses, Poland sits with Croatia, Czech Republic and Slovenia. Among others, the Polish media system is defined by a relatively strong public service broadcasting (PSB). Nevertheless, media freedom began to deteriorate in the early 2000s (Bajomi-Lázár, 2014). In 2017, Poland was the country with the biggest decline in media freedom (Freedom House, 2017).

After the political turnover in 1989, migrants from the former Soviet Union and former Yugoslavia decided to settle in Poland. Still, Poland never really became an “immigrant country” (e.g. in December 2015 the immigrant population constituted less than 1%, see Sadowski & Szczawinska, 2017). Still, since 2008 there has been an increase of labour migration to Poland, particularly from the Ukraine, which peaked



shortly after the Ukrainian revolution and the annexation of the Crimea by the Russian Federation in 2015 (Fogel, 2015, Sadowski & Szczawinska, 2017). Concerning irregular immigration to Poland, however, the numbers have largely remained stable – even between 2014 and 2018.<sup>6</sup> While in the last decades Poland has had continuously negative net migration numbers, emigration from Poland skyrocketed after the opening of the European labour market (Dustmann et al., 2015).

In sum, during the last two decades, “the issue of immigration has hardly been of interest within the Polish public sphere” (Sadowski & Szczawinska, 2017). However, fuelled by the Law and Justice party’s rhetoric, public discourse during election periods in Poland would quickly turn to an anti-immigrant agenda (Krzyżanowska & Krzyżanowski, 2018; Sadowski & Szczawinska, 2017).

## **Hungary**

According to Castro-Herrero and colleagues (2017), Hungary belongs to the Eastern cluster of post-communist countries, together with Romania and Bulgaria. These countries show high levels of political parallelism with very low audiences when it comes to public broadcasters.

Since the early 1990s, Hungary has witnessed an increase in xenophobic sentiment compared to other European countries. Additionally, Hungary is particularly known for circulating racist, anti-Roma, public discourses in the 2000s (Vidra & Fox, 2014). Since its implementation of the Schengen agreement, the country has an important geopolitical position (which became even more relevant during the refugee crisis of 2015) due to its Schengen external borders (Barlai & Sik, 2017). Xenophobic attitudes

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<sup>6</sup> [http://www.europarl.europa.eu/external/html/welcomingeurope/default\\_en.htm](http://www.europarl.europa.eu/external/html/welcomingeurope/default_en.htm)



in the population have reached a particularly high level during the Fidesz coalition governments beginning in 2010 (Simonovits & Szalai, 2013), despite the country's generally low immigration rate. During the refugee crisis, that same government launched professionally designed political campaigns to promote its anti-refugee policy (Barlai & Sik, 2017).

Since the Fidesz coalition's rise to power, the Hungarian government has shown extensive efforts to starve out critical media outlets, while rewarding outlets that support their policy with advertising contracts (Freedom House, 2017). With the sharp increase in asylum applications around 2014 and 2015, the migration discourse in Hungarian media is said to have been similarly strongly negative and anti-immigrant, focussed on portraying refugees as illegitimate and economic migrants (Chouliaraki, Georgiou, Zaborowski & Oomen, 2017). At the end of 2015, the conservative and pro-government media scene was focused on legitimizing Hungary's decision to be the first EU country to close internal borders (Heidenreich et al., 2019).

## **Romania**

As mentioned, Romania belongs to the same media system cluster as Hungary. Particularly during its communist past, the media was under strict state control and censorship (Herrero et al., 2017). As one of the core issues discussed during the negotiations for EU accession, there have been efforts at professionalisation and liberalisation of Romanian media between 2005 and 2006. However, irrespective of these intense short-term efforts, media freedom quickly deteriorated again after Romania's accession to the European Union (Gross, 2008; Karas, 2016).

Historically and at present, Romania is home to many ethnic minorities. While some left the country after the collapse of the Socialist Republic in 1989, Hungarians, Ruthenians, Roma and others still struggle to be fully accepted. In fact, Romania is



among the EU countries with the largest negative net-migration figures. This is seen in the emigration of particularly younger and often better-educated citizens, who are disappointed with slow economic and political reforms in the country (Stegherr, 2017). But this trend has been weakening in recent years (World Bank Group, 2017). Even during the 2015 refugee crisis, the number of refugees coming or even wanting to stay in Romania was very low, which is why, even then, emigration remained a more important issue for the country than immigration.

While Georgescu (2011) reports that anti-immigrant rhetoric in the media has increased after the financial crisis, it was never as negative – particularly when it comes to immigration from Muslim countries – as other European countries (see also Stegherr, 2017). At the same time, a pro-emigration media framing had increased as well (specifically emigration to Italy, see also Petrescu, Bâc & Zgură, 2011). Since the country was not strongly affected by the increased arrival of refugees from the Middle East in 2015, media reporting remained reasonably balanced with only a slightly negative tone towards the European Union's handling of the situation (Corbu, Buturoiu & Durach, 2017).

## Summary

In sum, we see that the seven countries in our sample differ greatly on several aspects. Whether and how these aspects are mirrored in our findings is subject to interpretation of the empirical results. The countries differ:

1) In terms of their media systems, journalistic cultures and freedom of the press. Spain belongs to the Polarized Pluralist Model. The UK and Germany belong to the Democratic Corporatist Model. Sweden belongs to the Northern Model. The post-communist countries are set apart, with Hungary and Romania being more similar to each other, while Poland stays distinct due to its comparatively strong public



broadcasting system. In recent years, media freedom is of particular concern in the three post-communist countries.

2) In terms of their migration histories, their geopolitical position on the European continent, and the extent to which they have been impacted by the 2015 refugee crisis. While Spain, the UK, Germany and Sweden have been countries of immigration (to a differing extent and at different points in time), Poland, Hungary and Romania have not. Particularly Spain, Poland, Hungary and Romania have witnessed an increase in emigration of young and educated citizens in more recent years. While Germany and Sweden have been destination countries for irregular migrants during the 2015 refugee crisis, the other countries have not. Spain and Hungary, however, have an important geopolitical role as gatekeepers to the Schengen area (particularly concerning irregular migration from Africa and the Middle East).

3) In terms of media coverage and public political discourse of migration. Due to the abovementioned differences between the countries, media discourses and their dynamics over the period of analysis are also expected to differ strongly between these countries. As public discourses may be driven by parties (i.e. agenda building), the long-term absence of strongly anti-immigrant parties in Spain, Sweden or Germany may be of relevance. In more general terms, real-world events such as EU accession periods, the financial crisis, and the 2015 refugee crisis seem to be intensifiers of particularly negative migration discourses in all of the countries. Moreover, there is the special case of Brexit as driver of anti-immigrant discourse in the UK in particular.



# Data and Methods

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The following analyses are based on the automated analysis of two separate and unique text corpora consisting of migration-related media coverage of up to seven member states of the European Union between the years 2003-2017, as well as 2013-2017. The data has been collected and analysed within the REMINDER project and can be accessed publicly through the Austrian Social Science Data Archive (AUSSDA) from the first quarter 2020 (see Lind et al., forthcoming).

## Text Corpora

Due to restricted data availability, two different media corpora are used in the following analyses (see below for more details). These corpora differ both in the number of included countries (six in Corpus A vs. seven in Corpus B), media outlets (17 in Corpus A vs. 38 in Corpus B) as well as in the covered time span (2003-2017 in Corpus A vs. 2013-2017 in Corpus B). The media data used in this report was collected using several media archives, namely, *APA DeFacto*, *EMIS*, *LexisNexis* and *Webretriever*.

Since our analyses focus on media coverage of migration, we had to preselect relevant news articles using appropriate keywords for each country and thus language. The Boolean search strings used for this procedure were designed to capture any article that relates to the topic of immigration, emigration, general migration and freedom of movement (see Table 1). The search strings were developed and validated with the help of seven native speakers, one per language. Their average Recall and Precision scores were  $\underline{R} = 0.81$  and  $\underline{P} = 0.85$ , respectively, and therefore represent an appropriate tool for the identification of migration related news articles.



Table 1. Boolean search strings used for retrieval of migration-related news articles

Country	Language	Search string
Spain	Spanish	asilo* OR inmigra* OR refugiad* OR migrante* OR migratori* OR "sin papeles" OR "campo de desplazados" OR patera* OR emigra* OR "libre circulación" OR "fuga de cerebros"
UK	English	asyl* OR immigrant* OR immigrat* OR migrant* OR migrat* OR refugee* OR foreigner* OR "undocumented worker*" OR "guest worker*" OR "foreign worker*" OR emigrat* OR "freedom of movement" OR "free movement"
Germany	German	asyl* OR immigrant* OR immigriert* OR immigrat* OR migrant* OR migrat* OR flüchtling* OR ausländer* OR zugwander* OR zugewander* OR einwander* OR eingewander* OR gastarbeiter* OR "ausländische arbeitnehmer*" OR emigr* OR auswander* OR ausgewander* OR personenfreizügigkeit* OR arbeitnehmerfreizügigkeit* OR "freier personenverkehr*"
Sweden	Swedish	asyl* OR invandr* OR migrat* OR migrant* OR flykting* OR utlänning* OR immigrant* OR ensamkommande* OR EU-migrant* OR "utländsk bakgrund" OR gästarbetar* OR "utländsk* arbet*" OR papperslös* OR emigr* OR utvandr* OR "fri rörlighet"
Poland	Polish	azyl* OR migr* OR imigr* OR uchodźca OR uchodźcy OR uchodźcę OR uchodźcą OR uchodźco OR uchodźców OR uchodźcom OR uchodźcami OR uchodźcach OR cudzoziem* OR obcokrajow* OR "robotni* z zagranicy" OR "pracowni* z zagranicy" OR gastarbeiter* OR "nielegaln* pracowni*" OR emigr* OR "swobodny przepływ"
Hungary	Hungarian	menedék* OR bevándor* OR immigrá* OR migrá* OR menekült* OR vendégmunk* OR elvándor* OR emmigrá* OR mozgásszabadság*
Romania	Romanian	azil* OR imigra* OR migra* OR emigra* OR refugiat* OR "muncitor străin" OR "muncitori străini" OR "muncitorii străini" OR "muncitorilor străini" OR "lucrător străin" OR "lucrători străini" OR "lucrătorii străini" OR "lucrătorilor străini" OR "libera circulație a persoanelor" OR "libertatea de circulație a persoanelor" OR "libera circulație a lucrătorilor" OR "libertatea de circulație a lucrătorilor"

*Note:* The search strings, and correspondingly the news articles, are in the most-widely spoken language for each country (e.g., not Catalan, Basque or Galician, but Spanish for Spain).



This procedure resulted in a total of 978,673 articles. In order to eliminate duplicate articles that may arise due to faulty archiving, regional mutations of news outlets, or archiving of minimally-edited articles, a deduplication procedure was applied. While it is fairly easy to exclude exact replications of an article, dealing with slightly altered news items requires additional efforts. To detect highly similar texts (e.g., Pouliquen, Steinberger, Ignat, Käsper, & Temnikova, 2004), we relied on the frequently used cosine similarity measure. Comparing the textual content of two articles, this measure indicates and predicts their resemblance. Whenever an article exceeded such manually predefined and language specific thresholds,<sup>7</sup> the shorter version of the article was excluded. With this step of deduplication, the total number of articles was reduced to 844,230.

In a subsequent step, all non-English textual data was machine translated into English via the Google Translate API. This was essential, as it allowed us to annotate the data with English language instruments for automated content analysis. To save financial resources, only a sample of the texts was translated. It is of note that drawing a sample, wherein articles are selected randomly from a strata of outlets and half-year periods, allowed for a subsequent adequate representation and analysis of the full period of analysis. A stratified sample by outlet and half-year period ensured that every outlet during every period would be represented in the data. We additionally opted for an oversampling of small units (outlet x half-year), guaranteeing that – even for such outlets or periods of little migration coverage – sufficient data remained in the sample for further analyses. This resulted in a final data set and two text corpora as described below:

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<sup>7</sup> Following a qualitative inspection of a sample of articles and their calculated cosine similarity, three of the authors determined country-specific thresholds (Spain: 0.98; UK: 0.96; Germany: 0.95; Sweden: 0.95; Poland: 0.95; Hungary: 0.95; Romania: 0.95).



**Corpus A:** The first corpus includes a diverse set of 17 European media outlets. For Spain, it contains the two highest circulating daily newspapers, the relatively center-left *El Pais* ( $n = 5,126$ ) and the center-right *El Mundo del Siglo Veintiuno* (hereafter *El Mundo*) ( $n = 4,371$ ). For the United Kingdom, it includes the tabloids *Daily Mail* ( $n = 4,577$ ) and *Daily Mirror* ( $n = 4,273$ ) and the broadsheets *The Daily Telegraph* ( $n = 4,061$ ) and *The Guardian* ( $n = 4,884$ ). On both levels of quality, broadsheet and tabloid, this selection mirrors the British political environment, with *Daily Mail* and *The Daily Telegraph* leaning to the right and traditionally supporting the Conservative Party, and *Daily Mirror* and *The Guardian* leaning to the left and traditionally supporting the Labour Party. For Germany, it includes the supraregional daily *Frankfurter Rundschau* ( $n = 4,387$ ), the national daily *Die Tageszeitung* (commonly shortened to *taz*) ( $n = 4,669$ ), and *spiegel.de* ( $n = 4,477$ ), which is the online version of the national weekly *Der Spiegel*. All three outlets are relatively left leaning, with *spiegel.de* being center-left, the *Frankfurter Rundschau* more social-democratic, and *taz* progressive left. For Sweden, the corpus contains the two daily newspapers *Svenska Dagbladet* ( $n = 4,257$ ) and *Dagens Nyheter* ( $n = 4,343$ ) and the two daily evening newspapers *Aftonbladet* ( $n = 4,981$ ) and *Expressen* ( $n = 5,497$ ). Regarding their political leaning, both *Dagens Nyheter* and *Expressen* are independent liberal, while *Aftonbladet* describes itself as independent social-democrat and *Svenska Dagbladet* is center-right. For Poland, the corpus includes the center-right daily newspaper *Dziennik Gazeta Prawna* ( $n = 4,187$ ) and the liberal-conservative daily *Rzeczpospolita* ( $n = 4,105$ ). Finally, for Romania, it includes *Romania Libera* ( $n = 1,860$ ), a daily broadsheet newspaper of conservative leaning, and *Ziarul Financiar* ( $n = 3,315$ ), a daily newspaper focusing on financial and business information.

Corpus A covers the period from 1 January 2003, until the 31 December 2017, and is thus an adequate basis for the investigation of long-term changes and



dynamics in migration reporting in European media, particularly when it comes to the assessment of the impact of the 2004, 2007 and 2013 EU-accession periods, the 2008 financial crisis, the Brexit-Referendum, and the refugee crisis of 2015.

**Corpus B:** The second corpus includes all outlets from Corpus A as well as 20 additional outlets, thus augmenting the diversity of the sample even further – particularly by adding Hungarian outlets, as well as a significantly larger set of online news outlets. For Spain, the national daily newspaper *ABC* ( $n = 1,139$ ) is added. It is of conservative leaning and the third most-read Spanish newspaper. For the United Kingdom, the free daily tabloid newspaper *Metro* ( $n = 1,520$ ), which has the highest circulation in the UK, the online news coverage from *telegraph.co.uk* ( $n = 1,316$ ), and *mirror.co.uk* ( $n = 1,205$ ) are added. For Germany, two print and two online outlets are added: the tabloid *Bild* ( $n = 1,573$ ), the highest-circulation newspaper in Germany, and the center-left broadsheet *Süddeutsche Zeitung* ( $n = 2,972$ ); as well as *welt.de* ( $n = 1,930$ ), the online outlet of the conservative daily broadsheet *Welt*, and *zeit.de* ( $n = 1,604$ ), the online outlet of the relatively left-leaning weekly *Zeit*. For Poland, we also include the liberal center-left daily broadsheet newspaper *Gazeta Wyborcza* ( $n = 1,268$ ) and its online outlet *gazeta.pl* ( $n = 1,547$ ). For Hungary, we have the conservative daily broadsheet newspaper *Magyar Hirlap* ( $n = 1,639$ ) and its online outlet *magyarhirlap.hu* ( $n = 1,507$ ), the national conservative daily newspaper *Magyar Idök* ( $n = 1,092$ ), which are all closely associated with the Fidesz party, as well as the left-wing daily broadsheet *Nepszabadsag* ( $n = 1,231$ ), and the social-democratic left-wing daily *Nepszava* ( $n = 1,388$ ). We also added *blikk.hu* ( $n = 1,390$ ), the online outlet of the daily tabloid *Blikk*, the left-leaning *napi.hu* ( $n = 1,125$ ), and the liberal left *24.hu* ( $n = 958$ ). Finally, for Romania, we added the liberal-conservative tabloid *Evenimentul Zilei* ( $n = 810$ ) as well as the relatively left-leaning (i.e. pro-government) daily broadsheet *Jurnalul National* ( $n = 317$ ).



Corpus B covers the period from 1st of January, 2013, until the 31st of December, 2017 and is thus an adequate basis for the investigation of mid-term changes and dynamics in migration reporting in European media; particularly when it comes to the study of the so-called European refugee crisis in 2015, using an even larger set of media outlets compared to Corpus A.

In preparation for the automated annotation of the textual data (i.e. the application of English-language keyword-based dictionaries), all non-English texts from the above described corpora were machine translated into English (e.g., de Vries, Schoonvelde & Schumacher, 2018), which also facilitates cross-country comparisons. The considered alternative, to construct multilingual dictionaries (i.e. keyword lists in different languages that measure the same concept), remained by comparison a much more resource-intensive endeavour (see Lind et al., forthcoming).

Hence, we decided to machine translate corpus A and B into one target language (English) using the Google Translate API. To provide a few more notes about our machine translation approach: the approach of translating full documents is still to be preferred over document-term matrix translation (i.e., translation of pre-defined keywords; see Reber, 2019). While machine translation can still be problematic (i.e., imperfect translation of grammatical structures), it is less of a problem when it comes to automated text analysis based on bag-of-word approaches. As applied in this study, bag-of-word approaches are merely interested in the frequency and co-occurrences of certain keywords (Lucas et al., 2015).

## Measurement

In the following, we will describe the tools that allowed us to measure key concepts of interest and to annotate each article in our corpus accordingly. All our tools make



use of a so-called *dictionary approach*. Such an approach applies a top-down procedure, where texts are searched based on a predefined list of words and phrases that reflect the concept of interest. The rate at which specific keywords then appear (together) in a text are used to classify documents into substantive categories (i.e. subtopics).

The key concepts annotated in the two corpora are threefold: First, the automated coding was used to measure the *salience* of subtopics within migration discourses, and thus to differentiate articles referring to migration within the EU and/or Schengen area from articles referring to migration into that area (i.e. third-country migration). Second, each article was annotated based on the *sentiment* it contained. Third, we prepared three dictionaries for the measurement of migration-related *frames* (economic, welfare and security). In the following, we will present a definition and description of each of these tools.

**Salience:** We first have to identify the salience of migration-related news coverage in general. This is based on the above mentioned selection criteria (see Table 1).<sup>8</sup> Afterwards, *Intra-European* (i.e. *Intra-EU* or *Schengen*) migration coverage is identified as a subgroup of that coverage.

More specifically, when put in contrast to the full coverage within each outlet (i.e. coverage that is not migration-related), we are able to compute the relative salience of migration articles within any outlet in any given period of analysis. Furthermore, the identification of *Intra-EU migration coverage* is made possible through an elaborate search string that is applied to the English-language and translated texts.

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<sup>8</sup> Our measure of salience is thus based on a frequency based indicator measuring the number of articles referring to migration. This indicator is not weighted based on article placement or article length.



This dictionary uses a combination of concepts such as the mention of a country of origin or nationality and keywords referring to migration (e.g. emigration, mobility, free movement) to annotate individual sentences within the corpora. It also contains phrases like “EU mobility” or “Erasmus student”.<sup>9</sup> The dictionary was validated manually and reaches acceptable levels of validity ( $F = 0.79$ ). Therefore, if an article includes at least one reference to *Intra-European migration*, it is annotated with a “1”.<sup>10</sup> Aggregated to the salience level of a specific outlet over a specific period of time, we compute the average number of articles referring at least once to *Intra-European migration* based on all migration-related articles within that outlet and that period of time; the value zero would mean that none of the articles in that outlet and period of time refer to Intra-European migration and the value of 1 would mean that all of the articles in that outlet and period of time refer at least once to that specific type of migration.

**Sentiment:** To quantify migration-related sentiment, we use the pre-validated and frequently used Lexicoder sentiment dictionary by Young and Soroka (2012). The dictionary measures sentiment on the basis of 4,567 predefined positively and negatively connoted words, and measures the general valence of language. It outperforms other known dictionaries in this field and was previously tested against a body of human-coded texts (ibid.). The Lexicoder dictionary fits our purpose perfectly as it is frequently used to measure sentiment in political texts (e.g., Balmas, 2017; Soroka & Wlezien, 2018), and has already been used for the analysis of migration-related texts in previous studies (Lawlor, 2015; Lawlor & Tolley, 2017).

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<sup>9</sup> Merely names, religion or language are not enough to infer a reference to migration or a migration background.

<sup>10</sup> Please note that a positive annotation does not exclude the possibility of other kinds of migration being also mentioned in such article.



More specifically, to measure migration specific sentiment within an article, we first select all sentences within that article containing migration-related words (see Table A1 in the Appendix for a list of the ten most frequent positive and most frequent negative words in each language).<sup>11</sup> All words within these sentences are then annotated based on the Lexicoder sentiment dictionary. Words that are not in the dictionary are assigned a neutral sentiment. Scores for each sentence are standardized according to the length of the sentence. Adding up all scores from words bearing positive sentiment ( $P_i$ ), subtracting all scores from negative words ( $N_i$ ), and dividing by the amount of words ( $W_i$ ) in a document, we get a final score ( $S_i$ ), revealing whether a sentence has a more positive or negative sentiment (e.g. Kouloumpis, Wilson & Moore, 2011):

$$S_i = \frac{\sum P_i - \sum N_i}{\sum W_i}.$$

This thus leaves us with a sentiment score for each migration-related sentence, reflecting the general tone with which media tend to cover migration-related issues, events or stories.<sup>12</sup> A sentence's sentiment can thus theoretically range from -1 (all words within that sentence have a negative sentiment) to +1 (all words within that sentence have a positive sentiment), with zero referring either to a balance between positive and negative words or only neutral words within that sentence.

We afterwards apply the same procedure for all non-migration-related sentences within the same set of articles to acquire a benchmark of negativity for each outlet within each period of time. The deviation of the sentiment value based on the migration-related sentences, from the sentiment value of the non-migration-related sentences within an article, allows us to standardize the measure – which from now

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<sup>11</sup> According to the English language search string in Table 1.

<sup>12</sup> Please note that the measure does not exclusively measure favourability or unfavourability towards migration or migrants. News stories involving criminal acts by migrants, while merely reported on and not necessarily condemned in media coverage, will have a negative sentiment as well.



on, we will call “relative sentiment”. See Figure A1 in the Appendix for a comparison of migration-related and non-migration related sentiment for each country. We therefore filter out any structural biases due to (the media genre dependent) overall negativity of an outlet, country specific differences, or even language differences in the absolute sentiment levels (see Eberl, Boomgaarden & Wagner, 2017 for a similar procedure). Aggregated to the level of a specific outlet over a specific period of time, we compute the average of all the relative sentiment scores per article within that outlet and that period of time.

**Frames:** As the economy, welfare, and security frames have been identified to be among the most relevant frames in migration coverage (e.g. Eberl et al., 2018), they will also be the focus of this report (see Table 3 for more detail). The presence of these frames within each of the migration-related articles was measured using carefully developed and validated frame-specific dictionaries.<sup>13</sup>

Before annotation, all words in the two corpora and in the frame-specific dictionaries were converted to lowercase and lemmatized. Similar to before, news articles were then segmented into sentences. Afterwards, we applied each frame-specific dictionary; matches between words within the sentences of each article and dictionary keywords were identified. One match between dictionary keywords and text was considered to be sufficient to code a sentence as frame-related (thus either referring to the economic, welfare or security frame in the context of migration). Subsequently, one frame-related sentence per article was sufficient to count a frame as present (0/1) in that article. The presence of the different frames are not mutually exclusive. Aggregated to the level of a specific outlet over a specific period of time,

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<sup>13</sup> The identification of the economy frame reached a precision score of 0.81 and a recall score of 0.82. The identification of the welfare frame reached a precision score of 0.82 and a recall score of 0.69. The identification of the security frame reached a precision score of 0.86 and a recall score of 0.84. All frames therefore reached satisfactory levels of validity for usage in automated content analyses.



we compute the average number of articles referring to a specific frame based on all articles within that outlet and that period of time, where the value zero would mean that none of the articles in that outlet use that specific frame and the value of 1 would mean that all of the articles in that outlet refer to that specific frame.

Table 3. Frame operationalization and examples

Frame	Operationalization (for validation)	Text example (Article excerpt)
Economic	Does the article refer to economy/budget-related aspects of migration?	“Migration is an important part of being in a thriving, modern <b>economy</b> ” (Source: The Guardian)
Welfare	Does the article refer to welfare-related aspects of migration? (e.g. public education, healthcare, housing, unemployment support, state subsidies, pension/retirement)	“The president of the PP does not see necessary to enumerate to the illegal immigrants so they can access basic <b>public services</b> , like health or <b>education</b> .” (Source: ABC, machine translated)
Security	Does the article refer to security and/or crime-related aspects of migrants/migration?	“According to his father, the refugee Hussein K., who was accused in the Freiburg <b>murder</b> trial before the Youth Chamber, is considerably older.” (Source: Die Zeit, machine translated)

## Analyses

As already mentioned in the introductory section of this report, we answer the main research question – *How do migration discourses in European media differ between countries and over time?* – by focusing on two main sets of analyses that help us to better understand how European media discuss migration.



In a first set of analyses, we contrast both dynamics in salience and relative sentiment of migration discourses in European media coverage within and between countries. In a second set of analyses, we take a closer look at the framing dynamics (again, both in terms of salience and relative sentiment) of these discourses. For both sets of analyses, a particular emphasis falls on the distinction between media coverage about migration in general and intra-European migration in particular. When deemed fitting, textual excerpts from the corpora are included for a better understanding of the methodological and analytical process of the analyses below.

## I. Visibility of Migration Coverage

We begin our analysis by taking a close look at the dynamics of salience of *migration* coverage over a fourteen-year period (Corpus A) in six European countries (namely, Spain, the UK, Germany, Sweden, Poland and Romania).<sup>14</sup> Migration, here, relates to *immigration as well as emigration and free movement* (see sections above), migration coverage should thus not be mistaken for immigration coverage alone. The share of migration-related coverage is computed in comparison to each outlet's total number of articles in a given period of time and afterwards aggregated on the level of the respective country. Note that an article is counted as relating to migration if at least one of the migration-related keywords is referenced in the same article (see Table 1).

In this larger corpus, at least 8.2 % of all articles relate in parts to migration in these six countries. The topic of migration was most present in the media discourse in Germany, representing 12.4 % of all news coverage. Conversely, the topic of

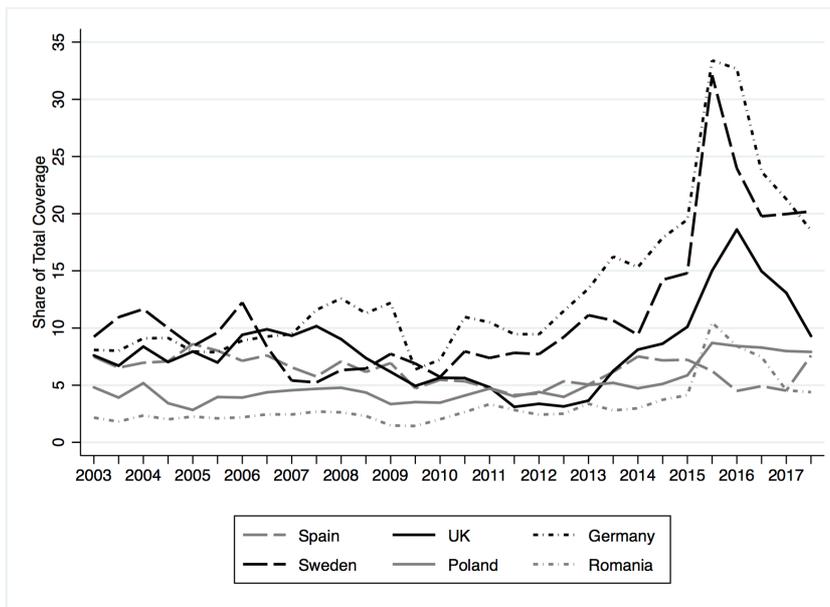
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<sup>14</sup> Remember that Hungary could not be included in the historical analysis of fourteen years due to data scarcity. Hungary is only included in the shorter period of analysis: between 2013 and 2017.



migration was least present in the media discourse in Romania, where it accounted for only 3.4 % of all news coverage. Figure 1 allows for a more detailed overview of media salience of migration across the different countries over a fourteen-year period that included several EU enlargements and the so-called European refugee crisis of 2015.

Figure 1: Relative Salience of Migration Coverage between 2003 and 2017 (in percent)



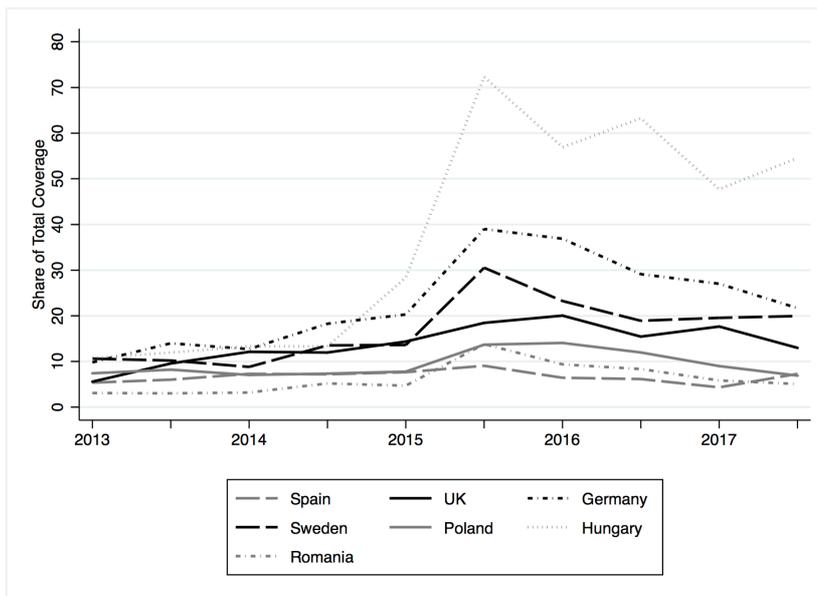
*Note.* For each country the population represents all articles within the respective outlets per half-year period. ESP: N = 1,662,935 articles in two outlets. UK: N = 2,063,189 articles in four outlets. GER: N = 1,276,874 articles in three outlets. SWE: N = 948,020 articles in four outlets. POL: N = 616,047 articles in two outlets. RO: N = 212,484 articles in two outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries.

In the smaller corpus, Corpus B, 16.8 % of all articles in this four-year period relate at least in part to migration in these six countries. This is twice as much as in Corpus A. The topic of migration was most present in the media discourse in Hungary, where it represented 39 % of news coverage. The topic of migration was least present in the



media discourse of Spain and Romania, where it accounted for only 6.9 % of news coverage. For a more detailed overview of media salience of migration across the different countries just before, during and shortly after the so-called European refugee crisis, see Figure 2.

Figure 2: Relative Salience of Migration Coverage between 2013 and 2017 (in percent)



*Note.* For each country the population represents all articles within the respective outlets per half-year period. ESP: N = 498,266 articles in three outlets. UK: N = 713,500 articles in seven outlets. GER: N = 795,060 articles in seven outlets. SWE: N = 277,339 articles in four outlets. POL: N = 268,022 articles in four outlets. HU: N = 156,309 articles in eight outlets. RO: N = 81,408 articles in four outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries.

**Spain:** For large parts of the observed period of analysis the salience of migration in media coverage remains stable, particularly when compared to other countries (see Figure 1). For one, there seems to be no particular reaction to the EU enlargements in 2004 or 2007. The lack of reaction to Romania’s joining of the EU in 2007 in particular may be deemed somewhat surprising, as Romanians are one of the largest immigrant



groups in Spain (Arroyo-Pérez et al., 2014). The topic of migration is most salient in Spain in the first half of 2005 (8.6 %), when Spain was among the EU members with the highest immigration rate. During that year, Spain granted amnesty to over 700,000 irregular immigrants (mostly Latin Americans, Romanians and Moroccans), who then applied for official residency and work permits (Maas, 2010; see Corpus Excerpt 1). After that year, the salience of the topic declines until the prelude to the so-called refugee crisis (see Figure 1 and Figure 2). However, even the height of the crisis did not impact Spanish media coverage that much, and salience of the topic actually decreased more quickly in Spain than it did in other countries. In fact, during our period of analysis, Spain was geographically quite far away from the main refugee routes, and the number of asylum applications remained low.<sup>15</sup>

Corpus Excerpt 1: El Mundo, 21.04.2005

*[ESP] LA NUEVA REGULARIZACIÓN. Caldera afirma que 700.000 extranjeros lograrán los 'papeles'.  
[Translation] THE NEW REGULARIZATION. Caldera affirms that 700,000 foreigners will achieve the 'papers'.*

**United Kingdom:** In the years before Brexit and the refugee crisis in 2015, in the UK the salience of migration in the media shows only one short upward dynamic, between 2006 and 2008, where the share of migration-related articles reaches about ten percent for a period of two and a half years (see Figure 1). This period coincides with multiple changes in migration, asylum and citizenship policies in the country, with elevated concern for migration among the general public and with increased net-migration figures (see Allen, 2016). In the prelude to the refugee crisis, the salience of migration increases again. However, the UK differs from all other countries in our analysis insofar as the salience of migration does not reach its peak

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<sup>15</sup> See: [http://www.europarl.europa.eu/external/html/welcomingeurope/default\\_en.htm](http://www.europarl.europa.eu/external/html/welcomingeurope/default_en.htm)



during the highpoint of the refugee crisis in 2015, but only after that, in 2016: the year of the Brexit referendum (see Figure 1 and Figure 2).

**Germany:** The relative media salience of migration in Germany has a first clear upwards dynamic between 2008 and the first half of 2009 (see Figure 1). This coincides with changes to immigration and naturalisation policies (e.g. introduction of a citizenship test, see Corpus Excerpt 2). Media salience then decreases sharply during the second half of 2009, the period of a Bundestags election campaign, in which migration did not play any meaningful role (Korte, 2010). Approaching the refugee crisis, the salience in German media continuously increases (Figure 1 and Figure 2). That Germany was one of the main destinations for refugees arriving to the EU is reflected in this comparative media analysis: in the second half of 2015, every third article was at least partially related to migration (which is the second highest peak in our data).

Corpus Excerpt 2: Frankfurter Rundschau, 11.06.2008

*[GER] Deutscher nach 33 Antworten ; Ab September gibt es einen Einbürgerungstest.  
[Translation] German after 33 answers; From September there will be a naturalization test.*

**Sweden:** Though dynamics were not very eventful over the first years, Sweden witnesses a sharp peak in migration salience in the second half of 2006 (see Figure 1), an election year, in which immigration was a more salient campaign issue compared to previous elections. This election also laid the foundation for the success of the anti-immigrant Sweden Democrats in the following elections (Dahlström & Esaiasson, 2013). Similar to Germany, Sweden was also a major destination for immigration during the refugee crisis. During that period, migration-related media coverage also shows similar patterns (see Figure 1 and Figure 2). Even in the years after the height of the crisis the salience of migration stays at a much higher level than before the



crisis (i.e., average of around 20 % between 2016 and 2017, compared to 11% in 2013, using Corpus B).

**Poland:** The media salience of migration in Poland is similar to other sending countries in our data, such as Romania or Hungary and even Spain when it comes to the period after 2010. Up until the refugee crisis in 2015, the coverage remains more or less stable, with a small peak in 2004 when Poland joined the EU (see Figure 1). Compared to the other countries in our sample, there is no clear peak during the refugee crisis, with coverage decreasing again afterwards. Instead, there is a slow increase in coverage that stabilizes again at the end of our period of analysis (see Figure 1 and Figure 2).

**Hungary:** While Hungary is not included in Corpus A, the data in corpus B shows the most extreme increase of migration-related coverage during the refugee crisis compared to all other countries. In the second half of 2015, the height of the refugee crisis, a baffling 72 % of all articles are identified as somewhat relating to migration. While Hungary is generally not a receiving country and not a destination for migrants entering the EU, especially in 2015 high numbers of refugees passed through the country. As a reaction to this, in October 2015, Hungary closed its border with Croatia, trying to inhibit more refugees from entering their country through the so-called Balkan Route (Chouliaraki, Georgiou, Zaborowski & Oomen, 2017; Heidenreich et al., 2019).

**Romania:** The salience of the migration topic is quite low in Romania compared to the other countries in our sample, reflecting the fact that immigration is not one of the central issues the country grapples with. Throughout most of the observed time period, the topic even has the lowest visibility compared to all other countries. It is



only during the second half of the refugee crisis that the coverage increases and surpasses the relative salience in Poland. A mild decrease in 2009 might be due to the presidential election in Romania that year. The campaigns of the different candidates focused aggressively and almost entirely on personal attacks against the opponents, and not on (immigration) policy (Cmeciu & Pătruț, 2010).

## II. Relative Sentiment of Migration Coverage

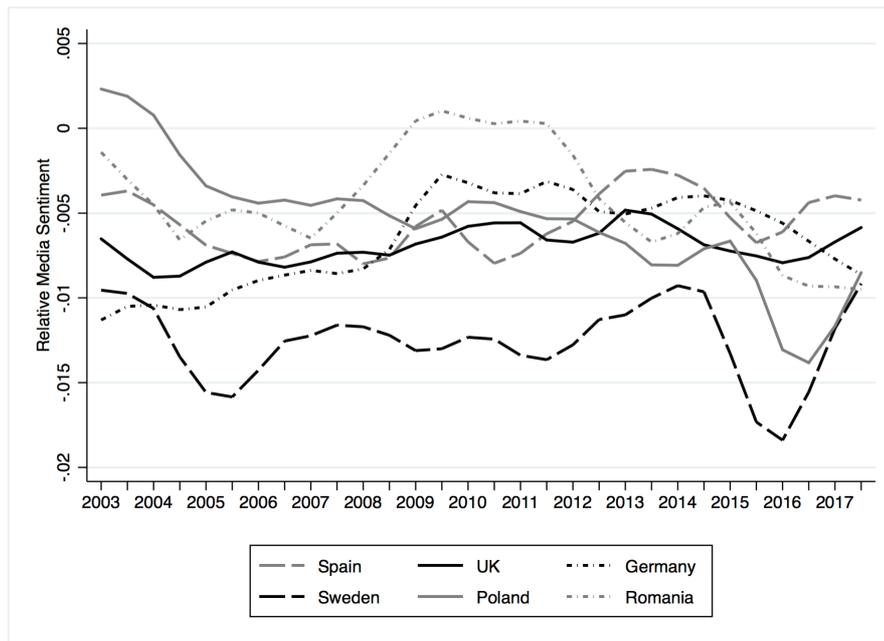
We will now take a closer look at the relative sentiment of migration coverage. Again, we want to stress that our general measure of migration refers to both immigration *and* emigration (as well as free movement). The relative sentiment of such migration-related coverage is computed as the absolute sentiment of all *migration*-related sentences relative to the absolute sentiment of all *non-migration*-related sentences within the same article. This baseline allows for a better comparison between countries. Therefore, migration-related relative sentiment has to be understood in relation to the baseline absolute sentiment of non-migration sentences in each country.

Based on Corpus A, and as expected on the basis of previous research (see Esser et al., 2017), the coverage of migration overall exhibits a negative relative sentiment ( $M = -0.007$ ,  $SD = 0.005$ ). Compared to all other countries in our sample, relative sentiment is most negative in Sweden ( $M = -0.013$ ,  $SD = 0.004$ ). In fact, in almost all years, the Swedish coverage is most negative compared to the other countries. Conversely, relative sentiment of migration is most positive in Romania ( $M = -0.004$ ,  $SD = 0.005$ ). See Figure 3 for more detail.



Corpus B shows similar results ( $M = -0.007$ ,  $SD = 0.005$ ). Focusing on the years before, during and after the European refugee crisis, relative sentiment is still by far most negative in Sweden ( $M = -0.012$ ,  $SD = 0.006$ ). The most positive coverage can be found in Spain ( $M = -0.004$ ,  $SD = 0.004$ ). See Figure 4 for more detail.

Figure 3: Relative Sentiment of Migration Coverage between 2003 and 2017



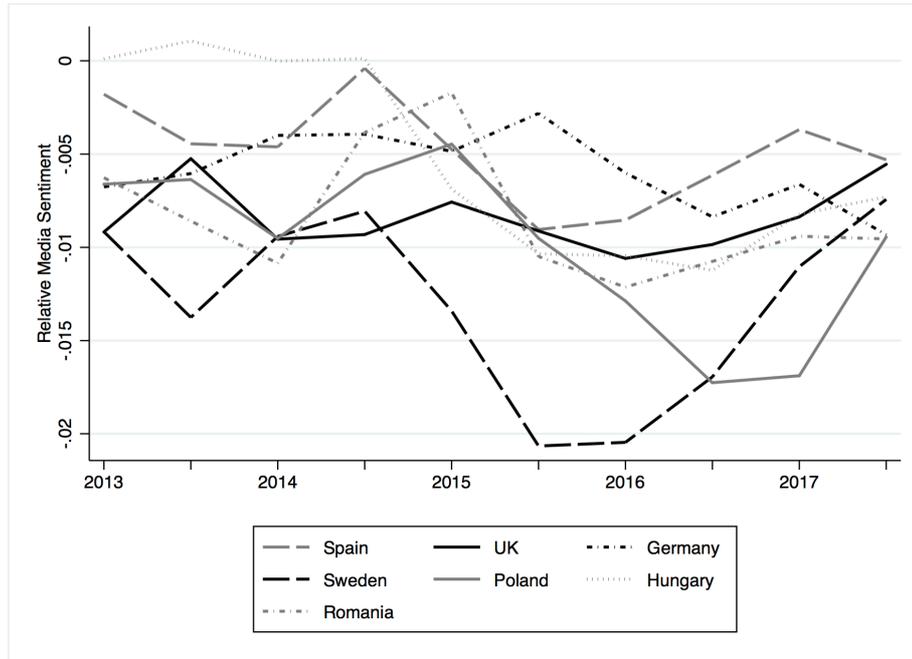
*Note.* For each country the population represents all sentences within articles that refer to migration in the respective outlets per half-year period. ESP:  $N = 303,147$  sentences in two outlets. UK:  $N = 643,936$  sentences in four outlets. GER:  $N = 519,834$  sentences in three outlets. SWE:  $N = 771,063$  sentences in four outlets. POL:  $N = 503,032$  sentences in two outlets. RO:  $N = 133,231$  sentences in two outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries. Lines are smoothed using a kernel-weighted local polynomial regression.

Taking a closer look at Figure 3, the clearest slope of negative relative sentiment, which can be seen across several countries at once, coincides with the refugee crisis in 2015. However, while the relative sentiment of the coverage around this time plummets quite drastically in Spain, Romania and Poland, the change is never quite



as large as in Sweden. In both corpora, we can only very rarely observe neutral or even positive coverage.

Figure 4: Relative Sentiment of Migration Coverage between 2013 and 2017



*Note.* For each country the population represents all sentences within articles that refer to migration in the respective outlets per half-year period. ESP: N = 129,331 sentences in three outlets. UK: N = 357,649 sentences in seven outlets. GER: N = 530,417 sentences in seven outlets. SWE: N = 226,153 sentences in four outlets. POL: N = 370,904 sentences in four outlets. HU: N = 310,824 sentences in eight outlets. RO: N = 78,819 sentences in four outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries. Lines are smoothed using a kernel-weighted local polynomial regression.

**Spain:** Spain is clearly among the more positive (or less negative) countries when it comes to covering migration (see Figure 3). Dynamics of relative sentiment remain largely uneventful, but there is a short period of relatively positive relative sentiment between 2013 and the middle of 2014. This change towards a slightly more positive tone in media coverage of migration coincides with the prelude to the refugee crisis, which also resulted in an increase in salience of the migration topic during the same period of time (see Figure 1). Compared to other countries, the number of asylum



applications in Spain remained low over the following years, which is why the eventual negative impact on the relative sentiment of media discourse also remained small and only short-lived (see Figure 3 and Figure 4).

**United Kingdom:** Compared to other countries in our sample, relative sentiment of migration media coverage in the UK shows few noteworthy dynamics throughout the whole period of analysis, while remaining on average among the rather negative countries until the period of the refugee crisis (see Figure 3). One big difference compared to other countries is, however, that it is one of few countries where relative sentiment of coverage was not strongly impacted by the height of the crisis in 2015 and quickly recovered afterwards (see Figure 3 and Figure 4).

**Germany:** In Germany, we would have expected highly positive relative sentiment of migration coverage until around 2007, followed by a more negative relative sentiment (Bauder, 2008). However, we do not observe these patterns in our data. This may have to do with our somewhat biased sample in Corpus A that does not include conservative newspapers such as *Welt*, *FAZ* or *Bild*. There is actually a tendency towards relatively more positive coverage between 2009 and 2013 (see Figure 3). As this period coincides with the conservative Government of CDU-CSU and FDP, one might wonder whether the relatively left-leaning outlets in our sample may have pushed their own – more positive – migration narrative during that time, to counter more restrictive government policy. However, this remains speculation, and needs further in-depth analysis. However, even in Corpus B – which includes more conservative outlets – relative sentiment of media coverage shows surprising patterns in Germany. In fact, relative sentiment did not become more negative during the height of the crisis in 2015. However, after a series of sexual assaults



during the New Year's celebration in 2015 in Cologne, German migration coverage was caught in a negative spiral (see Figure 3 and Figure 4).

**Sweden:** In Sweden we observe the most negative relative sentiment in our whole sample. However, the difference from the other countries appears to be weaker in Corpus B, where the relative sentiment of the coverage in the UK, Poland and Romania is at specific points in time about as negative as the tone of the coverage in Sweden. Overall, Swedish coverage is quite negative, and exhibits two especially negative peaks in 2005<sup>16</sup> and the second half of 2015. As Sweden is known for its comparatively open migration policies (Bucken-Knapp, 2017), it is somewhat surprising that absolute sentiment of migration-related sentences tends to be much more negative than the absolute sentiment of non-migration-related sentences. We verified that the negative relative sentiment in Swedish texts is not due to coverage's focus on the sufferings of the refugees arriving in Europe (see Corpus Excerpt 3)<sup>17</sup>. And in fact, negative words related to refugees suffering (e.g. "war", "persecution", "victim" or "dictator", see Table A2 in the Appendix) are largely equally distributed within all country-specific subcorpora and are thus unlikely to have a disproportionate effect on relative sentiment in Swedish texts compared to other country-specific sub-corpora.

Corpus Excerpt 3: Aftonbladet, 30.11.2015

*[SWE] Krigets fasor fortsätter även efter flykt.  
[Translation] The horrors of war continue even after the flight.*

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<sup>16</sup> In 2005 the "Aliens Act" (Utlänningslag) came into power, a law which regulates migration and is still in effect today.

<sup>17</sup> In this sense, even empathetic coverage might exhibit negative sentiment.



**Poland:** During the second half of 2003, just before Poland's accession to the European Union, migration coverage in Poland is most positive (see Corpus Excerpt 4), including compared to all other years and countries in our data. Again, this should be a reminder, that migration coverage, here, is measured as both immigration as well as emigration and free movement related news coverage. After 2004, however, relative sentiment of migration coverage continuously decreased in Poland (see Figure 3). Similar to Sweden, Poland saw a stark increase in negativity during the refugee crisis (see Figure 4). Although Poland was not an important destination for refugees, it was strictly against taking in refugees from other EU member states. Poland's turn towards more negative coverage also coincides with a power grab by the nationalist and anti-immigrant Law and Justice party (PiS) that also lastingly affected the media system and particularly media freedom in the country (Freedom House Report, 2017; Krzyżanowska & Krzyżanowski, 2018; Sadowski & Szczawinska, 2017).

Corpus Excerpt 4: Rzeczpospolita, 10.10.2003

*[POL] Od maja 2004 roku nasz kraj obejmą wszystkie korzyści członkostwa w Unii Europejskiej.  
[Translation] From May 2004, our country will cover all the benefits of membership in the European Union.*

**Hungary:** While not as clear as with migration salience, we can observe a drastic change in the relative sentiment of the coverage in Hungary during the refugee crisis (see Figure 4). Note that, at the beginning of the observed period, the coverage in Hungary appears to be neutral to slightly positive, up until the beginning of the refugee crisis. One has to note that during that period of analysis, Intra-European migration coverage did play a more important role in the general migration coverage (see Figure 6 below) thus pushing the coverage towards a more positive relative sentiment. However, relative sentiment of migration coverage deteriorated



significantly and much sooner than in other European countries during the refugee crisis.

**Romania:** As mentioned before, migration media coverage in Romania is most positive compared to the other countries in our sample. Most striking are the years immediately after its accession to the European Union. During these years coverage actually turns positive, and, at the same time, salience of intra-European migration tends to be more visible. Relative sentiment of migration coverage is thus also driven by relative sentiment towards intra-European migration (see Figure 3, see Corpus Excerpt 5). Later on, the refugee crisis has only a mild impact on migration-related relative sentiment in Romania (see Table 4).

Corpus Excerpt 5: Ziarul Financiar, 02.12.2008

*[RO] Odata cu aprobarea acestui program multianual, Romania si-a demonstrat angajamentul fata de un sistem integrat si echilibrat de gestionare a returnarii, care pune in evidenta atat cooperarea dintre statele membre, cat si respectarea drepturilor fundamentale ale persoanelor returnate.*

*[Translation] With the approval of this multiannual program, Romania has demonstrated commitment to an integrated and balanced return management system that highlights both cooperation between Member States and respect for the fundamental rights of returnees.*

### III. Visibility of Intra-European Migration

This next section focuses on the salience of intra-European migration coverage. The share of intra-European migration-related coverage is computed in comparison to each outlet's total number of migration-related articles in a given period in time, and then aggregated on the level of the respective country. Accordingly, a peak in Figures 5 and 6 refer to a relative change in salience; i.e. a peak in our graphs does not necessarily imply that the absolute number of articles concerned with intra-European

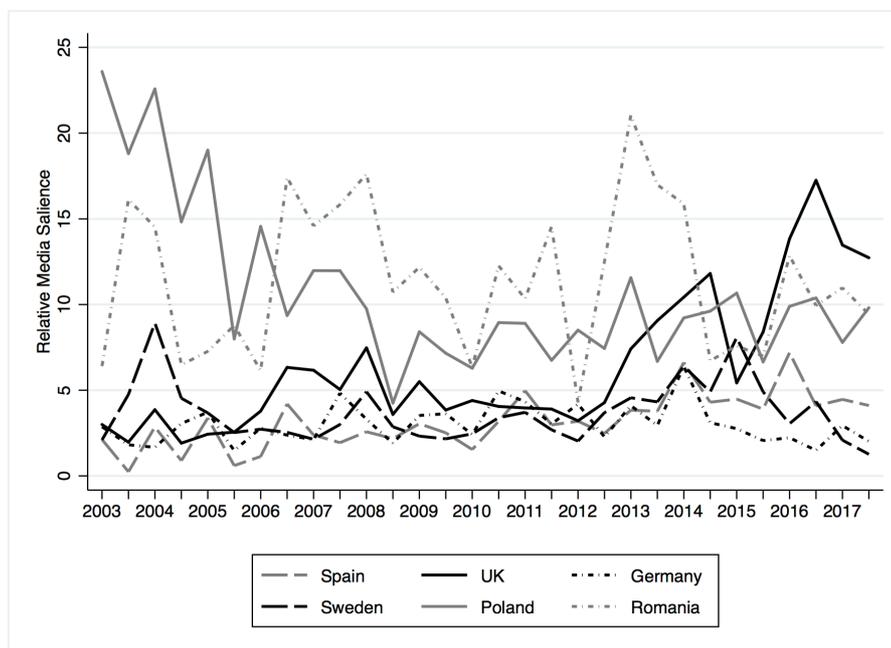


migration increased during that time, but only that it increased relative to the number of articles about third-country migration.

Note that an article is counted as relating to *Intra-European* migration if at least one of the keywords relating to intra-European migration are referenced in the same article (see Operational Definition page 4).

In the larger corpus, Corpus A, at least 4.8 % of all migration-related articles in this fourteen year period related in part to intra-European migration in these six countries. Intra-European migration was most present in the media discourse in Romania, where it comprised 11.2 % of all migration news coverage. Conversely, intra-European migration was least present in the media discourse in Germany and Spain, where it represented 2.9% of migration-related coverage. Figure 5 provides a more detailed overview of media salience of intra-European migration across the different countries over a fourteen year period, which included several EU enlargements and the so-called European refugee crisis of 2015.

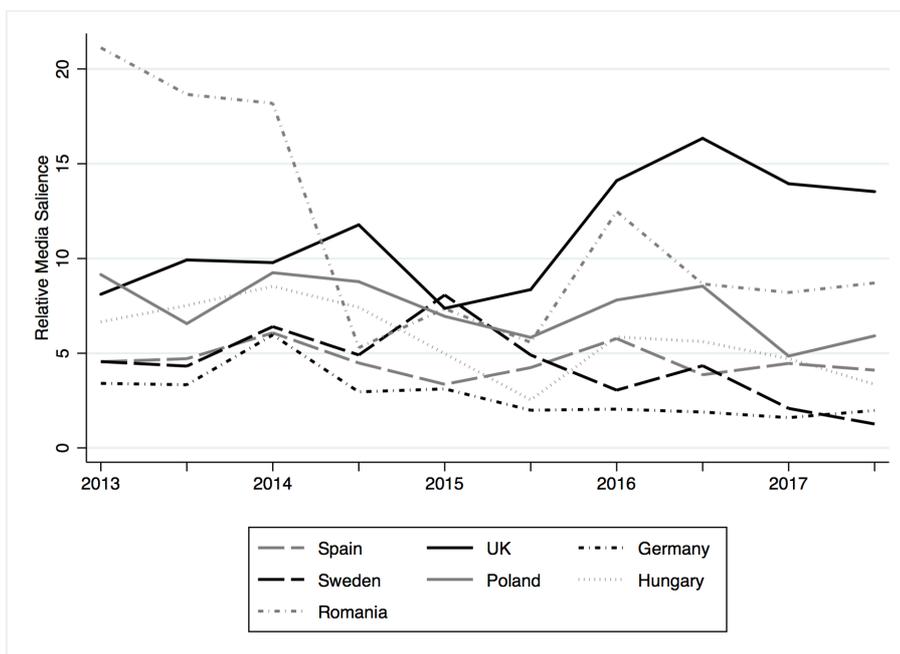
Figure 5: Relative Salience of intra-European Migration between 2003 and 2017



Note. For each country, the population represents all articles that refer to migration within the respective outlets per half-year period. ESP: N = 102,982 articles in two outlets. UK: N = 155,410 articles in four outlets. GER: N = 157,891 articles in three outlets. SWE: N = 100,750 articles in four outlets. POL: N = 29,704 articles in two outlets. RO: N = 7,288 articles in two outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries.

In the smaller corpus, Corpus B, 5.6 % of all migration-related articles in this four-year period related at least in part to intra-European migration. This is quite similar to Corpus A. Intra-European migration was most present in media discourse in the UK, where it accounted for 11.7 % of all news coverage about migration. Conversely, intra-European migration comprised only 2.5 % of migration news coverage in Germany. For a more detailed overview of media salience of intra-European migration across the different countries just before, during and shortly after the so-called European refugee crisis, see Figure 6.

Figure 6: Relative Salience of Intra-European Migration between 2013 and 2017



Note. For each country the population represents all articles that refer to migration within the respective outlets per half-year period. ESP: N = 34,415 articles in three outlets. UK: N = 108,147



articles in seven outlets. GER: N = 185,022 articles in seven outlets. SWE: N = 48,290 articles in four outlets. POL: N = 25,541 articles in four outlets. HU: 60,895 articles in eight outlets. RO: N = 5,623 articles in four outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries.

**Spain:** Overall, the topic of intra-European migration received only limited media attention within migration coverage during our period of analysis. However, there is a slight upwards trend over time, indicating that the topic becomes relatively more important – even during the period of the refugee crisis – although on a very low level. While more in-depth analysis is required, this may have to do with Spain’s increasing emigration to other EU member states – particularly after the European financial crisis of 2008 (González Enríquez & Martínez Romera, 2017).

**United Kingdom:** Similar to the coverage of migration in general, relative salience of intra-European migration also increases between 2006 and 2008. As with migration coverage during the same period, we expect this to be tied to changes in migration policy, as migration policy may affect some of the future EU member states as well (see Figure 5). There is a clear upwards trend in the visibility of intra-European migration between 2013 and 2014. This period also coincides with the end of labour market restrictions on Romanians and Bulgarians (see also Allen, 2016; Balch and Balabanova 2016). The trend, however, is interrupted by the refugee crisis, only to see a steep increase in the lead-up to the 2016 Brexit referendum (see Figure 5 and Figure 6).

**Germany:** Similar to the discourse in Spain, at no point did intra-European migration receive particularly high media attention in Germany. The only relatively clear peak occurs in 2014, during the European Election. Other than that, the salience remains quite flat and on a very low level. Smaller increases in relative salience can also be



seen during the 2004 accessions and around the Eastern European labor market opening in 2011 (see Figure 5). During the 2015 refugee crisis, salience of intra-European migration remains particularly low.

**Sweden:** Similar to Romania, but contrary to other countries in our sample, there is a clear increase in salience of intra-European migration during the year of the European Election and enlargement of 2004. From then on, the salience of Intra-European migration tends to slowly increase up until the refugee crisis in 2015; with no additional meaningful peaks in salience.

**Poland:** As the country joined the EU in 2004, we can observe high levels of relative media salience of intra-European migration in Polish media at the time of accession. However, the relative salience strongly decreased after that, and falls from above 20% to an average of only 10% of all migration-related coverage.

**Hungary:** Finally, while there seems to have been no particular media interest on the topic in Hungary, we do also observe a further drop during the refugee crisis. But of course, we do not know anything about the development before our period of analysis, with Hungarian media outlets only being added into Corpus B for the years 2013 through 2017.

**Romania:** Although Romania was not to join the EU until 2007, the country already saw very high emigration prior to its own accession, especially to Spain (see Corpus Excerpt 6). While in 2006 418,000 Romanians lived in Spain, in 2007 this number increased to 538,000 (Eurostat). Long before Romania became part of the European common market, the Romanian work force was very mobile in Europe. Combined



with the low immigration figures, this leads to a remarkably high salience of the topic in Romania compared to general migration coverage.



[RO] Aproape 400.000 de romani pun umarul la cresterea economica a Spaniei.  
[Translation] Almost 400,000 Romanians put their shoulder to Spain's economic growth.

#### IV. Relative Sentiment of Intra-European Migration

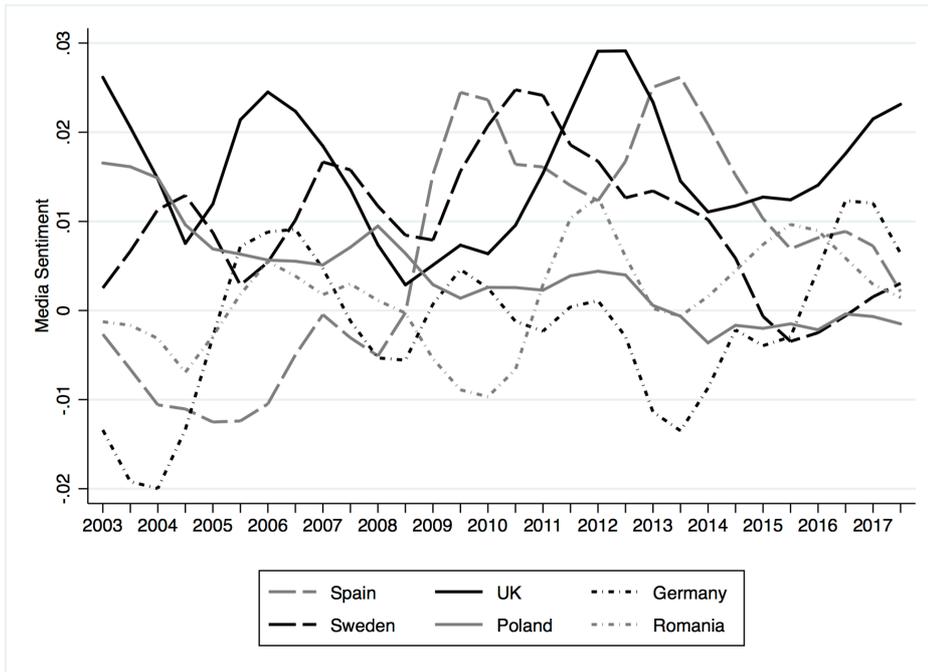
We will now take a closer look at the relative sentiment of intra-European migration coverage. The relative sentiment of intra-European migration is computed based on the sentiment of all *migration*-related sentences in articles that were identified as addressing intra-European migration, and were then contrasted to the sentiment of all *non-migration*-related sentences within this subset of intra-European migration coverage. This baseline allows for a better comparison between countries. Therefore, intra-European migration-related relative sentiment has to be understood in relation to the baseline absolute sentiment of non-migration-related sentences in each country.

Contrary to overall migration coverage, the coverage of intra-European migration exhibits a positive relative sentiment ( $M = 0.006$ ,  $SD = 0.005$ ). Compared to all other countries in our sample, relative sentiment of intra-European migration coverage is most positive in the UK ( $M = 0.016$ ,  $SD = 0.015$ ). Conversely, relative sentiment is most negative in Germany ( $M = -0.002$ ,  $SD = 0.015$ ). See Figure 7 for more detail.

Corpus B shows similar results ( $M = 0.005$ ,  $SD = 0.010$ ). Focusing on the years before, during and after the European refugee crisis, the most positive relative sentiment is still found in UK coverage ( $M = 0.017$ ,  $SD = 0.007$ ), and the most negative relative sentiment still persists in Germany ( $M = -0.004$ ,  $SD = 0.009$ ). See Figure 8 for more detail.



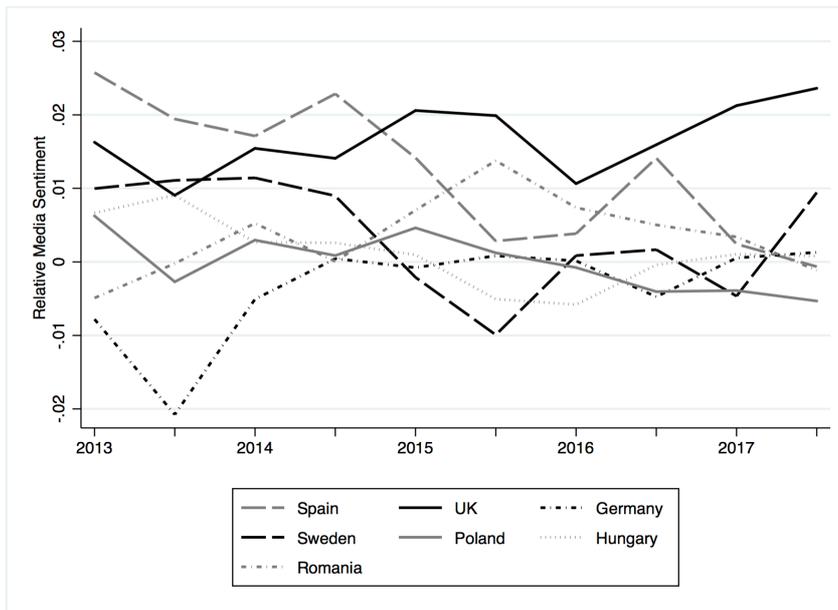
Figure 7: Relative Sentiment of Intra-European Migration Coverage between 2003 and 2017



*Note.* For each country, the population represents all sentences within articles that refer to Intra-European migration within the respective outlets per half-year period. ESP: N = 10,044 sentences in two outlets. UK: N = 44,502 sentences in four outlets. GER: N = 19,186 sentences in three outlets. SWE: N = 32,535 sentences in four outlets. POL: N = 58,739 sentences in two outlets. RO: N = 15,069 sentences in two outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries. Lines are smoothed using a kernel-weighted local polynomial regression.



Figure 8: Relative Sentiment of Intra-European Migration between 2013 and 2017



*Note.* For each country, the population represents all sentences within articles that refer to Intra-European migration within the respective outlets per half-year period. ESP: N = 6,159 sentences in three outlets. UK: N = 43,225 sentences in seven outlets. GER: N = 20,189 sentences in seven outlets. SWE: N = 12,819 sentences in four outlets. POL: N = 30,101 sentences in four outlets. HU: N = 21,479 sentences in eight outlets. RO: N = 9,041 sentences in four outlets. Sample weights are used. Countries are ordered from West to East. Lines are coloured based on an overall categorization into either “sending” (grey) or “receiving” (black) countries. Lines are smoothed using a kernel-weighted local polynomial regression.

**Spain:** We observe a clear shift in relative sentiment of intra-European migration coverage in Spain. While negative at the beginning of our period of analysis, the relative sentiment completely shifts in 2008 and remains positive afterwards. It stands to reason that this shift is related to the financial crisis after 2007/2008. At this time, Spain saw a drastic increase in unemployment, especially among younger demographics: according to Eurostat, at the end of 2007 there were 761,000 unemployed Spaniards between 15-29 years (Eurostat). Many therefore decided to



take advantage of European free movement and leave the country, in hopes of finding employment in neighbouring EU member states.

**United Kingdom:** The relative sentiment towards intra-European migration in the British media is surprisingly positive throughout the whole period of analysis. We see a first drop in the relative sentiment after the 2004 enlargement. While in 2004 the UK saw a strong increase in levels of intra-European immigration, in 2006 emigration numbers increased as well – possibly explaining the more positive coverage during that time. In 2012, immigration numbers reach a ten-year low,<sup>18</sup> which might explain the less negative coverage around that year (see Figure 7). The relative sentiment of intra-European migration coverage turns more negative around between 2013 (i.a. possibly reflecting the debate about the lifted labour restrictions for Romania and Bulgaria) and up until the Brexit referendum, but slowly recovers again afterwards.

**Germany:** Germany was not only the country where Intra-European mobility has very low salience, but also showed the most negative coverage. According to the dynamics in relative sentiment, it stands to reason that the accession of new member states in 2004 was viewed in a less positive light in the media. A similar decrease can be observed in 2007, with the accession of Romania and Bulgaria. Another such instance coincides with the 2013 accession of Croatia. It is only during and after the Brexit campaign and referendum, that coverage in Germany again turns more positive.

Corpus Excerpt 7: Tageszeitung (taz), 13.02.2003

*[GER] Dort blockiert Bundesinnenminister Schily alle Bemühungen um mehr Freizügigkeit für Arbeitsmigranten.*

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<sup>18</sup> See <https://www.bbc.com/news/uk-21614086>



*[Translation] Blocked there Federal Minister of the Interior Schily all efforts for more freedom of movement for Migrant workers.*

**Sweden:** Where Swedish coverage of migration overall was very negative (Figure 3), its coverage of intra-European migration tends to be one of the more positive countries within our sample (Figure 7). Specifically, positive relative sentiment of intra-European coverage in Sweden peaks during each of the first rounds of EU enlargements in 2004 and 2007. The highest positive peak occurs between 2010 and 2011, which coincides with a record high of emigration.<sup>19</sup> After that, coverage turns increasingly more negative.

**Poland:** Relative sentiment is particularly positive prior to Poland accession to the EU in 2004. After that, however, we can observe a steady downward trend, with only a short peak around the end of 2007 and the beginning of 2008, when the Schengen agreement was fully implemented in Poland. Poland saw the Schengen agreement taking effect in December 2007 regarding land and sea borders, and in March 2008 regarding air borders. This gave Polish citizens the complete freedom and the accompanying opportunities of the European common market with all border controls being abolished.

**Hungary:** Regarding the relative sentiment towards intra-European migration, we see a similar development as with relative sentiment towards migration in general, but not as drastic. Before the refugee crisis, Hungarian media coverage shows a slightly positive tone when reporting on intra-European migration, and turns more negative

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<sup>19</sup> See <https://www.thelocal.se/20120221/39228>



during the crisis, eventually becoming fairly neutral afterwards. It appears that, in light of the crisis, the view of Hungarian media on migration and mobility in general has become somewhat more reserved. It seems plausible that negative migration coverage had a spill-over effect on intra-European migration coverage.

**Romania:** Coverage of intra-European migration is neither particularly negative, nor particularly positive in Romania compared with the other countries in our sample. Still, there are at least two instances where coverage seems more positive than during the rest of the period of analysis. Intra-European migration coverage is particularly positive in 2012, when the UK decided not to increase restrictions on Romanian workers (see Corpus Excerpt 8), and in 2015, when the country's possible membership in the Schengen area was widely discussed.

Corpus Excerpt 8: Ziarul Financiar, 11.10.2012

*[RO] Secretarul de stat Ovidiu Dranga a declarat, la începutul acestei săptămâni, că MAE român a primit asigurări că Guvernul britanic nu își va schimba politica privind libera circulație, dar și că restricțiile pe piața muncii pentru români nu se vor prelungi după 1 ianuarie 2014, declarațiile recente ale unor oficiali britanici pe această temă fiind "în cheie electorală".*

*[Translation] State Secretary Ovidiu Dranga said earlier this week that the Romanian MFA was assured that the British Government would not change its policy on free movement, but that labor market restrictions for Romanians would not be extended beyond January 1, 2014, the statements recent British officials on this issue being "in the electoral key".*



## V. Framing of Overall and Intra-European Migration Coverage

We will now continue with the analysis of the framing of migration-related media coverage. As noted above, the three frames this report focuses on are the economic frame, the welfare frame and the security frame. Use of these frames in migration-related media coverage (both immigration as well as emigration and free movement) stands for the promotion of a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation of others (Entman, 1993). In short, framing is about highlighting one aspect of an issue over others.

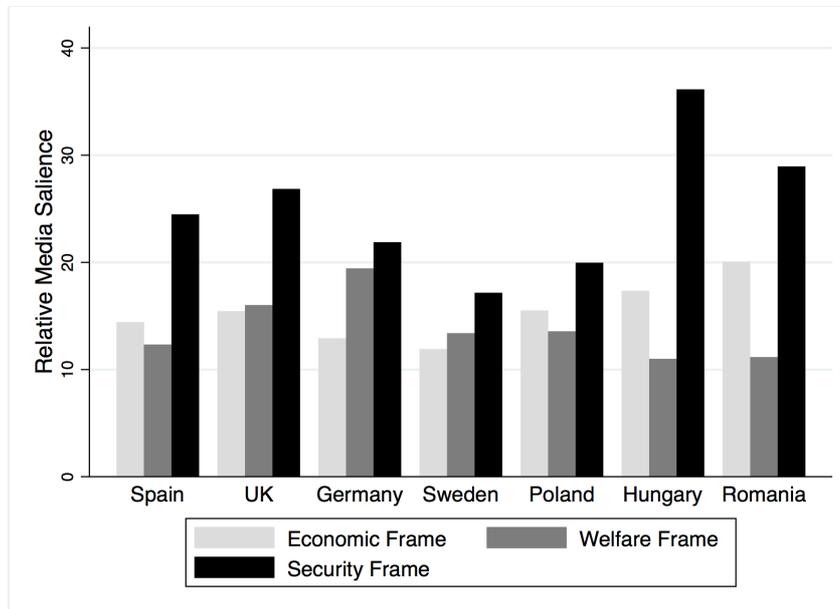
The relative salience of specific frames in migration coverage is measured based on the share of sentences relating to migration that also contain keywords referring to one of the three frames in question (see Table 3 above for more details). As the patterns for the relative frame salience are largely identical on the aggregate level in Corpus A and Corpus B, we decided to show and focus on the frame visibility for just one corpus. We chose Corpus B (Figure 9), which – although restricted to the time around the European refugee crisis – also includes Hungary.

The three frames measured in this study not only differ in their emphasis on specific attributes of the migration topic, they also tend to be of somewhat different valence. While the economic frame is rather neutral in tone, dealing with a relatively factual description of the impact of immigration and emigration on a country's economy, the welfare frame tends to be more positively valenced within our data. On average, it seems to focus on hopes and support for migrants, particularly for those who may have fled war. Finally, the security frame carries relatively negative relative sentiment, as it highlights developments in crime attributed to migration, but may



also deal with the possible horrors that precede irregular migration (see Eberl et al., 2018).

Figure 9: Migration Related Frames between 2013 and 2017



*Note.* For each country, the population represents all migration-related articles within the respective outlets per half-year period. ESP: N = 34,415 articles in three outlets. UK: N = 108,147 articles in seven outlets. GER: N = 185,022 articles in seven outlets. SWE: N = 48,290 articles in four outlets. POL: N = 25,541 articles in four outlets. HU: 60,895 articles in eight outlets. RO: N = 5,623 articles in four outlets. Sample weights are used.

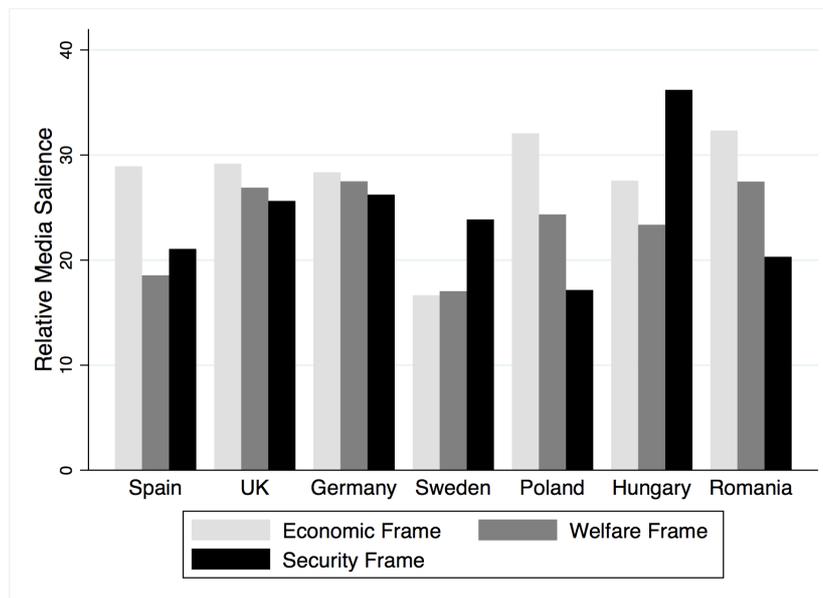
Based on Figures 9 and 10, an initial important observation is that each of the measured frames receives a considerable amount of attention (minimum of around 11 percent) in each of the seven countries.

While the economic framing was present in only 14.4% of all migration coverage, in the subset of intra-European migration coverage this percentage rose to 28%. Similarly, only 14.1% of all migration coverage highlights the welfare frame, however 26.2% does so in regards to intra-European coverage. Both of these frames are thus much more present in the media discourse of intra-European migration, than in the discourse of migration more generally. Finally, 26.2% of relevant articles



refer to the security frame in coverage of general migration, while this figure drops to 23.1% in coverage of intra-European migration. Thus, concerning the security frame, there is no real difference in framing between intra-European migration coverage and migration coverage more generally. However, while the security frame is always the most visible frame in more general migration coverage, this is not always the case in intra-European coverage, where the economic frame tends to be predominant (with the exception of Sweden and Hungary).

Figure 10: Intra-European Migration Related Frames between 2013 and 2017



*Note.* For each country the population represents all articles that refer to Intra-European migration within the respective outlets per half-year period. ESP: N = 1584 articles in three outlets. UK: N = 12,676 articles in seven outlets. GER: N = 4,630 articles in seven outlets. SWE: N = 2055 articles in four outlets. POL: N = 1747 articles in four outlets. HU: 2,947 articles in eight outlets. RO: N = 552 articles in four outlets. Sample weights are used.

Although not shown here, we can additionally report that the economic frame tends to be more positively valenced. The welfare frame also has an on average positive relative sentiment across countries, with Sweden being the only clear exception. Possibly this is because the alleged pressure immigration puts on the Swedish welfare



system is perceived to be higher compared to other countries in our sample. However, no such pattern is visible for Germany, which should feel similar pressures to the welfare system, due to its status as a receiving country. Conversely, the welfare frame turns out to be especially positively valenced in the sending countries (i.e., Poland, Hungary, and Romania). There, welfare discourse is likely to be less concerned with migration-related burdens for the national welfare systems, as fewer people immigrate to these countries. Further, welfare-related payments received by Polish, Hungarian, and Romanian emigrants who work and live abroad in the EU may be covered fairly positively in media discourses, as remittances may be viewed as beneficial for families back home and the national economic system overall.

In the following, we will look into differences and dynamics of framing within countries. Due to the large number of analyses, country-specific framing graphs are grouped together and shown in Figure A2 to A5 in the Appendix.

**Spain:** Both the economic and the welfare frame receive constant and moderate media attention over time. The salience of the security frame, however, shows differing patterns. We observe a relatively high visibility of the security frame at the beginning of our period of analysis. This may be seen in the light of policies on border protection measures in response to the fast growing number of irregular migrants at that time (López-Sala, 2009). One of the highest peaks appears in 2014. In the same year, more than 20,000 immigrants tried to enter irregularly through the fences of the two Spanish cities of Ceuta and Melilla (López-Sala, 2015).

**United Kingdom:** Similar to other countries, throughout our period of analysis the security frame is the most salient in the UK. As to be expected, the visibility of the security frame peaks during the refugee crisis when 34% of all migration coverage



show a security framing. Concerning intra-European migration coverage, the welfare (around 43%) and the economic frame (around 33%) were most visible in during the time when the suspension of labour market restrictions for Romanians and Bulgarians were developed. During the time of Brexit, in particular, the economic frame tends to be the most salient in intra-European migration coverage.

**Germany:** While less present than the welfare and security frame, since 2003, the salience of the economic frame increases slowly. All three frames are most visible during the height of the refugee crisis, as consequences of migration are discussed most widely in media coverage. However, the increase in salience of the economic frame between 2014 and 2015 of about 10 percentage points suggests that the discourse at that time was particularly concerned with the related costs and financial consequences of the refugee crisis.

**Sweden:** Between 2003 and 2013, the dynamics of economic, welfare and security framing in the Swedish press are rather monotonous. However, a small but noticeable increase in economic and welfare framing, with a concurrent decrease in security framing, can be noticed in 2008. Then, a new migration law came into force in Sweden which, among other things, laid down new rules for the labour migration of non-EU workers (Bucken-Knapp, 2017). Still, the most visible dynamics are a steep increase in security framing during the height of the refugee crisis and a rather abrupt decline in the salience of all frames in 2015. This latter trend is indicative of the emergence of a new frame, which we did not measure empirically (e.g. integration of the newly arrived immigrants, and/or culture-related aspects of migration).

**Poland:** The visibility of both the economic and the welfare frame develops quite uniformly in Poland over the whole period of analysis. Shared peaks correlate with,



among other factors, the EU enlargements in 2004 and 2007. As refugees are not expected to stay in the country, welfare framing is not particularly impacted by the crisis in 2015. Security framing, on the other hand, sharply increases around this time, as with other countries in our sample.

**Hungary:** As Hungary is only part of Corpus B, i.e. the data starting in 2013 and running through 2017, we do not know how the salience of the individual frames developed prior to that period. However, we can observe how salience of the security frame skyrockets with the inception of the refugee crisis, from about 12.5% in the first half of 2014 to 41% in the second half of 2015 (see Corpus Excerpt 9 and 10). The discrepancy in visibility between the security framing and the other two frames is the highest in Hungary compared to any of the other countries.

Corpus Excerpt 9: Magyar Hirlap Online, 26.09.2015

*[HU] "A nyomozás adatai szerint a bűnszervezetnek az említett három országban élő szerb, magyar és arab származású vezetői 2014 augusztusa és 2015 szeptembere között csempészték az unió határain belülre az illegális bevándorlókat."*

*[Translation] "According to the findings of the investigation, between August 2014 and September 2015, the illegal organizations of illegal immigrants were smuggled within the borders of the Union by Serbian, Hungarian and Arabic leaders of the criminal organization in these three countries"*

Corpus Excerpt 10: Magyar Idők, 05.08.2015

*[HU] "Néhány nappal ezelőtt átlépte a százezer főt az illegális bevándorlók száma Magyarországon - közölte Tuzson Bence. A Fidesz-frakció szóvivője elmondta, hétfő éjjelig 106 309 ember érkezett illegálisan hazánkba, ebből 105 587-en a szerb-magyar határon keresztül"*

*[Translation] "A few days ago, the number of illegal immigrants in Hungary crossed the hundred thousand, said Bence Tuzson. The spokesman for the Fidesz faction said that 106,309 people arrived illegally in Hungary until Monday midnight, of which 105,587 on the Serbian-Hungarian border."*



**Romania:** Both economic and welfare framing spiked between 2013 and 2014, just before Romania was granted complete freedom of movement within all EU member states. The security frame evolves very differently to the other two frames. It receives rather modest attention from 2003 to 2009, but significant increases in salience around 2011/2012 and later during the refugee crisis. While the first is probably related to reports on border security in the context of Romania's – for the time being failed – Schengen accession process (Corpus Excerpt 11), the latter is probably related to security concerns about new migrants arriving in Europe (Corpus Excerpt 12).

Corpus Excerpt 11: Romania Libera, 14.10.2011

*[RO] "Polițiștii de frontieră din Timiș au prins, în ultimele 24 de ore, 23 de migranți din diferite țări, care au trecut ilegal din Serbia în România, cu intenția de a ajunge în Spațiul Schengen, transmite Mediafax."*  
*[Translation] "Border police in Timis have captured 23 migrants from different countries who have crossed illegally from Serbia to Romania with the intention of reaching the Schengen area in the last 24 hours, Mediafax reports."*

Corpus Excerpt 12: Romania Libera, 02.09.2015

*[RO] "Această chestiune încă se află pe masă, pe agendă, o vom trata cu foarte multă atenție, dar în același timp trebuie să ținem cont de situația securității în cadrul Uniunii Europene, generată de aceste amenințări care vin din sud, fiind vorba nu numai de migrația ilegală, ci și despre problema terorismului, a declarat Aurescu care a adăugat că noi deja acționăm ca un stat Schengen de facto, dar trebuie să cooperăm cu celelalte state membre"*  
*[Translation] "This issue is still on the table, on the agenda, we will treat it very carefully, but at the same time we must take into account the security situation within the European Union generated by these threats that come from the south, only illegal migration, but also the issue of terrorism, Aurescu said, adding that we are already acting as a de facto Schengen state, but we must cooperate with the other member states."*



## Conclusions

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This report set out to conduct a systematic study of migration media coverage in seven European countries: Spain, the United Kingdom, Germany, Sweden, Poland, Hungary and Romania. This is to say that this report looks at both immigration as well as emigration coverage simultaneously. It is one of only a few studies that not only investigates dynamics within large-scale data sets for each of the countries, but also analyses media content in a comparative way and over a long period of time (i.e., 2003-2017). It did so by using computational approaches to text analysis, allowing for large-scale text analysis. This report contrasted the salience, relative sentiment and framing of migration news coverage in general with that of Intra-European migration coverage in particular. While doing so it discussed the impact of key events (e.g. EU accession periods or the European refugee crisis), as well as more general country contexts (e.g. net-migration figures or welfare state importance) on the salience, relative sentiment and framing of migration coverage within each country. In the following, we will recapitulate our main findings.

**Media salience of migration coverage is higher for receiving countries than for sending countries:** As one would expect, media attention towards migration is generally higher in receiving countries than in sending countries. The topic of migration receives the most attention in the media in Germany, Sweden and the UK (as receiving countries) and comparatively little attention in Poland and Romania (as sending countries). Spain was a “country of immigration” until around 2010 (Cebolla-Boado & González, 2013), and it was also during this period that media visibility of migration was similar to other receiving countries. Afterwards, emigration became the driving force of net-migration figures, which is when media attention began to align with other sending countries. Emigration does therefore not seem to be a



driving force of media coverage. Finally, while results for Hungary – traditionally a sending country – do not fit well into that dichotomy, this can easily be explained by the high number of irregular migrants during the refugee crisis. Hungary had the second highest number of refugees arriving in the country per 1000 people, and therefore was, in fact, during that specific time a receiving country.

**Media salience of intra-European migration coverage tends to relate to key phases of EU enlargement and transitional labour market controls:** Overall, intra-European migration coverage tends to be only a small part of all migration coverage. While there is no clear pattern concerning sending and receiving countries, it is particularly the countries that joined the European Union during our period of analysis, namely Poland, Hungary and Romania, that tend to show higher attention to this sub-dimension of migration. The only clear outlier here is the United Kingdom in the context of Brexit. The intra-European migration received the highest attention in Romania and Poland. Furthermore, for many countries, we see clear peaks in the visibility of intra-European migration in 2004, the year of the first EU enlargement during our period of analysis. However, peaks for the enlargements in 2007 and 2013 are not as defined – at the same time, the list of new member states was also considerably smaller.

**Relative sentiment of migration coverage tends to be negative, while relative sentiment of intra-European migration tends to be more positive:** Our measure of migration-related relative sentiment is based on an index of positive and negative words in migration-related sentences compared to non-migration-related sentences. This benchmarking (also standardization) allowed us to compare sentiment across countries. As to be expected, we find that the relative sentiment towards migration in general is rather negative and most negative in migration-related sentences in the United Kingdom and Hungary. However, the discrepancy between the migration-



related sentiment and the non-migration-related sentiment is highest Sweden (see Figure A1 in the Appendix). While this finding might be surprising, inspection of the sentiment data did not give us any reason to doubt our findings (see Tables A1 and A2 in the Appendix). It seems that different journalistic styles may stress the difference in sentiment between migration-related sentences and non-migration-related sentences more strongly than others, where negative sentiment might “spill-over” to the rest of the article (such as in the United Kingdom or Hungary). Intra-European migration, on the other hand, is mostly seen positively. A clear exception here is Germany, which is also the country witnessing by far the highest net-inflows from intra-European migrants.<sup>20</sup>

**The security frame is the most salient in migration coverage, while the economic frame is dominant in intra-European migration coverage:** Overall, our analyses show that the economic and welfare frame share similar dynamics over time, while they only correlate slightly.<sup>21</sup> The security frame, on the other hand, mostly follows its own dynamics. Being the frame with the most negative relative sentiment, the security frame is also the most salient in media coverage about migration in general. The salience of this frame increased particularly during the 2015 refugee crisis and was strongest in countries that experienced a higher numbers of migrants passing through during that time, particularly when compared to the country’s population (e.g. Hungary).<sup>22</sup> As to be expected from the previous literature (e.g. Mertens et al., 2019; Bucken-Knapp 2017), the security frame is relatively less pronounced in more immigration-friendly countries like Germany or Sweden. Furthermore, the security

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<sup>20</sup> See <http://bruegel.org/2019/03/considering-intra-eu-migration-and-countries-net-inflows/>

<sup>21</sup> Correlation between articles including the economic frame and articles including the welfare frame is of  $r=0.15$ .

<sup>22</sup> Please note that Hungarian government sponsored media additionally participated in active demonization of refugees, adding to the – to be expected – more negative relative sentiment (Barlai & Sik, 2017).



frame is not so dominant when it comes to intra-European migration. Here, the economic frame is most salient (but see Sweden and Hungary). Concerning overall migration coverage, journalists in receiving countries tend to emphasise the welfare frame more strongly (compared to the economic frame) than sending countries. Contrary to migration coverage in general, when it comes to intra-European migration coverage, the economic frame tends to be more visible than the welfare frame, and the difference between the two furthermore tends to be higher in sending countries – i.e., countries where the economy actually profits most from intra-European migration.

## **Limitations**

When building on computational or even quantitative methods more generally, researchers have to find a balance between resources, applicability and precision. We therefore want to point to a range of limitations of this study that may contextualize some of our findings.

Among other things, this report focuses on the differentiation between overall migration coverage and intra-European migration coverage. However, while a good proxy for what we want to capture, these measures are not mutually exclusive. Articles that mention intra-European migration may also mention other kinds of migration. Similarly, our operationalization of overall migration coverage also includes intra-European migration coverage. Concerning our findings, this means that we should expect intra-European coverage to be potentially even less negative and the security frame even less present than it is right now. More generally, differences between overall migration coverage and intra-European migration coverage should be even more pronounced.



While our automated measurement of framing identifies at least one of the three frames in 31 % of the articles, there is a lot that we do not capture. Future studies should expand these dictionaries, so that other central migration-related frames can be investigated (e.g. cultural frame, human interest frame). Similarly, the use of an automated sentiment analysis tool allowed for a comparable analysis between the different countries. Still, the tool may not pick up cultural intricacies (e.g. pejorative meanings of specific words in some languages but not others). Furthermore, the normalization of “othering”, and generally more subtle forms of racism, are not included in the sentiment tool kit, which may result in an incomplete measurement of or at least an underestimation of negative sentiment. Still, it is reasonable to believe that this problem – while more important for other kinds of political communication – may be (for now) less relevant for professional media coverage.

Previous studies in this field often focused on measuring valenced framing, also known as threat and benefit framing (Berry et al. 2016; Chouliaraki and Zaborowski 2017). To our knowledge, no studies have looked at both framing and sentiment together. Both content characteristics (sentiment and framing) show a different picture when compared across countries. This has to do with the possible interpretative comparisons which can be drawn. While sentiment is a more general concept and might be applied to any sort of text, framing is specific to the topic at hand, in the present case that is of course migration. Thus, framing is compared within migration-related coverage, but relative sentiment is compared to non-migration related coverage. It makes perfect sense to compare the sentiment of migration-related coverage to that of other coverage to understand how it diverges from the average, to take the average as a benchmark. On the other hand, by definition, it is not possible to look at the threat framing of migrants in non-



migration-related coverage. Future research should go further into detail in the comparison of these two content characteristics.

Finally, similar to most other content analysis studies, our results are to a certain degree contingent upon our country and media sample. While for most countries, our sample is diverse and extensive, it is still incomplete. As we pursue our analyses from a supply side perspective of journalism, we are interested in all (relevant) outlets within a media system and therefore follow previous literature in the field by not additionally weighing the data according to outlet readership (see also Allen, 2016; Boomgaarden & Vliegenthart, 2009). In fact this would have been impossible, since there is simply too little comparable data when it comes to seven countries' printed and online reach across a range of outlets over a decade of news consumption. While differences within countries tend to be smaller than differences between countries, such intricacies may still affect our results, even if our media sample is quite large compared to other studies. We thus caution readers when applying the results above to a different country or media context.

## **Concluding Remarks**

This report presents the findings of one of only a few comparative media content analyses. It is furthermore one of an even smaller number of analyses that works with multilingual data, describing step by step how future research can go about this rather difficult task using computational methods of text analysis. Not only did this study analyse differences between media coverage about different kinds of migration coverage (i.e. general migration coverage vs. intra-European migration coverage), it also relates the results of analyses concerning salience, relative sentiment and framing to the dynamics and key events in the countries under study concerning migrations flows as well as phases of EU enlargement. While this report remained on



a descriptive and aggregate level, next steps will include a more causal test of the supposed relationships between contextual factors and journalistic content. Finally, we have to go into more detail within the different countries and languages, differentiating between media outlets as well as actual language use, to deepen our understanding of European public debates about migration even further.



# Literature

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- Allen, W. L., 2016. *A decade of immigration in the British press*. Migration Observatory report, University of Oxford: COMPAS.
- Arroyo-Pérez, A., Bermúdez-Parrado, S., Romero-Valiente, J.M., Hernández-Rodríguez, J.A. & Planelles-Romero, J., 2014. Una aproximación demográfica a la población extranjera en España [A demographic approach to the foreign population in Spain]. *Documentos del Observatorio Permanente de la Inmigración*. 29.
- Bajomi-Lázár, P., 2014. *Party Colonisation of the Media in Central and Eastern Europe: Modern Business Decision Making in Central and Eastern Europe*. Central European University Press.
- Balabanova, E. & Balch, A., 2010. Sending and receiving: The ethical framing of intra-EU migration in the European press. *European Journal of Communication*. 25(4), pp.382-397.
- Balch, A. & Balabanova, E., 2016. Ethics, politics and migration: Public debates on the free movement of Romanians and Bulgarians in the UK, 2006–2013. *Politics*. 36(1), pp.19-35.
- Balmas, M., 2017. Bad news: The changing coverage of national leaders in foreign media of Western democracies. *Mass Communication and Society*. 20(5), pp.663-685.
- Barlai, M. & Sík, E., 2017. A Hungarian Trademark (a “Hungarikum”): The Moral Panic Button. In: Barlai, M., Fähnrich, B., Griessler, C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, pp.147.
- Bauder, H., 2008. Media discourse and the new German immigration law. *Journal of Ethnic and Migration Studies*. 34(1), pp.95-112.



- Becker, M. & El-Menouar, Y., 2012. Is Islam an Obstacle for Integration? A Qualitative Analysis of German Media Discourse. *Journal of Religion in Europe*. 5(2), pp.141-161.
- Berry, M., Garcia-Blanco, I. & Moore, K., 2016. Press coverage of the refugee and migrant crisis in the EU: A content analysis of five European countries. Project Report. Geneva: United Nations High Commissioner for Refugees. Available at: <http://www.unhcr.org/56bb369c9.html>.
- Blinder, S., 2015. Imagined immigration: the impact of different meanings of 'immigrants' in public opinion and policy debates in Britain. *Political Studies*, 63(1), pp.80-100.
- Boomgaarden, H. G., & Vliegenthart, R., 2009. How news content influences anti-immigration attitudes: Germany, 1993-2005. *European Journal of Political Research*. 48(4), pp.516–542.
- Boomgaarden, H. G., Vliegenthart, R., De Vreese, C. H. & Schuck, A. R., 2010. 'News on the move: Exogenous events and news coverage of the European Union', *Journal of European Public Policy*. 17(4), pp.506-526.
- Boomgaarden, H.G. & Vliegenthart, R., 2009. How news content influences anti-immigration attitudes: Germany, 1993–2005. *European Journal of Political Research*. 48(4), pp.516-542.
- Brücker, H., Kunert, A., Mangold, U., Kalusche, B., Siegert, M. & Schupp, J., 2016. Geflüchtete Menschen in Deutschland-eine qualitative Befragung (No. 313) [Refugees in Germany – a qualitative survey]. *SOEP Survey Papers*.
- Brüggemann, M., Engesser, S., Büchel, F., Humprecht, E. & Castro, L., 2014. Hallin and Mancini revisited: Four empirical types of western media systems. *Journal of Communication*. 64(6), pp.1037-1065.
- Bucken-Knapp, G., 2017. From “Open your Hearts” to Closed Borders: Sweden, the Refugee Crisis and the Role of Discourse. In: Barlai, M., Fähnrich, B., Griessler,



- C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, p.283.
- Castro-Herrero, L., Humprecht, E., Engesser, S., Brüggemann, M.L. & Büchel, F., 2017. Rethinking Hallin and Mancini beyond the West: An analysis of media systems in Central and Eastern Europe. *International Journal of Communication*. 11, p.27.
- Caviedes, A., 2015. An emerging 'European' news portrayal of immigration?. *Journal of Ethnic and Migration Studies*. 41(6), pp.897-917.
- CebollaBoado, H. & González Ferrer, A., 2008. *La inmigración en España (2000-2007): De la gestión de flujos a la integración de los inmigrantes [Immigration in Spain (2000-2007): from the management of flows to the integration of immigrants]*. Madrid: Centro Estudios Políticos y Constitucionales.
- CebollaBoado, H. & González Ferrer, A., 2013. *Inmigración: ¿Integración sin modelo?* Madrid: Alianza Editorial.
- Cheregi, B.F., 2015. The media construction of identity in anti-immigration discourses: the case of Romanian immigrants in Great Britain. *Romanian Journal of Journalism & Communication/Revista Romana de Jurnalism si Comunicare-RRJC*. 10(1), pp.279-298.
- Chouliaraki, L., Georgiou, M., Zaborowski, R. & Oomen, W. A., 2017. The European 'migration crisis' and the media: A cross-European press content analysis. *Department of Media and Communication and Utrecht University*. Available from: <http://www.lse.ac.uk/media-and-communications/assets/documents/research/projects/media-and-migration/Migration-and-media-report-FINAL-June17.pdf>. [Accessed 23rd April 2019].
- Chouliaraki, L. & Zaborowski, R., 2017. Voice and community in the 2015 refugee crisis: A content analysis of news coverage in eight European countries. *International Communication Gazette*. 79(6-7), pp. 613-635.



- Cmeci, C. and Pătruț, M., 2010. A functional approach to the 2009 Romanian Presidential debates. Case study: Crin Antonescu versus Traian Băsescu. *Journal of Media Research*. 3(1).
- Commission of the European Communities, Autumn 2017. *Standard Eurobarometer 88* [online]. [viewed 23 April 2019]. Available from: [https://ec.europa.eu/commission/index\\_en](https://ec.europa.eu/commission/index_en)
- Commission of the European Communities, March 2018. *Standard Eurobarometer 89* [online]. [viewed 23 April 2019]. Available from: [https://ec.europa.eu/commission/index\\_en](https://ec.europa.eu/commission/index_en)
- Corbu, N., Buturoiu, R. & Durach, F., 2017. 'Framing the refugee crisis in online media: A Romanian perspective', *Romanian Journal of Communication and Public Relations*. 19(2), pp.5-18.
- Dahlström, C. & Esaiasson, P., 2013. The immigration issue and anti-immigrant party success in Sweden 1970-2006: A deviant case analysis. *Party Politics*. 19(2), pp.343-364.
- de Vreese, C.H. & Boomgaarden, H.G., 2006. Media effects on public opinion about the enlargement of the European Union. *JCMS: Journal of Common Market Studies*, 44(2), pp.419-436.
- de Vreese, C.H., Boomgaarden, H.G. & Semetko, H.A., 2011. (In) direct framing effects: The effects of news media framing on public support for Turkish membership in the European Union. *Communication Research*. 38(2), pp.179-205.
- de Vries, E., Schoonvelde, M. & Schumacher, G., 2018. No longer lost in translation: Evidence that Google Translate works for comparative bag-of-words text applications. *Political Analysis*. 26(4), pp.417-430.



- Dobek-Ostrowska, B. (2012). Italianization (or Mediterraneanization) of the Polish media system. *Comparing media systems beyond the Western world*. pp.26-50.
- Dustmann, C., Frattini, T. & Rosso, A., 2015. The effect of emigration from Poland on Polish wages. *The Scandinavian Journal of Economics*. 117(2), pp.522-564.
- Eberl, J.-M., Meltzer, C.E., Theorin, N., Heidenreich, T., Lind, F., Schemer, C., Boomgaarden, H.G., Strömbäck, J., 2018. Media Framing Effects on Policy Preferences Towards Free Movement: A Comparative Approach. REMINDER Deliverable 9.3. [www.reminder-project.eu](http://www.reminder-project.eu)
- Eberl, J.-M., Boomgaarden, H. G., & Wagner, M., 2017. One bias fits all? Three types of media bias and their effects on party preferences. *Communication Research*. 44(8), pp.1125-1148.
- Eberl, J.-M., Meltzer, C.E., Heidenreich, T., Herrero, B., Theorin, N., Lind, F., Berganza, R., Boomgaarden, H.G., Schemer, C. & Strömbäck, J., 2018. The European media discourse on immigration and its effects: a literature review. *Annals of the International Communication Association*. 42(3), pp.207-223.
- Entman, R.M., 1993. Framing: Toward clarification of a fracture paradigm. *Journal of Communication*. 43(4), pp.51-53.
- Esser, F., Engesser, S., Matthes, J. & Berganza, R., 2017. Negativity. *Comparing Political Journalism*. pp.71-91.
- Fogel, K., 2015. The multistage nature of labour migration from Eastern and Central Europe (experience of Ukraine, Poland, United Kingdom and Germany during the 2002-2011 period). *Eastern Journal of European Studies*. 6(2).
- Freedom House, 2017. *Freedom in the World 2017*. Washington, DC: Freedom House. [viewed 23 May 2019]. Available at: <https://freedomhouse.org/report/freedom-world/freedom-world-2017>



- Georgescu, C.M., 2011. Stereotypes, migrants and the media: an analysis of the Romanian press on migration. *Revista de Stiinte Politice*, 29.
- González Enríquez, C. & Martínez Romera, J.P., 2017. Spanish High Qualified Migration After the Crisis. A Comparison with Italian, Greek and Portuguese High Qualified Migrations. *Migraciones*. 43, pp.117-145.
- Griessler, C., 2017. The UK's Discourse on the 'Migrant Crisis' in Summer 2015. In: Barlai, M., Fähnrich, B., Griessler, C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, pp.337-355.
- Gross, P., 2008. Back to the (Uncertain) Future. Politics, Business and the Media in Romania. *Global Media Journal*. 1(4), pp.51-68.
- Hallin, D.C. & Mancini, P., 2003. Amerikanisierung, Globalisierung und Säkularisierung: Zur Konvergenz von Mediensystemen und politischer Kommunikation in westlichen Demokratien [Americanization, Globalization and Secularization: The Convergence of Media Systems and Political Communication in Western Democracies]. *Politische Kommunikation im internationalen Vergleich*. pp.35-55. VS Verlag für Sozialwissenschaften.
- Hallin, D.C. & Mancini, P., 2004. *Comparing media systems: Three models of media and politics*. Cambridge University Press.
- Harteveld, E., Schaper, J., de Lange, S.L. & van Der Brug, W., 2018. Blaming Brussels? The impact of (news about) the refugee crisis on attitudes towards the EU and national politics. *JCMS: Journal of Common Market Studies*. 56(1), pp.157-177.
- Heidenreich, T., Lind, F., Eberl, J.-M. & Boomgaarden, H.G., forthcoming, Media Framing Dynamics of the 'European Refugee Crisis': A Comparative Topic Modelling Approach, *Journal of Refugee Studies*, doi:10.1093/jrs/fez025
- Herrero, L.C., Humprecht, E., Engesser, S., Brüggemann, M.L. & Büchel, F., 2017. Rethinking Hallin and Mancini beyond the West: An analysis of media systems



- in Central and Eastern Europe. *International Journal of Communication*. 11, p.27.
- Hobolt, S.B., 2016. The Brexit vote: a divided nation, a divided continent. *Journal of European Public Policy*. 23(9), pp.1259-1277.
- Hollifield, J. F., 2004. The Emerging Migration State. *International migration review*. 38(3), pp.885-912.
- Igartua, J. J., Muñiz, C. & Cheng, L., 2005. La inmigración en la prensa española. Aportaciones empíricas y metodológicas desde la teoría del encuadre noticioso [Immigration in the Spanish press. Empirical and methodological contributions from the theory of the framing news]. *Migraciones. Publicación del Instituto Universitario de Estudios sobre Migraciones*. 17, pp.143-181.
- Igartua, J. J., Muñiz, C., Otero, J. A. & de la Fuente, M., 2007. El tratamiento informativo de la inmigración en los medios de comunicación españoles. Un análisis de contenido desde la Teoría del Framing [The informative treatment of immigration in the Spanish communication media. An analysis of content from the Theory of Framing]. *Estudios sobre el Mensaje Periodístico*. 13, pp.91-110.
- Igartua, J.J. & Cheng, L., 2009. Moderating effect of group cue while processing news on immigration: Is the framing effect a heuristic process?. *Journal of Communication*. 59(4), pp.726-749.
- Jacobs, L., Damstra, A., Boukes, M. & De Swert, K., 2018. Back to reality: The complex relationship between patterns in immigration news coverage and real-world developments in Dutch and Flemish newspapers (1999–2015). *Mass Communication and Society*. 21(4), pp.473-497.
- Karas, D.P., 2016. Then and now: The evolution of the Romanian press in post-Soviet Europe. *Journal of Media Research*. 9(2), p.62.



- Klingeren, M.V., Boomgaarden, H.G., Vliegthart, R. & de Vreese, C.H., 2015. Real World is Not Enough: The Media as an Additional Source of Negative Attitudes Toward Immigration, Comparing Denmark and the Netherlands. *European Sociological Review*. 31(3), 268-283.
- Kohlmeier, M. & Schimany, P., 2005. Der Einfluss von Zuwanderung auf die deutsche Gesellschaft. Deutscher Beitrag zur Pilotforschungsstudie [The impact of immigration on Germany's Society: The German Contribution to the Pilot Research Study]. *Nürnberg: Bundesamt für Migration und Flüchtlinge*.
- Korte, K.R., 2010. Die Bundestagswahl 2009 - Konturen des neuen [The Bundestag Election 2009 - Outlines of the new], in: Korte, K.R. (Hrsg.), *Die Bundestagswahl 2009: Analysen der Wahl- Parteien-, Kommunikations- und Regierungsforschung [The Bundestag Election 2009: Analyses of Electoral Parties, Communications, and Government research]*. Wiesbaden: Springer Fachmedien, VS Verlag für Sozialwissenschaften, pp. 9-32.
- Kouloumpis, E., Wilson, T. & Moore, J., 2011, July. Twitter sentiment analysis: The good the bad and the omg!. In: *Proceedings of the Fifth International AAAI conference on weblogs and social media*. Barcelona, Spain, July 17-21 2011. Menlo Park: The AAAI press, pp. 538-541.
- Kroon, A.C., Kluknavska, A., Vliegthart, R. & Boomgaarden, H.G., 2016. Victims or perpetrators? Explaining media framing of Roma across Europe. *European Journal of Communication*. 31(4), pp.375-392.
- Krzyżanowska, N. & Krzyżanowski, M., 2018. 'Crisis' and migration in Poland: Discursive shifts, anti-pluralism and the politicisation of exclusion. *Sociology*. 52(3), pp.612-618.
- Lawlor, A. & Tolley, E., 2017. Deciding who's legitimate: News media framing of immigrants and refugees. *International Journal of Communication*. 11, 25.



- Lawlor, A., 2015. Local and national accounts of immigration framing in a cross-national perspective. *Journal of Ethnic and Migration Studies*. 41(6), pp.918-941.
- Lind, F., Heidenreich, T., Eberl, J.-M. & Boomgaarden, H. G., forthcoming. When the journey is as important as the goal: A roadmap to multilingual dictionary construction. *International Journal of Communication*.
- Lind, F., Eberl, J.-M., Heidenreich, T., Galyga, S., Herrero-Jiménez, B., Montero, E. L. G., Berganza, R., & Boomgaarden, H. G., 2020, *REMINDER WP8: Historic Content Analysis*, electronic dataset, AUSSDA Dataverse, doi:[10.11587/IEGQ1B](https://doi.org/10.11587/IEGQ1B) [forthcoming February/March 2020].
- Lubbers, M., Scheepers, P. & Wester, F., 1998. Ethnic minorities in Dutch newspapers 1990-5: Patterns of criminalization and problematization. *International Communication Gazette*. 60(5), pp.415-431.
- López-Sala, A. M., 2009. Immigration control and border management policy in Spain. Madrid: *Spanish Council for Scientific Research*.
- López-Sala, A., 2015. La inmigración irregular en Ceuta y Melilla en 2014: prácticas de control y debate público [Irregular immigration in Ceuta and Melilla in 2014: control practices and public debate]. *Anuario CIDOB de la Inmigración en España 2014*. 2015, pp. 170-191.
- Lucas, C., Nielsen, R.A., Roberts, M.E., Stewart, B.M., Storer, A. & Tingley, D., 2015. Computer-assisted text analysis for comparative politics. *Political Analysis*. 23(2), pp.254-277.
- Maas, W., 2010. Unauthorized migration and the politics of regularization, legalization, and amnesty. In: Menz G., Caviedes A. (eds) *Labour Migration in Europe*. Migration, Minorities and Citizenship. London: Palgrave Macmillan, pp. 232-250.



- Mariana, P.R., Dorin, B. & Ion-Daniel, Z., 2011. Descriptive analysis of the international migration phenomenon in Romania between 1991 and 2008. *Annals of Faculty of Economics*. 1(1), pp.288-294.
- Matthews, J. & Brown, A.R., 2012. Negatively shaping the asylum agenda? The representational strategy and impact of a tabloid news campaign. *Journalism*. 13(6), pp.802-817.
- Mertens, S., Standaert, O., d'Haenens, L. & De Cock, R., 2019. Diversity in Western countries: journalism culture, migration integration policy and public opinion. *Media and Communication*. 7(1), pp.66-76.
- Mylonas, Y., 2012. Media and the economic crisis of the EU: The 'culturalization' of a systemic crisis and Bild-Zeitung's framing of Greece. tripleC: Communication, Capitalism & Critique. *Open Access Journal for a Global Sustainable Information Society*. 10(2), pp.646-671.
- Petrescu, M. R., Bâc, D. & Zgură, I.-D., 2011. Descriptive analysis of the international migration phenomenon in Romania between 1991 and 2008. *The Annals of the University of Oradea. Economic Sciences*, Tom XXII, pp.288-294.
- Pouliquen, B., Steinberger, R., Ignat, C., Käsper, E. & Temnikova, I., August 2004. Multilingual and cross-lingual news topic tracking. In: *Proceedings of the 20th international conference on Computational Linguistics*. Geneva; Switzerland, August 23-27, 2004. Stroudsburg: Association for Computational Linguistics, p.959.
- Reber, U., 2019. Overcoming Language Barriers: Assessing the Potential of Machine Translation and Topic Modeling for the Comparative Analysis of Multilingual Text Corpora. *Communication Methods and Measures*, 13(2), pp.102-125.
- Ruhrmann, G., Sommer, D. & Uhlemann, H., 2006. TV-Nachrichtenberichterstattung über Migranten. Von der Politik zum Terror [in:] *Integration durch Massenmedien. Medien und Migration im internationalen Vergleich [TV news*



coverage of migrants. From politics to terror [in:] Integration through mass media. Media and migration in international comparison.].

Ruhs, M., 2015. Is unrestricted immigration compatible with inclusive welfare states? The (un) sustainability of EU exceptionalism. Centre on Migration, Policy and Society, Working Paper, (125).

Ruhs, M., 2017. Free movement in the European Union: national institutions vs common policies?. *International Migration*. 55, pp.22-38.

Sadowski, P. & Szczawińska, K., 2017. Poland's Response to the EU Migration Policy. In: Barlai, M., Fähnrich, B., Griessler, C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, p.211.

Schierup, C.U. & Ålund, A., 2011. The end of Swedish exceptionalism? Citizenship, neoliberalism and the politics of exclusion. *Race & Class*. 53(1), pp.45-64.

Schlueter, E., Meuleman, B. & Davidov, E., 2013. Immigrant integration policies and perceived group threat: A multilevel study of 27 Western and Eastern European countries. *Social Science Research*. 42(3), pp.670-682.

Schuck, A.R. & De Vreese, C.H. (2006). Between risk and opportunity: News framing and its effects on public support for EU enlargement. *European Journal of Communication*. 21(1), pp.5-32.

Seoane Pérez, F., 2017. *Framing of the Syrian Refugee Crisis in the Spanish Press*. In: Barlai, M., Fähnrich, B., Griessler, C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, pp.267-281.

Simonovits, B. & Szalai, B., 2013. Idegenellenesség és diszkrimináció a mai Magyarországon [Alienation and discrimination in Hungary today]. *Magyar Tudomány*. 03 March, pp.251-262.



- Smart, K., Grimshaw, R., McDowell, C. & Crosland, B., 2007. *Reporting asylum – The UK press and the effectiveness of PCC guidelines*. London: ICAR.
- Sniderman, P.M., Hagendoorn, L. & Prior, M., 2004. Predisposing factors and situational triggers: Exclusionary reactions to immigrant minorities. *American political science review*. 98(1), pp.35-49.
- Soroka, S. & Wlezien, C., June 2018. Tracking the Coverage of Public Policy in Mass Media. *Policy Studies Journal*.
- Spigelman, A., 2013. The depiction of Polish migrants in the United Kingdom by the British press after Poland's accession to the European Union. *International Journal of Sociology and Social Policy*. 33(1/2), pp.98-113.
- Spigelman, A., 2013. The depiction of Polish migrants in the United Kingdom by the British press after Poland's accession to the European Union. *International Journal of Sociology and Social Policy*. 33(1/2), pp.98-113.
- Statham, P., 2002. Racism-United Kingdom, Walter, Jessika.(ed.) *Racism and Cultural Diversity in the Mass Media*. European Research Centre on Migration and Ethnic Relations, Vienna. pp.78-79.
- Statistisches Bundesamt, 2014. *Bevölkerung und Erwerbstätigkeit: Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus*. Wiesbaden: Statistisches Bundesamt.
- Stegherr, M., 2017. "The Great Exchange" – The Political and Media Debate about the European Migrant Crisis in Romania. In: Barlai, M., Fähnrich, B., Griessler, C., Rhomberg, M., eds. *The Migrant Crisis: European Perspectives and National Discourses*. Zurich: Lit Verlag GmbH & Co, pp. 235-250.
- Strömbäck, J., Andersson, F. & Nedlund, E., 2017. Immigration in the media – how did Swedish newspapers report 2010–2015? / Invandring i medierna: Hur rapporterade svenska tidningar 2010–2015?. *Delegationen för migrationsstudier*.

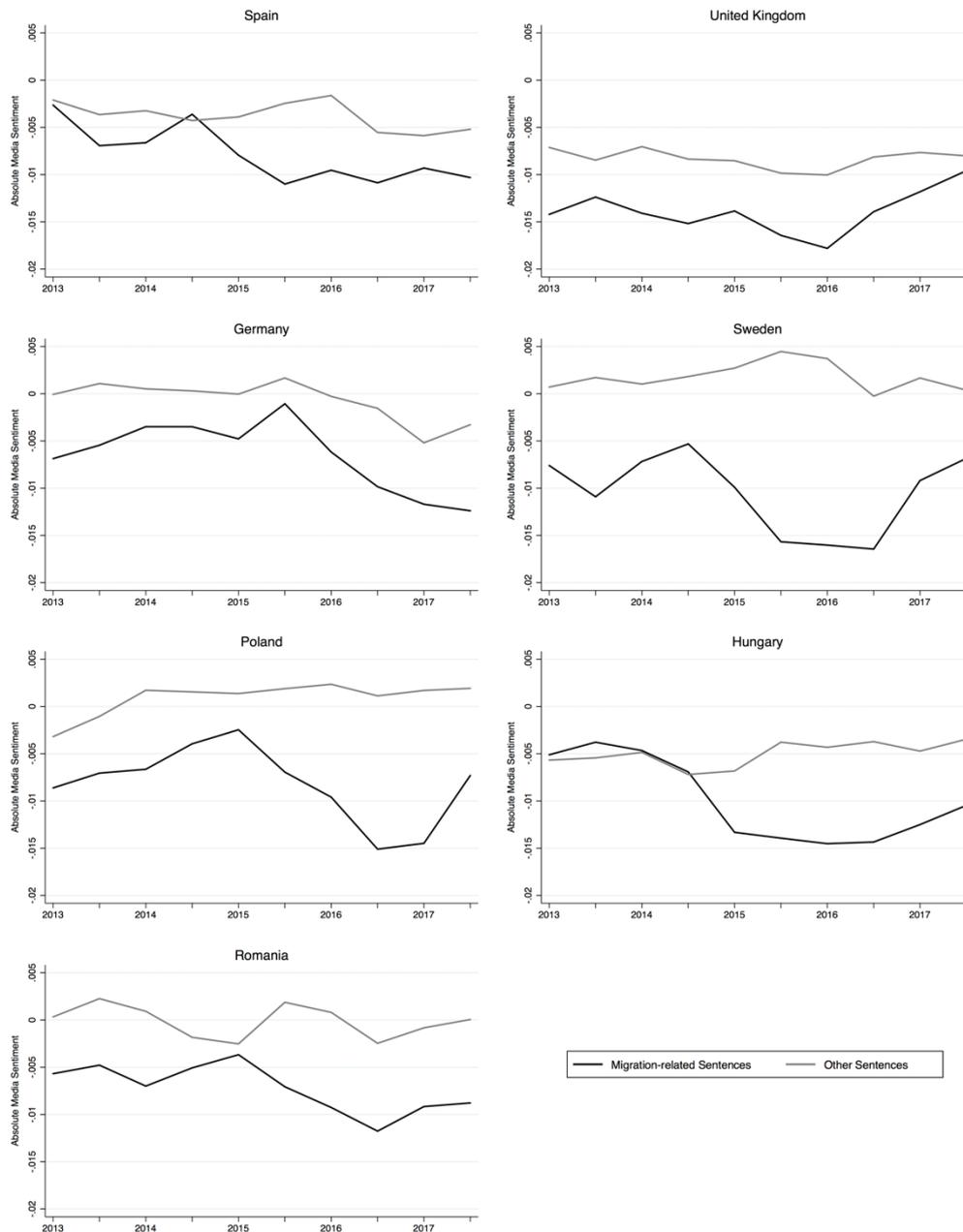


- van Dijk, T.A., 2005. *Racism and discourse in Spain and Latin America*. John Benjamins Publishing.
- van Klingeren, M., Boomgaarden, H., Vliegenthart, R. & de Vreese, C., 2015. Real World is Not Enough: The Media as an Additional Source of Negative Attitudes Toward Immigration, Comparing Denmark and the Netherlands, 2003–2010. *European Sociological Review*. 31(3), pp.268-83.
- van Spanje, J. & de Vreese, C. (2014). Europhile media and Eurosceptic voting: Effects of news media coverage on Eurosceptic voting in the 2009 European parliamentary elections. *Political Communication*. 31(2), pp.325-354.
- Vidra, Z. & Fox, J., 2014. Mainstreaming of racist anti-Roma discourses in the media in Hungary. *Journal of Immigrant & Refugee Studies*. 12(4), pp.437-455.
- Walgrave, S. & De Swert, K., 2007. Where does issue ownership come from? From the party or from the media? Issue-party identifications in Belgium, 1991-2005. *Harvard International Journal of Press/Politics*. 12(1), pp.37-67.
- World Bank Group, 2017. *Net migration* [online]. [viewed 27 March 2019]. Available from:  
[https://data.worldbank.org/indicator/SM.POP.NETM?year\\_high\\_desc=true](https://data.worldbank.org/indicator/SM.POP.NETM?year_high_desc=true).
- Young, L. & Soroka, S., 2012. *Lexicoder sentiment dictionary*. McGill University, Montreal, Canada.



# Appendix

Figure A2: Absolute Sentiment of Migration- and Non-Migration-related Sentences between 2013 and 2017

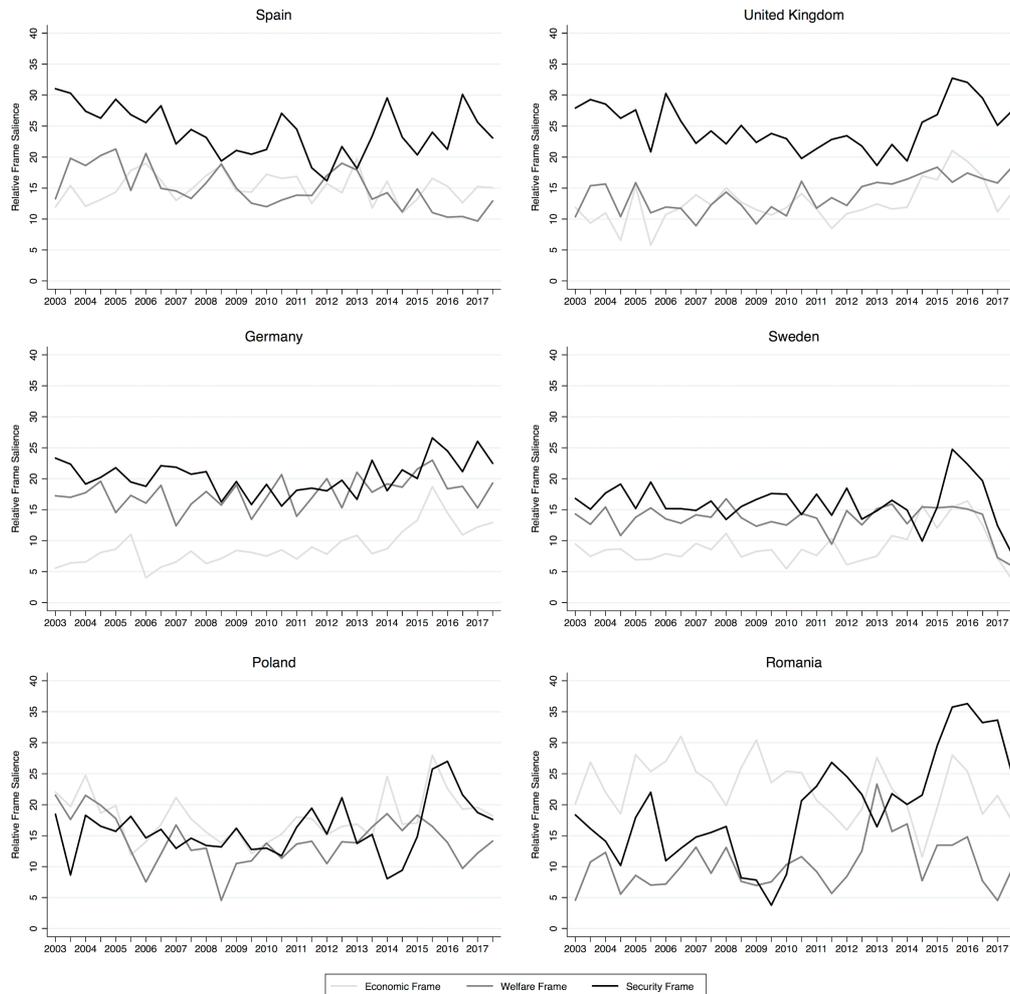


*Note.* For each country the population represents all sentences within articles that refer to migration in the respective outlets per half-year period. ESP: N = 129,331 sentences in three outlets. UK: N =



357,649 sentences in seven outlets. GER: N = 530,417 sentences in seven outlets. SWE: N = 226,153 sentences in four outlets. POL: N = 370,904 sentences in four outlets. HU: N = 310,824 sentences in eight outlets. RO: N = 78,819 sentences in four outlets. Sample weights are used. Lines are smoothed using a kernel-weighted local polynomial regression. The further two line are apart the more positive/negative is the relative sentiment.

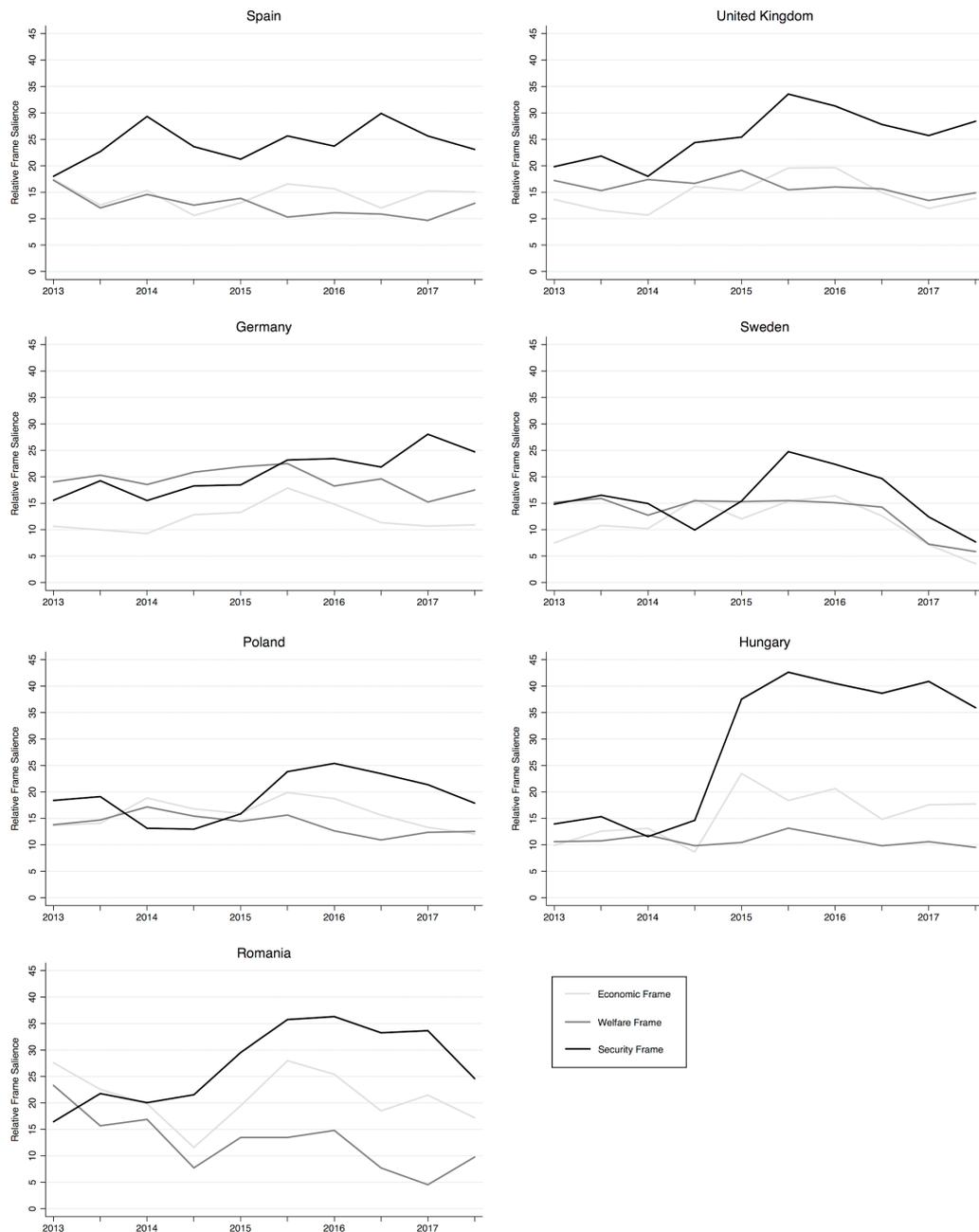
Figure A2: Migration-Related Framing Dynamics between 2003 and 2017



*Note.* For each country, the population represents all migration-related articles within the respective outlets per half-year period. ESP: N = 102,982 articles in two outlets. UK: N = 155,410 articles in four outlets. GER: N = 157,891 articles in three outlets. SWE: N = 100,750 articles in four outlets. POL: N = 29,704 articles in two outlets. RO: N = 7,288 articles in two outlets. Sample weights are used. Lines are smoothed using a kernel-weighted local polynomial regression.



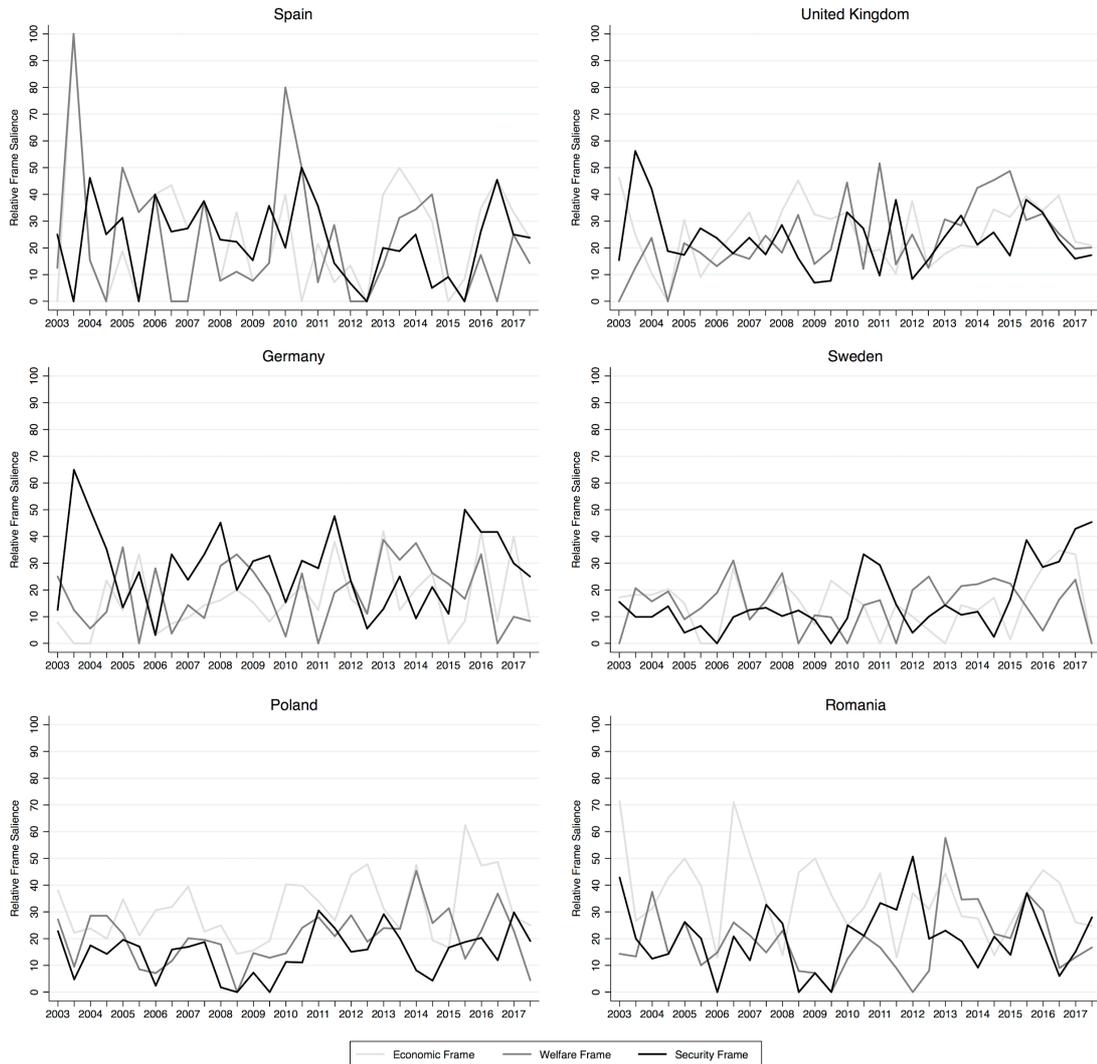
Figure A3: Migration-Related Framing Dynamics between 2013 and 2017



*Note.* For each country, the population represents all migration-related articles within the respective outlets per half-year period. GER:  $N = 185,022$  articles in seven outlets. SWE:  $N = 48,290$  articles in four outlets. POL:  $N = 25,541$  articles in four outlets. HU: 60,895 articles in eight outlets. RO:  $N = 5,623$  articles in four outlets. Sample weights are used. Lines are smoothed using a kernel-weighted local polynomial regression.



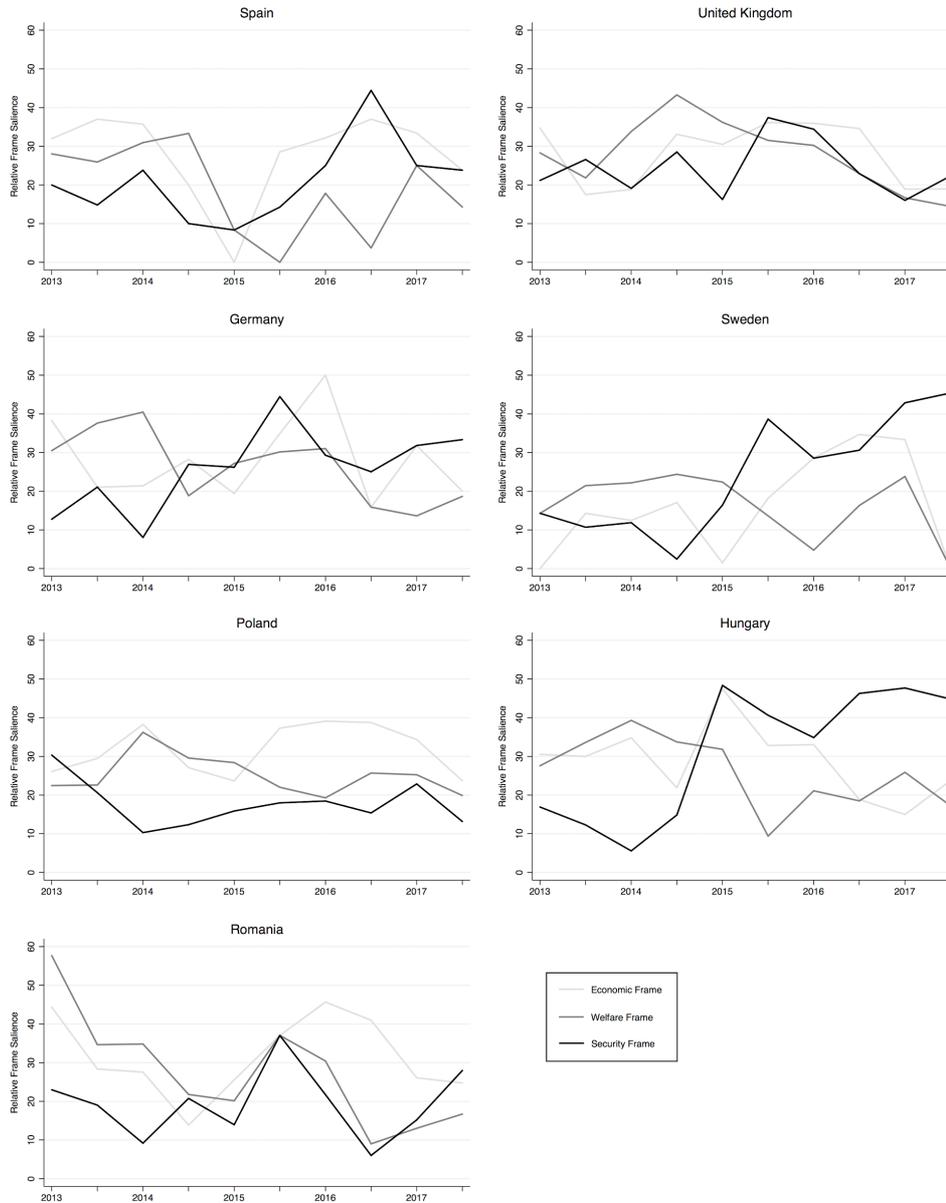
Figure A4: Intra-European Migration-Related Framing Dynamics between 2003 and 2017



*Note.* For each country, the population represents all sentences within articles that refer to Intra-European migration within the respective outlets per half-year period. ESP:  $N = 3,035$  articles in two outlets. UK:  $N = 11,373$  articles in four outlets. GER:  $N = 4,516$  articles in three outlets. SWE:  $N = 3,826$  articles in four outlets. POL:  $N = 2,898$  articles in two outlets. RO:  $N = 813$  articles in two outlets. Sample weights are used. Lines are smoothed using a kernel-weighted local polynomial regression.



Figure A5: Intra-European Migration-Related Framing Dynamics between 2013 and 2017



*Note.* For each country, the population represents all articles that refer to Intra-European migration within the respective outlets per half-year period. ESP:  $N = 1,584$  articles in three outlets. UK:  $N = 12,676$  articles in seven outlets. GER:  $N = 4,630$  articles in seven outlets. SWE:  $N = 2,055$  articles in four outlets. POL:  $N = 1,747$  articles in four outlets. HU: 2,948 articles in eight outlets. RO:  $N = 552$  articles in four outlets. Sample weights are used. Lines are smoothed using a kernel-weighted local polynomial regression.



Table A1: Most frequent positive/negative words within corpora

**Positive Lexicoder Top Features**

Country	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Spain	like	right	rights	support	free	help	great	good	agreement	open
UK	free	right	help	like	benefits	rights	support	freedom	allowed	open
Germany	right	like	accomodation	help	rights	good	care	better	protection	free
Sweden	right	like	free	help	good	care	support	great	rights	better
Poland	right	free	help	like	protection	benefits	accept	rights	support	obtain
Hungary	right	support	free	help	protection	agreement	accept	good	like	rights
Romania	free	right	support	benefits	freedom	help	agreement	accept	rights	like
Overall	right	like	free	help	rights	support	good	benefits	better	protection

**Negative Lexicoder Top Features**

Country	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Spain	against	illegal	crisis	irregular	problem	problems	lack	war	fight	crime
UK	illegal	crisis	against	war	too	failed	fail	forced	warned	problem
Germany	against	crisis	illegal	too	war	rejected	problem	deportation	problems	attacks
Sweden	against	crisis	war	illegal	difficult	problems	problem	too	forced	crime
Poland	illegal	against	crisis	problem	war	problems	difficult	restrictions	lack	threat
Hungary	illegal	crisis	against	problem	war	terrorism	terrorist	problems	forced	threat
Romania	crisis	illegal	against	problem	restrictions	problems	illegally	risk	affected	negative
Overall	against	illegal	crisis	war	problem	problems	too	forced	difficult	crime

Table A2: Relative distribution of words within corpora

Word	% frequency in Spanish corpus	% frequency in UK corpus	% frequency in German corpus	% frequency in Swedish corpus	% frequency in Polish corpus	% frequency in Hungarian corpus	% frequency in Romanian corpus
War	3.11	3.3	3.36	3.1	3.18	3.52	1.83
Persecution	0.4	0.61	0.39	0.42	0.57	0.5	0.32
Victim	1.55	1.01	0.98	0.68	1.04	0.87	0.39
Dictator	0.3	0.12	0.24	0.23	0.22	0.23	0.08

*Note. Shown are the relative number of articles mentioning a specific word (related to refugees' suffering) within each of the language-specific corpora.*





# REMINDER

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS  
IN NARRATIVES, DEBATES AND EU REFORMS

The REMINDER project is exploring the economic, social, institutional and policy factors that have shaped the impacts of free movement in the EU and public debates about it.

The project is coordinated from COMPAS and includes participation from 12 consortium partners in 8 countries across Europe



This project has received funding from the European Union's Horizon 2020 research & innovation programme under grant agreement no 727072

