Brexit! Grexit? Frexit? Considerations on how to explain and measure the propensities of member states to leave the European Union

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Abstract

Ever since the United Kingdom (UK) decided to leave the European Union (EU) in June 2016, one question has been on the minds of many Europeans: which other member states could leave the EU in the years ahead? In this paper, I develop an ‘exit index’ to measure each individual member state’s propensity to leave the EU, based on conjectures on how member states would generally decide to leave. After a discussion of methodological choices connected to composite indices, I use this index to define the ‘cores of Europe’. My results show that the UK is an outlier in terms of exit propensity. The only other country giving cause for some concern is Italy. Still, while practically all member states other than the UK are far from leaving the EU, the exit index brings to light substantial variation among them. Moreover, the exit index allows constant updating of exit propensities and could thus serve as an ‘early-detection system’. By sounding the alarm bell, it may perhaps even help to prevent future exits. Finally, the index allows modeling the effect that Britain’s exit will have on the exit propensities of other member states, thereby providing an objective means to assess the risk of contagion effects.

Keywords

European disintegration; exit propensities; composite index; cores of Europe.
Introduction*

The European Union (EU) faces its biggest existential threat yet, with its collapse becoming a faint but distinct possibility for the first time. At the height of the sovereign debt crisis, Angela Merkel declared that if the Euro fails, so will the EU (Zeit Online 2010). Similarly, at the reintroduction of border controls during the refugee crisis, Luxembourg’s foreign minister Jean Asselborn warned that the EU could break up ‘within months’ (Politico 2015). The culmination of this process was the United Kingdom’s (UK) decision to leave the EU in a referendum on 23 June 2016. While the UK’s decision is not directly linked to the other crises, its exit will prove that it is possible to leave the EU even after decades of membership.

As a result of these developments, there is growing speculation on the future of Europe. Particularly, whether countries other than the UK could leave the EU has been a recurrent theme in the wake of the British decision. A poll by the European Council on Foreign Relations (ECFR 2019) carried out across 14 member states found that a majority of Europeans fear the collapse of the EU by 2040. Ironically, this more widespread fear may be fuelled by a narrow focus on a small number of countries with highly visible populist parties (e.g. Lyons and Darroch 2016). The public narrative is thus often one of several countries potentially leaving the EU, implicitly portraying it as a crumbling political project. By contrast, scholars tend to emphasize the peculiarities of EU–UK relations, seeing only a limited risk of contagion (e.g. Clarke et al. 2017; Menon and Salter 2016; Moravcsik 2017; Vollaard 2014: 1154). The question of whether Brexit will remain an isolated event is, therefore, of central interest to both the public and academics and deserves greater attention.

In this paper, I develop a composite index measuring each EU member state’s propensity to leave the EU. This ‘exit index’ shows that the UK is indeed an outlier and will likely remain the only country leaving the EU. Still, there is substantial variation across the other 27 member states, with countries such as Italy or Greece more likely to leave the EU than Luxembourg or Ireland. The fact that these results will be uncontroversial among most observers of European politics provides some confidence in the ‘face validity’ of the index (Brown 2010: 144). The exit index also allows us to define the ‘cores of Europe’. Core 1 countries are extremely unlikely to leave the EU. Core 2 states are still very unlikely to leave, but more likely than countries in core 1. Finally, while core 3 countries are still unlikely to leave (the default expectation should always be EU membership), they are closest to an exit scenario. If the EU unravels further, we should expect to witness it in these countries first. Methodologically, I construct a multi-item additive index on the basis of existing theory, which has been fruitfully applied in previous research as well (e.g. Balint et al. 2008; Brown 2010; Dreher 2006).

This paper’s contribution to the literature is threefold. First, while previous contributions have dealt with disintegration or horizontal differentiation (Leruth et al. 2019; Schimmelfennig et al. 2015; Schimmelfennig 2018; Webber 2014), they, for the most part, fail to address why member states leave the EU. For Europe, this question is the most consequential for its political, social, and economic life and helps us understand ‘something that significantly affects many people’s lives’ (King et al. 1994: 15). Second, this paper shows how fundamental insights from various literatures can be combined into an additive theory (Jupille et al. 2003: 19–24), in this case explaining why member states decide to leave the EU. Third, while composite indices with comparable purposes are available (e.g. Gygli et al. 2019: 6; König and Ohr 2013), none is tailored towards measuring exit propensity. This paper is the first attempt to construct an exit index that can be applied across the whole of the EU.

The remainder of this paper is structured as follows. First, I theorize which conditions help explain a state’s decision to leave the EU. Second, I discuss the paper’s data sources and methodological issues.

* For helpful comments on earlier drafts of this paper I am greatly indebted to Rachel Epstein, Brigid Laffan, Craig Parsons, Alasdair Young, and the participants of panel 11L at the EUSA Biennial Conference in Miami (4–6 May 2017). All remaining errors and inconsistencies are my own.
connected to the construction of composite indices. Third, I present the results of the exit index, use it to define the cores of Europe, and offer some reflections on its future use. The final section concludes.

**Why leave?**

Fittingly, the oldest theory of European integration can serve as the starting point for theorizing how it may dissolve. Neo-functionalists acknowledged that integration is a multi-dimensional process that may result in integration or disintegration and also accepted that states could leave the EU (Hodson and Puetter 2018: 466; Rosamond 2019). Two paths to disintegration therefore need to be distinguished. First, neo-functionalism (and integration theories, more broadly) can help us understand the conditions under which the EU qua international organization (IO) may disintegrate (Webber 2014). But since constitutional-level changes in the EU require unanimity among its member states, the cancellation of the European Treaties or substantial reversions are highly unlikely. The most EU-friendly member state will prefer an outcome as close as possible to the status quo and veto outcomes that depart too far from its ideal point. The dissolution of the EU per se (the IO) through a negotiated process at the European level can thus be ruled out for all practical purposes.

The second path to disintegration leads past successive, but individual, exits of member states. Since these decisions would be taken entirely within the domestic political system of each state, this is a more realistic scenario. Here the EU would be hollowed out by successive exits, leaving the IO behind as an empty shell. Once the UK has left the EU, it will have proven that leaving the EU even after decades of membership is an option, with the extent to which this represents a realistic path to complete dissolution determined by the distribution of exit propensities across all member states.¹

In the remainder of this section, I follow neofunctionalists such as Haas (1958) and Nye (1968) and distinguish three fundamental dimensions of regional integration: social, economic, and political. For each dimension, I formulate three conjectures on how it plays into a member state’s decision to leave the EU. The term ‘conjectures’ signals that there is not much previous research focusing on why states leave the EU and acknowledges the problem of empirically testing my ideas given the n-of-one problem (i.e. there is only one state that has decided to leave the EU). Ideally for this paper, the world would consist of multiple regional organizations with levels of integration similar to the EU and dozens of member states, of which a fair number would have decided to leave the organization at some point.² This would provide the data necessary to discriminate among alternative hypotheses explaining a state’s leave decision. Given that this is not what the world looks like, I will consider all conjectures equally plausible and focus entirely on the measurement of exit propensities in the empirical part of this paper, rather than infer which of these conditions best explains the decision to leave the EU. However, these conjectures are, in principle, empirically falsifiable.

**The social dimension**

As is appropriate when dealing with democracies, the first dimension looks at how citizens influence a state’s decision to leave the EU. The most direct mechanism linking citizens to this question is through

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¹ Let me add two additional comments. First, the EU could collapse due to developments on the European level, such as the inability to achieve levels of integration commensurate with functional pressures, particularly in the area of Economic and Monetary Union (e.g. Jones et al. 2016). But this is not a negotiated dissolution in the sense mentioned here. Second, a state’s decision to leave the EU has no impact on the level of integration, thereby also not amounting to disintegration on the European level. In fact, a Eurosceptic state leaving may provide fresh impetus and lead to deeper integration. However, for the leaving state, this decision is a major disintegrative step and, when occurring in sufficient numbers, it could trigger a complete dissolution of the EU.

² One might also focus on a broader research question by looking at why states leave IOs, more broadly. But it can be doubted whether conditions for leaving ‘lower-profile’ IOs (von Borzyskowski and Vabulas 2019: 344) easily travel to a decision as far-reaching as leaving the most densely integrated regional organization on earth.
a popular referendum. However, member states have a diverse set of traditions for direct democratic instruments, which can be obligatory or optional and, once called, consultative or binding (Christiansen and Reh 2009; see also Hobolt 2009). For example, referendums in the UK itself are extremely rare. Only three UK-wide referendums have been held to date, two of which were on the question of EU membership. Nevertheless, it is inconceivable that the decision to leave the EU would be taken without a clear expression of the will of the people, if not in the form of a referendum then, for example, through a single-issue general election or widespread mass protests, which can lead to sudden and unexpected political transformations (Howard and Walters 2014).

The period from Rome to Maastricht has been marked by a permissive consensus among citizens, with only very limited popular opposition to European integration. This has changed during the 1990s and, in some countries, turned into a constraining dissensus (Hooghe and Marks 2009). But integration continues to deepen, not least due to functional pressures during the sovereign debt crisis (Jones et al. 2016; Niemann and Ioannou 2015: 200–205). This incongruity fuels the current dynamic of increased politicization (Cramme and Hobolt 2015; Risse 2015). While some see in this a welcome step towards a fully-fledged European polity (e.g. Follesdal and Hix 2006: 557; Habermas 2012: 51–52), others warn of its irreversibility and that it tends to benefit the populist right (e.g. De Wilde and Zürn 2012; Kriesi et al. 2006: 929). Either way, citizens will play a greater role in accounts of European (dis)integration.

More specifically, public opinion research deals with the characteristics that define who supports and who opposes European integration. It broadly distinguishes ‘utilitarian’, ‘identity’, and ‘cue-taking’ approaches (Hobolt and De Vries 2016: 420–423). Utilitarian support is based on a positive cost-benefit analysis and identity support on citizens’ attachment to Europe. While events such as the sovereign debt crisis may strengthen utilitarian considerations (Hobolt and Wratil 2015), identity is, at best, partly offset (Kuhn and Stoeckel 2014). Analysing the Brexit vote, Hobolt (2016: 1268) similarly finds identity to be a substantial predictor for leave votes. As both factors exert a distinctive influence on citizens’ support for integration, I include both. Finally, cue-taking approaches contend that European decisions are so complex that citizens rely on proxies such as politicians for integration preferences (Anderson 1998: 590–591). Since parties are included in the political dimension, I exclude this perspective here.

Conjecture S1: The higher the share of citizens perceiving the EU as providing net benefits, the lower a member state’s exit propensity.

Conjecture S2: The higher the share of citizens identifying exclusively with their nation-state, the higher a member state’s exit propensity.

Furthermore, attitudes towards EU immigrants can explain a country’s decision to leave. Increasing opportunities for transnational exchange have traditionally been viewed as a catalyst for integration (Deutsch 1957; Stone Sweet and Sandholtz 1997). However, freedom of movement is becoming increasingly politicized and developing into the ‘twin issue’ of European integration (Hoeglinger 2016). The public debate in the UK preceding the referendum was also shaped by the question of EU migration (Goodwin and Milazzo 2017; Kentmen-Cin and Erisen 2017). Since the architecture of the EU rests on the indivisibility of its four freedoms, which are non-negotiable, leaving the EU is the only viable path to cut EU migration. While there is no guarantee that EU migration will play an equally large role in other countries, it is plausible that it will be a hot-button issue whenever leaving the EU is discussed (cf. Schmidt et al. 2018: 1397–1398; Toshkov and Kortenska 2015).

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3 This also casts a different light on the claim that another (second) referendum would be undemocratic. Another referendum would be the third on the question of continued EU membership.
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Conjecture S: The higher the share of citizens viewing freedom of movement negatively, the higher a member state’s exit propensity.

The economic dimension

In the economic dimension, I first theorize that economic adjustment costs flowing from abandoning the Eurozone act as a deterrent to leaving the EU. The Euro has perhaps become a controversial achievement of European integration, particularly in the aftermath of the financial crisis. The adoption of the Euro may thus, in some respects, reinforce disintegrative tendencies also on a social level. Moreover, member states have different capabilities to leave the Eurozone and varying outlooks on its potential long-term benefits. Countries whose national currency would likely appreciate against the Euro stand less to lose than those facing depreciation and capital flight. In the latter case, businesses and citizens have strong incentives to shift their assets to other Eurozone economies, thereby triggering a full-blown bank run (Eichengreen 2010: 21–27). However, also countries whose currencies would appreciate would face enormous economic adjustment costs. The new currency would need to be printed and exchanged, contracts redenominated, automated teller machines reprogrammed, and price tags adapted. No country will underestimate the profound impact that abandoning the Euro will have on its economy.

Conjecture E1: Member states that have adopted the Euro have a lower exit propensity.

Second, businesses can shape state preferences, particularly on economic matters such as creating (or staying in) a single market (Moravcsik 1997: 528–530). Governments keenly defend economic interests in international negotiations, not least those of their exporters (De Bèvre and Dür 2005; Dür 2010). Given that humans mobilize more to avoid losses than in the pursuit of gains, this dynamic looms even larger when extricating one’s nation from a single market that has grown organically for years (see also Jensen and Snaith 2016: 1307). While it could be argued that universities or farmers will also mobilize in the face of losing access to European funds, I focus on exporters’ interests since many other types of losses can be compensated, partly, via domestic schemes and policies. Where businesses depend on imports, a state may unilaterally suspend tariffs or waive controls, if erga omnes (not only for EU states but all states of the world). However, unrestricted access to the world’s largest single market cannot be reproduced domestically and losing access to it will set off a period of massive economic adjustment.

Conjecture E2: The more a member state exports to other EU member states, the lower its exit propensity.

Finally, foreign investors can affect a country’s decision to leave. Credit rating agencies are a case in point, since they can constrain governments through credit assessments that determine a state’s cost of borrowing. Moody’s (2016) warned the UK that its rating could be downgraded if it loses access to ‘core elements’ of the single market. Similarly, third countries may attempt to protect investments made by its multinational corporations (e.g. Japan 2016). While this partly overlaps with the previous point since these investments can be tied to EU exports, adverse effects on a country’s ability to gain access to foreign capital can be theorized to also exert an independent effect on exit propensities. Generally, the repositioning of a country’s fundamental economic parameters caused by leaving the EU will alarm foreign investors. Daude and Stein (2007) find that the unpredictability of regulations and political instability deter foreign investment. Similarly, Julio and Yook (2016) report that the uncertainty surrounding national elections has an adverse effect. Büthe and Milner (2008), finally, argue that (developing) countries can reassure foreign investors by signing trade agreements, which the EU partly is. Since leaving the EU gives rise to much greater levels of uncertainty than any of these regular political events, its impact on foreign investors will be exponentially greater. Leaving the EU thus risks a painful period of adjustment from member states with economies used to high levels of foreign investment.
**Conjecture E:** The more a member state relies on foreign investment, the lower its exit propensity.

**The political dimension**

Leaving the EU also has a political dimension. The British referendum result had to be implemented by political institutions. Initially, Prime Minister Theresa May was eager to start the process with minimal interference from other domestic political actors as she sought to sidestep the British parliament under the royal prerogative. This was successfully challenged in the courts by a private litigant. Nevertheless, the House of Commons eventually overwhelmingly supported triggering Art. 50. While a majority in the House of Lords seemed opposed to Brexit, it did not have the necessary powers to block it. Similarly, the devolved legislature in Scotland could not abort the process. Meanwhile, the Queen as apolitical head of state did not interfere in the politics of Brexit. If the UK had had a political president opposed to Brexit, she may have taken a very different stance in the wake of the referendum result (and perhaps even swayed some voters in the referendum itself). The configuration of a country’s polity thus bears on political outcomes. Specifically, the number of veto players determines a political system’s capacity to change the status quo (Tsebelis 2002), in this case EU membership.

**Conjecture P 1:** The more institutional veto players a member state has, the lower its exit propensity.

Second, the strength of Eurosceptic parties increases a member state’s exit propensity. Party competition in democratic systems leads to electoral contestation. While the strength of Eurosceptic parties is tied to the social dimension (a Eurosceptic electorate will tend to vote Eurosceptic parties), if voters are partly guided in their electoral choices by factors unrelated to Europe, issue-specific preferences between the population and political parties can diverge (Hooghe 2003; Müller et al. 2012). Moreover, I do not distinguish between governing or opposition parties, since even if not in government, parties impact other parties by affecting tactics of party competition (Sartori 1976: 122–123; Van Spanje 2010). Political opposition thus places considerable pressure on other parties, as the British case also illustrates (Tournier-Sol 2015; see also Heppell 2013). While the impact of fringe parties on the positions of more mainstream parties may have been accepted too readily in the past (Alonso and Fonseca 2012), increased politicization and learning effects suggest that this effect will likely grow stronger in the future (Mudde 2013: 15). By contrast, if there is no credible political force lined up against European integration, other parties face less pressure to nurture anti-EU sentiments and leaving the EU is less likely.

**Conjecture P 2:** The better Eurosceptic parties fare in a member state, the higher its exit propensity.

Finally, I include a country’s budgetary status, i.e. whether it is a net contributor to or net beneficiary of the EU budget. In terms of political messaging, the Brexit campaign showed how the decision to leave the EU can be linked to a direct fiscal advantage in the case of net contributors. Upon leaving, the state’s contribution to the EU budget, allegedly, becomes available for salient domestic issues such as health care or housing. Establishing this link between EU membership and domestic spending is a powerful message, particularly when using inflated numbers and ignoring that membership is not a zero-sum game but generates additional value.

This can be illustrated with the help of club theory (Buchanan 1965), which conceives of the EU as a voluntary association creating benefits for its members from which non-members can be (partially) excluded. This is true in economic areas such as the single market or economic and monetary union (Fratianni and Pattison 2001: 399) but applies more widely, for example also concerning collective security (Dorussen et al. 2009). While clubs have optimal sizes and it is worth pondering whether the EU has grown too large (Majone 2009: 220; Schimmelfennig and Sedelmeier 2002: 512), empirically determining a club’s optimal size is challenging, particularly given the EU’s status as a system of differentiated integration in which multiple sub-clubs have formed. It could also be true that the optimal size of regional organizations is all states geographically qualified to join it, which is particularly true if we understand the world as a whole as an oligopoly dominated by a handful of players that will set the
rules (if Europe does not). As far as net beneficiaries are concerned, politicians have no immediate incentive to leave the EU as this would, even if integration were a zero-sum game, negatively affect their ability to provide benefits to their constituents.

Conjecture P: The more a country benefits fiscally from the EU, the lower its exit propensity.

Data and operationalization

I will now discuss the paper’s data sources and methodological questions connected to the construction of composite indices, beginning with how to combine the various components into one single metric to consistently report exit propensities across all countries. Generally, I see no convincing justification for weighting dimensions differently. For example, one may be tempted to rank the social dimension higher since EU states are democracies. But one can also argue that what ultimately matters is the reflection of theses preferences in parliament (as, again, the case of Brexit vividly illustrates). Similarly, one could argue that the fear of ruining a country’s economic foundation is key to explaining why countries stick with Brussels. Therefore, it is my contention that all components should enter the index unweighted.5

In the social dimension, I take three questions from the Eurobarometer (EB) survey. First, the question on whether the country would face a better future outside the EU, which should capture well citizens’ desire to leave the EU, even if it makes it impossible to distinguish utilitarian from ideational support (or, rather, opposition).6 Second, ideational support can be gathered from citizens’ attachment to their nation-states (Risse 2010: 41). I include whether citizens see themselves as ‘only national’ to measure the share of exclusive nationalists (identity) in each member state. Third, whether migration to one’s country from within the EU evokes negative feelings is included.7 This question is suited even better than a direct question on freedom of movement, since it breaks down a fairly abstract principle to a concrete outcome. To reduce the influence of outliers, I take the average of five standard EB surveys before the Brexit referendum, except for the question on EU migration, which has been included only four times before the referendum. To assess changes since the referendum, I take the five standard EB surveys with fieldwork conducted thereafter.

The first indicator to gauge economic adjustment costs is whether a country is a member of the Eurozone. If a country has not adopted the euro, its exit propensity is raised by 50 percent. This number may seem arbitrary. Why not accord 100 percent to non-Eurozone countries? The reason is because most ‘natural’ indicators (i.e. those with values not set by me) do not even come close to 100. The mean of all natural indicators is around 40. Picking 100 would effectively overweight Eurozone membership relative to other indicators. Furthermore, to get a single interpretable metric, it is necessary to have indicators with comparable properties and most naturally centre around 50. For example, if a majority of citizens or members of parliament (MPs) are Eurosceptic, leaving the EU is more likely than if this number is below this threshold. For the same reason, I am not normalizing indicators based on some reference value derived inductively from the data. Constructing the index as I do gives it a ‘fixed frame’

4 All data and code necessary to reproduce the results of this paper are available from my Harvard Dataverse at https://dataverse.harvard.edu/dataverse/MarkusGastinger.
5 Alternatively, we could turn to principal component analysis (PCA) to derive statistically determined optimal weights (Lockwood 2004: 515). However, I report results based on equal weights since they hardly change and ‘the cost in terms of [additional] complexity may fall short of the benefit’ (Dreher et al. 2010: 168). Moreover, the value of PCA increases with the number of indicators (Gygli et al. 2019: 10), of which the exit index currently has relatively few.
6 The question is: ‘(COUNTRY) could be better face the future outside the EU.’ I take the sum of ‘totally agree’ and ‘tend to agree’. italicized words in this section highlight variable names as they appear in the accompanying R-script.
7 Sum of ‘very negative’ and ‘fairly negative’ to the question: ‘Please tell me whether each of the following statements evokes a positive or negative feeling for you: immigration of people from other EU Member States.’
and makes it readily interpretable, with countries closer to or above 50 percent at a greater risk of leaving the EU than those below this threshold.\textsuperscript{8}

The second indicator included in the economic dimension are intra-EU exports of goods and services relative to a country’s gross domestic product (GDP), as taken from Eurostat (exports.eu). I compute three-year averages before and after the Brexit referendum. To gauge the impact of Brexit, intra-EU exports are calculated without exports to the UK in the latter period. Third, to measure a country’s exposure to foreign investors I take the inward stock of FDI as a percentage of GDP from Eurostat, averaged across 2013–5 and 2016–7. FDI is best suited to gauge the impact on foreign investors because, ‘[a]mong the various types of cross-border capital flows, FDI is considered most sensitive to political uncertainty and institutions’ (Julio and Yook 2016: 13). Shares of intra-EU exports and FDI are subtracted from 100 to measure exit propensities. FDI stocks of over 100 percent of GDP are capped at 100 to avoid negative values.

Concerning the political dimension, I suggest an indicator of veto players (constitutional structure) based on Huber et al. (1993: 728) and consisting of three components: whether countries are unitary or federal states, whether they have parliamentary systems, and the degree of bicameralism. Data are available from Armingeon et al. (2016). The variable ‘fed’ measures federalism. I count both weak (1) and strong (2) federalism as federalist systems. ‘Pres’ measures executive-legislative relations (from pure parliamentary to presidential systems). This variable is recoded 0 for parliamentary systems and 1 otherwise, since even in semi-presidential systems dominated by parliament the president typically has some veto power. Finally, ‘bic’ measures bicameralism and is assigned a value of 0 for unicameralism, weak bicameralism, and medium strength bicameralism. It is 1 for strong bicameralism (symmetrical powers, incongruent composition). Moreover, I recoded Belgium, Italy, and the Netherlands given that their second chamber has symmetrical powers (Lijphart 2012: 199). This indicator ranges from 0 to 2 but is rescaled to range from 50 to 50 to fit into the metric of the index.\textsuperscript{9}

To measure Eurosceptic parties within national parliaments, where decisions connected to exiting the EU will be primarily taken, I use the Chapel Hill Expert Survey (CHES) (Bakker et al. 2015), which provides reliable data on party positioning on European integration (Marks et al. 2007), combined with election results from the Parliaments and Governments database (ParlGov) (Döring and Manow 2018). I manually added recent elections, which allows us to gauge how exit propensities have developed since the Brexit referendum. Combining the CHES and ParlGov datasets has been tremendously facilitated by the Party Facts project (Döring and Regel 2019). I include parties with an EU position below 3.5 in the measure of Eurosceptic MPs. This means that they are ideologically closer to opposing the EU than to supporting it, which makes it easier for them to stomach an exit scenario, even if not actively advocating for it.\textsuperscript{10} Moreover, I use the degree of dissent on Europe within a party to estimate the number of Eurosceptic MPs. Assuming that dissent extents symmetrically in both directions, a party’s upper and lower bounds can be estimated based on the formula:

\textsuperscript{8} One could also argue that normalization enters my index by only including (natural) indicators that are expressed as a share of a total quantity and are bound between 0 and 100 (OECD 2008: 87–88). Moreover, in other contexts, a composite index with fixed goal posts may be a suboptimal choice because it fails to account for relative changes across all states (Noorbakhsh 1998: 522). However, I conceive of exit propensities as a more absolute phenomenon that should not be impacted by values of other member states. Therefore, it also makes little sense to interpret the results in terms of ranks.

\textsuperscript{9} An alternative operationalization for veto players is available from the Political Constraint Index dataset, which, among other things, includes information on the alignment between national political institutions, parties, and the fractionalization of parliaments (Henisz 2000). However, I consider a more structural view better suited for this paper, since leaving the EU is an extraordinary political event that transcends party loyalties and really encourages politicians to vote with their conscience for or against EU membership rather than simply fall into line.

\textsuperscript{10} Taggart and Szczerbiak (2004) famously distinguished hard and soft Eurosceptic parties. While the former object to the EU in principle, the latter only object to specific aspects. Arguably, this distinction becomes less relevant as Eurosceptic parties become more strategic by tabling (unrealistic) reform proposals and portraying leaving the EU as a measure of ‘last resort’. A continuous measure of Euroscepticism thus promises to be more useful.
where \( EUP_i \) is the EU position of party \( i \) and \( EUD_i \) is the corresponding value for EU dissent. Where the higher and lower bound of a party are below or above 3.5, all or none of its seats are included in the index. Where the bounds stretch across 3.5, the percentage share below 3.5 of party \( i \) is computed with the help of the formula:

\[
\text{Share}_i = \frac{3.5 - EUP_{i, \text{lower bound}}}{(EUP_{i, \text{upper bound}} - EUP_{i, \text{lower bound}}) / 100}
\]

This share is then multiplied with the party’s number of seats to estimate the strength of Eurosceptic MPs in national parliaments. Where data is missing in CHES, I imputed values for parties with a seat share of at least 5 percent based on descriptions on Wikipedia. Eurosceptic parties were imputed the value corresponding to the first quartile of the EU position of all known parties (3.4), while pro-EU parties received the third-quartile value (6.3). For EU dissent, I used the mean of all known parties.

Concerning the budget, I use the operating budgetary balance (OBB) to determine a member state’s status as net contributor or net beneficiary. I have taken states’ total tax receipts to compute relative shares of the OBB.\(^{11}\) Taking a country’s tax receipts, rather than GDP or GNI, is somewhat unorthodox. However, this is a better indicator for the direct fiscal impact of leaving the EU and the ability to provide benefits to constituents. Since a country’s status varies over time, I have computed the average for the periods 2013–15 and 2015–17, before and after the Brexit referendum, respectively. Net contributors paying 1 percent or more of their total tax intake into EU coffers receive a value of 50 in favour of exit propensities, net beneficiaries receiving at least 1 percent get a 0. Countries in between these two values get an intermediate value of 25.

Let me end this section with some reflections concerning the accuracy of the exit index. While there is no straightforward margin of error that comes with the methodology behind the construction of composite indices, the extent of the problem can be approximated by looking at the data sources going into the index. EB surveys have a margin of error of 2–3 percent at the 95 percent level of confidence (European Commission 2018: TS2). Similarly, economic indicators (other than Eurozone membership) invite some error. Data on GDP seem fairly accurate (Landefeld et al. 2008: 213) but the accuracy of trade data needs to be put in the 1–5 percent range (OECD 2001: 4). The collection of FDI data varies across member states. But Germany, for example, has a statute mandating its citizens and companies to declare all FDIs (Deutsche Bundesbank 2019: 89). Measurement error should hence be limited. Finally, the (estimated) share of Eurosceptic MPs in the political dimension has a margin of error. The standard deviation among experts on parties’ EU position is around 1 percent (Bakker et al. 2015: 149). Under the assumption that errors are not systematically determined by some underlying common factor, they should not simply add up but could, partly, offset each other. In conclusion, a 2–3 percent difference should give us reasonable confidence that member states are indeed falling into different categories.

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\(^{11}\) The OBB is defined as the difference between the operating expenditure (excluding administration) and adjusted national contribution (excluding traditional own resources). Data are from the Commission’s DG Budget, available at: http://ec.europa.eu/budget/library/figures/internet-tables-all.xls (accessed October 2019). Total tax receipts are taken from Eurostat and include taxes from the central, state, and local level.
The cores of Europe

What then is the distribution of exit propensities following the approach developed in this paper and what can we learn from it? Figure 1 lists all member states in descending order and broken down into individual dimensions. The UK tops the index and is among the two top countries in each dimension (more information on each individual dimension can be found in the Appendix). In the social dimension, the UK has the highest share of exclusive nationalists. Economically, it is ranked second as a non-Eurozone country with an economy not geared towards goods and services exports to the EU. Politically, the UK tops the list with little in the way of change constitutionally, its net-contributor status, and an estimated 30 percent of Eurosceptic MPs. The UK, therefore, stands out as a member state that is uniquely positioned to leave the EU. If we understand these dimensions as necessary conditions, where countries only leave the EU if ranking high across all three dimensions, no other member state faces a comparable risk of leaving the EU.

Still, the exit index picks up considerably more variation among the remaining member states than this top-level assessment conveys. Behind the UK, we find a group of four countries. Greece ranks highly in the social and economic dimensions but would face a loss in EU funds to the tune of about 10 percent of its tax revenues. Italy’s case for leaving the EU is probably stronger, particularly given the development in its political dimension (see below), but disentangling from the Euro and the concomitant depreciation of its national currency would put considerable pressure on its economy. Denmark and Sweden exhibit high exit propensities in the economic and political dimensions but have very Europhile citizens. In summary, while all these countries would need to see substantial changes in at least one dimension to make good candidates for leaving the EU, they have more plausible exit scenarios than the other member states. With exit propensities of more than 40 percent, I put them in core 3 of Europe.
Figure 1. The exit index and its three dimensions viewed for all EU member states in the period *before* the Brexit referendum

Note: Member states are represented by their ISO 2 codes as adapted by Eurostat. Author’s own computations and illustration.
Core 2 begins with France and ends with Cyprus. This corresponds to exit propensities from 40 to 31. France leads this core but has a high share of citizens feeling European and puts more in the way of ‘Frexit’ in the political dimension. In this group, we also have Finland and Austria, which have been mentioned as potential candidates for leaving the EU. Based on the exit index, these concerns seem overblown. Finland has a solidly Europhilic population and Austria, while more Eurosceptic, has many veto players and generates 40 percent of its GDP from EU exports. Germany, which has received attention following the Alternative für Deutschland’s decision to include the possibility of ‘Dexit’ in its European election manifesto, is also nowhere near this scenario given the pro-European stance of its citizens and the constitutional hurdles that would need to be overcome. Overall, core 2 countries would need to change substantially, often in two dimensions, before getting closer to exiting the EU.

Finally, core 1 brings together countries with exit propensities of 30 or lower. This core starts with Bulgaria and includes the Netherlands, which has also been mentioned as an example of a country that might leave in the future. But the Netherlands has an open economy tightly knit into the single market and the Dutch are largely pro-European. Apart from the Netherlands, no other country in this group has been seriously connected to a potential exit in the public or scholarly discourse, which gives me some confidence in the validity of the exit index as proposed in this paper.

Another key advantage of the exit index is that it can be updated and used to assess the extent to which future exits affect the exit propensities of other countries. To illustrate this point, I have updated all indicators with the exception of constitutional structure and Eurosceptic MPs in five member states with no elections since the Brexit referendum. Moreover, I have excluded the UK when measuring exports of goods and services to the EU to ‘simulate’ its departure. As Figure 2 illustrates, Brexit would not give rise to great immediate changes, not even in the case of Ireland, which remains solidly in core 1. Greece has moved closer to the centre of Europe with the most recent elections. The same cannot be said of Italy, which has seen a sharp jump in the share of Eurosceptic MPs. If the current trajectory continues, Italy may gradually inch closer towards ‘Itexit’. Nevertheless, a low share of exclusive nationalists (39 percent; the UK reached 63 percent before the referendum) and issues connected to the abandonment of the Euro act as serious deterrents. The UK itself has reverted towards Europe, mainly due to a drop in exit propensities in the social dimension (which is true for most member states). The share of exclusive nationalists has dropped to 49 percent and EU migrants are held in higher regard compared to the period before 2016. What is surprising then is that the share of respondents seeing a better future for the UK outside the EU has even increased slightly. One way to interpret this disconnect is that the British do see a better future outside the EU not because of issues connected to the EU itself, but to finally put an end to the domestic political battle that has ravaged the country ever since the Brexit referendum has taken place.
Figure 2. The exit index and its three dimensions viewed for all EU member states in the period after the Brexit referendum

Note: Member states are represented by their ISO 2 codes as adapted by Eurostat. Author’s own computations and illustration.
In summary, the exit index presents the EU in a fairly good state. Exits of other member states are very unlikely. The risk of contagion effects is currently limited. Regular updates of the exit index will allow monitoring of the situation and raise the alarm if a member state does get closer to an exit scenario. To the extent that the index comes to be known as an accurate representation of whether a member state is at risk of leaving the EU, the mere publication of updates could help prevent future exits by making citizens in affected countries aware of the increasing stakes. One reason for the narrow win of the leave side over remain in the British referendum may well have been a false sense of security that the remain side would carry the day. The exit index, if then available, may have made some modest contribution in convincing people to get out and cast their ballot in the referendum. In light of the serious ramifications that the British decision has had, no avenue to help prevent future exits should be left unexplored.

Conclusion

In this paper, I have developed a composite index measuring exit propensities across all member states of the EU. To that end, I have first theorized the conditions contributing to this decision across the social, economic, and political dimensions. I have then identified suitable indicators and engaged with the methodology behind composite indices. The resulting exit index suggests that the UK is an outlier and uniquely positioned to leave the EU. However, the other member states also exhibit substantial variation, with Italy relatively closest to an exit scenario. More broadly, I have used the index to define three ‘cores of Europe’ and argued that future exits are overall very unlikely. Future research could help predict and, perhaps by raising alarm, avoid exits by further refining the exit index both theoretically and in terms of indicators included. This paper can thus be viewed as an important first step to help inform public and scholarly discourse on one of the most pressing issues facing the EU today.

My paper also shows that in spite of the multiple crises that the EU has had to go through in the last couple of years, the European project is in, perhaps surprisingly, good shape. There is no indication that any member state other than the UK will leave the EU in the foreseeable future. While, so far, I have not differentiated between countries in the discussion, it obviously matters whether a small country like Cyprus would decide to leave or a big country like the UK. Importantly, Germany, which because of its size and geographic location can be viewed as the linchpin of European integration, is showing no signs of abandoning the European idea. In much the same vein, France seems guaranteed to see its interests better served by shaping the European project rather than abandoning it altogether. With the EU moving closer together and dire prospects for the UK to peel off member states individually by pushing an alternative vision of European cooperation based on a more limited free trade area, the UK government will have no choice but to define a new partnership with the EU as a whole. The British decision to leave the EU must obviously be respected, but the EU will remain a fact of life and major political entity with which the UK will continue to share many interests, values, and its only land border. An adversarial relationship based on loose ties serves no one in the long term.
Appendix

Figure A1. The three dimensions of the exit index viewed individually for the period before the Brexit referendum

Exit propensity
- Social
- Economic
- Political

Social propensity
- Future
- Identity
- Migration

Economic propensity
- Euro
- EU exports
- FDI

Political propensity
- Structure
- Parties
- Budget
Brexit! Grexit? Frexit? Explaining and measuring the exit propensities of EU member states

Figure A2. The three dimensions of the exit index viewed individually for the period after the Brexit referendum

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References


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