Media Sentiment Towards Chinese Investments in Malaysia: An Examination of the Forest City Project¹

Yicong Wang² James Reagan

Endicott College of International Studies, Woosong University, Republic of Korea

Abstract

We collected national newspaper articles on the largest Chinese investment project in Malaysia, Forest City, and examined media sentiment polarity using alternative automated sentiment analysis tools. We further checked the robustness of these results using content analysis, and consistently found that sentiment polarity for mainstream news is more volatile than independent online journalism. We also found that the sentiment polarity of Malaysian mainstream media towards Chinese investments is aligned with government interactions between the two countries. This suggests that the sentiment of Malaysian mainstream media towards Chinese investments complies with local government attitudes, while independent online media are less constrained by government control. In light of this, foreign investors looking to more effectively estimate risks should monitor both independent and mainstream media to calculate the sentiment of the host country towards their foreign direct investment projects.

Keywords: agenda-setting, Chinese investments, sentiment analysis, Malaysian media

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² All correspondence concerning this article should be addressed to Yicong Wang at Huangshan University, Huangshan, Anhui Province, P.R.C. or by e-mail at stanwyc@hsu.edu.cn or stanwyc@live.wsu.ac.kr.

The expansion of China's capital in recent decades is one of the crucial forces that spurs local economies in emerging markets (Meyer, 2003). Thus, foreign direct investments (FDI) are a major topic in economic news publications, providing investors with important business intelligence. Some publications explore the correlation between the increase of Chinese investments and confrontations in host countries (Ilhéu, 2011), while others discuss the cultural distance and political risks that Chinese investments might encounter in other countries (Quer et al., 2012).

Since the launch of China's global development strategy in 2014, the "Belt and Road Initiative" (BRI), China's investments continue to attract much attention from media and scholars, many with divergent views and analyses (Liang & Zhang, 2019). On the one hand, some interpret this initiative as China's strategy to intensify regional and global influence through trade and infrastructure, while aiming for geopolitical hegemony (Flint & Zhu, 2019). Criticism of China's FDI projects is also not uncommon, especially with regard to environmental damage, failing to hire local employees, and exhibiting general neglect of social responsibility (Kamal et al., 2014). On the other hand, there is evidence that BRI countries benefit from Chinese investments because of the host country's infrastructure problems (Liu et al., 2017). Nevertheless, some host countries are increasingly skeptical that China's capital is motivated by a new form of neo-colonialism under the context of a South-South center-periphery relationship (Sauvant, 2013). Whether Chinese FDI benefit or threaten a host country is evaluated by local government policymakers, who are likely to be markedly influenced by media perception. Thus, it is imperative for investors to monitor the local media's response to FDI projects to evaluate overseas investment risks effectively.

Since 2008, the majority of Malaysian intra-FDI comes from China (UNCTAD, 2018), spurring its media to report heavily on China-backed projects in the region. Malaysia witnessed a dramatic change in the media coverage of Chinese investments (Kenyon & Marjoribanks, 2007). Following a rise in nationalism and a significant political replacement in 2018, this media tendency is getting more explicit. Perhaps out of anxiety stemming from the proximity of a geopolitical giant, the Malaysian media became skeptical of China's FDI projects and their impact on regional economics

and sovereignty. A rapid increase in China's investments has led to a rise in the literature asking "Is Chinese money helpful or harmful?" (Peng, 2012).

A heavily publicized Chinese FDI project in Malaysia is Forest City an ambitious real-estate project conducted by Country Garden Pacific View Sdn Bhd (CGPV). The project is a joint venture between the third biggest Chinese real estate corporation and a Malaysian partner. Launched in 2014, Forest City is comprised of four reclaimed islands spanning 30 km², rising in the strait between Malaysia and Singapore and is expected to house 700,000 people with luxurious facilities. The project has attracted an enormous investment of US\$100 billion. To put this into perspective, in 2017, the total inflow of all investments in Malaysia was RM197.1 billion (approximately US\$47.79 billion). Forest City is the biggest single China-backed outward FDI project by far, but there is fear among Malaysians that the Chinese stand to benefit from this investment more than the Malaysian hosts.

Due to a lack of experience with international expansion, Chinese FDI projects are often met with controversy in the host country and become a focus of local media attention. When it was reported that Chinese buyers snapped up nearly two-thirds of the sold units, along with permanent resident rights, the Malaysian media expressed strong opposition, charging it as "a threat to Malaysia sovereignty" (Moser, 2018). With the 2018 election of Mahathir bin Mohamad, who long railed against Chinese investments, media speculation over Forest City intensified to the point that Mahathir banned the sale of units to foreign buyers. As Forest City faced a sudden loss of customers and increasing hostility from Malaysian society, there were mounting worries about the future of this enormous investment.

The purpose of this study is to estimate media sentiment polarity towards Chinese FDI in Malaysia through the examination of the Forest City project. This paper will examine the Malaysian media's responses to Chinese investments, their journalistic sentiment towards this project, and how media sentiment polarity changes over time. Furthermore, the researchers explore the potential links behind these changes in media sentiment with the possible factors that influence the editorial selection of relevant reports in local economic news.

One key indicator of the media's coverage is its sentiment, which overtly impacts public opinion. The sentiment is simply a tone, attitude, emotion, or appraisal about an entity or an aspect of the entity from an opinion holder (Cambria et al., 2013). Journalistic sentiment manifests as an editorial tone of certain media, revealing to what degree the subject is perceived to be positive or negative (or sometimes neutral, with a vague tone). For this study, sentiment is the variable that indicates the media's journalistic tones, normally classified based on the polarity of texts in terms of "Positive," "Negative," or "Neutral" (Kaur & Gupta, 2013). Aiming to illustrate the sentiment of the Malaysian media's responses to Chinese investments, "sentiment analysis" is an automated opinion-mining tool employed to depict news coverage in the host country's representative media sources. Through sentiment analysis, we strive to find the possible links between political and economic events in Malaysia and the changes in its media sentiment towards Chinese FDI projects.

The public's economic perceptions affect policy preferences and government support (Soroka et al., 2015). In turn, media sentiment is one of the major factors affecting the public's perception of economic activities. Most Malaysian media is tightly controlled by the government, so their sentiment must generally comply with the Malaysian government's attitude. Thus, Malaysian media sentiment is directly affected by a variety of political issues, such as diplomatic relations. This study seeks to uncover if there is a correlation between the bilateral political interactions and the media sentiment towards Chinese FDI projects. More specifically, the study will answer the following research question: To what extent does the change of Malaysian media sentiment towards Chinese investments correspond to bilateral interactions between the Chinese and Malaysian governments? To illustrate this research question, we have the following 3 sub-questions:

RQ1: How did media sentiment towards the Forest City project in Malaysia change over time?

RQ2: How does the sentiment of two representative Malaysian media publications differ on the issue of Forest City?

RQ3: How did the bilateral interactions between China and Malaysia

correspond to any changes of the Malaysian media's sentiment regarding Forest City?

The significance of this research lies in assessing and dealing with the political risks or potential social hostility that a foreign company may encounter in their FDI projects. The power of media over public opinion and government support, including policy preference for foreign investments, has been widely studied and confirmed in the Western world (Zhu & Wang, 2018). In an effort to address this recognition gap, this research will reveal the possible correlation between the media's sentiment towards Chinese investments and China-Malaysian bilateral interactions by examining the Forest City project.

Literature Review

Chinese Foreign Direct Investments

Foreign direct investment, by definition, represents an investment in a local enterprise made by a foreign firm, involving a long-term relationship and a certain degree of control over the company by the foreign equity owner (Schüler-Zhou & Schüller, 2009). Paniagua et al. (2017) provide a comprehensive conceptual and empirical model to explain the effect of social media on foreign direct investment.

Since the gradual opening of China's economy, China has used its large foreign currency deposits to invest in other countries. Consequently, theoretical and empirical research on Chinese overseas investments has increased significantly since the mid-1990s. In the beginning, China's outward FDI occupied only a small portion of global foreign investments. This changed in 2008 when the Chinese economy remained stable during a worldwide economic crisis, while key countries struggled to recover. This period witnessed a great leap in the amount of China's net outward FDI, jumping from US\$26.51 billion in 2007 to US\$55.91 billion in 2008, more than doubling the net increase. In the past decade, China's investments brought necessary capital inflow to both developing and developed countries, forming a worldwide outward FDI flow. The number of Chinese investors also tripled, from 20 enterprises in 2005 to more than 60 companies in 2010. Meanwhile, the investors from the U.S. and E.U. decreased during

the same period (Peng, 2012). With nearly US\$1.36 trillion designated for non-financial direct investments by Chinese investors to more than 180 countries during 2016 (National Bureau of Statistics of China, 2017), it is not surprising that news reports and academic articles have taken an interest in China's large-scale foreign direct investments.

Due to the dramatic growth of Chinese outward FDI, both scholars and practitioners believe that China will become a major source of FDI (Li, et al., 2016). The global playing field may indeed be reshaped by the internationalization of Chinese firms (Alon et al., 2012). In light of this, Schüler-Zhou and Schüller (2009) conducted a study of the development pattern of Chinese cross-border mergers and acquisitions, offering a critical view of the internationalization of Chinese companies. Quer et al. (2012) analyzed the influence of political risk and cultural distance on the locations of large Chinese companies. Another consideration Chinese investors face is how technology gaps between China and the host country has a moderating effect on productivity (Li et al., 2016). In sum, not only is Chinese outward FDI in BRI countries highly sensitive to the exchange rate and market potential of a host country, but also the openness and infrastructure of the host (Liu et al., 2017).

Nevertheless, there exist very few studies on the relationship of Chinese FDI to local media reports. However, in one notable example, a content analysis of international economic news about Chinese FDI was examined using 14 different Latin American newspapers (Zhu & Wang, 2018). The study illustrates differences among the newspaper portrayal of Chinese FDI in the region, with a special focus on the possible factors that influence the editorial selection of relevant news frames on international economic news. Though with slightly different research objectives, this paper will follow a similar methodology to examine how Chinese FDI projects in Malaysia are reflected in the local media.

Agenda-Setting Theory

The news media are a primary source of those pictures in our heads about the larger world of public affairs, a world that for most citizens is "out of reach, out of sight, out of mind" (Lippmann, 1921). People not only acquire information about social

on the emphasis of the news (McCombs, 2002). Later researchers also demonstrate that media discourse interacts with public opinion, though individuals will to some extent construct their own understanding of the issue (Goffman, 1974). Entman (1993) stresses that news frames help journalists develop priorities for information in terms of what seems to be relevant and newsworthy, thereby creating agendas.

The relative importance of media discourse depends on how available meaning-generating experiences are in people's everyday lives (Gamson & Modigliani, 1989). In other words, on issues that the audience has little experience with, the media prime the audience to think in certain ways, and public opinion is thereby reinforced by the media's role. Furthermore, the media plays a crucial role in collecting, framing, and distributing information. McCombs (2002) points out the power of the news media is big enough to focus public attention on a few key issues, thus to set a nation's agenda, and to exercise an immense and well-documented influence on public opinion.

This theory provides us with the framework that media draws the public eye to specific topics by setting an agenda or influencing the audience's perspective (De Vreese et al., 2001). One dimension of this power is to set an agenda for their audiences and make certain issues acceptable for discussion in "legitimate" public forums (Lukes, 2005). This occurs as the media determines the importance of a given new issue, and uses salience cues to effectively strengthen the importance of the selected topic (Ladrido, 2008). This theory focuses on how media bring attention to specific topics, and then it takes a step further to create a certain pattern of the frame, through which the audience will comprehend the information (Arowolo, 2017).

People not only acquire information about social issues from media but also learn how important a topic is by the extent to which it appears in the news (Protess & McCombs, 2016). Under certain circumstances, the media plays a dominant role influencing the public by offering an agenda of attributes, that is, the attitudes or sentiments promoted by the media (Wanta et al., 2004). Therefore, agenda-setting theory demonstrates "a strong connection between the salience of foreign affairs in the media and the salience of foreign affairs for the public" (Soroka, 2003, p.23). Most

researchers agree that mass media plays a critical role in shaping the public's attitudes about policy-making, and thus acts as an important influence thereto (Baum & Potter, 2008). Thus, media sentiment is a key attribute shaping public opinion and policy on certain salient issues.

This paper will first analyze how much Malaysian news utilized agenda-setting regarding Chinese investments. This is determined by the frequency of related news coverage, which can reasonably assess the level of public attention to an issue, revealing the agenda (Zhang & Meadows, 2012). Within a certain period, the frequency of relevant reports about Chinese investments is a key indicator to determine agenda-setting and show how important the host country thinks the project is to the local community. We will utilize sentiment analysis testing to see whether the sentiment polarity of media towards Chinese FDI changed across time. We will then compare, in chronological order, the sentiment polarity of two Malaysian media publications to see how they differ on the project. Finally, we seek to find how the Malaysian media sentiment polarity is associated with the China-Malaysia bilateral interactions, which in turn lead to public policy preferences concerning Chinese FDI projects.

Methodology

To address the cognition gap of how local media sentiment links with FDI projects, this research tries to reveal the change of Malaysian media sentiment polarity towards Chinese investments using Forest City as an example. To meet these objectives, this study conducts a sentiment analysis of news articles concerning the Forest City project from two news sources with different backgrounds in Malaysia.

This study will examine two news sources from online journalism, each representing either mainstream media or independent news outlets. The mainstream news site is the most widespread form of news media production online, offering a selection of editorial content and a moderated form of mass communication (Sayre, et al., 2010). Deuze (2003) believes that mainstream news sites do not differ much from print or broadcasting journalism in their content, readership, and approach to

storytelling. According to Reporters Without Borders (2010), the majority of Malaysian mainstream media, both print and broadcast, are controlled by incumbent political parties. Because of the Malaysian government's tight control of the local media, mainstream news stories are generally consistent with the views of the ruling party (Manaf & Sedu, 2015).

We chose *New Straits Times* (*NST*), the oldest English newspaper, and one of the largest English newspapers in Malaysia in terms of circulation (54,490 copies daily in 2016) as a representative of the mainstream media. To include an independent opinion source different from the unanimous tone of mainstream media, we chose Malaysia's only independent web-based news outlet, *Malaysiakini* for comparison purposes, which receives about 50,000 visits every day (Sani, 2005).

Because the Forest City project was first reported in 2014, we traced the news articles on this specific issue back to 2014. Using the keywords "Forest City", we searched and retrieved relevant articles from the selected news websites. We then formed a database using Web Scraper, a website data mining application, to extract the publishing dates and full texts of these articles. To ensure these articles were closely related to our topic, we screened the articles by the frequency of the keywords: "Forest City" and "China". After the relevance filtering, 283 valid items from these two media sources remain, among which 128 are from *Malaysiakini* and 155 from *NST*.

We then applied sentiment analysis onto the connotations of "emotional" words and expressions, which identify the sentiment polarity of these news articles. Sentiment analysis is a computational study to extract opinions, including appraisals, attitudes, and emotions toward entities, issues, events, topics, and their attributes (Liu & Zhang, 2010). It is an automated method that synthesizes useful opinion-orientated information from large amounts of data (Breck & Cardie, 2004). The sentiment polarity of "Positive," "Negative," or "Neutral" is assigned to the "emotional" words and expressions to identify the reporters' or editors' attitudes hidden between the lines. There are two popular ways to automatically extract sentiment: the lexicon-based approach and the machine learning approach. The lexicon-based approach calculates the sentiment polarity from the semantic or lexical meanings of words or phrases in

the text (Taboada et al., 2011). The machine learning approach performs a supervised classification learning by extracting the features from texts and learning the model (Rokade & Kumari, 2019).

Sentiment analysis was originally used to extract customer evaluations by processing texts on social media. It is now widely utilized by social scientists and market researchers to yield sentiment polarity from online discourse, a quantitative method complementing the traditional measures of opinion mining (Gunter et al., 2014). O'Connor et al. (2010) link the statistics from public opinion polls with the sentiment measured from Twitter posts, while Wang et al. (2012) apply sentiment analysis of real-time Twitter in the 2012 U.S. presidential election. Another study combines sentiment analysis with agenda-setting in a study on social media, online news, and conventional news in the digital age (Sayre et al., 2010). Similar to our topic, a group of scholars employed sentiment analysis on U.S. media coverage of the Belt and Road Initiative (Wang et al., 2018).

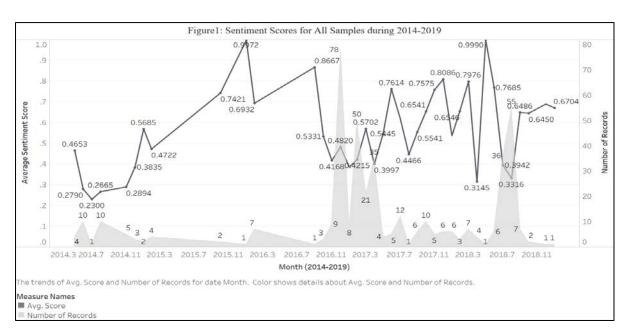
Utilizing a sentiment analysis tool (Azure Machine Learning) based on a machine learning approach, we automatically estimated the sentiment polarity of each article. In the scaling system, a sentiment polarity under 0.45 is marked as "negative," above 0.60 as "positive," and between 0.45 and 0.60 as "neutral." There is a degree of criticism for the machine learning approach of sentiment analysis. Some researchers consider sentiment a multifaceted problem, and so they worry about the accuracy of sentiment analysis (Liu & Zhang, 2010). Eremyan (2012) also holds that irony, sarcasm, negations, word ambiguity, and multipolarity in natural language impact the accuracy of sentiment analysis in terms of validity. To address these concerns, updated sentiment analysis applications usually combine natural language processing and machine learning techniques to assign weighted scores to the themes. The currently available tools for automated sentiment analysis require considerable contextual adaption to produce valid results (Haselmayer & Jenny, 2016). In consideration of these shortcomings, we employed an alternative sentiment analysis tool, Semantria, to recalculate sentiment polarity of the same material and increase validity and reliability. The results proved to be similar for both methods. To ensure the robustness of our analysis, we combined machine learning with a lexicon-based content analysis,

which emphasized how closely the sentiment-loaded words are related to the relevant topic (Medhat et al., 2014). This reduces the likelihood that the sentiment of some articles is wrongly targeted.

Results and Discussion

Concerning RQ1, we first counted the frequency of news coverage of Forest City to illustrate how important the issue is for Malaysians based on agenda-setting theory. We inputted the sentiment scores in order of publication date into Tableau. We then mapped out the average sentiment polarity scores and the total number of reports each month, as shown in Figure 1.

Figure 1
Sentiment Scores for All Samples during 2014-2019



As the area at the bottom of the chart shows, the earliest coverage started in June 2014 with 4 articles. This was followed by 10 articles each in July and September. During this time, the average sentiment score dropped quickly from neutral (0.4653) down to the lowest negative point (0.2300). These negative scores followed sharp criticism of Forest City for the environmental damage from the land reclamation in the

strait between Malaysia and Singapore. This implies that the Malaysian media set an environmental agenda related to Forest City. In response to the media criticism, the project had to reduce the land reclamation, resulting in a new plan to divide one big island into four small islands. The data indicates that this compromise raised the average sentiment score to neutral (0.5685). When real estate opportunities for Forest City officially opened in March 2016, only a few articles were published, but the sentiment polarity score was positive. This coincides with the project developer's series of advertising campaigns in the local community.

More than 70% of the total news coverage related to Forest City (201 out of 283 items) was published between December 2016 (9 articles) to May 2017 (35 articles), with an average sentiment score hovering at the neutral level (0.45). During this period, the opposition leader, Mahathir, criticized Forest City for "having undermined the country's sovereignty," while the Najib Razak government defended its benefits by citing the work opportunities and tax revenue it had brought into Malaysia. Thereafter, the project became a heated topic in Malaysia, with the typical arguments centered around whether it is a "threat to sovereignty" or provides "economic benefits." Before the Malaysian general election on May 9, 2018, Forest City received relatively high media exposure every month. In the end, Mahathir won the election by accusing his rival Najib of selling the country's sovereignty through Forest City and other such Chinese projects. This study provides data that indicates the Malaysian media influenced the general public's views about Chinese investments through the media's agenda-setting function, which in turn affected the result of the general election in favor of Mahathir.

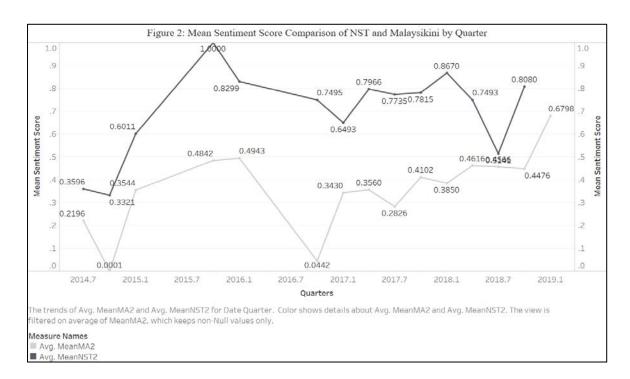
Mahathir continued to criticize the project after the election, and the media response was amplified accordingly. Fifty-five articles relating to the project were published in August 2018 while the average sentiment dropped sharply down to negative (0.3316). The controversy intensified when Mahathir banned foreign buyers from purchasing Forest City units on August 27, 2018 (Sipalan, 2018). In most cases, the more negative the news coverage a project receives, the more likely the public is to think negatively about the project (Wanta et al. 2004). Furthermore, the negative public opinion reflected through media can also influence government policymaking in certain ways,

which could potentially impact FDI projects. Eventually, the project developer, CGPV, acquiesced to the ban on foreign buyers by lowering the price of houses for Malaysians in October 2018. Directly following these changes, the average sentiment score revived to positive (0.6486), and the news coverage of Forest City in both media faded away, implying that it was taken off the agenda of the Malaysian national media.

In sum, the news coverage of Forest City increased significantly in Malaysian media from 2014 to 2018. It also became a politicalized economic issue, with the average sentiment score of media shifting across time in accordance with the media's agenda-setting.

Figure 2

Mean Sentiment Scores Comparison of NST and Malaysiakini by Quarter



Concerning RQ2, Figure 2 depicts the average sentiment score trends between the two news outlets by quarter. The average score of *NST* (Avg. MeanNST2) is consistently above that of *Malaysiakini* (Avg. MeanMA2), occupying the upper half of the chart (positive) whereas the latter is generally restrained in the lower half (negative). This reveals that, as a mainstream media, the sentiment of *NST* is much

more positive than that of *Malaysiakini*, an independent media. As news selection is the heart of the agenda-setting process (Scheufele & Tewksbury, 2007), the sentiment polarity scores largely depend on the editorial selection of the media, which in turn reflects newspapers' political stances.

As a mainstream news outlet, *NST* is likely to be predisposed to a more nationalist viewpoint, in accordance with government attitudes. Since the Sino-Malaysian relationship was generally friendly from 2014 to 2018, it is natural that the *NST* sentiment remained positive. On the other hand, as *Malaysiakini* is a self-described independent media with a nationalist bias, it is more likely to take a critical or oppositional position towards the flood of Chinese investments. As expected in this case, the *NST* sentiment is generally positive, while that of *Malaysiakini* is mostly negative. This indicates the media's sentiment towards Chinese investments is related to their editorial background.

From Figure 2, we also found that the curve of *NST* reached the top (1.000) once while that of *Malaysiakini* touched the bottom (0) twice. When the general election campaign began at the end of 2016, the *NST* sentiment peaked quite high at 0.7495. At the same time, the average sentiment score of *Malaysiakini* dropped to zero. This shows a great divergence between the journalistic sentiment of these two news outlets, indicating that *NST* tends to support Chinese investments while *Malaysiakini* does not.

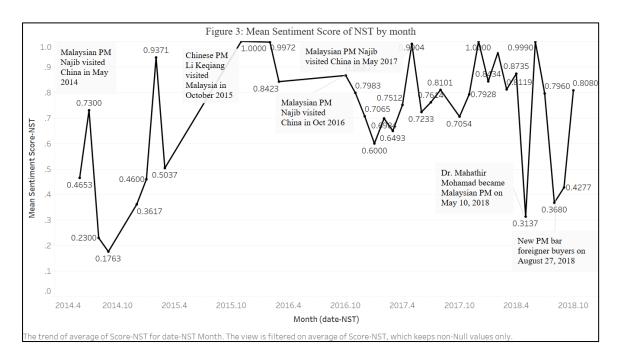
Though *Malaysiakini* and *NST* are different on the sentiment polarity scale, the trends in the sentiment scores are similar in a broader sense, as both curves fluctuated almost simultaneously at certain critical moments. This study holds that these broader trends indicate the shifts in media sentiment based on the same political factors and economic consequences. The lowest points for both curves (0.3321 for *NST* and 0 for *Malaysiakini*) appeared in October 2014. Then both lines ascended to relatively higher points (1 for *NST* and 0.4943 for *Malaysiakini*) by the end of 2015. When the project was exposed to media allegations of environmental damage, illegal labor, as well as perceived sovereignty threats, the sentiment polarity for both media outlets descended sharply. When the project signed agreements with local companies or

employed more locals, the sentiment polarity for both media outlets increased, though on a different scale.

NST sentiment polarity tends to be closely correlated with political factors while *Malaysiakini* scores are less sensitive. During the election period from January 2017 to May 2018, both curves fluctuated continuously, as this project became one focal point of the Malaysian election debate. After Mahathir's inauguration, both curves turned upwards. This implies that the mainstream media's sentiment sensitively responds to political issues. It is inferable that *Malaysiakini* held a stable and enduring sentiment polarity because it keeps a distant, sometimes even oppositional, stance from the government attitudes.

Figure 3

Mean Sentiment Score of NST & Events by Month



When we combine the dates of important political events with the curve of *NST* sentiment, we find there is a potential correlation between media sentiment and key political or economic activities concerned with this project. This supports our hypothesis that the sentiment of mainstream media towards Chinese FDI projects is aligned with Sino-Malaysian diplomatic interactions and the attitudes of the ruling

party. To test RQ3, we listed the critical moments for top diplomatic interactions between Malaysia and China and economic events concerning Forest City in Table 1.

Table 1Key political interactions and Forest City events in the past 5 years

Date	Key political interactions and events
May 2014	Malaysian Prime Minister Najib visited China
October 2015	Chinese Prime Minister Li Keqiang visited Malaysia
August 2016	Forest City officially opened
October 2016	Malaysian Prime Minister Najib visited China
May 2017	Malaysian Prime Minister Najib visited China
May 9, 2018	The 14 th Malaysian general election was held
May 10, 2018	Mahathir became Malaysia's Prime Minister
August 17, 2018	Malaysian Prime Minister Mahathir visited China
August 27, 2018	Malaysian PM Mahathir bars Forest City from foreign buyers

Without exception, in the corresponding months before the election in 2018, the average sentiment polarity of *NST* towards Forest City was positive. During the Najib administration, the average sentiment score of *NST* undoubtedly rose very high at the diplomatic visits of the two countries' heads of state. The victory of Mahathir in the election dragged the *NST* sentiment score from highly positive (0.8735) to negative (0.3137), while the *Malaysiakini* curve remained neutral (0.4516). From this data, we conclude that the average sentiment score of *NST*, since it is a mainstream media source, is in line with the government's attitude towards Chinese investments. This is further supported by the dip in sentiment that appeared in May and August of 2018, during which time Mahathir, who long railed against Chinese investments, became

prime minister. The second dip in sentiment on May 10 coincides with his prohibitions of foreign buyers at Forest City.

Our data imply that *NST* generally publishes reports that cater to the needs of the ruling party. As mentioned above, the media is tightly controlled by the ruling parties in Malaysia. Therefore, there are not many diversified opinions in media, and neither can the media present oppositional opinions to the public. In this sense, mainstream media represents the voice of the government, and must generally subject itself to self-censorship and strict control (Kenyon & Marjoribanks, 2007). The mainstream media must then simply repeat the governmental voices with the assumption that the government is telling the truth due to the unavailability of other sources of information (Iyengar & Simon, 1993).

Despite the tight control of media in Malaysia, independent news media have grown substantially, offering a space for relatively open public discussion and debates. The radical development of independent media has destabilized patterns that once made sense (Hamilton & Jenner, 2004). Online independent news outlets have naturally become an important source of information for the public. It is also true in Malaysia that web-based media are on the leading edge of journalism in the region. Among them, *Malaysiakini* is the largest independent outlet and thus a good representative of Malaysian independent online media. As Figure 2 indicates, *Malaysiakini* does not always cater to the government's tone. Political interactions on the Sino-Malaysian relationship have little influence on the sentiment of this independent news outlet towards Chinese projects; rather, only the economic consequences directly concerning Forest City would influence its sentiment. In other words, the sentiment of *Malaysiakini* tends to be oriented to economic factors rather than politics, and therefore it is a more trustworthy reflection of public opinion. These findings support previous research about Malaysian media.

To sum up, the news coverage of Forest City increased significantly in Malaysian media from 2014 to 2018, and the shifting average sentiment scores generally correlate with the project's involvement in political or economic controversies. We compared the sentiment polarity of a mainstream media outlet, the *NST*, with an

independent media outlet, *Malaysiakini*. The results suggested that the sentiment of the former was much more positive than the latter on the issue of the Forest City project. This divergence could result from the editorial selection of these two media from different backgrounds. The mainstream media tends to report in accordance with the tones of the current government or ruling party instead of holding a neutral stance. Being an independent media source, *Malaysiakini* is less constrained by government control, and thus demonstrates a more reliable editorial sentiment towards Chinese investments.

Conclusion

Forest City became a politicalized project when it was involved in Malaysian political conflicts in the general election. As a representative of Chinese investments in Malaysia, the sentiment of mainstream media represented by *NST* remained positive, while independent media, as represented by *Malaysiakini*, held a negative sentiment towards Forest City. We also found that there are correlations between Sino-Malaysian bilateral interactions and the sentiment polarity of the mainstream media on the issue of Forest City because the government wants positive media exposure of FDI projects due to political concerns. As for *Malaysiakini*, its sentiment tends to link more with the perceived economic consequences of the project instead of political factors.

Under the current circumstance of prevailing protectionism, foreign investors need to investigate media sentiment to avoid overseas investment risks. To explore the dominant public opinion in the host country conveys more significance for the public relations department of multinational corporations to react to the crises or media concerns related to FDI projects. As for investors who know little about Malaysia, observing mainstream news outlets is not enough to portray a panoramic view since independent media play a role in decision-makers' evaluation. This new approach of sentiment analysis based on machine-learning provides communication researchers a quantitative way of opinion mining to explore the sentiment of news texts, which is practical in cases of large datasets. The sentiment of independent media may provide a reliable indicator of the public opinions towards FDI projects whereas mainstream media sentiment is determined by government attitudes.

Although Forest City is truly a mega-project, it does represent the typical political risks that foreign direct investments overseas face. The results of this research provide useful information for promoting foreign direct investments in the region, which implies a reliable tactic for investors to manage risks. As the study is limited to one case in Southeastern Asia, a future study is recommended to research more FDI projects in multiple destinations around the world and examine their links with local media sentiment.

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Biographical Notes

Yicong Wang is a Ph. D candidate at Endicott College of International Studies, Woosong University, Daejeon, R.O.K. and an associate professor at and can be reached at Huangshan University, Huangshan, Anhui Province, P.R.C. or by e-mail at stanwyc@hsu.edu.cn or stanwyc@live.wsu.ac.kr.

James Reagan, Ph. D, is a professor at Endicott College of International Studies. He can be reached at Woosong University, Daejeon, R.O.K. or by e-mail at jr.reagan1@gmail.com.

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