Exploring the impact of trade sanctions

A frame analysis on Huawei's stakeholders' responses to "the Huawei ban"

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Master's Thesis

June 2020

Abstract

In May 2019, the U.S. government signed off executive order 13873, which restricts U.S. companies' export of information and communications technology to "foreign adversaries" for national security reasons. Essentially, this policy alludes to the Chinese telecom giant Huawei. Media coverage portrayed a significant number of diverse stances and opinions from different stakeholders that relate to Huawei. This thesis took Huawei ban news as an example to study the "unspoken" in the media- News Framings. The aim was to understand how do news media frame the strategic responses of the different stakeholders in the interactions between Huawei and the U.S. government.

This research attended to the cultural difference between the U.S. and China. 50 articles from the U.S. and Chinese online news outlets were analysed by five frames, the news sources included general news and specialized news. Three types of frames were referenced from empirical framing studies and two types of frames were developed specifically for the Huawei case. The dataset was relatively large (985 units). Hence, after producing the primary results from framing analysis, the researcher then analysed the primary results by a highly structured result analysis design. The analysis purpose was to find out the differences between the two countries' applications of news framings and for allocating the framing focus.

The results have shown that geopolitics was the overarching theme, but both countries' media tended to use other issues to conceal the Huawei ban's geopolitical essence. Furthermore, geopolitics was the centre of disputes between stakeholders. The U.S. and Chinese cultural values were reflected by the news frames, as the U.S. news outlets applied the frames in a more direct manner. However, unconventional characteristics were detected from Chinese specialised news. Moreover, the framing analysis indicated that the ban will harm the U.S and China mutually, and the technological complementary of the U.S. and China was stressed. This research could provide insight into mass media's effect in conflict situations where the social integration of novel technology was emphasised.

KEYWORDS: *News framing, Huawei, geopolitics, trade sanctions, economic consequences, diffusion of innovations*

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1. Introduction

In May 2019, the U.S. government signed off executive order 13873, which restricts U.S. companies' export of information and communications technology to "foreign adversaries" for national security reasons. Essentially, this policy alludes to the Chinese telecom giant Huawei (Kang & Sanger, 2019). Media coverage portrayed a significant number of diverse stances and opinions from different stakeholders that relate to Huawei. Taking the Huawei example, the aim of this thesis is to conduct a frame analysis, in order interpret the framing effect in news reports and articles which addressed the impact of executive order 13873 on Huawei and its stakeholders.

There are several motivations behind the executive order. The central motivations are that the U.S. government believes that Huawei's development would endanger the U.S. national security system, and China might outshine U.S.'s position in implementing a worldwide 5G network in the future (Jaishankar, 2019). The motivations could potentially be reflected in the news as a part of the strategical response from the U.S. government.

The Chinese and the U.S. government, the Chinese and the global telecommunication market, and companies that relate to Huawei's business have been reported in the news with different strategic responses. Moreover, previous research in political studies suggested three aspects are proven to be representative in political related news framing studies, namely *economic consequences, conflicts, attribution of responsibilities* (Semetko & Valkenburg, 2000). Additionally, a *technology* frame was included in this study to analyse the responses that indicate the mutual influence between technology developments and society. Moreover, literature reviews suggested that *geopolitics* could be a potential overarching theme for this research that addresses the interactions between China and the U.S. However, with the attention to precision, on which aspects and to what degrees is geopolitics relevant to the other four aspects was verified by the end of the research.

Besides the framing theories that were used to construct the analysis process, the researcher also included several theories and concepts to comprehend the issues that arose by the Huawei ban. In terms of technology, the diffusion of innovations theory provided knowledge on the social integration process of Huawei's technologies. Furthermore, sociology and communication theories supported the researcher to deduce the motivations

behind the responses and the incentives of frame applications. Namely, the high and low context culture theory which was coined by Edward T. Hall (1976), the uncertainty avoidance concept which is a part of Hofstede's model for cultural dimensions (Country comparison, n.d.), the ancient Confucian theory which roots in the Chinese cultural (Amako, 2014; Li, 2015), and the pursuits and protections for freedom of speech by generations of Americans (Redish, 2013).

The researcher aimed to investigate how the stakeholders involved in the Huawei ban case responded to executive order 13873, to understand the integrations between Huawei and the U.S. This research took the news framing theory as the fundamental approach, for analysing the framing effect that addressed interactions and possible tensions concerning the mentioned five aspects of *economic consequences, the conflicts between stakeholders, the attribution of responsibilities, technology and geopolitics*.

The main research question (RQ) and the Sub-questions (SQ) were formulated based on the topic and the theoretical framework.

Main RQ: How do news media frame the strategic responses of the different stakeholders in the interactions between Huawei and U.S. government.

SQ1: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of attribution of responsibility?

SQ2: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of economic consequences?

SQ3: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of conflict?

SQ4: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of geopolitics?

SQ5: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of technology?

1.1 Problem definition

The essential problem is that the signing of the executive order influences Huawei and its stakeholders in various aspects and to different degrees. The root cause of the tension between China and the U.S. is a geopolitical dispute. Since 2013, the Chinese leadership started to promote a "Belt and Road" initiative to reinforce China's geopolitical strategy. In this initiative, China uses its geographical position as an advantage in connecting through Asia to Europe and constructs a business chain in infrastructure, transportation network, energy, and communication project (Shen, 2018; Wen, 2017). Among them, the "fibre optic Silk Road" project is where Huawei is a valuable player. The aim of the "fibre optic Silk Road" is to realize data transportation across continents and strengthen China's position in the field of global telecommunications (Rolland, 2015).

From the standpoint of the U.S. government, the geopolitical intention of China and the technology development of Huawei are threats. This was emphasised in numerous reports on the Huawei ban (Thorbecke, 2019; Hamilton, 2020). Political-science scholar Allison (2018) attributed the current tension between the U.S. and China to historical national power disputes, which occurs when a rising power challenges and tends to displace a ruling power. In this sense, China's growth alerts the U.S. and tends to intensify the conflict. The signing of the executive order is one of U.S. approaches to constrain the growth of China and Huawei, so that the U.S. can maintain its global leadership.

1.2 Academic relevance

Policy constraints for novel technology

Multiple sources have taken Huawei as the representative case due its technological impact. For instance, Fan's (2010), and Hosain's (2019) researches discussed the consequence of international trade due to the power of Huawei and Wen's (2017) dissertation on "The rise of Chinese transnational ICT[1] corporate: the case of Huawei". However, in the era where technology companies grow rapidly and effectively, there is no empirical research that has analysed a country using policy to impact a technology company's growth. Moreover, the changes in geopolitical dynamics between countries are under the research scope. This research aims to contribute to academia by examining policy constrains for novel technology.

Global issue across cultural context

Through initial research, framing studies typically research issues within its cultural context where the issue was generated, or a global issue within a specific cultural context, such as, Semetko and Valkenburg's framing study on European politics (2000), Shah, Watts, Domke and Fan's framing study about Clinton's public approval after the scandals (2002), Froehlich and Rüdiger's framing research on political public relations in Germany (2006). Additionally, the research of Luther and Zhou (2005) is somewhat similar to this thesis, where a global issue is investigated across cultures. In their study, an excellent comparison of news framing by China and the U.S. media regarding SARS is provided. However, although different nations have different stances, SARS was a pandemic that people in China and the U.S. conquered as human entities, while the Huawei ban is a sanction that one nation proactively placed on a company from another nation, influencing the global stakeholders. Thus, this research is valuable as it explores this global issue which is a conflict between countries, and its portrayal across cultures.

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[1] ICT stands for Information Communication Technology.

1.3 Societal relevance

Social integration progress of novel technology

The establishment of this executive order has a considerable impact on society. It directly and indirectly affects innovation companies, governments, markets, citizens, and the formation of subsequent policies. For instance, Google revoked Huawei 's Android licenses, which profoundly limited the usability of Huawei products worldwide. Losing access to the apps impeded the maintenance of Huawei's current users and engaging with new users also proves to be a challenge. Moreover, Huawei's 5G plan has a big societal relevance, discussed by the general public, national leaders, and media outlets. Thus, as the Huawei ban is a popular societal topic and this research will help society better understand how the stakeholder responses are being presented with frames which can impact the audience and the society's opinions of the ban.

Mass media and social conflicts

According to Linström and Marais (2012) "mass media have a powerful effect on the world view of the society." In addition, the news framings that exist in mass media affect people's learning, interpretation, and evaluation of issues and events. In sections 2.1 and 2.4.1 of this research, it is elaborated how the mass media environment of China and the U.S. differ as well as the way of communications. Due to the distinct focus and approaches that mass media used to underline the consequences of the ban, it is likely that the media framings lead to purposeful swaying of public opinions. This academic research, unlike causal interpretation, takes the cultural difference into account. The research design is based on empirical frameworks to study news reports from both countries. Therefore, the research outcomes will provide insights into the way that Chinese and U.S. media operate in reporting issues that contain cross-national conflicts. Conducting this research would benefit society by providing comparably objective and evidential points of view.

2. Theory and literature review

"The Department will continue to rigorously monitor sensitive technology exports to ensure that our innovations are not harnessed by those who would threaten our national security." This is a statement given by the U.S. Secretary of Commerce Wilbur Ross during his interview with ABC news about Huawei's restriction for doing business with U.S companies (see dataset article No. 21, A21). News is one of the many ways for the public to gain information from the leaderships on the Huawei ban issue. Would it make a difference if it was a descriptive text written by one of the journalists? Does it reflect Huawei's malicious intention? Does it reflect the fragility of a nation's security system? Does it make known the power of technology? Statements and reports like these fill up the internet. As there are many ways to express opinions, it is valuable to analyse news framing by an academic approach to understand the focus that the U.S. and China's media presented to the audience regarding the Huawei ban issue.

As questions arose, the researcher became more aware of the importance of the spoken and the unspoken in news media, which are often highlighted in news framing studies. This is because news framings assist the audience to locate, perceive, identify, and label the flow of information that surrounds them (Goffman, 1974), and to "narrow the available political alternatives" (Tuchman, 1978, p. 156). The literature review entails three types of theories. The first type of theory supports the researcher to select the framing devices, build up the structure of the research and provide empirical knowledge for the framing analysis. The second type is cultural-related theories that help to researcher to understand the communication differences between the U.S. and Chinese media. Cultural theories will be examined against the research outcomes to understand whether there is a gap between the traditional theory and the case-specific phenomenon. The third type of theory is a typology, a unique form of theory building that provides systematic classifications for the researcher to identify the frames (Chu, Chau & So, 2015)

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2.1 Characteristic of U.S. and Chinese news media

According to de Vreese (2003), a frame refers to the way that journalists shape raw material into stories. This research intends to study the news framing that was revealed in U.S. and the Chinese news regarding the Huawei case. It is important to have knowledge of the characteristics of the news from these two countries, so that different cultural values can be incorporated into the news framing analysis.

China's political intentions often characterize its aim to enhance its global power, its desires to be recognized on a worldwide stage, and its determinations to make its economic and material power more robust. Thus, these notions are often being captured in news framings, while encouraging nationalism and patriotic feelings (Deng & Moore, 2004). More insights on the Chinese media's characteristics were given in the study of Luther and Zhou (2005), which compares the news framing applied by China and the U.S. in covering news about SARS[2]. They expressed that long existent government control and the Chinese Communist party's ideological control affect the Chinese news media. The major news outlets, therefore, developed a co-existing mechanism of the political demands and commercial needs. However, tensions exist in this mechanism because the governmental controls and the growing commercial incentives do not always have the same purpose. However, Luther and Zhou (2005) recognised the characteristics of Chinese news cannot merely be viewed as "propaganda designed to manipulate or indoctrinate the Chinese public mind" which was affirmed by many scholars (Chang, 2002; Chang, Chen & Zhang, 1993; Zhao, 1998). The increasingly diversified information sources, especially social media, are reshaping the Chinese news industry and gradually infusing more transparency and a more critical point of view. It can be concluded that the Chinese media is highly political with a focus on nationalism.

Similar to China's goal to extend its impacts globally, U.S. politics is centred on achieving worldwide diffusion of capitalist democracy. The U.S. also tends to interfere with China by promoting capitalism disparaging its ideological belief system (Herrmann & Keller, 2004). Oswald's (2009) study on the mass media in transforming American politics does not

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[2] SARS stands for Severe Acute Respiratory Syndrome, an epidemic outbreak that started in China in 2002.

deny that the U.S. government also tries to control the media. However, if the U.S. media does not contribute to seeking the truth in the political process, the American citizens demand to be heard. Thus, it can be concluded that U.S. media tends to contain powerful political factors just as the Chinese media, however, the demands for liberty and free speech are strengthened by the U.S. citizens. So, the injustices will be emphasised in the media content because the audience's voice is wide and powerful.

In Luther and Zhou's research. (2005), more specifications on the news framing application similarities and differences between the US and Chine are also presented in Although not as liberal as the U.S. media, the China news industry took reference from Western values. Therefore, there are similarities between the frames that are used by both nations. The search for news on SARS indicated that the dominant news framings that are often used in U.S. news reports were also found in Chinese news. However, the Chinese news present fewer responsibilities, leaderships, economic consequences and conflict frames than the U.S. news. In particular, the U.S. news frequently uses negative frames to portray China in terms of responsibilities and blame, as well as expressing doubts towards China's economy. In comparison, Chinese News emphasizes human interest framing more than the U.S. news, thus, the expression of Chinese news also tends to tale a humanitarianism appraoch. Moreover, a few Chinese newspapers that cover conflicts focus on the external entities, not internal conflicts.

As a conclusion for the media comparisons, both U.S. and Chinese media use Western values, although the U.S. media utilises these values more. Both media are political, however, the U.S. media complies to the demands of liberty, and the Chinese media agrees to the focus of nationalism and it is more humane.

2.2 Ground theory - Two framing schemes

2.2.1 Media frames

Communication scholar Scheufele (1999) stated in his notable work "Framing as a theory of media effect" that frames need to be considered as schemes when presenting and comprehending news. Therefore, he summarised two concepts of frames: media frames and individual frames. Gitlin (1980) supported this argument by explaining the effect of the frame on both sides. To a great extent, frames are unspoken and unacknowledged, but they are constantly used by journalists when reporting the news and influence the audience which relies on their reports. Thus, media frames are intensively studied in this research by looking at the news surrounding Huawei and how they are portrayed.

In essence, media frames act as functions, properties, or devices of the media texts embedded in political discourse (Sanders, 1990). Entman (1991, p7.) also pointed out that frames are considered as attributes of news. News that describe political topics contain information and frames, and although the actual text is the information, the unspoken frames can still have an informative effect on the news story (Tewksbury and Scheufele, 2009). Information effects appear when a frame unifies information into a package that can influence the audience. The packages usually contain arguments, symbols, metaphors and images. (Gamson & Mogigliani, 1987), which suggest the ways of interpretation and resonate with events to the audiences.

If the news shows text containing arguments, such as "Huawei's technology causes a national security threat to the U.S.," the story might intend to stimulate the audience's insecurity and suspicions towards Huawei. To reiterate this point, frames are devices that can associate different concepts, and attach the information to an association; an influential news story relies on the frames to build the association (Tewksbury and Scheufele, 2009). Tewksbury and Scheufele (2009) emphasized the effectiveness of media frames further when a frame is at its most powerful state; it proposes a direction for the audience to think about an issue. An effective frame would express the meaning within the text, with little supporting arguments. In an experiment that was done by Simon and Jerit (2007), they tested how to manipulate the audience's perception by changing only one word in an article concerning abortion. One article used the word "baby", and the other article used "fetus",

and the rest of the article remained exactly the same. The result has shown that the readers who received the "baby" article supported more the regulation of abortion. Therefore, the media frames used in the U.S. and Chinese news are important as they will determine the focus of the messages that are conveyed to the audience.

2.2.2 Individual frame

Frames can exert an effect on the reader's belief, attitude and behaviour (Tewksbury and Scheufele, 2009). However, the ultimate impact of news stories does not entirely depend on how the journalists present the media frame but also on individual (audience) frames, which are internal structures of the mind (Sanders, 1990). Neuman et al. (1992) supported this statement by indicating the way that private thoughts and discussions are framed is different from the way that public and media discourse are framed. Iyengar's (1991) explained more specifically that the formation of the relationship between individual frame and media frame largely depends on the specific issue that is being discussed. However, this research cannot explicitly study the individual frames, because it requires analysing audience responses, which cannot be achieved with the chosen research method. Analysing individual frames on the Huawei ban topic could be an approach for future study.

2.3 News Framing

Framing the news is one of the ways to utilise media frames, as media entails multiple channels. De Vreese's (2005) pointed out the significant inconsistency in the literature regarding "framing" as it is emphasising on the salience of different aspects of a topic. Gamson and Modigliani (1989) recognized that frames give meaning to an issue, essentially being, "a central organizing idea, or frame, for making sense of relevant events, suggesting what is at issue". The strategic responses are constituted by correspondent habits, dispositions and ways of thinking (Deudney, 2000).

Empirical research has shown that there are two lines of framing approach that were commonly used to study topics regarding political, economic and communication issues: issue-specific frames and generic frames. Issue-specific frames are used to selected aspects of perceived reality and enhance the salient through communicating text (Entman, 1993, p.52). This framing approach was previously used to study specified events such as, "women's movement" and "labour disputes" (de Vreese, 2005).

In comparison, while the issue-specific frames allow researchers to identify "great specificity and detail", generic frames broadly prompt "systematic platforms for comparison across issues, frames, and topics" (de Vreese, Peter, & Semetko, 2001, p.108). This research investigates the generic frames, as the research goal is to understand the framing of the potentially broad impact by Huawei's stakeholders. Moreover, the Huawei ban is an ongoing process, generic frames are more suitable for this research. The attention to analyse the Huawei ban issue from a broader point of view should be valued. Thus, conducting a research on generic frames would allow the researcher to comprehend the diverse aspects of the consequences from establishing such executive order.

Several articles indicated that Semetko and Valkenburg are crucial contributors for using generic frames in political studies (Kozman, 2017; de Vreese, 2005; D'Angelo, 2002, Linström & Marais, 2012). In their study of the news framing of European politics, they deliberately used the generic frames approach to investigate the following aspects in the news framings: attribution of responsibility, conflict, economic consequences, human interest, and morality. The attribution of responsibility frame describes the situation where accusations are assigned to individuals, groups or organizations, as they should take the responsibilities in causing or solving the issue. Interpreting the conflict frames emphasizes

the conflicts between different stakeholders. The economic consequence frame presents a problem regarding the economic consequences' impact on individuals, groups, organizations, regions or countries. The human-interest aspect tends to manifest an individual's story, it reflects an emotional angle while presenting the event. Morality frames focus on the moral and religious context (Semetko & Valkenburg, 2000).

Their research has shown that the attribution of responsibility was the most discussed aspect, accompanied by conflict and economic consequences (Semetko & Valkenburg, 2000; de Vreese, 2005). These three aspects are potentially aligned with the impact that the ban has on Huawei and its stakeholders, so they will be adopted. Thus, the researcher considered these aspects as the focus for using the generic frame approach in this study. Therefore, three out of five SQs are formulated based on the theories discussed above. The formulations of other two SQs are explained in section 2.4 Geopolitics, and 2.5 Technology.

SQ1: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of attribution of responsibility?

SQ2: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of economic consequences?

SQ3: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of conflict?

2.3.1 Attribution of responsibility

According to Druckman (2001), framing effects could alter one's perception of the definition of judgment or choice of problems. Specifically, the responsibility frame suggests to the audience that some parties should take more responsibilities than others in causing an issue or come up with a solution. Semetko and Valkenburg's (2000) study suggests that in the nations where social welfare is significantly valued, the government is expected to provide answers to problems. According to de Vreese (2005), national news organizations could build a 'spin' to the framing of national and international news. For example, if the Chinese government pressures domestic news to portray Huawei as a victim of the U.S.-China trade war, the U.S. government would be seen as the cause of the problem. Nevertheless, more stakeholders will be examined to determine whether any were portrayed with the responsibility frames.

2.3.2 Economic consequences

Graber (1993) expressed that the extensive impact of an event has substantial news value, and economic consequences are often significant. Moreover, economic-related issues are usually presented to citizens as alternative characterizations of a course of action (Sniderman & Theriault, 2004). For example, one of the potential points of investigation is that some U.S. companies' growth is increasingly reliant on China, the world's second-largest economy. So, besides that the ban on Huawei would harm Huawei's profit, interrupting U.S. chipmakers to sell critical components to Huawei would also jeopardize U.S. company's sales channels (King, Bergen & Brody, 2019). The importance of interpreting this frame when researching an impact of the policy is underlined by de Vreese (2005), as he stated that emphasizing the economic consequences of an event is translating the economic implication of a policy.

2.3.3 Conflict

The conflict frame is often used to capture the audience's interest by intensifying the conflict between individuals, groups, and institutions (Semetko & Valkenburg, 2000). Additionally, Neuman, Just, and Crigler (1992, p.61-62) expressed that the conflict frame is typically used in U.S. news when reporting a range of issues. Moreover, compared to the

economic consequence frame, the conflict frame was more prominently used in Britain, Denmark, and The Netherlands (de Vreese, 2005). Thus, the researcher is interested in discovering the conflict frames that applied to Huawei and its stakeholders.

Since the research subject includes the political aspect, to ensure the comprehensiveness and relevance of the research, geopolitical frames would be the used as a subtheme for analysing the three aspects of framing effect. The geopolitical angle will be further specified with China's geopolitical strategy, the "Belt and Road" initiative.

2.4 Geopolitics

Geopolitics can be understood as the competition among great powers over access to strategic locations and natural resources (Overland, 2015). A typical geopolitical play could be several nations fighting over the ownership of an area or ocean for natural resources: oil and gas. Considering the business that Huawei operates in and the reason behind Huawei becoming a target of the executive order, the geopolitics of the internet is in the centre of discussion.

China:

According to Schiller (2011), China intending to establish a significant place in the world market system where the U.S. aims to dominate s a modern example of geopolitical contend.

In 2013, the Chinese leadership developed a "Belt and Road" initiative, also known as the new silk road. It fostered Huawei to become a key contributor of China's geopolitical strategy. This initiative aims to connect China with other continents and reconstruct China's position in infrastructure construction, transportation networks, energy, and communication projects. China wants to play a role in forming a new global development pattern to reach a more significant position in geopolitics (Shen, 2018; Wen, 2017).

One of the most crucial parts of the "Belt and Road" initiative is "fibre optic Silk Road", and it is considered as the outcome of realizing the geopolitics of the internet. Building a "fibre optic Silk Road'' enables China to construct "independent network sovereignty as a counter-hegemonic offensive" (Wen, 2017). The Chinese government supports and makes use of market-oriented Chinese multinational ICT enterprises, to strengthen the intercontinental backbone network. Huawei supports "fibre optic Silk Road'' by linking Asia to Europe and facilitating international data traffic (Rolland, 2015). Moreover, Huawei cooperating with the Chinese government does not only profit Huawei as the company expands its businesses. Non-digital infrastructure projects such as high-speed railways and oil-pipelines also rely on ICT technologies to realize system integration (Zhao, 2015). Thus, actions that were implemented in response to China's "fibre optic Silk Road'' strategy would cause economic consequences. Corresponding to the previous literature, the signing of the executive order could change the benefits of different stakeholders.

Comprehending the opinions from Huawei's stakeholders by using framing analyses as a tool will support the researcher to understand the geopolitical impact of the executive order, especially the impacts that the frames tend to emphasise.

The U.S.:

On the other side of this geopolitical competition, the U.S. aims to ensure a major stake in a genuinely global system (Schwoch, 2009). As China intended to expand business by the initiative, the U.S. also intended to build more connections in Asia. Tellis (2013) gave more insights on American geopolitical approach to China; during the presidency of George W. Bush and Barack Obama, U.S.'s primary focus was not to "keep China down but raising other up". The U.S. is actively making allies with the countries that geographically close to China, such as Japan, India, Singapore. As these countries are being aided by the U.S., the U.S. can increase their mutual cooperation, having these countries to become more dependent on the partnerships. Subsequently, objective constraints will be created to limit China's power in Asia (Tellis, 2013). It therefore appears to be that the U.S. tend to interfere with China's "Belt and Road" initiative.

After China proposed the "Belt and Road" initiative, similarly, the U.S. promoted a "Trans-Pacific Partnership", a regional free trade agreement in Asia. Although this partnership was abandoned after President Trump's election, it was recognized as essential for the U.S.'s geopolitical, economic development (Lee, Wainwright & Glassman, 2018). Furthermore, the U.S. reached out to Asia, and the U.S. previously deployed military forces and cyber strategy forces in other regions. The U.S. neglecting the U.S. and the involved countries' fixed border, which triggered political debates (Tellis, 2013; Lee et al., 2018). Lee et al. (2018) addressed the debate and the controversy in Capitalism vs. Territorialism. In other words, it is a debate on to what degree a country should go beyond its own territories to develop its economy.

Lee et al. (2018, p.418) concluded and agreed with Harvey's argument: "The motivations and interests of agents differ." "The two spatialities of state and capital sit awkwardly with and frequently contradict each other''. The "awkwardness" was also identified by Tellis (2013), she expressed that the tension between China and U.S. is caused by Washington creating an awkward reality when expending U.S.'s power. The U.S.

prompted an international economy by producing benefits for itself and other countries around China that it wanted to be allied. Meanwhile, as the countries around China grew, China is also simultaneously fuelled (Tellis, 2013).

Based on the description of China and the U.S.'s geopolitical strategy, although their political agendas are different, the common goal is to make allies through geopolitical approaches.

The conflicts:

China's internet strategy tends to oppose the U.S.'s leading power, specifically, China's firewall, state censorship, systematic hacking, and widespread monitoring (Schiller, 2011). When the media reports relevant events, conflict could potentially be initiated by Huawei's goal and the U.S.'s global network strategy. The conflicts are anticipated to be portrayed in the consequences of the executive order.

According to Jaishankar (2019), the U.S. government, especially the Department of Defence, stressed that over-dependence on Chinese ICT infrastructure would jeopardize the hardware and software used by the military and in critical infrastructure. The 5G network is one of the prioritized political issues for the White House, because U.S. firms do not have advance positions in the competition. Researchers highlighted that Huawei invested more than 15.3 billion USD for Research and development in 2018 (Wang, 2019). China's increased trading production has become comparable to the U.S., and the U.S. are reacting to the changes. Viewing news about the responses from the stakeholders would influence judgment of the greater public.

Huawei's advances in technology would support China's "fibre optic Silk Road" and "Belt and Road" initiative to proceed the nation's position in geopolitics. China intends to alter the global political and economic ecosystem with the Chinese network system and applications by Huawei's innovations (Schiller, 2011). The geopolitical tensions are reflected in the stakeholders' response in the aspects of attribution of responsibility, economic consequences, conflict and technology. To understand the effect the executive order has on Huawei, the researcher needs to analyse the news framing on the stakeholders.

2.4.1 The cultural roots

The way of framing and expressing one's opinion in the articles is considered to be associated with communications styles. The communication styles and the geopolitical strategy of China and the U.S. are associated with the two countries' cultural roots.

Diplomatic approaches

China's culture, especially its tolerance approach to foreign affairs is shaped by Confucian philosophy where respect and order are emphasized. Confucianism entails several values that can be practiced in numerous aspects of life. Among them, there are three values relevant to the research on China's geopolitical strategy (Amako, 2014; Li, 2015):

Benevolent and orderly - Both the ruler and the ruled to assume obligations.

Trust and mutual respect - Focus on self-cultivation and harmonious relationships.

Sublime words with profound meaning - The profound truth is contained in subtle language.

Free speech is deeply infused in American culture, as Redish (2013) stated that there should hardly be any controversy in which democracy and free expression are inextricably intertwined in a symbiotic relationship. The basic notion of free expression and the establishment of policy and laws are therefore mutually affecting each other. As an example, the First Amendment (The First Amendment to the United States Constitution) bars Congress from "abridging the freedom of speech, or of the press", which makes freedom of speech an absolute right only subjects to reasonable limitations (Corwin, 1920).

A modern setting is built based on The First Amendment, having different political orientations tends to change the reasons of supporting the rights of free speech. Alvarez and Kemmelmeier's (2017) research on U.S. culture value explained that conservatives protect the freedom of speech because they are motivated by a focus on collectively held values favouring free speech. Liberal's support for the freedom of speech is due to their value for self-expression. Despite the divergent political views within the U.S., free speech is jointly supported, as well as protected by law.

Encouraging liberty and free speech are considered to be motivations of the U.S. people being prone to create changes. This is supported by the concept evaluation of

uncertainty avoidance which is one of the cultural dimensions that were coined by Hofstede. It refers to the uncertainty in social cognitions and the degree of threat of vague scenarios. In related analysis, the U.S. has a higher score than China. The U.S. diplomacy strategy tends to proactively change uncertainty towards certainty, but China is comfortable with ambiguity (Country comparison, n.d.). Amako (2014) affirmed this by expressing that China develops its geopolitical path with leveraging the advantages of developing countries while avoiding collision with aggressive parties.

Comparing both countries' diplomatic approach, the common goal is to enrich their alliances. However, the Chinese tend to present a relatively less aggressive approach, due to the belief of benevolence in Confucianism and high tolerance for uncertainties. The U.S. tend to be more proactive, due to its pursuits in liberty and low tolerance for uncertainties. Consequently, the U.S. might appear to be more aggressive than China.

Communication approaches

The cultural roots are also shown in the ways of communication. Hall (1976) indicated that a particular communication style is structured by the cultural context. China has a high context culture, so people tend to provide less information in verbal expression. Chinese people prefer an indirect communication style. Other information can be provided through individual backgrounds, associations, values, gender, the stance, and status in society. This also leads to the conclusion that the Confucian concept corresponds to the interpretation of western anthropologist Hall. On the contrary, the U.S. has a low context culture. Their way of communication is direct, information and arguments tend to be expressed as clear and as straightforward as possible (Hall, 1976).

The communication style factor can potentially distinct opinions that are expressed in the two nation's articles, as well as differ the application of the frames. Essentially, framing is used as a means to select an aspect of perceived reality and enhance the salient through communicating text (Entman, 1993). Therefore, conducting a framing analysis will help the researcher to identify the differences in communicating the Huawei ban topic when the media present stakeholder's responses.

In conclusion, the different cultural roots shaped the two countries' diplomatic approaches, geopolitical strategies and communication style that are likely to be portrayed

in news media. Although common grounds can be identified, the current disputes between two nations do not exist in a vacuum and have global impacts. Therefore, SQ4 is formulated to identify the media's focus when framing the geopolitical dispute.

SQ4: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of geopolitics?

2.5 Technology

Besides the geopolitical elements and the macro-level economic consequences that are covered in the news, the news reports on Huawei being restricted by executive order also describe Huawei as a technology company. As Huawei's efforts for accomplishing the "Belt and Road" initiative seems to trigger disagreements from the U.S. and causing the current conflicts on the global stage, it can be concluded that Huawei promoting its innovations is experiencing frictions (Huang, 2019). According to Rogers (2003), as innovation provides individuals or an organization a new way of solving problems, to reinforce social changes toward an ideal state, the advances that are brought by innovations need to adapt the society appropriately. Subsequently, this is the challenge that Huawei is facing. The diffusion of innovation theory explained this process and pointed out the crucial role that innovations have in society.

Rogers (2003) explained the diffusion of innovations theory entails that the progress of an innovation being introduced, further diffused and accepted is essentially a social progress. Thus, the society has impact on technologies. However, as the diffusion of innovation theory was first coined in 1963, it is important to evaluate its applicability for doing research nowadays. Reinhardt, Hietschold and Gurtner's research (2019) and Claudy, Garcia and O'driscoll's (2015) research added specifications to this theory for improving its relevancy to the current situation.

Reinhardt et al. (2019) suggested three factors that are essential to overcome the resistance in the adoption of innovation: the adoption drivers, the adoption barriers, and the transitional concept. In the Huawei case, the adoption drivers are Huawei's technical advantages and being promoted by different stakeholders. The adoption barriers usually involved the barriers in usage, value, and risk barriers (Claudy et al., 2015). The main barrier for Huawei that is investigated for this study is the risk barrier, as the U.S. claimed that Huawei's technology endangers its national security system. The transitional concept can be understood as the message that innovators deliver to the innovation adaptors on what is new that the innovation is offering. Reinhardt et al. (2019) explained that to trigger innovation adoption, firstly, the adoption drivers need to be reinforced by increasing innovation attraction. Secondly, the adoption barriers need to be reduced, this can be realised by minimizing the risk. Thirdly, the messages that underlined technology

advantages should be spread to the society to promote the transition concept. They developed a fourth concept "Tilting the system" which suggested that promoting certain changes in the society can accelerate the innovation's diffusions and adoptions.

Rogers (2003) also pointed out that the element of social construction in diffusing an innovation is corresponding with the "Social Constructivism" that exists in news framing. "Social constructivism" describes the development and the knowledge of an individual are constructed by human interactions and the societal environment (McKinley, 2015). In addition, the use of framing has been characterized by "Social constructivism" since the 1980s (McQuail, 1994). Scheufele (1999) also recognised the connection between framing and social construct by expressing that in political communication through mass media, framing is designed and operated on the basis of social constructivism.

Hence, the innovations have impacts on society by advancing the technical capabilities. The society also influences the progress where the new technologies are adapted by people and the social conditions in its totality. The news frames that are used to explain Huawei's innovative features, or the impact that the ban has on Huawei's technology is likely affecting the company's future business developments. Therefore, analysing news frames that present technology and the society's mutual impacts became parts of the research focus. SQ5 is subsequently formulated to guide the analysis for finding out the framing attentions on the news content that discuss technology related issues.

SQ5: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of technology?

Theoretical framework

	Technology	Attribution of responsibility	Economic consequences	Conflict	Geopolitics

Data — Articles about the executive order affects Huawei

Analytical frames — Technology, Attribution of responsibility, Economic consequences, Conflict, Geopolitics

Potential associated perspectives — Geopolitics, Geopolitics, Geopolitics, Geopolitics

Supporting concepts — Diffusion of innovations Adoption drivers vs. Adoption barriers; High / low context culture; Uncertainty avoidance; Confucianism; Freedom of speech
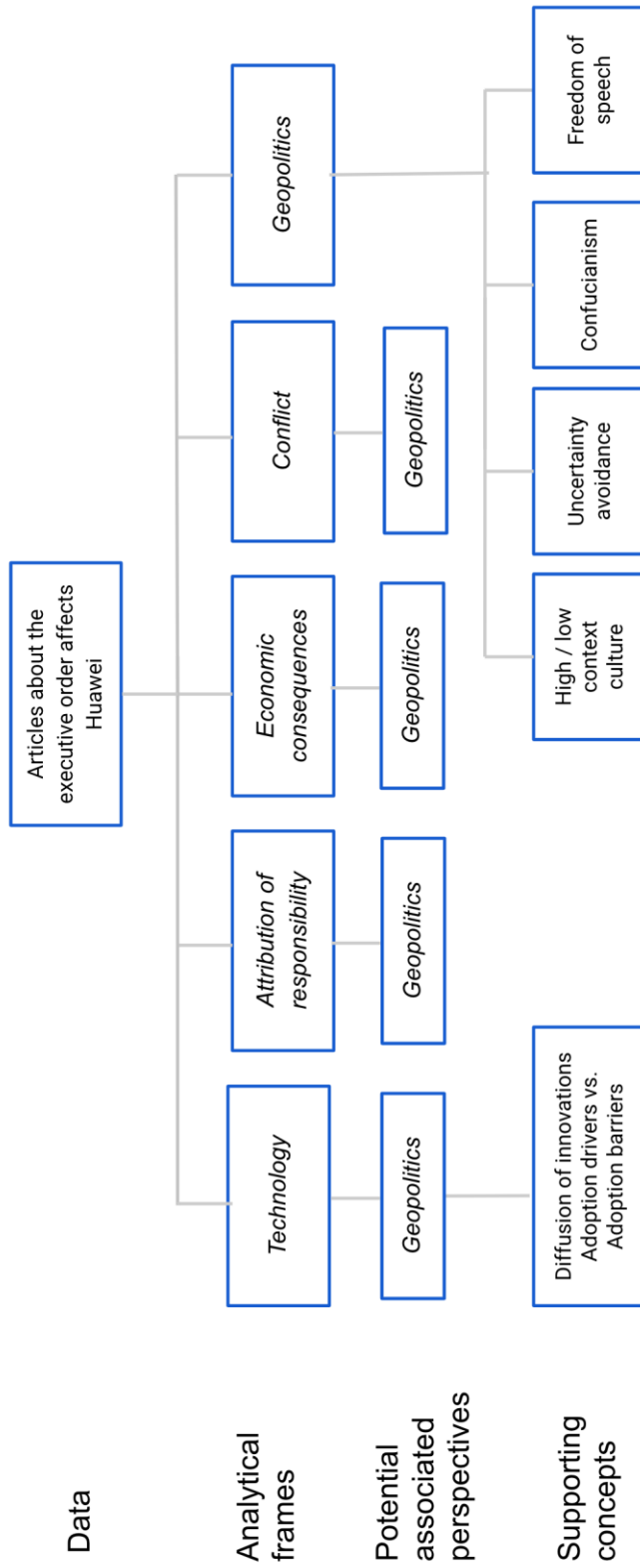
Figure 2.1 Theoretical framework

2.6 Typology of frames

In preparation of the research analysis, by incorporating the characteristics of different frames, a system of typology of frames was developed specifically for the current study. The researcher used the typology as a tool to guide the process of identifying, categorizing and analysing news frames.

Attribution of responsibility:

Attribution of responsibility frame can be identified in the U.S. blaming China for endangering the U.S.'s national security. The frames could also be shown in Huawei's monopolization of the 5G market worldwide, thus impacting other countries' technology sovereignty. On the contrary, China's response to the allegations is also an application of attribution of responsibility frame.

Economic consequence:

News on the executive order modifying the trading details, profit and loss and the changes in Huawei and allied/competitor companies' business can be seen as indications for the Economic consequence frame. Apart from considering the "consequence", information on Huawei's previous and current market shares should also be taken into consideration because they are the motivations for implementing the executive order. The consequence might not assert immediately, so economic predictions would be meaningful to analyse.

Conflict:

Conflict framing is demonstrated when disagreements are voiced in news stories. It can be a debate over the national security threat that Huawei potentially caused to the U.S. It can be disagreements on restricting the market. Conflict frames are portrayed through antagonism between oppositional opinions, ideologies, and stances. The chain relation of the Huawei ban can cause conflict between other countries with the U.S. or China.

Technology:

Technology frames are able to portray two ways of impact. On the one hand, the news reports on Huawei's technological advances initiating or influencing the current event can be recognized as applying technology frames. On the other hand, acts from the leaderships or companies to reshape technology development are also applying technology frames. Furthermore, the changes in the technology industry, new product releases or new strategy to contend with the executive order can be framed with the characteristics of technology frames.

Geopolitics:

The researcher anticipated the geopolitical frames would associate with the other frames. Essentially, economic factors, conflicts between countries, attribution of responsibility to countries and advanced technology can be seen as manipulating chess pieces to win the geopolitical game. Furthermore, if the news states that a certain court of action is taken to enhance a country's geopolitical power, the frame exerts effects independently from other frames.

3. Research design

The researcher conducted qualitative content analysis to answer the five SQs. According to Abrams and Meyers (2010), a qualitative research design is suitable for the studies that aim to gather in-depth and interpret understandings of perception, attitudes, histories, experiences and perspectives. As Wood (2004, p.69) argued, "quantitative data cannot provide substantial insight into the texture and meaning of experience". In the case of Huawei, simple figures and numbers yielded by the quantitative approach were insufficient for the researcher to understand the complexity of different stakeholders, perspective, description of the situation, consequences and solutions to the issue.

David, Atun, Fille and Monterola (2011) further explained the feasibility of using qualitative content analysis for framing studies in their work "Comparing Two Methods of Frame Analysis". They stated that qualitative textual analyses serve for identifying and describing the frames in media discourse. It was also often used to heavily interpret and to deeply investigate small sample of text. In this research, the units of analysis were paragraphs; a smaller unit would not be able to capture the debate. It is essential to incorporate the portrayal of opinions in each paragraph and the framing effect comprehensively.

The foundation of this research is news framing and the various aspects within the frames. Conducting frame analysis is able to provide a theoretical, methodological, and critical tool for the researcher to explore the meaning-making process and how would the frames influence governmental, social elites, news media, and the general public (Allen, 2017). Therefore, the researcher analysed news reports and website articles by identifying what the strategic responses from different stakeholders are; hence, the frame analysis approach appears suitable. Moreover, Reese (2001) expressed that using a frame analysis in social science studies enables the researcher to bridge the competing tendencies of social analysis to provide closure and openness. Qualitative framing analysis was also used by Shaw and Giles (2009) to analyse older mothers in UK news; Perkins (2005) to investigate public relations' responses to U.S. presidential election; Tian and Stewart (2005) to compare the news framing of SARS in BBC and CNN. These researches yielded insightful results and were frequently cited by other researchers. Thus, qualitative framing analysis is suitable for analysing news on societal topics.

3.1 Sampling strategy

The chosen sampling method is purposive sampling. It is a sampling strategy that is commonly used to identify and select information-rich cases that address the research interests and related phenomena (Palinkas et al., 2015). Finding cases that emphasize the impact that the executive order has on Huawei's stakeholders is the core of this method. Articles regarding the executive order and Huawei tend to comment on various aspects. Different media outlets and stakeholders are voicing from their unique positions; thus, the researcher aims to uncover as many different key dimensions as possible. Purposive sampling provides a detailed and quality description of each case so that the researcher can document uniqueness; the ability to compare and contrast is embedded in this strategy (Palinkas et al., 2015). In this way, the researcher was able to yield different patterns across cases; significant aspects emerged from heterogeneity (Benoot, Hannes & Bilsen, 2016).

According to the methodology guideline (Janssen & Verboord, 2019), and considering the limitation of time and resources, the sample size was fifty articles. The researcher planned to analyse 10 more articles if there were new distinct stakeholders' responses being discovered in the last few articles within the sample size. However, by the end of the analysis, the stakeholder responses were rather repetitive, so, no extra articles were analysed.

Since China and the U.S. are the main stakeholder countries, the sample included news articles that were published by American and Chinese (mainland) media outlets. The sample constitutes twenty-five articles in English and twenty-five articles in Chinese. The chosen articles were published between May 15th, 2019 and February 24th, 2020. This period is from the date that the executive order 13873 was established, until the date that the researcher planned to start the analysis process.

Each article was at least 300 words in length. If the article was too short, a thorough description of the situation and the stretch of the argument would not be achieved. For analysing the frames of conflict, each article should describe at least two stakeholders. In this way, different responses could be compared. Regarding the frames of economic consequence, geopolitics and the attribution of responsibility, as long as the news article portrays one stakeholder's strategic response, it was considered sufficient.

This research focused on Chinese and U.S. news platforms that are adequate to professional standards. In this way, the researcher was able to standardize the trustworthiness and quality of the news articles. In order to increase the diversity of opinion and the viewing point of the sample data, there were two types of news outlets that the researcher collected news articles from. The first type was general news websites that cover a full range of news topics. The second type was specialised news websites that online-publish profession level news with specific topic focus. In this research, some of the selected specialised news outlets cover a comprehensive category of news while specialising in technology and financial news.

3.1.1 U.S. news outlet selection

The selection of the U.S. national media outlet was based on the research that was published on Statist (Watson, 2020): "Credibility of major news organizations in the United States as of November 2017 and April 2019". Ten news organizations were ranked by 2201 adults in the United States based on perceived credibility. The researcher included the two news platforms that were cited credible by over 50% of the respondents. They were ABC and NBC. Considering textual articles are the corpus of the analysis, the researcher did not specifically distinguish whether the news platform is primarily focused on printing media or broadcast news.

In addition to the general news websites, Wall Street Journal, TechCrunch and Business Insider were also included in the articles collection sources. Selecting these three news websites was based on their informative style and the unique point of view that they provide to the news industry. The focus of these three news outlets is disposed to provide professional and insightful information to enrich the vibrant atmosphere of the society. Particularly, some of the content of TechCrunch and Business Insider covers events in the subculture, the audience is considerably young, and demands a more unconventional and global citizen mindset. Yet, the news on TechCrunch and Business Insider is up to technical standards; they are insightful and able to provide a critical point of view (Arrington, 2018).

3.1.2 Chinese news outlet selection

The selection of Chinese news outlets was consistent with the selection of the U.S. news outlet. The news sources were from the Chinese general news websites and specialised news websites. There is little information available on how the public perceives the credibility of Chinese news platforms in comparison to the U.S. Hence, the researcher selected two top-ranked general news platforms: Xinhua and China Daily, based on an overall ranking score that combines: Alexa website traffic ranking, Baidu (Chinese major search engine) ranking, and PR value (Newspapers and periodicals website ranking, 2020).

Through initial research, the researcher found out that the Chinese general news outlets tend to re-publish articles from non-mainstream news websites while crediting the original sources. Xinhua is an exception with plenty of original articles. This is potentially caused by the direct and indirect control of the Chinese Communist party over the major news outlets. Thus, for providing information-rich research outcomes and to minimize the inherent bias that existed in the sample, it was crucial to include specialized Chinese news that reflect opinions beyond mainstream. Namely: Huxiu, Guancha and Caixin.

Table 3.1 News outlets selection overview

The U.S.	China
General news outlets	**General news outlets**
NBC	Xinhua
ABC	China Daily
Specialised news outlets	**Specialised news outlets**
Wall Street Journal	Huxiu
The Wall Street Journal has a long tradition of vigorous and independent editorial commentary (Wall Street Journal, 2000).	is dedicated to providing original, in-depth, sharp and high-quality business information to its readers. Its news content is created with the societal perspective (Huxiu, n.d.).
TechCrunch	Guancha
The remarkable readership was developed through TechCrunch's specialization in the news of the technology industry, reporting analysis of emerging trends and profiling of new technology businesses and products (Arrington, 2018).	Guancha" means "observe" in Chinese, this online news and comments aggregator website aims to provide global Chinese readers with in-depth reports and real-time comprehensive information incorporating unique original content (Guancha, n.d.).
Business Insider	Caixin
It grows rapidly as an American online news website with a focus on financial and business news (Business Insider, 2007).	Editorial staff at Caixin Media is well-known for independent thinking and professional practices. They are insiders with a profound understanding of China's economic and social transition (Caixin, n.d.).

3.2 Data Collection

The researcher manually collected data from the news outlets' websites. The researcher intentionally collected articles that cover more topics and more perspectives yet are still relevant to the executive order. It was more difficult to collect articles from Chinese news websites than the U.S. news websites. Firstly, within the defined publishing date, the Chinese news covers more topics about Huawei while the U.S. news intensely discussed Huawei being restricted by the executive order. So, the researcher modified the search term to collect Chinese news. Instead of searching "Huawei", the researcher used "Huawei, U.S." and "Huawei, U.S. ban" on Chinese News websites to discover relevant and applicable articles. Secondly, for limiting the publishing date of the articles to the desired research scale, the researcher used "advanced search". However, some Chinese news websites' advance search pages were unable to open or stumbled in loops of "loading page". This might be caused by potential censorship, as the researcher was accessing Chinese news websites from outside of China. The researcher then collected the articles with a VPN turned on. By doing so, the articles were collected successfully.

3.3 Operationalisation

The research subjects were online news reports and website articles. As this study followed a purposive sampling strategy, the researcher included sources from different types of media outlets in China and the U.S., and the content should cover multiple stakeholders. The company Huawei, the Chinese government and the U.S. government were the primary focus. Still, articles describing involved companies and governments worldwide were included in the sample to encourage the adoption of different stakeholders and opinions.

To minimize the research bias, the researcher interpreted the articles as objectively as possible. Theoretically, the researcher adopted an interpretivist approach to analyse the frames. Bryman and Bell (2007) explained that by using this approach, researchers interpret and examine the meaning of text, rather than simply calculate word frequencies. In this way, the frames, their implications, reflections and impacts were understood in a social context.

The research was initially conducted in a deductive matter; the frames were summarized by reviewing literature. The frames function as themes in the initial coding process. The researcher conducted the pilot analysis where 10 articles were analysed. An initial coding tree was inductively formulated based on the ten articles. News from the U.S. and China are likely to have different focuses; they might apply news framing differently. To formulate the coding tree as comprehensive as possible, the researcher included both Chinese and U.S. articles, as well as both general news and specialised news in the pilot analysis. Then the researcher analysed the rest of articles and enriched the code book with news identified stakeholders' strategic responses.

For content analysis, it is a common practice to determine themes by record keywords. However, this research used frame analysis; the central concept was to research beyond the visible surface of texts and to understand the latent meaning. Moreover, several framing researches did not use identifying keywords as a tool for the analysis, they used the technique of asking questions (Valkenburg, Semetko & Claes, 1999; Semetko & Valkenburg, 2000; Scheufele, 1999).

According to Semetko and Valkenburg (2000), the researcher should primarily measure and analyse the framings by asking questions to create sub-categories based on the framing aspects. Based on the theoretical framework of this research, each question should be meant to measure one of the five aspects of the potential frames: attribution of responsibilities, conflict, economic consequence, technology and geopolitics.

The questions to determine the sub-categories are:
- · Does this paragraph suggest a party should be considered responsible for causing/ solving the problem? (SQ1)
- · Does this paragraph express a positive/negative impact on the economy? (SQ2)
- · Does this paragraph portray disagreement between different parties? (SQ3)
- · Does this paragraph discuss Huawei influence/ is influenced by the technology industry? (SQ4)
- · Does this paragraph represent a geopolitical effect? (SQ5)

A Yes or No answer would be sufficient for the first step of the categorical analysis. The study of Semetko and Valkenburg (2000) on European policies is quantitative. They labelled each question with a score based on the relevancy and the strength of the expression. The current qualitative research needs to comprehend meanings and opinions. Therefore, the researcher analysed and determined what an article exactly describes regarding the four aspects. There are two ways of expression in the article content. The first kind is sourcing from the stakeholders: quoting from a spokesperson or a leader. The second kind is sourcing from the article's publishers: the news publishers are portraying the stakeholders, or the publishers express their opinion towards the issue. The two ways of expression were recorded separately, the distinction was made in the analysis process. In the next step, the researcher interpreted the article and summarized the subject.

The dataset can be found in the additional file. The articles were numbered from A1 to A50. Within each article the units of analysis (paragraphs) were numbered from U1 to Ux, the units' numbers do not accumulate across articles. The inductively developed code book can be found in appendix A. An example of the coding sheet can be found in Appendix B.

3.3.1 Specification of the frame's applications

Scheufele and Scheufele (2010) expressed that "The process through which frames emerge from reading of texts is largely opaque." Considering the innate characteristic of geopolitics, it functions as an overarching theme of this research. Moreover, the frames were naturally connected to each other at a certain level. So, one article could fall under several framing aspects, in other words, sub-categories. Each stakeholder could also be related to several framing aspects.

To clarify the overlapping frames, the researcher distinguished the frames within each paragraph as primary frames and subordinate frames. In this case, the most obvious frame that can be detected in a paragraph was recorded as a primary frame. In particular, when keywords that closely relate to a certain frame were shown in a paragraph, it was considered as an indicator to determine a primary frame. Some related issues that can be reflected in framing can be counted as subordinate frames. It is possible that one paragraph contains more than one subordinate frame. To demonstrate the procedure this is a paragraph from ABC News (A21 U7).

"'We have long held that the decision by the U.S. Department of Commerce to add Huawei to the Entity List has caused more harm to the U.S. than to Huawei,' the statement added. 'This has done significant economic harm to the American companies with which Huawei does business and has already disrupted collaboration and undermined the mutual trust on which the global supply chain depends. We call on the U.S. government to put an end to this unjust treatment and remove Huawei from the Entity List.'"

In this paragraph, the key phrase "economic harm" is mentioned, and it involves the decision of the U.S. Department of Commerce, so the economic consequence is the primary frame. By further interpreting the text, attribution of responsibility is recognized as a subordinate frame. The indication is U.S. blacklisting Huawei has harmed the U.S. Companies and global supply chain. Moreover, the conflict frame is also used as a subordinate frame. It is concluded from Huawei calling on the U.S. government to end unjust treatment and remove Huawei from the Entity List. Geopolitics frame was also involved in this text, as U.S. blacklisting Huawei changes the geopolitical dynamic between China and the U.S., as well as has an impact on the global supply chain.

3.4 Design of result analysis

This research processed a large quantity of data; thus, the analysis process first took place when the researcher analysed the articles, assigned codes and frames; these yield preliminary results. The researcher also needed to analyse the preliminary result of the frame analysis. Therefore, a clear and specific structure needs to be established for analysing the preliminary results. The goal was to provide precise answers to the sub-questions while various specific research aspects and comparisons were also presented to offer associations and comparisons context.

The table below is the analytical design for examining the preliminary research outcomes. In other words, it is the research design for analysing the results.

The researcher deployed data validation, filters function in Google sheet to separate data into clusters for each analysis. The researcher also used SPSS to calculate the frequency of codes for each group of analysis.

Table 3.2 Design of result analysis

Design of result analysis				Method
	Item	Division	Purpose	
General analysis	total times of frame applications	by per frame	to determine the tendency and frequency of each frame was applied	**Google sheet:** assigning the codes to frames and stakeholders, making use of data validation and filter functions for the calculations and analysis
		by per nation's media outlet	to determine the differences exist in the two nations' media outlets in terms of the tendency and frequency of each frame was applied	
		by primary/ subordinate frame's ratio	to determine the strength of each frame	
	frame associations	by per frame	to determine each frame's likelihood of be associated with other frame/ issues/ topics	
		by per nation's media outlet	to determine the differences exist in the two nations' media outlets in terms of each frame's likelihood of be associated with related frames/ issues/ topics	
Individual frames	overview of the frame application	in general	provide an overview of the frame within context	**+ SPSS:** frequency calculations and analysis
	comparison between two nations' media outlets	by per nation's media outlet	to determine the differences exist in the two nations' media outlets on frames applications and frequent codes applications	
	stakeholder parties analysis	by U.S. governmental organizations' responses	to determine the stakeholder's responses	
		by Huawei and Chinese governmental organizations' responses	to determine the stakeholder's responses	**+ the researcher's interpretations and analysis:** interpreting each paragraph, determine frames and assigning codes, determine the primary and subordinate frames
		by other stakeholders' spokesperson's responses	to determine the stakeholder's responses	
		additionally, by raised issues when stakeholders' responses are too scattered in terms of codes and frequency	to determine the stakeholder's responses	
	connectivity between codes	by per stakeholder party	to determine the stakeholder's responses while considering related frames/ issues/ topics	
	most frequently applied codes	by per frame	to determine the stakeholder's responses	
		by U.S. governmental organizations' responses	to determine the stakeholder's responses	
		by Huawei and Chinese governmental organizations' responses	to determine the stakeholder's responses	
		Other stakeholders response were not applicable for the most frequently applied code analysis. Because there were too many stakeholder were involved the responses are rather scattered		

3.5 Validity and reliability

The reliability of research refers to the extent that fellow researchers can replicate the research. Achieving validity is concerned with the accuracy of scientific findings. Validity is reflected when the researcher studied what was intended to be studied. The conclusions of the research are required to present empirical reality and being able to assess human experience that occurs (LeCompte & Goetz, 1982).

The researcher included various methods to increase the validity. The frames in this study were deductively formed based on empirical research. The theoretical framework was derived from a number of academic papers that were written by authoritative scholars in the field. These papers were often used as a reference in academic theses with similar topics. By choosing articles from both China and the U.S.; and both national news outlets and free-press news outlets, the inclusiveness of this research is assured.

To improve the reliability of this approach, firstly, the researcher was as objective as possible and followed a set template when interpreting different samples. Not leaning toward any stakeholders nor nations emphasized the principle of conducting research objectively. Secondly, the researcher intended to provide clarity and details of the analysis process. Some codes were merged for the consistency of the analysis, the researcher explained the merging details to provide a transparent analytical process. Thirdly, distinctions were made between a quote from a spokesperson and a descriptive statement from a journalist. In this way, the specific context of the news paragraph and potential stance in which the text was written were made available the analysis. Lastly, the researcher recorded, and analysed primary frames and subordinate frames separately helps the researcher to prioritize the frames and their effect, it also increases the clarity when interpreting the frames.

In this research, the data collection process was illustrated by steps. The obstacles that the researcher encountered were noted in this research. For instance, using a VPN to collect articles from countries that have internet restrictions could be used as a suggestion for others to replicate this research. The data were collected, and the analysis was recorded in a constructed matter. These procedures were documented in Google Sheets; the researcher repeated the procedures and seeking patterns for enhancing the reliability of this research.

4. Results and discussions

The researcher identified the frames by asking herself questions regarding the frame's characteristic. With the aim of finding patterns in news framing of Huawei stakeholders' strategic responses, a total of 50 articles, 985 units were coded and analysed in order to provide answer to each SQs. The shortest article was A43 which contains 8 units. The longest article was A33 with 41 units. The emerged codes were subsequently analysed by the steps in "Table 3.2 Design of result analysis". Finally, the frequent and outstanding responses construed patterns for each frame, they are explained in this chapter.

4.1 Overview of the frames

Table 4.1 Frame frequency overview

Frame frequency			
	Primary	Subordinate	Total
U.S. media	377	268	645
attribution of responsibility	62	55	117
economic consequences	90	31	121
conflict	75	42	117
geopolitical	30	100	130
technology	120	40	160
Chinese media	288	133	421
attribution of responsibility	40	19	59
economic consequences	90	19	109
conflict	63	15	78
geopolitical	25	40	65
technology	70	40	110
Total	665	401	1066
attribution of responsibility	102	74	176
economic consequences	180	50	230
conflict	138	57	195
geopolitical	55	140	195
technology	190	80	270

The table above is an overview of the five frames' application frequency for the U.S. news outlets, Chinese news outlets and total frequency. The most frequently used frame in all 3

cases was technology frame. The least used frame in U.S. articles were attribution of responsibility frame and conflict frame, they were applied 117 times each. For the Chinese media, the economic consequence frames were applied almost as often as the technology frames, and the least used frame was attribution of responsibility frame. When combining the news sources of the two countries, the least used frame was attribution of responsibility as well.

The U.S. media used frames 224 times more than the Chinese media. It can be deduced that, on one hand, it is due to the Chinese news outlets being under censorship with the expressions within the news being influenced, so opinionated sentiments were less likely to be included in the Chinese articles. On another hand, it is due to the cultural context difference. The Chinese culture and the way of communication is high context and indirect, the U.S. culture is low context and more direct (Hall, 1976), as discussed in the theory section. This was discussed in the theory section. Thus, the U.S. articles were written in a sharper tone and oppositions and disagreements to another party were expressed more in the U.S. news.

In the analysis of individual frame and stakeholder responses, it might appear that the total number of the codes are more than the total frequency of the frames being applied. That is because multiple codes could be assigned within one paragraph and within one frame. The coding tree and the conditions of merging codes can be found in the research design section.

It is worth mentioning that although the U.S. news outlets and stakeholders used the frames more often than the Chinese parties, the codes developed from the U.S. stakeholders' responses are less diverse than the codes developed from the Chinese stakeholders' responses. There were 15 more types responses from the Chinese or Huawei than the U.S. that were recorded. The Chinese parties tend to raise more aspects of the Huawei ban issue, for instance, that banning Huawei affects academia. Moreover, the Chinese stakeholders occasionally expressed positive opinions although the situation is targeting at them. For instance, Huawei CEO expressed that he is a fan of the U.S. technologies. In comparison, the U.S. stakeholders merely expressed anything positive through the frames.
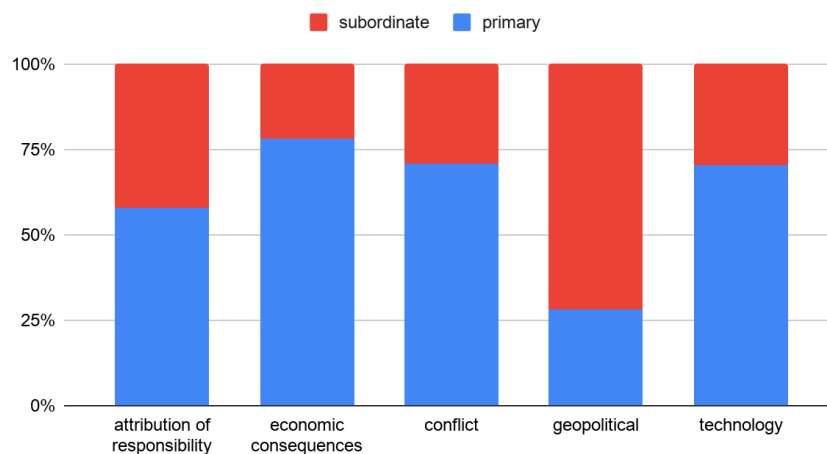
4.2 Primary and subordinate frames

Figure 4.1 Ratio overview of primary and subordinate frames

The researcher analysed the ratio based on the frequencies of each frame was used as a primary frame or as a subordinate frame. This could be an indication of the strength of each frame. If a frame is more likely to be used as a subordinate frame, it means that the strength of this frame is not strong enough, that other frames or aspects of the issue are overshadowing this frame. The news articles tended to emphases issues with strong frames than weak frames. However, this result was yielded by 50 articles and it might not be applicable in other research.

The economic consequence frame was identified as the primary frame the most. When a paragraph from the article used the economic consequence frame to express responses from stakeholders, other issues were less likely to arise. On the contrary, geopolitical frames had been applied as subordinate the most. The strength of the geopolitical frame was relatively weak as other aspects of the executive order's impact tend to arise in the same paragraph. However, interpreting from another perspective, this result also means that geopolitical issues tend to be associated with other issues. This result was anticipated as the overarching theme of this research is geopolitics.

The strength of technology and conflict frames are similar, and they are slightly less powerful than economic consequence frames. Attribution of responsibility frame is the 4th powerful frame.
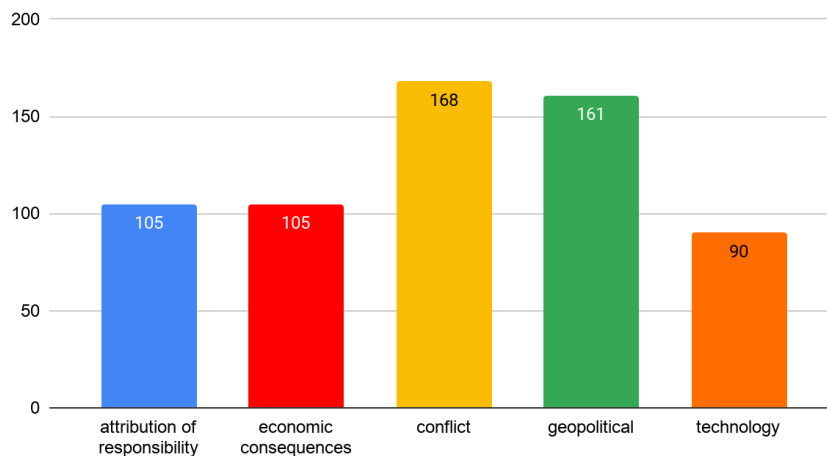
4.3 Frame associations

Figure 4.2 Frequency of each frame's association with other frames

The chart above provides a general overview of: Frequency of per frame associated with other frames. Each paragraph of the data could contain more than one frame, so it is important to interpret the frame associations. The frequency of each frame associated with other frames determined the connection between the frames. Subsequently, it also determined the connection between different aspects of the executive order's impact.

The conflict frame is associated with other 4 frames for 168 times. It is the frame that was most likely to associate with other frames in this research. This result suggests that confit might appear to be a broad topic that is associated with other aspects of the executive order's impact. Considering that the conflict frame is relatively strong, once a conflict was aloud in the paragraph, it initiated a chain effects in other aspects.

Geopolitical frame has the second highest frequency when connected with other frames within one paragraph. Incorporating the framing strength analysis, geopolitical frames were used frequently but have the weakest strength. This indicates that the media tend to express geopolitical impacts, but often use other frames as the primary frame to conceal the issue's geopolitical essence. This will be further discussed in geopolitical frame analyses (section 4.9).

Taking a paragraph from a TechCrunch article as an example (A9 U5). "We need to make sure our networks won't harm our national security, threaten our economic security or undermine our values," said Republican-appointed FCC chairman Ajit Pai in remarks. "The

Chinese government has shown repeatedly that it is willing to go to extraordinary lengths to do just that." This unit of analysis was noted with attribution of responsibility frame as the primary frame, the code was applied within the attribution of responsibility frame is *"The U.S. accusing Huawei is a threat to national security"* and *"The U.S. accuses Huawei's link to the Chinese government"*. The overall tone of this paragraph leaned toward the U.S. government organization FCC blamed China with Huawei as an addition. This paragraph was also identified with two subordinate frames: Economic consequence which is coded with *"ban Huawei will damage the US"*; and geopolitics with the code *"The U.S. accusing China of wrongdoing".* As the paragraph intensified the hostilities and accusations between nations, it expressed responses by a geopolitical frame as a subordinate frame.
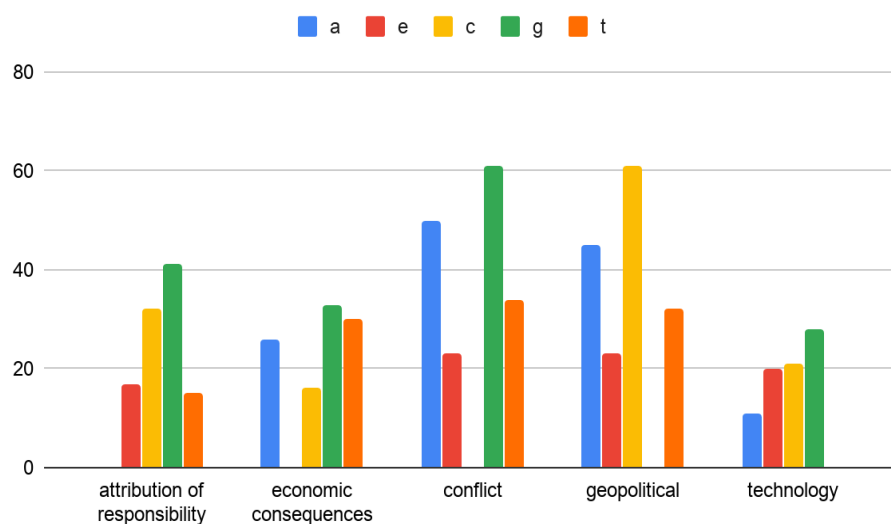
Figure 4.3 Overall frame associations in detail

The chart above is a magnified version of Figure 4.2. It provides details of each frame's frequency when they are used with another frame.

Attribution of responsibility frame is most likely to be used together with geopolitical frame, and the conflict frame follows.

The economic consequence frame has similar association with attribution of responsibility frame, geopolitical frame and technology frame. It is less likely to be connected with a conflict frame.

The conflict frame has the most connections among all, it is most likely to be associated with the geopolitical frame, the association of attribution of the responsibility

frame is moderately fewer. Conflict frame is least likely to be associated with the economic consequence frame. Both economic consequence and conflict between stakeholders seem to be crucial issues, but because these issues are significant, they are not likely to be stressed together within one paragraph.

The geopolitical frame's associations are slightly fewer than the conflict frame had. The result has shown a close connection between these two frames. Attribution of the responsibility frame also had numerous occasions that were associated with the geopolitical frame within one paragraph, but fewer than conflict frames.

Technology frames had the least associations with other frames among all. The impact that the executive order has on technology, or vice versa tends to be discussed independently by the media. Moreover, the frequency of technology frames appearing together with other 4 frames are similar.

4.3.1 Comparison overview of frame associations between the U.S. and Chinese news outlets
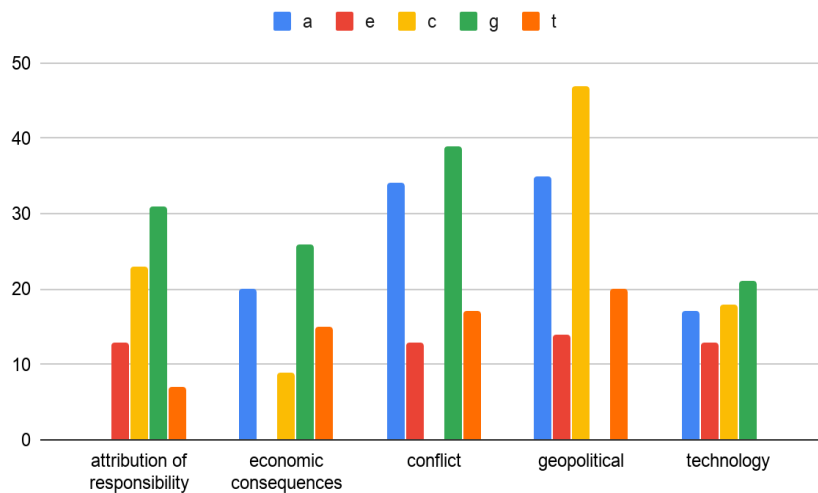
Figure 4.4 U.S. media frames associations
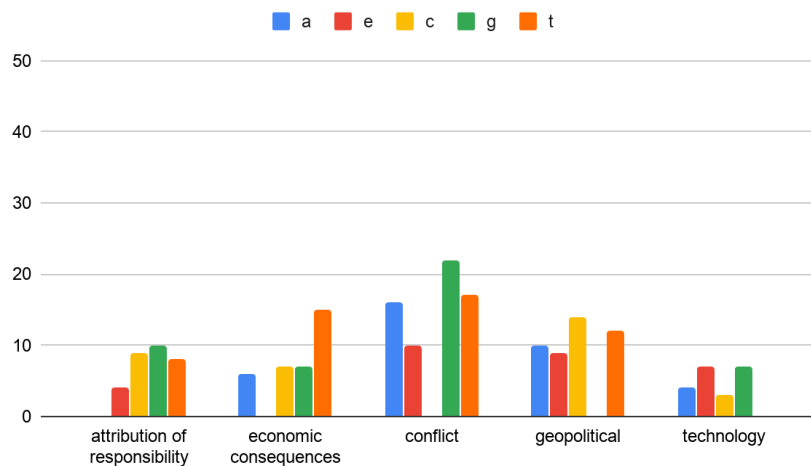
Figure 4.5 Chinese media frames associations

The two charts above summarized the frame associations within Chinese articles and the U.S. articles. The U.S. media applied 645 frames and had 432 frame association. The Chinese media applied 421 frames and had 197 frame association. The frame association that the U.S. articles had was way more than the Chinese articles, by number and by ratio. However, it needs to be taken into consideration that the U.S. news outlets used framing more often than the Chinese news outlets. As the associations were based on different grounds, it is

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better to compare the two countries' news framing associations by ratio. In that sense, the associations of the geopolitical frames in Chinese articles were significantly fewer than the U.S. articles. This could be caused by on one hand, the Chinese media is under more censorship control than the U.S. (Luther & Zhou, 2005). On another hand, the Chinese culture is more indirect and less outspoken that the U.S. culture (Amako, 2014; Li, 2015).

4.4 Unconventional significance in media- Chinese specialised news outlets, a breakthrough of anti-nationalism yet remain humane

It was previously discussed in 2.1 that the Chinese news media are characterised as promoting nationalism and humanitarianism. However, there are several frames that were applied by the three Chinese specialised news outlets indicating different features, as they promoted humane oriented, but anti-nationalism frames in Huawei ban related reports.

Caixin (A39) applied frames to emphasise that Huawei CEO's expressed nationalism should not be linked to purchasing Huawei's technology. Moreover, A39's title is "Blame U.S. Politicians, Not Companies, Huawei Founder Says, Dismissing Blind Nationalism". Although the American politicians were subjected to blame, at least this article intended to alarm the audience that conducting nationalism should be built on the premises of rational selection and independent thinking. Caixin, the news outlet, strived to represent its uniqueness which is focusing on independent thinking. This was introduced in Table 3.1 News outlets selection overview.

Huxiu (A33) framed a Singaporean diplomat expressing that Huawei installing Google's service in its devices is spreading the American made digital ecology, together with the American ideology. These frames uplifted the Huawei ban issue to an ideological level which could be considered more humane than only focusing on economic and technological impacts.

Guancha article (A28) indicated that the CEO of Huawei expressed: Afterall, 5G technologies are essentially base stations, the biggest industry of the future is AI. He hoped: "We don't want artificial intelligence to suffer from the entity list again, we hope to provide a service for human beings together." Similarly, another Guancha article (A26) quoted from the United States Attorney General as he appealed to the U.S. alliance countries that the

global economy and technology can only obtain significantly growth when the allies are united together. The technology framing tended to manifest that Huawei's CEO and the U.S. Attorney General were considering the technology development from a humane approach. By framing these messages in the news, the humane characteristic of the Chinese media was reflected again. Moreover, these specific frames did not align with another characteristic of the Chinese media, which is encouraging nationalism, as the news emphasised "as humans together".

Different from the tradition Chinese news style, these three Chinese specialised news outlets presented a novel perspective to their audience - anti-nationalism yet remain humane. Although the new framing style of these three Chinese specialised news outlets did not cohort with the Chinese media characteristics, they were still a representation of the Chinese cultural roots- Benevolent. It is important to note that, this finding might only be applicable for the Huawei ban case, and it does not represent the Chinese general news. As unconventionalities were detected in Chinese specialised news, the researcher therefore sought for breakthroughs in framing style from the U.S. media. However, the results have shown that the U.S. media's characteristics aligned with its features that were introduced in the literature review 2.1.- communicating directly and representing free speech.

4.5 Attribution of responsibilities

SQ1: How do the news framings portray the strategical responses of the Huawei stakeholders in the aspect of attribution of responsibility?

The attribution of responsibilities frame was used 176 times, it was used as a primary frame for 102 times, as a subordinate frame for 74 times.

Comparing the responsibilities that China ought to take with the U.S., the U.S. was accused of taking responsibility for the negative consequence of the ban. China and Huawei's responsibilities are often described as the initial reason for the U.S. to establish the executive order. So, the two countries have been accused of taking responsibility for different matters.

4.5.1 Comparison between Chinese and U.S. media using attribution of responsibility frame
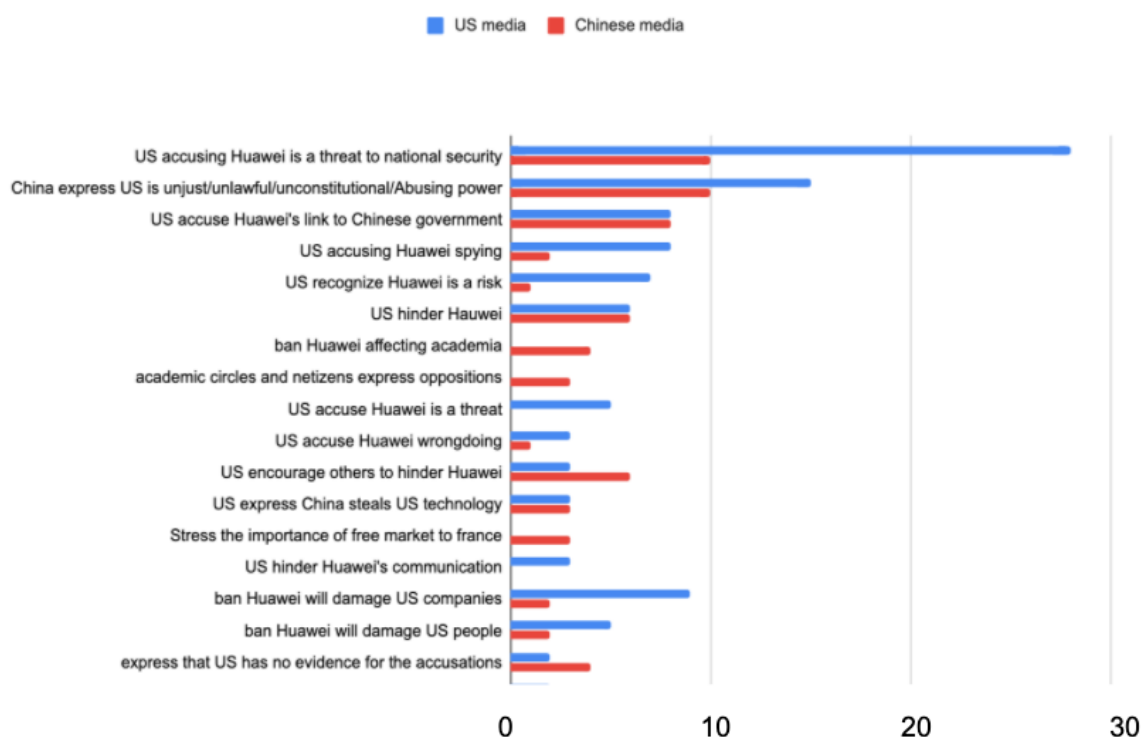

Figure 4.6 Overview Chinese vs. U.S. news outlets' applications of attribution of responsibility frame

The chart above is a comparison overview between the Chinese news outlets and the U.S. news outlet on the applications of frequently used codes within the attribution of

responsibility frame. In total, 117 codes were identified in the U.S. news articles, and 59 codes were used in the Chinese news articles. A big part of the code was not used frequently enough to be able to form a comparison.

The application of the code *"The U.S. accusing Huawei is a threat to national security"* is where the most significant difference took place with this frame. This code was identified in the U.S. articles for 28 times within the attribution of responsibility frame, and the record for the Chinese media is 10. It can be assumed that the U.S. media tend to emphasize the initial motivation behind the decision and to make the public aware that Huawei is causing national security concerns. Thus, this response is heavily underlined in U.S. news articles.

The code *"China expresses the U.S. is unjust/ unlawful/ unconstitutional/ abusing power"* reflects that the U.S. should be responsible for its unjust actions. The U.S. media and the Chinese media both emphasized that the U.S should be responsible. Yet, this code was applied 5 times more in the U.S. media than the Chinese media, indicating that the U.S. media was prone to present the reactions which convey the faultiness of the U.S. government.

A conclusion that the U.S. media always express the same response more often than the Chinese media is not applicable, because there were some opinions expressed more in the Chinese media than in the U.S. media. For example: *"express that the U.S. has no evidence for the accusations"* and *"The U.S. encourages others to hinder Huawei"*. However, in general, articles that were published by U.S. media outlets contain more responses than the articles published by the Chinese media. Additionally, there were a couple of expressions from the Chinese articles that were not mentioned in the U.S. articles, such as *"ban Huawei affecting academia"*.

It might appear to be odd seeing some common codes were only used a few times by a country's media. For example, *"ban Huawei will damage U.S. companies"*, was used in the Chinese articles only twice and in the U.S. articles 9 times. It is a common response; however, this code was mostly expressed by economic consequence. Therefore, when the Chinese media applied frames to express the negative consequence for the U.S., the focus that the Chinese media presented to the audience was stronger for economic consequences, the intention of blaming the U.S. was less often implicated.

4.5.2 Assigned attribution of responsibility codes to the U.S.
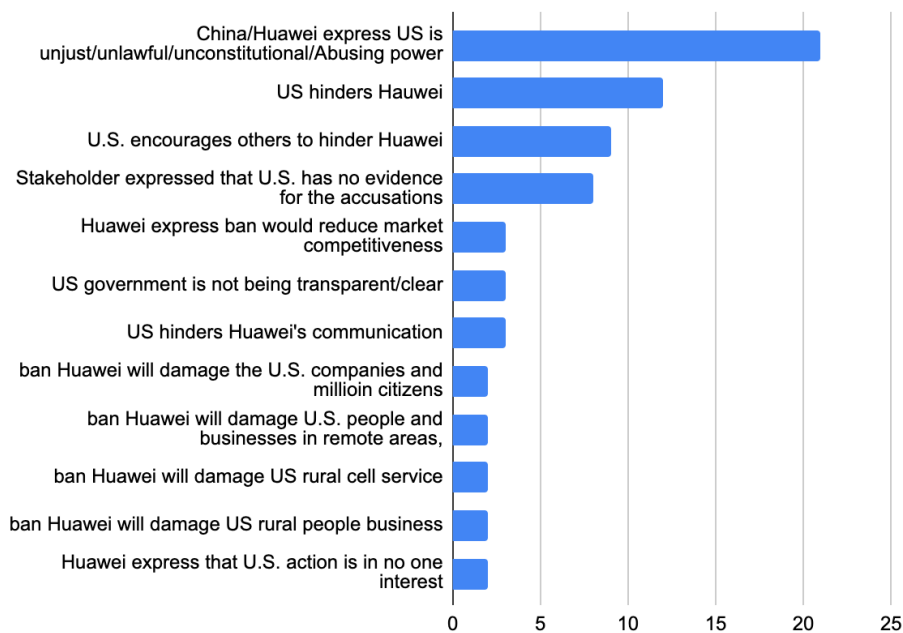
Figure 4.7 U.S. frequent responses within attribution of responsibility frame

The chart above is an overview of the frequent responsibility codes that were assigned to the responses of U. S spokespersons with the U.S. and Chinese articles combined. In general, the result indicated that the U.S. accused Chinese parties to be responsible more than the Chinese parties accused the U.S., this finding was also reflected in empirical research on the news coverage about SARS (Luther & Zhou, 2005).

Because the code "China/Huawei express the U.S. is unjust/ unlawful/ unconstitutional/ abusing power" was applied frequently for 21 times, Huawei and China's response to the U.S. government reshaping the notion of policymaking for global trade can be therefore be concluded as unlawful and unconstitutional (e.g. A4, A25). Moreover, the executive order and the frictions that Huawei is experiencing are violations of the free market principles. It was indicated in the news that Chinese officials expressed that for some time, the U.S. has been abusing its power to tarnish Huawei's image and to surpass Huawei, thus, they considered the action of the U.S. is being unjust (e.g. A16, A44).

A paragraph from China Daily (A50) demonstrates how such a response was recognized to fall under the frame of attribution of responsibilities. "Huawei Technologies

Co on Thursday announced a legal challenge to the U.S. Federal Communications Commission, seeking a court ruling to overturn an "unlawful" order that bans local rural telecom carriers from using federal funding to purchase the company's equipment and services."

Moreover, numerous conflict frames have indicated that the U.S. government encouraged other countries and companies to form a cluster, to reinforce their relationship by hindering Huawei's 5G technology together. Nevertheless, some stakeholders also expressed that the U.S. has no evidence to accuse Huawei. European 5G technology providers Nokia and Ericsson were favoured by the U.S. government. The U.S. also encouraged American firm Cisco to acquire a stake in Nokia and Ericsson. Although the European companies were recognized as more trustworthy by the U.S., the attempt of taking more control might cause suspicion that the U.S.'s intention is more than collaborations. Cisco spokesperson expressed that the acquisition does not fit in the company's financial and strategic plan (A31 U17).

4.5.3 Assigned attribution of responsibility codes to China or Huawei:
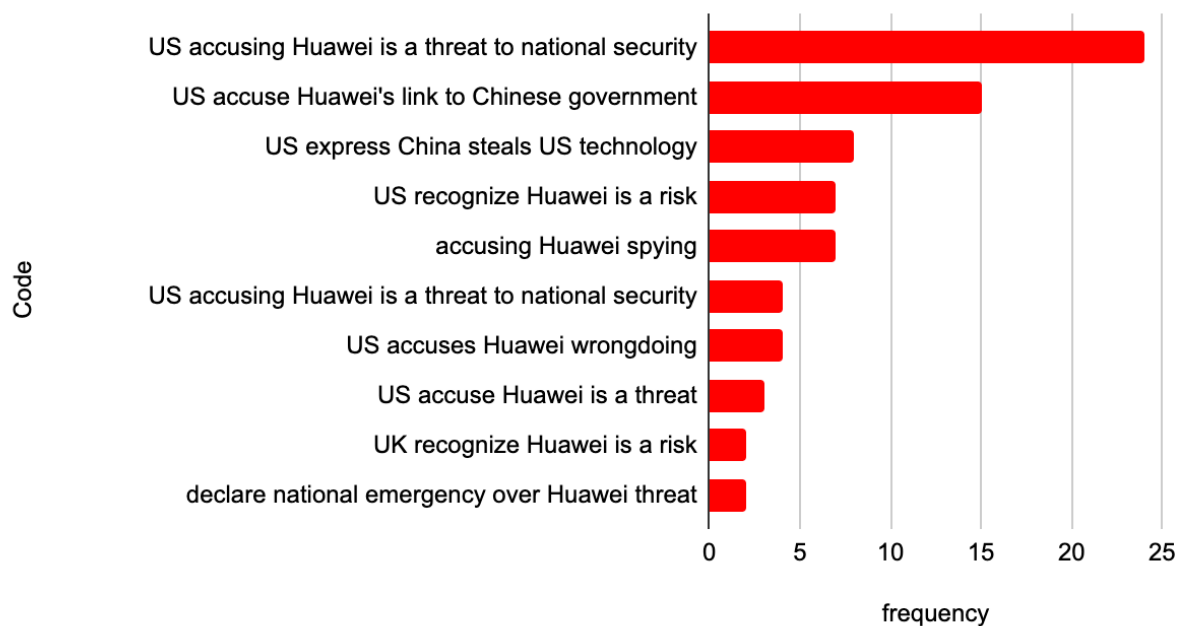
Figure 4.8 China/ Huawei frequent responses within attribution of responsibility frame

Within the attribution of responsibilities category, China and Huawei were also accused of having responsibility. It was expressed in U.S. media 60 times and in Chinese media 32 times. The code title "*The U.S. accusing Huawei is a threat to national security*" was used 24 times.

The frames magnified that U.S. government claimed Huawei and China's wrongdoing as the motivation behind the ban, the ban is a defence to prevent Huawei from jeopardizing U.S. national security. This was concluded based on the code "*The U.S. accusing Huawei is a threat or a risk*" was used 31 times. The link between the company and the Chinese communist party was also pushed under the spotlight, as the U.S. claimed for 15 times that Huawei is stealing information and spying on other countries for the Chinese government. Moreover, within the dataset, the way that the U.S. accuses Huawei to be responsible for spying and connecting to the Chinese government is very direct. A typical example is A5 U7: "President Donald Trump administrations justifies its Huawei ban on national security grounds, as it claims the phone maker acts as a proxy for the Chinese government to spy. Huawei denies this."

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The news intensively framing Huawei causes risks can be explained by the diffusion of innovation theory that the "risk barrier" is a form of "adoption barrier". As the attribution of responsibility frames manifested the "adoption barrier" that Huawei encountered, the news media slowed down the transition process for the stakeholders and the general publics to accept Huawei's technology.

4.5.4 Assigned attribution of responsibility codes to other stakeholders

Other stakeholder countries or companies were cited in the frames to take responsibilities for 26 times in total. This number is naturally less significant than the U.S. and China. Other stakeholders that hindered Huawei were accused by Huawei and China for damaging the market competitiveness. This response was explicitly expressed toward France, Australia and Google. Canada was also criticized by China for helping the U.S. to arrest Huawei's CFO in Vancouver. Moreover, the articles indicated that while the U.S. charged Huawei for stealing information, Huawei also filed lawsuits against the U.S. company Verizon for stealing Huawei's intellectual property.

Additionally, "*Restrictions on Huawei affecting academia*" was the most unique accusation aspect among others. It was famed in the articles that Institute of Electrical and Electronics Engineers (IEEE) prohibited Huawei employees from reviewing technological related academic papers and was alluded by China and Huawei for affecting academia and knowledge exchange (A46). Subsequently, obstruct global technology development. Although the IEEE is an international institution serving worldwide technology professionals, it is founded, and has its headquarters located in the U.S. Thus, the IEEE complied with the executive order, and banned Huawei employees from reviewing papers.

4.6 Economic consequences

SQ2: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of economic consequences?

The economic consequence frames were applied 230 times within the sample size. 101 codes reflected the reactions from Huawei and China on the economic consequences, and the U.S.'s responses were coded for 90 times. 63 codes were applied as response from other stakeholders within the economic consequences frame.

The most used code is "Ban Huawei will damage xx", this code entails economic consequences of the executive order. The xx were modified according to the detailed subject that the paragraph mentioned. Parties from the U.S. expressed this code 15 times, Chinese officials and Huawei leaders expressed these 23 times. Other stakeholders indicated such consequences 11 times. It can be concluded that the Chinese stakeholders tend to point out the economic damage more often than others. It is reasonable because Huawei is the company that is being banned.

4.6.1 Comparison between Chinese and U.S. news outlets using economic consequences frame
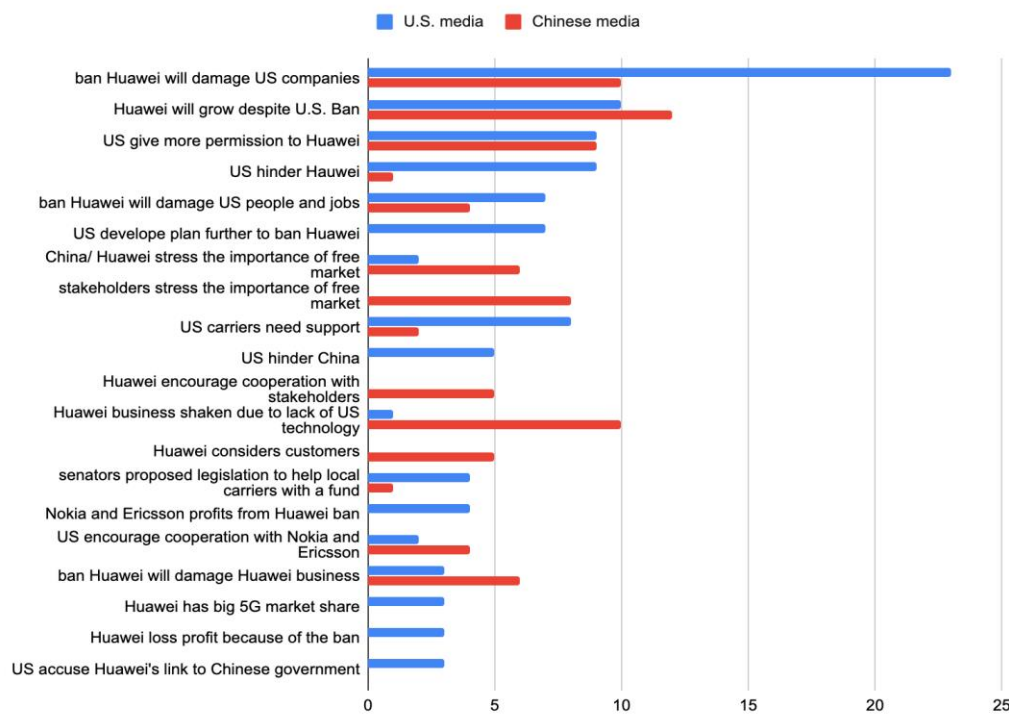
Figure 4.9 Overview Chinese vs. U.S. news outlets' applications of economic consequences frame

The U.S. articles have used economic consequence frames 121 times, and the Chinese articles applied the frame for 109 times. Compared to other frames, the economic consequence frame has the smallest gap when comparing the two countries' frame applications. It can be concluded that both nation's news outlets paid almost equal amounts of attention to economic consequence issues that are derived from the ban. Therefore, although the U.S. and China have different stances, both countries' news media agreed that the executive order has impacts on the economy. Moreover, the economic impacts that were discussed by both countries' media were mostly negative. This section explains the detailed consequences that were portrayed in the media.

There are several highlights on the different frequencies of the two countries' news outlets applying the same codes. The code *"ban Huawei will damage U.S. companies"* was expressed by U.S. articles within the economic consequence frame for 23 times, and the number for Chinese news was 10. It is the most frequently used code by the U.S. news

outlets, nevertheless, this code was often used in other frames. The U.S. news outlets framed the negative consequences for the U.S. companies which were caused by the decision of its national leaders, is considered as a portrayal of the U.S. media's characteristic- free speech.

The most frequently used code by the Chinese journalists is *"Huawei will grow despite U.S. Ban"*. It was recorded 12 times in Chinese articles, the U.S. articles expressed this response 10 times, only with a slight difference of 2 times. It is interesting to see that Huawei was framed to express this response with confidence, and the U.S. media was also not reserved to share this reaction with the U.S. and global readers. The code "Huawei business shaken due to lack of U.S. technology" was detected 10 times in Chinese articles, but only once in the U.S. articles. This code does not merely describe the financial loss of Huawei due to the ban and policies; the framing focus was to differentiate from other damage related codes by stressing "lack of U.S. technology". Additionally, this code was often used to frame the technology aspect, it was considered as the connecting point of the technology frame and economic consequence frame. It can be concluded that, both countries' news media agreed to the significance of economic impact, but they were more prone to present the impacts concerning their own country.

The importance of free market and market competitiveness was emphasized by the economic consequences frames in Chinese articles for 14 times. Among them, China or Huawei raised this point 6 times, and 8 times was mentioned by other stakeholders, such as Germany, UK and the EU. In the U.S. articles, the ban would damage the principle of free market was only mentioned twice as it was expressed by Huawei or China. The U.S. media did not mention other stakeholder countries that used this argument.

4.6.2 assigned economic consequence code to the U.S.
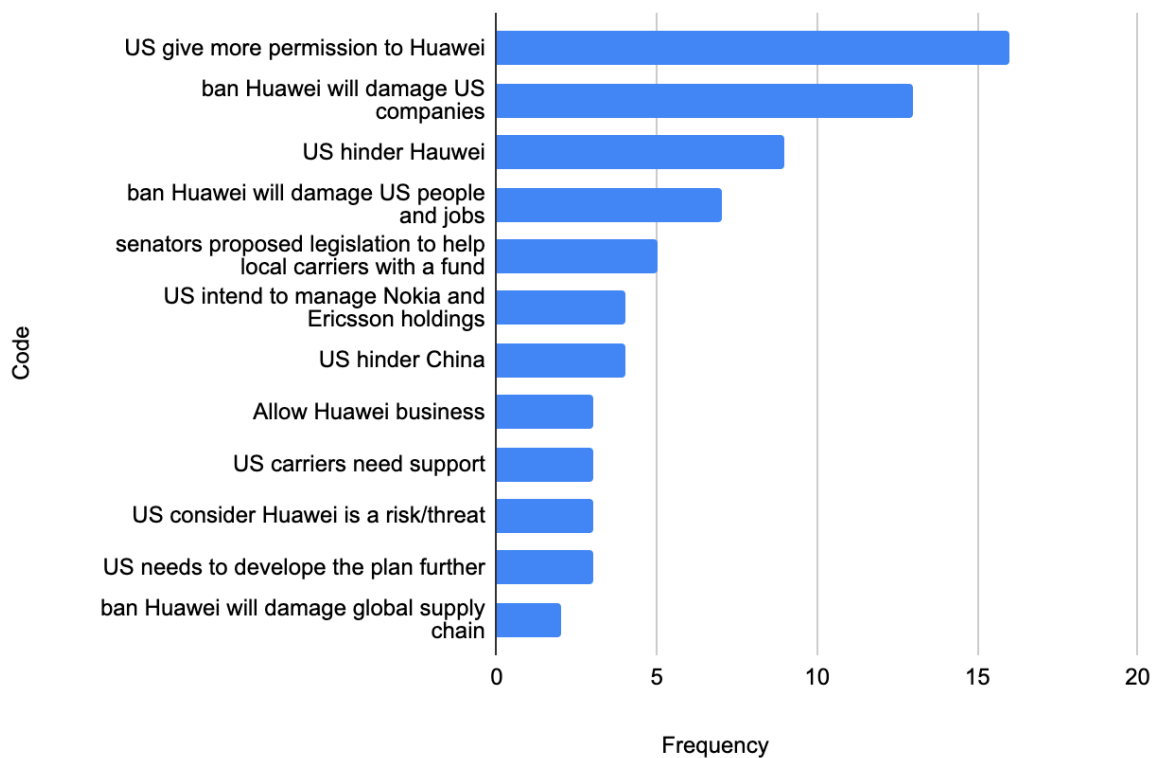
Figure 4.10 U.S. frequent responses within economic consequences frame

The adoption of the economic consequences frame was considered as translating the economic implication of a policy by Vreese (2005). By interpreting the research outcomes, this description was particularly accurate for the Huawei ban research. It was the second most frequently applied frame in the news reports in this study. Ban Huawei will damage U.S. companies financially, causing job losses especially in the U.S. and disrupt the global supply chain is the popular reaction from both Chinese parties and the U.S. government. However, it was highlighted more in the U.S. news outlets.

Both Chinese and U.S. news outlets have framed the issue toward carriers in rural areas are the ones who need to bear the brunt the most. Huawei's low cost tended to attract these carriers, and they have expressed that replacing the already installed Huawei equipment would consume a lot of money, time, and human resources. Moreover, the carriers would be forced to use unfamiliar EU technology, such as Nokia and Ericsson

As an example of emphasizing the consequences for rural areas as the framing focus, NBC (A20) reported that local cell phone and internet provider Viaero Wireless argued that

it would cost them 410 million USD to replace Huawei equipment through Colorado, Nebraska and Kansas. 80% of their core equipment was supplied by Huawei. Some U.S. senators have proposed a fund, mostly for helping the American rural area telecom providers to substitute their Huawei equipment with other brands. Yet, the U.S. government issued subsequent policies to prevent the rural providers from purchasing Huawei equipment again. In general, President Trump's comment on the trade war between the U.S. and China is that "We're in a very strong position." This quote was used as a sub-header by an ABC article, while the headline is "Economic sanctions on Huawei could backfire on US firms" (A50). These two titles pointed out the contradictions, it can be assumed that the president's opinion was framed as confident in spite of the potential negative consequences in reality.

4.6.3 Assigned economic consequence codes to China or Huawei
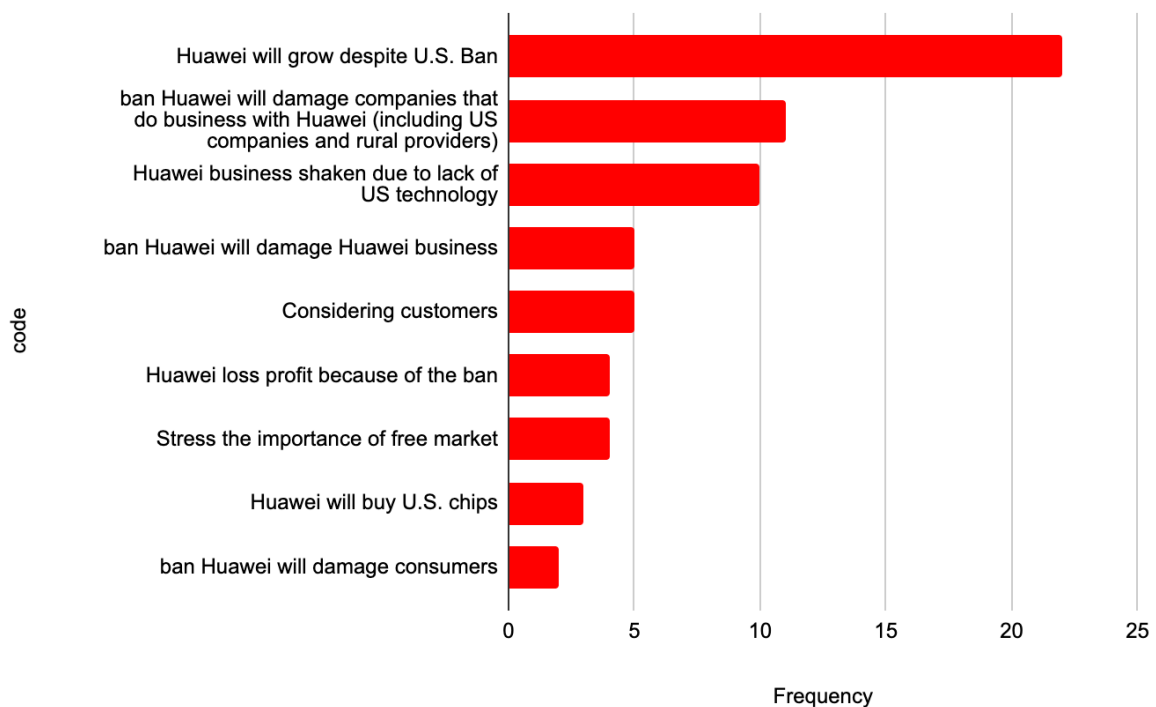
Figure 4.11 China/ Huawei frequent responses within economic consequences frame

As was mentioned in theory section 2.4, Belt and Road initiative is a part of China's geopolitical strategy, prompts the country to invest in ICT development (Wen, 2017). Thus, the initiative intended to cause economic consequences, the frames further stressed the aspects of the consequences. Aside from the negative financial impacts caused by the U.S. ban of Huawei, the framing focus of Chinese parties' response was Huawei will grow despite the ban. It was the most frequent response given by Chinese stakeholders within this frame. An example of this response is: "The company added that the decision 'won't have a substantial impact' on business. Huawei Chairman Liang Hua said that 'neither production nor shipment has been interrupted, not for one single day.'" (A16 U15)

This was on one hand due to the fact that Huawei's role in the technology industry and the U.S. 's associations on the global stage was extensive and influential. Any harm that the U.S. brought to Huawei would subsequently backfire. Besides the financial damage of the rural telecom provider, the frames also emphasised that Huawei cutting jobs in its U.S.

research centre was by nature that Americans were losing their jobs. As a Singapore diplomat commented, the U.S. uses a gun to shoot in its own foot (A33).

On the other hand, the articles tended to underline that Huawei's confidence came from its independent technology development. For example, Huawei has rolled out a series of chips and its own OS without the help of American technology was discussed many times (A5; A8; A38 etc.). Moreover, the frames portrayed the U.S. hindering Huawei was recognized by several parties as not contributing to advance the U.S.'s 5G development. This will be further discussed in the technology frame conclusions.

According to a Huxiu report (A33), Huawei was in fact considering selling 5G technology to U.S. companies. If so, Huawei hoped investment banks could be intermediaries to deal with this matter. Yet up till November 2019 there has not been any American company approaching Huawei to communicate this matter. The reason could be that U.S. people and companies are under political pressure, which will be further discussed in the geopolitical frame analysis.

4.6.4 Assigned economic consequences codes to other stakeholders

Table 4.2 Overview of other stakeholders' responses within economic consequence frames

Overview of other stakeholders' responses within economic consequence frames	
Profit from the ban	Nokia, Ericsson
Against the U.S. action	U.S. rural providers
Encouraging cooperation with Huawei	Rural provider Eastern Oregon Telecom
Loss profit	The Information Technology and Innovation Foundation
Encourage cooperation with Huawei	Aptoide, Microsoft, ARM, Google, MediaTek
Taking U.S. suggestion and hinder Huawei	Google, Qualcomm, Microsoft, smaller U.S. chip company
Lobby for Huawei to U.S. government	Google
Approved to work with Huawei by U.S. government	Microsoft

The table above is an overview of stakeholders' responses while using economic consequence frames. Most of the reactions from stakeholder and companies are negative.

The framings illustrated that for not losing their business ties with Huawei, technology companies Aptoide, Microsoft, ARM, Google, MediaTek have expressed their willingness to cooperate with Huawei. However, the frames also indicated that having willingness cannot stop the U.S. based companies such as Google, Qualcomm, Microsoft and smaller U.S. chip makers to comply with the rules by law and to stop working with Huawei.

Besides Nokia and Ericsson who will revive and profit from the ban, some companies captured the opportunity of the ban. An NBC article (A19 U28, U29) reported that some types of Huawei's device contain 10% of hardware that is produced by Taiwanese chipmaker MediaTek. A researcher from International Data Corporation stated that if Qualcomm would not be able to work with Huawei, MediaTek would be more than happy to pick up the deals. Similarly, Portuguese software company Aptoide's CEO expressed that since Google's relationship with Huawei has been shaken, Aptoide claimed their intention to support Huawei with its app marketplace as a substitute of Google Play Store (A29).

4.7 Conflict

SQ3: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of conflict?

Neuman, Just, and Crigler (1992) expressed that the conflict frame is typically used in U.S. news when reporting a range of issues. The result has shown that the U.S. news outlets did use this frame 39 times more than the Chinese outlets. Semetko & Valkenburg (2000) argued that conflict frames profoundly capture the audience's interest. To align with this argument, the hostility between the U.S. and China on trade war or technological dispute was reflected in responses where the code "the U.S. hinders Huawei" was applied. This code has the highest frequency among others. It was recorded as one of the top 3 responses in all framing categories.

In general, the U.S. parties indicated conflicts for hindering Chinese parties or encouraging others to hinder China parties. In comparison, when the Chinese government or Huawei was involved in a conflict, they were framed as rather passive. The Chinese parties' involvements in conflicts were to against the U.S. actions or deny the accusations from other stakeholders.

4.7.1 Comparison between Chinese and U.S. news outlets using conflict frame
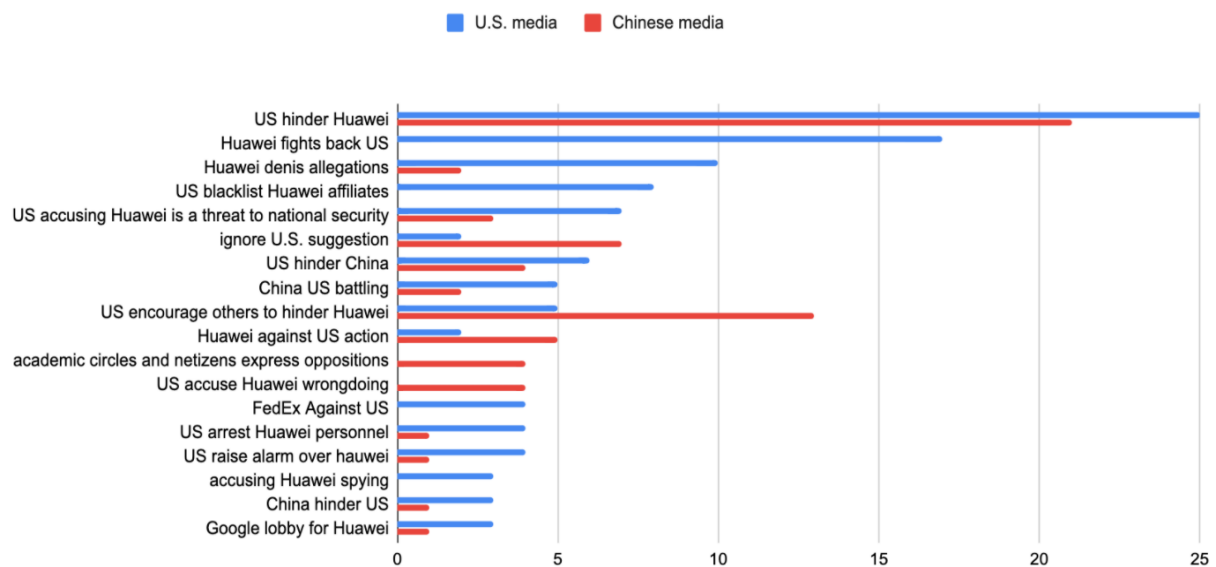
Figure 4.12 Overview Chinese vs. U.S. news outlets' applications of conflict frame

The chart above is a comparison overview of the applied codes within the conflict frame between the U.S. and Chinese media. There were 117 codes used by the U.S. media and 78 codes used by the Chinese media. The U.S. news articles expressed conflict-related responses more often than Chinese articles. Beyond the chart, approximately 13 responses were only mentioned by the U.S. news.

However, there were several codes only applied to the Chinese articles. Such as "*academic circles and netizens express oppositions*" and *"The U.S. accuses Huawei of wrongdoing".* These two codes were detected in the attribution of responsibility frame as well. The academic related code refers to the U.S. urging IEEE to stop Huawei personnel from viewing technology-related academic articles, it was discussed in the attribution of responsibility frame. Yet, this matter was also framed as causing conflict by Chinese journalists.

Moreover, *"the U.S. encourages others to hinder Huawei"* was mentioned in Chinese media by the conflict frame 13 times, and in the U.S. media 5 times. The framings have

shown that Chinese news outlets value the relationship between China, Huawei and other stakeholders, and see the U.S. provoking alienation as occurrences of conflict.

4.7.2 Assigned conflict codes to the U.S.
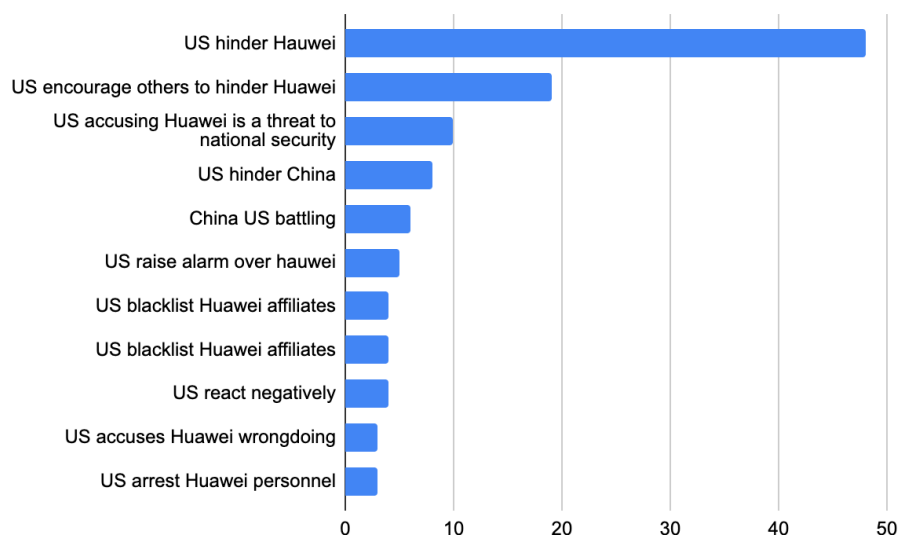
Figure 4.13 U.S. frequent responses within conflict frame

It was previously discussed in the theory section 2.1.2 that the rising presence of the Chinese firm is challenging the status quo, where U.S. technology is dominating (Boxall, 2020; Kharpal, 2020). As the U.S. news used conflict frames more than the Chinese news, this could be considered as the reason for the U.S. media to utilise the frame and express the tensions between the two nations.

The conflicts frames expressed that besides the original executive order that has policies to hinder Huawei, the U.S. government has added more Huawei's affiliates to the trade blacklist. This was where more conflicts were intensified. The "entity list" is a derivative of the executive order. If the blacklisted companies want to do business with Huawei and its affiliates, they will have to apply for a special permit from the U.S. Commerce Department. New technology companies also need to apply for licenses, and it is unlikely to be approved, according to Reuters in a TechCrunch report (A8 U3).

Similar to the attribution of responsibility frames, the conflicts frames also empathised the U.S. government encouraged other stakeholder companies or countries to ban Huawei. Moreover, the warning that the U.S. government issued to prohibit the rural area telecom providers to use the helping fund to purchase Huawei again also stimulated some disagreements. Additionally, the U.S. government has interrupted the internal communication between Huawei and employees in the U.S. Lastly, the U.S. government has been accusing Huawei of causing a national security threat, spying and linking to the Chinese government. When Huawei or the Chinese government spokesperson denied the allegations, these responses were considered being expressed through conflict frames as well.

Incorporating the results from two countries' news outlet analysis, both the U.S. news outlets and the U.S. spokesperson's responses were detected with conflict frames more than the Chinese parties. Based on the cultural theories, this phenomenon was likely caused by the American culture having lower tolerance of uncertainties than the Chinese culture (Country comparison, n.d.). Moreover, China's geopolitical and communication approach was influenced by Confucianism, and the American's approach was influence by their persistence in free speech and liberty (Amako, 2014; Li, 2015; Alvarez & Kemmelmeier, 2017). Thus, the U.S parties tend to express themselves and act more aggressively than the Chinese parties.

4.7.3 Assigned conflict codes to China or Huawei
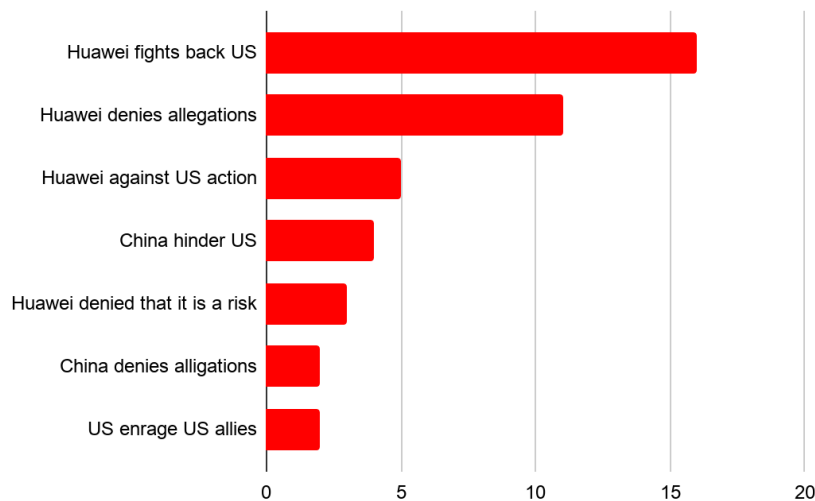
Figure 4.14 China/ Huawei frequent responses within conflict frame

The chart above shows codes with high frequencies that were detected from Huawei or China's responses. Among the 58 times China or Huawei stimulated conflicts with the U.S., the code *"Huawei fights back the U.S."* was recorded for 16 times. Although Huawei or the Chinese government were involved conflicts, the news' wording and framing focus tend to express "fight back" or "against the U.S. action". Hence, the Chinese parties' conflict responses can be seen as passive reactions to prior U.S. actions. The finding confirmed the arguments in theory section 2.4 which examined the goal of China advancing its ICT technology: constructing independent network sovereignty as a counter-hegemonic offensive (Wen, 2017). It can be concluded that China and Huawei's progress in technology development was considered as a force to counter offensive U.S. 's competence, so are the consequential acts of the Chinese parties to the executive order.

One of the fiercest conflict reactions from the Chinese party is where a spokesman of China's commerce ministry stated that China will create its own "entity list", according to a TechCrunch report (A6). The Chinese entity list alludes to 'unreliable entities' as "Foreign enterprises, organizations or individuals that do not comply with market rules, deviate from a contract's spirit or impose blockades or stop supplies to Chinese enterprises for non-commercial purposes, and seriously damage the legitimate rights and interests of Chinese

enterprises". Thus, creating an "entity list" was a common practice from both China and the U.S. to advance their position in the ICT development competition.

4.7.4 Assigned conflict codes to other stakeholders

The framing analysis has shown that numerous stakeholders have been encouraged by the U.S. government to hinder Huawei. It was pointed out in the geopolitical theory section that China and Huawei strive to advance ICT technology as part of the "Belt and Road" initiative to develop China's power. The findings reflected that the U.S. government firmly recognized and acted upon China's intention by placing "construction signs" on the roads from Huawei to other stakeholders.

Based on the detected conflict frames, stakeholders that have acted upon U.S. proposal and hinder Huawei, conflicts were provoked between the stakeholders and Huawei, such as, Canada, Australia and New Zealand. The frames presented some stakeholders as they will not take U.S. suggestions and will make their decision carefully; based on evidence and based on acknowledging Huawei is in the position of causing risk. In this case, the conflicts exist between the U.S. government and the stakeholders such as, the EU, Germany, France, UK and India. Additionally, after Australia disagreed with the UK's plan and banned Huawei, the Australian Criminal Intelligence Commission cancelled a planned visit to the U.K. This was the only time where two nations' disputes were reported, excluding the U.S and China.

The frames that placed on Intel and Qualcomm expressed that ruled by law they will ban Huawei from future cooperation. The frames on Google expressed similarly, but the code "*Google lobbies for Huawei*" and "*Google protects relationship with Huawei*" were jointly recorded for 5 times within the conflict frame. The news has framed two arguments from Google. Firstly, banning Huawei does not solve cybersecurity challenges. Secondly, to stop cooperating with Huawei means that Google Mobile Services will not be installed on new Huawei devices and will not be updated for existing Huawei users. Therefore, this is a loss for Huawei; it potentially causes Google to lose users as well. It could cause Huawei to change OS and become successful, and thus create competition.

It can be deduced that the conflict frames for other stakeholders tend to present that several involved stakeholder countries and companies have shown willingness to work

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with Huawei. When some stakeholders were lobbied by the U.S., they tended to make choices based on their own evaluation of the current situation. Furthermore, when other stakeholders lobby against the U.S., presenting the mutual damages that caused by the ban was the conflict framing focus.

4.8 Technology

SQ4: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of technology?

Technology frame was the most heavily used frame, it was applied 270 times, 40 times more than the economic consequence frame which was in second place. In essence, Huawei is a technology company. 5G technologies, the ban, the 90 days reprieve, the lobbying reflected the dynamic that was created by the mutual influence between technology and society. Two issues were highlighted by the technology frames: ban Huawei doesn't solve cybersecurity challenges and technological leadership.

The codes distribution for the technology frame was scattered. 193 codes have only been used once. This might be caused by the large number of stakeholders portrayed by this frame. Hence, this analysis focuses on discussing the response regarding the two identified issues and various technical impacts. The frequency will be taken into account only for a limited degree.

4.8.1 Comparison between Chinese and U.S. news outlets using technology frame
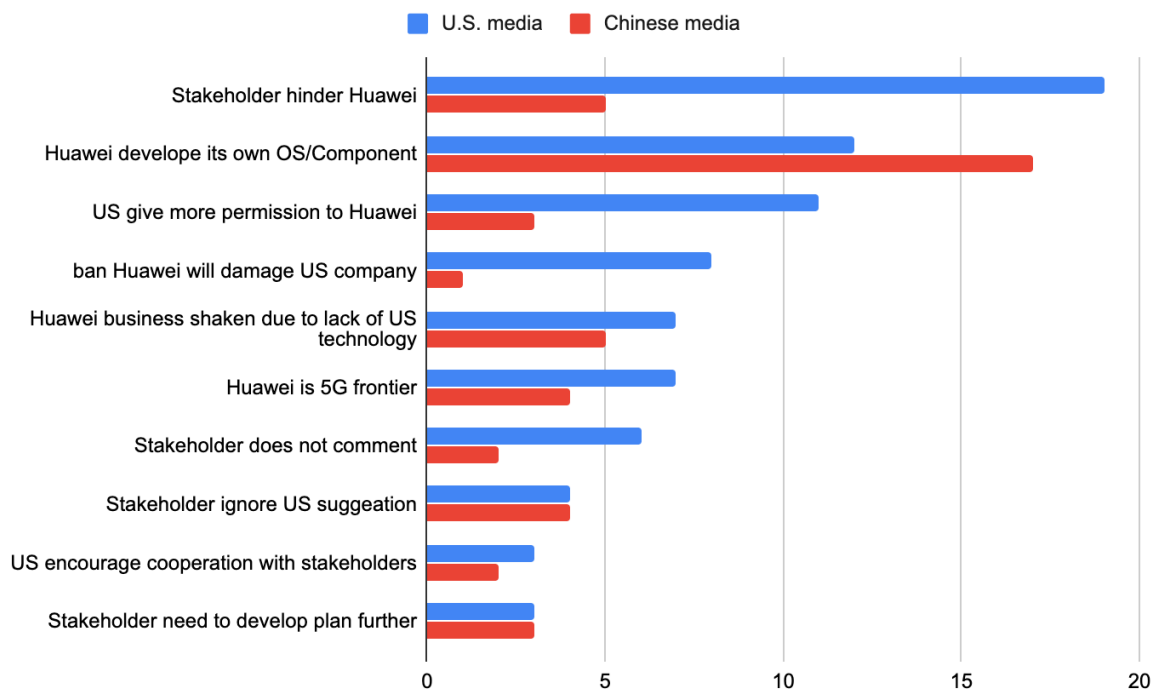
Figure 4.15 Overview Chinese vs. U.S. news outlets' applications of technology frame

Above chart provides an overview of the comparison between the U.S. and Chinese media outlets applying reactions with high frequency. Including the reactions shown in the chart, the U.S. articles expressed 160 technology related reactions, and the number for Chinese articles is 110.

The most significant difference is the frequency that *"Stakeholders hinder Huawei"* was mentioned. The U.S. news outlet pointed this out for 19 times, and it was mentioned in Chinese articles for 5 times. The code *"ban Huawei will damage U.S. company"* was dedicated 8 times in U.S. articles, and only once in Chinese articles. This does not necessarily mean that Chinese journalists ignore the damage that the ban would cause to the U.S. companies, this point was more emphasized through the economic consequence frame in Chinese articles. *"The U.S. gives more permission to Huawei ''* which refers to the 90 days reprieve of the ban was also not significantly expressed in Chinese articles. This code was recorded 3 times, and the U.S. news outlets mentioned it for 11 times. However, according

to the Wall Street Journal (A13) and Caixin (A39), Huawei and a senior fellow at Centre for a New American Security (CNAS) expressed that extending a license for 90 days won't have a substantial impact on Huawei's business.

Essentially, Huawei spokesperson did express that *"Huawei will grow despite the U.S. Ban"* 4 times within the technology frame and 22 times by the economic consequence frame in both countries' news reports. This statement was often accompanied with the articles discussing Huawei's technology preparations prior the ban; or Huawei's progress on independent research; or Huawei signed more business deal after the ban.

The code *"Stakeholder does not comment"* was noted 6 times in the U.S. media and 2 times in Chinese media within the technology frame. This code was developed for the situation where Huawei or the U.S. government proposed cooperation or other actions to stakeholders and requested a response. Nonetheless, the articles stated that the stakeholder did not comment.

Chinese news outlets expressed *"Huawei develops its own OS/Component"* for 17 times, the same reaction was introduced in the U.S. news for 12 times. It is the only code that was used more in Chinese than American articles within the technology frames. It could be considered as a sign for the Chinese journalists to deliver a sense of independence and encouragement to the readers, while the nation's tech giant is under the U.S. government's impact.

4.8.2 Technological leadership

The codes that were associated with technological leadership are: "Huawei being banned will not help the U.S. advances technological leadership", "China surpasses the U.S." "Huawei is 5G frontier" "The U.S. develops its own 5G" "Huawei develops its own OS/Component". Huawei's devices and 5G technology have a big market share worldwide and Huawei as a 5G frontrunner has been mentioned by all stakeholders' multiple times in the dataset. Based on the analysis, for managing the current situation and advancing its technology leadership, Huawei needs to develop its own operating system and chips. The U.S. government needs to encourage companies to develop its own 5G technology. Both parties are facing challenges to overcome their issues.

Huawei's CEO stated that the company has been developing its own backup technology for years (A29). Huawei seems to have already implemented its own chips with subsidiary company HiSilicon. HiSilicon has released a series of semiconductors after the ban, and these hardware were implemented on Huawei's flagship products. Moreover, according to China Daily (A47), a brokerage firm disclosed that Huawei has developed its own operating system-Harmony OS. It is meant to be used as an alternative to Google's Android system. Shipments of Huawei smartphones with the self-developed system have reached 1 million.

The Chinese news outlets actively framed the progress that Huawei has made after the ban as their report focus. This act was to enhance the "adoption drivers" by promoting the innovation attractions which was discussed in the Diffusion of Innovation theory in section 2.5. As the U.S. media focused on making the audience aware of Huawei's "adoption barrier" by stressing Huawei is a risk, perhaps besides denying the accusations, the Chinese media tended to emphasise the "adoption drivers" for compensating the reputation damages that were caused by the U.S government and the U.S. media.

4.8.3 Ban Huawei doesn't solve cyber security challenges

The significance of this issue affirmed the theory that when China's technology rises to challenge the U.S.'s current dominant position, the U.S. will be vigilant. The U.S. government is certain that Huawei is causing risks to its national security, while the framing focus was *"Ban Huawei doesn't solve cyber security challenges".* This was argued by U.S. officials, Chinese officials, Huawei spokespersons and Google spokespersons. Google's reaction was very representable. The company explained that isolating Huawei would force the company to develop its own hardware and software, which has taken place. The hybrid operation system, the Huawei version of android would be more susceptible to be hacked. This reaction from Google was highlighted in the conflict frame analysis as well.

Moreover, in the theory section the researcher also discussed the progress of diffusion of innovations. Huawei is a company that recently came into the centre of various heated discussions and 5G is a novel innovation. The concept and the technical functions need more time to be accepted by the public and to be put in a well-adjusted position that fits in the current technology industry. Empirical research also suggested that the diffusion

of innovation is also a social construction process. It can be obtained from the news articles that 5G technology will change people's way of living; and organizations and individuals also shape the way that new technology blends into the society.

A Chinese ambassador expressed opinions regarding the antagonism between technology and the social system (A31). When a U.S. official denounced that Huawei threatens the U.S. national security, the Chinese spokesperson responded that technology is a tool and that is how the world operates. The Chinese spokesperson further argued that in the past China has been actively using the U.S. technologies, and China was able to keep its political system robust. The western innovation did not threaten the control of the Chinese communist party. The Chinese spokesperson then questioned if the western democratic system is so fragile that it can be damaged by a Chinese company. Although this conversation could be considered as a diplomacy to switch subjects, the dynamic between technology and social system was stressed. Eventually, the research focus is technology, social systems were not intensively studied in this research, it is hard to conclude which force limits another more.

4.8.5 Other stakeholder response in technology frame

Most of the countries who agreed to use Huawei's 5G network technology tend to argue that *"their decision is evidence based".* They have also expressed that they "*will make decisions carefully considering Huawei is a risk to national security*". Moreover, "*will monitor the situation*" was a common code that was recorded for several countries. Taking the UK as an example, the UK allows Huawei's equipment and network, but it is kept out of the core network. The technology frames aimed to emphasise that other stakeholder countries intended a rational approach on adopting Huawei's technology, as they plan to customise strategies based on the countries' current conditions.

Table 4.3 Overview of other stakeholders' responses within technology frames

Overview of other stakeholders' responses within technology frames	
Comply with the executive order	Google, Intel, Qualcomm, Microsoft, Lumentum, Facebook
Limited cooperation with Huawei	Google, Microsoft, Telefonica
Non-U.S. companies hinder Huawei	Panasonic, Vodafone, EE
Countries that work with Huawei	United Arab Emirates, Belgium, Germany, UK, France, Italy, EU
Countries that hinder Huawei	Italy, Japan, Australia, New Zealand, Canada, Poland
Companies that refuse to help U.S. rural carriers	Verizon, AT&T
Companies that want to merge to help rural carriers	T-Mobile, sprint

4.9 Geopolitics

SQ5: How do the news framings portray the strategic responses of the Huawei stakeholders in the aspect of geopolitics?

Besides identifying the frame by asking questions, the frame is considered to be used when a paragraph portrays a nation's action towards another nation for political motivations. This frame is more abstract compared to other frames. Throughout the data collection and analysis process, the researcher has been assessing the weight and the relevancy of the geopolitical concept.

During the analysing process, it came to the researcher's attention that the term "geopolitics" was rarely mentioned in the articles. Moreover, considering the geopolitical frame is not a frame that has been widely used in empirical framing studies, the salient of geopolitical representations in the articles was questioned. Eventually, the results have shown that the geopolitical frame was applied for 195 times. This reassured the salient and crucialness of geopolitical impact on stakeholder responses. Regarding the overarching role that geopolitics plays in the research structure, the ratio of primary/ subordinate frame analysis and the frame association analysis have shown that the geopolitical frame is likely to be associated with other frames. Geopolitical issues tend to be involved and be discussed together with other issues. The associations were recorded 161 times. The U.S. news outlets have used geopolitical frames 50 times more than the Chinese news outlets. Considering the main RQ is to answer the stakeholders' responses in the four aspects in relation to geopolitics, the large number of associations will help the researcher to enrich the answer for the main RQ.

Based on initial research, the executive order and the trade war between China and the U.S. were measures taken by national leaders to place their countries in a more significant geopolitical position. Huawei might as well be considered to be a pawn in this chess game (A13, A16 U24).

6 articles have used the term "geopolitics", they were considered as the most obvious geopolitical frame application. Guancha (A26 U2) and ABC (A22 U5) both reported that a U.S. law enforcement official called China as "top geopolitical adversary" for the 5G race. China Daily (A49 U14) news quoted from an EU official, who expressed that the EU can, and must be a leader in the current 5G race, not a follower.

Huxiu (A34 U17) expressed that the current geopolitical dispute might harm industry in the U.S. and the workers within. A Wall Street Journal article (A14 U5) headlined "How the U.S. Went Wrong on Huawei" explaining that no country nor telecom carrier wants to be dependent on a single technology provider. The home country of that provider might act in pursuit of geopolitical advantage. The article also suggests that by having different suppliers compete with each other and constantly testing for network vulnerabilities, network security and technology is likely to be advanced.

4.9.1 Comparison between Chinese and U.S. news outlets using geopolitical frame
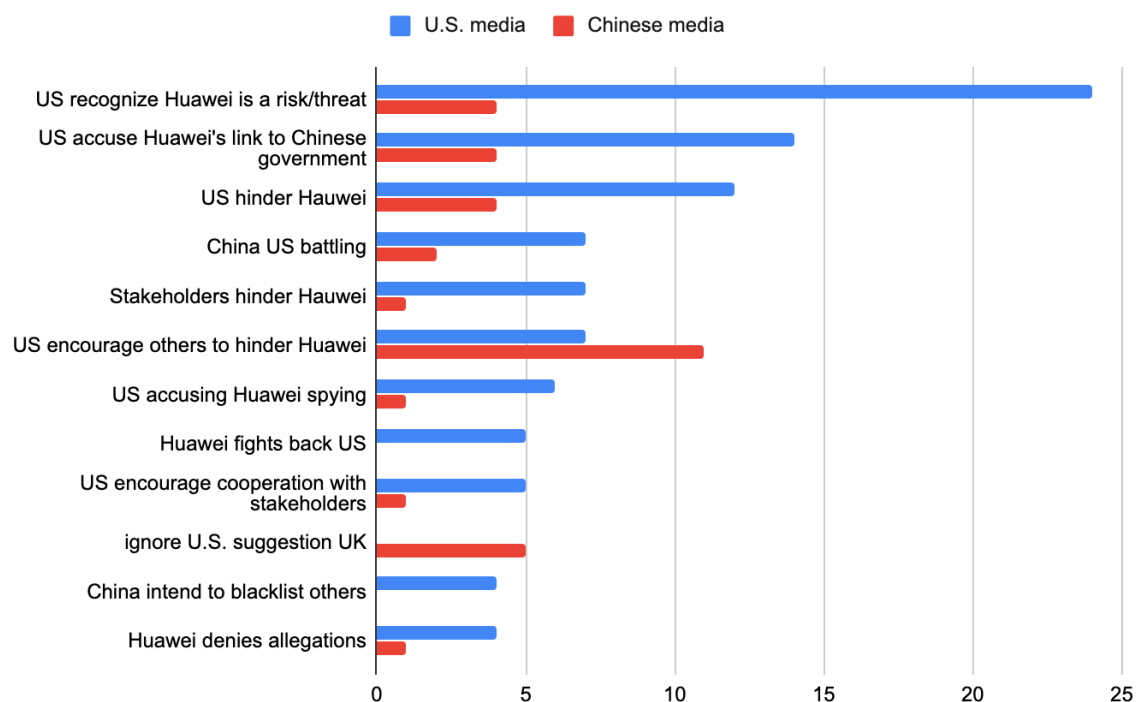
Figure 4.16 Overview Chinese vs. U.S. news outlets' applications of geopolitical frame

The above chart is a comparative overview between the U.S. and Chinese news outlets, for the frequently applied codes in the geopolitical frame. Similar to the previous other frames, the U.S. media tend to use frames more than the Chinese media. Especially for the geopolitical frame, the codes that were identified from the U.S. articles (130 codes) are twice as much as in the Chinese articles (65 codes).

Within the geopolitical frame, *"Huawei fights back US"* was only mentioned in U.S. news outlets, the same result was found in the comparison analysis of the conflict frame. As previously mentioned, China and Huawei tend to be in passive positions when conflict occurs. This might indicate that the Chinese media is trying to minimize reporting on the reactions of which Huawei, or the Chinese government is an opponent to the U.S and actively participating in conflicts with the U.S. The lack of representation of conflict in Chinese media suggests that the Chinese journalists tend to construct a non-hostile image for Huawei and the Chinese government. On the contrary, Chinese media has expressed *"The U.S. encourages others to hinder Huawei"* 4 times more than the U.S. media. The U.S. provoking alienation could be considered as the Chinese media tending to highlight geopolitical disputes through both attribution of responsibility frame and geopolitical frame.

Having other frames be used together with geopolitical frames for pointing out geopolitical issues further affirms the argument in section 4.3- the media uses other frames to conceal the executive order's geopolitical nature.

Although both countries' media tend to use geopolitical frames together with other frames, the U.S. media convey twice as much responses as the Chinese media. Besides the media uses framing to intentionally set narrative, the cultural roots should not be excluded as a part of reasoning. Chinese news outlets implementing geopolitical frame in a subtle way reflects that the Chinese diplomacy is shaped by Confucianism.

4.9.2 Assigned geopolitical codes to the U.S.
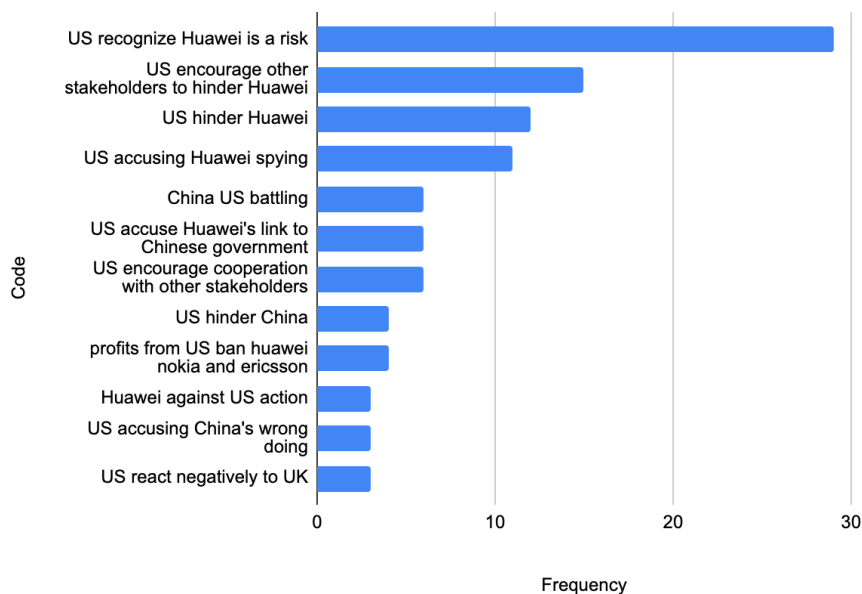
Figure 4.17 U.S. frequent responses within geopolitical frame

Codes that are associated with *"the U.S. recognizes Huawei is a risk or threat"* were the most frequently applied code, they were applied 29 times. It is the most frequent reaction from the U.S. when using attribution of responsibility frame as well. The risk codes were deductively developed from the "risk barriers" element in diffusion of innovation theory, and the codes that convey similar meanings were inductively developed in the process of the article interpretations. The U.S. governments actively spreading the message that Huawei's technology is a risky choice is by essence increasing the "risk barriers" as an "adoption barrier" to dispute Huawei's innovation from further diffusion.

Moreover, making allies is a powerful move in any geopolitical competitions. The U.S. has added a number of Huawei's affiliate companies to its blacklist. Furthermore, the articles framing the U.S. government was trying to make allies by encouraging other stakeholders to hinder Huawei was recorded with the second highest frequency. For instance, American new outlet reported that the U.S. stressed to Germany that they will weaken relationships with stakeholders who don't distance themselves from Huawei, by reducing the amount of information they share with the German security forces (A1 U21). Additionally, these incitements were portrayed by conflict frames as well.

From suspecting to accusing and hindering, the tension between the U.S. and China were transformed into conflicts. The connections between attribution of responsibility frames, conflict frames and geopolitical frames are therefore undeniable. This also proves the U.S. has a low tolerance with uncertainty, the nation acts proactively to alter the situation. The two tables below give an overview of the stakeholders that the U.S. has encouraged to hinder Huawei, and the stakeholder that the U.S. has shown willingness of cooperation, in geopolitical frames.

Table 4.4 Overview of the U.S.'s interactions with other stakeholders within geopolitical frames

Overview of other stakeholders that have been encouraged by the U.S. to hinder Huawei / to cooperate with the U.S.	
The U.S. encourages others to hinder Huawei	3
The U.S. encourages others to hinder Huawei allies	2
The U.S. encourages EU to hinder Huawei	2
The U.S. encourages Five Eyes to hinder Huawei	1
The U.S. encourages Germany to hinder Huawei	1
The U.S. encourages global suppliers to hinder Huawei	3
The U.S. encourages France to hinder Huawei	1
The U.S. encourages the UK to hinder Huawei	2
The U.S. encourages cooperation with Nokia and Ericsson	1
The U.S. encourages cooperation with Canada	3
The U.S. encourages cooperation with Poland	1
The U.S. encourages cooperation with U.S. allies	1

Additionally, a Huxiu article (A34 U13) quoted from Huawei CEO, who explained that U.S. citizens are under U.S. political pressure. The framing stressed his opinion that the current situation in the U.S. appears to be that banning Huawei is politically correct. No one tends to stand out and lobby for Huawei, because they will bear a great amount of pressure in doing so. The Huawei CEO anticipated that the "entity list" would exist for a long time. As

the Chinese media framing Huawei's concerns for the U.S. citizen, it could be considered as an illustration of Chinese media's characteristic: emphasising benevolent and humane.

4.9.3 Assigned geopolitical codes to China
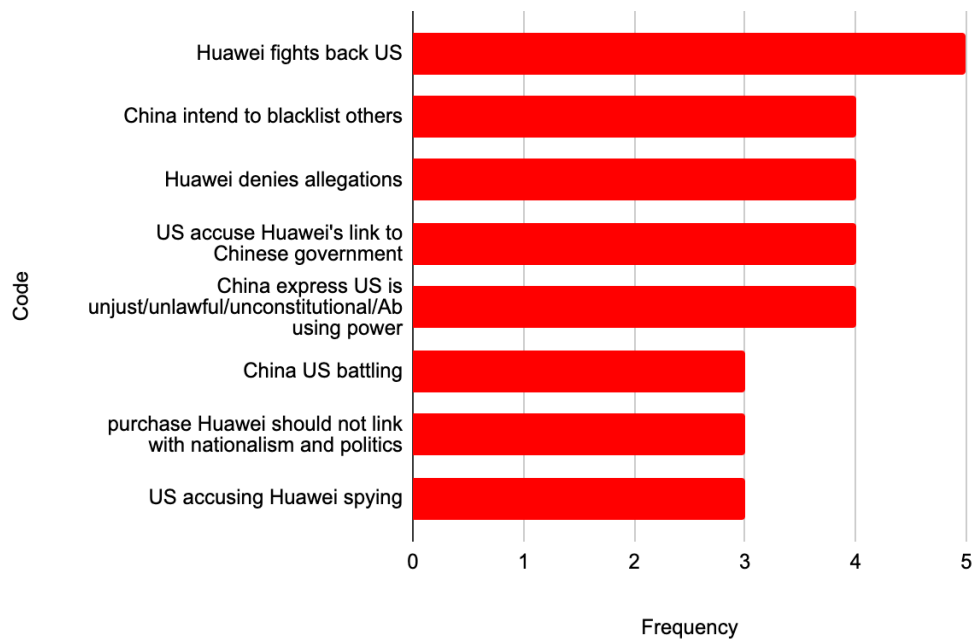
Figure 4.18 China/ Huawei frequent responses within geopolitical frame

The above chart gives an overview of codes that are frequently expressed by Huawei or China in regard to the geopolitical frame. The articles framed "Huawei fights back the U.S." and "Huawei denies allegations" frequently, this indicated that Huawei and China were in a passive position to react to geopolitical matters. The allegations from the U.S. and other stakeholders are focusing on Huawei causing national security issues, and Huawei being used by the Chinese government to spy on other countries.

Another key point that geopolitical framings illustrated is that China and Huawei also encouraged cooperation with other stakeholders. Particularly, the CEO of Huawei indicated that he appreciated the past cooperation with western companies during the past 20 years and hoped for future collaboration opportunities (A33 U24). However, the related codes only appeared once or twice, they are not included in the table.

The frames tend to indicate that Huawei moved its research centre from the U.S. to Canada was based on geopolitical reasons. As the U.S. reinforced sanction to the company. More codes were recorded in discussions about nationalism and geopolitics. Two Caixin

articles (A38 U12, A39) reported that the chief legal officer of Huawei argued that the U.S. is "Banning a company like Huawei, just because we started in China". This argument was noted with attribution of responsibility frame and conflict as well. A Caixin article provided more information in this aspect by quoting from the Huawei CEO. He indicated that to purchase Huawei should not link with nationalism and politics and made it aware to Chinese citizens that buying Huawei does not equals being patriotic. He further stated resorting to nationalism and populism is not encouraged in Huawei's corporate culture, because it is harmful to China.

Furthermore, a geopolitical farm conveyed the message of the U.S. citizens are under political pressure. As the article presented Huawei's CEO indicating that the current situation in the U.S. appears to be that banning Huawei is politically correct. No one tends to stand out and lobby for Huawei, because they will bear a great amount of pressure in doing so (A34).

It is no secret that Huawei has connections to the Chinese government. As it was previously mentioned that developing 5G technology and promoting it worldwide is a part of the "Belt and Road" initiative. The Chinese government gave support to Huawei, so that the country's ICT enterprise leader could reinforce China's backbone (Rolland, 2015). The applied news framings have shown that while China tries to use Huawei's innovation to form a new global development pattern to reach a more significant position in geopolitics, the U.S. government captured the link and employ it for specific accusations, such as, spying and providing information to the Chinese government. This is considered as an attempt for the U.S. government to restrain China's geopolitical growth. However, Chinese parties and other stakeholders expressed that U.S. government did not have any evidence, this was emphasized by several frames.

4.9.4 Assigned geopolitical codes to other stakeholders

Table 4.5 Overview of stakeholders who expressed the intension of protecting relationships

Stakeholders who expressed the intension of protecting relationships
Canada protects relationships with the U.S.
France protects relationships with stakeholder countries
Germany protects relationships with EU allies
The UK protects relationships with like-minded countries
The UK protects relationships with Five Eyes
The UK protects relationships with the U.S.

The stakeholders' responses are indeed based on their own considerations and planning for the countries, the responses were also partially based on their intention to protect relationships with another party. The table above gives an overview of the messages that were delivered by framing of which stakeholders that have expressed their tendency to protect relationships to other stakeholders.

A1 explicitly expressed Canada's intentions to protect its relationship with the U.S. Canada banned Huawei and arrested Huawei's CEO were also mentioned in several articles. The UK is in a difficult position as it tried to protect its relationship with "like-minded" countries and with Five eyes (A31; A49). Italy and Poland have decided to ban Huawei. The framings suggested that the rest of EU countries hold a rather mild attitude toward Huawei. France has agreed to work with Huawei, and so does Germany. However, different political parties within Germany expressed controversial opinions (A30 U18). Nevertheless, stakeholder countries intend to customize and develop the plan further for cooperating Huawei yet minimizing Huawei's potential risks.

The political factors in policy making was framed by a TechCrunch (A10 U11) report. UK's National Cyber Security Centre indicated that the U.K and Australia might have the same technical understanding of the situation but will come to very different conclusions. In the same article, a UK parliamentary committee also pointed out, enacting Huawei's services might be based on geopolitical or ethical grounds.

It is worth mentioning that many frames have expressed that stakeholders were stating that the Huawei ban is not exactly an act to enrich the market freedom and competitiveness. Guancha article (A27) quoted a chairperson of the Chinese National People's Congress Foreign Affairs Committee. She was the same person who questioned the fragility of democratic system which was discussed in the analysis of the conflict frame. The chairperson expressed that Americans' paranoid delusions about Huawei may be due to their lack of competitiveness. She argued that technology is a tool, the key is how to use it, technology itself cannot be a threat. Several frames were applied to the text that described her arguments.

While the geopolitical frames portrayed that a free market is encouraged by Chinese stakeholders and several other stakeholders, various articles expressed that the U.S. and other stakeholder countries seemed to be treating Nokia and Ericsson with a different standard (A45; A10 U17). These 5G vendors are based in the EU. Some nations are in doubt regarding whether they should establish inspections or policies to evaluate the security threat that these two companies might cause. Whereas, similar measures are more likely to be implemented to Huawei. Moreover, the U.S. has shown strong willingness to encourage its allies to invest into Nokia and Ericsson as a way for countering the dominance of Huawei's 5G (A12; A31; A26).

5. Conclusion

RQ: How do news media frame the strategic responses of the different stakeholders in the   interactions between Huawei and U.S. government.

The purpose of this research is to identify stakeholders' strategic responses as interactions toward the Huawei executive order. This was done by examining the responses with five frames, and the individual frame analyses are used to provide answers to the sub-questions. To answer the main research question, the researcher sought strategic response patterns in the analysis results that were obtained from the vast amount of data. Eight conclusions are emerged from patterns that recurred often, yielded novel insights, and have significant impacts to this research. They are presented in this section separately, but the connections between conclusions were identified as well.

1. **Geopolitics was often seen in the context of the four other issues.**

   Through initial research, the establishment of the executive order and the tension between the U.S. and China was anticipated as a geopolitical issue, and it was again affirmed by the end of research. The framing analysis results have shown that geopolitics was the overarching theme, but both countries' media tended to use other issues to conceal the Huawei ban's geopolitical essence. The primary/ subordinate frame's ratio analysis and the frame association analysis indicated that the geopolitical frames have the second heights connections to other frames. Hence a strong association between geopolitical issues is evidential. Although conflict frames were recorded as having the highest frame associations, tensions and conflicts were considered rather as natural consequences of the U.S. placing trading sanctions. The result has shown that conflicts were commonly found in other frames' application, and the conflict frames helped the researcher to identify the important and specific issues that were discussed in the reports.

2. **Stakeholders tended to protect relationships.**

   The most significant pattern that was illustrated by news frames was stakeholder countries and companies tend to protect relationships. This conclusion aligned with conclusion 1 which entails geopolitics is the overarching theme of the media frames, as well

as the main motivations for the current dispute between countries. The motivations behind protecting relationship lean towards geopolitical significance. For instance, Canada protected its relationship with the U.S. and helped to arrest Huawei personnel was assumed due to it is geographically close to the U.S. The U.S. also appealed to France, Germany, UK, the EU and global suppliers to from allies and hinder Huawei. However, the media emphasised that the European countries did not cohort with the U.S. and they will set their own security standard for Huawei. Especially, German officials stated that they intended to protect its relationship to other EU countries. Similar to the U.S. once promoting the "Trans-Pacific Partnership", and China reinforcing the "Belt and Road" initiative, other stakeholders also tended to evaluate the current situations and escalated their unique advances to form allies and expand their impacts.

Additionally, connecting this finding to the discussion about Capitalism vs. Territorialism in section 2.4, both countries' media framed the Huawei's 5G was the front runner in the industry, and it was cost- efficient. Furthermore, considering geographical infrastructure building is essential in developing 5G, and European countries being physically close, this Capitalism vs. Territorialism paradox might not apply to the EU stakeholders' strategies. It can be assumed from the news framings that deploying Huawei's technologies could be beneficial for both capital growth and forming allies by territories. However, the executive order's economic impacts on each country were not precise examined in this study, this conclusion will need further verifications.

3. **The U.S. media used news frames more often and more directly than the Chinese media**

The framing analysis indicated this research outcome, this conclusion was assumed caused by the U.S. cultural influencing its people in pursuing liberty and the freedom of speech, as well as to be the advocates when facing changes and uncertainties. Hence the U.S. media used the frames more directly and frequently, because the framing itself is a way to enhance impacts of delivering a message. The Chinese media on the contrary, tended to use sublime words with profound meaning. This communication style was shaped by Confucianism with the central concept of benevolent.

4. **The U.S governments tended to initiate conflicts, and the Chinese government as well as Huawei tended to react passively.**

This conclusion aligned with conclusion 3, and both patterns significances were potentially caused by in inherent culture differences. The U.S. hinders Huawei" was identified with the highest frequency among the U.S. strategic responses within the conflict frames. In comparison, when Huawei was involved in conflicts, "Huawei fights back the U.S." was the focus of both countries' media framing. This code also had the highest frequency among other conflict-related responses involving China or Huawei. It can be concluded that the media framed the U.S. as the initiator of conflicts, and China or Huawei was passive. Cultural theories regarding China is influenced by Confucianism is aligned with this pattern as Chinese people tend to express themselves in an indirect and subtle manner. Chinese are relatively comfortable with uncertainties and honour a benevolent diplomatic approach explains this phenomenon. On the contrary, the U.S. culture promotes free speech and liberty, subsequently leads to them proactively changing situations due to little tolerant to uncertainty. These characteristics were shown in stakeholders' responses and media framing approaches for both countries.

Moreover, both conflict frames and attribution of responsibility frames highlighted that the U.S. accused Huawei of being linked to the Chinese government. The articles presented the U.S. suspected Huawei being used by the Chinese government to steal information to enhance China's informational assets was based on geopolitical concerns as well. It was reported various time that Huawei and China denied the accusations.

5. **The U.S. recognized Huawei is a risk or threat.**

Both countries' media tended to present the U.S. recognized Huawei as a risk or threat to its national security as the framing subject. This reaction was framed by the attribution of responsibility frame while having the highest frequency among other codes within the frame. However, the news framings did also explicitly show that Huawei and China's spokesperson denied such allegations. As the U.S. parties reinforced the "risk barriers" for Huawei, the detected interaction from this pattern is that the U.S. government and the U.S. media tended to "tilt" the society's perception towards an environment that will be unsuitable for Huawei's innovation being further diffused that is accepted.

6. **Stakeholders tend to protect relationships.**

The most significant pattern that was illustrated by geopolitical frames was stakeholder countries and companies tend to protect relationships. Importantly, the motivations behind protecting relationships leans towards geopolitical significance. That Canada protected its relationship with the U.S. and helped to arrest Huawei personnel was assumed due to it being geographically close to the U.S. The U.S. also appealed to France, Germany, UK, the EU and global suppliers to from allies and hinder Huawei. The media emphasised that the European countries did not cohort with the U.S. and they will set their own security standard for Huawei. Connecting this finding to the discussion about Capitalism vs. Territorialism in section 2.4, the finding could be an indication of countries tending to value geographical connections more than growing economy on 5G issues, perhaps because the geographical infrastructure building is essential in developing 5G, and the EU countries are physically close. However, the executive order's economic impacts on each country were not precise examined in this study, this conclusion will need further verifications.

7. **Mutual help- technological complementary of U.S. and China.**

The media portrayed another crucial tension between the U.S. and China; both countries are striving to advance their technology, but both countries seemed to be needing each other to accomplish their goals. The technology frames analysis aligned with this finding in conflict framing setting. The key argument in the news reports was that banning Huawei does not benefit the U.S. for its technology development, nor solving the cyber security challenges. The coverage on both parties' responses and their future strategy pointed out that the U.S. needed to develop its own 5G technology and Huawei needed to be independent on building its own hardware and operational systems that can be compatible for users outside of China. As these arguments were reported both in the U.S. and Chinese media, it can be concluded that both media presented frames that could

reduce the "adoption barriers" for Huawei, which could potentially help Huawei's technologies to be accepted by society.

Regarding the U.S.'s future 5G plan, the media conveyed that the U.S. encouraged American based firm Cisco to acquire a stake from EU companies- Nokia and Ericsson who are able to provide more trustworthy 5G. However, it was reported that Cisco turned down this suggestion. On another side of the competition, as losing the chip supplies from big U.S. firms, China did roll out a series of independent developed hardware. Both countries' media also framed Huawei spokesperson claiming *"Huawei will grow despite U.S. Ban" with confident.* However, the articles indicted Huawei is still seeking cooperation's with the U.S. firms alluded that Huawei's progress after the ban require further inputs. Again, although the Chinese media did it more often, both countries news outlets applied frames to increase the attractions of Huawei's technology as "adoption drivers". The news frames indicating that Huawei's business operation was able to remain robust after the ban was considered as altering the audience perceptions, therefore, creating an environment to accelerate Huawei's adoptions by the society.

8. Mutual damage- banning Huawei also harms the U.S.

The framings have shown that the ban had negative impacts on China and the U.S. mutually in three aspects. Firstly, it was indicated by both countries' media using the economic consequences frames to emphasise that the telecom providers in U.S. rural area was financially harmed the most. Furthermore, the articles pointed out that due to the ban, Huawei cut jobs in the U.S. and moving its research centre to Canada was by essence Americans losing their jobs, this entailed that the damage was mutual.

Secondly, another framing focus in the aspect of economic consequences was that the ban harms market competitiveness. This was also expressed by China and Huawei through attribution of responsibility frames where the U.S. was pointed at fault for being unjust and unlawful. Moreover, amongst other stakeholders, Germany, UK and the EU was frequently reported as expressing the executive order was a violation of free market principle.

Thirdly, some frames in the specialised Chinese news shifted the technology framing focus to an anti-nationalism and an ideology level, which was unconventional considering

Chinese media's inherent characteristics. As a Chinese article used a relatively large amount of content for reporting a Singaporean diplomat expressed that Huawei installed Google's service in its devices is spreading the American-made digital ecology with the American ideology. Yet, the executive order sabotaged this process. As well as the frames stressed that Huawei's CEO expressing "we hope to provide a service for human beings together.", incorporating these arguments and conclusion 7 which indicating China and the U.S. technology could complement each other, it can be concluded that blindly resistance caused damages for all parties. Nevertheless, blindly acceptance would also be the impulsive. As new generations of technology emerge, each country needs to produce strategies to flexibly adapt to the changes, so that new technologies can maximise their potentials to serve human beings as a whole.

The explanations of the eight conclusions are illustrated above. This research focused on the stakeholders' responses that were presented by the media and the portrayal of the frames. The right or wrong from the stakeholders' reactions and their past actions was not the research focus. As discussed in the theory section 2.4, "The motivations and interests of agents differ." (Lee et al., 2018), this was indeed reflected in the stakeholders' responses and the two countries' news outlets' applications of frames. The unspoken in the news was intensively studied. Hopefully, this research could provide insight on mass media's effect in conflicts situations where the social integration of novel technology was emphasised.

5.1 Limitations

Differences in Chinese and U.S. media:

There were differences found in the way that the Chinese and the U.S. news outlets deployed news framing. However, these two countries have significantly different cultures; it is reflected in the way of talking, writing and expressing in general. The response differences were not only based on the various stances taken by the two countries, but also the way of shaping a story and the tone of voice which inherently exists in the country's culture and languages.

Moreover, the Chinese media has come a long way from the propaganda era, and different U.S. media outlets have divergent preferred political stances. The pre-existing value in the news outlets caused bias in reporting and increased the incompatibility to a certain degree when the researcher needs to analyse the news and results.

Limited data collection date:

The articles that were collected as data for this research were until 2020 February 15th. The Huawei ban is an ongoing issue. The stakeholders' reactions change with the time being. However, this research covers a very crucial period. It covers articles that were published immediately after the ban until 10 months after the ban. The technology landscape and the dynamic between nations will certainly be varied in the future, but the current research captured the most decisive and timely responses.

5.2 Future research

The U.S. and China have distinct cultures. Their approach to politics, news and communications are very different. To a certain level, this research taking the cultural difference into account was one of its uniqueness. The researcher analysed both countries' news with the same template. It was sufficient because the research goal was to understand the stakeholder's strategic response of the executive order by analysing news framing, and culture was one of the factors. Future research could be analysing the two countries' news with two distinct templates that are developed specifically for the news from each country. The templates will be built based on the two countries' unique communication and media context. The templates should include criteria that are pre-adjusted by the different weight of cultural values and tendencies. By doing so, comprehending and analysing the articles will be based on the somewhat similar ground. Potentially, future research could use a mixed method of quantitative and qualitative content analysis

As stated in the literature review, this research focusses on the media frames, it does not study the audience frames (individual frames). The audiences are the receiver of the mass media, their opinions and actions will potentially influence the executive order's subsequent issues, Huawei's business development and the process of a technology's social integration. So, another potential future research could be studying the audience frames by survey or experiment research methods to gain insights on the audiences' perceptions on the news and the stakeholders' responses.

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Appendix A

Codebook

This codebook was inductively developed. The codes with the grey background are the original codes. Considering the convenience during coding process, the codes were made short. The codes in the white background are the short codes modified into more proper sentence, for presenting to the readers.

In case "Command + F" keyword search for the codes in the dataset sheet, use the short codes in grey background.

The U. S. codes:

The U.S. codes	The U.S. - simplified codes that were used during the coding process
Ban Huawei will damage the U.S.	ban Huawei will damage US
Sanctions are not a part of the trade negotiation	Sanctions are not a part of the trade negotiation
senators proposed legislation to help local carriers with a fund or rural	senators proposed legislation to help local carriers with a fund or rural
The U.S encourages others to hinder Huawei	US encourage others to hinder Huawei
The U.S hinders Huawei	US hinder Huawei
The U.S. accuses China of wrongdoing	US accusing China's wrong doing
The U.S. accuses Huawei is a threat to national security	US accusing Huawei is a threat to national security
The U.S. accuses Huawei of being linked to the Chinese government	US accuses Huawei's link to Chinese government
The U.S. accuses Huawei of spying on other stakeholders for China	US accusing Huawei spying
The U.S. accuses Huawei of wrongdoing	US accuses Huawei of wrongdoing
The U.S. against	US against
The U.S. allows Huawei business	Allow Huawei business
The U.S. and China are geopolitical opponents	US and China are Geopolitical opponent
The U.S. arrests Huawei personnel	US arrest Huawei personnel

The U.S. bans Huawei doesn't solve cyber security challenge	US Ban Huawei doesn't solve cyber security challenge
The U.S. blacklists Huawei affiliates	US blacklist Huawei affiliates
The U.S. calls China top adversary	US call China top adversary
The U.S. carriers need support	US carriers need support
The U.S. considering customers	Considering customers
The U.S. considers Huawei is a threat	US accusing Huawei is a threat to national security
The U.S. courts	US courts
The U.S. declares national emergency over Huawei threat	US declare national emergency over Huawei threat
The U.S. develops its own 5G	US develops its own 5G
The U.S. develops plan further to ban Huawei	US develop plan further to ban Huawei
The U.S. encourages cooperation	US encourage cooperation
The U.S. encourages negotiation	US encourage negotiation
The U.S. express China steals US technology	US express China steals US technology
The U.S. gives more permission to Huawei	US give more permission to Huawei
The U.S. hinders China	US hinder China
The U.S. hinders Huawei's communication	US hinder Huawei's communication
The U.S. ignores relationship	ignore relationship
The U.S. intends to manage Nokia and Ericsson holdings	US intend to manage Nokia and Ericsson holdings
The U.S. loss profit because of the ban	US loss profit because of the ban
The U.S. needs to improve its security setting	US needs to improve its security setting
The U.S. profits from Huawei	US profits from Huawei
The U.S. protects relationships	US protect relationships
The U.S. raises alarm over Huawei	US raise alarm over Huawei
The U.S. reacts negatively	US react negatively
The U.S. recognizes China cannot be trusted	US recognize China cannot be trusted/is a threat
The U.S. recognizes Huawei is a risk	US recognize Huawei is a risk
The U.S. should not ban Huawei	US should not ban Huawei

The U.S. stressed that their conflict was not with the Chinese people or Chinese Americans, but the country's communist government.	U.S. stressed that their conflict was not with the Chinese people or Chinese Americans, but the country's communist government.
The U.S. will investigate	US will investigate
The U.S. will monitor situation	US will monitor situation
The U.S. will protect its network	US will protect its network
The U.S. will weaken relationship with stakeholder who doesn't distance Huawei	US will weaken relationship with stakeholder who doesn't distance Huawei

China/ Huawei codes:

China - codes	China - simplified codes that were used during the coding process
5G is not as important as AI in the future	5G is not as important as AI in the future
5G is overrated	5G is overrated
affecting academia	affecting academia
Ban Huawei will damage	ban Huawei will damage
China accusing stakeholder	China accusing stakeholder
China and the U.S. are battling	China US battling
China denies allegations	China denies allegations
China encourages negotiation	China encourage negotiation
China express the U.S. is unjust/ unlawful/ unconstitutional/ abusing power	China express US is unjust/unlawful/unconstitutional/Abusing power
China expresses a stakeholder is unjust/ unlawful/ unconstitutional/ abusing power	China express stakeholders is unjust/unlawful/unconstitutional/Abusing power
China hinders	China hinder
China hinders the U.S.	China hinder US
China ignores relationship	ignore relationship
China intends to blacklist others	China intend to blacklist others
China is considering customers	Considering customers
China issues warning	China issue warning

China profits from Huawei	China profits from Huawei
China questions Democratic system	China question Democratic system
China receive alternative support	China receive alternative support
China supports decision from	China support decision from
China surpasses the U.S.	China surpass US
China urges	China urge
China urges the U.S. to stop	China urge US to stop
enrage US allies	enrage US allies
express no intention to harm	express no intention to harm
Extending license for 90 days won't have a substantial impact on Huawei's business	Extending license for 90 days won't have a substantial impact on Huawei's business
Huawei expresses they refused to give data to Chinese government, but the law forces them	Huawei express they refuse to give data to Chinese government, but law forces them
Huawei accuses	Huawei accuse
Huawei accusing U.S. action	Huawei accusing US action
Huawei against arrest	Huawei against arrest
Huawei against U.S. action	Huawei against US action
Huawei appeals to country to use 5G	Huawei appeal country to use 5G
Huawei being banned will not help US advance technological leadership	Huawei being banned will not help US advance technological leadership
Huawei business shaken due to lack of US technology	Huawei business shaken due to lack of US technology
Huawei CEO expresses that he is a fan of the U.S.	Huawei CEO express he is a fan of the US
Huawei courts	Huawei courts
Huawei denied that it is a risk	Huawei denied that it is a risk
Huawei denies allegations	Huawei denies allegations
Huawei develops its own OS/Component	Huawei develop its own OS/Component
Huawei does not comment	Huawei does not comment
Huawei encourages cooperation	Huawei encourage cooperation
Huawei encourages the facts-based approach	Huawei encourages the facts-based approach

Huawei expresses the ban would harm market competitiveness	Huawei express ban would harm market competitiveness
Huawei expresses they are safe	Huawei express they are safe
Huawei expresses U.S. action is in no one's interest	Huawei express US action is in no one interest
Huawei expresses U.S. companies should not be blamed, because they have to obey the law	Huawei express US companies should not be blamed, because they have to obey the law
Huawei fights back US	Huawei fights back US
Huawei has a big market share	Huawei has big market share
Huawei hinders the U.S.	Huawei hinder US
Huawei is 5G frontrunner	Huawei is 5G frontrunner
Huawei loss profit because of the ban	Huawei loss profit because of the ban
Huawei moving U.S. research centre to Canada	Huawei moving US research center to Canada
Huawei needs to develop the plan further	Huawei needs to develop the plan further
Huawei promises advance technology and profits	Huawei promises advance technology and profits
Huawei will buy U.S. chips	Huawei will buy U.S. chips
Huawei will grow despite U.S. ban	Huawei will grow despite U.S. Ban
Huawei will invest to other stakeholders than U.S.	Huawei will invest to other stakeholders than US
Huawei will monitor situation	Huawei will monitor situation
Huawei will obey rules and regulations	Huawei will obey rules and regulations
Huawei will sell product	Huawei will sell product
Purchase Huawei should not link with nationalism and politics	purchase Huawei should not link with nationalism and politics
The U.S. is lack of competitiveness	US lack of competitiveness
U.S. people are under U.S.'s political pressure	US people are under US political pressure

Other stakeholders' codes:

Other stakeholders - codes	Other stakeholders - simplified codes that were used during the coding process
Academic circles and netizens express oppositions	academic circles and netizens express oppositions
Accuses Huawei's link to Chinese government	accuse Huawei's link to Chinese government
Accusing Huawei is a threat to national security	accusing Huawei is a threat to national security
Accusing Huawei spying	accusing Huawei spying
Against U.S. action	Against US action
Against Chinese government	Against Chinese government
Against Huawei statement	against Huawei statement
Arrests Huawei personnel	arrest Huawei personnel
Ban Huawei doesn't solve cyber security challenge	Ban Huawei doesn't solve cyber security challenge
ban Huawei will damage	ban Huawei will damage
Call China top adversary	call China top adversary
Considers Huawei is a threat	consider Huawei is a threat
declares national emergency over Huawei threat	declare national emergency over Huawei threat
Does not comment	does not comment
Does not have full control on banning Huawei decision	does not have full control on banning Huawei decision
Does not want to be involved into the fight between China and the U.S.	does not want to be involved into the China US fight
Don't fear to challenge google	don't fear to challenge google
Encourages cooperation between nations	encourage nation cooperation
Expresses that the U.S. has no evidence for the accusations	express that US has no evidence for the accusations
Follow other stakeholder's decision	Follow other stakeholder decision
Gives Huawei software updates	Give Huawei software updates
Hinders China	hinder China
Hinders Huawei	hinder Huawei
Huawei is being used	Huawei is being used

Loss profit because of the ban	Loss profit because of the ban
Needs to develop the plan further	needs to develop the plan further
No technical reason to exclude Huawei	No technical reason to exclude Huawei
Only has a few technology is from US	only has a few technology is from US
Profits from working with Huawei	Profit from working with Huawei
Recognizes China cannot be trusted/is a threat	recognize China cannot be trusted/is a threat
Recognizes Huawei is a risk	recognize Huawei is a risk
Recognizes Huawei's competitiveness	recognize Huawei's Competitiveness
Stakeholder considering customers	Considering customers
Stakeholder doesn't hinder Huawei	doesn't hinder Huawei
Stakeholder encourages cooperation with Huawei	encourage cooperation with Huawei
Stakeholder encourages negotiation	encourage negotiation
Stakeholder expresses that the risks that caused by Huawei is manageable	the risks that caused by Huawei is manageable
Stakeholder ignores relationship	ignore relationship
Stakeholder ignores U.S. suggestion	ignore U.S. suggestion
Stakeholder is taking U.S. suggestion	Taking US suggestion
Stakeholder lobbies for Huawei	lobby for Huawei
Stakeholder profits from Huawei ban	profits from Huawei ban
Stakeholder protects relationships	protect relationships
Stakeholder raise alarm over Huawei	raise alarm over Huawei
Stakeholder refuse to help rural carrier	stakeholder refuse to help rural carrier
Stakeholder uses Huawei 5G network, but excluded from the core	use Huawei 5G network, but excluded from the core
Stakeholder welcomes Huawei 5G	welcome Huawei 5G
Stakeholder will make decision carefully considering Huawei is risky to national security	will make decision carefully considering Huawei is risky to national security
Stakeholder will set its own standards	will set its own standards
Stakeholder works with Huawei	work with Huawei
Stakeholder's decision is evidence-based	decision is evidence-based
Stakeholder's stance is uncertain	stance is uncertain

Stresses the importance of free market	Stress the importance of free market
Suggests U.S. government to make policies to support stakeholders in order to compete with Huawei	suggest US gov to make policies to support stakeholders in order to compete with Huawei
Supports U.S. decision	support US decision
The U.S. gives more permission to Huawei	give more permission to Huawei
The U.S. government is not being transparent/ clear	US government not being transparent/clear
Will investigate	Will investigate
Will monitor the situation	will monitor situation
Will treat Huawei fairly	will treat Huawei fairly

An example of the coding sheet

Frames	Geopolitics = g			Attribution of responsibility = a			Economic consequences = e			Conflict = c			Technology = t			Primary	subordinate
Stakeholders	U.S.	China	Other	U.S.	China	Other	U.S.	China	Other	U.S.	China	Other	U.S.	China	Other		
Various US senators reacted with anger. "Allowing Huawei to the build the UK's 5G networks today is like allowing the KGB to build its telephone network during the Cold War," tweeted Senator Tom Cotton.				The U.S. accuses Huawei is a threat to national security						The U.S. reacts negatively			The U.S. accuses Huawei is a threat to national security			c	a, t