### **BELT AND ROAD SENTIMENT INDEX**

#### **Abstract**

## 1. Introduction and purpose of the study

The Chinese government has launched the Belt and Road Initiative (B&RI), targeting to establish a foreign policy scheme that facilitates infrastructure and economic development through cooperation and risk avoidance. To date, 123 countries have participated in the B&R Initiative (Zhu, 2019). These countries, together, constitute two-third of world population and one-third of global GDP.

Since the implementation of B&RI, the public's sentiment is mixed due to participating countries' stakeholders are uncertain if unsure B&RI would benefit or disadvantage their own / countries' interests. B&R partner countries and companies when faced with information uncertainties can retort to the use of a proposed Belt and Road Sentiment Index to achieve information symmetry.

This study aims at conceptualizing the B&R sentiment construct as well as a B&R Sentiment Index to improve the information symmetry about B&R initiative among the partner countries. With enhanced information symmetry, with trustworthy information among the stakeholders, the sentiment index could be used as a tool for B&R partner countries to be prepared to enter into long-term trade relationships with China. This project can also assist the public and the media to report and disseminate information about B&RI. With enhanced public awareness, it allows the fourth estate to access information and improves the public knowledge of the myths of B&RI.

### 2. Literature Review

## 2.1 International News Flow Theory

International News Flow Theory (INFT) (Galtung and Ruge, 1965; Ostgaard, 1965) mentioned the 12 laws governing the structure of foreign news (Table 1). From a country-oriented perspective, INFT comprised of factors such country size, perceived "elite-ness" of a country, and other factors including historical, geographical, economic size and cultural distances. Information flows include factors such as cultural exchanges, trade, migration and tourism between countries (Kim and Barnett, 1996; Segev, 2010, 2014, 2017; Shoemaker, 2006; Wu, 1998, 2000, 2003, 2007).

Galtung and Ruge advocate the additivity hypothesis (1965), whereby these 12 laws are required to act in tandem need to rather than independently to generate news worthiness. The additivity model is used to test the model of country salience by Grasland (2019), Segev (2010; 2014) and Wu (1998, 2000). Wallerstein's (1974) further developed it into a World System Theory (WST), whereby news interactions between countries are categorized in three spheres; core, semi periphery, and periphery. In WST theory, core countries such as United States are the key players who will dictate the direction flow of information (Segev, 2016). Research supports news flow from the affluent and strong political power countries to the rest of the world (Guo and Vargo, 2017). Views are formulated from information reported in core countries' news media and social media platforms (Wanta, Golan and Lee, 2004).

# 2.2 Intermedia Agenda-setting Theory

In addition to INFT, McCombs and Shaw's agenda-setting theory (1972) suggests that the news reported by the media will "transfer" to the public and hereby influence the formation of public opinion. Agenda-setting theory is further expanded in an intermedia agenda-setting setting, whereby "elite" or "credible" media agencies such as *Associated Press* will set the agenda for less elite media outlets and extend to other media outlets such as television and radio (Reese and Danielian, 1989; McCombs, 2014; Protess and McCombs, 1991). Recent students extended the model to examine cross-national intermedia agenda-setting on how the news agenda of one country *transfers* to another Guo and Vargo (2017).

Non-traditional media follow a non-egalitarian information flow structure (Golan and Himelboim, 2015). Spokespersons such as political or partisan online news sites are now considered to have a stronger influence over traditional media on agenda-setting influence (Meraz, 2011; Vargo & Guo 2016).

This paper aimed at outlining the theories in development of the B&R sentiment index (BSRI), a multivariate construct.

# 3. Methodology

This project proposes to use computer-assisted big data gathering techniques to crawl the information using computer-assisted analysis (Guo and Vargo, 2017) by combing an open source database, Global Data on Events, Location and Tone - GDELT Translingual (GDELT, 2019). GDELT provides real-time news monitoring in 65 languages with 98.4% of the daily non-English news translated into English (GDELT, 2019). To measure Galtung and Ruge (1965) twelve laws, a total score using multiple regression model (Grasland, 2019) will be used based on Peterson's (1981) approach.

To determine whether news source are from core, semi-peripheral, and peripheral countries, studies by Babones (2005), Chase-Dunn, Kawana, and Brewer (2000), and

Guo and Vargo (2017) list is adopted. The list would be updated by adding the B&R

countries to form a comprehensive view of the definition of countries mentioned in

international news flow literature. As we predict core countries set the agenda to semi-

periphery and periphery countries, we use the Guo and Vargo's (2017) media agenda-

setting operationalization method by using the Granger causality test. The amount of

issues a country caused another countries' media agendas would be used to examine the

country's agenda-setting power.

Finally, to include emerging online news agenda-setting power in the BRI sentiment

index (Meraz, 2011; Vargo and Guo, 2016), Vargo and Guo's (2016) Granger causality

test where ordinary least squares regression (OLS) model is used to regress between

emerging online media and traditional media to determine the causality in intermedia

agenda-setting relationships at different time-lags.

4. Results, conclusions, practical and social implications

The findings from this study aims at developing and operatizing the B&RI sentiment

index aims at developing a multidimensional multilevel construct to determine the

sentiment level of different types of stakeholders in B&R countries to improve

information symmetry and increase cross-border cultural, trade, tourism flows between

B&R participating countries.

Keywords: Belt & Road Sentiment Index, International News Flow Theory,

Intermedia Agenda-setting Theory, Two-way symmetrical Model, GDELT

**Selected References** 

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