Social media debates on politics and the dynamics of conflicts shape people’s and societies’ understanding and reaction to trends and discourses across the globe. In particular, Twitter has been an interesting and most important social media platform for politics and conflicts communication and discussion. Therefore, analyzing what people discuss about politics on Twitter by extracting the current and emerging topics under discussion is needed. This research investigates the differences of the overall topics and evolution of topics discussed by the pro-Ethiopian government Twitter users and anti-Ethiopian government Twitter users concerning Ethiopia’s Tigray conflict. We adopted the BERTopic topic modeling technique for extracting the overall topics and modeling the evolution of the topics over time. We analyzed 48,708 Twitter textual data of pro-Ethiopian government Twitter users and 46,048 Twitter textual data of anti-Ethiopian government Twitter users, both from April 1, 2021, to September 30, 2021. Our experimental results suggest that noticeable differences in the vast majority of the overall topics and the evolution of topics over the six-month time interval on monthly basis exist between the pro-Ethiopian government Twitter users and anti-Ethiopian government Twitter users.