

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12

## 5 How does the future look for the EU?

13 Previous chapters have shown that the integration process in Europe was AQ2  
14 prompted by an initial commitment by France and Germany to jointly sup-  
15 port collaboration rather than confrontation. The creation of the EU and  
16 its initial progress were supported by this agreement. Assessments of rel-  
17 ative power show that Germany, which still remains the dominant nation  
18 in this region, was most supportive of early structural changes. A key  
19 German commitment was to provide the largest transfers to the EU for eco-  
20 nomic adjustments due to integration. As European integration deepened  
21 and the EU gained more members, the preponderance of Germany in the  
22 regional hierarchy gradually declined. France, Italy, and the UK closed the  
23 gap between themselves and Germany. As Germany’s capacity to provide  
24 necessary resources for integration reached its limit, integration plateaued  
25 because of the lowering of guarantees for ameliorating negative implica-  
26 tions of integration. This shift is reflected in our results that show at higher  
27 levels of integration, further deepening no longer depends on the dominant  
28 states within the hierarchy. Instead, we show that deepening of integration  
29 is driven by convergence of values and continued trust in EU institutions. In  
30 sum, satisfaction with the status quo becomes the driver in the later stages  
31 of integration.

32 The ongoing Brexit process discloses that members that have lagged in  
33 their commitment to “ever closer union” may choose to leave the EU and  
34 shift regulatory decisions back to their national governments. This is the  
35 case for the UK, which was often uncomfortable with integration steps that  
36 went beyond the common market. Recall that Britain chose not to join the  
37 Eurozone and rejected Schengen. Furthermore, we show that Britain’s val-  
38 ues are not converging with those of the EU core. Certainly, Britain’s value  
39 convergence is more with those of the US than its European neighbors.  
40 Moreover, we also show that since joining the EU, Britain maintained a  
41 lower level of trust in EU institutions than any other member state. Because  
42 of this reluctance to integrate, Britain has consistently opposed political  
43 proposals that would move the EU further towards a political union. By  
44 removing Britain as a member of the EU, we speculate and test here if further  
45 deepening of integration may follow among the rest of the member states.

46 National decisions addressing the forced migration from war-torn nations  
47 – particularly Syria, Iraq, Afghanistan, and Central and North Africa – have  
48 placed serious strains on the freedom of citizens to move within the EU.  
49 Many suspect that fear of Middle Eastern migrants disproportionately re-  
50 locating to Britain was a major factor in the vote for Brexit. Refugees have  
51 been welcomed in Germany, but many countries in the EU, most promi-  
52 nently Hungary, Poland, and Bulgaria, have refused to accept immigrants  
53 and sealed their borders counter to EU rules. Greece and Italy have taken  
54 the brunt of new entries but now seek to disperse the new immigrants. While  
55 migrations after World War II dwarf the size and scope of the refugee flows  
56 currently underway, the political impact on the EU is palpable. We explore  
57 the migration divide within the EU to assess the impact of this externally  
58 induced division in European unity and the willingness to further integrate.

59 An additional concern revolves around European security. It is con-  
60 ceivable that the Trump administration might substantially reduce US  
61 commitment to NATO. This, in turn, raises a serious challenge for Europe's  
62 CFSP. Strengthening the CFSP against external threats may require substan-  
63 tial financial commitment by member states. Such financial requirements  
64 cannot proceed without revision of current EMU fiscal limits. However,  
65 the current political opposition to furthering the centralization of finan-  
66 cial transitions within the EU has shown that the undertaking of such  
67 drastic measures is anything but easy. Yet, if the Trump administration  
68 casts serious uncertainties upon the future of NATO and the security inter-  
69 ests of the EU, the defense needs of the EU could force member states to  
70 revise the fiscal restrictions on national budgets and push them to adopt a  
71 supranational-level solution by adopting a fiscal union.

72 In this chapter, we address these challenges through macro and micro  
73 analyses. First, we present a macro-level analysis of the EU as a global actor  
74 in competition with other giants given the current state of integration among  
75 its members. In other words, holding all variables constant what would be  
76 the EU's position in the global hierarchy? Once this picture is clear, we next  
77 examine the member states' policy preferences over key challenges that are  
78 central to further deepening of integration. Finally, we provide a forecast  
79 analysis of the challenges presented in [Chapter 3](#), using the theoretical model  
80 presented in [Chapter 2](#) and tested in [Chapter 4](#).

## 82 **Competition among the giants**

84 In this section, we look at the EU as a global actor. In the past, compe-  
85 tition among the more powerful states of the global hierarchy has led to  
86 confrontations under conditions of parity when competing sides rejected the  
87 status quo. This observation is fundamental to power transition theory. All-  
88 ison Hamlin and Jacek Kugler summarized the long-term global record of  
89 observations from 1700 through the present.<sup>1</sup> Limitations of data restrict  
90 somewhat the length of this analysis, but [Figure 5.1](#) shows that starting with

91 the French Revolution, the most severe global wars were waged at *parity*  
 92 among *dissatisfied* contenders.

93 In Figure 5.1 the X-axis represents power where parity, measured by GDP,  
 94 is achieved at 1.0. The Y-axis indicates the severity of conflict in terms of  
 95 total deaths. The figure shows us that the overwhelming number of severe  
 96 conflicts occur in or around parity – challenging the notion that a balance  
 97 of power preserves peace. The one glaring exception is the conflict Japan  
 98 initiated against the United States during World War II.<sup>2</sup>

99 Parity and dissatisfaction can lead to severe conflict and power asymmetry  
 100 and dissatisfaction can lead to limited conflict. However, parity and  
 101 satisfaction, as we have shown, can lead to cooperation while a combination  
 102 of power asymmetry and satisfaction improves the likelihood for early  
 103 integration. Let us then present the basic data before we provide a very tentative  
 104 assessment of the likelihood of conflict and cooperation among the  
 105 major powers.

106 The productivity of top members of the global hierarchy can be used  
 107 to anticipate the likely trajectory that sets the necessary preconditions for  
 108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

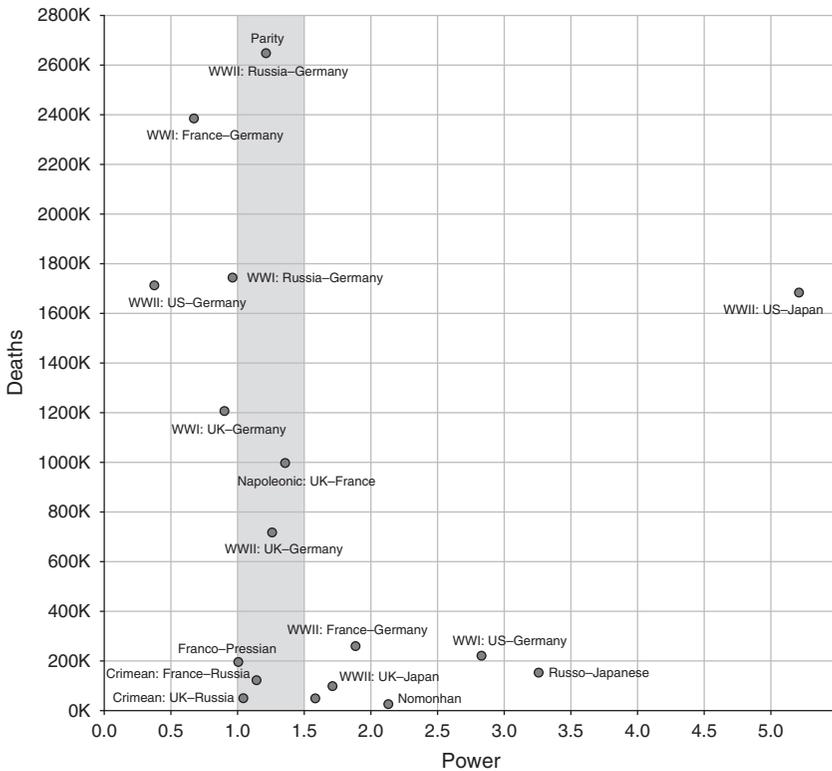


Figure 5.1 Power Parity and Severity of Conflict.

136 major conflict or cooperation. Figure 5.2 summarizes the relative GDP and  
 137 productivity of major global powers. The EU's power is an aggregate of  
 138 members controlled for when they joined the Union. Anticipating Brexit, we  
 139 reduce the capability of the EU by removing the UK starting in 2020. The  
 140 thickness of each time assessment indicates the productivity of individuals  
 141 within each society. The United States dominates the global system from  
 142 1950 to the present, but this preponderance is now challenged by China.  
 143 The European Union holds a steady third place even without Britain. Russia,  
 144 despite its current visibility, will not be a major player in the future. Instead,  
 145 India, because of its population size, is expected to emerge as a major power  
 146 sometime beyond 2035.

147 Another key consideration is the EU's regional hegemony. As the dom-  
 148 inant power in Europe, the EU, as a single actor, can possibly provide  
 149 stability. If integration deepens between EU member states, the resulting  
 150 Union would be capable of meeting any economic or security threat posed  
 151 by Russia. On the other hand, neither Germany, France, nor the UK has  
 152 individual capabilities to confront Russia's growing challenge in Europe.  
 153 Given the power projections presented in Figure 5.2, we examine the likeli-  
 154 hood of cooperation or conflict between the EU and Russia, and the EU/US  
 155 and Russia/China.

156

157

158 *The EU and Russia*

159 After 1989, Russia endured a severe and protracted economic downturn.  
 160 Hyperinflation plunged millions of people into poverty. A sharp fall in  
 161

162

163

164

165

166

167

168

169

170

171

172

173

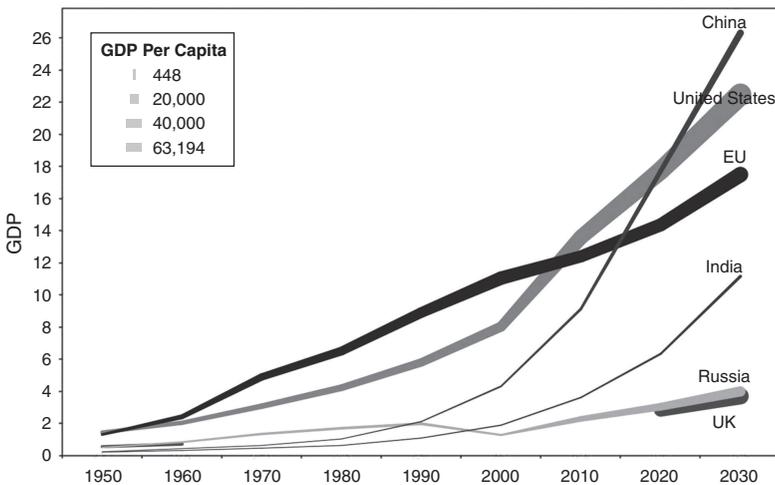
174

175

176

177

178



179 *Figure 5.2* Power and Productivity of Global Contenders, 1950–2030 (in PPP 1990  
 180 US trillions).

181 GDP, plummeting foreign trade, a high unemployment rate, an extraordinary  
182 increase in income differentials, a rise in corruption, and a massive  
183 budget deficit dramatically affected income. Coupled with low oil prices,  
184 the negative economic performance created serious economic problems in  
185 the reckless early 1990s. Real GDP fell by 8.7 percent in 1993 and 12.7  
186 percent in 1994, indicating a severe recession.<sup>3</sup> The EU and US made  
187 significant contributions to Russian economic recovery through various  
188 assistance programs.<sup>4</sup> Many Western analysts and policy-makers anticipated  
189 that privatization, price and trade liberalization reforms, and currency con-  
190 vertibility would ultimately lead to macroeconomic stability in Russia. Such  
191 changes would then put this country on its way to becoming a more democ-  
192 ratic and faster growing market economy. Early agreements seemed to  
193 lead in this direction. In 1998, the United States and the European Union  
194 invited Russia to join the Group of Seven (G7). This major step recognized  
195 the prominent role that Russia could play among the top industrialized  
196 and highly developed democracies despite its temporary economic decline.  
197 Moreover, relations with the West improved further in 2012, when after  
198 19 years of tortuous stop-start negotiations, the World Trade Organization  
199 (WTO) officially welcomed the Russian Federation to join the organization  
200 as its 156th member. Russia was finally granted the right to have a say in  
201 global trade forums. Admitting Russia would bring the country interna-  
202 tional prestige, enhance its economic and political interactions, and adhere  
203 it more closely to the West.

204 However, the opposite occurred. Failure of the 1995 Oslo negotiations  
205 between Presidents Clinton and Yeltsin to bring Russia into NATO, coupled  
206 with the admission of the former Soviet Baltic states, enraged the Russians  
207 and paved the way for a more hostile relationship. Vladimir Putin increased  
208 state control of the economy, started a massive military build-up, intervened  
209 and occupied parts of Georgia and Ukraine, annexed Crimea, and caused  
210 dangerous regional instability. Russia's offensive postures made Western  
211 leaders very concerned about the future of regional stability on the eastern  
212 border of the EU. The early post-Soviet optimism about a full reconciliation  
213 between Russia and the West dissipated and initial rapprochement between  
214 the EU and Russia that started after the collapse of the USSR ended.

215 A standoff with Russia was prompted by EU attempts to incorporate  
216 Ukraine as an EU associate member. A prolonged crisis in Ukraine began  
217 in November 2013 and deposed President Viktor Yanukovich who had  
218 suspended implementation of an association agreement with the EU. Mass  
219 protests known as the "Euromaidan" toppled the government. This in turn  
220 led to a reaction by Russia that culminated in the annexation of Crimea and  
221 continued support for east Ukrainian dissidents who seek to partition the  
222 country or destabilize the government in Kiev.

223 In view of this deteriorating status quo, [Figure 5.3](#) shows the power dis-  
224 tribution between the EU and Russia controlling for the UK dropping out of  
225 the Union in 2019. The distribution of power shows the EU as the dominant

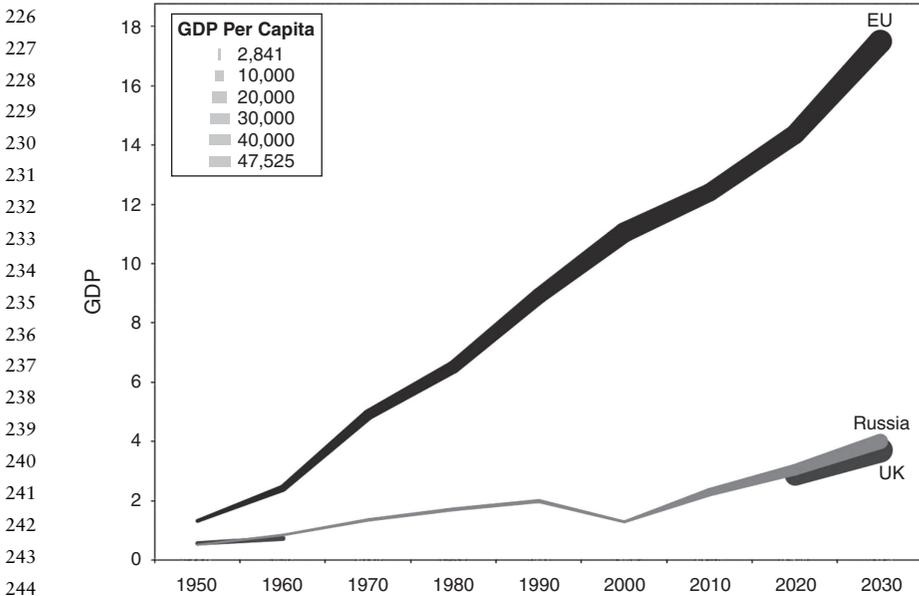


Figure 5.3 Power and Productivity of the EU, Russia, and the UK, 1950–2030 (in PPP 1990 US trillions).

power in the European region for the foreseeable future. With or without US support, a conventional confrontation in Europe favors the EU.<sup>5</sup> On the other hand, were the EU to collapse (and we do not forecast this eventuality), direct confrontations between Germany and Russia or France and Russia would favor Russia as these societies are all very similar in power to Britain.

Currently, tensions in EU–Russia relations continue despite uncertainty regarding the US position. It is not likely therefore that the status quo will improve in the next few years sufficiently to anticipate cooperation between the EU and Russia. Thus, we examine the probability of conflict between the EU and Russia using a specification of the power transition model provided by Efird, Genna, and Kugler.<sup>6</sup> For estimation purposes, we use a conflict–cooperation continuum that ranges from 1 to 10, where 1 represents federated integration and 10 represents severe conflict. Using the Efird, Genna, and Kugler model with value convergence and power asymmetry to reflect hierarchy and the status quo, we can preliminarily forecast the likely interactions between the EU and Russia. Figure 5.4 indicates a stable confrontational relationship through 2035. Unless major political changes take place, the confrontational posture currently in play will persist. Although we do not forecast war, the results indicate a set of preconditions for a continuing low level of hostilities.

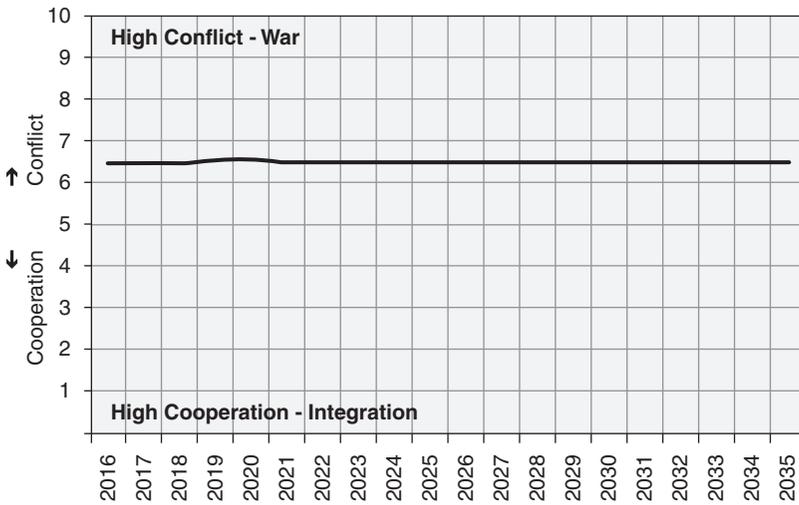


Figure 5.4 Estimated Relations between the EU and Russia, 2016–2035.

These results are concerning but concurrently reassuring. Despite the visibility of the Ukraine crisis and the sharp focus on Crimea, the likelihood of an escalation from crisis to war is very limited. Even without US participation, the EU towers over Russia. The combined forces of France and Britain provide a significant deterrence to a potential Russian threat. In a conventional conflict, Russia could inflict serious short-term costs on the EU. Yet, in a prolonged confrontation, Russia would not be able to match the combined capabilities of the EU. Only in the unlikely event of EU disintegration (which we do not anticipate) would Russia prevail in a confrontation with the EU. At the same time, no individual member state can match Russian capabilities – so dissent about external security among EU members and distancing from the US can both contribute to a rise in the likelihood of conflict along the eastern border of the EU.

*NATO and the China–Russia relationship*

In this section we examine relations between NATO and a Sino-Russian alliance. Figures 5.5 and 5.6, using the same method used in the previous section, outline the structural conditions and likelihood of cooperation and conflict, respectively. Initial results show that – as common sense indicates – the EU–US remains the preponderant power in the global arena. Even with a competitive China–US relationship, where China is expected to overtake the latter as the dominant global economic power by 2025–2030, NATO allies maintain preponderance over a Russia–China alliance for the foreseeable future.

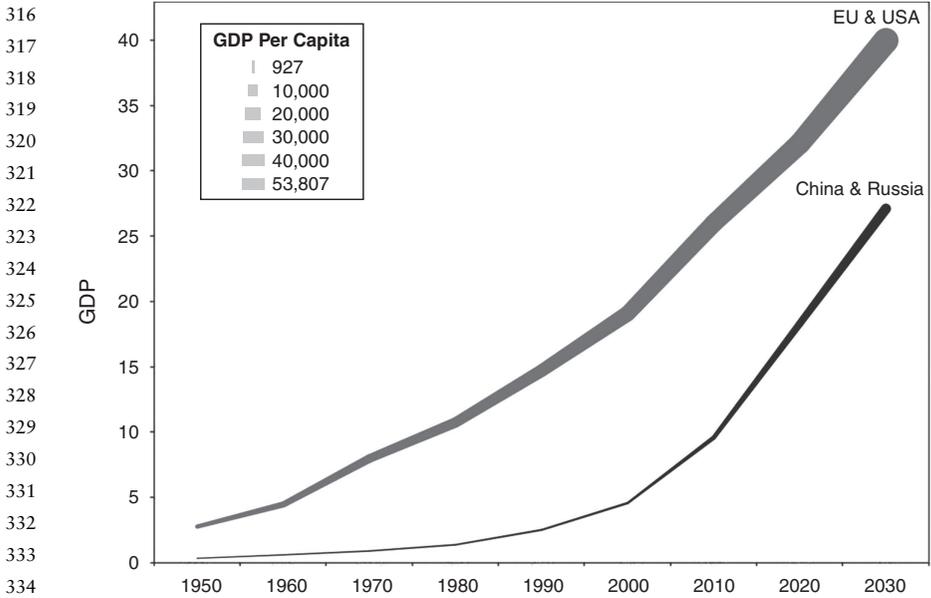


Figure 5.5 Power and Productivity of the EU-US and China-Russia, 1950–2030 (in PPP 1990 US trillions).

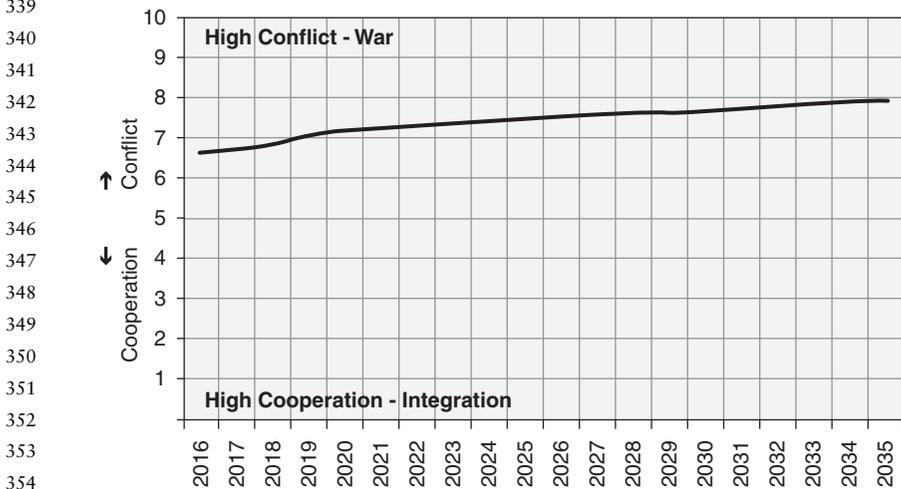


Figure 5.6 Estimated Relations between the EU-US and China-Russia, 2016–2035.

The reason is simple. Russia is a visible, active international actor that is no longer a very powerful country. As its population continues to decline,

361 and assuming that productivity remains static, Russia will remain an impor-  
362 tant power – like Germany, Japan, or France – but can no longer contest  
363 global dominance. Indeed, the asymmetric relationship between China and  
364 Russia is such that if these countries disagree, Russia will become a vassal of  
365 China. This is increasingly evident despite prominence in the Middle East.  
366 As Russian trade shifts east away from the EU, China, if it so desires, could  
367 increasingly control the economic future of its much smaller partner. With  
368 a retreat towards Europe blocked by the Ukraine dispute (see above), the  
369 options for Russia are limited.

370 We replicate the procedures described for [Figure 5.4](#) to assess the relation-  
371 ship between East and West. [Figure 5.6](#) show a slightly higher confrontation  
372 potential between NATO and China/Russia than between that the EU and  
373 Russia. The results are consistent with derivations from power transition  
374 that as parity approaches, confrontation between dissatisfied countries rises.  
375 The asymmetry of power between East and West constrains the possibility  
376 of a high cost war (10). In sum, a conflict between East and West is unlikely  
377 for this time period. However, prospects for cooperation along the eastern  
378 border of the EU are equally unlikely. The analysis shows that if current  
379 interactions are maintained, the stability of the international system will be  
380 increasingly challenged.

### 381 382 383 **Estimating further integration** 384

385 The pervious section assumed stable or deepening integration. The question  
386 that remains unanswered is: what are the prospects for the member states to  
387 deepen the integration? By utilizing the results obtained in the multinomial  
388 regression model in [Chapter 4](#), we can estimate the likelihood of further  
389 integration. Since it is difficult to forecast integration through the use of the  
390 multinomial model, we construct an Integration Factors Index (IFI), which  
391 provides a benchmark for the furthering of integration (see [Appendix B](#) for  
392 details). The IFI reflects the average levels of value convergence, trust, and  
393 hierarchy at every stage of integration.<sup>7</sup>

394 [Table 5.1](#) presents the IFI estimates and mean compositions for the time  
395 period between 2019 and 2021. As in our prior analysis, we assume that the  
396 UK is going to leave the EU in 2019. IFI values above 0.10 indicate move-  
397 ment towards further integration; 0.09–0.06 suggest stability at current  
398 levels; 0.05 and below suggest lower levels of integration. The estimates pro-  
399 vide important but rather complex results. We begin from the first section  
400 where we hold the integration achievement score (IAS) to the level of a cus-  
401 toms union. Even at this low level of integration, the UK will seek further  
402 separation from the EU as indicated by the low IFI values. This is reinforced  
403 at all three trust scenarios – low, normal, and high. Therefore, the UK is  
404 expected to seek a hard exit and to continue to distance itself from the EU.

Table 5.1 Impact of Brexit with Values, Trust Scenarios, and Hierarchy, 2019–2021.

<i>Integration Achievement Score (IAS)</i>	<i>Independent Variables</i>	<i>N<sup>a</sup></i>	<i>Mean</i>	<i>Integration Factors Index</i>
<b>Country: UK</b>				
<b>UK's Integration Level after Brexit (Customs Union)</b>	Value	3	1.3086252	
	Convergence			
	Hierarchy	3	0.2947608	
	Low Trust	3	0.1461217	0.03
	Normal Trust	3	0.1826510	0.04
	High Trust	3	0.2191803	0.05
<b>Countries: Poland, Sweden, Romania, the Czech Rep., Hungary, Denmark, Bulgaria, and Croatia</b>				
<b>3.50 (Economic Union)</b>	Value	24	1.4995956	
	Convergence			
	Hierarchy	24	0.2947608	
	Low Trust	24	0.3335608	0.07
	Normal Trust	24	0.4165723	0.08
	High Trust	24	0.4995837	0.10
<b>Countries: France, Spain, Italy, Netherlands, Belgium, Austria, Greece, Portugal, Finland, Ireland, Slovakia, Slovenia, Latvia, Lithuania, Luxembourg, Estonia, Cyprus, and Malta</b>				
<b>3.83 (Eurozone + partial financial integration)</b>	Value	54	1.0267418	
	Convergence			
	Hierarchy	54	0.2947608	
	Low Trust	54	0.3135296	0.09
	Normal Trust	54	0.3916334	0.11
	High Trust	54	0.4697372	0.14

Note:<sup>a</sup>Country-year.

We then set the IAS value to the level of the economic union (3.50) to see how the members listed are likely to press for further integration at varying levels of trust. At low or normal trust levels, members will likely stay at their current levels of integration. If trust increases, they may take steps towards further integration. The incentive to do so, however, is not high since the IFI value of 0.10 is a weak indicator of further integration. The last section of Table 5.1 increases the IAS to the EMU level (3.87). States that have low trust are likely to resist major increases in integration (i.e. fiscal union). However, if trust increases to normal or high levels, integration is likely to increase swiftly.

These results indicate that further divergence of a two-speed Europe is likely (see Chapter 3, Figure 3.1). The EU will be stable but will only inch forward to further integration if trust in the EU increases. Unlike current analysis that predicts other countries will follow the example of Brexit, we predict that no country currently in the Economic Union or the Eurozone will leave the EU anytime soon. In sum, the EU is fairly stable.

Finally, if we consider prior expectations derived from a British lack of trust in the EU and its movement away from value convergence with

451 the core EU nations, a comparison of the results in [Table 5.1](#) with similar  
452 assessments of the EU's probability of deepening of integration without the  
453 UK, we find that integration will increase after Brexit. Furthermore, Brexit  
454 would increase Germany's power asymmetry in the European hierarchy and  
455 improve values convergence among the remaining leading EU countries.  
456 This leads to improved prospects for further integration to rise concurrently.

457

458

459

### **Interaction between power transition and agent-based models**

460

461

462

463

464

465

466

467

Power transition is an aggregate model that accounts for the structural preconditions for integration or conflict. Such aggregate models provide a long-term assessment of the likelihood of future stability but cannot provide short-term predictions or assess impending salient issues. Also, they cannot indicate the tactical short-term moves that can determine the direction agents (in this case nations) might take along the cooperation–conflict continuum. To close this gap we shift our focus from macro- to micro-assessments.

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

Power transition's macro-analysis and the agent-based model's (ABM) micro-results (decision theory, expected utility, and game theory) are connected by common assumptions. It is fundamental to note that micro-solutions are consistent with macro-expectations. Bueno de Mesquita and Lalman show that crisis escalates to conflict following the predictions of power transition.<sup>8</sup> They show that conditions derived by the agent-based model and power transition are identical to the short-term tactical evaluations derived from an agent-based approach. Jacek Kugler independently shows that when additional variables used in the agent-based models are standardized, similar results to that of power transition emerge, suggesting cooperation among competitors when trust is high and confrontation when trust is absent.<sup>9</sup> Simply stated, comparisons confirm that the main macro-insights of power transition can be derived at the micro-level that adds complexity to the interactions.<sup>10</sup>

483

484

### *Agent-based models*

485

486

487

488

489

490

491

There are a number of ABMs used in the literature. The majority of them use stakeholder analysis to anticipate net gains agents expect to achieve from interactions with other agents. We apply two distinct computer programs to provide a picture of the current policy debates affecting European integration. giCompute and Senturion are used to assess the current and likely future development of integration in the EU (see [Appendix C](#) for descriptions of these programs).

492

493

494

495

We use the same data set, slightly transformed, for both ABM programs (see [Appendix C](#)). giCompute is an advanced decision analytics platform that assesses ranked preferences of states on selected issues to determine where they stand and what policy they will now support. This perspective

496 incorporates the principles of game theory and decision analysis to calculate  
 497 the positions leaders adopt and the impact of their actions on the overall  
 498 outcome on any given issue. Senturion is similar to giCompute, but in addition  
 499 has the capability to anticipate the outcome of issues for a period when  
 500 stakeholders are consistent. Generally forecasts are reliable for a period  
 501 between one and three years.<sup>11</sup> The outcomes are predictions about policy  
 502 outcomes based on current inputs. The model allows us to explore strategic  
 503 opportunities the stakeholders could utilize.

504 In this analysis, we take into account the preferences of the major EU  
 505 members and major external stakeholders on three salient issues identified  
 506 in [Chapter 3](#) that can affect the future of integration in the EU: fiscal union  
 507 (political union), CFSP, and migration/refugees. The fourth issue, Brexit, is  
 508 considered in each of the three assessments. Based on careful reading of the  
 509 current literature, we define the specifics of the key issues, assess the influence  
 510 of key stakeholders, and the importance they attach to each position on  
 511 the issue, and then order preferences of member states and influential external  
 512 actors across the three issues. The results are presented in [Appendix C](#).  
 513 The models then estimate potential outcomes across each issue to assess  
 514 how integration is currently impacted – as we detail below – by migration  
 515 and security.

516

517

### 518 *Data*

519 The inputs for the two agent-based models are the same. Outputs depend  
 520 on accurate information obtained from face-to-face interviews with subject  
 521 matter experts. Their inputs need to be supported and confirmed by  
 522 information obtained from published sources. Four inputs are required:

523

- 524 1. Who are the stakeholders and what group do they belong to that can  
 525 influence the policy outcomes?
- 526 2. What policy position do they currently advocate?
- 527 3. What is the group and stakeholder relative potential influence?
- 528 4. How important is the issue to each stakeholder?

529

530

### 531 *Central issues of integration*

532 The integration process is affected by salient policy differences over key  
 533 issues. The process of integration takes place under competitive or cooperative  
 534 conditions and involves stages that vary from a customs union, a  
 535 common market, an economic union, monetary union (Eurozone), and fiscal  
 536 and political union (including military matters). States satisfied with  
 537 EU institutions wish to deepen integration, while those that are dissatisfied  
 538 wish to move back or even abandon the process. Many are committed to  
 539 the current status quo and do not support changes. To provide a forensic  
 540 investigation of the socio-economic factors and a road map for the future

541 of European integration, we concentrate on deepening of integration as  
542 affected by migration and security concerns.

543 For sure, EU members must face challenges created by entering a mon-  
544 etary union without a matching fiscal, military, and political integration.  
545 The introduction of the euro generated differences over the future direc-  
546 tion of the EU. The main supporters of deepening integration, France and  
547 Germany, still have some differences over the direction of a more integrated  
548 EU. France supports debt mutualism and fiscal flexibility before committing  
549 to deeper integration and the creation of a unified security arrangement.<sup>12</sup>  
550 In contrast, Germany prefers fiscal discipline and integration before consid-  
551 ering mutualism. For Germany, a security arrangement cannot be effectively  
552 implemented without prior consensus on fiscal discipline.

553 An additional item that divides members is migration, which was promi-  
554 nently mentioned in the Brexit debate. Finally, the movement towards an  
555 integrated European military force, in response largely to threats from Rus-  
556 sia and concerns about US policy shifts that affect the stability of NATO,  
557 impacts the willingness to integrate. [Table 5.2](#) summarizes the options open  
558 to policy-makers on the level of integration, migration, and security.

559 Using giCompute, we assess the relative capabilities of each member state  
560 by the votes they hold in the EU. We then rank them to create the landscape  
561 of preferences for analysis. Russia, the US, and Turkey are added when they  
562 can directly affect integration. Each actor is assigned a value between 100  
563 and -100 based on their preferences: 100 equals maximum disagreement  
564 on a particular issue and -100 equals maximum support on the same issue.  
565 Zero is the point at which the actor holds a neutral position on the issue.  
566 [Figure 5.7](#) shows the outcome of our giCompute analysis. Overall, there is a  
567 lack of consensus among the parties about the future of the European Union.  
568 The most likely current path for the EU is the preservation of the Eurozone,  
569 but a path to deepening political integration is not feasible. Specifically, there  
570 is a 47.5 percent chance that the Eurozone will not lose members. Concur-  
571 rently, there is a 40 percent chance that the EU will revert back to solely  
572 an economic union without the common currency. Further scaling down of  
573 integration is unlikely. The likelihood of reverting back solely to a customs  
574 union is 5 percent and to a common market is 7.5 percent.

575 Next we examined preferences of states controlling for anticipated results  
576 on the migration policy. To test the robustness of these results, we set the  
577 migration policy outcome to resettle migrants outside Europe, which reflects  
578 the results of the dynamic analysis to be presented later in this chapter.  
579 Consistent with prevailing assessments, the migration issue is an important  
580 factor in weakening European integration. [Figure 5.8](#) displays the results.  
581 Our results show – counterintuitively – that once the migration issue is  
582 resolved, commitment to further integration actually diminishes. Note that  
583 there is some possibility of political/fiscal union, but it is very small at 5  
584 percent. The survival of the Eurozone drops from 47.5 percent to 27.5  
585 percent. Economic union also declines from 40 percent to 32.5 percent,

586  
 587  
 588  
 589  
 590  
 591  
 592  
 593  
 594  
 595  
 596  
 597  
 598  
 599  
 600  
 601  
 602  
 603  
 604  
 605  
 606  
 607  
 608  
 609  
 610  
 611  
 612  
 613  
 614  
 615  
 616  
 617  
 618  
 619  
 620  
 621  
 622  
 623  
 624  
 625  
 626  
 627  
 628  
 629  
 630

*Table 5.2 Policy Options across Integration, Migration, and Security.*

<b>Integration</b>	Disintegration	Customs Union	Common Market	Economic Union	Eurozone	Political Union	Fiscal Union
<b>Migration</b>	Fortress Europe	Turn back refugees	Help from afar only	Safe zones outside Europe	Resettle not in Europe	Resettle in Europe with controls	Accept all refugees with open arms
<b>Security</b>	Neutral	NATO		NATO–EU partnership	CFSP		

631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675

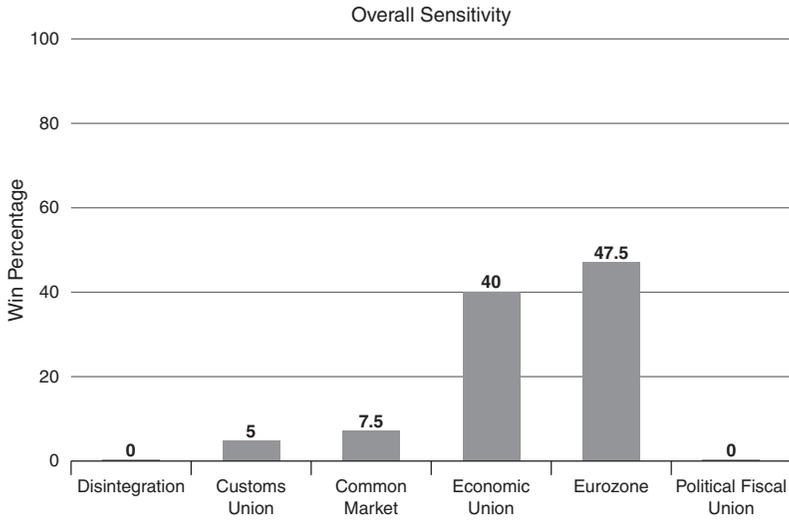


Figure 5.7 Level of EU Integration Controlling for Current Migration and Security Policy.

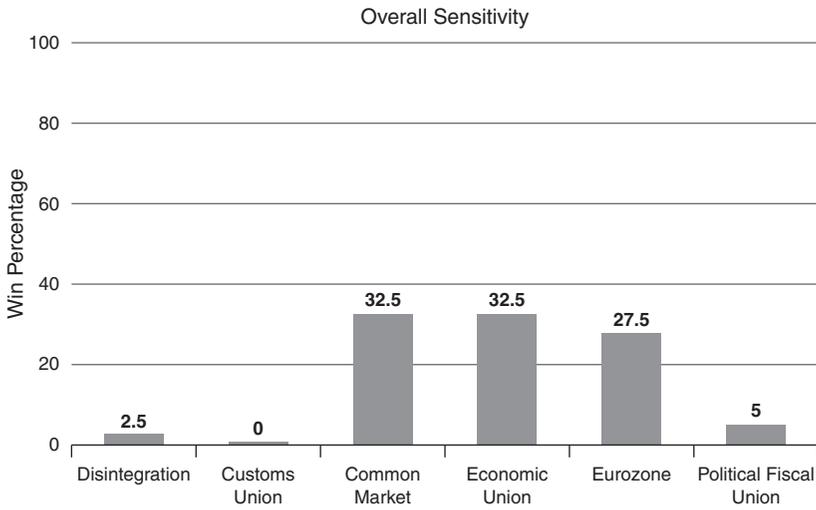


Figure 5.8 Level of EU Integration Controlling for Anticipated Migration and Security Policy.

while the chances of reverting to a common market increase 7.5 percent to 32.5 percent. Reversion to a customs union or complete disintegration is minimal at 2.5 percent. This counterintuitive result suggests that resolving the migration/refugee issue will not improve the chances for the deepening of integration.

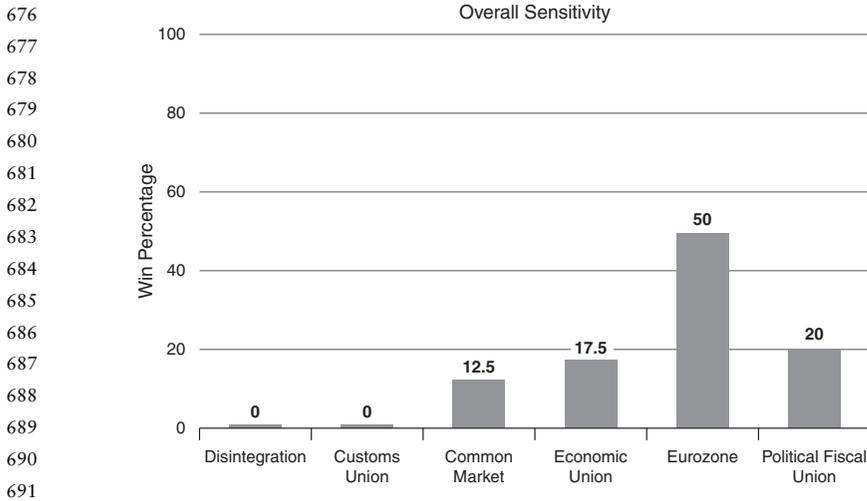


Figure 5.9 Level of EU Integration Controlling for Anticipated Migration and Security Policy, Schengen and Eurozone Countries.

Note an interesting non-obvious implication if these results hold. The final result coincides with the original posture of Britain regarding migration. Such results challenge the notion that migration is the driver of Brexit. If EU members are converging on the policy the UK desires, a reversal of the exit policy should follow. We see no indication of such a reversal by the UK, suggesting that migration is not the driver of Brexit.

Finally we explore the likelihoods of deepening integration among members of both Schengen and the Eurozone. Such EU members should be the most committed to deepening integration in the EU. The results of this simulation are presented in Figure 5.9. As anticipated, this restricted set of states is far more committed to the EU. The chances of Schengen and Eurozone countries leaving the Eurozone is lower (moving down from a combined 65 percent to 30 percent). The likelihood of lowering the level of integration below the common market is nonexistent. Moreover, deepening of integration has a greater chance – 20 percent – of taking place among this restricted group than in the larger context. The Schengen and Eurozone group of states is not likely to dissolve.

### *Dynamic analysis*

To more directly address the challenges posed by the integration, migration, and security issues, we apply a dynamic ABM analysis using Senturion to anticipate the likely resolution of these issues in the near future.

### *Integration*

The financial and fiscal crises of the past few years revealed the need for further fiscal union for monetary stability. Many economists indicate that

721 the Eurozone requires further fiscal deepening in order to avoid a repetition  
722 of the economic crises, ranging from Greece to Ireland, that have weakened  
723 the EU in recent years.<sup>13</sup> Consistent with analysis earlier in this chapter,  
724 the following scale is used to capture the integration continuum previously  
725 analyzed incorporating distance between policy options.

- 727 0 Disintegration
- 728 25 Custom Union
- 729 50 Common Market
- 730 65 Economic Union
- 731 75 Economic Union and Eurozone
- 732 100 Political Union, Economic and Fiscal Union

734  
735 **Figure 5.10a** is the base case or the initial positions of the agents as  
736 provided by expert assessments. The height of each agent represents the  
737 weighted power that the stakeholder can exercise on the issue. The positions'  
738 labels indicate the policy options (degree of integration) across the  
739 issue. The shading of each column represents distinct groups of states and  
740 each state is labeled. **Figure 5.10b** represents the anticipated outcome of the  
741 issue (degree of integration) resulting from the political interactions among  
742 the agents.

743 Comparing the two figures indicates no change in positions between the  
744 base case and the anticipated outcome. Commitments to current positions  
745 are fixed. Consistent with previous results, in the short term, given current  
746 policy commitments, further integration is unlikely. Germany, France, and  
747 Belgium will seek to move further towards a fiscal union – but are unlikely  
748 to succeed. All members of the Union will coalesce at the current Eurozone  
749 level. Poland, Croatia, Romania, and even Hungary, are expected to join the  
750 Eurozone despite their concerns over migration. On the other hand, Britain  
751 will likely emerge following Brexit with an agreement that falls between a  
752 customs union and a common market. This outcome will be closer to but  
753 not exactly a hard exit, thus making it a “soft exit” of a sort. Our static  
754 and dynamic ABM analyses indicate that the EU is robust despite a complex  
755 structure. States that are members of the Eurozone are the most likely to  
756 deepen integration. This observation is consistent with the previous findings  
757 reported in the macro- and micro-analyses. Movement towards a political  
758 union does not have much support in the foreseeable short term.

759 Brexit is the result of long-term policy dissatisfaction in the UK with the  
760 rules of the EU. Assessments in **Figure 5.10b** do not forecast other member  
761 states willing to follow the British example. Changes in government can  
762 shift policy preferences sufficiently and thereby raise up the issue of an EU  
763 exit. Our results here suggest, however, that they are not likely to diminish  
764 integration below the economic union level and this will most likely remain  
765 in place.

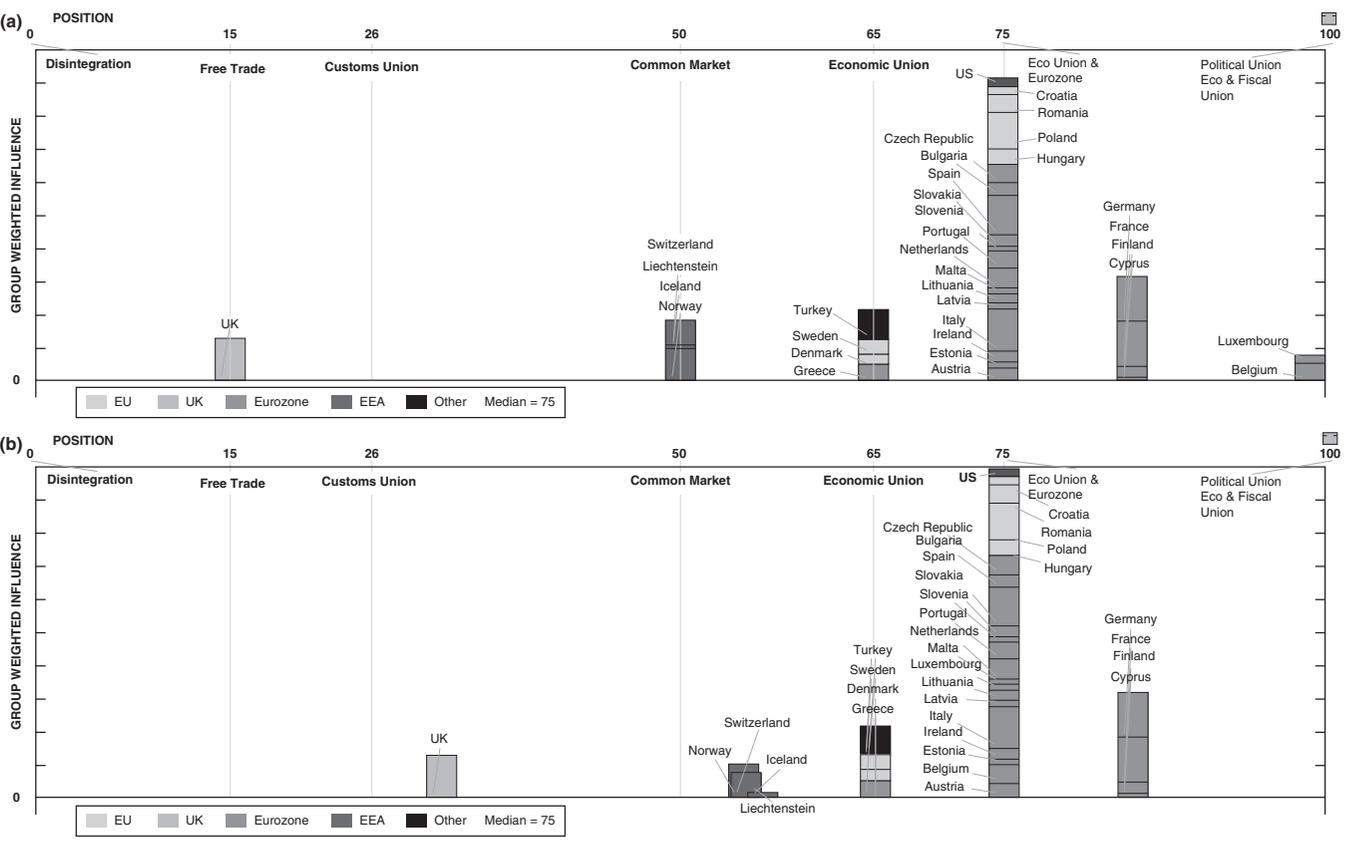


Figure 5.10 (a) Base Case Outcome of Integration Policy. (b) Outcome of Integration Policy (Round 5).

766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810

811 *Migration*

812 The alternative policies regarding migration were prompted by increased  
 813 movement of people displaced mainly by the Syrian, Iraq, and Afghanistan  
 814 crises and instability in Central and North Africa. This is not the largest  
 815 or most consequential migration crisis the European continent has experi-  
 816 enced.<sup>14</sup> A substantive difference between past and current migrations is the  
 817 large differences in values held by the Europeans and the new migrants.<sup>15</sup>  
 818 These concerns have prompted many to suggest that the migration crisis  
 819 will weaken efforts at further integration. Recall that the migration crisis  
 820 has caused some states to abandon their Schengen commitments and pro-  
 821 moted arguments on how to best resolve the crisis. We explore the likely  
 822 future path of the resolution of this issue in order to determine the validity  
 823 of such claims.

824 Following previous methods, the policy options on migration available to  
 825 European leaders are as follows and are given the following values:

- 826
- 827 0 Fortress Europe
  - 828 20 Turn Back Refugees
  - 829 40 Help From Afar Only
  - 830 50 Safe Zones Outside Europe
  - 831 70 Resettle not in Europe
  - 832 80 SQ – Resettle in Europe and Controls
  - 833 100 Accept all Refugees with Open Arms
  - 834

835 Figures 5.11a and 5.11b plot out the outcomes of migration policy fol-  
 836 lowing the same procedures found in Figures 5.10a and 5.10b. The base case  
 837 analysis in Figure 5.11a shows wider dispersion of policy preferences across  
 838 the EU members. These are the disagreements that have recently caused such  
 839 serious strife among European countries. The policy outcomes of the migra-  
 840 tion debate are detailed in Figure 5.11b. Key decision-makers are likely to  
 841 coalesce as the debate is reduced to levels of support for new migrants  
 842 outside Europe. EU member states are expected to adopt a common pol-  
 843 icy that supports safe zones outside Europe. This is a marked departure  
 844 from the current status quo that allows migrants to resettle in Europe with  
 845 controls.

846 While the migrant problem will not disappear, this analysis indicates that  
 847 EU members will find a common migration policy position that will dissi-  
 848 pate the crisis and that migration will become a far less salient issue. All  
 849 EU nations are expected to converge on a policy that slows the influx of  
 850 migrants into the EU. All will eventually favor different safe zones out-  
 851 side Europe. Hungary and Poland will lead dissent and continue to reject  
 852 any additional immigration aid for migrants already in place or outside the  
 853 Schengen region. Once more, the anticipated final outcome coincides with  
 854 the original position held by Britain, again suggesting that Brexit was not  
 855

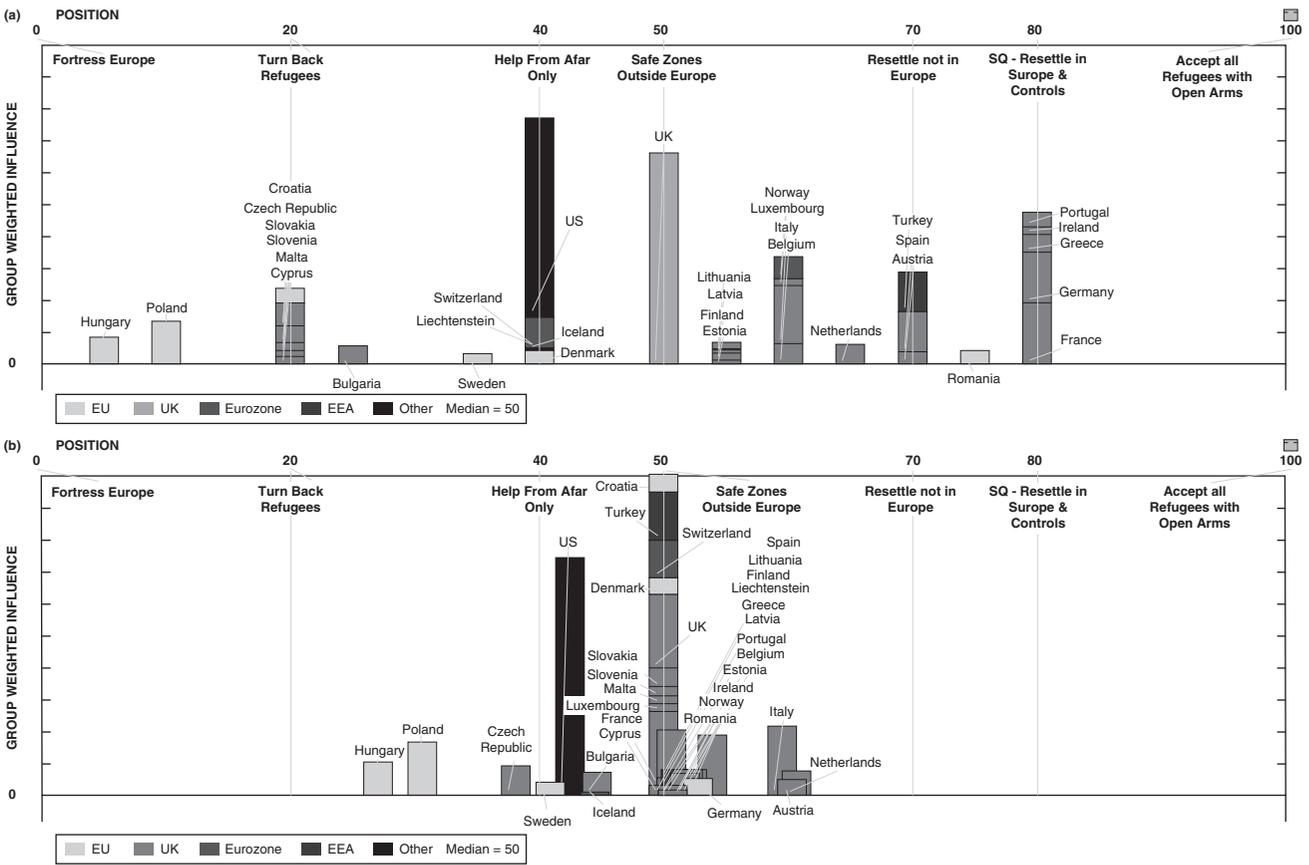


Figure 5.11 (a) Base Case Outcome of Migration Policy. (b) Outcome of Migration Policy (Round 5).

856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900

901 solely or mainly motivated by differences between the EU and the UK on  
902 migration policy.

903  
904

905 *Security*

906 Security concerns of European states are serious. For the first time since  
907 World War II, states covered by the NATO umbrella are not totally con-  
908 vinced that the US will come to their aid if needed. Warmer Russia–US  
909 relations combined with US support for Brexit, and loosening ties between  
910 Germany and the US, pose questions about the future security of Europe.  
911 Before these events took place, Genna and Justwan carried out an elab-  
912 orate systematic analysis of European attitudes towards CFSP with data  
913 ending in 1990.<sup>16</sup> This analysis indicated that positive support for a broader  
914 CFSP driven by Germany and France was sufficient to shift reliance on  
915 national security to collective security.<sup>17</sup> The question now is whether con-  
916 ditions have changed sufficiently to alter the EU’s reluctance to generate its  
917 own security.

918 To address this challenge, we assess the current positions of the EU mem-  
919 ber states on security. The following are the possible positions of each state  
920 along the following scale:

- 921  
922 0 Neutral  
923 50 NATO  
924 75 NATO and EU Partnership  
925 100 CFSP  
926

927

928 The base case in [Figure 5.12a](#) shows substantial divisions within the EU  
929 membership over the future of European security. Austria, Ireland, and  
930 to a lesser degree Sweden, want to maintain neutrality. Britain, Denmark,  
931 Norway, and Iceland all advocate a strict reliance on NATO. The major-  
932 ity of members support a NATO and EU partnership. France, Germany,  
933 and Greece want to create a robust CFSP to supplement and even partly  
934 replace NATO.

935 [Figure 5.12b](#) displays the outcome of the dynamic analysis. Major shifts  
936 are anticipated suggesting that despite the initial differences, all European  
937 states will likely respond to veiled US pressures by supporting a NATO  
938 framework while increasing the role of the EU in the Atlantic alliance. With  
939 the exception of Ireland and Austria – which remain neutral – Europeans  
940 wish to remain in NATO with increased European contribution to security.

941 Given the fluidity of this issue, the final analysis simulates the possible  
942 impact of Russia on EU security positions. Russia has suggested that NATO  
943 is obsolete and that the EU should choose neutrality to diminish the rising  
944 tensions. To test this proposition, we add Russia in a neutral position. The  
945 outcome of this simulation is reported in [Figure 5.13](#).

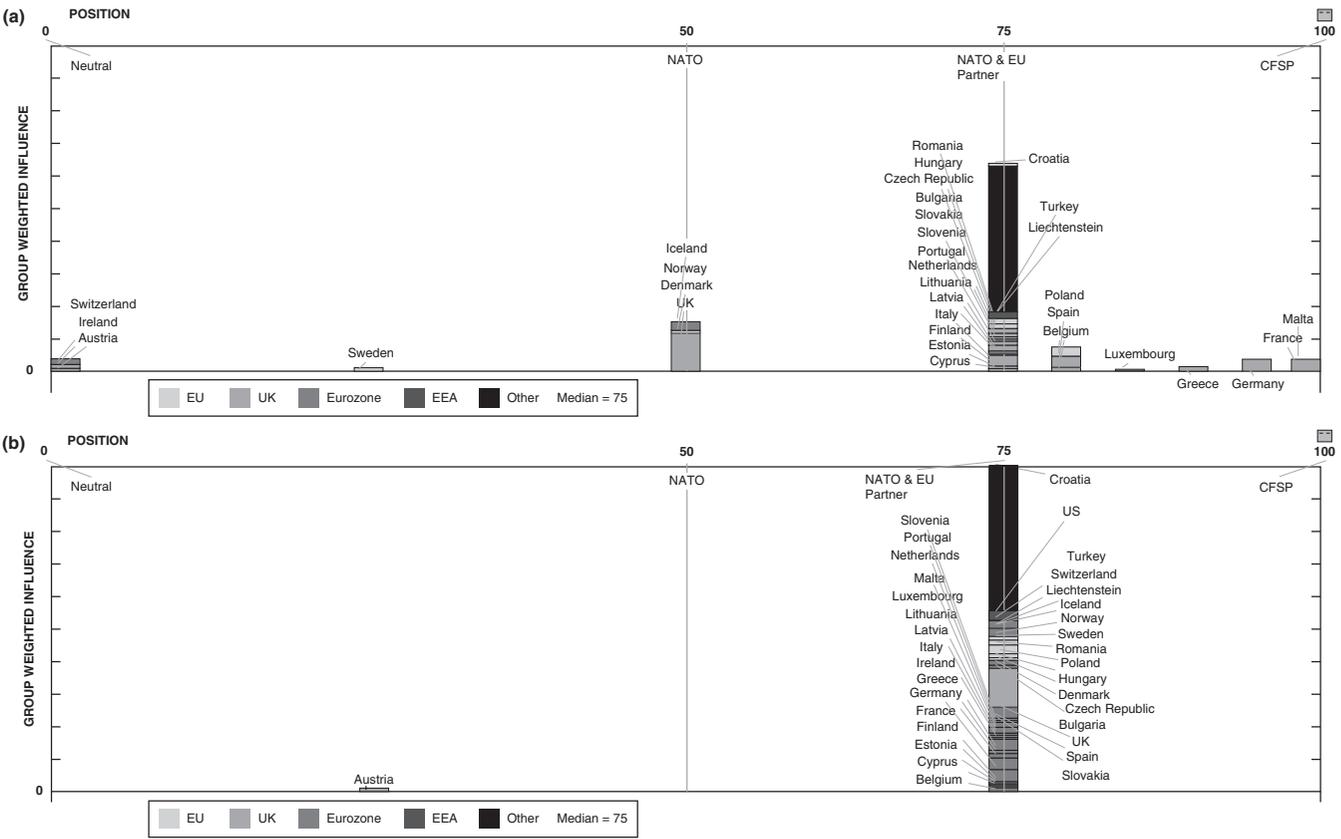


Figure 5.12 (a) Base Case Outcome of Security Policy. (b) Outcome of Security Policy (Round 5).

946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990

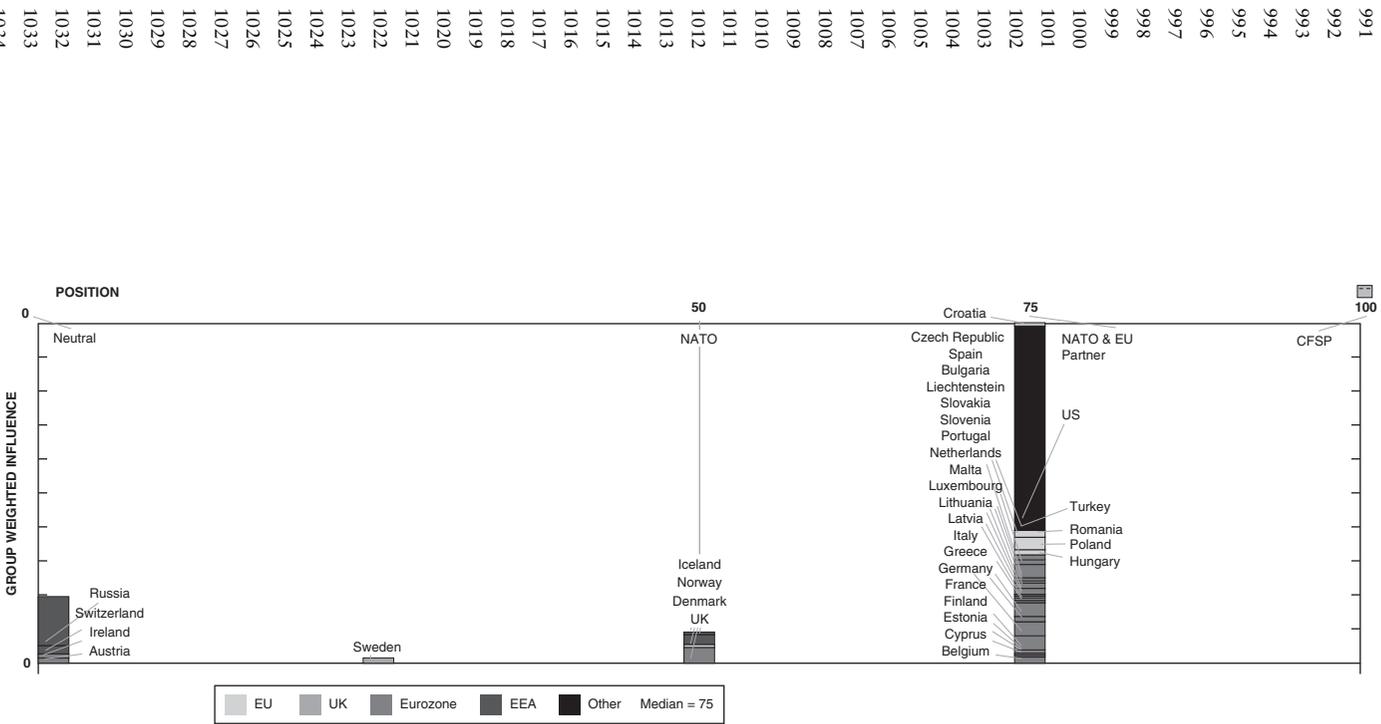


Figure 5.13 Simulation: Impact of Russia Advocating EU Neutrality.

1036 Compared with the previous result, Russia can persuade Sweden to  
1037 remain neutral. Britain, Iceland, Norway, and Denmark will now support  
1038 NATO rather than join the rest of Europe in support of a NATO–EU  
1039 partnership. Russia is an important competitor but will not drive Europe’s  
1040 security decisions. We also attempted to simulate the outcome if NATO  
1041 were to disintegrate. However, the data following such an event is so spec-  
1042 ulative that multiple scales can be constructed that provide little light on  
1043 reality. However, given the coherence of the EU in the NATO analysis and  
1044 under the Russian pressure, were NATO to falter we expect that most EU  
1045 member states would coalesce into a CFSP rather than disperse as individual  
1046 nations.

1047

1048

1049

## Conclusion

1050 The European Union is stable with limited room for further integration.  
1051 The migration challenges are serious but will not derail the Union. The  
1052 most committed Eurozone–Schengen members of the EU are most likely to  
1053 deepen integration further, reinforcing the two–track EU already in place.  
1054 The greatest threat to European integration comes from declining trust in  
1055 EU institutions. Reversing this trend is essential for integration to prosper  
1056 and move towards a fiscal union.

1057 Migration is a passing concern as EU member states will coalesce on a  
1058 common policy that excludes migrants instead of supporting them in place.  
1059 Migration will not soon disappear because migrants already in Europe can-  
1060 not be simply removed. Moreover, demand for a larger workforce can help  
1061 accommodate the new Europeans already in place.

1062 Security is a new and rising concern. NATO dominates all opposition –  
1063 limiting the likelihood of major war for the foreseeable future. The EU alone  
1064 can stand up to pressure from Russia. To do so a buildup of weapon systems  
1065 is needed to compensate for a potential US withdrawal from Europe. Such  
1066 a move will require amending the EMU spending rules. Analysis suggests  
1067 that while EU members favor a NATO partnership, they will also willingly  
1068 join together for their common defense, implying that if the need arises,  
1069 under German and French leadership, the creation of a viable CFSP would  
1070 follow. Such a move implies a willingness to accept further fiscal and military  
1071 integration – culminating in a federated state.

1072

1073

1074

## Appendix B

1075

1076

1077

### *Overview of giCompute*

1078 giCompute is a hybrid conjoint analysis–reverse induction game theory  
1079 model conceived for the purpose of quantitatively estimating outcomes of  
1080 multi-factor and multi-agent issues in a transparent way. The platform helps

1081 transfer the qualitative judgment of analysts and practitioners involved  
1082 in transnational disputes, armed conflict, legal disputes, and mergers to  
1083 measure gains and losses relative to agent preferences across any set of  
1084 defined options and scenarios. The objective is to compute and visualize the  
1085 likely versus optimal outcomes for agents based on their relative preference  
1086 attributes and influence pertaining to any particular dispute or negotiation.  
1087 The platform computes all the possible relative gains and losses pertaining  
1088 to any set of scenarios dependent on the number of preference attributes  
1089 for agents across a defined scale involving a dispute or negotiation. The  
1090 platform then transfers the calculated agent payoff for each scenario and  
1091 visualizes multi-agent landscape preferences.

1092 giCompute in application to negotiations or disputes applies a hybrid  
1093 approach that adapts elements of a method used in market research known  
1094 as conjoint analysis and integrates it with the game-theory principles of  
1095 status quo positioning. Conjoint analysis is a statistical technique used to  
1096 determine how consumers value different attributes of a product or service.  
1097 The process estimates the overall utility associated with each component  
1098 based on the rank-ordered preference on components of a product by the  
1099 consumer or market segment. The utility values identify the relative value  
1100 consumers place on a product characteristic. This information then allows  
1101 one to develop a net utility maximized product, isolating the more desirable  
1102 product based on consumer references. giCompute calculates full factorial  
1103 design using pure ordinal ranking of component preference. The giCompute  
1104 approach calculates relative aggregate agent payoffs based on the number  
1105 of components defining the issue and then calculates the payoffs based on  
1106 agent preferences on the various policy issues.

1107 Subject matter experts provide filtered information on issues deemed cen-  
1108 tral to EU integration. The scales for each issue – Integration, Migration,  
1109 and Security - are constructed. Then the following data is collected.

1110       Who are the national agents that have potential to influence the  
1111       outcome?

1112       What is the relative potential influence of each group, and then  
1113       within each group, what is the relative influence of each agent  
1114       belonging to a group?

1115       What is the stated position that each agent holds?

1116       How important is the issue to each agent given all other issues in  
1117       the nation's agenda?

1118       

1119       

1120       giCompute uses the same inputs to define agents, and measures of rela-  
1121       tive potential influence of groups and agents. The position of agents on the  
1122       scale is used to create the rank variable. Each actor ranks highest the posi-  
1123       tion closest to the initial stated agent position. Ranked second is the closest  
1124       defined policy. Ranked third is the next closest policy and so on. Distance  
1125       from the initial policy left or right position determines rank.

1126 Unlike Senturion, which interacts influence with importance, giCompute  
1127 uses influence in this analysis, measured here by the voting strength of EU  
1128 members.<sup>18</sup>

1129

## 1130 **Appendix C**

1131

1132

### *Overview of Senturion*

1133 Senturion has been used for a variety of cases ranging from complex diplo-  
1134 matic and business negotiations to anticipation and evolution of conflicts.  
1135 Given all the components in the data, Senturion simulates political dynamics  
1136 and future interactions to predict the outcome of negotiations. The model  
1137 uses Black's median voter theory, which shows the winning position in a  
1138 pairwise comparison of all alternatives is the median. Distance from the  
1139 median defines an agent's risk profile – those close to the median are risk  
1140 averse and those farther from the median are risk acceptant.<sup>19</sup> An agent  
1141 attempts to achieve its goal subject to risk tradeoffs estimated in a game  
1142 theoretical context.<sup>20</sup> Using such information the model maps potential deci-  
1143 sions by calculating pairwise interactions for each dyad colored by risk  
1144 perceptions. Given the median outcome, how will agents attempt to change  
1145 other actors' positions and to what degree will they succeed? The model  
1146 reports individual actor moves and their influence on the overall median.  
1147 Iterations stop when agents see no potential to influence others. Stability  
1148 emerges when a winning coalition coalesces around a median outcome –  
1149 the smaller the dispersion the more stable the outcome. Dissent will take  
1150 place when coalitions form but do not coalesce. Confrontations take place  
1151 when the distance between such coalitions is large. Predictions are reliable  
1152 for the duration of policy control by current governments or if the replace-  
1153 ment does not shift current positions. This analysis applies to all political  
1154 disputes where agents have a say in the outcome, but does not apply to  
1155 market-driven events determined by the pricing of goods.

1156 Senturion assumes that agents hold rational preferences that are (1) com-  
1157 plete – all choices are disclosed; (2) ordered – all choices can be ranked;  
1158 and (3) transitive – consistent ranking of choices from best to worst holds.  
1159 Applications are only valid to single picked monotonic and symmetrically  
1160 declining utility preferences away from the preferred position of an actor.  
1161 The decision-making landscape is built from data on policy positions by  
1162 competing relevant actors whose commitment to their position is affected  
1163 by influence weighted by the importance they attach to the outcome of the  
1164 contested issue. Senturion anticipates future behavior, repeatedly analyz-  
1165 ing changing structures resulting from accepted proposals across numerous  
1166 actors, all of which seek to maximize their net gains. Perceptions are created  
1167 by considering the gains and losses of not acting at all compared with the  
1168 anticipated outcomes of intervening conditioned on expectations that third  
1169 parties will join, oppose, or remain neutral. Each agent perceives poten-  
1170 tial payoffs differently based on their risk propensity and the importance

Table 5.2 Issue 1 European Security 0 — Neutral  
 50 — NATO  
 75 — NATO  
 100 — CFSP

1171								
1172								
1173								
1174								
1175	<i>Austria</i>	Eurozone	No	No	0	10	275	90
1176	Belgium	Eurozone	No	No	80	12	275	90
1177	<i>Cyprus</i>	Eurozone	No	No	75	4	275	80
1178	Estonia	Eurozone	No	No	75	4	275	80
1179	Finland	Eurozone	No	No	75	7	275	85
1180	France	Eurozone	No	No	100	29	275	90
1181	Germany	Eurozone	No	No	95	29	275	90
1182	Greece	Eurozone	No	No	90	12	275	80
1183	<i>Ireland</i>	Eurozone	No	No	0	7	275	90
1184	Italy	Eurozone	No	No	75	29	275	85
1185	Latvia	Eurozone	No	No	75	4	275	80
1186	Lithuania	Eurozone	No	No	75	7	275	80
1187	Luxembourg	Eurozone	No	No	85	4	275	85
1188	Malta	Eurozone	No	No	100	3	275	85
1189	Netherlands	Eurozone	No	No	75	13	275	90
1190	Portugal	Eurozone	No	No	75	12	275	85
1191	Slovenia	Eurozone	No	No	75	4	275	85
1192	Slovakia	Eurozone	No	No	75	7	275	85
1193	Spain	Eurozone	No	No	80	27	275	85
1194	Bulgaria	Eurozone	No	No	75	10	275	80
1195	Czech	Eurozone	No	No	75	12	275	90
1196	UK	EU	No	No	50	29	275	95
1197	Denmark	EU	No	No	50	7	77	90
1198	Hungary	EU	No	No	75	12	77	85
1199	Poland	EU	No	No	80	27	77	85
1200	Romania	EU	No	No	75	14	77	85
1201	<i>Sweden</i>	EU	No	No	25	10	77	90
1202	<i>Croatia</i>	EU	No	No	75	7	77	85
1203	Norway	EEA	No	No	50	100	40	90
1204	Iceland	EEA	No	No	50	10	40	90
1205	<i>Liechtenstein</i>	EEA	No	No	75	2	40	80
1206	<i>Switzerland</i>	EEA	No	No	0	75	40	95
1207	Turkey	CU	No	No	75	100	20	70
1208	US	US	No	No	75	100	400	90
1209								
1210								

\* Non-NATO countries.

attached to the issue. Change is driven in part by real opportunities, and also by unseen opportunities generated by differences in risk and importance across agents. The Senturion agent-based model performed with the highest level of accuracy and granularity, achieving an accuracy of more than 90 percent for baseline projections in policy analysis.<sup>21</sup>

1216 *Table 5.2 Issue 2* Integration-Disintegration of EU 0 — Dis-  
1217 integration  
1218 15 — Free Trade Area  
1219 25 — Custom Union  
1220 50 — Common Market  
1221 65 — Economic Union  
1222 75 — Economic Union &  
Eurozone  
1223 100 — Political Union:  
1224 Economic and Fiscal Union

---

1225	Austria	Eurozone	No	No	75	10	275	80
1226	Belgium	Eurozone	No	No	100	12	275	90
1227	Cyprus	Eurozone	No	No	85	4	275	60
1228	Estonia	Eurozone	No	No	75	4	275	85
1229	Finland	Eurozone	No	No	85	7	275	90
1230	France	Eurozone	No	No	85	29	275	90
1231	Germany	Eurozone	No	No	85	29	275	90
1232	Greece	Eurozone	No	No	65	12	275	80
1233	Ireland	Eurozone	No	No	75	7	275	90
1234	Italy	Eurozone	No	No	75	29	275	85
1235	Latvia	Eurozone	No	No	75	4	275	85
1236	Lithuania	Eurozone	No	No	75	7	275	85
1237	Luxembourg	Eurozone	No	No	100	4	275	90
1238	Malta	Eurozone	No	No	75	3	275	90
1239	Netherlands	Eurozone	No	No	75	13	275	90
1240	Portugal	Eurozone	No	No	75	12	275	85
1241	Slovenia	Eurozone	No	No	75	4	275	75
1242	Slovakia	Eurozone	No	No	75	7	275	90
1243	Spain	Eurozone	No	No	75	27	275	85
1244	UK	Eurozone	No	No	35	29	275	85
1245	Bulgaria	Eurozone	No	No	75	10	275	75
1246	Czech	Eurozone	No	No	75	12	275	90
1247	Denmark	EU	No	No	65	7	77	90
1248	Hungary	EU	No	No	75	12	77	75
1249	Poland	EU	No	No	75	27	77	80
1250	Romania	EU	No	No	75	14	77	75
1251	Sweden	EU	No	No	65	10	77	90
1252	Croatia	EU	No	No	75	7	77	75
1253	Norway	EEA	No	No	50	100	40	90
1254	Iceland	EEA	No	No	50	10	40	90
1255	Liechtenstein	EEA	No	No	50	2	40	75
1256	Switzerland	EEA	No	No	50	75	40	90
1257	Turkey	CU	No	No	65	100	20	85
1258	US	US	No	No	75	100	400	1

---

1254

1255

1256

1257

1258 *Data*1259 **Notes**

1260

Table 5.2 Issue 3 Immigration to EU 0 — Fortress Europe  
 20 — Turn Back Refugees  
 40 — Help From Afar Only  
 50 — Safe Zones Outside Europe  
 70 — Resettle Not in Europe  
 80 — Current SQ: Resettle in Europe  
 with Controls  
 100 — Accept all Refugees with Open Arms

1269	Austria	Eurozone	No	No	70	10	275	50
1270	Belgium	Eurozone	No	No	60	12	275	70
1271	Cyprus	Eurozone	No	No	20	4	275	80
1272	Estonia	Eurozone	No	No	55	4	275	40
1273	Finland	Eurozone	No	No	55	7	275	40
1274	France	Eurozone	No	No	80	29	275	85
1275	Germany	Eurozone	No	No	80	29	275	70
1275	Greece	Eurozone	No	No	80	12	275	60
1276	Ireland	Eurozone	No	No	80	7	275	40
1277	Italy	Eurozone	No	No	60	29	275	80
1278	Latvia	Eurozone	No	No	55	4	275	40
1278	Lithuania	Eurozone	No	No	55	7	275	40
1279	Luxembourg	Eurozone	No	No	60	4	275	70
1280	Malta	Eurozone	No	No	20	3	275	80
1281	Netherlands	Eurozone	No	No	65	13	275	60
1282	Portugal	Eurozone	No	No	80	12	275	50
1282	Slovenia	Eurozone	No	No	20	4	275	80
1283	Slovakia	Eurozone	No	No	20	7	275	90
1284	Spain	Eurozone	No	No	70	27	275	60
1285	Bulgaria	Eurozone	No	No	25	10	275	75
1286	Czech	Eurozone	No	No	20	12	275	80
1287	UK	EU	No	No	50	29	275	85
1287	Denmark	EU	No	No	40	7	77	80
1288	Hungary	EU	No	No	5	12	77	90
1289	Poland	EU	No	No	10	27	77	65
1290	Romania	EU	No	No	75	14	77	40
1291	Sweden	EU	No	No	35	10	77	40
1292	Croatia	EU	No	No	20	7	77	80
1292	Norway	EEA	No	No	60	100	40	40
1293	Iceland	EEA	No	No	40	10	40	30
1294	Liechtenstein	EEA	No	No	40	2	40	50
1295	Switzerland	EEA	No	No	40	75	40	80
1296	Turkey	CU	No	No	70	100	20	80
1297	US	US	No	No	40	100	400	20

1298  
 1299  
 1300

1301 1 Allison Hamlin and Jacek Kugler, in *Regional Politics*, edited by Jacek  
 1302 Kugler and Ronald Tammen (forthcoming). In this work satisfaction with  
 1303 the status quo is measured by the transfer of military resources to coalition  
 1304 members. Large transfers indicate support while counter transfers  
 1305 indicate disagreement. Tests reported in this work show strong results

- 1306 indicating that nations that confront each other and are dissatisfied with  
 1307 the status quo may wage war at parity. This empirical argument rejects  
 1308 the entrenched notion that a balance of power preserves peace.
- 1309 2 Power transition shows that conflicts over dominance of the global system  
 1310 are overwhelmingly waged under conditions of parity and dissatisfaction.  
 1311 Contenders escalate to global conflicts over very valuable population and  
 1312 output. Previous global encounters were waged over control of Eurasia  
 1313 because more than 50 percent of global population and GDP were and  
 1314 still are at stake. The winner emerges as the dominant global nation.  
 1315 Peripheral disputes that lead to severe but asymmetric limited conflicts  
 1316 – Korea, Vietnam, Afghanistan, and Iran among the most recent – are  
 1317 resolved with far less loss of life and treasure by the great powers involved,  
 1318 even though they may be devastating for the smaller main participants.  
 1319 A. F. K. Organski and Jacek Kugler, *The War Ledger* (Chicago: Chicago  
 1320 University Press, 1980); Jacek Kugler and Douglas Lemke, *Parity and War*  
 1321 (Ann Arbor: University of Michigan Press, 1996); Ronald Tammen et al.,  
 1322 *Power Transitions* (New York: Chatham House, 2000).
- 1323 3 Yelena Tuzova and Faryal Qayum, “Global Oil Glut and its Impact on  
 1324 Putin’s Russia,” *Energy Policy* 90 (2015): 140–151.
- 1325 4 For example, see the TACIS and PHARE programs.
- 1326 5 A nuclear confrontation would undoubtedly involve France, Britain, and  
 1327 the US. Given such a contest China would also likely join. See KyungKook  
 1328 Kang and Jacek Kugler, “Nuclear Weapons: Stability of Terror,” in *Debat-*  
 1329 *ing a Post-American World: What Lies Ahead?*, ed. by S. Clark and S.  
 1330 Hoque (New York: Routledge, 2011).
- 1331 6 We apply the formulation provided by Brian Efrid, Jacek Kugler, and Gas-  
 1332 pare M. Genna, “From War to Integration: Generalizing Power Transition  
 1333 Theory,” *International Interactions* 29 (2003): 293–313, which produces  
 1334 very stable results across all types of conflict. In the latest Conflict and  
 1335 Cooperation estimation, we calculated the Hierarchy of the Challenger  
 1336 and the Hierarchy of the Dominant consistent with the work here that  
 1337 differs somewhat from Efrid et al. The model used is as follows:  
 1338
- 1339 CC = Conflict – Cooperation. Continuum ranges from 0 to 10  
 1340 when  $(GDP_i > GDP_j)$   
 1341 Vc = Value Convergence  
 1342 HC = Hierarchy of the Challenger  
 1343 HD = Hierarchy of the Dominant  
 1344
- 1345 7 Integration Factors Index (IFI) is derived as an interaction between the  
 1346 means as follows: The lower the values distance between countries, the  
 1347 higher the level of integration. In the analysis, a decreasing mean of value  
 1348 convergence increases the IFI; an increasing mean of trust raises the level  
 1349 of integration; and an increasing mean of hierarchy increases integration.  
 1350

- 1351 The resulting IFI measures the impact of all drivers of integration. For  
1352 more details, see [Appendix B](#).
- 1353 8 Bruce Bueno de Mesquita and David Lalman, *War and Reason: Domestic*  
1354 *and International Imperatives* (New Haven: Yale University Press, 1992).
- 1355 9 Jacek Kugler, "Terror without Deterrence: Reassessing the Role of  
1356 Nuclear Weapons," *Journal of Conflict Resolution* 28, no. 3 (1984): 470–  
1357 506. This argument is extended in Jacek Kugler and Suzanne Werner,  
1358 "Conditional Anarchy: The Constraining Power of the Status Quo,"  
1359 Paper presented at the annual meeting of the Midwest Political Science  
1360 Association in Chicago, April 1993.
- 1361 10 Macro-assessments cannot simply replicate micro-evaluations. The rea-  
1362 son is that risk and intensity that affect micro-assessments are associated  
1363 with specific leaders and cannot be forecast into the future. Likewise,  
1364 accurate assessment of tactical short-term decisions are muted on the  
1365 long-term implications that macro-models address directly.
- 1366 11 Senturion provides a description of current conditions and policy assess-  
1367 ments based on the nature of interactions among stakeholders and the  
1368 types of coalitions that will form. The mechanics of this agent-based  
1369 modeling are based in part on Black's median voter theorem that the  
1370 median voter controls outcomes in majority win situations and assumes  
1371 monotonicity of scales used to assess expectations and the escalation of  
1372 political disputes (Duncan Black, "On the Rationale of Group Decision-  
1373 making," *Journal of Political Economy* 56, (1948): 23–34; Duncan  
1374 Black, *The Theory of Committees and Elections* (Cambridge, UK: Cam-  
1375 bridge University Press, 1958); Jeffrey S. Banks, "Equilibrium Behavior  
1376 in Crisis Bargaining Games," *American Journal of Political Science* 34  
1377 (1990): 599–614. The models' predictions are based on the assumption  
1378 that national leaders make rational decisions that optimize the politi-  
1379 cal desired net gains of the parties. Decisions are not extensions of past  
1380 behavior but calculations based on strategic interactions.
- 1381 The decision analytics platform uses minimal information and ranks the pol-  
1382 icy preferences to obtain the probability that agents in the EU will choose  
1383 a position along the integration scale. Assessments are verified by altering  
1384 marginal positions to determine if integration is deepened or reversed moti-  
1385 vated by variations in either the migration or the security issues. These ABM  
1386 models facilitate a mapping of the relationships based on stakeholder's indi-  
1387 vidual perceptions of reality vis-à-vis every other stakeholder who observing  
1388 the same payoffs may assess outcomes differently because of their risk and  
1389 salience levels.
- 1390 The dynamic ABM model employed incorporates importance to the calcu-  
1391 lations and evaluates risk propensity. The dynamic ABM model simulates  
1392 the anticipated shifts in position of individual stakeholders in response to  
1393 pressure from competitors during implicit or explicit bargaining. The results  
1394 report changing rounds in detail that produce a likely final output. All actors  
1395

- 1396 can simultaneously make proposals and exert influence on one another dur-  
 1397 ing each round but only viable proposals are accepted. Stakeholders evaluate  
 1398 options and build coalitions by shifting positions on the issue that is deemed  
 1399 to be critical in each situation. The policy proposals and the subsequent  
 1400 responses begin to give insights into the short-term negotiation process,  
 1401 anticipating dynamics and outcomes that in our case deal with the future  
 1402 of EU integration. The agent-based modeling forecasts the likely settlement  
 1403 of specified policy issues as a function of negotiations in an environment  
 1404 where competition, confrontation, and cooperation are dictated by the dis-  
 1405 tribution of power of stakeholders, the importance they attribute to the  
 1406 issue, and the risk they are willing to accept to achieve goals.
- 1407 12 Markus Konrad Brunnermeier, Harold James, and Jean-Pierre Lan-  
 1408 dau, *The Euro and the Battle of Ideas* (Princeton: Princeton University  
 1409 Press, 2016).
- 1410 13 Brunnermeier et al., *The Euro and the Battle of Ideas*.
- 1411 14 The migrations following World War II were massively larger. See  
 1412 Tadeusz Kugler, Kyungkook Kang, Jacek Kugler, M. Arbetman, and  
 1413 John Thomas, “Demographic and Economic Consequences of Con-  
 1414 flict,” *International Studies Quarterly* 57. (2013): 1–12; Tadeusz Kugler,  
 1415 “Demography and International Relations: Politics, Economics, Sociol-  
 1416 ogy and Public Health,” in *Interdisciplinary Approaches to International*  
 1417 *Studies*, ed. by Patrick James, Steve Yetiv, and Stefan Fritsch (London:  
 1418 Palgrave Macmillan, 2016).
- 1419 15 For some works in this area, see Malina Voicu, Ingvill C. Mochmann,  
 1420 and Hermann Dulmer (eds.), *Values, Economic Crisis and Democracy*  
 1421 (London: Routledge, 2016); Richard C. Jones (ed.), *Immigrants*  
 1422 *Outside Megalopolis* (Lanham, M.D.: Lexington Books, 2008); Nils  
 1423 Holtug, Kasper Lippert-Rasmussen, and Sune Lægaard, (eds.), *Nation-*  
 1424 *alism and Multiculturalism in a World of Immigration* (New York:  
 1425 Macmillan, 2009).
- 1426 16 Gaspare Genna and Florian Justwan, “The European Power Hierar-  
 1427 chy, Member State Trust, and Public Support for the Common Security  
 1428 and Defense Policy,” *Pan-European Conference on the European Union*,  
 1429 European Consortium for Political Research (Trento, Italy, 2016).
- 1430 17 Ibid.
- 1431 18 Replication shows that changing these inputs does not substantively  
 1432 affect results for the EU.
- 1433 19 Duncan Black, “On the Rationale of Group Decision-making,” *Journal*  
 1434 *of Political Economy* 56 (1948): 23–34; John W. Pratt. “Risk Aversion in  
 1435 the Small and in the Large,” *Econometrica* 32, no. 1/2 (1964): 122–136;  
 1436 Arrow, Kenneth, “The Theory of Risk Aversion,” in Helsinki *Aspects*  
 1437 *of the Theory of Risk Bearing*, ed. by Yrjo Jahnssonin Saatio (Helsinki:  
 1438 Yrjo Jahnssonin Saatio, 1965).
- 1439 20 David Lalman, “Conflict Resolution and Peace,” *American Journal of*  
 1440 *Political Science* 32, no. 3 (1987): 590–615.

1441 21 For a technical assessment see various contributions in Jacek Kugler  
1442 and Yi Feng (eds.), “The Expected Utility Approach to Policy Decision  
1443 Making,” *International Interactions* 23 (1997); Mark Abdollahian and  
1444 Carole Alsharabati, “Modeling the Strategic Effects of Risk and Per-  
1445 ceptions in Linkage Politics,” *Rationality and Society* 15, no. 1 (2003);  
1446 Mark Abdollahian, Michael Baranick, Brian Efrd, and Jacek Kugler,  
1447 *Senturion: Predictive Political Simulation Model*, Defense and Technol-  
1448 ogy Paper 32 (Washington, D.C.: Center for Technology and National  
1449 Security Policy, 2006).

1450

1451

1452

1453

1454

1455

1456

1457

1458

1459

1460

1461

1462

1463

1464

1465

1466

1467

1468

1469

1470

1471

1472

1473

1474

1475

1476

1477

1478

1479

1480

1481

1482

1483

1484

1485

## AUTHOR QUERIES

1486

1487

1488

1489

1490 AQ2. Please carefully check the accuracy of names and affiliations.

1491

1492

1493

1494

1495

1496

1497

1498

1499

1500

1501

1502

1503

1504

1505

1506

1507

1508

1509

1510

1511

1512

1513

1514

1515

1516

1517

1518

1519

1520

1521

1522

1523

1524

1525

1526

1527

1528

1529

1530