



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**CLIMATE CHANGE, MIGRATION, AND EUROPEAN
SECURITY**

by

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September 2020

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 2020	3. REPORT TYPE AND DATES COVERED Master's thesis	
4. TITLE AND SUBTITLE CLIMATE CHANGE, MIGRATION, AND EUROPEAN SECURITY			5. FUNDING NUMBERS	
6. AUTHOR(S) James D. Strunk				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) This thesis examines the threat climate change-induced migration (CCIM) poses to Europe. It emphasizes three key topics: (1) how climate change-induced migration might affect European state security; (2) the strengths and weaknesses of different intergovernmental organizations in response; and (3) what a North Atlantic Treaty Organization (NATO) response would look like and cost. Lessons learned from prior migration events are combined with estimations of climate migration to produce actionable approximations of migration and migration routes. This thesis finds that millions of forced climate migrants will attempt to migrate to Europe over the next century: over 8 million by 2040, over 14 million by 2070, and over 23 million by 2100. Additionally, this thesis finds that only NATO has the resources to ensure thorough coverage of migration routes and provide safety during migration at an approximate price tag of \$12.2b a year. This thesis recommends early planning by NATO to respond to CCIM for two reasons. First, European states may fail under the weight of unmitigated CCIM. Second, European populist politicians may gain increased support with unmitigated CCIM. These politicians are overwhelmingly anti-European Union (EU), and some are pro-Russian. Increased populist presence in Europe could threaten EU existence and/or culminate with some European states being anti-United States.				
14. SUBJECT TERMS climate change, migration, European security, NATO, European integration, European Union, EU			15. NUMBER OF PAGES 141	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

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CLIMATE CHANGE, MIGRATION, AND EUROPEAN SECURITY

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(EUROPE AND EURASIA)**

from the

**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

This thesis examines the threat climate change–induced migration (CCIM) poses to Europe. It emphasizes three key topics: (1) how climate change–induced migration might affect European state security; (2) the strengths and weaknesses of different intergovernmental organizations in response; and (3) what a North Atlantic Treaty Organization (NATO) response would look like and cost. Lessons learned from prior migration events are combined with estimations of climate migration to produce actionable approximations of migration and migration routes. This thesis finds that millions of forced climate migrants will attempt to migrate to Europe over the next century: over 8 million by 2040, over 14 million by 2070, and over 23 million by 2100. Additionally, this thesis finds that only NATO has the resources to ensure thorough coverage of migration routes and provide safety during migration at an approximate price tag of \$12.2b a year. This thesis recommends early planning by NATO to respond to CCIM for two reasons. First, European states may fail under the weight of unmitigated CCIM. Second, European populist politicians may gain increased support with unmitigated CCIM. These politicians are overwhelmingly anti-European Union (EU), and some are pro-Russian. Increased populist presence in Europe could threaten EU existence and/or culminate with some European states being anti-United States.

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LIST OF ACRONYMS AND ABBREVIATIONS

ARG	Amphibious Readiness Group
CCIM	Climate Change-Induced Migration
CNA	Center for Naval Analysis
CoE	Council of Europe
CRS	Congressional Research Service
CSDP	Common Security and Defence Policy
CSG	Carrier Strike Group
DOD	Department of Defense
ECRI	European Commission Against Racism and Intolerance
EEZ	Economic Exclusion Zone
EP	European Parliament
EU	European Union
FCM	Forced Climate Migrant
IFOR	Implementation Force
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
KFOR	Kosovo Force
MENA	Middle East and North Africa
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organization
NIC	National Intelligence Council
OAE	Operation Active Endeavor
OECD	Organisation for Economic Co-operation and Development
OSCE	Organization for Security and Co-operation in Europe
OSG	Operation Sea Guardian
SFOR	Stabilisation Force
SNMG2	Standing Maritime Group 2
SSA	Sub-Saharan Africa
U.S.	United States
UK	United Kingdom

UN

United Nations

UNHCR

United Nations High Commissioner on Refugees

ACKNOWLEDGMENTS

First and foremost, I would like to thank Dr. Halladay and Dr. Matei for putting up with my chaotic and haphazard writing style.

To Kate, thank you for helping turn my chaos into a readable and coherent product.

To my wife, Alyssa, thank you for your whimsicalness, patience, and support.

To my great friend Eric, you are the yin to my yang.

To the Beans, thank you for teaching me there is always time for play.

Finally, to the great actor Michael Shanks, thank you for the endless hours of entertainment during quarantine.

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I. INTRODUCTION

Speaking about climate change is not a matter of intellectual luxury the phenomenon is an actual fact... All of the industrialized countries, especially the big ones, bear responsibility for the global warming crisis.¹

—Osama Bin Laden

Climate change is not a sneak attack on the world. Instead, climate change is a slow-moving forest fire. Despite seeing the smoke in the distance for years, the world has yet to take major fire-fighting action. As early as 1912, news outlets were warning the public about the cumulative effects of spewing greenhouse gases into the atmosphere, as shown in Figure 1.

Figure 1. A New Zealand Newspaper Article from 1912²

COAL CONSUMPTION AFFECT- ING CLIMATE.

The furnaces of the world are now burning about 2,000,000,000 tons of coal a year. When this is burned, uniting with oxygen, it adds about 7,000,000,000 tons of carbon dioxide to the atmosphere yearly. This tends to make the air a more effective blanket for the earth and to raise its temperature. The effect may be considerable in a few centuries.

Humanity will probably survive climate change but will, comparatively, live a crippled existence.

¹ Suzanne Goldenberg, “Osama Bin Laden lends Unwelcome Support in Fight against Climate Change,” *The Guardian*, January 29, 2010, <https://www.theguardian.com/environment/2010/jan/29/osama-bin-laden-climate-change>.

² “Coal Consumption Affecting Climate,” Papers Past, accessed August 15, 2020, <https://paperspast.natlib.govt.nz/newspapers/ROTWKG19120814.2.56.5>.

Climate change poses a myriad of threats to the United States and its allies. Climatic events, droughts, floods, and famines could all produce security situations requiring a major response. One such climate change-induced situation is human migration. As areas of the world become less habitable, human beings may be forced to migrate. Just as humans migrated out of Africa 55–65 thousand years ago due to a deteriorating climate, humans may be facing similar circumstances in the coming century.³

This thesis explores how climate change-induced migration (CCIM) will impact Europe, the home of key U.S. allies, through questions such as why climate migration might happen, what areas of the world might produce climate migration, and where the bulk of the climate migration will relocate. The implications of these answers, when weighed against lessons learned from the European migrant crisis of the 2010s, allude to a worsening condition in Europe if CCIM is unmitigated.

To stave off the worst consequences of CCIM, a response will require efforts greater than any single state can offer. Five intergovernmental agencies are assessed based on their strengths and weaknesses in responding to CCIM. These agencies are also evaluated using subjective, fictional narratives to further highlight gaps in effectiveness. Out of the agencies assessed, only the North Atlantic Treaty Organization (NATO) appears to have the means necessary to offer simultaneous security-minded and humanitarian-leaning approach. This proposed NATO strategy, based on historical and present case studies, will cost approximately \$12.2b annually.

A. MAJOR RESEARCH QUESTION

This thesis seeks to answer the question: How will European security be affected by human migration caused by climate change? The National Intelligence Council (NIC) has identified multiple threats to international order and security posed by climate change, one

³ Jessica E. Tierney, Peter B. deMenocal, and Paul D. Zander, “A Climatic Context for the Out-Of-Africa Migration,” *Geology* 45 (11): 1023–1026. <https://doi.org/10.1130/G39457.1>.

of which is human migration.⁴ Building off this premise, this thesis focuses on the aspect of migration induced by climate change on Europe. More precisely, it emphasizes three key topics: (1) how CCIM might affect European society and politics, (2) the strengths and weakness of different intergovernmental organizations in response to CCIM, and (3) what a North Atlantic Treaty Organization (NATO) response to CCIM would cost and look like.

B. SIGNIFICANCE OF RESEARCH QUESTION

Richard Youngs, a contributor at Carnegie Europe, posits that “it is now commonly asserted that climate change will fundamentally change international relations,” due to conflicts, resource scarcity, economic impacts, and migration.⁵ Youngs argues that although European states have acknowledged the threat climate change poses, security policy changes have not been either extensive or coherent.⁶ In addition, he believes that the issue of climate change is continually put off due to other emerging challenges.⁷ This thesis will contribute to the literature by showcasing the detrimental impacts of CCIM on Europe. In essence, by focusing on CCIM as just one consequence, it attempts to highlight security concerns due to climate change policy inaction.

With the United States abandoning the Paris Agreement, accords created to combat climate change, the European Union (EU) appears to be disheartened and increasingly worried about the consistency of the United States as a partner.⁸ More recently, the EU has looked to China for cooperation and assistance in dealing with climate change.⁹ If the EU

⁴ National Intelligence Council (NIC), *Implications for U.S. National Security of Anticipated Climate Change* (Washington, DC: National Intelligence Council, 2016, https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/Implications_for_US_National_Security_of_Anticipated_Climate_Change.pdf, 7.

⁵ Richard Youngs, *Climate Change and European Security* (London: Routledge, 2015), 1.

⁶ Youngs, 2.

⁷ Youngs, 133.

⁸ Kristin Archick, *The European Union: Questions and Answers*, CRS Report No. RS21372 (Washington, DC: Congressional Research Service, 2019), <https://crsreports.congress.gov/product/pdf/RS/RS21372>, 16.

⁹ Archick, 17.

does adopt a more coordinated climate policy, and the United States is not part of that solution, it could further strain the strength and cohesion of the trans-Atlantic alliance. Therefore, this research also aims to provide policy insights for the United States in light of current climate science and migration policy.

C. DEFINITIONS AND THE SCIENCE OF CLIMATE CHANGE

Climate change is well-documented by both U.S. and United Nations (UN) scientific bodies. This section defines terms that are often mistakenly used interchangeably, explains the causes of climate change, describes the risks climate change poses, and suggests strategies for mitigating climate change.

1. Climate Change versus Global Warming

The term ‘*global warming*’ refers to the documented trend of rising temperatures on the planet.¹⁰ ‘*Climate change*’ itself can refer to any broad, climatic shifts in the Earth’s environment, but the term is mostly used to describe the current trends.¹¹ In this sense, climate change can refer to and include global warming, rising seas, melting glaciers, or even shifts in agriculture.¹² Often times, these terms are used interchangeably, despite discussing slightly different concepts.¹³ For the purposes of this work, climate change is used to describe conditions in relation to the current environmental trends.

2. Forced Climate Migrants

There currently is no universal term for people displaced by climate change. Attempting to use either ‘*climate refugee*’ or ‘*climate migrant*’ is problematic.¹⁴ Some literature does use the term climate refugee, but the term itself “does not exist in

¹⁰ “What’s the Difference Between Climate Change and Global Warming?” National Aeronautics and Space Administration (NASA), accessed January 7, 2020, <https://climate.nasa.gov/faq/12/whats-the-difference-between-climate-change-and-global-warming/>.

¹¹ “What’s the Difference Between Climate Change and Global Warming?” NASA.

¹² “What’s the Difference Between Climate Change and Global Warming?” NASA.

¹³ “What’s the Difference Between Climate Change and Global Warming?” NASA.

¹⁴ IOM, Migration and Climate Change, 13.

international law.”¹⁵ Furthermore, using ‘*refugee*’ “to describe those fleeing from environmental pressures is not strictly accurate under international law.”¹⁶ This work defers to the United Nations High Commissioner on Refugees (UNHCR) for defining refugee: someone fleeing persecution or fleeing serious violence.¹⁷ The usage of ‘*migrant*’ is similarly challenging; “it tends to imply a voluntary move towards a more attractive lifestyle” and also does not exist in international law.¹⁸ To limit confusion in this thesis, and to support a suggestion by the International Organization for Migration (IOM), the term ‘*forced climate migrant*’ (FCM) will be used to describe persons who have no choice but to migrate due to climate change.¹⁹

3. Causes of Climate Change

The primary cause of climate change is attributed to the “greenhouse effect,” where heat on Earth is trapped by the atmosphere.²⁰ This process is controlled by the concentration of different gases in the atmosphere, essentially where a larger concentration of gases directly causes more heat to be trapped on the planet.²¹ The largest culprit is carbon dioxide (CO₂), which is released during the burning of fossil fuels such as coal and oil.²² The rise of the modern, industrial society has increased levels of these greenhouse-effect-inducing gases by approximately seventy percent over the last 150 years.²³ The

¹⁵ “Climate Change and Disaster Displacement,” United Nations High Commissioner on Refugees (UNHCR), accessed August 31, 2020, <https://www.unhcr.org/en-us/climate-change-and-disasters.html>.

¹⁶ International Organization for Migration (IOM), *Migration and Climate Change* (Geneva, Switzerland: IOM, 2008), http://publications.iom.int/system/files/pdf/mrs-31_en.pdf, 13.

¹⁷ Division of International Protection, *UNHCR Resettlement Handbook* (Geneva, Switzerland: United Nations High Commissioner on Refugees (UNHCR), 2011), <https://www.unhcr.org/46f7c0ee2.pdf>, 18–19.

¹⁸ IOM, *Migration and Climate Change*, 13.

¹⁹ IOM, 15.

²⁰ “The Causes of Climate Change,” NASA, accessed October 20, 2019, <https://climate.nasa.gov/causes/>.

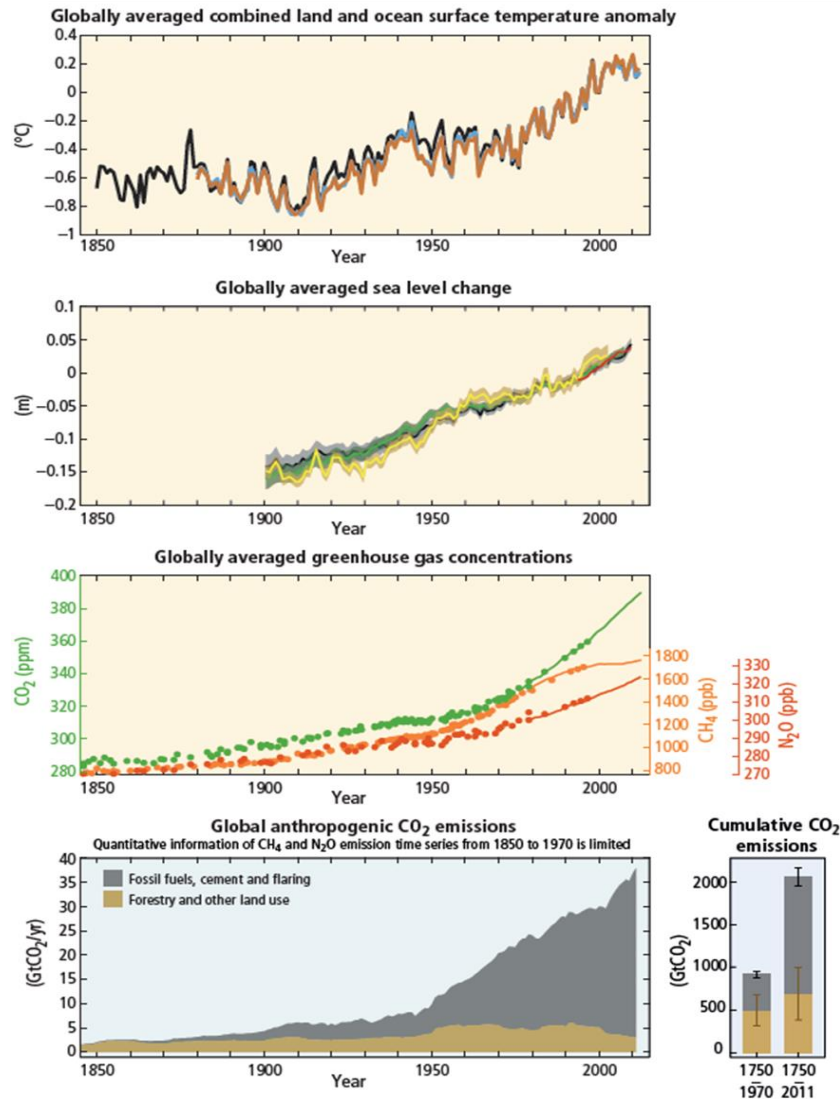
²¹ “The Causes of Climate Change,” NASA.

²² “The Causes of Climate Change,” NASA.

²³ “The Causes of Climate Change,” NASA.

relationship between these gases, global temperature, and changing sea levels is best explained visually. Figure 2 shows data collected by the Intergovernmental Panel on Climate Change (IPCC) that depicts the relationship between temperature, gases, sea level, and humanity's contributions.

Figure 2. Global Temperature and Greenhouse Gases from 1850²⁴



²⁴ Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2014: Synthesis Report* (Geneva, Switzerland: IPCC, 2014), https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf, 3.

4. Risks Associated with Climate Change

Climate change will have drastic effects on the environment. The Earth will experience longer and more frequent heat waves and more powerful and frequent extreme weather events, oceans will continue to rise and acidify, and sea levels will rise.²⁵ These changes will result in an increased risk of extinction for both plant and animal life.²⁶ Specific threats to humanity are expected to be induced by heat stress, increased power and frequency of storm systems, increased risk of flooding, increased risk of landslides, more frequent droughts, increased water scarcity, and lowered food security.²⁷ More indirectly, these stressors are expected to slow economies, increase the displacement of peoples, and exacerbate conflicts.²⁸

5. Mitigating Climate Change

Any mitigation efforts will take time to affect the world; even if humanity ceased all output of greenhouse gases instantly, the Earth would continue to warm for at least decades.²⁹ Overall mitigation requires a two-prong strategy, the first being the goal of emission reduction, and the second adaptation to changes that have already occurred or are still developing.³⁰ Additionally, reducing emissions requires a truly unified front from humanity; global coordination between states must occur.³¹

D. LITERATURE REVIEW

A robust literature discusses climate change and its relation to security and migration. On climate change itself, the predominant schools of thought can be broken into

²⁵ IPCC, 10.

²⁶ IPCC, 13.

²⁷ IPCC, 15–16.

²⁸ IPCC, 15–16.

²⁹ “Is it too Late to Prevent Climate Change?” NASA, accessed January 13, 2020, <https://climate.nasa.gov/faq/16/is-it-too-late-to-prevent-climate-change/>.

³⁰ “Is it too Late to Prevent Climate Change?” NASA.

³¹ “Is it too Late to Prevent Climate Change?” NASA.

those who agree and those who disagree on the existence and causes of climate change. Of note, the denial of climate change literature is dominated by focus on the United States. The relationship between climate change and its effect on security is examined by U.S. government agencies, NATO, and security-oriented think tanks. How climate change will alter migration patterns is discussed by many U.S. academics, international academics, and Non-governmental Organizations (NGOs). This literature review analyzes each of these broad subjects.

1. Consensus on Climate Change

The history of climate science is summarized by the Congressional Research Service (CRS) *Evolving Assessments of Human and Natural Contributions to Climate Change*.³² This report details how the science of climate change has been evolving for approximately two centuries.³³ The report concedes that the climate itself can indeed be influenced by both human and natural causes.³⁴ However, advancements in technology and scientific understanding have led to high confidence that human activity is the prime driver of climate change.³⁵ This conclusion is supported by U.S. federal research and UN scientific bodies.³⁶

Academic literature on the validity of climate change and its causes is vast. However, aggregating the views of scientists, three different scholarly articles compiled

³² Jane A. Leggett, *Evolving Assessments of Human and Natural Contributions to Climate Change*, CRS Report No. R45086 (Washington, DC: Congressional Research Service), 2018, <https://crsreports.congress.gov/product/pdf/R/R45086>.

³³ Leggett, 2.

³⁴ Leggett, 3.

³⁵ Leggett, 6.

³⁶ United States Global Change Research Program (USGCRP), *Fourth National Climate Assessment* (Washington, DC: USGCRP, 2018), https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf, 39–40; IPCC, *Climate Change 2014*, 5, 39–49.

results on consensus.³⁷ They concluded that general certainty exists among approximately 96 percent–97 percent of scientists that humanity is causing climate change.³⁸ Of those who publish work in the minority opinion, further study has found serious shortcomings in methodology.³⁹ This review of contrarian literature found deficiencies such as use of a false dichotomy where warming is caused by the sun, ignoring the interplay of greenhouse gases; ignoring tests that did not support the initial hypothesis, thus misrepresenting the data; and “implausible or incomplete physics,” such as claiming climate variation is due to the eleven-year solar cycle length where the sun’s magnetic poles switch locations.⁴⁰

European attitudes tend to agree with the scientific consensus on climate change.⁴¹ Respondents from a variety of European countries overwhelmingly believe that climate change is occurring and that humanity is causing it, with the lowest scores being 82.2 percent and 82.7 percent, respectively.⁴² The European Commission, the EU’s executive branch, states bluntly that climate change is both happening and caused by human activity on their official website.⁴³

³⁷ John Cook et al., *Consensus on Consensus: A Synthesis of Consensus Estimates on Human-Caused Global Warming*, 2016 Environmental Research Letter 11, <https://www.doi.org/10.1088/1748-9326/11/4/048002>; William R. L. Anderegg, James W. Prall, Jacob Harold, and Stephen H. Schneider, “Expert Credibility in Climate Change,” *Proceedings of the National Academy of Sciences of the United States of America* (PNAS) 107, no. 27 (June 2010): 12107–12109, <https://doi.org/10.1073/pnas.1003187107>; Peter T. Doran and Maggie Kendall Zimmerman, “Examining the Scientific Consensus on Climate Change,” *Eos, Transactions American Geophysical Union* 90, no. 3 (June 2011): 22–23. <https://doi.org/10.1029/2009EO030002>.

³⁸ Cook et al., *Consensus on Consensus*; Anderegg et al., “Expert Credibility in Climate Change,” 12107; Doran and Zimmerman, “Examining the Scientific Consensus on Climate Change,” 23.

³⁹ Rasmus E. Benestad et al., “Learning from Mistakes in Climate Research,” *Theoretical and Applied Climatology* 126, no. 3–4 (August 2015): 699, <https://doi.org/10.1007/s00704-015-1597-5>.

⁴⁰ Benestad et al., 700–701.

⁴¹ Wouter Poortinga, Stephen Fisher, Gisela Böhm, Linda Steg, Lorraine Whitmarsh, and Charles Ogunbode, “European Attitudes to Climate Change and Energy: Topline Results from Round 8 of the European Social Survey,” *ESS Topline Results Series*, issue no. 9 (September 2018): 15, http://www.europeansocialsurvey.org/docs/findings/ESS8_toplines_issue_9_climatechange.pdf.

⁴² Wouter et al., 4.

⁴³ European Commission (EC), “Climate Change and You,” accessed December 4, 2019, https://ec.europa.eu/clima/citizens/eu_en.

2. Climate Change Denial

There is a body of literature that addresses why climate change denial is so prevalent in the United States. The Pew Research Center finds views on climate change and climate science are highly correlated to political leanings in the United States.⁴⁴ Democrats were more likely to agree with the science behind climate change and its harmful effects and agree on methods of combatting climate change.⁴⁵ Republicans scored lower in all three of those categories.⁴⁶ Of the total respondents, only 48 percent believes climate change was due to human activity.⁴⁷

Though there does not seem to be one dominant motive in climate change denial, one possible explanation is theorized to be rooted in pro-market ideology.⁴⁸ Jean-Daniel Collomb, a French academic specializing in U.S. political thought, believes regulations put in place to mitigate climate change would question the “validity of...the free market as the ultimate solution to all social, economic, and environmental problems.”⁴⁹ In his view, climate change deniers are therefore reluctant to admit to the science because there would be “devastating repercussions on the intellectual bearings of many conservative officials and activists.”⁵⁰ Further work on this link found that “endorsement of free-market economics predicted rejection of climate science.”⁵¹ There is also a high correlation in

⁴⁴ Cary Funk and Brian Kennedy, “The Politics of Climate.” Pew Research Center, October 4, 2016, <http://www.pewinternet.org/2016/10/04/the-politics-of-climate/>, 4–5.

⁴⁵ Funk and Kennedy, 9.

⁴⁶ Funk and Kennedy, 9.

⁴⁷ Funk and Kennedy, 19.

⁴⁸ Jean-Daniel Collomb, “The Ideology of Climate Change Denial in the United States,” *European Journal of American Studies* 9, no. 9–1 (2014):11-12. <https://www.doi.org/10.4000/ejas.10305>.

⁴⁹ Collomb, 12.

⁵⁰ Collomb, 12.

⁵¹ Stephan Lewandowsky, Klaus Oberauer, and Gilles E. Gignac, “NASA Faked the Moon Landing—Therefore, (Climate) Science is a Hoax: An Anatomy of the Motivated Rejection of Science,” *Psychological Science* 24, no. 5 (2013): 622, 629, <https://www.doi.org/10.1177/0956797612457686>.

climate change denial and subscription to other conspiracy theories.⁵² Professors of psychology Stephan Lewandowsky, Klaus Oberauer, and Gilles E. Gignac find that a tendency to accept conspiratorial ideation leads to a refusal to accept “well-founded science,” not just the science of climate change, but other scientific conclusions such as AIDS being caused by HIV, or that smoking can lead to cancer.⁵³

Environment sociologist Robert J. Brulle argues that the funding of climate change denial is for a single purpose: to discredit the science of climate change in support of the fossil fuel industry.⁵⁴ Brulle finds that the funding of these efforts originates from predominantly conservative organizations and includes fossil fuel industry foundations.⁵⁵ He believes these efforts have been successful in challenging the science of climate change in part because of the direct financing of conservative and fossil fuel linked organizations.⁵⁶ Research done by the Center for American Progress shows U.S. Congressional members received “more than \$68 million in direct contributions from the fossil fuel industry.”⁵⁷ Though the current number of climate change deniers is lower than in previous Congresses, the numbers present still have the power to slow or stop any Congressional climate action legislation.⁵⁸

⁵² Lewandowsky, Oberauer, and Gignac, 622, 629.

⁵³ Lewandowsky, Oberauer, and Gignac, “NASA Faked the Moon Landing—Therefore, (Climate) Science is a Hoax,” 622, 629–630.

⁵⁴ Robert J. Brulle, “Institutionalizing delay: Foundation Funding and the Creation of U.S. Climate Change Counter-Movement Organizations,” *Climatic Change* 122, no. 4 (December 2013): 692, <https://www.doi.org/10.1007/s10584-013-1018-7>.

⁵⁵ Brulle, 692.

⁵⁶ Brulle, 693.

⁵⁷ Sally Hardin and Claire Moser, “Climate Deniers in the 116th Congress,” Center for American Progress Action Fund, January 28, 2019, <https://www.americanprogressaction.org/issues/green/news/2019/01/28/172944/climate-deniers-116th-congress/>.

⁵⁸ Hardin and Moser, “Climate Deniers in the 116th Congress.”

3. Security Implications of Climate Change

The U.S. Department of Defense (DOD) has deemed climate change a national security threat in at least two separate reports.⁵⁹ Risks include natural disasters, migration, and resource conflicts.⁶⁰ The DOD concludes that relatively weak states are most at risk, but even “well-developed countries are subject to the effects of climate change in significant and consequential ways.”⁶¹ A NIC report published in 2016 and a NATO-sponsored report done in 2012 agree with the findings by the DOD.⁶²

Echoing these sentiments, a report done by the Center for Naval Analyses (CNA) warns that climate change is an evolving threat to national security and that a delay in action would multiply the consequences.⁶³ The report finds that climate change will be a threat multiplier in unstable regions, such as further crippling already weak state capacity, and will even add to political tensions in the developed world, due to waves of refugees, spread of disease, and weather disasters.⁶⁴ Likewise, *The Oxford Handbook of Climate*

⁵⁹ Department of Defense (DOD), *National Security Implications of Climate-Related Risks and a Changing Climate* (Washington, DC: DOD, 2015), <https://archive.defense.gov/pubs/150724-congressional-report-on-national-implications-of-climate-change.pdf>, 3; DOD, *Reports on Effects of a Changing Climate to the Department of Defense* (Washington, DC: DOD, 2019), <https://media.defense.gov/2019/Jan/29/2002084200/-1/-1/1/CLIMATE-CHANGE-REPORT-2019.PDF>, 2.

⁶⁰ DOD, *National Security Implications of Climate-Related Risks and a Changing Climate*, 3.

⁶¹ DOD, *National Security Implications of Climate-Related Risks and a Changing Climate*, 14.

⁶² Harindra Joseph Fernando and Zvezdana Bentić Klaić, “Introduction: Climate Change, Human Health and National Security,” in *National Security and Human Health Implications of Climate Change*, ed. H. J. S. Fernando, Z.B. Klaić, and J. L. McCulley (Dordrecht, Netherlands: Springer, 2012), <https://www.doi.org/10.1007/978-94-007-2430-3>, xi-xii; NIC, *Implications for U.S. National Security of Anticipated Climate Change*, 6–8.

⁶³ CNA, *National Security and the Threat of Climate Change* (Arlington, VA: CNA, 2007), https://www.cna.org/CNA_files/pdf/National%20Security%20and%20the%20Threat%20of%20Climate%20Change.pdf, 3.

⁶⁴ CNA, 44–45.

Change and Security warns of states failing due to climate change, and that state sovereignty will be threatened over the course of the 21st century.⁶⁵

4. Climate Change-Induced Migration

The literature broadly agrees that climate change itself will not be a sole determinant in migration.⁶⁶ Climate change is merely a factor in the decision-making process, and other issues such as socioeconomics potentially play a larger role.⁶⁷ A study conducted by the World Bank believes that the real crux is the loss of food security, water security, and employment.⁶⁸ This study found residents in an area affected by climate change attempted to adapt to their new conditions and only migrated when adaptations failed.⁶⁹ In addition, research done by the European Commission states that only those with the real financial means will be able to truly emigrate.⁷⁰

Predicting the number of future FCMs is an evolving science. Many of the calculations vary significantly, from 25 million to 1 billion.⁷¹ Ling Bai and Alex de

⁶⁵ Nils Gilman, Doug Randall, and Peter Schwartz, "Climate Change and 'Security,'" in *The Oxford Handbook of Climate Change and Society*, ed. John S. Dryzek, Richard B. Norgaard, and David Schlosberg (Oxford: Oxford University Press, 2011): 16, <https://www.doi.org/10.1093/oxfordhb/9780199566600.001.0001>.

⁶⁶ Vikram Kolmannskog, *Future Floods of Refugees: A Comment on Climate Change, Conflict and Force Migration*. (Oslo, Norway: Norwegian Refugee Council, 2008), <https://www.nrc.no/globalassets/pdf/reports/future-floods-of-refugees.pdf>, 4; Kathleen Newland, *Climate Change and Migration Dynamics* (Washington, DC: Migration Policy Institute, 2011), <https://www.migrationpolicy.org/sites/default/files/publications/climatechange-2011.pdf>, 1; The German Marshall Fund of the United States (GMF), *Climate Change and Migration: Report of the Transatlantic Study Team* (Washington, DC: GMF, 2010), <http://www.gmfus.org/file/2295/download>, 1.

⁶⁷ Quentin Wodon et al., *Climate Change and Migration: Evidence from the Middle East and North Africa* (Washington, DC: World Bank, 2014), <https://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-9971-2>, 160–161.

⁶⁸ Wodon et al., 217.

⁶⁹ Wodon et al., 163.

⁷⁰ ATLAS INNOGLOBE LLC, *Environmental Change and Forced Migration Scenarios (EACH-FOR)* (Brussels: European Commission, 2009), <https://cordis.europa.eu/project/rcn/84134/factsheet/en>, 5, 72.

⁷¹ Newland, *Climate Change and Migration Dynamics*, 2; International Organization for Migration (IOM), *IOM Outlook on Migration, Environment and Climate Change* (Geneva, Switzerland: IOM, 2014), <https://environmentalmigration.iom.int/iom-outlook-migration-environment-and-climate-change-1>, 38.

Sherbinin, in reviewing various modeling efforts, found “considerable room for further methodological refinement,” and no perfect modeling approach.⁷² Perhaps the most detailed academic work on estimating CCIM was published in September 2019 by Michael Burzynski, Christoph Deuster, Frederic Docquier, and Jaime De Melo. By attempting to incorporate a model that includes economics, preferences, and mobility factors, the authors produced an extensive report on future migration patterns due to climate change.⁷³ Burzynski et al. predict the Middle East and North Africa will produce 4.4 million international FCMs by 2040, 5.9 million by 2070, and 5.9 million by 2100.⁷⁴ In addition, these authors posit that Sub-Saharan Africa will produce 3.9 million international FCMs by 2040, 8.9 million by 2070, and 17.2 million by 2100.⁷⁵ The authors also expect the majority of these FCMs to relocate to Europe.⁷⁶ By producing specific migration estimates, periods of time, and destinations, Burzynski et al. allow for further academic work to build upon this model, vice attempting to account for a range of 25 million to 1 billion.

When documenting migration mobility, literature agrees that most migration will be internal, or restricted to the local region.⁷⁷ Burzynski et al. concur with this sentiment, and conclude 80 percent “of climate migrants will move internally.”⁷⁸ It will invariably depend on the individual state’s capacity to provide for FCMs.⁷⁹ Even if a state does not

⁷² Alex de Sherbinin and Ling Bai, “Geospatial Modeling and Mapping,” in *Routledge Handbook of Environmental Displacement and Migration*, ed. Robert McLeman and François Gemenne (London: Routledge, 2018), <https://www.taylorfrancis.com/books/e/9781315638843>, 89.

⁷³ Michael Burzynski et al., *Climate Change, Inequality, and Human Migration*, Foundation for Studies and Research on International Development (FERDI) Working Paper P256 (Clermont-Mirrande, France: FERDI, 2019), <https://ferdi.fr/en/publications/climate-change-inequality-and-human-migration>.

⁷⁴ Burzynski et al., 40.

⁷⁵ Burzynski et al., 40.

⁷⁶ Burzynski et al., 42.

⁷⁷ Newland, *Climate Change and Migration Dynamics*, 9–10; GMF, *Climate Change and Migration: Report of the Transatlantic Study Team*, 1.

⁷⁸ Burzynski et al., *Climate Change, Inequality, and Human Migration*, 41.

⁷⁹ Newland, *Climate Change and Migration Dynamics*, 9–10.

have the capacity, the likelihood of mass migration to far off countries does not appear to be a strong argument.⁸⁰

Internationally, research funded by the EU predicts migration routes “will be influenced by proximity, historical ties, and ethnic or linguistic affinity,” such as migration from the Middle East and North Africa finding the closest European territory.⁸¹ The NIC agrees with migration stemming from North Africa and heading to Europe, but does not provide any estimates on the Middle East.⁸² IOM simplifies route prediction; any new migration flows will notionally follow existing routes.⁸³

E. POTENTIAL EXPLANATIONS AND HYPOTHESES

The response to recent waves of immigration has already manifested itself in European politics. As some Europeans view mass migration as a threat, they are voting for more right-wing political parties.⁸⁴ In addition to an anti-immigration stance, these radical parties are also associated with anti-EU sentiments.⁸⁵ If predictions are correct, the results seen in response to immigration will continue to trend in the radical right direction. If more and more of these parties come into power, having strong anti-EU views, EU integration could be at risk.

⁸⁰ GMF, *Climate Change and Migration: Report of the Transatlantic Study Team*, 1.

⁸¹ Newland, *Climate Change and Migration Dynamics*, 3.

⁸² National Intelligence Council (NIC), *North Africa: The Impact of Climate Change to 2030: Geopolitical Implications* (Washington, DC: NIC, 2009), https://www.dni.gov/files/documents/2009%20Conference%20Report_North%20Africa_The%20Impact%20of%20Climate%20Change%20to%202030.pdf, 3.

⁸³ IOM, *IOM Outlook on Migration, Environment and Climate Change*, 40.

⁸⁴ Marcel Lubbers and Marcel Coenders, “Nationalistic Attitudes and Voting for the Radical Right in Europe,” *European Union Politics* 18, no. 1 (March 2017): 98, <https://www.doi.org/10.1177/1465116516678932>.

⁸⁵ Lubbers and Coenders, “Nationalistic Attitudes and Voting for the Radical Right in Europe,” 114.

These mass migrations will also cause a potential overload in stress on EU states' ability to protect their own citizens.⁸⁶ This security dilemma could increase the likelihood of a NATO response, and entail systemic change of the institution.⁸⁷ The amplified call for NATO humanitarian missions might put excessive strain on both "economic and military resources."⁸⁸ Control over these migration patterns is predicted to become a "widespread security issue" by 2030.⁸⁹ In addition, the flow of people could create an unstable environment in the Middle East and North African area, possibly triggering even more NATO security deployments.⁹⁰

F. RESEARCH DESIGN

This thesis produces five products: (1) a quantitative estimate of CCIM into the EU with possible routes (2) a prediction of migration-induced instability on EU states, (3) a prediction of migration-induced instability for the EU, (4) an analysis of which intergovernmental agency can respond adequately to CCIM, and (5) the potential costs to NATO for responding to these migration patterns.

Migration into the EU will primarily come from the Middle East and North African regions, and this research focuses on these regions for two additional purposes. First, the European migrant crisis of the 2010s provides both a recent and relevant case study. Second, these two regions are geographically the closest to the EU with well-documented migration routes. Immigration predictions are aggregated from intergovernmental agencies, non-governmental organizations, scholarly work, and think tanks. Primary

⁸⁶ Tyler H. Lippert, *NATO, Climate Change, and International Security: A Risk Governance Approach* (Santa Monica, CA: RAND Corporation, 2016), https://www.rand.org/pubs/rgs_dissertations/RGSD387.html, 56.

⁸⁷ Lippert, 34–35.

⁸⁸ Lippert, 49.

⁸⁹ Lippert, 56.

⁹⁰ Lippert, *NATO, Climate Change, and International Security: A Risk Governance Approach*, 68.

consideration will be given to Burzynski et al., largely due to the detailed nature of their predictions.⁹¹

State instability predictions are based on a broader case study of the current European migrant crisis, which peaked in 2015.⁹² Such reactions as rising nationalism, increasing ethnic conflict, and the emerging popularity of populist parties have been a dominant motif in Europe due to the crisis and will be used as potential responses to future waves of FCMs. The rise of far-right populism is reviewed via academic works and non-governmental agency research.⁹³ Though there is no certainty in predicting outcomes, current trends should provide an adequate, if notional, prediction of future action.

CCIM as a threat to EU integration is projected through the same use of the European migrant crisis case study. This area will focus specifically on political actions or referendums by countries and political stances of anti-immigration parties. Government leader statements, official political party websites, and government documents are used as primary sources for official responses. Though the predicted wave of future FCMs is not the same situation as the previous migration crisis, this author will use current anti-immigration politics to forecast future scenarios.

Five intergovernmental agencies are evaluated as possible responders to CCIM: the UN, the Council of Europe (CoE), the Organisation for Security and Co-operation in Europe (OSCE), the EU's Common Security and Defense Policy (CSDP), and NATO. These agencies are assessed on their ability to respond to raw number of FCMs and monitor the major migration routes. Additionally, these agencies are gauged on their ability to provide security for the local area and during migration.

⁹¹ Burzynski et al., *Climate Change, Inequality, and Human Migration*.

⁹² Joanna Apap, Anja Radjenovic, and Alina Dobрева, *The Migration Issue* (Brussels: European Parliamentary Research Service, 2019), [http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/635542/EPRS_BRI\(2019\)635542_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2019/635542/EPRS_BRI(2019)635542_EN.pdf), 1.

⁹³ Gabriella Lazaridis, Giovanna Campani, and Annie Benveniste, *The Rise of the Far Right in Europe Populist Shifts and "Othering,"* (London: Palgrave Macmillan UK, 2016), <https://doi.org/10.1057/978-1-137-55679-0>; Martin A. Schain, *Shifting Tides: Radical-Right Populism and Immigration Policy in Europe and the United States*, (Washington, D.C.: Migration Policy Institute, 2018), <https://www.migrationpolicy.org/sites/default/files/publications/Schain-PopulismUSandEurope-Final-Web.pdf>.

Future costs to NATO in response to CCIM are calculated and estimated using the costs of previous NATO and UN security and peacekeeping missions, as well as Australian anti-migration missions. While some academic literature has made use of NATO budgetary numbers, there are gaps in available information.⁹⁴ NATO mission costs are either not published or quite possibly classified. UN data is more readily available and will be supplemented where gaps in NATO budgetary numbers exist.⁹⁵ Peacekeeping and security missions are chosen due to the likelihood of the military operational response to CCIM. This author does not predict other NATO mission subsets—no-fly zones, naval blockades, air campaigns, or counter-piracy—to be used in response to human migration.⁹⁶ Since NATO budgetary numbers for active maritime missions are not publicly available, comparable missions from Australia are used as a supplement.

G. OVERVIEW

Chapter I introduces the thesis. It includes the major research question, the significance of the topic, definitions, a literature review, potential hypotheses, the research design, and an overview.

Chapter II covers CCIM and the European migrant crisis. It details current estimates of future climate migration, and detail how these migration patterns could induce instability. It includes an estimation of the most likely scenario of migration, to include routes and numbers. This chapter also examines the European migrant crisis, its background, and its effects on society and European politics.

⁹⁴ Jyoti Khanna, Todd Sandler, and Hirofumi Shimizu, “Sharing the Financial Burden for UN and NATO Peacekeeping, 1976–1996,” *Journal of Conflict Resolution* 42, no. 2 (April 1998): 176–195, <https://doi.org/10.1177%2F0022002798042002003>; Hirofumi Shimizu and Todd Sandler, “Peacekeeping and burden-sharing, 1994–2000,” *Journal of Peace Research* 39, no. 6 (November 2002): 651–668, <https://doi.org/10.1177%2F0022343302039006001>; Keith Hartley and Todd Sandler, “NATO Burden-Sharing: Past and Future,” *Journal of peace research* 36, no. 6 (November 1999): 665–680, <https://doi.org/10.1177%2F0022343399036006004>.

⁹⁵ United Nations (UN), *Approved Resources for Peacekeeping Operations for the Period from 1 July 2017 to 30 June 2018* (New York: UN, 2017), <https://undocs.org/en/A/C.5/71/24>; UN, *Approved Resources for Peacekeeping Operations for the Period from 1 July 2018 to 30 June 2019* (New York: UN, 2018), <https://undocs.org/en/A/C.5/72/25>.

⁹⁶ North Atlantic Treaty Organization (NATO), “Operations and Missions: Past and Present,” last updated April 25, 2019, https://www.nato.int/cps/en/natohq/topics_52060.htm.

Chapter III assesses the UN, CoE, OSCE, CSDP, and NATO to determine which agency has the capacity to respond to CCIM. It also builds off the objective analysis in a more subjective manner. It uses fictionalized accounts of future climate migration to highlight areas of weakness in the five intergovernmental agencies.

Chapter IV estimates the cost of responding to CCIM via NATO. This chapter examines past mission subsets that could be invoked as a response to CCIM. Based upon the need, Chapter IV also proposes a sea and a land-based strategy for NATO. Costs of this theoretical strategy are estimated using historical, present, and comparative examples.

Chapter V provides security implications and policy recommendations for the United States and NATO. This chapter will use the previous results to illustrate how European states will suffer internal strife and how EU integration will be tested. The weakening of U.S. allies might change the geopolitical landscape. If the EU is looking for leadership and a robust economy to assist in combatting climate change, it could look elsewhere if the United States is not willing to take up the role. Policy recommendations based on the findings of this thesis will be provided to foster discussion and potential action in maintaining and strengthening these U.S. allies.

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II. CLIMATE CHANGE-INDUCED MIGRATION ESTIMATE AND POTENTIAL EFFECTS

To understand how CCIM will potentially impact Europe, this chapter is divided into three sections. The first broadly examines CCIM estimates and routes. The second section explores future FCMs' health and more detailed predictions of the FCMs' origins. The third section highlights the European migrant crisis of the 2010s and includes refugee numbers, societal effects, and political effects. This chapter finds that CCIM will drive many millions of FCMs to Europe over the next century. Much like the European migrant crisis, European xenophobic attitudes will increase due to CCIM, leading to a more exclusive society and vigorous support for populist politicians. The same populist politicians who run on anti-immigrant platforms are also generally anti-EU, and some are even pro-Russian.

A. FORCED CLIMATE MIGRANTS AND THEIR MOTIVES

This section reveals that by 2040 over eight million refugees will attempt to reach Europe and they will follow the same paths used during the European migrant crisis. These FCMs will not all be able-bodied men but cover a spectrum, whether young, old, healthy, or sick. Trauma and disease are still a concern, especially if FCMs are housed in poorly maintained camps. This chapter also finds that FCMs travelling across the Mediterranean from Africa will probably be fleeing states overwhelmed by their own internal and external migration, and/or fleeing intra or inter-state violence. FCMs travelling by land to the eastern portion of Europe from the Middle East will probably be fleeing due to the same causes, with the addition of drastic water scarcity.

The Burzynski et al. model provides an approximation of future FCMs into Europe and comprises of complex calculations of economics, preferences, and mobility factors to predict migratory patterns.⁹⁷ Burzynski et al. also include factors that account for climatic

⁹⁷ Burzynski et al., *Climate Change, Inequality, and Human Migration*.

weather events, resource conflicts, and impacts on the labor force.⁹⁸ This work emphasizes two regions: (1) the Middle-East and North Africa (MENA) and (2) Sub-Saharan Africa (SSA). Burzynski et al. predict FCMs from these regions will focus primarily on Europe, with richer Organisation for Economic Co-operation and Development (OECD) countries being the optimal relocation area.⁹⁹ Table 1 shows Burzynski et al.’s estimates.

Table 1. CCIM Migration Estimates ¹⁰⁰

Region	Year	International Migration Estimate
MENA	2040	4,400,000
	2070	5,900,000
	2100	5,900,000
SSA	2040	3,900,000
	2070	8,900,000
	2100	17,200,000

Data availability from The European Border and Coast Guard Agency (otherwise known as Frontex) only supplies the number of illegal border crossing for January through April of 2020. Over those four months, Frontex only detected 27,316 crossings.¹⁰¹ If modeling by Burzynski et al. is correct, the CCIM estimates represent a gigantic step up in migrations to Europe.

With an actionable CCIM estimate on hand, route predictions should notionally follow pre-existing paths.¹⁰² For the European migrant crisis of the 2010s, Figure 3 represents a visualization of the migrant’s paths.

⁹⁸ Burzynski et al., 38–39.

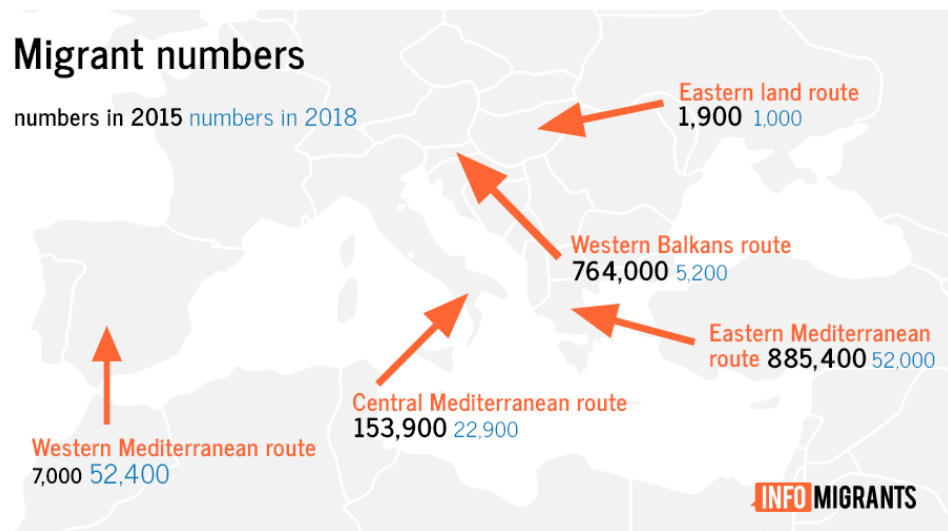
⁹⁹ Burzynski et al., 37, 39.

¹⁰⁰ Burzynski et al., 40.

¹⁰¹ FRONTEX, “Migratory Map.”

¹⁰² IOM, IOM Outlook on Migration, Environment and Climate Change, 40.

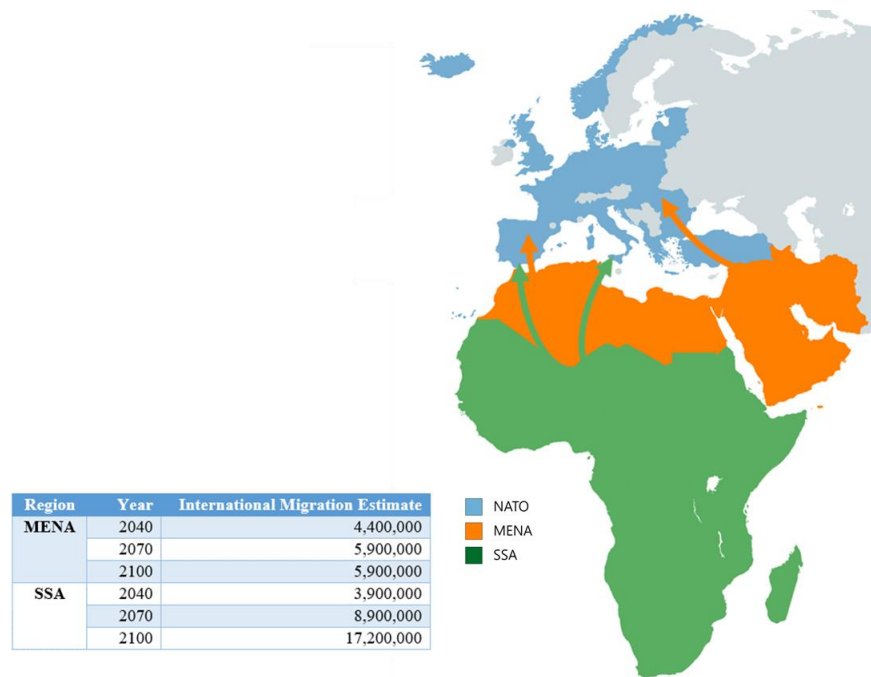
Figure 3. European Migrant Crisis Route Paths¹⁰³



Building on this precedent, and with the data from Burzynski et al., Figure 4 represents the predicted route patterns with the number of FCMs from the MENA and SSA regions.

¹⁰³ Marion MacGregor, “Changing Journeys: Migrant Routes to Europe,” Info Migrants, February 13, 2019, <https://www.infomigrants.net/en/post/15005/changing-journeys-migrant-routes-to-europe>.

Figure 4. CCIM Routes and Estimations



B. FORCED CLIMATE MIGRANTS' HEALTH, ORIGINS, AND MOTIVATIONS

While Burzynski et al. offer raw numbers of FCMs, the authors do not attempt to predict more nuanced details describing the FCMs. However, research on health from the European migrant crisis predicts non-communicable diseases, infectious diseases, and psychological disorders. These conditions could be from either the experiences in origin nations, the transit, or how the FCMs are housed. For FCM origins and motivations, the NIC does attempt to predict how climate change will impact specific regions of the world. For Africa, water stress, resource conflicts, and civil unrest will likely lead to a mass exodus from urban areas to Europe. In the Middle East, water stress might lead to resource wars that snowball into civil wars.

1. Forced Climate Migrant Health

For the health of those migrating due to CCIM, lessons have already been learned from the European migrant crisis. For one, the notion that only healthy, able-bodied people will be able to travel is either suspect or a complete myth; sick, young, and old refugees

were able to reach their destinations.¹⁰⁴ Refugees were found to have a “triple burden of chronic non-communicable diseases (e.g., diabetes, cardiovascular diseases, respiratory conditions and cancer), infectious diseases (e.g., tuberculosis, HIV, hepatitis), and psychiatric illnesses (e.g., post-traumatic stress disorder, depression).”¹⁰⁵ Additionally, refugees were found to have a 60 percent chance of experiencing a traumatic event in their home country, a 90 percent chance of a traumatic event during migration, a high likelihood of multiple victimizations, and prevalent sexual violence.¹⁰⁶ How FCMs are housed once in new locations is a deciding factor as well. Overcrowding and lack of sanitation can “increase risks related to infectious diseases.”¹⁰⁷ For FCMs, the expected health outcomes should be equivalent to the previous findings of the European migrant crisis.

2. Sea-Based Migration—Current Predictions

The NIC expects North Africa to experience water stress, droughts, floods, climate migration, civil unrest, loss of employment, resource conflicts, and interstate conflicts.¹⁰⁸ These sources of tension are the probable culprits for precipitating migration both internally and internationally. Based on the predictions by the NIC, there are likely two main groups contributing to international migration: destitute rural and urban inhabitants with limited education and a wealthier middle-class fleeing civil unrest in urban areas. While the wealthier group may migrate outside or within legal channels, the poorer group will be left with no other option than illegally crossing international borders to seek asylum. Much like the European migrant crisis of the 2010s, the migration path will likely be across the Mediterranean to the Italian border, and from there either seek immediate asylum or attempt to reach other destinations in the EU.

¹⁰⁴ Mohamed Abbas et al., “Migrant and Refugee Populations: A Public Health and Policy Perspective on a Continuing Global Crisis,” *Antimicrobial Resistance & Infection Control* 7, no. 1 (2018): 4, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6146746/pdf/13756_2018_Article_403.pdf.

¹⁰⁵ Abbas et al., 4.

¹⁰⁶ Abbas et al., 4.

¹⁰⁷ Abbas et al., 4.

¹⁰⁸ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 3.

Climate change will have a drastic effect on North Africa's water supply. Morocco and Algeria will both experience a 10–15 percent loss in water resources and Tunisia is expected to have almost a 30 percent loss.¹⁰⁹ Even without climate change, North Africa is already set to exceed land-based water resources before 2025.¹¹⁰ When adding in the cumulative effects of water loss due to climate change, hundreds of millions of North Africans are expected to experience water stress.¹¹¹

The NIC also predicts climate change will shrink suitable land for agriculture and lower crop yields.¹¹² This is an especially troubling prognosis for Egypt because agriculture is only feasible on four percent of Egypt's territory.¹¹³ The overall outlook for North Africa's agriculture will ultimately threaten "the livelihoods and subsistence of millions across the region."¹¹⁴

Stresses on both water availability and agriculture will hinder quality of life and employment opportunities in rural areas. This will most likely entail mass internal migrations to cities. The NIC expects an increase of 50 million new city residents by 2050.¹¹⁵ These will not just be North Africans, either, as the NIC predicts Sub-Saharan Africans to journey north and settle in these urban areas due to water scarcity and desertification in SSA.¹¹⁶ One such example of this could be Lake Chad, where "over 20 million inhabitants of Chad, Cameroon, Niger, and Nigeria" rely on water from this source.¹¹⁷ The NIC predicts this lake's resources will disappear due to climate change, forcing the millions of inhabitants north. If the declining

¹⁰⁹ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 24.

¹¹⁰ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 23.

¹¹¹ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 23.

¹¹² NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 26.

¹¹³ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 27.

¹¹⁴ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 12.

¹¹⁵ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 32.

¹¹⁶ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 31-32.

¹¹⁷ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 31.

availability of water and declining agricultural resources are not enough to overwhelm an urban areas social safety net, the influx of millions of non-North Africans would further deplete state resources.

This strain on rural life and the migration into urban areas could produce severe unrest, especially because major urban areas in North Africa already suffer from overpopulation.¹¹⁸ Assistance from the state might not be forthcoming either. According to the NIC, North African “economic reforms have often been slow due to large, corrupt, and inefficient government bureaucracies and entrenched economic interests.”¹¹⁹ Corruption aside, the NIC additionally predicts the disenfranchised masses will also not receive state assistance due to the “weak social contracts” of North Africa.¹²⁰ This region is currently experiencing a “youth bulge” where “60 percent of North African’s population is under the age of 25.”¹²¹ A centralization of large groups of the young and unemployed is a recipe for affiliation with “radical networks or gangs.”¹²² Of particular concern to the NIC is further potential support for radical Islamist groups; Islamist extremists may use the circumstances to bolster their numbers and undermine state regimes.¹²³

The NIC also warns of another potential strain in this region: interstate conflict due to the climate change. If water scarcity becomes a truly dire situation, states may be inclined to hoard their own resources or attempt to tap into a neighboring country’s supply.¹²⁴ In SSA, the situation is even worse as the “risks of state failure or serious civil or cross-border conflict are high.”¹²⁵

¹¹⁸ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 13.

¹¹⁹ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 14.

¹²⁰ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 21.

¹²¹ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 13.

¹²² NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 21.

¹²³ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 19.

¹²⁴ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 24.

¹²⁵ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 32.

One country is at risk for all these substantial issues: Egypt. The NIC predicts almost 75 percent of Egypt “will have less than adequate fresh water supply by 2030.”¹²⁶ In addition to water stress, Egypt’s agricultural sector will experience lower crop yield.¹²⁷ Sea-level rise (SLR) will also disproportionately affect Egyptian territory. A mere one-meter SLR will displace almost 70 million Egyptians, submerge 13 percent of agricultural land, render 5.5 percent of urban areas unlivable, and result in millions of damages to the country’s GDP.¹²⁸ Add in 30 percent of Egyptian workers being employed in agriculture and the potential millions of FCMs from SSA, then the domestic situation in Egypt could become quite unstable.¹²⁹

Internationally, Egypt is also more likely to be involved in resource wars, specifically over water. Egypt receives over 95 percent of its water from the Nile.¹³⁰ However, Egypt is also the furthest downstream recipient of the waters. The NIC warns that any upstream state attempting to divert more of the Nile will invite Egyptian military retaliation.¹³¹ According to the NIC, the most likely source of interstate water wars will be between Egypt and the Sudan.¹³²

In a case such as Egypt, there are at least two groups adapting simultaneously that will create international migration. It is also important to stress that emigration is typically seen as a last resort when all other adaptive measures fail.¹³³ The first group is generally the poor farmers and the disenfranchised. This group is comprised of residents of SSA that fled north, Egyptian rural residents who lost their livelihood, and Egyptian lower-class

¹²⁶ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 24.

¹²⁷ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 27–29.

¹²⁸ Dasgupta et al., “The Impact of Sea Level Rise on Developing Countries: A Comparative Analysis,” *Climatic Change* 93, no. 3–4 (April 2009): 387, <https://doi.org/10.1007/s10584-008-9499-5>; Brian Blankespoor, Susmita Dasgupta, and Benoit Laplante, “Sea-Level Rise and Coastal Wetlands,” *AMBIO* 43, no. 8 (December 2014): 1003, <https://doi.org/10.1007/s13280-014-0500-4>.

¹²⁹ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 27.

¹³⁰ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 24.

¹³¹ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 33.

¹³² NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 33.

¹³³ Wodon et al., *Climate Change and Migration*, 163.

urban residents who are unable to compete in a saturated work environment. Those that choose to emigrate from this group are those choosing not to join radical Islamic groups or gangs and are most likely seeking economic opportunity for themselves and their families. This group also most likely suffers from a lack of education, but conversely has a willingness to work abroad to survive.

The second group fleeing Egypt in this scenario is more of a middle-class stratum. Those that choose to emigrate will do so as a last resort, but those who have the wealth and connections to emigrate will probably do so more successfully.¹³⁴ This group has the means to emigrate inside of the normal legal channels, but may also choose to do outside of the legal channels if connections break down or if asylum is refused.

During the European migrant crisis, the overwhelming majority of Africans utilized the central Mediterranean route, crossing the sea between Africa and Italy.¹³⁵ Considering that the IOM believes future migrations will follow pre-existing paths, it is therefore likely the millions of FCMs Burzynski et al. predict will also coalesce around the central Mediterranean route.

3. Land-based Migration—Current Predictions

The Middle East is likely to generate more of the land-based migration to the EU. Water scarcity, water wars, civil unrest, interstate conflict, and loss of economic viability will all be driving factors. Of note, Israel and Iraq might be at the epicenters of such migrations. Israel and its neighbor countries all share water sources. If water becomes too scarce, people might migrate anyway, but if the scarcity precipitates Israeli wars with Lebanon or Jordan, millions more could be displaced. Iraq, a country that has yet to fully recover from recent invasions, suffers from a lack of state capacity to respond to climate change and relies on neighbors for water sources. If the Iraqi government cannot alleviate its populations' food and water security worries, extremist elements could capitalize on a

¹³⁴ ATLAS INNOGLOBE LLC, *Environmental Change and Forced Migration Scenarios (EACH-FOR)*, 5, 72.

¹³⁵ FRONTEX, "Migratory Map."

weak response and challenge regime authority. States having the headwater of major rivers may even take action to keep the water within their national boundaries, thus cutting off Iraq from a vital resource.

The Middle East is already a water-scarce region and climate change will exacerbate this issue.¹³⁶ This issue is further compounded by the fact that water sources cross multiple international borders.¹³⁷ In Israel for example, the chief source of water is the Jordan River which is supplied by Lebanon and Syria.¹³⁸ Conversely, a large source of groundwater that supplies both Jordan and Israel is located in the West Bank.¹³⁹ Cooperation might very well be key to water security throughout the region.

Cooperation, however, might be a hard sell. The wars throughout the region have created a “deep distrust.”¹⁴⁰ Furthermore, the combination of distrust and water scarcity could undermine pre-existing agreements.¹⁴¹ There is a complex water-sharing agreement between Jordan and Israel, which may become unsustainable due to climate change and a lack of cooperation.¹⁴² Additionally, there is no current water treaty between either Israel and Lebanon or Israel and Syria.¹⁴³ If distrust is too deep-seated states might militarize around critical resources.¹⁴⁴ If cooperation in the region cannot be achieved, water wars with Israel at the center could be a very real scenario. If Lebanon faces a critical water shortage and diverts the Jordan River, or if Israel hoards the groundwater in the West Bank

¹³⁶ Oli Brown and Alec Crawford, *Rising Temperatures, Rising Tensions: Climate Change and the Risk of Violent Conflict in the Middle East* (Winnipeg, Canada: International Institute for Sustainable Development (IISD), 2009), https://www.iisd.org/pdf/2009/rising_temps_middle_east.pdf, 6.

¹³⁷ Brown and Crawford, 12.

¹³⁸ Brown and Crawford, 12.

¹³⁹ Brown and Crawford, 12.

¹⁴⁰ Brown and Crawford, 15.

¹⁴¹ Brown and Crawford, 21.

¹⁴² Brown and Crawford, 21.

¹⁴³ Brown and Crawford, 21.

¹⁴⁴ Brown and Crawford, 28.

from Jordan, the Middle East could experience a whole new wave of conflict. This new conflict could reach Syrian levels of displacement, especially if the conflict escalates to full interstate war.

Iraq, situated on the opposite side of Jordan, poses a similar series of problems. Iraq will experience the typical climate change calamities such as rising temperatures, droughts, and desertification.¹⁴⁵ Much like other areas in the MENA region, Iraq's agricultural sector will suffer greatly due to the combination of water scarcity and shrinking arable land. The agricultural industry employs a quarter of Iraq's population.¹⁴⁶

The resulting stress of rural Iraqis moving into urban areas will cause societal pressure and could set the conditions for civil conflict.¹⁴⁷ The possibility of further unrest and conflict would arise in an area that is already dealing more than its fair share of problems; a quarter of Iraq is impoverished and the state security apparatus is still tenuous due to decades of war and Islamic extremism.¹⁴⁸ Moreover, millions of Iraqis are already suffering from food insecurity or deprivation.¹⁴⁹

The loss of employment and added stressors could fuel extremist recruitment, much like in North Africa. Extremist groups might be able to barter resources and other services in exchange for support among these disenfranchised Iraqis.¹⁵⁰ These extremist groups might be the only provider of such life-saving services; the Iraqi state suffers from a lack of resources and capacity to provide assistance across many portions of the country.¹⁵¹

¹⁴⁵ United States Agency for International Development (USAID), *Climate Change Risk Profile: Iraq* (Washington, D.C.: USAID, 2017), https://www.climate-links.org/sites/default/files/asset/document/2017Mar3_GEMS_Climate%20Risk%20Profile_Iraq_FINAL.pdf, 1.

¹⁴⁶ USAID, 3.

¹⁴⁷ USAID, 2.

¹⁴⁸ USAID, 2.

¹⁴⁹ USAID, 4.

¹⁵⁰ Kawa Hassan, Camilla Born, and Pernilla Nordqvist, *Iraq: Climate-related Security Risk Assessment* (Solna, Sweden: Stockholm International Peace Research Institute (SIPRI), 2018), <https://www.eastwest.ngo/sites/default/files/iraq-climate-related-security-risk-assessment.pdf>, 1, 6.

¹⁵¹ Hassan, Born, and Nordqvist, 1, 7.

Like the case of Syria, the avalanche of climate change effects could very well lead to social unrest and increased extremist presence, thereby creating a threat multiplier effect and potentially blossoming into civil conflict.¹⁵²

Internationally, the Iraqi government is also facing competition for water resources. The Tigris and Euphrates Rivers “supply more than half of Iraq’s freshwater resources” and rely on upstream states such as Turkey, Syria, and Iran.¹⁵³ Since the rivers originate in Turkey, if Turkey decides to hoard its water supply the water scarcity situation in Iraq could be a source of conflict.¹⁵⁴ The relationship between the two states is already precarious given Turkey’s animosity and military operations against the Iraqi Kurdish population.¹⁵⁵

C. EUROPEAN RESPONSES

Literally millions of people have flooded to the UK... This has driven wages down, property prices up, and put unsustainable burdens on housing, the NHS, schools, roads and transport... If we stay in the European Union there will be millions more migrants to come.¹⁵⁶

—Propaganda distributed during the United Kingdom’s EU Referendum

The European migrant crisis of the 2010s exposed gaping holes and flaws within national and European asylum policy. Admittedly, conflict, not climate change, displaced these refugees. Additionally, even though the event is commonly described as a migrant crisis, it is

¹⁵² Sarah Johnstone and Jeffrey Mazo, “Global Warming and the Arab Spring,” *Survival*, 53:2 (2011): 11–17, <https://doi.org/10.1080/00396338.2011.571006>; Colin P. Kelley, Shahrzad Mohtadi, Mark A. Cane, Richard Seager, and Yochanan Kushnir, “Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought,” *Proceedings of The National Academy of Sciences of The United States of America* 112, no. 11 (March 2015): 3241–3246, <https://doi.org/10.1073/pnas.1421533112>.

¹⁵³ USAID, 3.

¹⁵⁴ USAID, 3.

¹⁵⁵ Hassan, Born, and Nordqvist, Iraq: Climate-related Security Risk Assessment, 8.

¹⁵⁶ “Vote to Leave,” LSE Digital Library, accessed May 23, 2020, <https://digital.library.lse.ac.uk/objects/lse:saj876qeb>.

more accurate to refer to the displaced persons as refugees since they were fleeing violence.¹⁵⁷ However, the refugees' motivations are not as important for a comparative study as the raw numbers of people. The sheer influx of refugees and asylum seekers brought changes to European society and the European electorate. Upticks in xenophobia against immigrants also branched out to include other visibly different groups such as Muslims and Jews. Domestic attacks on refugees, Muslims, and Jews increased throughout the crisis but dropped by the end of the decade. This drop in violence seems to correlate broadly with the number of immigrants coming into Europe. This same upward, then downward trend mirrors the success of nationalist, populist parties during this period. This author does not find causation, but at the very least the increase in xenophobic attacks, nationalist sentiments, and populist party support correlates with the number of refugees fleeing to Europe.

1. European Migrant Crisis by the Numbers

During the 2010s, the European Parliamentary Research Service concluded that Europe was experiencing the “most severe migratory challenge since the end of the Second World War.”¹⁵⁸ This migration flow peaked in 2015 at 1.8 million, and had generally diminished by approximately 2018.¹⁵⁹ Motivations ranged from fleeing civil war, escaping different variations of intra-state violence, and seeking better economic opportunities.¹⁶⁰ The vast majority of the migration were asylum seekers and/or refugees.¹⁶¹ This status places the refugees outside of the normal, legal channels of immigration. Table 2 shows the number of illegal border crossings per year, as measured by Frontex.

¹⁵⁷ J. Clayton, “UNHCR Chief Issues Key Guidelines for Dealing with Europe’s Refugee Crisis,” United Nations High Commissioner on Refugees (UNHCR), September 4, 2015, <https://www.unhcr.org/55e9793b6.html>.

¹⁵⁸ Apap, Radjenovic, and Dobрева, *The Migration Issue*, 1.

¹⁵⁹ Apap, Radjenovic, and Dobрева, *The Migration Issue*, 1.

¹⁶⁰ Natalia Bogdan-Banulescu and Susan Fratzke, “Europe’s Migration Crisis in Context: Why Now and What Next?” Migration Policy Institute, September 24, 2015, <https://www.migrationpolicy.org/article/europe-s-migration-crisis-context-why-now-and-what-next>.

¹⁶¹ Apap, Radjenovic, and Dobрева, *The Migration Issue*, 3.

Table 2. Number of Border Crossings per Year 2010–2019¹⁶²

Year	Illegal Border Crossings
2010	103,991
2011	140,989
2012	72,382
2013	107,339
2014	282,873
2015	1,822,177
2016	511,047
2017	204,654
2018	149,036
2019	126,732

Another metric to measure the influx of refugees is by asylum applications per country. Table 3 shows the total asylum applications throughout Europe.

Table 3. Total Asylum Applications in Europe 2010–2019¹⁶³

Year	Asylum Applications
2010	285,225
2011	341,800
2012	373,555
2013	464,515
2014	662,170
2015	1,393,930
2016	1,292,760
2017	735,015
2018	665,930
2019	738,450

¹⁶² “Migratory Map,” FRONTEX, accessed June 30, 2020, <https://frontex.europa.eu/along-eu-borders/migratory-map/>.

¹⁶³ “Asylum and First Time Asylum Applicants by Citizenship, Age and Sex Annual Aggregated Data (Rounded),” Eurostat, last updated June 9, 2020, <https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>.

By any metric, the vast number of refugees “exposed a series of deficiencies and gaps in EU policies on asylum, external borders, and migrations.”¹⁶⁴

2. Social Effects

For European citizens, this influx manifested itself as various flavors of fear and hatred, whether that be xenophobia against immigrants or more specific discriminatory attitudes toward other outsider groups. The backlash against immigrants revealed itself through bigoted attitudes, prejudiced laws, and even violence. The anti-immigrant attitudes can generally be categorized as a nationalistic, populist reflex. This nativist reflex branched out from immigrants to encompass groups such as Muslims and Jews. Attacks against refugees, Muslims, and Jews increased at different levels throughout the decade. Because the influx generally increased in about 2014, European attitudes from 2014 on are provided in this section. Data provided shows yearly trends of anti-immigrant violence, anti-Semitic violence, and Islamophobic violence. Despite the majority not conducting terrorist attacks, Muslims were lumped together as a visible, tangible ‘threat’ to European citizens. Despite not being a part of the refugee crisis, anti-Semitism once again flared up across the continent. Despite Europe receiving less than 1 percent of its total population in refugees throughout the crisis, the landscape of political and public discourse appears to have shifted towards a more nationalistic, xenophobic, and violent tone.

In 2014, anti-immigrant rhetoric permeated the public sphere.¹⁶⁵ This rhetoric could manifest in different ways; in Greece, for example, police were accused of excessive force while routinely stopping refugees and there were allegations of mistreatment at detention centers.¹⁶⁶ Concurrently, xenophobia strengthened already present Islamophobic

¹⁶⁴ Apap, Radjenovic, and Dobрева, *The Migration Issue*, 3.

¹⁶⁵ European Commission Against Racism and Intolerance (ECRI), *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2014* (Strasbourg, France: Council of Europe (CoE), 2015), <https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808ae6d4>, 14.

¹⁶⁶ “World Report 2015: European Union,” Human Rights Watch, accessed June 29, 2020. <https://www.hrw.org/world-report/2015/country-chapters/croatia-european-union-france-germany-greece-hungary-italy>.

sentiments; there were frequent reports of harassment against women in traditional Muslim dress during this year¹⁶⁷ Additionally, Europeans of Jewish descent now faced a two-pronged assault. On one end, the growing nativist sentiment expanded to include anti-Semitic attacks.¹⁶⁸ On the other end, some of the Muslims arriving in Europe already holding anti-Semitic attitudes.¹⁶⁹ In the UK alone, anti-Semitic crime rose 92.8 percent.¹⁷⁰

Xenophobia increased in 2015 and also manifested in government policy.¹⁷¹ Some governments bolstered their borders or arrest those aiding refugees, as in Hungary.¹⁷² Anti-immigrant attitudes manifested as 60 attacks on refugees in Greece and excessive force allegations in Spain.¹⁷³ For Muslims, Islamic terror attacks in Europe boosted Islamophobia and further created “widespread mistrust towards Muslims.”¹⁷⁴ No surprise that in London alone anti-Muslim crime rose 46.7 percent.¹⁷⁵ Anti-Semitic trends continued from 2014, as extremists and Muslims both contributed to the ongoing

¹⁶⁷ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2014*, 11.

¹⁶⁸ ECRI, 10.

¹⁶⁹ ECRI, 11.

¹⁷⁰ Human Rights Watch, “World Report 2015: European Union.”

¹⁷¹ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2015* (Strasbourg, France: CoE, 2016), <https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808ae6d5>, 8.

¹⁷² ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2015*, 8; “World Report 2016: European Union,” Human Rights Watch, accessed June 29, 2020. <https://www.hrw.org/world-report/2016/country-chapters/croatia-estonia-european-union-france-germany-greece-hungary>.

¹⁷³ Human Rights Watch, “World Report 2016: European Union.”

¹⁷⁴ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2015*, 14.

¹⁷⁵ Human Rights Watch, “World Report 2016: European Union.”

discrimination.¹⁷⁶ In France, anti-Semitic attacks rose over 100 percent from the previous year.¹⁷⁷

In an increasingly “us” versus “them” mindset, Europe continued this trend throughout 2016.¹⁷⁸ In Germany, the European state with the largest influx of asylum seekers, 2,500 refugees were victims of violence and there were roughly 1000 attacks on refugee centers.¹⁷⁹ As Islamophobic sentiment became more and more mainstream, government actions began to emulate the discourse.¹⁸⁰ In France, law enforcement conducted thousands of warrantless raids, hundreds of house arrests, and countless police checks against Muslims; France only ended up with six criminal charges from these efforts.¹⁸¹ According to ECRI, anti-Semitism remained constant.¹⁸²

Although European austerity measures seemed to inflame tensions between European citizens and refugees even more, 2017 appeared to be a turning point in public attitudes.¹⁸³ Citizens were beginning to notice “the gap between the perception and the

¹⁷⁶ ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2015*, 15

¹⁷⁷ Human Rights Watch, “World Report 2016: European Union.”

¹⁷⁸ ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2016* (Strasbourg, France: CoE, 2017), <https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808ae6d6>, 9.

¹⁷⁹ Deutsche Welle, “Germany: More than 1,600 Crimes ‘Targeted Refugees and Asylum-seekers,’ “*Info Migrants*, March 27, 2020, <https://www.infomigrants.net/en/post/23720/germany-more-than-1-600-crimes-targeted-refugees-and-asylum-seekers>.

¹⁸⁰ ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2016*, 13

¹⁸¹ “World Report 2017: European Union,” Human Rights Watch, accessed June 29, 2020. <https://www.hrw.org/world-report/2017/country-chapters/european-union>.

¹⁸² ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2016*, 14.

¹⁸³ ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2017* (Strasbourg, France: CoE 2017), <https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808c168b>, 8, 10.

reality of migration and reinforced stereotypes and misconceptions about migrants.”¹⁸⁴ Though still quite numerous, attacks on refugees in Germany dropped to 2,219 and attacks on asylum shelters dropped to roughly 300 for the year, an 11 percent and 70 percent decrease respectively.¹⁸⁵ Anti-Muslim incidents dropped more than 44 percent in France, and anti-Muslim attacks occurred in Spain only after an Islamic terrorist incident.¹⁸⁶ However, according to ECRI, anti-Semitism continued in 2017, with “insults, threats, vandalism of synagogues or Jewish cemeteries and violence against Jewish persons...still widespread.”¹⁸⁷

Though European public attitudes appeared to shift in 2017, violence did not diminish dramatically in 2018.¹⁸⁸ Germany again saw a decline in anti-immigrant violence; attacks on refugees dropped 20 percent and attacks on asylum shelters dropped over 40 percent.¹⁸⁹ Possibly due to the terror attacks on European soil, Islamophobia persisted as well.¹⁹⁰ After declining the previous year, attacks on Muslims rose slightly in France, only an annual increase of about 8 percent.¹⁹¹ Anti-Semitism also endured; in

¹⁸⁴ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2017*, 10.

¹⁸⁵ Human Rights Watch, “World Report 2018: European Union,” Kai Dambach, “More than 2,200 Attacks on Refugees in Germany in 2017,” Info Migrants, February 28, 2018, <https://www.infomigrants.net/en/post/7797/more-than-2-200-attacks-on-refugees-in-germany-in-2017>.

¹⁸⁶ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2017*, 12; “World Report 2018: European Union,” Human Rights Watch, accessed June 29, 2020, <https://www.hrw.org/world-report/2018/country-chapters/european-union>.

¹⁸⁷ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2017*, 12.

¹⁸⁸ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2018* (Strasbourg, France: CoE, 2017), <https://rm.coe.int/annual-report-2018/168094d6fe>, 8.

¹⁸⁹ Deutsche Welle, “Germany: More than 1,600 Crimes ‘Targeted Refugees and Asylum-seekers.’”

¹⁹⁰ ECRI, *Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2018*, 10.

¹⁹¹ “World Report 2019: European Union,” Human Rights Watch, accessed June 29, 2020, <https://www.hrw.org/world-report/2019/country-chapters/european-union>.

France alone attacks rose 69 percent and “Jewish institutions, such as synagogues, community centres and cemeteries” were “often vandalised (sic).”¹⁹²

Anti-immigrant attacks would decrease further in 2019, but anti-Semitism and Islamophobia persisted. This turn in public sentiment most likely explains the further drop in German anti-refugee attacks; attacks on refugees dropped 33 percent and attacks on shelters dropped 65 percent.¹⁹³ While Islamophobia did not really increase or decrease, it did manifest a slightly different manner in 2019.¹⁹⁴ The Netherlands passed legislation banning Muslim women from wearing traditional, religious garb “on public transport, in hospitals, town halls, and educational institutions.”¹⁹⁵ This ban was claimed to “improve safety by making people more easily identifiable.”¹⁹⁶ Anti-Semitic behavior did not change significantly, but alarmingly a continent-wide survey portrayed 44 percent of Jewish youth as having experienced some form of anti-Semitic harassment.¹⁹⁷

3. Political Effects

Populist political parties and politicians gained notable support during the European migrant crisis. While this support may have been due to public xenophobic attitudes, it might also have been due to almost a complete inability to manage the crisis by government leaders.¹⁹⁸ Instead of focusing on asylum reform or protecting refugees. European

¹⁹² ECRI, Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2018, 11; Human Rights Watch, “World Report 2019: European Union.”

¹⁹³ Human Rights Watch, “World Report 2020: European Union,” accessed June 29, 2020, <https://www.hrw.org/world-report/2020/country-chapters/european-union>.

¹⁹⁴ ECRI, Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2019, 11.

¹⁹⁵ Human Rights Watch, “World Report 2020: European Union.”

¹⁹⁶ Jack Guy, “The Netherlands has introduced a ‘Burqa Ban’ – but its Enforcement is in Doubt,” CNN, August 1, 2019, <https://edition.cnn.com/2019/08/01/europe/netherlands-burqa-ban-scli-intl/index.html>.

¹⁹⁷ ECRI, Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2019, 12; Human Rights Watch, “World Report 2020: European Union.”

¹⁹⁸ Aldo Ardon, “The Return of the Radical Right in Spain” (master’s thesis, Naval Postgraduate School, 2020, 75, <http://hdl.handle.net/10945/64861>).

governments instead narrowed in on deterring refugees, hardening borders, and outsourcing the problem. Electoral trends from 2014 onward show that support for populist parties started to wane in about 2017. However, populist parties have not disappeared and continue to be present in many European governments and at the intergovernmental level.

With the political and public landscape altered in Europe, politicians of populist parties running on nationalistic anti-immigration platforms received strong support beginning in about 2014.¹⁹⁹ Combined with mismanagement and discord among European states, refugees began having their movement restricted various countries along their path without adequate aid.²⁰⁰ This restriction of movement was most notable when such countries as Hungary, Slovenia, and Croatia closed their borders entirely to refugees.²⁰¹ This policy of exclusion evolved by roughly 2016, and some states were increasingly making distinctions when excluding incomers “on the basis of their skin colour, religion, language, or ethnicity.”²⁰² Greece failed to provide adequate law enforcement support for refugees, Hungary essentially criminalized migration, and the UK used the crisis as a catalyst to vote itself out of the EU.²⁰³ In addition to being stuck in some countries, violence against refugees also erupted on both Turkish and Greek borders.²⁰⁴ Human Rights Watch describes this period as a complete failure “to show leadership and solidarity in the face of the largest global displacement crisis since World War II.”²⁰⁵ Instead, European states narrowed in on issues of security, cultural identity, stopping new arrivals, and attempting to have other regions take in refugees.²⁰⁶

¹⁹⁹ Schain, *Shifting Tides*, 1; ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2014*, 14.

²⁰⁰ Human Rights Watch, “World Report 2016: European Union.”

²⁰¹ Human Rights Watch, “World Report 2016: European Union.”

²⁰² ECRI, *Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2016*, 9.

²⁰³ Human Rights Watch, “World Report 2017: European Union.”

²⁰⁴ Human Rights Watch, “World Report 2017: European Union.”

²⁰⁵ Human Rights Watch, “World Report 2017: European Union.”

²⁰⁶ Human Rights Watch, “World Report 2017: European Union.”

Europe fared no better in 2017. States work vigorously to stop new arrivals and outsource responsibility for migration control to countries outside the EU's borders.²⁰⁷ One example of this outsourcing was in Libya, where the EU worked with local authorities to stop immigration despite evidence refugees would face harsh consequences if stuck in Libya.²⁰⁸ Even if refugees made it to European soil, asylum laws evolved to "make it easier to summarily reject claims, send people to countries outside the EU based on the "safe third country" concept, and revoke refugee status."²⁰⁹ However, as noted, 2017 also seemed to mark a tipping point in public attitudes, and manifested as lower incidence rates of attacks on refugees. Anti-immigrant rhetoric clashed with the reality; warming European reception of refugees generally led to lower support for populist parties.²¹⁰

Hyper-nationalistic politicians would still advocate their brand of exclusion in 2018.²¹¹ Continuing disagreement on asylum reform at the intergovernmental level also led to continuing efforts to block refugee access to Europe.²¹² However, the EU did start pushing back at countries that perhaps went too far. In September of 2018, the European Parliament (EP) used treaty law to curtail some of Hungary's recent developments, one of which was its restrictive refugee policy.²¹³ The EP's ruling and other international lawsuits

²⁰⁷ Human Rights Watch, "World Report 2018: European Union."

²⁰⁸ Human Rights Watch, "World Report 2018: European Union."

²⁰⁹ Human Rights Watch, "World Report 2018: European Union."

²¹⁰ ECRI, Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2017, 10.

²¹¹ ECRI, Annual Report on ECRI's Activities: Covering the Period from 1 January to 31 December 2018, 8; Human Rights Watch, "World Report 2019: European Union."

²¹² Human Rights Watch, "World Report 2019: European Union."

²¹³ Human Rights Watch, "World Report 2019: European Union."

did free refugees from holding camps, but sanctions against Hungary have yet to materialize.²¹⁴

While 2019 saw some electoral gains for populist parties, other parties declined in support both on the national and intergovernmental level.²¹⁵ This decline in support could also be a result of declining visibility of the problem; refugee arrivals by land and sea further dropped this year.²¹⁶ Nevertheless, European states still maintained support of border control using other countries to outsource the issue.²¹⁷ As a result, little progress was made in asylum reform or expanding refugee care.²¹⁸

D. CONCLUSION

Even though European public attitudes have shifted to a somewhat more inclusive nature and support for populist parties has waned, there is still a substantial populist presence in European politics. This presence is most notable in political systems that have proportional representation which allow representation of multiple parties.²¹⁹ However, conventional, mainstream political parties have had to augment their own messaging, sometimes making conciliatory agreements to appease the popularity of populist ideas.²²⁰ In the Netherlands, the non-populist party Prime Minister essentially told refugees to adapt

²¹⁴ “Rule of Law in Hungary: Parliament Calls on the EU to Act,” December 9, 2018, <https://www.europarl.europa.eu/news/en/press-room/20180906IPR12104/rule-of-law-in-hungary-parliament-calls-on-the-eu-to-act>; “Hungary Frees Refugees Trapped on its Border, but Tightens Rules,” Al Jazeera, May 21, 2020, <https://www.aljazeera.com/news/2020/05/hungary-frees-refugees-trapped-border-tightens-rules-200521203317243.html>.

²¹⁵ ECRI, Annual Report on ECRI’s Activities: Covering the Period from 1 January to 31 December 2019, 7.

²¹⁶ Human Rights Watch, “World Report 2020: European Union.”

²¹⁷ Human Rights Watch, “World Report 2020: European Union.”

²¹⁸ Human Rights Watch, “World Report 2020: European Union.”

²¹⁹ Schain, *Shifting Tides*, 2.

²²⁰ Schain, *Shifting Tides*, 2; William A. Galston, “The Rise of European Populism and the Collapse of the Center-left,” Brookings Institute, last modified March 8, 2018, <https://www.brookings.edu/blog/order-from-chaos/2018/03/08/the-rise-of-european-populism-and-the-collapse-of-the-center-left/>.

to the European way of life or be sent back in 2017.²²¹ In 2019, Phillip Lee, a member of the Conservative party in the United Kingdom, left his party stating “it has become infected by the twin diseases of English nationalism and populism.”²²² Populist ideas, even if populist parties are waning, appear to have mainstream staying power.

Although some literature alludes to economics being a factor for populist electoral success, support is also drawn from “public opposition to mass immigration, cultural liberalization, and the perceived surrender of national sovereignty to distant and unresponsive international bodies.”²²³ After all, the economy of the United Kingdom had rebounded prior to the Brexit vote, and Poland had a booming economy with major populist victories.²²⁴ Populist platforms capitalized on perceived threats to national sovereignty, monetary policy, cultural heritage, and changing sentiments on immigration.²²⁵

One byproduct of this surge in populist support is reinvigorated Euroscepticism.²²⁶ Euroscepticism is not a new phenomenon. In the EP, the present of Eurosceptics has remained relatively constant from 1979 to about 2009, as show in Figure 5.

²²¹ Galston, “The Rise of European Populism and the Collapse of the Center-left.”

²²² “Brexit: Tory MP Defects Ahead of Crucial No-deal Vote,” *BBC News*, September 3, 2019, <https://www.bbc.com/news/uk-politics-49570682>.

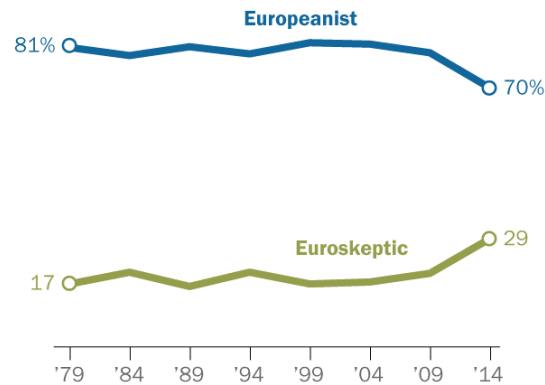
²²³ Schain, *Shifting Tides*, 5; Galston, “The Rise of European Populism and the Collapse of the Center-left.”

²²⁴ Galston, “The Rise of European Populism and the Collapse of the Center-left.”

²²⁵ Schain, *Shifting Tides*, 6–8.

²²⁶ Lazaridis, Campani, and Benveniste, *The Rise of the Far Right in Europe*, 20.

Figure 5. Eurosceptics in the European Parliament, 1979–2017²²⁷



But also shown in Figure 5 is a trend upward of Eurosceptics during the 2010s. In 2019, the most recent EP composition is roughly the same percentage as the 2014 election.²²⁸ Not all European populists are Eurosceptic. But, as Table 4 shows, the majority hold Eurosceptic views.

²²⁷ Drew Desilver, “Euroskeptics are a Bigger Presence in the European Parliament than in Past,” Pew Research Center, May 22, 2019, <https://www.pewresearch.org/fact-tank/2019/05/22/euroskeptics-are-a-bigger-presence-in-the-european-parliament-than-in-past/>.

²²⁸ Ariadna Ripoll, “The New European Parliament: More Eurosceptic?” The UK in a Changing Europe, September 16, 2019. <https://ukandeu.ac.uk/the-new-european-parliament-more-eurosceptic/>.

Table 4. Current Successful Populist Parties in Europe²²⁹

Country	Party	Eurosceptic	NVP ²³⁰	MEPs ²³¹
Austria	Freedom Party of Austria	X	16.2	3
Belgium	Flemish Interest	X	11.95	3
Bulgaria	United Patriots (NFSB and Attack)	X	9.31	0
Croatia	Bridge of Independent Lists		9.91	0
Cyprus	Citizens Alliance		6.01	0
Czechia	Freedom and Direct Democracy	X	10.79	2
Denmark	Danish People's Party	X	8.7	1
Estonia	Estonian Conservative People's	X	17.8	1
Finland	Finns Party	X	17.5	2
France	National Front	X	8	22
Germany	Alternative for Germany	X	12.6	11
Greece	Syriza	X	31.53	6
Hungary	Fidesz	X	49.27	13
Iceland	Centre Party	X	10.9	N/A
Ireland	Sinn Fein	X	24.5	1
Italy	Northern League	X	17.35	28
Latvia	Who Owns the State?	X	14.25	0
Lithuania	Order and Justice	X	3.28	0
Luxembourg	Alternative Democratic Reform	X	8.28	0
Netherlands	Party for Freedom	X	13.1	1
Norway	Progress Party	X	15.19	N/A
Poland	Law and Justice	X	43.6	26
Serbia	Serbian Radical Party	X	8.1	N/A
Slovakia	Slovak National Party	X	3.16	0
Slovenia	Slovenian Democratic Party		24.92	2
Spain	Vox - Voice	X	15.08	3
Spain	Podemos	X	12.86	3
Sweden	Sweden Democrats	X	17.53	3
Switzerland	Swiss People's Party	X	25.6	N/A
Ukraine	The Radical Party of Oleh	X	4.01	N/A

²²⁹ Refer to Appendix A.²³⁰ National vote percentage from most recent legislative or parliamentary elections.²³¹ Numbers of Members of the European Parliament.

Eurosceptic populists reject EU governance and instead advocate for a more nationalistic style by contending that national heritage is a stronger, more enduring historical identity.²³² Populists therefore call into question the legitimacy of the EU project with claims of inefficiency and claims of not being truly representative of the people.²³³ However, populist opposition to the EU is not solely derivative of Euroscepticism; opposition to the EU merely fits comfortably into the ideology of populism and is not a central theme, but just a consequence.²³⁴

This skepticism can range from hard or soft, but the general theme of returning sovereignty and power to national bodies is still present. The now infamous United Kingdom referendum in 2016 to leave the EU provides crucial insight into what motivates EU citizens to vote to remain or leave. Market research firm Ipsos MORI found that just prior to the vote, the biggest concern of UK citizens was immigration.²³⁵ Forty-eight percent listed immigration as their top concern, compared with the EU being the top concern coming in at only thirty-two percent.²³⁶

Skepticism aside, there are also geopolitical concerns at stake when discussing European populism. When taking a small sample size of notable populist parties, pro-Russian stances are very apparent. When a German member of the Alternative for Germany (AfD) was asked about the Russian annexation of Crimea, he responded that it was a Ukrainian problem and thus not important to Germany.²³⁷ This AfD politician also claimed

²³² Lazaridis, Campani, and Benveniste. *The Rise of the Far Right in Europe*, 20.

²³³ Lazaridis, Campani, and Benveniste. *The Rise of the Far Right in Europe*, 20–21.

²³⁴ Andrea LP Pirro, Paul Taggart, and Stijn van Kessel, “The Populist Politics of Euroscepticism in Times of Crisis: Comparative Conclusions,” *Politics* 38, no. 3 (2018): 388, <https://doi.org/10.1177%2F0263395718784704>.

²³⁵ “Concern About Immigration Rises as EU Vote Approaches,” Ipsos MORI, June 22, 2016, <https://www.ipsos.com/ipsos-mori/en-uk/concern-about-immigration-rises-eu-vote-approaches>.

²³⁶ Ipsos MORI, “Concern About Immigration Rises as EU Vote Approaches.”

²³⁷ Chesnokov, Edward, “Head of the Alternative for Germany Party Alexander Gauland: The Situation in the Donbass is an Internal Affair of Russia and Ukraine,” *Komsomolskaya Pravda*, last modified March 9, 2019, <https://www.kp.ru/daily/26951.5/4003938/>.

that this “internal affair” should not involve anyone in the West.²³⁸ The Freedom Party of Austria (FPO) has actually signed a cooperation agreement with the dominant Russian political party.²³⁹ Similarly, the FPO has also backed Russian claims in Crimea and opposes sanctions.²⁴⁰ French National Front (NF) leader Marie Le Pen has also publicly stated that Russian actions in Crimea were completely legal and not requiring intervention.²⁴¹ These statements by AfD, FPO, and NF members clearly indicate a Pro-Russian stance, regardless of the implications for Western security.

Migration crises appear to coincide with greater support for populist parties. Populist parties are overwhelmingly Eurosceptic, and some are very pro-Russian. If there is a much stronger migration crisis, and the crisis is not handled adequately, populist parties could reach even higher representation in European politics. With controlling coalitions, populists could enact legislation restricting movement within the EU. If there are serious attacks on the Schengen Agreement amidst a migration crisis, the current EU Migration Commissioner warns that it would be “the beginning of the end of the European project.”²⁴² Even if the EU is safe from dissolution, populist majorities could shift European politics away from the United States. The repercussions of this slant could range from limitations on intelligence-sharing within NATO, limitations on future NATO operations, or possibly even calling NATO’s continued existence into question.

²³⁸ Chesnokov, “Head of the Alternative for Germany Party Alexander Gauland: The Situation in the Donbass is an Internal Affair of Russia and Ukraine.”

²³⁹ “Austrian Far-Right Party Signs Cooperation Pact with United Russia,” Radio Free Europe, December 19, 2016, <https://www.rferl.org/a/russia-austria-freedom-party-pact-putins-party/28185013.html>.

²⁴⁰ Radio Free Europe, “Austrian Far-Right Party Signs Cooperation Pact with United Russia.”

²⁴¹ Tom Batchelor, “Marine Le Pen Insists Russian Annexation of Crimea is Totally Legitimate,” The Independent, last updated January 3, 2017, <https://www.independent.co.uk/news/world/europe/marine-le-pen-crimea-russia-putin-ukraine-illegal-annexation-france-front-national-fn-a7507361.html>.

²⁴² Ben Antenore, “Can the Schengen Agreement Survive the EU Refugee Crisis?” The European Institute, February 18, 2016, <https://www.europeaninstitute.org/index.php/archive/208-blog/276-february-2016/2129-can-the-schengen-agreement-survive-the-eu-refugee-crisis-2-18>.

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III. RESPONSES TO CLIMATE CHANGE-INDUCED MIGRATION

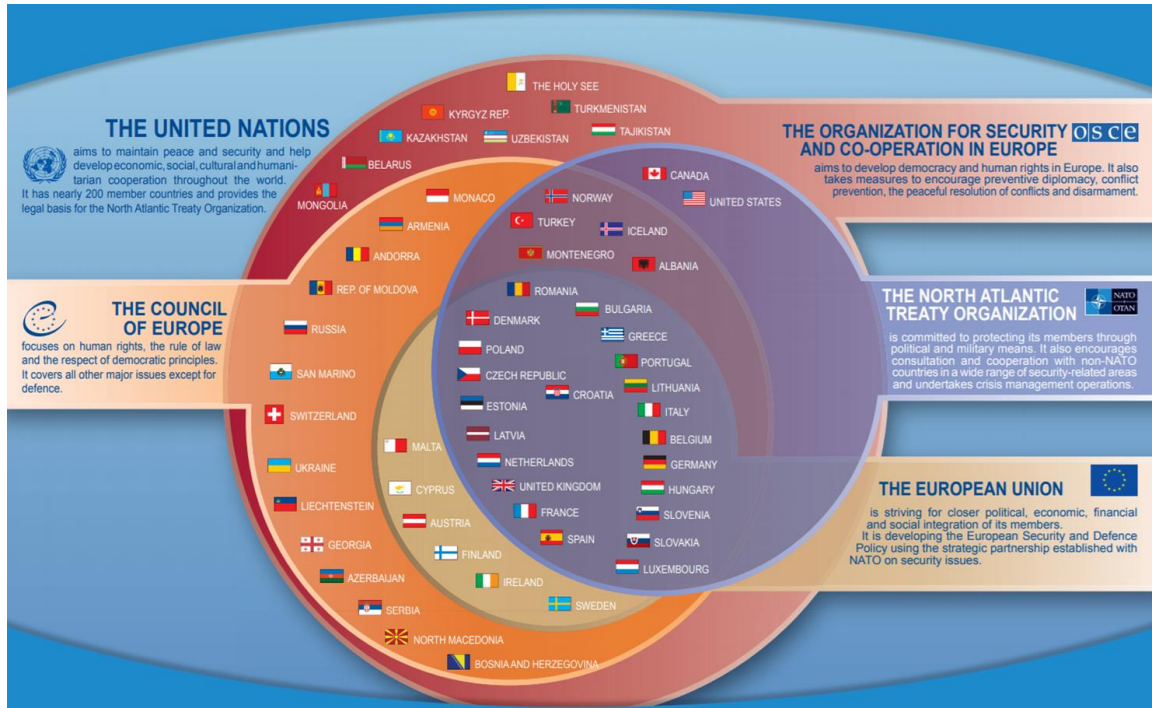
Millions of refugees will undoubtedly spark national and international efforts to manage CCIM. However, by evaluating major agencies and their core mission sets, it can be determined which organization can offer a more complete response. For the purposes of this work, the main competitors are the UN, the CoE, the OSCE, the EU's CSDP, and NATO.

In this chapter, each of these intergovernmental agencies offers possible benefits and consequences if they were to take the lead on CCIM. In the first section, each organization is evaluated on objective criteria such as historical precedent, availability of resources, and potential conflicts of interest. In the second section, fictional narratives are created based on predictions of the NIC. These narratives provide personalized and subjective lenses with which to view future FCM journeys and further emphasize gaps of each intergovernmental agency's capabilities. Out of the five agencies, only NATO appears to have the organizational depth to offer a powerful response to CCIM.

A. ASSESSING INTERNATIONAL AGENCIES' ABILITY TO RESPOND

If eight and a half million FCMs attempt to enter the EU by 2040, there will almost assuredly be a response at the international level. However, not all agencies have the same mandate or resource level capable of responding to such a task. Additionally, there is also considerable overlap among various organizations, as seen in Figure 6.

Figure 6. Security Organizations by Country²⁴³



Major intergovernmental agencies, such as the UN, CoE, OSCE, CSDP, or NATO, are the likely response to such a migration. Each of these organizations has different strengths and weaknesses when responding to CCIM. This research evaluates the agencies on past performance, resource and manpower depth, and potential internal conflicts of interest. In addition to historical and recent precedents, only NATO appears to have the appropriate resources, alliance members, manpower, and assets to respond.

1. The United Nations

The UN has an inherently global outlook. It cannot focus all of its time and energy on one specific region at the detriment of others. CCIM will affect many different areas of the world, and therefore might outpace the resources available to respond. In addition, a ruling in January 2020 by the UN Human Rights Committee “determined that countries

²⁴³ “Working Together for Peace and Security,” North Atlantic Treaty Organization (NATO), last updated April 15, 2019, https://www.nato.int/cps/en/natohq/topics_82719.htm.

cannot deport people who have sought asylum due to climate-related threats.”²⁴⁴ Considering the lack of a boots-on-ground response by the UN to the European migrant crisis, it is therefore suspect whether the UN would respond at all.

If the UN does respond to CCIM in Europe, it will draw on a legacy of peacekeeping missions. The majority of the UN’s previous efforts have focused on either monitoring cease fires, stabilization missions, monitoring post-war conflicts, and enforcing the peace process.²⁴⁵ However, there was also a UN mission that deal specifically with the issue of a mass movement of refugees: MINURCAT.²⁴⁶ MINURCAT, or the United Nations Mission in the Central African Republic and Chad, was launched in 2007 as a response to tensions caused by migration.²⁴⁷ This operation was triggered by approximately 300,000 refugees fleeing violence in Darfur and refugees internally displaced by the civil war in Chad.²⁴⁸ With about 5,500 personnel, the UN did manage to protect civilians and conduct security operations.²⁴⁹

2. The Council of Europe

The CoE is an implausible response to managing CCIM because of its core mission. The CoE advances notional Western ideals, i.e., human rights and democracy.²⁵⁰ State stabilization and border control are not under its purview. The CoE will most likely be

²⁴⁴ “UN Human Rights Ruling Could Boost Climate Change Asylum Claims,” UN News, last updated January 21, 2020, <https://news.un.org/en/story/2020/01/1055671>.

²⁴⁵ “Our History,” United Nations (UN), accessed February 19, 2020, <https://peacekeeping.un.org/en/our-history>; “Historical Timeline of UN Peacekeeping,” United Nations (UN), accessed February 19, 2020, <https://peacekeeping.un.org/en/historical-timeline-of-un-peacekeeping>.

²⁴⁶ “MINURCAT,” United Nations (UN), accessed January 30, 2020, <https://peacekeeping.un.org/sites/default/files/past/minurcat/background.shtml>.

²⁴⁷ “MINURCAT,” UN.

²⁴⁸ “MINURCAT,” UN.

²⁴⁹ World Peace Foundation, *United Nations Mission in the Central African Republic and Chad (MINURCAT) / European Union Force (EUFOR)* (Medford, MA: Fletcher School of Law and Diplomacy, 2017), <https://sites.tufts.edu/wpff/files/2017/07/Chad.pdf>, 1; “MINURCAT,” UN.

²⁵⁰ “Achievements,” Council of Europe, accessed January 27, 2019, <https://www.coe.int/en/web/about-us/achievements>.

involved in monitoring the rights of FCMs and ensuring the rule of law but is an unlikely ally in providing resources or manpower in either deterring or assisting FCMs.²⁵¹

3. The Organization for Security and Co-operation in Europe

The OSCE does conduct missions that in theory are a possible response to CCIM, notably in the realm of border management, conflict prevention, and policing.²⁵² However, there are two major drawbacks for relying on the OSCE in the context of CCIM. First, it only employs about 3,500, and this is the total that support all of its operations.²⁵³ Perhaps more importantly, Russia is a member of the OSCE.²⁵⁴ Though no hard evidence is available, some theorize that Russia is exploiting the refugee crisis into Europe as part of a larger strategic move in undermining the West.²⁵⁵ Even a former NATO Supreme Allied Commander adheres to this theory and claims Russia is in essence “weaponizing migration.”²⁵⁶

4. The Common Security and Defence Policy

The CSDP, the joint forces of EU members, is not easily discounted. In fact, a report done by the European Security and Defence College advocates how strong a role the CSDP can play in managing migration.²⁵⁷ There is also historical precedent: the CSDP did in fact

²⁵¹ “Migrations,” Council of Europe, accessed July 12, 2020, <https://www.coe.int/en/web/compass/migration>.

²⁵² “What We Do,” Organization for Security and Co-operation in Europe, accessed January 27, 2020, <https://www.osce.org/what-we-do>.

²⁵³ “Employment,” Organization for Security and Co-operation in Europe, accessed January 27, 2020, <https://jobs.osce.org/>.

²⁵⁴ “Participating States,” Organization for Security and Co-operation in Europe, accessed January 27, 2020, <https://www.osce.org/what-we-do>.

²⁵⁵ J. R. Nyquist and Anca-Maria Cernea, *Russian Strategy and Europe’s Refugee Crisis* (Washington, DC: Center for Security Policy, 2018), https://www.centerforsecuritypolicy.org/wp-content/uploads/2018/05/Russia_Refugee_05-28-18.pdf.

²⁵⁶ Nyquist and Cernea, 13.

²⁵⁷ European Security and Defence College (ESDC), *Migration – How CSDP can Support* (Brussels, Belgium: ESDC, 2016), https://eeas.europa.eu/topics/migration/10866/migration-how-csdp-can-support_en.

respond to the European Migration crisis with Operation Sophia in 2015.²⁵⁸ At its peak, ten naval and nine aviation units conducted anti-human-trafficking operations in the Mediterranean Sea.²⁵⁹

The CSDP has the manpower and mandate to monitor and control future migration into Europe and has already proved itself during the European migrant crisis.²⁶⁰ However, operations such as Sophia encounter difficulty when requiring the aid and assistance of countries that are not part of the EU. Turkey is not a member of the EU but is a member of NATO. This is why when another maritime operation was launched in the Aegean Sea to combat illegal migration, NATO was activated instead.²⁶¹ The close cooperation necessary between Greece and Turkey necessitated a NATO-coordinated effort simply because both countries are members of that alliance, not the CSDP.

The EU could activate the CSDP in response to both land and sea CCIM scenarios. While it might perform admirably at sea, the CSDP would suffer against migration over land. Considering Turkey is part of a major migration route the CSDP might prove ineffective. Also, despite having the backing of EU militaries, the CSDP could become overextended in its efforts to stem the flow of millions of FCMs across multiple international borders.

5. The North Atlantic Treaty Organization

NATO has both historic precedent and the capability to respond to migration crises.²⁶² Even prior to its formation in 1949, states that would become the core of NATO were using their militaries to assist and safeguard the millions of refugees post-World War

²⁵⁸ Steven Blockmans, “New Thrust for the CSDP from the Refugee and Migrant Crisis,” *CEPS Special Report* 142, (July 2016), <http://aei.pitt.edu/78095/>, 5–8.

²⁵⁹ Blockmans, 5.

²⁶⁰ ESDC, Migration – How CSDP can Support, 12.

²⁶¹ Blockmans, “New Thrust for the CSDP from the Refugee and Migrant Crisis,” 8.

²⁶² Michael Townsend, “Will the Real Multinational Elephant in the Room Please Stand Up? The Need for NATO Assistance in Europe’s Migrant Crisis,” *Military Law Review* 225, no. 1 (2017): 216–257, https://www.loc.gov/rr/frd/Military_Law/Military_Law_Review/pdf-files/225-issue1-2017.pdf.

II.²⁶³ In the 1990s, NATO deployed to both Bosnia and Kosovo to protect and safeguard refugees following violent conflict in the aftermath of the Soviet Union’s demise.²⁶⁴

NATO’s response to CCIM would notionally fall in line with previous mission subsets, such as peacekeeping operations in support of civil authorities or maritime surveillance and interdiction. Although NATO does not encompass as many European states as the CSDP, NATO does benefit from having both Turkey and the United States. With Turkey being a main hub of migration, and the depth of resources at the disposal of the United States, NATO appears to be a very attractive choice in dealing with CCIM. However, a NATO response to migration crises does have the potential to undermine “a unified policy on Russia” because it distracts and shifts resources away from other ongoing NATO missions.²⁶⁵

B. FICTIONAL CCIM SCENARIOS

To see how this world event might evolve, this section creates fictional stand-ins to further identity gaps in responses. An imaginary family emanating from Egypt and an imaginary family from Lebanon are used to personalize future FCMs’ experiences. Their backstories are based almost entirely upon the objective predictions of the NIC, with a few current events added in for relevancy.²⁶⁶ While fictional and subjective, the fictional accounts highlight how experiences may vary depending on who is coming to the FCMs’ aid. Of the journeys experienced by these families, only NATO appears poised to respond adequately to the plight of these FCMs.

²⁶³ Matthew N. Metzel and John M. Lorenzen, “Military Force and Mass Migration in Europe,” *Parameters* 47, no. 3 (September 22, 2017): 56, <https://www.armyupress.army.mil/Portals/7/Hot%20Spots/Documents/Jihad-Europe/Refugees-in-Europe-Parameters.pdf>.

²⁶⁴ Metzel and Lorenzen, 57–60.

²⁶⁵ Stephanie Pezard, Andrew Radin, Thomas S. Szayna, and F. Stephen Larrabee, *European Relations with Russia* (Santa Monica, CA: RAND Corporation, 2017), https://www.rand.org/content/dam/rand/pubs/research_reports/RR1500/RR1579/RAND_RR1579.pdf, 18.

²⁶⁶ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries); NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries).

1. By Sea—Ahmed and Fatma Flee Africa

In 2030, Ahmed and his wife Fatma make the decision to flee Cairo. Cairo is now struggling under the weight of supporting the influx of Egypt’s rural inhabitants and SSA FCMs.²⁶⁷ The state response has been completely ineffective and has not given enough assistance to those struggling to simply survive.²⁶⁸ This lack of assistance has led the booming population to foment chaos in the streets.²⁶⁹ Rioters have started to burn multiple businesses down. Ahmed’s employer, car manufacturer Arab American Vehicles, is caught in the crossfire and destroyed. Lacking the savings and connections to flee legally, Ahmed and Fatma are left no recourse but to travel north and acquire passage to Europe, and hopefully a better future.

Depending on which future timeline is followed, Ahmed and Fatma have varied experiences. Each timeline begins with the same generic premise: Ahmed and Fatma flee Egypt by sea and head to Italy. The encounters with the UN and CoE are underwhelming due to lack of agency and assets. On the other hand, the two are saved and live happy lives if encountering OSCE, CSDP, and NATO.

a. Ahmed and Fatma’s Lack of Experience with the United Nations

Ahmed and Fatma flee Cairo and head north. On the coast of Egypt, various human traffickers are extorting those who can pay for passage. Luckily having enough left to offer, Ahmed and Fatma head out on a barely sea-worthy vessel for Italy. The seasoned human traffickers easily outmaneuver the local coast authorities. Ahmed and Fatma experience widespread xenophobia once reaching Italian soil; Italian locals have grown excessively hostile toward new FCMs coming ashore. Finding Italy has self-limited its asylum program, Ahmed and Fatma again journey north.

Ahmed and Fatma finally reach Germany after weeks of travel. They have depleted their remaining money and are both suffering from cholera but are able to apply for asylum

²⁶⁷ NIC, North Africa: The Impact of Climate Change to 2030 (Selected Countries), 31–32.

²⁶⁸ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 14.

²⁶⁹ NIC, North Africa: The Impact of Climate Change to 2030: Geopolitical Implications, 13.

because of the German governments' pro-migration policies. The psychological toll on both has manifested as severe post-traumatic stress disorder. Battling health and mental ailments, neither one of them can fully integrate into the German economy or way of life for years. But Ahmed and Fatma have survived. They have also not seen a single UN soldier their entire journey.

b. *Ahmed and Fatma—The Council of Europe's Intervention*

Ahmed and Fatma reach Italy. The CoE has an active presence in Italy as it is one of the major migration routes. With the CoE's constant oversight, Italy is unable to illegally deter FCMs and instead houses Ahmed and Fatma in an overcrowded processing facility. Unfortunately, the CoE is unable to provide proper oversight over all the facilities. Ahmed falls ill with tuberculosis. He dies without ever actually receiving medical care. Fatma's grief is short-lived as she is routinely abused in the facility by other FCMs. After months of waiting, Fatma is granted asylum and transported to Germany. Having no vocational skills, Fatma lives the rest of her life as a maid in German hotels.

c. *Ahmed and Fatma—An OSCE Success Story*

Ahmed and Fatma arrive in Italy. Knowing the hotspots of migration, the OSCE has set up a processing center to assist Italian authorities in handling the crisis. After only a few weeks of waiting both Ahmed and Fatma relocate and are granted asylum in Germany. An NGO contracted by the OSCE places Ahmed, who has a solid grasp of English, at a job in at the multinational car manufacturer BMW. Ahmed eventually earns enough money to raise a family. After waiting the legal requirement of eight years, Ahmed and Fatma become legal German citizens and live out the rest of their life within German territory.

d. *Ahmed and Fatma—Saved by the CSDP*

Ahmed and Fatma never make it to Italy. A French naval ship spots and boards the vessel. The human traffickers are arrested and identified as low-level thugs working for the Mafia. The French ship transports Ahmed and Fatma safely to Marseille. After barely a week of processing and medical examinations, France grants Ahmed and Fatma asylum.

An EU-contracted NGO settles Ahmed and Fatma outside of Lyon. After learning some rudimentary French, Ahmed finds a job at a Renault plant and they live out their lives peacefully thanks to the CSDP.

e. Ahmed and Fatma—Saved by NATO

Ahmed and Fatma barely make it a few miles from the Egyptian coast before a U.S. warship appears alongside. Having the combined intelligence and surveillance network of major European powers and the United States, the U.S. warship knew exactly where to position itself to intercept the FCMs. U.S. Sailors arrest the human traffickers and bring the FCMs aboard. The U.S. warship brings Ahmed and Fatma to a NATO facility in Italy for health examinations and asylum processing. Canada grants asylum to Ahmed and Fatma and a Canadian NGO help settle the two in Ontario. With his knowledge of English, Ahmed acquires gainful employment at car manufacturer Magna International. Ahmed and Fatma live out their days peacefully.

2. By Land—Elie’s Family Flee the Middle East

In the year 2030, Beirut has fallen. The Lebanese military finally put down the civil unrest that started in 2019–2020, but the economy has not recovered.²⁷⁰ The Lebanese currency has only recently recovered to 80 percent of its 2019 value. The resulting decade of austerity has led to large swaths of Lebanese being unemployed. Combined with the increasing water scarcity Beirut has been a hotbed of unrest and riots for most of the 2020s.²⁷¹ Elie, a middle-class financier, has survived the economic crash but his savings has been wiped out entirely. Elie, his wife Marie, his son Charbel, and his daughter Mariam are barely making ends meet. Elie’s family probably could have survived in Beirut for many more years, but disaster has struck. The Israeli and Lebanese governments have struggled to come to a compromise over water-sharing. The Lebanese authorities have

²⁷⁰ Thomson Reuters, “Lebanon Protesters Burn Roads, Clash with Police in Unrest over Currency Clash,” Canadian Broadcasting Company, June 12, 2020, <https://www.cbc.ca/news/world/lebanon-protest-currency-1.5610977>.

²⁷¹ Brown and Crawford, *Rising Temperatures, Rising Tensions*, 12; Johnstone and Mazo, “Global Warming and the Arab Spring,” 11–17.

claimed sovereign authority over the Jordan River's dwindling resources and attempted to hoard water.²⁷² Israel has responded with precision military strikes against soft targets.²⁷³ These strikes are not enough to start an all-out war throughout the region, but enough to put all militaries on alert. The ensuing fallout of Lebanon buckling to Israeli military might combined with the already omnipresent unrest has led to full on civil war. Seeing no choice but to leave, Elie and his family depart for Europe.

Unlike the sea scenario, Elie and his family do not have a majority of happy endings. For each of these timelines, Elie and his family head to Europe via Syria and Turkey. Neither the UN, CoE, OSCE, or CSDP have the reach or assets to ensure the safety of Elie's family. Only NATO, and especially the high-powered NATO military assets, have the infrastructure necessary to not only secure Elie and his family, but protect them along the journey.

a. *Elie Finds No Solace with the United Nations*

Elie and his family leave Beirut and travel to Syria. They follow the well-known paths of previous Syrian refugees and find refuge in a large migrant caravan. The journey is perilous; Syria is still engaged in an ongoing proxy war/civil conflict. Twenty miles south of the Syrian-Turkish border, an unknown group of extremists stops the caravan. Seeking young, able-bodied men and women for their cause the rebels begin picking out refugees to take by force. Quickly hiding Mariam, Elie is unable to stop the rebels from spotting Fatma or Charbel. Rebels accost Elie and shoot him in the leg when he interferes. Writhing and bleeding on the ground, the last Elie sees of his wife or son is on Syrian soil.

Hobbled by injury, but determined, Elie and his daughter continue their trek into Turkey. The UN, unable to securely set up an operation in Syria, has instead positioned itself on the Turkish border. The UN outpost is manned, equipped, and ready to take in Elie and Mariam. After months of processing, the UN relocates the two to France. Being a Lebanese Francophone, Elie is able to get a job working again in the finance industry.

²⁷² Brown and Crawford, *Rising Temperatures, Rising Tensions*, 12, 21, 28.

²⁷³ Brown and Crawford, 28.

Elie's mobility never truly returns, and he is continuously haunted by the loss of his wife and son. Mariam never fully recovers from the trauma. The UN saved them, but it was too late. The damage had already been done.

b. Elie's Family—The Council of Europe's Failed Intervention

Elie and his family travel through Syria and are accosted by an unknown rebel faction. Only Elie and Mariam reach Turkish soil. Unfortunately, they find no sanctuary. Turkey has had increasingly tenuous relations with the EU. The CoE's office in Ankara is harassed and CoE officials are unable to assist any FCMs in Turkey. However, Turkish authorities still provide enough assistance for refugees if they continue to migrate. Elie and Mariam see no choice but to travel west in hopes of reaching Greece.

Elie, hobbled from his injury trying to protect his family, is unable to make the over 500-mile trek across Turkey. He forces his daughter to continue without him and stay with the rest of the migrant caravan. Weeks of grueling marching later, Mariam and her travelling companions finally reach the Greek border. A Greek processing facility houses and feeds her and eventually finds her asylum. Having lost every member of her family, Mariam struggles to adapt to Greek life for the remainder of her years.

c. Elie's Family—An OSCE Failure

A wounded Elie and Mariam thankfully reach the Turkish border. The OSCE has assisted Turkish authorities in pinpointing the greatest migration routes and subsequently most if not all the FCMs are housed and sheltered. Not having the EU's best interests in mind, a Russian OSCE agent arranges travel for Elie and Mariam to Poland.

Poland has been rebuffing the EU's attempts at regulating quotas of FCMs, and Polish authorities are doing nothing more than rounding up FCMs. Polish border agents bring Elie and Mariam to what they believed was a processing facility but is just a shanty town with limited food and water. Months pass as Elie and Mariam hope to be granted asylum. One fateful night, a xenophobic hate-group tosses homemade Molotov cocktails into the shanty town. Elie and Miriam are unable to escape the walled confines of the migrant camp. They perish huddled together against a fence.

d. *Elie's Family—Almost Outside the Reach of CSDP*

Mariam has lost her brother and mother to Syrian rebels, has had to leave her father behind in the middle of Turkey, and is travelling with a migrant caravan heading for Greece. Having no authority in Turkey, the CSDP cannot enter and assist. Undernourished and weak, Mariam barely makes it to the Greek border. There she finds a multi-European coalition is ready and waiting to help the struggling FCMs. Hearing Mariam's plight, a German officer contacts his old NATO buddy in Istanbul. Turkish authorities find Elie living with other immobilized FCMs outside of Ankara and give him transport to Greece. Reunited once more, Elie and Mariam find solace and asylum in France. Perhaps sparked by a renewed sense of hope by reuniting, Elie and Mariam struggle but ultimately succeed in integrating into French life.

e. *Elie's Family—Traumatized, but Saved by NATO*

Elie sees the unknown rebels closing in on the migrant caravan. There is not much he can do but attempt to hide his daughter Mariam. Bright flashes and the sound of thunder assail Elie's senses. Where the rebel vehicles had been is nothing but a crater. Crossing the Turkish border, all the FCMs are greeting and housed by a multi-national NATO contingent. A NATO drone strike had apparently been the family's savior. Safe and secure, Elie and his entire family wait only a few weeks in a well-maintained and manned facility to find an asylum location. Elie and his family live out their days in Quebec. They have recurring nightmares about the rebels' deaths, but the Canadian universal healthcare system provides more-than-adequate mental health treatment for the family.

C. CONCLUSION

A coordinated response to CCIM would most likely resemble a large-scale peacekeeping operation, an operation that provides both security and care, but also doubles as a local security force to prevent instability. The UN could therefore conduct a peacekeeping operation to handle a large influx of FCMs, but this operation would be limited to a set geographical area based on the UN mandate, and most likely limited to land. The UN has no experience either monitoring or assisting with a large sea-based migration pattern. The OSCE could assist in building state capacity to handle asylum

seekers, but is incapable of assisting European states in managing borders or stemming migration.²⁷⁴ The OSCE will be present but is unlikely to assist Europe in a broader effort to stem migration, and possibly because of competing geopolitical interests with Russia. Neither the CoE nor the OSCE have the resources needed to assist European states in managing and housing millions of FCMs. The CDSP can offer a robust response to CCIM, but without close cooperation with Turkey the CDSP will struggle with monitoring the eastern borders of Europe. Based on objective criteria, only NATO has the depth of resources and membership to react to both seafaring and land-based migration.

Though fictional and based on future predictions, the accounts of Ahmed, Fatma, and Elie's family further solidify NATO's position as the proper response to CCIM. FCMs traveling either at sea or through conflict areas such as Syria might not encounter the UN at all and might even become ensnared by human traffickers. FCMs will not be able to rely on the CoE to enforce humanitarian refuge or for protection during transit. FCMs could be aided by the OSCE if traveling in high visibility areas but could alternatively suffer due to internal flaws exploited by anti-Western OSCE members. FCMs could very well be aided by the CSDP on a Mediterranean transit but on land they could be quite out of reach due to Turkey's non-membership. NATO, and NATO alone, has the technology, manpower, and agency to adequately respond to CCIM. This response would cover both land and sea approaches and would be funded by some of the wealthiest nations on Earth, thus nearly ensuring adequate care and refuge.

D. NATO CASE STUDIES

NATO is fully capable of responding to CCIM, and historical examples prove NATO's merits. During and post-World War II, the Allies provided "humanitarian aid for more than 6.7 million displaced refugees and migrants during and after the war."²⁷⁵ The Allies then transferred their efforts and knowledge to the United Nations following the

²⁷⁴ "Migration," Organization for Security and Co-operation in Europe, accessed July 12, 2020, <https://www.osce.org/migration>.

²⁷⁵ Metzel and Lorenzen, "Military Force and Mass Migration in Europe," 55–56.

war.²⁷⁶ These proto-NATO efforts appear to suggest that even prior to its formation, NATO members had an integral role to play in managing the large movements of people throughout Europe. For a response to CCIM, NATO would need to deploy both a land and sea response. Either approach alone would leave paths for millions of FCMs to skirt NATO's efforts. This section analyzes recent NATO peacekeeping and maritime interdiction efforts. The analysis suggests NATO is fully capable of and has history of maintaining peace in a region with millions of displaced personnel.

1. Sea Examples

NATO's history of monitoring the waters adjacent to Europe is both recent and relevant. NATO has two active operations, both of which are monitoring and assisting with migration flows. Because their respective areas of operation are not all-encompassing of the Mediterranean and Black Sea, the assets deployed for each mission would merely require some additional assets and a unifying command structure to evolve into a dedicated NATO CCIM sea response.

a. Operation Active Endeavor, 2001–2016

Operation Active Endeavour (OAE) was launched after the terrorist attacks of September 11, 2001 and focused specifically on the Mediterranean.²⁷⁷ NATO vessels monitored the region for suspicious ships, but also assisted civilian craft when necessary. OAE evolved in 2010 from an ad-hoc platform-based operation to a more centrally controlled and organized network-based operation. This network-based approach allowed units to be surged to hot spots rather than simply loitering and waiting on activity. While no hard data is publicly available on the number of participating units, by OAE's end in 2016 it had boarded 172 vessels.²⁷⁸

²⁷⁶ Metzel and Lorenzen, 56.

²⁷⁷ NATO, "Operations and Missions."

²⁷⁸ "Operation Active Endeavour (Archived)," North Atlantic Treaty Organization (NATO), last updated October 27, 2016, https://www.nato.int/cps/en/natolive/topics_7932.htm.

b. Deployment to the Aegean, 2016-Present

During the height of the European migrant crisis, NATO deployed its Standing NATO Maritime Group Two (SNMG2) to assisting in combatting human traffickers.²⁷⁹ SNMG2 supports individual national efforts in handling the crisis and aids the EU's border agency Frontex. SNMG2 is "also ready to perform search and rescue (SAR) operations following the legal obligations stated both in the International Convention for the Safety of Life at Sea and the UN Convention on the Law of the Sea."²⁸⁰

c. Operation Sea Guardian, 2016-Present

OAE was replaced by Operation Sea Guardian (OSG) in 2016.²⁸¹ OSG has three primary missions: "maritime situational awareness, counter-terrorism at sea and support to capacity-building" in the Mediterranean.²⁸² Additionally, OSG could also be called upon to uphold "freedom of navigation, conducting interdiction tasks and protecting critical infrastructure."²⁸³ OSG built upon the legacy of OAE, expanded the mandate, and contributes to monitoring migration within its area of operation.²⁸⁴ A comparison between the NATO maritime missions and the EU's Operation Sophia is depicted in Figure 7.

²⁷⁹ NATO, "Operations and Missions."

²⁸⁰ Alessandra Giada Dibenedetto, *Implementing the Alliance Maritime Strategy in the Mediterranean: NATO's Operation Sea Guardian* (Rome: NATO Defense College, 2016), https://www-jstor-org.libproxy.nps.edu/stable/resrep10237?seq=1#metadata_info_tab_contents, 5.

²⁸¹ NATO, "Operations and Missions."

²⁸² NATO, "Operations and Missions."

²⁸³ NATO, "Operations and Missions."

²⁸⁴ Dibenedetto, *Implementing the Alliance Maritime Strategy in the Mediterranean*, 14.

Figure 7. Comparison Between NATO and EUNAVFOR's Missions²⁸⁵

	NATO			EUNAVFOR
	<i>Operation Active Endeavour</i>	<i>Deployment in the Aegean Sea</i>	<i>Operation Sea Guardian</i>	<i>Operation Sophia</i>
Mission	Patrol the Mediterranean and monitor shipping to help deter, defend, disrupt and protect against terrorist activity.	Support international efforts to cut the lines of illegal migrant trafficking by providing real-time information to Greek, Turkish and Frontex authorities.	Provide situational awareness, counter terrorism, contribute to regional capacity building. Be prepared to conduct maritime interdiction operations, act against threats to energy security, protect critical infrastructure and freedom of navigation. When directed, complement the EU's Operation Sophia, providing surveillance, reconnaissance and logistic support.	Undertake systematic efforts to identify, capture and dispose of vessels used – or suspected of being used – by migrant smugglers, in order to contribute to wider EU efforts to disrupt the business model of human smuggling and trafficking networks and prevent the further loss of life at sea.
Area of Operation	The whole Mediterranean Seathe whole of the Mediterranean	Aegean Sea	Central and Eastern Mediterranean	Southern-Central Mediterranean
Means	NATO standing naval forces: surface units, submarines, maritime patrol aircraft and two high-readiness frigate forces.high-readiness frigate forces	SNMG2: 7 ships.	3 surface units, 2 submarines, maritime patrol aircrafts.	7 ships, 4 organic helicopters and 3 air assets.
Duration	October 2001 – 27 October 2016	February 2016 – no formal end date has been established yet	9 November 2016 - ongoing	22 June 2015 – 27 July 2017

²⁸⁵ Dibenedetto, Implementing the Alliance Maritime Strategy in the Mediterranean, 13.

2. Land Examples

There are three contemporary examples of NATO operating in Europe in a peacekeeping role, and all that stem from the fall of Yugoslavia. NATO's actions during these operations did encompass more than strictly peacekeeping duties, but only prior to or at the beginning of each mission. Two general themes can be learned from these examples. First, NATO's footprint for a peacekeeping operation is roughly 50,000 troops regardless of area to be covered. Secondly, NATO appears to sector its area of operations and have different countries in charge of different areas. While this fact is outside the scope of this research, it can probably be assumed that segregated units achieves a clearer chain of command along national lines within a supranational organization.

a. *Implementation Force, 1995–1996*

Following the dissolution of Yugoslavia in the early 1990s, NATO intervened in the ensuing chaos with an arms embargo, a no-fly zone, airstrikes, and a peacekeeping ground operation.²⁸⁶ This ground operation, the Implementation Force or IFOR, was initially about 60,000 troops strong. IFOR was composed of additional non-NATO countries such as “Albania, Austria, Czech Republic, Estonia, Finland, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Sweden and Ukraine—all of which are Partners for Peace countries—plus Egypt, Jordan, Malaysia, and Morocco.”²⁸⁷ IFOR's primary mission was enforcing the peace, but it also contributed substantially to humanitarian relief.²⁸⁸ Over two million Bosnians were displaced during this crisis.²⁸⁹ NATO did not have significant peacekeeping experience during this period and thus had to rely heavily on prior U.S. knowledge.²⁹⁰ This learning curve led IFOR to initially be “more reactive

²⁸⁶ NATO, “Operations and Missions.”

²⁸⁷ Larry Wentz, *Lessons from Bosnia: The IFOR Experience* (Washington, D.C.: The Command and Control Research Program, 1997), http://www.dodccrp.org/files/Wentz_Bosnia.pdf, 27

²⁸⁸ Wentz, 125.

²⁸⁹ Wentz, 13.

²⁹⁰ Wentz, 125.

than proactive,” but by the end of the mandate IFOR had fully embraced interoperability with civilian-led humanitarian agencies.²⁹¹

b. *Stabilisation Force, 1996–2004*

After IFOR had calmed the tensions, it was replaced by the Stabilisation Force (SFOR).²⁹² At only 32,000 troops, it represented a much smaller footprint reflective of the lowered tensions. SFOR’s peacekeeping duties included deterring hostilities, stabilizing the peace, and supporting civilian agencies.²⁹³ Comprising of mostly the same composition of nations, SFOR was NATO-run but also included twenty non-NATO nations.²⁹⁴ SFOR’s 32,000 troops were broken into several different sectors and dispersed among Croatia and Bosnia and Herzegovina as depicted in Figure 8.

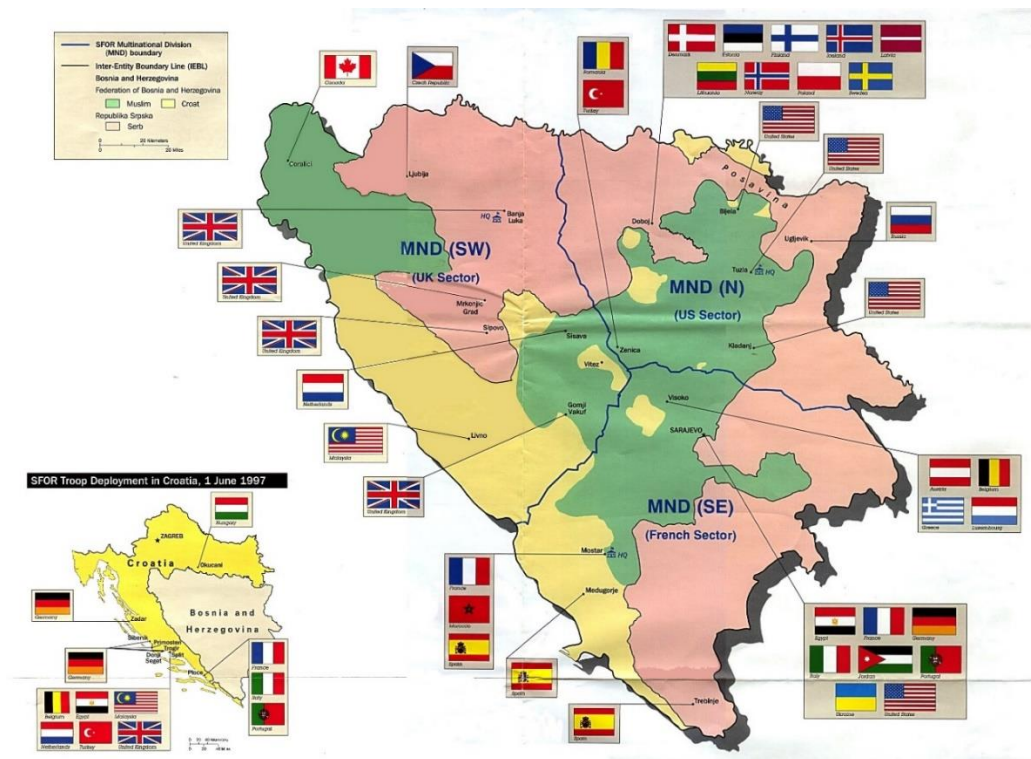
²⁹¹ Wentz, *Lessons from Bosnia*, 419–421.

²⁹² NATO, “Operations and Missions.”

²⁹³ Julie Kim, *Bosnia Implementation Force (IFOR) and Stabilization Force (SFOR): Activities of the 104th Congress*, CRS Report No. 96–723 (Washington, D.C.: Congressional Research Service, 1997), <https://crsreports.congress.gov/product/pdf/RL/96-723>, 4.

²⁹⁴ Wentz, *Lessons from Bosnia*, 33.

Figure 8. SFOR Troop Sectors²⁹⁵



c. Kosovo Force, 1999-Present

Deeper into the 1990s, and also due to the break-up of Yugoslavia, NATO entered what is now Kosovo in another peacekeeping operation.²⁹⁶ Kosovo Force's (KFOR) primary mission was to quell the violence in the country. But much like IFOR and SFOR, would simultaneously provide massive amounts of humanitarian aid and services to the 1.5 million refugees.²⁹⁷ At its height, KFOR was comprised of about 50,000 personnel.²⁹⁸ Also following SFOR's example, KFOR was split into various zones throughout Kosovo as depicted in Figure 9.

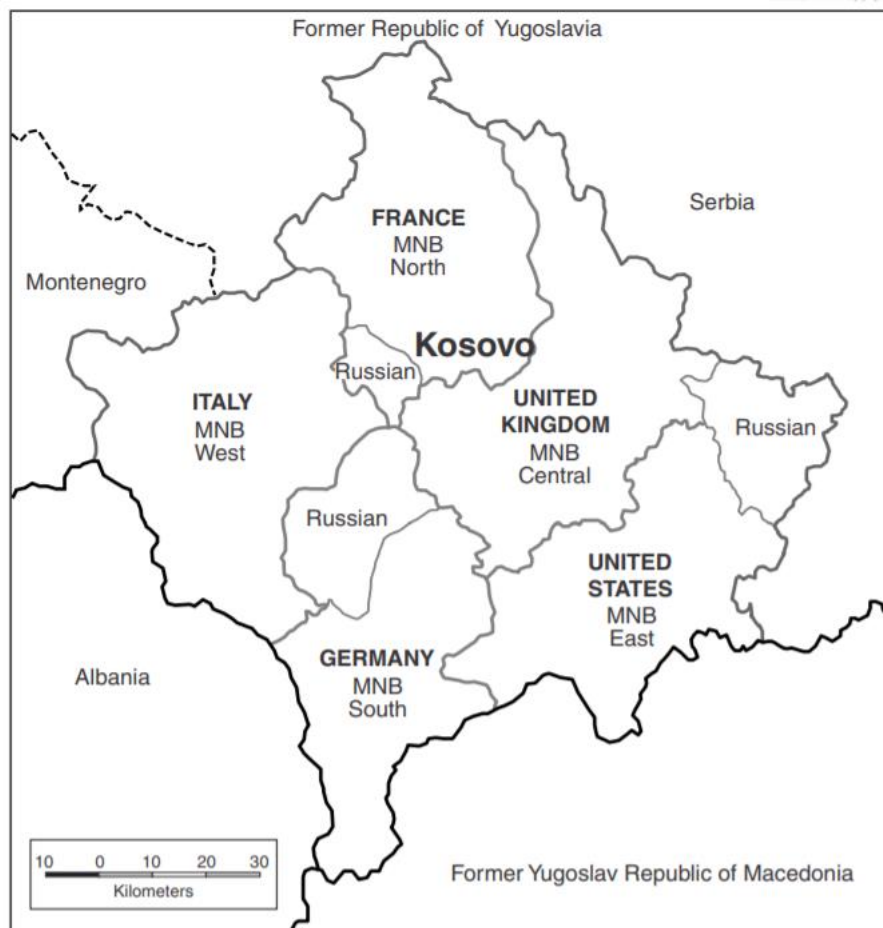
²⁹⁵ University of Texas Libraries, accessed July 15, 2020, https://legacy.lib.utexas.edu/maps/bosnia/bosnia_sfortroop_97.jpg.

²⁹⁶ NATO, "Operations and Missions."

²⁹⁷ Larry Wentz, *Lessons from Kosovo: The KFOR Experience* (Washington, D.C.: The Command and Control Research Program, 2002), http://www.dodccrp.org/files/Wentz_Kosovo.pdf, 16–20.

²⁹⁸ Wentz, 24.

Figure 9. KFOR Troop Sectors²⁹⁹



E. SYNTHESIZED NATO CCIM DEPLOYMENTS

To approximate the type and level of assets needed for a robust NATO response to CCIM, section D's examples are built upon to provide a concise estimate of assets and manpower. Based upon previous migration routes, NATO would need to pre-position 150,000 ground forces dispersed at three strategic locations to prepare for millions of potential FCMs. Additionally, NATO would also need to create two naval groups with diverse assets to monitor the seas most heavily trafficked migration routes.

²⁹⁹ Bruce R. Nardulli, *Disjointed War: Military Operations in Kosovo, 1999* (Santa Monica, CA: RAND, 2002), 102.

1. Sea-based Deployments

A NATO CCIM sea response would need to be far more ambitious than its ongoing operations. NATO would require more air reconnaissance, faster ships, and pre-staged larger combatants to monitor, board, and potentially transport FCMs from human trafficker vessels. Even though the diverting of NATO assets might be at the expense of other world-wide operations, the added benefits of doing so would be a clearer, more unified situational awareness of both the Mediterranean and Black Sea as well as coordination training for various NATO naval, air, and intelligence assets.

a. Units Required

While the assets deployed to the Aegean during the European migrant crisis and the assets deployed for OSG provide standard benchmarks, a NATO sea response should be tailored specifically to the mission. First, NATO should fully embrace unnamed aerial vehicles (UAV) in its reconnaissance. The Air Force has employed the Global Hawk since 2001, and it has the benefit of having a range of over 12,000 nautical miles and can provide over 30 hours of intelligence gathering in a single mission.³⁰⁰ A UAV squadron would be land-based but would be able to provide real-time tracking and cueing to afloat forces. Secondly, NATO has access to and should employ smaller, corvette-class warships. The Norwegian Skjold corvette can reach speeds over fifty knots, which is much faster than larger surface combatants.³⁰¹ In the face of a visible NATO presence, human traffickers might attempt to speed by larger naval units. Having smaller but faster assets to stop this strategy might become key. However, larger surface warships would still have a role; they could provide temporary shelter to refugees rescued at sea and transport them to one of the NATO land bases for housing.

³⁰⁰ “Global Hawk,” Northrop Grumman, accessed July 20, 2020, <https://www.northropgrumman.com/air/globalhawk/>.

³⁰¹ “Skjold Class Missile Fast Patrol Boats, Norway,” Naval Technology, accessed July 21, 2020, <https://www.naval-technology.com/projects/skjold/>.

b. Locations

A sea response would ideally be split up into two different areas of responsibility. The first would be the Mediterranean Sea. With enough UAV reconnaissance, the naval assets could divide up the large sea area in various sectors and be pre-positioned to respond to aerial cueing. The second location for NATO sea assets would be the Black Sea. Though not a major migration route, the Black Sea is still an avenue for thousands of FCMs fleeing Asia. A smaller footprint, also with a plethora of UAVs, would be enough to monitor the region.

c. NATO CCIM Sea Deployments

The two NATO CCIM sea deployments described above are depicted in Figure 10 and Figure 11.

Figure 10. NATO CCIM Mediterranean Strategy



Figure 11. NATO CCIM Black Sea Strategy



The Mediterranean assets could include either a carrier strike group (CSG) or an amphibious readiness group (ARG). A CSG would be preferred as it would be able to contribute far more air assets for even deeper reconnaissance or even FCM transport. An aircraft carrier could temporarily carry thousands of FCMs found at sea to the nearest port, obviously with a security detail closely monitoring the refugees. The Black Sea would probably only require a destroyer squadron (DESRON). A DESRON would only be able to transport a limited number of FCMs but would be able to provide helicopter overwatch to assist the UAVs.

2. Land-based Deployments

NATO's troop levels have been surprisingly consistent in its peacekeeping efforts. Based upon the examples set forth peacekeeping in former Yugoslavia, a figure of roughly 50,000 troops emerges when monitoring regions of one to two million displaced refugees. These troops would need to be highly mobile, but also capable of conducting humanitarian work, intelligence gathering, and security for FCMs. When factoring in the three major

routes of European migrant crisis, stationing 50,000 NATO troops at three key locations would be a logical choice to handle the FCMs, provide security, and ensure the local areas are not overly taxed.

a. Troop Levels and Composition

To approximate troop strength, data provided in Table 5 provides key insight.

Table 5. IFOR, SFOR, and KFOR Area and Troop Levels³⁰²

Mission	Country	Area	Area Total	Max Troop Levels
IFOR	Bosnia and Herzegovina	51,187 km ²	107,161 km²	62,000
	Croatia	55,974 km ²		
SFOR	Bosnia and Herzegovina	51,187 km ²	107,161 km²	32,000
	Croatia	55,974 km ²		
KFOR	Kosovo	10,887 km ²	10,887 km²	50,000

Despite KFOR having had a vastly smaller area to occupy, it nearly had as many troops as the initial IFOR deployment. The approximate 50,000 troop level appears to be typical, despite differences in the size of the area of operation.

Troop composition details from IFOR, SFOR, and KFOR are severely lacking from available resources; however, assumptions can be made based on the type of mission and level of hostilities predicted. Unlike IFOR and KFOR, there is low-to-zero risk of needing either a no-fly zone or embargo activities. A troop composition needed for managing CCIM would ideally include mobile ground elements that could quickly respond to influxes or cases of border crossing, maintain order within temporary FCM housing, prevent local hostilities, and provide much needed security along migration routes. Interpreters are just

³⁰² “The World Factbook,” CIA, accessed July 20, 2020, <https://www.cia.gov/library/publications/the-world-factbook/geos/kv.html>; “The World Factbook,” CIA, accessed July 20, 2020, <https://www.cia.gov/library/publications/the-world-factbook/geos/bk.html>; “The World Factbook,” CIA, accessed July 20, 2020, <https://www.cia.gov/library/publications/the-world-factbook/geos/hr.html>.

as mandatory. This CCIM deployment must be able to communicate with the FCMs to determine levels of need or even potential medical emergencies. A field medical unit will also assuredly be required. FCMs traveling vast distances are at risk for a host of illnesses. Potentially, this type of deployment would also include an intelligence unit, one that could attempt to weed out any known or prospective extremists or criminals.

b. Prospective Locations

Based on the previous European migrant crisis and the likelihood of FCMs utilizing the same routes, NATO ground forces could pre-position themselves in very predictable locations: the southern tip of Spain, the southern portion of Italy, and the southern portion of Turkey. Fortunately, there are already three U.S. installations at these locations: Rota Naval Base, Naval Air Station Sigonella, and the Incirlik Air Base. Obviously, new temporary or permanent structures would be required to station CCIM-responding NATO units at these locations. These locations would also benefit from having a temporary FCM housing location in proximity. Troops would not have to venture far to maintain order among the FCMs or to venture to the borders for new incoming arrivals.

c. NATO CCIM Land Deployments

A potential NATO response to CCIM is depicted in Figure 12.

Figure 12. NATO CCIM Ground Response



Each base in this deployment set-up would be responsible for its own area of responsibility but would share intelligence among its mirrored comrades. If, much like the earlier examples of SFOR and KFOR, NATO found it beneficial to parcel up these territories further into various zones under individual commanders, these zones could be further subdivided by smaller commands working under a central authority.

F. POTENTIAL COSTS OF NATO CCIM DEPLOYMENTS

Estimating the potential cost of a NATO response to CCIM, based upon the previous suggest deployment scenarios, requires using sources outside of NATO's history. NATO's publicly available data is only readily accessible for some of its peacekeeping operations, most notably in the case of KFOR. A NATO CCIM land response, based upon KFOR, yields a potential cost of \$12b a year. A NATO CCIM sea response does not have analogous data. The finances of current NATO operations in response to migration is not publicly available. Australia's efforts to deter migrants from its territorial waters is used as a comparative example instead. Even though the Australian model was a different mission

set, such as deterrence and internment, it still provides comparable maritime mission costs and is thus a suitable substitute. Though estimates vary, the Australian example yields unit and personnel costs at \$262m annually.

1. NATO CCIM Land Response Costs

Peacekeeping operations are not only diverse in their responsibilities, but also in their costs. The cost of a NATO peacekeeping operation is much higher than a UN peacekeeping operation. Based on publicly accessible financial data, this section finds that an approximate cost of a NATO CCIM land response would be \$12.2b a year, not factoring in additional infrastructure required or potential humanitarian aid.

a. NATO Peacekeeping Costs

The Congressional Research Service (CRS) provides some but not all the costs associated for the IFOR, SFOR, and KFOR. Because SFOR and KFOR are more aligned to a potential CCIM response, costs associated with IFOR are most likely not relevant. SFOR's cost per year is expressed in Table 6.

Table 6. SFOR Costs per Year for the United States³⁰³

Fiscal Year	Cost in Millions of Dollars
1998	\$1,792.8
1999	\$1,382.5
2000	\$1,381.7
2001	\$1,400.0
2002	\$932.9
2003	\$930.7
2004	\$913.0
Total	\$8,733.6
Average	\$1,247.7

³⁰³ Steve Bowman, *Bosnia and Kosovo: U.S. Military Operations*, CRS Report No. RL32282 (Washington, D.C.: Congressional Research Service, 2004), https://digital.library.unt.edu/ark:/67531/metadc812548/m2/1/high_res_d/RL32282_2004Feb16.pdf, 5.

Unfortunately, the CRS does not provide further minutiae of how these costs are broken down, i.e., humanitarian or other military-related costs. Nor does the CRS provide data on how much other members are contributing.

KFOR's financial data is simultaneously less available, but more detailed. Only four years of total costs are accessible: \$5b in 1996, \$4b in 1997, \$4b in 1998, and \$4b in 1999.³⁰⁴ However, the CRS does provide somewhat detailed information for 1999. With the actual peacekeeping operation starting in June of 1999, NATO spent approximately \$2b on just that effort.³⁰⁵ The \$4b a year cost estimate found in *The Military Balance* appears to be an accurate estimation of annual peacekeeping expenses.

b. UN Peacekeeping Mission Costs

The UN publishes data that is far more accessible to the public, to include costs of missions per year. Table 7 lists all UN peacekeeping missions from 2004–2020 and their associated costs (in 2020 dollars).

³⁰⁴ The International Institute for Strategic Studies (IISS), *The Military Balance: 1996/97* (London: Oxford University Press, 1996), 304; IISS, *The Military Balance: 1997/98* (London: Oxford University Press, 1997), 284; IISS, *The Military Balance: 1998/99* (London: Oxford University Press, 1998), 291; IISS, *The Military Balance: 1999/2000* (London: Oxford University Press, 1999), 297.

³⁰⁵ Ek, NATO Burdensharing and Kosovo, 14–15.

Table 7. UN Peacekeeping Mission Costs in 2020 Dollars.³⁰⁶

Name(s) of Operation	Years of Data	Total Cost	Cost Per Year
UNDOF	2004-2020	\$957,346,070.00	\$56,314,474.71
UNFICYP	2004-2020	\$1,028,691,981.64	\$60,511,293.04
UNIFIL	2004-2020	\$8,067,460,398.00	\$474,556,494.00
UNMIK	2004-2020	\$2,383,058,050.00	\$140,179,885.29
MONUC	2004-2020	\$23,126,231,084.00	\$1,360,366,534.35
UNOL / UNMIL	2004-2018	\$9,253,400,888.60	\$616,893,392.57
UNAMSIL	2004-2006	\$1,228,764,559.00	\$409,588,186.33
UNMEE	2004-2009	\$1,101,447,950.00	\$183,574,658.33
UNOMIG	2004-2010	\$265,172,905.00	\$37,881,843.57
UNTAET / UNMISSET / UNOTIL / UNMIT	2004-2013	\$1,868,207,220.00	\$186,820,722.00
ONUB	2005-2007	\$965,794,464.00	\$321,931,488.00
UNMIS	2005-2012	\$7,432,171,114.00	\$929,021,389.25
UNOCI	2005-2017	\$6,999,728,506.00	\$538,440,654.31
MINUSTAH	2005-2020	\$8,589,820,454.00	\$536,863,778.38
MINURSO	2005-2020	\$971,567,085.40	\$60,722,942.84
MINURCAT	2008-2011	\$1,833,721,742.00	\$458,430,435.50
UNAMID	2008-2020	\$15,500,508,049.00	\$1,192,346,773.00
UNISFA	2012-2020	\$2,551,250,970.00	\$283,472,330.00
UNMISS	2012-2020	\$9,634,676,968.00	\$1,070,519,663.11
UNSOA	2012-2020	\$11,838,652,271.00	\$1,315,405,807.89
MINUSMA	2014-2020	\$6,814,240,581.00	\$973,462,940.14
MINUSCA	2015-2020	\$5,266,865,642.00	\$877,810,940.33
Total / Average	2004-2020	\$127,678,778,952.64	\$549,323,483.04

For these missions, the average cost of a UN peacekeeping mission per year is approximately \$550m. The majority also focus on monitoring cease fires, stabilization

³⁰⁶ See Appendix B for sources. Dollar amounts calculated using “Inflation Calculator,” Official Data Foundation, accessed January 15, 2020, <https://www.officialdata.org/us/inflation/>. For reference, the following inflation ratios were used: 2004 \$1 / 2020 \$1.36; 2005 \$1 / 2020 \$1.32; 2006 \$1 / 2020 \$1.27; 2007 \$1 / \$1.24; 2008 \$1 / \$1.19; 2009 \$1 / 2020 \$1.2; 2010 \$1 / 2020 \$1.18; 2011 \$1 / \$1.14; 2012 \$1 / 2020 \$1.12; 2013 \$1 / \$1.1; 2014 \$1 / \$1.09; 2015 \$1 / \$1.08; 2016 \$1 / 2020 \$1.07; 2017 \$1 / \$1.05; 2018 \$1 / 2020 \$1.02; 2019 \$1 / 2020 \$1.01.

missions, monitoring post-war conflicts, and enforcing the peace process.³⁰⁷ Of noteworthiness is MINURCAT, the UN mission triggered by a refugee crisis.³⁰⁸ Given the relatively recent timeframe, operating from 2007–2010, and the focus on stabilizing tensions amidst a migration crisis, MINURCAT offers an excellent case study for future migration events.³⁰⁹ Taking the previous points of consideration, a peacekeeping deployment involving large numbers of refugees would conservatively cost about \$450m per year. However, bearing in mind the NATO peacekeeping operations in Kosovo were several billion dollars per year, the \$450m estimate is likely low.

c. *NATO CCIM Land Deployment Cost and Considerations*

Between the NATO and UN examples, the range of peacekeeping costs is quite vast. The cost-sharing within the UN for peacekeeping operations is not enough to contribute to this gap, as each state pays “roughly the same percentage as other countries.”³¹⁰ Instead, this gulf in costs is most likely due to technology employed, equipment utilized, and personnel costs. Former ambassador to the U.S. James Dobbins noted this discrepancy in testimony before Congress:

NATO troops are much better equipped than most of those devoted to UN operations, and correspondingly more expensive. The resultant wealth of staff resources ensures that NATO operations are more professionally planned and sustained, but the proportion of headquarters personnel to fielded capacity is quite high and correspondingly more costly.³¹¹

³⁰⁷ “Our History,” United Nations (UN), accessed February 19, 2020, <https://peacekeeping.un.org/en/our-history>; “Historical Timeline of UN Peacekeeping,” United Nations (UN), accessed February 19, 2020, <https://peacekeeping.un.org/en/historical-timeline-of-un-peacekeeping>.

³⁰⁸ “MINURCAT,” United Nations (UN).

³⁰⁹ “MINURCAT,” United Nations (UN).

³¹⁰ Heather Peterson, “U.N. Peacekeeping is a Good Deal for the U.S,” RAND Corporation, April 2, 2017, <https://www.rand.org/blog/2017/04/un-peacekeeping-is-a-good-deal-for-the-us.html>.

³¹¹ James Dobbins, “A Comparative Evaluation of United Nations Peacekeeping,” RAND Corporation, June 13, 2007, https://www.rand.org/content/dam/rand/pubs/testimonies/2007/RAND_CT284.pdf, 4.

Therefore, the \$4b per year average is likely correct, and the cost of a NATO CCIM ground response would be in the realm of \$12b per year.

Another consideration is the humanitarian aid aspect. Whether or not NATO would have to bear the burden of additional resources devoted to feeding and caring for FCMs would increase costs. The UNHCR annual budget for 2020 and 2021 is over \$8b.³¹² In addition to aid, the UNHCR also devotes resources towards the resettlement of those refugees.³¹³ If CCIM predictions are correct, the UNHCR will be heavily involved throughout the world. By inviting UNHCR to participate, and take up the costs of aid and resettlement, NATO would alleviate itself of further financial burden.

2. NATO CCIM Sea Response Cost

The Australian government provides possibly one of the best recent examples of a country dedicating assets to secure its waters. Australia's approach at deterring migrants has even garnered the praise of the current President of the United States.³¹⁴ Though vastly distant from the EU, Australia is still a Western country and has a similar military structure to EU countries. These similarities facilitate a cost-comparison analysis even if the missions themselves differ.

Australia began deterring migrants in the early 2000s, starting with a policy called the Pacific Solution.³¹⁵ The military cohort to this policy was Operation Relex, which used

³¹² "Update on Budgets and Funding (2019, 2020–2021)," United Nations High Commission on Refugees (UNHCR), February 20, 2020. <https://www.unhcr.org/5e6a3c497.pdf>.

³¹³ "Resettlement," United Nations High Commission on Refugees (UNHCR), accessed July 22, 2020, <https://www.unhcr.org/en-us/resettlement.html>.

³¹⁴ Donald J. Trump (@realDonaldTrump), "These Flyers Depict Australia's Policy on Illegal Immigration. Much Can Be Learned!" Twitter, June 26, 2019, 5:02 p.m., <https://twitter.com/realDonaldTrump/status/1144033134129758208>.

³¹⁵ "The 'Pacific Solution' Revisited: A Statistical Guide to the Asylum Seeker Caseloads on Nauru and Manus Island," Parliament of Australia, September 4, 2012, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/PacificSolution#_Toc334509636.

maritime interdiction to prevent vessels from reaching Australian mainland.³¹⁶ Currently, the military aspect of border control functions under Operation Resolute (which absorbed Relex), and which is under the broader umbrella of Operation Sovereign Borders.³¹⁷

According to the Australian Department of Defence, military operations to secure Australian borders from 1999–2019 came at the price tag \$397.3m, with a projected 2020 cost of \$59.3m.³¹⁸ This equates to an average of \$19.8m per year, which taken at face value seems like quite a bargain. However, the true costs of these operations have been called into question.

When asked what the true cost of Operation Resolute was, the Department of Defence stated that “the full cost associated with Operation Resolute is not specifically captured within Defence’s financial systems.”³¹⁹ This response prompted an investigative look into costs by the think tank Lowy Institute.³²⁰ The study took data starting from late 2010, broke it down into unit and personnel cost, and came out with a figure of at least \$262m per year.³²¹

³¹⁶ “Chapter 2 – Operation Relex,” Parliament of Australia, accessed January 15, 2009, https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Former_Committees/maritimeincident/report/c02.

³¹⁷ “Operation Resolute,” Australian Government Department of Defence, accessed January 15, 2019, <https://www.defence.gov.au/Operations/BorderProtection/Default.asp>; Peter Chambers, “The Embrace of Border Security: Maritime Jurisdiction, National Sovereignty, and the Geopolitics of Operation Sovereign Borders,” *Geopolitics* 20, no. 2 (2015): 405, <https://doi.org/10.1080/14650045.2015.1004399>.

³¹⁸ Australian Government Department of Defence, *Annual Report 18–19* (Canberra, Australia: Department of Defence, 2019), https://www.defence.gov.au/annualreports/18-19/DAR_2018-19_Complete.pdf, 61.

³¹⁹ Joint Standing Committee on Foreign Affairs, Defence and Trade, *Review of the Defence Annual Report 2009–2010* (Canberra, Australia: The Parliament of the Commonwealth of Australia, 2012), https://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=jfadt/defenceannualreport_2009_2010/report/full%20report.pdf, 29–30.

³²⁰ James Brown, “Asylum Seekers: The Cost to Defence,” Lowy Institute, July 30, 2013, <https://www.lowyinstitute.org/the-interpreter/asylum-seekers-cost-defence>.

³²¹ Brown, “Asylum Seekers.”

Operational and personnel cost also do not cover the full spectrum of Australia's border control program cost. Another investigative, academic study delved into all the different services and infrastructure necessary to run the earlier policy Pacific Solution.³²² The report found that offshore processing of refugees alone cost \$1b, infrastructure required cost \$396m, and operation of detention facilities \$253m.³²³ For the newer Operation Sovereign Borders, total cost from 2013–2016 is estimated at \$9.6b, and a projected 2016–2020 cost of \$4.04–\$5.7b.³²⁴

The variables for consideration of cost for this type of undertaking include FCM processing, infrastructure, detention facility staff, unit costs, and personnel costs. Since NATO would most likely pair a sea-response with a land-response, the numbers from Australia's unit and personnel costs are probably the only relevant data for consideration. NATO land bases in key locations already exist and processing of FCMs would fall under NATO ground forces already deployed, which also would be further augmented by the UNHCR. So, while the figure of \$262m per year does not cover the full cost of Australia's efforts, it does provide an estimate for future NATO sea missions.

G. CONCLUSION

If NATO were to be activated in response to CCIM, how much money might be asked of member nations? There are three important contingencies for consideration. First, a NATO deployment in an area amid tensions derived from mass migration resembles a peacekeeping endeavor, and from earlier NATO examples equates to about \$12b a year if deployed at three key migration chokepoints. Secondly, a NATO maritime interdiction response encompassing both the Mediterranean and Black Seas, an area roughly half that of Australia's Economic Exclusion Zone (EEZ), a figure in the region of \$130m per year

³²² Kazimierz Bem, Nina Field, Nic Maclellan, Sarah Meyer, and Tony Morris, *A Price Too High: The Cost of Australia's Approach to Asylum Seekers* (Carlton, Australia: Oxfam Australia, 2007), <http://library.bsl.org.au/jspui/bitstream/1/894/1/Price%20too%20high.pdf>, 29.

³²³ Bem et al., *A Price Too High*, 4.

³²⁴ Lisa Button, Shane Evans, and Amy Lamoin, *At What Cost? The Human, Economic, and Strategic Cost of Australia's Asylum Seeker Policies and the Alternatives* (Sydney, Australia: UNICEF Australia, 2016), <https://www.unicef.org.au/Upload/UNICEF/Media/Documents/At-What-Cost-Report.pdf>, 4, 54.

emerges.³²⁵ If both a land and sea strategy is employed, the total would be \$12.2b. If NATO decides to build processing centers for FCMs, akin to the Australian model, this approach yields a price tag of \$1b-\$2b, but if built adjacent to or on existing allied bases, it could be much lower.

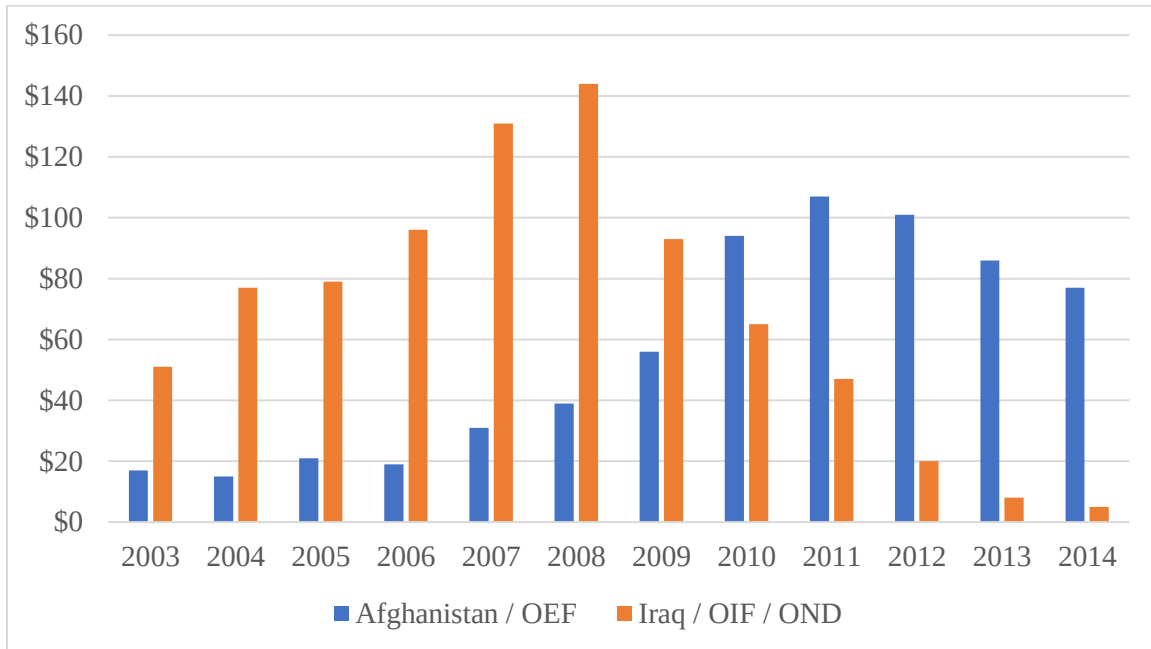
\$12.2b a year is not a small amount of expenditure for NATO, especially when this amount would be focused on border control and refugees rather than responses to conventional geopolitical threats. However, NATO has historical precedent, resources, and perhaps more importantly, signaling power by responding to CCIM. The United States obviously has enormous resources and personnel strength to assist its allies. More significantly, robust U.S. support could theoretically unify a NATO effort or even a hesitant EU electorate. For the cost of \$12.2b, the United States and its allies could achieve a multi-purpose effect of not only reinforcing NATO as an alliance but would also further solidify NATO's international standing as a humanitarian and peacekeeping force.

NATO positives aside, the \$12.2b to secure Europe seems small in comparison to benefits and past examples. The EU is not only comprised of key NATO allies, but also is the United States' second largest importer and largest exporter in trade.³²⁶ The continued prosperity of the EU is integral to the U.S. economy. \$12.2b is therefore a paltry amount for sustaining U.S. economic dominance and is also a paltry amount compared to other U.S./NATO war efforts. Figure 13 shows how much the United States has spent on operations in Afghanistan and Iraq from 2003–2014.

³²⁵ Mostafa Salah and Baruch Boxer, "Mediterranean Sea," accessed February 19, 2020, <https://www.britannica.com/place/Mediterranean-Sea>; "Oceans and Seas," Australian Government – Geoscience Australia, accessed February 19, 2020, <http://www.ga.gov.au/scientific-topics/national-location-information/dimensions/oceans-and-seas>; Vladimir Petrovich Goncharov, Aleksey Nilovich Kosarev, and Luch Mikhaylovich Fomin, "Black Sea," accessed February 19, 2020, <https://www.britannica.com/place/Black-Sea>.

³²⁶ "USA – EU – International Trade in Good Statistics," European Commission, March 2020, https://ec.europa.eu/eurostat/statistics-explained/index.php/USA-EU_-_international_trade_in_goods_statistics.

Figure 13. U.S. Expenditure for Wars in Afghanistan and Iraq in Billions of Dollars³²⁷



Between 2003 and 2014, the U.S. has spent \$1.48t on the war efforts in Afghanistan and Iraq, at an average of \$55.2b and \$68b per year, respectively.

\$12.2b a year is a justifiable expenditure for NATO. This expenditure would strengthen the alliance, secure the largest trading bloc for the United States, and would only be about 10 percent what the United States alone spent per year during the War on Terror campaigns. Considering the ramifications of inaction and the less-than-stellar capabilities of other intergovernmental agencies, \$12.2b is therefore not only justifiable, but in the context of the plethora of benefits, comparatively cheap.

³²⁷ Amy Belasco, *The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11*, CRS Report No. 7–5700 (Washington, D.C.: Congressional Research Service, 2014), <https://fas.org/sgp/crs/natsec/RL33110.pdf>, 15.

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IV. CONCLUSION

The first thing that happened when President Obama and I were elected, we went over to what they call the Tank, in the Pentagon, sat down and got the briefing on the greatest danger facing our security. Know what they told us it was? The military? Climate change. Climate change. Climate change is the single greatest concern for war and disruption in the world, short of a nuclear exchange.³²⁸

—Vice President Joe Biden

Climate change's effect on the world and humanity is not dystopian science-fiction. Climate change is real, and the consequences are already occurring. How the United States and its allies contend with those consequences remains to be seen. Perhaps by highlighting just one significant consequence, CCIM, both the United States and NATO can better prepare themselves for the deteriorating security circumstances. If climate change is unmitigated, CCIM will occur. If CCIM is unmitigated, European society will become more violent towards 'others,' European populist parties will gain more prominence, the EU itself might disintegrate, and some European states might become pro-Russian. To mitigate CCIM, NATO should be the response. NATO has both precedent and the resources required, and these mitigation efforts will improve NATO's image worldwide. Additionally, a CCIM response would strengthen alliance cohesion in the face of yet another threat.

A. SIGNIFICANT FINDINGS

Millions of FCMs will attempt to migrate to Europe over the next century: over 8 million by 2040, over 14 million by 2070, and over 23 million by 2100.³²⁹ These FCMs

³²⁸ Luke Darby, "How the U.S. Military Churns Out More Greenhouse Gas Emissions than Entire Countries," GQ, last modified September 13, 2019, <https://www.gq.com/story/military-climate-change-cycle>.

³²⁹ Burzynski et al., *Climate Change, Inequality, and Human Migration*, 40.

will come predominantly from the MENA and SSA regions. There are only two broad courses of action for Europe to follow: attempt a coordinated response to CCIM, or not.

Not all coordinated responses to CCIM are equal. This thesis found that the UN, CoE, OSCE, and CSDP lack the resources and key allies necessary to ensure thorough coverage of migration routes and ensure FCM safety. Only NATO is found to meet these wickets, at an approximate price tag of \$12.2b a year.

If there is no overarching, intergovernmental response to CCIM, Europe can expect to experience increased xenophobia, increased Islamophobia, and increased anti-Semitism. Because migration levels are expected to be higher, corresponding levels of hatred will likely be at higher levels than the previous European migrant crisis. After all, attacks on refugees, Muslims, and Jews roughly peaked mid-2010s which corresponds to the highest influx of refugees. Additionally, if an influx of FCMs is too great for national budgets to handle, some states might fall into economic distress. The combination of a hyper-nationalistic xenophobic trend with a dire economic situation could very well fuel support for populist parties at levels even higher than the 2010s. The domestic and international repercussions of unmitigated CCIM on Europe are not aligned with U.S. interests. Repercussions include the rise of parties that are anti-EU and/or anti-U.S., and potential state failure.

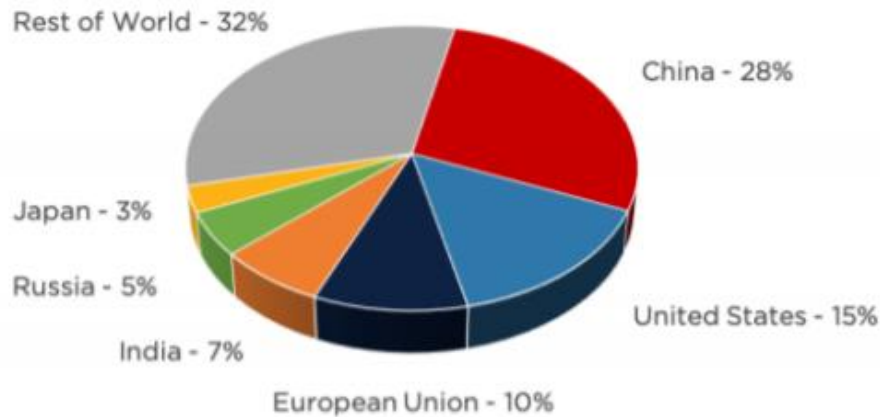
B. POLICY IMPLICATIONS

The findings of this thesis lead to several policy implications for both the United States and NATO. First, security organizations need to take the threat of climate change and CCIM seriously, because the solution to climate change may never come. Second, unmanaged CCIM will produce internal and external tensions within Europe. These tensions could produce governments that are more aligned with the Kremlin than the White House. Third, a NATO deployment in response to CCIM could be a net boon for NATO interoperability, could increase relevancy of the organization, and could increase alliance cohesion. Lastly, if Europe follows a more forceful, deterrent-minded response unlike the response posed in this thesis, the Western world will suffer on the international stage.

1. Coming to Terms that Combatting Climate Change May Be a Lost Cause

Determining the likelihood of whether the world will mitigate climate change itself was not the goal of this thesis, nevertheless this author is pessimistic. The Paris Agreement is a promising endeavor, but as of the time of this thesis has not provided any meaningful results. Arguably the most critical aspect combatting climate change is U.S.-Sino cooperation. Not just because they are the two worst polluters of greenhouse gases, as show in Figure 14, but also because they are the largest economies.

Figure 14. CO₂ Emissions, 2018³³⁰



Cooperation between the two countries is basically a prerequisite for any real effort in stopping climate change. Considering how pervasive climate change denial is in the United States, the withdrawal of the United States from the Paris Accords, and that U.S.-Sino relations are at a low-point due to the COVID-19 pandemic, it is unlikely the two countries will be working towards climate change solutions in the near future.

³³⁰ David Sandalow, *Guide to Chinese Climate Policy 2019* (New York: Columbia, 2019), https://energypolicy.columbia.edu/sites/default/files/file-uploads/Guide%20to%20Chinese%20Climate%20Policy_2019.pdf, 11.

Therefore, planning for responses to all the consequences of climate change, including CCIM, should be priority. If climate change is not mitigated, Europe should be planning their responses before the great climate migration occurs. Security organizations such as NATO should be considering infrastructure and deployment areas now, so they can be prepared and ready.

2. Russian Considerations

The Russian relationship with the Western far-right is fascinating and complex. Each side benefits with mutual support. Western far-right alliances leverage Moscow as an ally against the multicultural liberal world order in an effort to “reconstruct the mythologized and romanticised (sic) nation-state and ‘take our country back.’”³³¹ Russia benefits by having leaders in place who will approve of foreign policy objectives, and by supporting destabilizing narratives and actors.³³² On a grander scale, the Russian strategy here is to legitimize Russian hegemony in the former Soviet bloc and to provide further legitimacy the Russian regime.³³³

The latest United States European Command posture statement remains firm that Europe and NATO “remain crucial to our national security.”³³⁴ A “revisionist Russia” has “demonstrated willingness to violate international law and legally binding treaties” which threatens the preservation of “a Europe that is whole, free, and at peace.”³³⁵ Russia is painted as a “long-term, strategic competitor” against both the United States and NATO by looking to “assert its influence over nations along its periphery, undermine NATO solidarity, and fracture the rules-based international order.”³³⁶ To counter this revisionist

³³¹ Anton Shekhovtsov, *Russia and the Western Far Right: Tango Noir* (New York, Routledge, 2018), 247.

³³² Shekhovtsov, 247.

³³³ Shekhovtsov, 250–251.

³³⁴ “EUCOM Posture Statement 2019,” United States European Command (EUCOM), March 5, 2019, <https://www.eucom.mil/news-room/document/39544/eucom-posture-statement-2019>, 1.

³³⁵ EUCOM, 1–2.

³³⁶ EUCOM, 2.

threat, the United States relies on NATO's assistance and "shared commitment of collective defense, democratic principles, and mutual respect of national sovereignty."³³⁷

Examining the European response to the 2010s migration crisis within the context of CCIM yields troubling conclusions for U.S. security. Populist, nationalistic parties will almost assuredly garner increased support. These parties are most likely Eurosceptic and generally lean more favorably towards Russia than the United States. A fractured, pro-Russian Europe could undermine the entire U.S. security strategy paradigm.

3. NATO Cohesion

If NATO is activated in response to CCIM and executes akin to the scenarios described earlier occurs, the net result is positive with one potential drawback. Cohesion among the alliance would increase, the appeal of NATO to non-NATO countries would increase, and alliance members would benefit from the operational experience. Despite the cost, the amount pales in comparison to the alliance's defense budgets and could be easily justified. However, reallocation of NATO forces to conduct stability operations, maritime interdiction, and processing would pull units away from deterrence or other NATO mission areas.

4. The Risk of Climate Apartheid

The impacts of global heating are likely to undermine not only basic rights to life, water, food, and housing for hundreds of millions of people, but also democracy and the rule of law...Climate change threatens to undo the last 50 years of progress in development, global health, and poverty reduction... Developing countries will bear an estimated 75% of the costs of the climate crisis, the report said, despite the poorest half of the world's population causing just 10% of carbon dioxide emissions.³³⁸

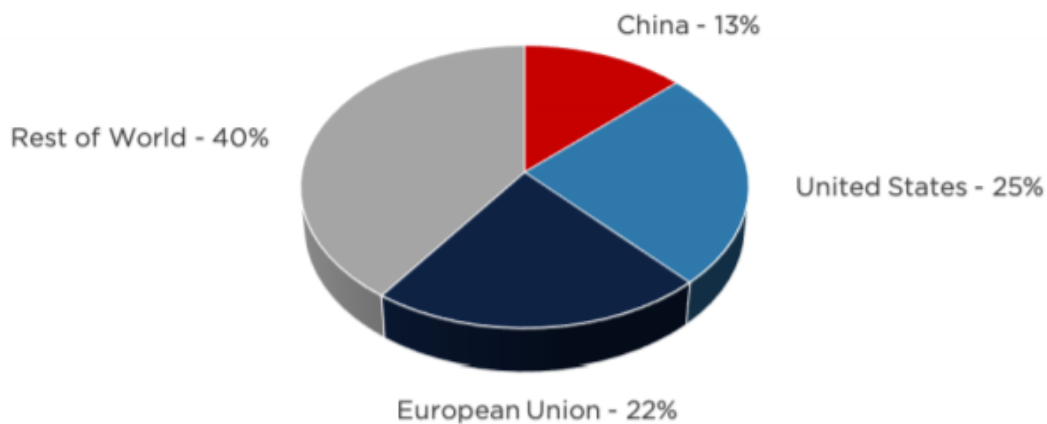
—Philip Alston, UN Special Rapporteur on Extreme Poverty
and Human Rights

³³⁷ EUCOM, "EUCOM Posture Statement 2019," 19.

³³⁸ Carrington, "'Climate Apartheid': UN Expert says Human Rights May Not Survive."

Alston also warns of “a ‘climate apartheid’ scenario where the wealthy pay to escape overheating, hunger, and conflict while the rest of the world is left to suffer.”³³⁹ If NATO, or any other European security organization, responds with force and deterrence against FCMs, the Western World’s image may never recover. The Western World is responsible for nearly 50 percent of global CO₂ emissions over the past several hundred years, as shown in Figure 15.

Figure 15. Cumulative CO₂ Emissions, 1751–2017³⁴⁰



To wall off Europe and leave the FCMs to fend for themselves is not only antithetical to Western values, but also a miscarriage of justice. After all, the West is a predominant factor in causing climate change. If a climate apartheid scenario arises, the West’s image may be forever tarnished, but perhaps more importantly the West’s standing in the world will be lost. Agencies like the UN may be skewed against the West, and more towards other, rival powers.

C. OPPORTUNITIES FOR FURTHER RESEARCH

This thesis contributes to the literature on climate change and its impact on both the EU and NATO. However, some gaps in areas of climate change-related and security-

³³⁹ Carrington, “‘Climate Apartheid’: UN Expert says Human Rights May Not Survive.”

³⁴⁰ Sandalow, *Guide to Chinese Climate Policy* 2019, 12.

related research are identified in this section. For non-security related endeavors, future researchers could investigate whether the economic damages of climate change would outweigh the cost of mitigating climate change entirely, how to limit carbon emissions from military assets, or exploring options under international law for FCMs. For a more security-minded focus, future research could determine whether NATO assets in Europe could be easily shuffled into a CCIM role, or how CCIM in South America will impact U.S. security.

1. Economic Costs of Climate Change versus Climate Change Mitigation

Human health, environmental destruction, and worsening international situations aside, the blow to world economies from climate change appears to be significant. The National Bureau of Economic Research estimates the following losses of GDP, as shown in Table 8.

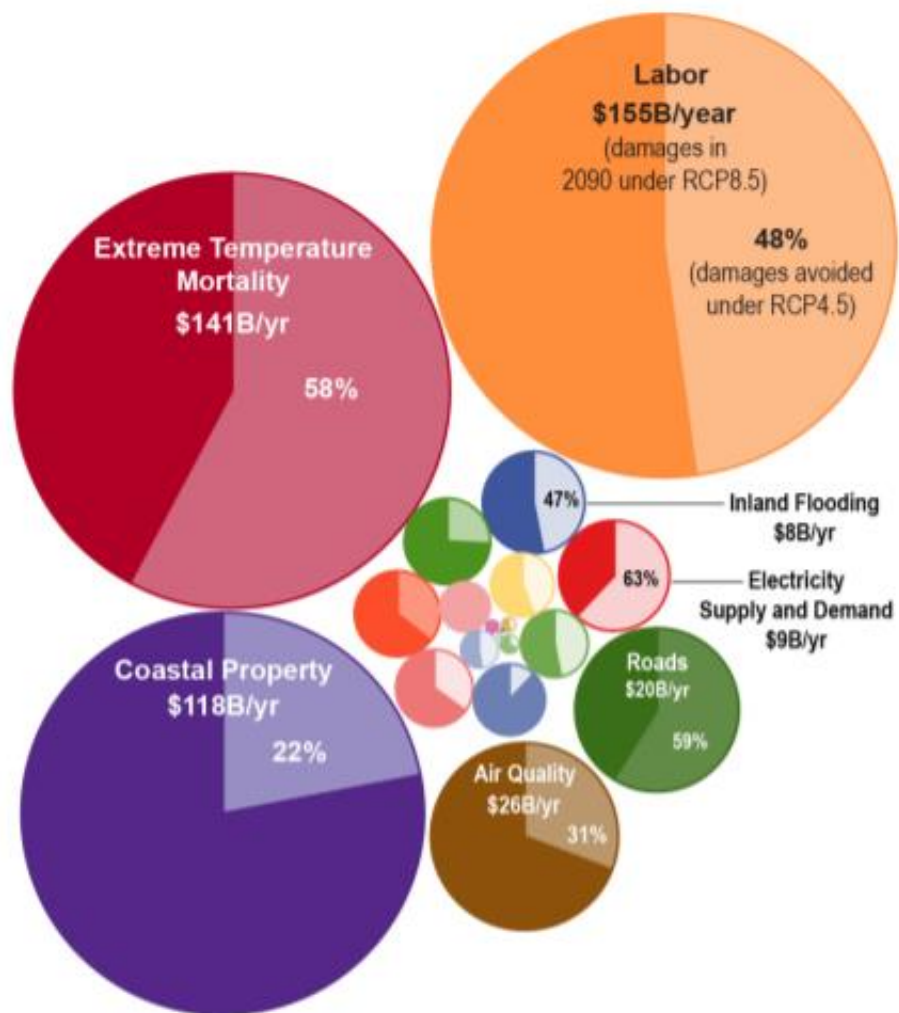
Table 8. Percent Loss of GDP if Temperatures Continue to Rise³⁴¹

Area	2030	2050	2100
World	0.4-1.25	1.39-3.67	4.44-9.96
China	0.31-0.87	0.9-2.3	2.67-5.93
EU	0.24-0.8	0.79-2.35	2.67-6.69
India	0.6-1.78	2.13-5.08	6.37-13.39
Russia	0.51-1.63	1.62-4.61	5.28-12.46
U.S.	0.6-1.86	2.13-5.39	6.66-14.32
Rich Countries	0.42-1.33	1.46-3.93	4.74-10.75
Poor Countries	0.37-1.09	1.24-3.11	3.78-8.25
Hot Countries	0.39-1.17	1.35-3.39	4.17-9.1
Cold Countries	0.41-1.28	1.40-3.76	4.53-10.24

For the United States specifically, the risks and damages to various sectors of the U.S. economy are expressed in Figure 16 and Figure 17.

³⁴¹ Matthew E. Kahn, Kamiar Mohaddes, Ryan N.C. Ng, M. Hashem Pesaran, Mehdi Raissi, and Jui-Chung Yang, *Long-Term Macroeconomic Effects of Climate Change: A Cross-Country Analysis*, NBER Working Paper No. 26167 (Cambridge, MA: National Bureau of Economic Research, 2019), <https://www.nber.org/papers/w26167.pdf>, 32.

Figure 16. Projected Risks by Sector³⁴²



³⁴² USGCRP, Fourth National Climate Assessment, 1349.

Figure 17. Projected Damages by Sector³⁴³

Annual Economic Damages in 2090		
Sector	Annual damages under RCP8.5	Damages avoided under RCP4.5
Labor	\$155B	48%
Extreme Temperature Mortality◊	\$141B	58%
Coastal Property◊	\$118B	22%
Air Quality	\$26B	31%
Roads◊	\$20B	59%
Electricity Supply and Demand	\$9B	63%
Inland Flooding	\$8B	47%
Urban Drainage	\$6B	26%
Rail◊	\$6B	36%
Water Quality	\$5B	35%
Coral Reefs	\$4B	12%
West Nile Virus	\$3B	47%
Freshwater Fish	\$3B	44%
Winter Recreation	\$2B	107%
Bridges	\$1B	48%
Munic. and Industrial Water Supply	\$316M	33%
Harmful Algal Blooms	\$199M	45%
Alaska Infrastructure◊	\$174M	53%
Shellfish*	\$23M	57%
Agriculture*	\$12M	11%
Aeroallergens*	\$1M	57%
Wildfire	-\$106M	-134%

³⁴³ USGCRP, Fourth National Climate Assessment, 1349.

When considering the amount of economic damages of climate change, a case can be made that it is both economically viable and sound to invest in technologies to stave off the entire calamity. Future work could focus on precisely weighing the damages from climate change with investment needed to offset climate change. Two strategies are detailed below, one for the world and one specifically for the United States.

A Morgan Stanley blue paper estimates \$50t of investment is required to decarbonize.³⁴⁴ Private entities are looking forward to investing and profiting from green technology in support of combatting climate change. Since energy requirements amount for roughly 60 percent of CO₂ emissions, the goal is obviously to find areas to offset those energy requirements. Morgan Stanley has identified five areas of investment to cut emissions: “(1) renewable power, (2) electric vehicles, (3) carbon capture and storage (CCS), (4) hydrogen and (5) biofuels.”³⁴⁵ Even though \$50t is a staggering amount of investment, it is estimated that this amount will not only turn a profit, but trillions in profit.³⁴⁶

Another alternative is for the U.S. government to mobilize nationwide. By being a government-led effort, this cuts down on the potential lack of investors in the private sector and is theorized to bolster the economy as well. One prior Presidential hopeful offered a proposal to accomplish this feat. Senator Bernie Sanders offered this vision: 100 percent renewable energy, the creation of twenty million jobs, and an equitable transition off fossil fuels.³⁴⁷ This plan to essentially transform the entire United States economy comes at the price tag of \$16.3t.³⁴⁸ While lambasted across various news agencies, the Sanders Green

³⁴⁴ Morgan Stanley, *Decarbonisation: The Race to Net Zero* (New York: Morgan Stanley, 2019), 12.

³⁴⁵ Morgan Stanley, *Decarbonisation*, 10.

³⁴⁶ Morgan Stanley, *Decarbonisation*, 14.

³⁴⁷ “The Green New Deal,” Friends of Bernie Sanders, accessed May 20, 2020, <https://berniesanders.com/issues/green-new-deal/>.

³⁴⁸ Friends of Bernie Sanders, “The Green New Deal.”

New Deal (GND) has been vetted and found “economically credible.”³⁴⁹ The question is not viability, but will to implement. Sanders’ GND “does not seem to break any vital economic rules and would not necessarily lead to inflation...the main unanswered question is whether American society would accept 1940s-70s-style tax rates on its wealthiest citizens.”³⁵⁰

2. Greening NATO Militaries

The U.S. military contributes more to greenhouse gas emissions than Sweden.³⁵¹ Future research could focus on ways to limit CO₂ output while maintaining operational efficiency. Environmental degradation aside, there could be strategic interest in limiting the need for fossil fuels. Limiting NATO’s dependence on oil would make areas such as the Middle East far less strategic, and thus entice a smaller footprint from NATO.³⁵²

3. Expanding the Framework of Forced Climate Migrant

As shown in the Introduction of this thesis, the terminological discourse of climate migration is problematic. Neither climate refugee nor climate migrant are sufficient³⁵³ FCM is a useful term, but also suffers from lack of nuance.³⁵⁴ For example, if a citizen of Cairo flees Egypt due state failure caused by an influx of FCMs, is the term really appropriate? FCM does not encapsulate all scenarios even if climate change is still the dominant factor.

³⁴⁹ Ray Galvin and Noel Healy, “The Green New Deal in the United States: What it is and How to Pay for it,” *Energy Research & Social Science* 67 (2020): 1, <https://www.sciencedirect.com/science/article/pii/S2214629620301067>.

³⁵⁰ Galvin and Healy, “The Green New Deal in the United States,” 6.

³⁵¹ Darby, “How the U.S. Military Churns Out More Greenhouse Gas Emissions than Entire Countries.”

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³⁵³ IOM, *Migration and Climate Change*, 13–15

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4. NATO Assets Against CCIM, Reallocation or Easy Mission Shifts?

This thesis provides suggestions for a NATO deployment in response to CCIM. Future research could focus on whether the assets and manpower required for a NATO response would be detrimental to current NATO missions, or whether NATO forces could simply be shifted in theatre. European states make up the majority of NATO members and potential NATO deployment areas are still within the European theatre. Future research could examine whether some current NATO bases be closed to reinforce NATO locations along the periphery to support a mission against CCIM.

5. South America Migration

This thesis focuses specifically on CCIM towards Europe. Burzynski et al. also have data on migration from Latin American and the Caribbean (LAC). Migration from the LAC will generally follow similar trends; FCMs will head north if able. The domino effect of FCMs moving north and potentially overloading state capacity of richer countries in the LAC might mirror the North African findings of this thesis. Future research could delve into where those likely points of state failure will be and offer suggestions for U.S. security.

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