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# Global Journal of Business Research

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# **IMPLICATIONS OF SUPPLIERS AND CUSTOMERS AND INDUSTRY COMPETITION DENSITY ON ACCOUNTING CONSERVATISM**

Hui-Sung Kao, Feng Chia University  
Ming-Jiun Tsai, Feng Chia University

## **ABSTRACT**

*Accounting conservatism is often used to measure an enterprise's earnings quality. This study adopted the accounting conservatism indicator of C-Score proposed by Khan and Watts (2009) to explore the correlation between the number of suppliers and customers and accounting conservatism and to further analyze whether the number of suppliers and customers and accounting conservatism produce differences due to the industry competition density. According to the empirical research results, as the number of suppliers and customers increases, earnings conservatism turns higher. The empirical evidence also showed that when the Industry Competition Density is higher, as the number of suppliers and customers increases, earnings conservatism becomes more significant. Different from the previous literature that only discussed industry competition and earnings quality from the perspective of the company, this study considered the number of important suppliers and customers having contract relationships with the company, which is also the main contribution of this research. Therefore, the findings of this study are conducive to understanding that the number of suppliers and customers is an important factor affecting accounting policy in the market competition market. The findings can be used by firm management as a reference to handle relationships between suppliers and customers.*

**JEL:** M41, M110

**KEYWORDS:** Number of Suppliers and Customers, Accounting Conservatism, C-Score, Industry Competition Density

## **INTRODUCTION**

This paper delves into the correlation between accounting conservatism and the number of suppliers and customers, in order to analyze whether accounting conservatism and the number of suppliers and customers exhibit any difference as a result of industry competitive density. Accounting conservatism is measured with the C-Score model proposed by Khan and Watts (2009). Most supply chains in the past were much longer and cumbersome. It was necessary to place orders with a large number of suppliers, and the maintenance of good relationships was key to the long-term stability of supply chains. However, the revolution of short supply chains has prompted many industries to in-source instead of out-source for components. The shrinking of supply chains in fact highlights the importance of key suppliers. As most components come from a small number of suppliers, it is essential to retain these suppliers in order to mitigate the risk associated with supply disruptions. The heavier reliance on major suppliers means that suppliers must keep a closer eye on their corporate customers. In this regard, the stability of earnings quality is critical. The importance of fewer customers has also increased, as the business environment is conducive to a shorter supply chain. The change in global trade over recent years means the ball is in the court of customers. Shipment speed and service quality generally affect the effectiveness of the cooperation. Thus, maintaining the loyalty of major customers is key to higher profitability. The higher customer loyalty is, the greater is the importance of accounting conservatism to retain customer relationships and avoid profit erosion. Li, Li, and Feng (2015) suggest that a high concentration of suppliers and customers implies high switching costs. In other words, companies do not seek to expand the list of suppliers or customers in order to prevent negative effects on the existing supplier-customer relationships.

This paper hence argues that compared to high industry concentration, the number of key suppliers and customers is a greater factor on the sustainability and profitability for a company. Hui, Klasa, and Yeung (2012) posit that the bargaining power of suppliers and customers is highly relevant to the timeliness of loss recognition. In fact, suppliers and customers both like to see their dealing counterparties adopt accounting conservatism and maintain reporting quality. It is thus safe to infer that monitoring from suppliers and customers can effectively ensure the robustness of profits and loss recognition, and therefore accounting conservatism preserves the harmony of the overall supply chain.

Dhaliwal, Huang, Khurana, and Pereira (2009) contend that the higher the industry concentration is, the longer the delay is for companies to release bad news. As a result, accounting conservatism is compromised. This paper incorporates the concept developed by Porter (1980) that profitability is subject to the level of industry competitiveness. Sustainable growth rates (SGR) and the Herfindahl-Hirschman Index (HHI, a metric for industry concentration) are used to measure industry competitive density as a variable. The level of industry competitiveness also indicates whether market demand is upward or downward. At the same time, the reliance on suppliers and loyalty to customers also affect earnings quality. In sum, the number of key suppliers and customers and the level of industry competitive density are important factors of earnings reporting reliability. The measurement of the number of the important customers and suppliers is to add up the suppliers and customers with purchases or sales reaching 10% of the goods. Unlike previous studies that used the purchase and sales amount or the proportion of the purchase and sales amount in the total amount, this study considered the supervising effect using the number of important customers and suppliers. If the scale of the sample enterprises differs greatly, the biased phenomenon occurs when the purchase or sales amount is used. Therefore, with greater numbers of important customers and suppliers, it means that the loyalty of important customers or suppliers is high and the supervising power is greater. The empirical findings of this paper indicate that the greater the number of key suppliers and customers is, the stronger is the reliability of earnings quality. Conversely, a high level of industry competitive density signals a shrinkage in market demand and a shortening of the supply chain. At this juncture, the robustness of financing reporting helps stabilize the supply chain. The empirical evidence suggests that the higher the industry density or the larger the number of suppliers and customers is, the better is the reliability of earnings. The subsequent sections of this paper are arranged as follows. Literature Review summarizes the literature review and research hypotheses. Methodology describes the research methodology. Empirical Results explains the empirical results. Conclusion presents the conclusions and suggestions.

## LITERATURE REVIEW

### Accounting Conservatism

Accounting conservatism often serves as an indicator of earnings quality (Dechow, Ge, and Schrand, 2010). Watts (2003a) says that external users of financial reports for contractual, litigation, control, and taxation purposes place a heavy emphasis on accounting conservatism. In the context of contractual relationships, corporate governance and financial reporting reliability can reduce agency costs due to a misalignment of interest between shareholders and managers (Lara, Osmá, and Penalva, 2009; LaFond and Roychowdhury, 2008; LaFond and Watts, 2008). If a company is a borrower, then a high degree of financial reporting reliability provides assurance to lenders (e.g. banks) and protection of debt covenants. This will lower the cost of debt (Beatty, Weber, and Yu, 2008; Zhang, 2008; Ahmed, Billings, Morton, and Harris, 2002; Beneish and Press 1993). Financial reporting conveys information regarding salaries and compensations, as part of the remuneration contracts, by disclosing cash distributions, stock options, and restricted stocks. The sensitivity to unrealized earnings is relevant to ex-post costs (Leone et al., 2006). In the context of litigations, companies in countries with healthy juridical systems tend to adopt accounting conservatism, by not seeking to withhold bad news. They in fact recognize losses and inform internal and external investors early to avoid the probability of lawsuits (Bushman and Piotroski, 2006). As far as management and control is concerned, the selection of accounting standards affects earnings quality, but it is not the only factor. Issues such as restrictions in the investment environment and the considerations taken by auditors are all drivers for the adoption of accounting conservatism. Ball and Shivakumar (2005) sample UK companies to examine the factors that influence earnings quality. The results indicate that companies not

listed on the mainboard and the junior board opt for the same accounting principles. However, the earnings quality of private companies is lower than that of public companies. In other words, accounting standards are not an overriding factor. Issues such as investment environments and market demand carry a much heavier weight in the equation.

For taxation purposes, a delay in earnings recognition reduces the tax burden for the company. This provides incentives to management to adopt accounting conservatism (Qiang, 2007). Beaver and Ryan (2005) believe that accounting conservatism can be further divided into conditional conservatism and unconditional conservatism. As these two types of conservatism have different emphases, the correlations also change over time (Roychowdhury and Watts, 2007). Conditional conservatism refers to an asymmetric approach to the recognition of profits and losses. Bad news is immediately reflected in earnings, but good news is channeled through earnings recognition with latency. Unconditional conservatism means consistency in accounting treatments, as the nature of news and the timing of recognition are not directly linked. The literature addressing conditional conservatism often uses the measurement model developed by Basu (1997) based on reverse regressions.

Basu (1997) refers to the change of share prices for the definition of good news and bad news when looking at the correlation with earnings during a time period. The model can shed light as to whether the earnings of sampled companies exhibit the characteristics of conditional conservatism. Many scholars (Beaver, Landsman, and Owen, 2012; Ball, Kothari, and Nikolaev, 2010; Khan and Watts 2009; Francis and Wang 2008; Francis, LaFond, Olsson, and Schipper, 2004) conduct follow-up studies by using the Basu (1997) model and seek to resolve the issue in which the original model cannot deal with the conservatism of the individual companies by year. Cross-company and multi-year models have been created. For instance, Khan and Watts (2009) construct C-Score as a new metric for accounting conservatism, which allows the calculation of the firm-year values with the model proposed by Basu (1997). It also overcomes the issue associated with more than one cross-multiplying term for each additional research variable in the original model. A number of academic papers in Taiwan has also appeared during the past few years (Liao, Tang, and Lee, 2016; Chen and Hsu, 2014; Lee and Liu, 2014; Wang, Pan, and Chi, 2012; Cheng, Wu, and Shiue, 2011) that use the C-Score constructed by Khan and Watts (2009) to measure accounting conservatism.

#### Suppliers, Customers, and Requirements for Accounting Conservatism

The relationship with suppliers and customers is pivotal to the health of company operations (Kale and Meneghetti, 2014). Brito, Brito, and Hashiba (2014) indicate that good cooperation with suppliers and customers helps to increase company performance and profitability. Many studies examine the relationship from the perspective of relationship-specific investments. Suppliers or customers seek to strengthen the relationship with dealing counterparties through relationship investments. As such investments entail a certain degree of risk (Gu, Sanders, and Venkateswaran, 2017), any factors in relation to earnings quality (Minnick and Raman, 2016) and company performances will result in an increase in the volatility of the value of relationship-specific investments. This is likely to affect the relationship with suppliers and customers. The reason for this phenomenon is the information asymmetry between investors and companies. It is not easy to access information on the relationship with suppliers and customers. Therefore, the relationship with suppliers and customers is even more important to the disclosure of earnings information, in order for investors to reach investment decisions. Madsen (2016) mentions that earnings announcements by suppliers help to alleviate information asymmetry, and allow investors to understand the relationship with suppliers and customers. At the same time, any negative behavior of earnings management can alter how suppliers and customers view the company. This is detrimental to supplier and customer relationships (Graham, Harvey, and Rajgopal, 2005; Raman and Shahrur, 2008).

Past studies on companies with stronger supplier and customer relationships indicate that their suppliers and customers operate in the industry with a high degree of concentration (Krolikowski and Yuan, 2017). The high concentration of suppliers and customers implies high switching costs. As a result, companies do not seek to expand the list of suppliers and customers in order to avoid negative effects on supplier and

customer relationships (Li, Li, and Feng, 2015). In addition, Hui, Klasa, and Yeung (2012) posit that the bargaining power of suppliers and customers is a key factor to the timely recognition of losses. According to their study, suppliers and customers prefer that their business partners adopt accounting conservatism.

In summary, there is a correlation between supplier and customer relationships and firm profitability and operations. To maintain stable supplier and customer relationships, companies seek to enhance earnings quality and reduce the magnitude of negative earnings management. The oversight from suppliers and customers is conducive to a stringent approach in the recognition of profits and losses. In fact, companies even resort to accounting conservatism to sustain the harmony of the whole supply chain. Therefore, this paper explores the influence of the concentration of key suppliers and customers (measured by the numbers) on accounting conservatism. This paper defines key suppliers and customers as those that account for at least 10% of purchases and sales. In the annual reports for U.S. and Taiwanese companies, customers that contribute to at least 10% of sales are important to the investment decisions of the public.

Key customers are an important source of profitability. The higher the number of key customers is, the greater is their loyalty. It is necessary to adopt accounting conservatism in order to retain key customers and avoid profit erosion. On the other hand, the sourcing of components depends on key suppliers. The larger the number of key customers is, the stronger is the reliance on them. As suppliers make decisions by referring to the accounting information of customers, they urge the customers to adopt accounting conservatism. Based on these statements, this paper develops the following hypotheses.

H1a: There is a correlation between a large number of key customers and accounting conservatism.

H1b: There is a correlation between a large number of key suppliers and accounting conservatism.

Industry competition is an important factor of supplier and customer relationships and also affects earnings quality (Chang et al., 2016). Porter (1980) suggests that profitability is subject to the influence of industry competitive density, measured with sustainable growth rates (SGR) and the Herfindahl-Hirschman Index (HHI, a metric for industry concentration). High competitive density implies that market demand is shrinking. In this environment, the reliance on suppliers and the loyalty of customers are essential. Accounting conservatism is beneficial to the stability of the supply chain. Dhaliwal, Huang, Khurana, and Pereira (2009) contend that the higher the industry concentration is, the more likely there is latency of bad news disclosure and hence weaker accounting conservatism.

Kuo (2009) suggests that the lower the industry growth is, the less attractive the market is to new entrants and existing players. This implies a lower degree of competition among organizations and hence a lower industry competitive density. The Herfindahl-Hirschman Index (HHI) measures industry concentration. The smaller the index is, the lower is the industry concentration and the higher the competitive density. This paper refers to the industry growth rate developed by Prescott et al. (1986) and HHI proposed by Rhoades (1993) as popular metrics for industry competition. The research hypotheses are as follows.

H2a: There is a positive correlation between the number of key customers and accounting conservatism if industry competitive density is high.

H2b: There is a positive correlation between the number of key suppliers and accounting conservatism if industry competitive density is high.

## **METHODOLOGY**

### Data Sources and Sample Selection

This paper samples companies listed on the Taiwan Stock Exchange and the Taipei Exchange in 2009-2016, sourcing the data from Taiwan Economic Journal. In total, 12,986 companies are in the sampling pool for 2009-2016. After the deletion of 1,171 financial institutions, TDR listings, and F shares, there are 11,815

sampled companies remaining. An analysis on the suppliers and customers of the sampled companies was conducted, removing a total of 2,410 companies as customers due to missing values. Therefore, 9,405 companies were sampled as customers and a total of 4,616 companies as suppliers removed due to missing values. Therefore, 7,199 companies were sampled as suppliers. Below is the summary of the sample selection process.

Measurement of Conservatism (C-SCORE)

The demand from users of financial reports can be classified into four purposes: contracts, litigations, control, and taxations (Watts, 2003a). An extensive body of empirical evidence suggests that conservatism influences management and financial report users (Lara, Osma, and Penalva, 2009; LaFond and Roychowdhury, 2008; LaFond and Watts, 2008; Beatty, Weber, and Yu, 2008; Zhang, 2008; Leone et al., 2006; Bushman and Piotroski, 2006; Ball and Shivakumar, 2005; Ahmed, Billings, Morton, and Harris, 2002; Beneish and Press 1993). Based on the timing of recognition, accounting conservatism can be divided into conditional and unconditional (Beaver and Ryan, 2005). Unconditional conservatism adopts a consistent set of accounting rules in the timing of recognition, regardless of the nature of news. Conditional conservatism recognizes good news and bad news at different timings, i.e. an asymmetric approach (Basu, 1997). The conservatism model constructed by Basu (1997) examines the correlation between good/bad news and accounting conservatism. The Basu (1997) model is expressed as follows:  $EARN_{i,t} = \rho_1 + \rho_2 NEG_{i,t} + \rho_3 \times RET_{i,t} + \rho_4 NEG_{i,t} \times RET_{i,t} + \gamma_{i,t} \cdot \rho_3$ , to measure the sensitivity of accounting earnings to good news.  $\rho_4$  denotes the incremental sensitivity of accounting earnings to bad news. Although While this paper was applied extensively in older literature, there were many limitations. For example, the model does not measure the degree of conservatism for individual firms in different years. In other words, the model assumes that the degree of conservatism of all companies is homogeneous or does not change over time. This paper uses the C-Score, a measurement of accounting conservatism, developed by Khan and Watts (2009) by expanding the Basu (1997) model and incorporating variables such as firm scale, price/book multiple, and debt ratio. As the Khan and Watts (2009) model is able to calculate C-Score to measure the firm-year level of accounting conservatism, it has overcome the restriction of the Basu (1997) model. The Khan and Watts (2009) model is expressed as follows:

$$\begin{aligned}
 EARN_{i,t} = & \rho_{1,t} + \rho_{2,t}NEG_{i,t} + (\mu_{1,t} + \mu_{2,t}SIZE_{i,t} + \mu_{3,t}MB_{i,t} + \mu_{4,t}LEV_{i,t}) \times RET_{i,t} \\
 & + (\lambda_{1,t} + \lambda_{2,t}SIZE_{i,t} + \lambda_{3,t}MB_{i,t} + \lambda_{4,t}LEV_{i,t}) \times NEG_{i,t} \times RET_{i,t} + \delta_{1,t}SIZE_{i,t} \\
 & + \delta_{2,t}MB_{i,t} + \delta_{3,t}LEV_{i,t} + \delta_{4,t}SIZE_{i,t} \times NEG_{i,t} \\
 & + \delta_{5,t}MB_{i,t} \times NEG_{i,t} + \delta_{6,t}LEV_{i,t} \times NEG_{i,t} + \varepsilon_{i,t}
 \end{aligned}
 \tag{1}$$

where EARN is the accounting earnings, defined as post-tax profits of continuing operations and deflected by the market capitalization at the beginning of the period; RET denotes annualized return of share prices, NEG is a dummy variable with negative NEG (1) and positive NEG (0); SIZE is the firm size, measured with the logarithm of the assets at the end of the period; MB is the price/book multiple, calculated with the market capitalization at the end of the period divided with the book value at the end of the period; LEV is the leverage ratio, estimated with the total debts divided by total assets at the end of the period.

The coefficients  $(\lambda_{1,t}, \lambda_{2,t}, \lambda_{3,t}, \lambda_{4,t})$  estimated with the abovementioned equation indicate the conservatism parameters for different years. Firm size (SIZE), price to book multiple (MB), and leverage ratio (LEV) of individual companies for specific years are incorporated into the equation below, in order to derive firm-year conservatism C-Scores to measure the incremental sensitivity of accounting earnings to bad news for individual companies in a given year. This approach is different from the measurement with the Basu (1997) model for the overall level of conservatism.

$$C\_SCORE_{i,t} = \lambda_{1,t} + \lambda_{2,t}SIZE_{i,t} + \lambda_{3,t}MB_{i,t} + \lambda_{4,t}LEV_{i,t}$$

Empirical Model

This paper measures H1a with the empirical model (1). H1a: There is a correlation between a large number of key customers and accounting conservatism. The model is expressed as follows:

$$C\_SCORE_{i,t} = \alpha_0 + \alpha_1 KEY\_CUSTOMER_{i,t} + \alpha_2 CASHFLOW_{i,t} + \alpha_3 DO_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 AGE_{i,t} + \alpha_6 SALES\_GROWTH_{i,t} + \alpha_7 INVCYCLE_{i,t} + \alpha_8 LEV_{i,t} + \alpha_9 SIZE_{i,t} + \alpha_{10} MB_{i,t} \quad (1)$$

where C-SCORE is accounting conservatism, measured with the Khan and Watts (2009) model; KEY\_CUSTOMER denotes key customers, defined as those that account for at least 10% of total sales; CASHFLOW denotes operating cash flows, and DO is a dummy variable for the purchase of director/supervisor liability insurance (1 if purchased, 0 if not); ROA is return on assets, calculated by (post-tax earnings of continuing operations + interest expenses \* (1-tax rate)) divided average total assets; BIGX represents the dummy variable of being audited by the Big Four firms (i.e. Deloitte, PwC, KPMG, and Ernst & Young). It is 1 if audited by any of the Big Four, and 0 if not; AGE denotes firm history, measured by the number of years from inception toward the end of the current year; SALES\_GROWTH represents sales growth, calculated from net sales of the current year less net sales of the prior year and divided by net sales of the prior year; INVCYCLE indicates the investment cycle, estimated from the sum of depreciation and amortization divided by total assets at the end of the period; LEV represents the leverage ratio, defined as the total debts divided by total assets at the end of the period; SIZE denotes firm size, calculated from the natural logarithm of total assets at the end of the period; MB is the price to book multiple, which is a ratio of the market capitalization to book value at the end of the year. The empirical model (2) conducts tests on H1b: There is a correlation between a large number of key suppliers and accounting conservatism.

$$C\_SCORE_{i,t} = \alpha_0 + \alpha_1 KEY\_SUPPLIER_{i,t} + \alpha_2 CASHFLOW_{i,t} + \alpha_3 DO_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 AGE_{i,t} + \alpha_6 SALES\_GROWTH_{i,t} + \alpha_7 INVCYCLE_{i,t} + \alpha_8 LEV_{i,t} + \alpha_9 SIZE_{i,t} + \alpha_{10} MB_{i,t} \quad (2)$$

where KEY\_SUPPLIER denotes key suppliers, defined as those that account for at least 10% of the total purchase in a single customer. The dependent variables and the control variables are the same as Eq. (1). Companies that generate low operating cash flows (CASHFLOW) will find it relatively difficult to adhere to accounting conservatism, as the adoption of accounting conservatism may have an adverse effect on operating cash flows. Therefore, this paper anticipates a positive correlation between operating cash flows CASHFLOW and C-SCORE. The purchase of directors/supervisors liability insurance affects the legal liability borne by the board and hence accounting conservatism. The higher the value of the insurance policy (DO) is, the greater is the earnings reliability (Liao et al., 2016). Hence, this paper expects a positive correlation between directors/supervisors liability insurance (DO) and C-SCORE. Conditional conservatism is accompanied by an asymmetric timing of earnings recognition and the timely reporting of bad news. Therefore, return on assets (ROA) declines due to the enhancement of accounting conservatism. This paper expects an inverse correlation between ROA and C-SCORE.

The Big Four accounting firms (BIGX) impose a robust and fair set of auditing procedures and provide a greater level of auditor independence (Chi, Liu, and Wang, 2009). Therefore, investors trust that companies audited by the Big Four and hence demand a lower degree of accounting conservatism. The shorter the firm history (AGE) is, the more difficult it will be for investors to get a full grasp on firm information. This will make investors more demanding of accounting conservatism. Therefore, this paper anticipates a positive correlation between firm history (AGE) and C-SCORE. The longer the investment cycles (INVCYCLE) are, the stronger is investors' demand for accounting conservatism given the greater level of information asymmetry (Liao et al., 2016). Therefore, this paper anticipates a positive correlation between investment cycles (INVCYCLE) and C-SCORE. Debt covenants are subject to the influence of accounting conservatism, i.e. the timely reporting of debts and losses. Thus, this paper expects a positive correlation between leverage (LEV) and C-SCORE. The larger the firm size measured by assets (SIZE) is, the greater is the supervision from the market and regulators, and the more information that needs to be disclosed. This paper expects a negative correlation between firm size (SIZE) and C-SCORE.



The next step is to examine whether high competitive density affects the correlation between the number of key suppliers and customers and accounting conservatism. This paper measures the degree of industry concentration with SGR developed by Prescott (1986) and HHI proposed by Rhoades (1993). Sustainable growth rate (SGR) is a key factor to the market attractiveness to new entrants and existing players (Chang et al., 2016).  $SGR_{j,t} = (NetSales_{j,t} - NetSales_{j,t-1}) / NetSales_{j,t-1}$ .  $NetSales_{i,t}$  denotes net annual sales of a given industry during the current year, and  $NetSales_{i,t-1}$  is net annual sales of the industry during the previous year. Industry concentration (HHI) is indicative of market competitiveness (Chang et al., 2016), measured by  $HHI_{i,t} = \sum_{i=1}^n (X_{ijt} / X_{jt})^2$ ;  $HHI_{i,t} = \sum_{i=1}^n X_{ijt}$ .  $X_{ijt}$  denotes the net sales of the main business of individual companies in a given industry, and  $X_{jt}$  is net sales of the industry. These two indicators serve as the basis for sub-grouping. A total of four groups are established: high HHI and high SGR; high HHI and low SGR; low HHI and high SGR; and low HHI and low SGR. The empirical models are the same as Eq. (1) and Eq. (2) for the validation of H2a and H2b.

## RESULTS

### Descriptive Statistics

The mean/median of the C-Score for earnings reliability is 0.224 (0.084) and that for key customers is 1.816 (2.000). This suggests that the sampled companies have approximately two customers on average that account for 10% of annual sales. The mean of HHI is 0.152 (0.107) and the mean of SGR is 0.048 (0.020). On average, industry sales increased by 4.8% from the previous year. The mean of C-SCORE is 0.283 (0.091), and the mean of key suppliers is 1.791 (2.000). This indicates that the sampled companies have approximately two customers on average that account for 10% of annual sales. The mean of HHI is 0.150 (0.106) and the mean of SGR is 0.015 (0.013). On average, industry sales increased by 1.5% from the prior year.

### Empirical Results

This paper seeks to explore how the number of key suppliers (KEY\_SUPPLIERS) and/or the number of key customers (KEY\_CUSTOMERS) affect C-Score, an earnings reliability measurement, with variables such as corporate governance and firm characteristics controlled. This is followed by tests on the sample of key suppliers (KEY\_SUPPLIERS) and key customers (KEY\_CUSTOMER). The purpose is to examine the influence of the number of suppliers and customers on earnings reliability (C-SCORE) by taking into account industry competitive density (measured from HHI and SGR). This paper sub-groups the samples by referring to medians. The first, second, third, and fourth columns of Table 3 and Table 4 are the sub-groups with high HHI and high SGR, high HHI and low SGR, low HHI and high SGR, and low HHI and low SGR, respectively. There is a positive correlation between a large number of key customers and accounting conservatism. Table 1 shows the empirical model (1) that examines earnings reliability C-Score as the explained variable. The F value is 25.956, suggesting the goodness of fit. Adjusted R<sup>2</sup> is 0.028. In this model, there is a significant and positive correlation between key customer suppliers (KEY\_SUPPLIER, with a coefficient of 0.124, p-value < 0.01) and earnings reliability C\_SCORE. In summary, the greater the number of key customers is, the higher is the C-Score, and the stronger is earnings reliability. H1a is thus supported. In terms of control variable, there is a significant and negative correlation between operating cash flows (CASHFLOW, coefficient of -1.104, p-value < 0.01) and earnings reliability (C-Score). Kao, Chen, and Chen (2011) indicate that the higher the free cash flows are, the weaker is accounting conservatism. The capital market in Taiwan does not provide incentives for companies to adopt conservatism in financial reporting. As free cash flows are a summation of operating cash flows and investing cash flows, an increase in the net operating cash flows may slack off the investors' demand for conservatism. There is a significant and positive correlation between return on assets (ROA) and earnings reliability (C-Score), which runs contrary to expectation. This paper further analyzes the regression results of the sub-groups. The significant and positive correlation between price to book multiple (M/B) and earnings reliability (C-Score) is consistent with research expectations.

Table 1: No. of Key Customers and Accounting Conservatism

<b>H1a: A High Number of Key Customers Is Positively Correlated with Accounting Conservatism (N=9,405)</b>				
	<b>Expected Sign</b>	<b>Coefficient</b>	<b>(p value)</b>	<b>VIF</b>
(Constant)		-0.028	(0.854)	
KEY_CUSTOMER	+	0.124***	(0.000)	1.009
CASHFLOW	+	-1.104***	(0.000)	1.104
DO	+	0.046	(0.237)	1.165
ROA	-	0.940***	(0.000)	1.104
BIGX	-	-0.129*	(0.076)	1.039
AGE	+	0.002	(0.152)	1.006
SALESGROWTH	?	0.000	(0.978)	1.001
INVCYCLE	+	0.003	(0.205)	1.015
Lev	+	0.022	(0.435)	1.159
Size	-	-0.007	(0.115)	1.316
M/B	+	0.119***	(0.000)	1.038
R <sup>2</sup>			0.030	
Adj – R <sup>2</sup>			0.028	
F value			25.956***	

This table shows that the results of H1a: A high number of key customers is positively correlated with accounting conservatism (N=9,405).

Notes: 1. Variable definitions: C-SCORE is accounting conservatism, measured with the Khan and Watts (2009) model; KEY\_CUSTOMER denotes key customers, defined as those that account for at least 10% of total sales; "CASHFLOW" denotes operating cash flows, and "DO" is a dummy variable for "the purchase of director/supervisor liability insurance (1 if purchased, 0 if not); ROA is return on assets, calculated by (post-tax earnings of continuing operations + interest expenses \* (1-tax rate)) divided average total assets; BIGX represents the dummy variable of being audited by the Big Four firms (i.e. Deloitte, PwC, KPMG, and Ernst & Young). It is 1 if audited by any of the Big Four, and 0 if not; AGE denotes firm history, measured by the number of years from inception toward the end of the current year; "SALESGROWTH" represents sales growth, calculated from net sales of the current year less net sales of the prior year and divided by net sales of the prior year; INVCYCLE indicates the investment cycle, estimated from the sum of depreciation and amortization divided by total assets at the end of the period; LEV represents the leverage ratio, defined as the total debts divided by total assets at the end of the period; SIZE denotes firm size, calculated from the natural logarithm of total assets at the end of the period; MB is the price to book multiple, which is a ratio of the market capitalization to book value at the end of the year. 2. Inside the bracket are p values. The asterisk signs \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance levels in a two-tail test, respectively.

There is a positive correlation between a large number of key suppliers and accounting conservatism. Table 2 shows the empirical model (2) that examines the earnings reliability C-Score as the explained variable. The F value is 91.363, suggesting goodness of fit. Adjusted R<sup>2</sup> is 0.121. The empirical results indicate a significant and positive correlation between key customer suppliers (KEY\_SUPPLIER, with a coefficient of 0.079, p-value=0.003) and earnings reliability C\_SCORE. These statistics suggest that the greater the number of key suppliers is, the higher is the C-Score, and the stronger is earnings reliability. H1b is thus supported. In terms of control variable, there is a significant and negative correlation between operating cash flows (CASHFLOW, coefficient of -1.104, p-value<0.01) and earnings reliability (C-Score). In terms of another control variable, there is a significant and negative correlation between operating cash flows (CASHFLOW) and earnings reliability (C-Score). This is contrary to expectation, probably due to the same reason in the analysis of the empirical model (1). The argument for return on assets (ROA) is the same as that for H1a. At the same time, earnings reliability (C-Score) is significantly and positively correlated with directors/supervisors liability insurance (D&O), debt ratio (Lev), and price to book multiple (M/B). There is a significant and inverse correlation between firm size (SIZE) and earnings reliability (C-Score), which is in line with research expectation.

There is a positive correlation between the number of key customers and accounting conservatism if industry competitive density is high. Table 3 shows the sub-groups on the basis of the median of HHI and the median of SGR. Empirical model (1) examines earnings reliability C-Score as the explained variable. The F values of the four sub-groups, from left to right, are 5.404, 8.932, 131.470, and 10.413, respectively. These numbers indicate goodness of fit. Adjusted R<sup>2</sup>, from left to right, are 0.018, 0.048, 0.459, and 0.037, respectively. The empirical findings suggest that the sub-group with low HHI and low SGR demonstrates the strongest statistical significance. In this model, there is a significant and positive correlation between key suppliers (KEY\_SUPPLIER, with a coefficient of 0.180, p-value<0.01) and earnings reliability C\_SCORE. This suggests that in a high competitive industry, the greater is the number of key suppliers, the higher is the C-Score and the better is earnings reliability. Hence, H2a is supported.

Table 2: No. of Key Suppliers and Accounting Conservatism

<b>HIb: A High Number of Key Suppliers Is Positively Correlated with Accounting Conservatism (N=7,199)</b>				
(Constant)		0.197	(0.197)	
KEY_SUPPLIER	+	0.079***	(0.003)	1.004
CASHFLOW	+	-1.015***	(0.000)	1.082
DO	+	0.148***	(0.010)	1.154
ROA	-	1.128***	(0.000)	1.090
BIGX	-	-0.134*	(0.064)	1.037
AGE	+	-0.001	(0.297)	1.006
SALESGROWTH	?	0.000	(0.765)	1.003
INVCYCLE	+	0.000	(0.491)	1.019
Lev	+	0.306***	(0.010)	1.134
Size	-	-0.027***	(0.000)	1.286
M/B	+	0.286***	(0.000)	1.053
R <sup>2</sup>			0.123	
Adj - R <sup>2</sup>			0.121	
F value			91.363***	

This table shows that the results of A high number of key suppliers is positively correlated with accounting conservatism (N=7,199).  
 Notes: 1. KEY\_SUPPLIER denotes key suppliers, defined as those that account for at least 10% of the total purchase in a single customer. Other variable definitions are detailed in Table 1. 2. Inside the bracket are p values. The asterisk signs \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance levels in a two-tail test, respectively.

Table 3: No. of Key Customers and Accounting Conservatism Sub-grouping based on HHI and SGR

	Selection Model	HHI > Median	HHI > Median	HHI < Median	HHI < Median
		SGR > Median	SGR < Median	SGR > Median	SGR < Median
Independent Variables	Expected Sign	N=2,814	N=1,853	N=1,883	N=2,855
		Coefficients	Coefficients	Coefficients	Coefficients
		(p value)	(p value)	(p value)	(p value)
Constant		0.517 (0.196)	0.660** (0.024)	0.296 (0.416)	-0.461 (0.225)
KEY_CUSTOMER	+	0.029 (0.319)	0.055 (0.109)	0.090* (0.064)	0.180*** (0.000)
CASHFLOW	+	-1.299*** (0.002)	-1.324*** (0.005)	2.287*** (0.000)	-0.790* (0.072)
DO	+	-0.135 (0.172)	0.123* (0.097)	-0.085 (0.255)	0.038 (0.374)
ROA	-	1.293*** (0.000)	-1.453*** (0.008)	-0.657 (0.344)	-1.356** (0.014)
BIGX	-	-0.288 (0.171)	-0.059 (0.649)	-0.410** (0.027)	-0.030 (0.851)
AGE	+	0.007* (0.064)	-0.001 (0.327)	0.007* (0.054)	0.000 (0.469)
SALESGROWTH	?	0.004 (0.893)	0.025 (0.551)	0.000 (0.849)	-0.016 (0.301)
INVCYCLE	+	0.000 (0.482)	-0.007 (0.275)	-0.030 (0.123)	0.000 (0.464)
Lev	+	-0.768*** (0.005)	0.717*** (0.000)	2.815*** (0.000)	-0.396** (0.042)
Size	-	-0.000 (0.500)	-0.048*** (0.000)	-0.092*** (0.000)	0.028** (0.040)
M/B	+	-0.073*** (0.001)	-0.043*** (0.000)	0.494*** (0.000)	0.215*** (0.000)
R <sup>2</sup>		0.022	0.054	0.463	0.041
Adj - R <sup>2</sup>		0.018	0.048	0.459	0.037
F value		5.404***	8.932***	131.470***	10.413***

This table shows that the results of No. of Key Customers and Accounting Conservatism Sub-grouping based on HHI and SGR.  
 Notes: 1. Variable definitions are detailed in tables. 2. Inside the bracket are p values. The asterisk signs \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance levels in a two-tail test, respectively.

This paper infers that low industry concentration (as shown with a low HHI) results in a high level of competition, making it difficult for a small group of players to dominate the economic activities. A low sustainable growth rate (SGR) implies that market demand is slowing down or flattening out. As a result,

industry density will increase (Kuo, 2009). In a highly competitive industry, companies maintain a certain percentage of sales to key customers (10% defined in this paper), in order to ensure survival in the heated competitive landscape. With regards to control variables, there is a significant and negative correlation between operating cash flows (CASHFLOW) and earnings reliability (C-Score). This runs contrary to expectation, probably due to the same reason in the analysis of the empirical model (1). There is also a significant and inverse correlation between return on assets (ROA) and earnings reliability (C-Score), which is consistent with expectations. A significant and positive correlation is also found in the groups with high HHI and high SGR, which explains the results for H1. When industry competitive density is low, the oversight on companies is relatively weak. Hence, it is less likely for companies to adhere to accounting conservatism. There is a significant and negative correlation between debt ratio (Lev) and earnings reliability (C-Score), running contrary to expectations. This is probably due to a not overly high mean/median of 0.270 (0.266), as shown in the descriptive statistics of debt ratios (Lev). As the financial system in Taiwan is relatively healthy, creditors do not have to impose extra requirements for conservatism. There is a significant and positive correlation between firm size (SIZE) and earnings reliability (C-Score), which is not in line with expectations. This paper infers that investors demand a greater level of accounting conservatism in order to compare peers in a highly competitive industry.

Table 4: No. of Key Suppliers and Accounting Conservatism Sub-grouping based on HHI and SGR

	Selection Model	HHI > Median SGR > Median	HHI > Median SGR < Median	HHI < Median SGR > Median	HHI < Median SGR < Median
	Expected Sign	N=2,814 Coefficients (p value)	N=1,853 Coefficients (p value)	N=1,883 Coefficients (p value)	N=2,855 Coefficients (p value)
Constant		1.202*** (0.000)	0.855*** (0.007)	0.401 (0.300)	-0.835* (0.081)
KEY_SUPPLIER	+	-0.017 (0.309)	-0.049 (0.149)	-0.035 (0.287)	0.367*** (0.000)
CASHFLOW	+	-1.148*** (0.000)	-1.344*** (0.008)	3.129*** (0.000)	-1.060* (0.057)
DO	+	-0.005 (0.474)	0.167** (0.048)	0.008 (0.474)	0.169 (0.137)
ROA	-	1.329*** (0.000)	-1.489*** (0.008)	-3.558*** (0.000)	-1.022 (0.132)
BIGX	-	-0.239** (0.040)	-0.009 (0.948)	-0.288 (0.118)	-0.052 (0.801)
AGE	+	-0.004* (0.06)	-0.001 (0.421)	0.008** (0.043)	0.001 (0.447)
SALESGROWTH	?	0.003 (0.939)	0.018 (0.691)	-0.020 (0.741)	-0.015 (0.499)
INVCYCLE	+	-0.003 (0.498)	-0.007 (0.290)	-0.016 (0.273)	-0.000 (0.473)
Lev	+	-0.140 (0.181)	0.879*** (0.000)	2.441*** (0.000)	-0.673** (0.014)
Size	-	-0.037*** (0.000)	-0.048*** (0.000)	-0.087*** (0.000)	0.034** (0.044)
M/B	+	0.071*** (0.000)	-0.119*** (0.000)	0.591*** (0.000)	0.233*** (0.000)
R <sup>2</sup>		0.084	0.067	0.600	0.056
Adj - R <sup>2</sup>		0.079	0.060	0.597	0.050
F value		14.899***	10.084***	193.033***	10.352***

This table shows that the results of No. of Key Suppliers and Accounting Conservatism Sub-grouping based on HHI and SGR. Notes: 1. Variable definitions are detailed in tables. 2. Inside the bracket are p values. The asterisk signs \*, \*\*, and \*\*\* represent 10%, 5%, and 1% significance levels in a two-tail test, respectively.

There is a positive correlation between the number of key suppliers and accounting conservatism if industry competitive density is high. Table 4 shows the sub-groups on the basis of the median of HHI and the median of SGR. Empirical model (2) examines earnings reliability C-Score as the explained variable. The F values of the four sub-groups, from left to right, are 14.899, 10.084, 193.033, and 10.352, respectively, indicating goodness of fit. Adjusted R<sup>2</sup>, from left to right, are 0.079, 0.060, 0.597, and 0.050, respectively. The

empirical findings suggest that the sub-group with low HHI and low SGR exhibits the strongest statistical significance. In this model, there is a significant and positive correlation between key suppliers (KEY\_SUPPLIER, with a coefficient of 0.367, p-value<0.01) and earnings reliability C\_SCORE. This suggests that in a low competitive industry, the greater is the number of key suppliers, the higher is the C-Score and the better is the earnings reliability. Hence, H2B is supported. The reason is similar with the inference summarized in Table. In a highly competitive industry, companies maintain a certain percentage of sourcing from key suppliers (10% defined in this paper), in order to secure stable supplies in a highly competitive market. Regarding control variables, there is a significant and negative correlation between operating cash flows (CASHFLOW) and earnings reliability (C-Score). This goes against the expectation, probably due to the same reason in the analysis of the empirical model (1). There is also a significant and inverse correlation between debt ratio (Lev) and earnings reliability (C-Score), running contrary to expectations. The reason is possibly similar with those stated for Table.

## CONCLUSION

As a result of the changes in the pattern of global trade over recent years, customers with strong bargaining power and suppliers that provide sourcing may have a significant influence on the effectiveness of business partnerships and may also affect company profitability, causing a risk of supply tightening. Customer loyalty and supplier reliance both affect the reliability of reported earnings. At the same time, the level of industry competitive density indicates whether market demand is shrinking or expanding, which is an important factor to supplier and customer relationships as well as to earnings quality. In summary, the influence of the number of key suppliers and customers and the degree of industry competitive density on the reporting of corporate earnings are topics worthy of attention. This paper uses C-Score constructed by Khan and Watts (2009) as a measurement for accounting conservatism in the exploration of the relationship between the number of suppliers and customers and the reliability of earnings for companies listed on the Taiwan Stock Exchange and the Taipei Exchange in 2009-2016. Industry competitive density is a critical factor to managerial decisions and supply chain dynamics. Therefore, this paper seeks to examine whether the relationship between the number of suppliers and customers and the reliability of corporate earnings is any different as a result of industry competitive density.

The empirical findings of this paper are as follows. First, profitability comes from key customers. The stronger customer loyalty is, the more necessary it is to adopt accounting conservatism in order to retain key customers and avoid profitability erosion. At the same time, the majority of product components come from key suppliers. The heavier is the reliance on key suppliers, the more likely these suppliers will push for accounting conservatism. The empirical results indicate that the greater is the number of key suppliers and customers, the higher is the reliability in earnings quality. Finally, a high level of industry competitive density suggests a weaker market demand. As far as existing players are concerned, financial reporting reliability is beneficial to the stability of supply chains. The empirical evidence shows that given a high degree of industry competitive density, the larger is the number of suppliers and customers, the more pronounced is earnings reliability. This paper makes the following suggestions to future studies. As it only explores the effects of the number of suppliers and customers and the degree of industry competitive density on earnings reliability, follow-up studies may analyze further how other factors in the supply chain affect earnings quality. On the other hand, supplier and customer relationships may evolve into strategic alliances to ensure supply chain stability. This concept may be incorporated into future studies. In terms of research limitations, companies in Taiwan often use codes (such as Company A) to disclose suppliers and customers and maintain confidentiality. Thus, it is difficult to clarify the upstream and downstream dynamics across the whole supply chain.

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## **BIOGRAPHY**

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## **AN INVESTIGATION OF TRACKING ERRORS OF LEVERAGED AND INVERSE ETFs IN TAIWAN**

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### **ABSTRACT**

*The purpose of this paper is to investigate the tracking error of leveraged and inverse ETFs. Single-day tracking performances of the Taiwan 50 Bull 2X ETF and Taiwan 50 Bear -1X ETF were tested to investigate whether there are structural changes of tracking performances during the bull and bear markets. The result shows that single-day performances of the two ETFs are significantly different from their targets. The positive and negative effects of single-day performance are asymmetric. When the market moves from bull to bear, there is a structural change in the two ETFs' returns. Nonetheless, there is a structural change only in Taiwan 50 Bear -1X ETF returns when the market moves from bear to bull.*

**JEL:** G11, G12

**KEYWORDS:** Tracking Error, Leveraged ETF, Inverse ETF, Structural Change

### **INTRODUCTION**

Leveraged and inverse ETFs first appeared in the market about 20 years ago. Since their inception, they have grown rapidly throughout the world. Some research examines the product character and tracking performance of leveraged and inverse ETFs (e.g. Lu, Wang and Zhang, 2009; Bansal and Marshall, 2015; Sherrill, Shirley, and Stark, 2017; Lundström and Peltomäki, 2018). For example, Lu et al. (2009) examined leveraged ETFs, which are designed to provide double (or double the opposite) the performance of the benchmark on a daily basis. Over holding periods no greater than one month, an investor can safely assume that both ETFs would provide double the return (or double the negative return) of the underlying benchmark. Nevertheless, most of them focus on America or other countries. In Taiwan, there are several papers exploring the tracking performance and arbitrage of traditional ETFs (Lu, 2008; Luo and Chang, 2009). Since leveraged and inverse ETFs were introduced only two years ago in Taiwan, there are not many papers discussing them. The relevant papers examine mostly foreign leveraged and inverse ETFs (Trainor and Gregory, 2016; Giannetti, 2017). The papers about leveraged and inverse ETFs in Taiwan focus on the long and short term of tracking performance and the factor affecting tracking performance (e.g. Su, 2015).

Fund managers experience different operating performance in bull and bear markets (Chu, 2000). Additionally, there are some structural changes in funds with the changes of bull and bear markets, (Lin, 2011). Therefore, this study explores whether there is a structural change in tracking performance of leveraged and inverse ETFs in different markets. The remainder of this paper is organized as follows. In the literature review section, related research and literature highlighting key data and analysis are presented. The data and methodology section describes the data and defines the variables used. In the results and discussion section, the regression results and discussion of specific aspects can be found before the concluding comments section.

### **LITERATURE REVIEW**

Lu et al. (2009) studied leveraged ETFs, in particular Ultra ETFs and UltraShort ETFs from the ProShares family. These ETFs are designed to provide double (double the opposite) the performance of the benchmark

on a daily basis. Over holding periods no greater than one month, an investor can safely assume that both ETFs would provide double the return (or double the negative return) of the underlying benchmark. Su (2015) examines long-term and short-term tracking performances of four leveraged and inverse ETFs listed on the stock exchange in Taiwan. The daily tracking performance of the leveraged and inverse ETFs significantly deviate from the investment objectives of the funds at the 1% level. Lin (2016) examines the tracking performance of leveraged and inverse ETFs in Asia. He explores whether the leveraged and inverse ETFs can reach their goal to provide the promised return in the short- and long-term.

Fabozzi and Francis (1977) provide three kinds of definitions of bull and bear markets to estimate the single-index market model (SIMM). They find that the SIMM is unaffected by the three different bull and bear market conditions delineated in their research. Chu (2000) finds that the higher internal locus of control fund managers and higher risk-taking fund managers both experience better fund performance, especially in the bull market. Chen (2007) uses the data envelopment analysis (DEA) approach to evaluate the performance of 132 Taiwan stock mutual funds from 2001 to 2006. He shows that mutual funds have better performance in bull markets. Chang and Huang (2010) test local open-end stock funds from January 1999 to December 2008. They find that local open-end stock funds can be affected by the bullish or bearish performance of the local stock market; fund performance and turnover rates also moved up and down in the same direction as the rise and fall of the local stock market. Lin (2011) investigates the interaction of Taiwan ETFs and related financial assets in the bull and bear markets. It was found that there exists a long-term equilibrium relationship between ETFs and related financial assets.

Kao (2006) applies clustering analysis to detect the structural changes in the Taiwan Weighted Stock Index (TAIEX). From 1990 to 2004 there were three structural changes and several transient structural changes detected along with some important events during the structural change period. Chen (2010) applies the “extreme value theory” to investigate both whether the risk indices of 26 industries in Taiwan’s stock market and whether the tail risk and tail quantile index significantly changed due to the 921 Earthquake. The results indicate that the 921 Earthquake caused a structural change on indices for most industries. According to Lu et al. (2009), Su (2015), and Lin (2016), there exists tracking performance error in both leveraged and inverse ETFs. They show that there is an obvious difference between tracking performance and target remuneration, even in a single day. As Chen (2007) and Chung and Huang (2010) point out that in bull markets, the performance of funds are higher than the market index remuneration, in bear markets, the performance of funds are much more defensive. Therefore, in both bull and bear markets, there is a different level of effectiveness and performance. According to Lin (2011), there exists structural changes in Taiwan’s 50 funds with the changes in bull and bear markets. Since the underlying stocks of traditional ETFs are the same as the leveraged and inverse ETFs, it is inferred that the tracking performance of the leveraged and inverse ETFs would have structural changes along with the changes in bull and bear markets. Therefore, the following hypotheses have been formulated.

Hypothesis 1: The intercepts of the tracking performances in leveraged and inverse ETFs have structural changes along with the bull and bear markets.

Hypothesis 2: The return terms of the tracking performances in leveraged and inverse ETFs have structural changes along with the bull and bear markets.

## DATA AND METHODOLOGY

This study uses the leveraged (T502X) and inverse ETFs (T50R) in Taiwan as a sample. The sample period is from October 31, 2014 (listing day) to February 24, 2017. According to Fabozzi and Francis (1977), the division of the stock market is determined by the markets’ moving average. The bull market period is from October 31, 2014 to April 30, 2015 and from February 1, 2016 to February 24, 2017. The total number of trading days is 567 and the frequency of observations in our data is daily. The bear market is from May 1, 2015 to January 31, 2016. The source of data is TEJ and CMoney. Since the target returns for leveraged and inverse ETFs are based on one day, it would deviate the target return over one day owing to the compound interest effect. Therefore, they are suitable for short term operation rather than long term.

According to Su (2015), the compound interest effect by two-day period is explained as an example. First, the single-day returns of the subject index are defined, double leveraged ETF and doubled inverse ETF as  $r_t^B$ 、 $r_t^L$ 、 $r_t^I$ . Then, the two-day returns of the subject index are defined, double leveraged ETF and doubled inverse ETF as  $R_{t2}^B$ 、 $R_{t2}^L$ 、 $R_{t2}^I$ .

$$r_t^L = 2r_t^B \tag{1}$$

$$r_t^I = -r_t^B \tag{2}$$

$$R_{t2}^B = (1 + r_t^B)(1 + r_{t+1}^B) - 1 = r_t^B + r_{t+1}^B + r_t^B r_{t+1}^B \tag{3}$$

$$R_{t2}^L = (1 + 2r_t^B)(1 + 2r_{t+1}^B) - 1 = 2r_t^B + 2r_{t+1}^B + 4r_t^B r_{t+1}^B \tag{4}$$

$$R_{t2}^I = (1 - r_t^B)(1 - r_{t+1}^B) - 1 = -r_t^B - r_{t+1}^B + r_t^B r_{t+1}^B \tag{5}$$

$$R_{t2}^L = 2R_{t2}^B + 2r_t^B r_{t+1}^B \tag{6}$$

$$R_{t2}^I = -R_{t2}^B + 2r_t^B r_{t+1}^B \tag{7}$$

According to the above formula, the two-day accumulated returns of the leveraged and inverse ETFs would deviate 2-times and -1-time from the subject index. The longer period held is associated with the greater deviation from the target return. When the tracking target index continues rising or falling, the term of  $r_t^B r_{t+1}^B$  is positive, implying that the returns of the leveraged and inverse ETFs exceed the target returns. When the tracking target index is bumpy, the term of  $r_t^B r_{t+1}^B$  is be negative, implying that the returns of the leveraged and inverse ETFs do not reach target returns. This paper investigates whether single-day tracking performances of leveraged and inverse ETFs have reached the target performance. Based on Su (2015), returns in the holding period are calculated by overlapping data to minimize the loss on the number of sample.

$$r_{n\text{-day}} = \frac{P_{t+n} - P_t}{P_t} \tag{8}$$

where  $P_t$  is defined as net asset value (NAV) when the return for funds is calculated;  $P_t$  is defined as the index of closing price when the return for index is calculated.

The relationship between the return of leveraged and inverse ETFs in the holding period and the return of the target index in the corresponding period. The dependent variable is the return of leveraged and inverse ETFs and the independent variable is the return of the target index. The regression model is as follows:

$$Y_i = \alpha + \beta \cdot X_i + \varepsilon_i \tag{9}$$

where  $Y_i$  is the return of leveraged and inverse ETFs,  $X_i$  is the return of the target index. The Wald test is used to examine single-day tracking performance of the leveraged and inverse ETFs. The higher value of the Wald test is associated with more accurate tracking performance. The above relationship is examined using the hypotheses

$$H_0: C(2) = 2 \text{ and } H_0: C(2) = -1.$$

Moreover, this research examines the symmetry of return. That is, an investigation of whether there is a different between positive and negative effects of tracking performance is carried out. In linear regression, an intersection term of the return for tracking subject index is added and the dummy variable,  $D$ , which is equal to one if the return for index, is positive or zero otherwise. If  $\beta_2$  is significantly different from zero, it can be concluded that there is a different between positive and negative effects of tracking performance.

$$Y_i = \alpha + \beta_1 \cdot X_i + \beta_2 \cdot D_i \cdot X_i + \varepsilon \tag{10}$$

where  $Y_i$  is the return for leveraged and inverse ETFs,  $X_i$  is the return for tracking index.  $D_t$  is equal

to one if the return for tracking index is positive, zero otherwise. If the return of the subject index is positive, the tracking performance would be  $\beta_1 + \beta_2$ . If the return of the subject index is negative, the tracking performance would be  $\beta_1$ . If  $\beta_2$  is significantly different from zero, this research argues that the tracking performance is asymmetric. This research examines whether there are some structural changes in the tracking performance for leveraged and inverse ETFs during bull and bear markets. The bull and bear markets are separated according to the research of Fabozzi and Francis (1977). By taking the structural change of two-period time intervals as an example, the sample is split into two parts and it is examined whether there is a structural change at point  $T_1$ . The regression is as follows.

$$Y_t = \alpha + \beta X_t + \lambda_1 D_t + \lambda_2 X_t D_t + \varepsilon_t \tag{11}$$

where  $D_t$  is equal to one if there is after  $T_1$ , zero otherwise. If  $\lambda_1, \lambda_2$  are significantly different from zero, it is argued that there exists a structural change.

### RESULTS AND DISCUSSION

Table 1 presents the descriptive statistics of Taiwan 50 ETF, T502X and T50. The mean, median, maximum, or minimum value of return of T502X are not two times greater than those of T50ETF. In addition, the return of inverse T50 is not negative one times as big as those of T50ETF. Thus, there should be some reasoning for them not to reach the return of the target index. Table 2 presents the tracking performance rate in single-day leveraged and inverse ETFs and the tracking performance rate in the single-day tracking index ETF. The coefficients of return of T502X and inverse T50 ETFs are 1.8910 and -0.9076, which are significantly different from 2 and -1 at the 1 % level, respectively. It shows that the lack of performance of the return of T502X and inverse T50 ETFs are tracking the target return of Taiwan 50 ETF.

Table 1: Descriptive Statistics of Tracking Index, Leveraged and Reversed ETFs

	Taiwan50 ETF	T502X	T50R
Mean	0.0377%	0.0725%	-0.0419%
Median	0%	0.0822%	-0.0493%
Maximum	4.3938%	9.3936%	5.8364%
Minimum	-3.8462%	-10.5882%	-4.8654%
Std. Error	0.9687%	1.8852%	0.9227%
# of data	567	567	567

*This table shows the descriptive statistics of tracking index, leveraged and reversed ETF from 2014/10/31 to 2017/02/24.*

Table 2: The Tracking Performance in One-Day Leveraged and Reversed ETFs

	Coefficient	Std.Error	t-Value	p-Value	Adjusted R <sup>2</sup>
<b>Panel A: T502X</b>					
Intercept	0.00001	0.0002	0.0594	0.9527	0.9441
X	1.8910***	0.0193	97.7541	0.0000	
<b>Panel B: T50 reversed</b>					
Intercept	-0.00008	0.0001	-0.6526	0.5143	0.9078
X	-0.9076***	0.0122	-74.6452	0.0000	

*We use the following regression to calculate the tracking performance of these ETFs.*

$Y_i = \alpha + \beta \cdot X_i + \varepsilon$  where  $Y_i$  is the return rate of leveraged ETF or reversed ETF and  $X_i$  is the return rate of tracking index \*\*\*, \*\* and \* denote statistical significance at 1 percent, 5 percent and 10 percent level respectively.

In Table 3, the Wald Test is used to examine the null hypothesis  $C(2)=2$  for T502X and  $C(2)= -1$  for inverse T50. The result shows that the null hypotheses must be rejected in T502X and inverse T50, indicating that these two ETFs' single-day returns deviate from the corresponding multiple target return of the tracking index ETF. Therefore, it is argued that the reactions of single-day T502X and inverse T50 returns lack the multiple target return of Taiwan 50 ETF.

Table 3: The Tracking Performance in One-Day Leveraged and Reversed ETFs in Wald Test

Test Statistic	Value	df	p-Value
<b>Panel A: T502X</b>			
t- statistic	-5.6354***	565	0.0000
f- statistic	31.7576***	(1,565)	0.0000
Chi-square	31.7576***	1	0.0000
<b>Panel B: T50 Reversed</b>			
t- statistic	7.5987***	565	0.0000
f- statistic	57.7402***	(1,565)	0.0000
Chi-square	57.7402***	1	0.0000

We use Wald Test to examine the tracking performance of these ETFs. \*\*\*, \*\* and \* denote statistical significance at 1 percent, 5 percent and 10 percent level respectively.

Table 4 shows the symmetry of return in leveraged and inverse ETFs. The coefficients of return in leveraged and inverse ETFs ( $\beta_2$ ) are significantly different from 2 and -1 at the 1% level, suggesting that the effects of single-day T502X and inverse T50 returns are not symmetric. The  $\beta_2$  in T502X is negative. It means that when return rises, T502X's return would deviate from the target return rate. The  $\beta_2$  in inverse T50 is positive, indicating when return rises, the inverse T50 would deviate from its target return.

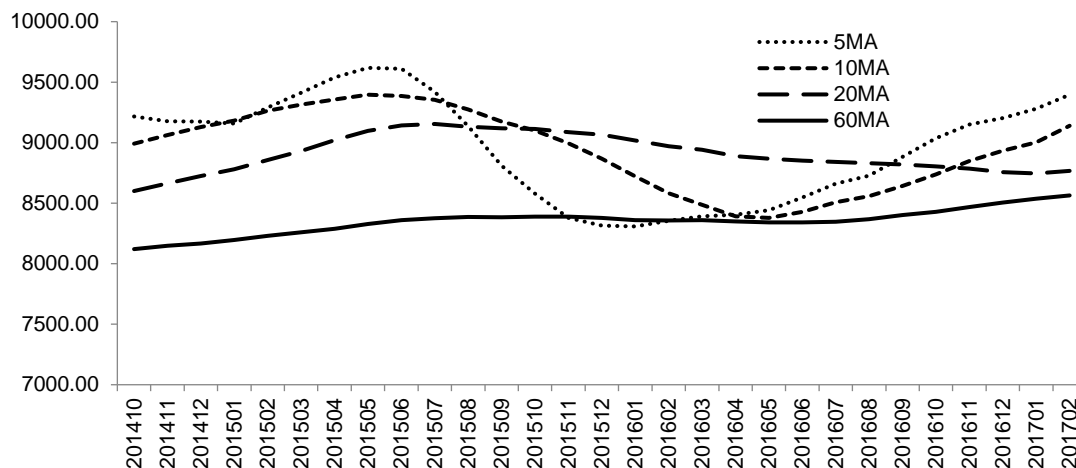
Table 4: The Symmetry of Return in Leveraged and Reversed ETFs

	Coefficient	Std.Error	t-Value	p-Value	Adjusted R <sup>2</sup>
<b>Panel A: T502X</b>					
Intercept	0.0007	0.0003	2.6998	0.0071	0.9453
X	1.9985***	0.0350	57.0436	0.0000	
DX	-0.0020***	0.0006	-3.6632	0.0003	
<b>Panel B: T50 reversed</b>					
Intercept	-0.0005	0.0002	-2.7845	0.0055	0.9093
X	-0.9670***	0.0221	-43.7963	0.0000	
DX	0.0011***	0.0004	3.2130	0.0014	

We use the following regression to examine the symmetry in tracing performance of these ETFs.  $Y_i = \alpha + \beta_1 \cdot X_i + \beta_2 \cdot D \cdot X_i + \varepsilon$  where  $Y_i$  is the return of leverage ETF or reversed ETF,  $X_i$  is the return of tracking target index,  $D$  is Dummy variable. If  $X_i > 0$  then  $D=1$ . If  $X_i \leq 0$  then  $D=0$ . \*\*\*, \*\* and \* denote statistical significance at 1 percent, 5 percent and 10 percent level respectively.

This study explores whether there is a structural change of tracking performance rates of single-day leveraged and inverse ETFs during the different market situations. Figure 1 is a monthly chart of the Taiwanese stock market (2014/10/31-2017/02/24). According to the research of Fabozzi and Francis (1977), the period from 2014/10/31 to 2015/04/30 is set as a bull market and changes to bear market beginning May, 2015, and changes back to bull market on 2016/01/31 and continues until 2017/02/24.

Figure 1: The Monthly Chart of Taiwanese Stock Market 2014/10/31- 2017/02/24



The picture shows the monthly line of Taiwanese stock market from 2014/10/31 to 2017/02/24. We set two dotted lines to separate the bull and bear markets. The source of data is from CMoney.

Table 5 shows the result of structural changes of leveraged and inverse ETFs during bull and bear markets. In Panels A and C, it can be seen that the coefficient of return terms of leveraged and inverse ETFs are significantly different from zero at the 1% level, indicating that there is a structural change when the bull market changes to bear market. Panel D presents that the coefficient of return term of the inverse ETF is significantly different from zero at the 1% level, whereas Panel B presents that the coefficient of return term of the leveraged ETF is not significantly different from zero. It indicates that there are structural changes in two ETFs when the bear market changes to bull market. As for the intercept, there is no structural change in the two ETFs during either situation. Therefore, Hypothesis 2 is accepted, implying the return terms of the tracking performances in leveraged and inverse ETFs have structural changes along with the bull and bear markets. Nonetheless, Hypothesis 1 is rejected, indicating the intercepts of the tracking performances in leveraged and inverse ETFs do not have structural changes along with the bull and bear markets.

Table 5: Structural Change of Leveraged and Reversed ETFs During Bull and Bear Markets

	Coefficient	Std.Error	t-Value	p-Value	Adjusted R <sup>2</sup>
<b>Panel A: T502X Bull to Bear</b>					
Intercept	0.0002	0.0005	0.3694	0.7121	0.9399
D	-0.0002	0.0006	-0.3594	0.7195	
X	1.6584	0.0530	31.3095	0.0000	
DX	0.0029***	0.0006	4.7691	0.0000	
<b>Panel B: T502X Bear to Bull</b>					
Intercept	-4.03E-05	0.0003	-0.1219	0.9030	0.9475
D	-0.0001	0.0004	0.2713	0.7863	
X	1.9525	0.0291	67.01559	0.0000	
DX	-0.0004***	0.0004	-2.8516	0.0950	
<b>Panel C: T50 Reversed</b>			<b>Bull to Bear</b>		
Intercept	-0.0002	0.0003	-0.6144	0.5394	0.9073
D	0.0001	0.0004	0.3133	0.7543	
X	-0.7450	0.0330	-22.5957	0.0000	
DX	-0.0024***	0.0004	-6.1829	0.0000	
<b>Panel D: T50 Reversed</b>			<b>Bull to Bear</b>		
Intercept	-6.04E-05	0.0002	-0.2926	0.7699	0.9161
D	-0.0001	0.0003	-0.4051	0.6856	
X	-0.9823	0.0182	-53.9921	0.0000	
DX	0.0010***	0.0003	3.5613	0.0004	

We use the following regression to examine whether the tracking performance has structural changes during the bull and bear markets.  $Y_t = (\alpha + \lambda_1 D) + \beta X_t + \lambda_2 DX_t + \varepsilon_t$  where  $Y_t$  is the return of leveraged and reversed ETF.  $X_t$  is the return of tracking index.  $D$  is a dummy variable, which indicates different conditions. The transition time from bull to bear is 2014/10/31~2016/01/31, the turning point is 2015/04/30; and the time from bear to bull market again would be 2016/01/31. \*\*\*, \*\* and \* denote statistical significance at 1 percent, 5 percent and 10 percent level respectively.

## CONCLUDING COMMENTS

This paper explores the tracking performance of leverage and inverse ETFs. Single-day tracking performances of the Taiwan 50 Bull 2X ETF and Taiwan 50 Bear -1X ETFs are tested to investigate whether there are structural changes of tracking performances during the bull and bear markets. The findings are as follows. Single-day performances of T502X and inverse T50 are significantly different from their target multiple. The results are similar when the Wald test is used. The coefficients of return in leveraged and inverse ETFs are significantly different from 2 and -1 at the 1% level, suggesting that the effects of single-day T502X and inverse T50 returns are not symmetric. When the returns rise, the returns of T502X and the inverse T50 would deviate from the target return rate. Moreover, the coefficient of return terms of leveraged and inverse ETFs are significantly different from zero at the 1% level, indicating that there is a structural change when a bull market changes to bear market. The coefficient of return term of the inverse ETF is significantly different from zero at the 1% level, implying that there are structural changes in two ETFs when the bear market changes to bull market. As for the intercept, there is no structural change in the two ETFs during either situation.

This study only focuses on the Taiwanese ETF market. Future research could examine other ETF markets to explore whether the results of this research could be different due to the specifics of Taiwan's financial system and the maturity of the market. It is suggested that future researchers explore possible factors that might influence tracking performance and take more Taiwanese of the markets' leveraged and inverse ETFs into consideration.

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# **MANDATORY RESTATEMENTS, FAMILY DOMINANCE AND INTERNAL AUDITOR TURNOVER**

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## **ABSTRACT**

*Internal auditors are a key governance element to help assure good financial reporting quality. Hence, internal auditors should be responsible for false financial reporting. This paper examines whether family dominance affects the relationship between mandatory restatements and internal auditor turnover before issuing stricter regulations on internal auditors. The findings show that family shareholding can negatively affect the relationship between mandatory restatements (the restatement severity) and internal auditor turnover. Family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. Our findings have important policy implications for security regulators since public firms establish an internal audit unit.*

**JEL:** K22, M41, M43, M49

**KEYWORDS:** Restatements, Internal Auditors, Family, Turnover

## **INTRODUCTION**

Traditionally, internal audit has been regarded as an essential mechanism to assure financial reporting quality. It assists in the improvement of corporate governance and enhances total value of firms. Internal auditors are authorized to oversight and uncover fraudulent financial reporting (Gramling et al., 2013). Institute of Internal Auditors (IIA) defines and notes that “internal audit is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” Internal audit is a monitoring control mechanism in corporate governance and thus internal auditors have responsibilities to help prevent and detect financial reporting fraud (Marston et al., 1989; Christopher, 2012).

Due to the outbreak of major accounting scandals in the United States, the Sarbanes-Oxley Act was passed in 2002. The goal was to improve corporate governance and strengthen the accountabilities of particular persons who are responsible for assuring financial reporting quality. Internal auditors also receive concerns and their governance roles have become increasingly important (Schneider, 2008). Past restatement studies have widely examined the impact of restatements and the roles of the CEO, CFO, outside directors and external auditors (Land, 2010; Ma et al., 2015). The findings generally show that persons involved in assuring financial reporting quality should be responsible for restatement events. The possible impacts of restatements to these persons include increased litigation (Schmidt, 2012) and the reduction of compensation (Wang et al., 2013). They even face dismissal (Desai et al., 2006) and reputation damage in the labor markets. Prior studies lack sufficient empirical evidence on how internal auditors play their roles in assuring financial reporting quality and whether they would be responsible for fraudulent financial reporting (Prawitt et al., 2009). Hence, it is necessary to examine whether internal auditors should be punished such as facing dismissal in the face of restatements.

Most Taiwanese firms are dominated by family members (Yeh and Woidtke, 2005; Xiaoxiang et al., 2013). Family literature asserts that on the one hand, family members are likely to have self-interest behavior. On the other hand, they are also likely to make decisions considering shareholders' interest. Hence, family members may intervene in firms' punishment for internal auditors via their shareholding or directorship to affect internal auditor turnover in the announcement of restatements. Past research rarely focuses on the uniqueness of restatements and often ignores to examine the severity of restatements. The nature of the restatements between voluntary restatements and mandatory restatements is different. The punishment for internal auditors should be high in the case of mandatory restatements and increase with the mandatory restatement severity. Accordingly, this paper examines whether family dominance (family shareholding and family directorship) would affect internal auditor turnover in the reveal of mandatory restatements. Further, this paper also examines the above relationship in the case of the restatement severity. Particularly, this paper examines the above relationship before issuing stricter regulations on internal auditors in Taiwan.

The findings show that family shareholding can negatively affect the relationship between mandatory restatements (the restatement severity) and internal auditor turnover whereas family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. Our findings indicate that family members holding shares tend to deter internal auditor turnover in the reveal of mandatory restatements and also deter their turnover when the restatement severity increase. Before stricter regulations on the functions of internal audit and the independence and professional skill of internal auditors in Taiwan were amended, it is likely that internal auditors do not avoid interest conflicts from having personal connections with family members and thus family members holding firm shares would be favor of retaining these internal auditors via their influence when mandatory restatements are announced and the restatement severity increases. However, family members serving directors prefer internal auditor to leave only when mandatory restatement severity increases. This may because that family members serving directors are authorized to assure financial reporting. When the restatement severity increase, family members face much pressure from the public and thus would prefer internal auditor turnover.

A majority of studies have documented the positive relationship between restatements and the turnover of particular firm members such as the CEO. However, internal auditors receive little concern in restatement literature. Particularly, family members have significant influence in most Taiwanese firms and thus they are likely to affect how restating firms punish internal auditors. Restatement literature rarely focuses on mandatory restatements, little examines the punishment effect of restatements on the internal auditors and ignores family influence in the above relationship. Our research contributes to extend past restatement studies by focusing on how family dominance affects the relationship between mandatory restatements and internal auditor turnover. Particularly, this paper further examines the above relationship by focusing on the restatement severity. Besides, since Taiwanese regulations began to strengthen the functions of internal audit and the independence and professional skill of internal auditors from 2007, this paper also aims to understand before stricter requirement on internal auditors, whether family dominance would intervene internal auditor turnover in the reveal of mandatory restatements. Our results support the continuing improvement of Taiwanese regulations on enhancing the independence and professional skill of internal auditors. Our findings have important implications for Taiwanese security regulations. The remainder of this paper is as follows. Section 2 presents the literature review and hypothesis development. Section 3 presents the research design. Section 4 discusses the results. Finally, conclusions, limitations and future directions are presented in Section 5.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### Mandatory Restatements, Family Dominance and Internal Auditor Turnover

Firm members related to financial reporting quality should be punished for the material financial reporting misstatement. Restatement studies have widely examined the impact of restatements to these persons.

These findings show that these persons such as the CEO, the CFO or outside directors are likely to face compensation reduction (including salaries and bonuses), turnover and possible litigation (Collins et al., 2008). For example, Collins et al. (2008) examine the association among restatements, class-action securities litigation, CFO turnover and their bonus compensation. The findings indicate that CFO turnover and bonus compensation would only be affected by restatements in the case when the restatement firm is the target of a class-action suit. Youssef and Khan (2018) investigate whether CEO would choose the timing of restatements to disclose so as to balance the cost and benefits related to their compensation package. Their findings show a negative relationship between options exercised and lags in restatements. Liu and Yu (2018) turn the attention to examine the relationship between restatement occurrence and the compensation of audit committee. They focus on the incentive entrenchment and alignment of stock-based compensation of audit committee and examine how to alleviate restatement occurrence. One of their findings show that equity-based compensation of audit committee is negatively related to restatement likelihood. Except for examining the reduction of the compensation of the persons involving in financial reporting failure, some restatement studies examine whether these persons would thus lose their jobs and even damage their reputation in the labor markets. For example, Wang and Chou (2011) examine the impact of restatement characteristics and subsequent earnings management on post-sox executive turnover. Their findings show that CEO or CFO turnover increases with higher restatement severity of restatement firms. Lee et al. (2013) examine the relationship among option repricing, management turnover and restatements. Their evidence shows that restatements are positively related to management turnover.

In Taiwan, most firms are family firms. Family members often can significantly affect firms' decisions. Family dominance can be examined from family shareholding and family directorship, respectively. When family members have high shareholding, they are likely to achieve their benefits via their ownership influence (Yeh and Woitke, 2005). Hence, when internal auditors have personal connections with family members, family members may prevent the turnover of internal auditors so as to avoid losing family benefits. Based on the above, this paper develops the hypothesis 1a. On the other hand, family members serving directors may prefer internal auditor turnover so as to protect the interest of minority shareholders since directors are authorized to assure financial reporting quality. According to Taiwanese regulations, public firms shall establish an internal audit unit and appoint qualified persons in an appropriate number as full-time internal auditors. Any appointment or dismissal of chief internal auditor of public firms shall be approved by directors. Hence, this paper develops hypothesis 1b.

*Hypothesis 1: Family shareholding weakens the relation between mandatory restatements and internal auditor turnover.*

*Hypothesis 2: Family directorship strengthens the relation between mandatory restatements and internal auditor turnover.*

### Research Design

This paper examines the relationship among mandatory restatements, family dominance and internal auditor turnover. Using Taiwanese firms as our sample, this paper examines the firms announcing mandatory financial restatements during 1998-2006. The major reason are as follows. In our sample period, many countries do not require firms to set up internal audit unit (most are outsourcing). In Taiwan, Regulations Governing Establishment of Internal Control Systems by Public Companies begins to significantly strengthen the regulations of internal audit from 2007, including the functions of internal audit, the professional skill (such as enhancing training hours) and the independence of internal auditors (such as obeying conflict of interest avoidance). Based on the above, the accountabilities of Taiwanese internal auditors for financial reporting quality have significantly increased after strengthening internal audit functions and the professional skill and the independence of internal auditors. Since this paper aims to examine whether family dominance can affect internal auditor turnover in the reveal of mandatory

restatements before issuing stricter regulations on internal auditors, this paper examines the sample firms before 2007.

### Data and Sample Selection

Mandatory restatement sample was gathered from the Taiwan Economic Journal (TEJ) database. The data for internal auditor turnover was gathered from a website search – the Market Observation Post System in two years before the year of mandatory restatement announcement (year-2), in one year before the year of mandatory restatement announcement (year-1), in the year of mandatory restatement announcement (year 0), in one year after the year of mandatory restatement announcement (year +1) and in two years after the year of mandatory restatement announcement (year +2). The data on financial restatements, family variables and control variables were mainly collected from TEJ database.

### Variables Definitions

Mandatory restatement variable is *MREST*. *MREST* is a dummy variable that equals to 1 if financial restatements are mandatory restatements and 0 if the firm was not required to restate financial statements. Mandatory restatement severity variable is *REMGN*. *REMGN* is the absolute value of restatement magnitude scaled by sales. Internal auditor turnover variable is *ITURN*. In the logistic regression models, *ITURN* is a dummy variable that equals to 1 if there is any internal auditor turnover and 0 otherwise. In the ordered logistic regression models, *ITURN* is a continuous variable that measure the frequency of internal auditor turnover. Family dominance is measured by family shareholding and family directorship. *FH* measures family shareholding. *FD* measures family directorship, which refers to the percentage of family members as firm directors.

### Others

In consistent with prior literature (Desai et al., 2006), this paper uses the following control variables. *FM* measures the percentage of family members as firm executives. *CCON* refers to the extent of shareholding concentration of big shareholders (using the Herfindahl index: the sum of the squares of shareholding by big shareholders in a firm to measure). The return of assets (*ROA*) and stock returns (*STOCK*) are used to measure firm performance. *ROA* refers to operating income after depreciation scaled by average assets. *STOCK* refers to raw buy-and-hold returns. *SIZE* refers to the natural log of market capitalization. *LEV* refers to the leverage ratio, the ratio of total liabilities divided by total assets. *GROWTH* refers to the sales growth rate, the average annual sales growth rate for 2 years prior to the year of the restatement announcement.

### Research Models

$$\begin{aligned}
 ITURN_{i,t} &= \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMREST_{i,t} & (1) \\
 &+ \beta_5 FDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\
 &+ \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon
 \end{aligned}$$

$$\begin{aligned}
 ITURN_{i,t} &= \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FHD_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} & (2) \\
 &+ \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\
 &+ \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon
 \end{aligned}$$

$$ITURN_{i,t} = \alpha_0 + \beta_1 REMGN_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMGN_{i,t} \quad (3)$$

$$\begin{aligned}
 & + \beta_5 FDMGN_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} \\
 & + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon
 \end{aligned}$$

*ITURN* is measured for different years around the year of mandatory restatement announcement, including two years before the year of mandatory restatement year (year+2), one year before the year of mandatory restatement announcement (year-1), the year of mandatory restatement announcement (year 0), one year after the year of mandatory restatement announcement (year-1) and two years after the year of mandatory restatement announcement (year-2). Research model (1) adopts the logistic regression model (non-dummy family variables) to examine the relationship among mandatory restatements, family dominance and internal auditor turnover. The number of the sample firms is 74. Research model (2) adopts the logistic regression model (dummy family variables) to examine the relationship among mandatory restatements, family dominance and internal auditor turnover. The number of the sample firms is 74. Research model (3) adopts the ordinal logistic regression model (non-dummy family variables) to examine the relationship among mandatory restatement severity (measured by restatement magnitude), family dominance and internal auditor turnover. The number of the sample firms is 37.

## RESULTS AND ANALYSIS

Table 1 documents the relationship among mandatory restatements, family dominance and internal turnover around the years of mandatory restatement announcement. The coefficient of *MREST* is only significantly in year +2. When furthering examining the interaction effect of mandatory restatements and family dominance, the results show that *FHMREST* is significantly negative in year 0 and year +2. This suggests that family shareholding is likely to negatively affect the relationship between mandatory restatements and internal auditor turnover. However, the results indicate that the coefficient of *FDDMREST* is not significantly positive no matter the observed year is. It appears that family directorship does not significantly positively affect the relationship between mandatory restatements and internal auditor turnover. In order to further confirm the above relationship, firstly, this paper replace non-dummy family variables with dummy family variables in logistic regression models. The results are shown in Table 2.

Table 1: Mandatory Restatements and Internal Auditor Turnover – Non-Dummy Family Variables (N=74)

		Year -2	Year -1	Year 0	Year +1	Year +2
Var.	Pred Sign	ITURN	ITURN	ITURN	ITURN	ITURN
CONSTANT		3.175	0.943	-4.395	-3.527	1.324
<i>MREST</i>	+	-0.567	1.046	3.410	1.768	5.335*
<i>FH</i>	+/-	0.003	0.002	-0.074	-0.008	-0.023
<i>FD</i>	+/-	0.157	0.653	2.996	1.658	0.011
<i>FHMREST</i>	-	0.042	0.012	-0.123***	-0.014	-0.216**
<i>FDDMREST</i>	+	1.018	0.392	-0.098	-2.031	-4.660
<i>FE</i>	+/-	-4.437	-3.411	5.403**	-1.287	1.133
<i>CCON</i>	+/-	-0.066	-0.058	0.303***	0.046	0.005
<i>ROA</i>	-	-0.120*	0.008	-0.066*	-0.063**	-0.043
<i>STOCK</i>	-	0.006	0.006	0.015*	-0.008	0.004
<i>SIZE</i>	+/-	-0.643***	-0.575**	-0.468	0.005	-0.068
<i>LEV</i>	+/-	-3.611*	-1.662	-1.553	0.947	-5.389**
<i>GROWTH</i>	+/-	0.011	0.008	-0.04*	0.002	-0.003
LR stat.		19.98	17.61	20.30	22.66	19.13
Probability		0.0675	0.1281	0.0617*	0.0308**	0.0853
Pseudo-R <sup>2</sup>		0.2587	0.2384	0.4928	0.2040	0.2684

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (*ITURN*) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression estimates of the equation (1):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \varepsilon$ .

Table 2 shows that *FHMREST* is significantly negative in year -1 and year 0. Secondly, this paper adopts the suggestions of Greene (1999) to use logistic regression methods to examine internal auditor turnover. Greene (1999) indicates that using logistic regression methods to calculate the marginal effects of independent variables can provide better implications on more economic meaning of coefficients. Table 3 shows the marginal effects (dy/dx) of dependent variables, the corresponding z-statistics and the percentage

increase in the estimated probability of internal auditor turnover around the years of mandatory restatements. The results show that the marginal effect of *FHDMREST* is significantly negative in the logistic regression of internal auditor turnover in year +2. However, the results do not show that the marginal effect of *FDDMREST* is significantly positive in any observed years.

Table 2: Mandatory Restatements and Internal Auditor Turnover -Dummy Family Variables (N=74)

Var.	Pred Sign	Year -2	Year -1	Year 0	Year+1	Year +2
		ITURN	ITURN	ITURN	ITURN	ITURN
CONSTANT		2.613	-1.353	-0.970	-3.351	0.864
MREST	+	-0.086	0.951	1.480	0.777	0.737
FHD	+/-	1.340	-1.264	0.613	2.518*	0.162
FDD	+/-	0.270	1.951	-0.380	-1.092*	0.065
FHDMREST	-	2.327	-2.730**	-2.412*	-1.442	-1.598
FDDMREST	+	-0.984	2.432	0.234	0.717	-0.880
FE	+/-	-3.808	-4.162*	2.153	-1.495	0.768
CCON	+/-	-0.088	0.080*	0.094*	-0.013	-0.048
ROA	-	-0.147**	0.000	-0.063*	-0.071***	-0.041
STOCK	-	0.003	-0.007	0.005	-0.007	0.003
SIZE	+/-	-0.682***	-0.131	-0.459*	0.056	-0.076
LEV	+/-	-3.237**	-0.482	-1.159	1.168	-4.164**
GROWTH	+/-	0.013*	-0.011*	-0.025	0.004	0.004
LR stat.		23.49	23.46	24.89	17.25	18.22
Probability		0.0239**	0.0240**	0.0153**	0.1403	0.1091
Pseudo-R <sup>2</sup>		0.3393	0.2287	0.3539	0.2675	0.1472

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (ITURN) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression estimates of the equation (2):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FHD_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

Table 3. Mandatory Restatements and Internal Auditor Turnover – Marginal Effect (N=74)

Vari.	Pred Sign	Year -2		Year -1		Year 0		Year +1		Year +2	
		ITURN		ITURN		ITURN		ITURN		ITURN	
		dy/dx	z	dy/dx	Z	dy/dx	z	dy/dx	z	dy/dx	z
MREST	+	-0.023	-0.180	0.052	0.420	0.163	0.690	0.280	0.910	0.314	0.870
FH	+/-	0.000	0.090	0.000	0.050	-0.003	-1.430*	-0.001	-0.320	-0.001	-0.540
FD	+/-	0.006	0.060	0.031	0.230	0.103	0.990	0.262	0.730	0.000	0.000
FHMREST	-	0.002	0.770	0.001	0.270	-0.004	-1.270	-0.002	-0.440	-0.007	-2.040**
FDMREST	+	0.041	0.320	0.019	0.120	-0.003	-0.030	-0.321	-0.750	-0.140	-0.860
MDIR	+/-	-0.179	-1.030	-0.163	-0.870	0.186	1.330*	-0.204	-0.650	0.034	0.370
CCON	+/-	-0.003	-1.070	-0.003	-0.990	0.010	1.540*	0.007	0.970	0.000	0.080
ROA	-	-0.005	-1.640	0.000	0.290	-0.002	-0.910	-0.010	-2.110**	-0.001	-0.720
STOCK	-	0.000	0.590	0.000	0.730	0.001	1.250	-0.001	-1.080	0.000	0.650
SIZE	+/-	-0.026	-1.290*	-0.028	-1.460*	-0.016	-1.070	0.001	0.020	-0.002	-0.330
LEV	+/-	-0.146	-1.300*	-0.079	-0.770	-0.053	-0.760	0.150	0.600	-0.162	-1.020
GROWT H	+/-	0.000	1.470*	0.000	1.080	-0.001	-1.920**	0.000	0.540	0.000	-0.480
LR stat.		19.98		17.61		20.30		22.66		19.13	
Probability		0.0675		0.1281		0.0617		0.0308		0.0850	
Pseudo-R <sup>2</sup>		0.2587		0.2384		0.4928		0.2040		0.2684	

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (ITURN) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the logistic regression of the equation (1):  $ITURN_{i,t} = \alpha_0 + \beta_1 MREST_{i,t} + \beta_2 FHD_{i,t} + \beta_3 FDD_{i,t} + \beta_4 FHDMREST_{i,t} + \beta_5 FDDMREST_{i,t} + \beta_6 FM_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

In summary, the above findings show that family holdings can negatively affect the relationship between mandatory restatements and internal auditor turnover around the years of the restatement announcement year whereas family directorship does not have any significant effect on the relationship between mandatory restatements and internal auditor turnover. H1 generally receives support whereas H2 is not supported. Land (2010) suggest that the severity of earnings restatements may affect the relationship between restatements and CEO turnover. Therefore, this paper also further examines whether family dominance affects the relationship between mandatory restatement severity and internal auditor turnover. Table 4 shows that the coefficient of *FHMGN* is significantly negative in year 0 and year +1. The results show that family shareholding negatively affects the relationship between mandatory restatement severity and internal auditor turnover. In addition, the results indicate that *FDMGN* positively affects the relationship between mandatory restatement severity and internal auditor turnover in year -2 and year +1. The results indicate that family directorship positively affects the relationship between mandatory restatement severity and internal auditor turnover.

Table 4: Restatement Severity and Internal Auditor Turnover - Ordered Logistic Regression (N=37)

Model		Year -2	Year -1	Year 0	Year +1	Year +2
Var.	Pred Sign	ITURN	ITURN	ITURN	ITURN	ITURN
<i>REMGN</i>	+	0.032	0.065	25.634***	0.141*	0.126**
<i>FH</i>	+/-	-0.014	-0.026	-0.968**	0.057	-0.008
<i>FD</i>	+/-	-11.189**	1.793	34.481**	0.449	2.720
<i>FHMGN</i>	-	-0.008	0.054	-0.245*	-0.005*	-0.001
<i>FDMGN</i>	+	0.383**	-0.002	0.003	0.112*	-0.015
<i>FE</i>	+/-	9.233*	-10.566***	-18.865***	-29.386***	-34.906***
<i>CCON</i>	+/-	0.045	0.103	1.597**	0.003	0.007
<i>ROA</i>	-	0.035	-0.019	-0.171**	-0.045*	-0.044
<i>STOCK</i>	-	0.067***	0.006	-0.016	-0.009	0.003
<i>SIZE</i>	+/-	-1.567**	0.188	-3.317*	-0.723	-0.739*
<i>LEV</i>	+/-	7.070**	-0.596	-20.930**	1.488	0.365
<i>GROWTH</i>	+/-	-0.007*	0.012**	-0.191	0.010*	0.015***
LR stat.		37.96	213.67	415.92	270.17	233.29
Probability		0.0000***	0.0000***	0.0000***	0.0000***	0.0000***
Pseudo-R <sup>2</sup>		0.5125	0.1958	0.6724	0.2705	0.2130

Asterisks \*, \*\*, \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively. The number of the sample firms is 74. Internal auditor turnover (*ITURN*) is examined in year -2, year -1, year 0, year +1 and year +2, where 0 is the year of mandatory restatement announcement. This table shows the ordered logistic regression estimates of the equation (3):  $ITURN_{i,t} = \alpha_0 + \beta_1 REMGN_{i,t} + \beta_2 FH_{i,t} + \beta_3 FD_{i,t} + \beta_4 FHMGN_{i,t} + \beta_5 FDMGN_{i,t} + \beta_6 FE_{i,t} + \beta_7 CCON_{i,t} + \beta_8 ROA_{i,t} + \beta_9 STOCK_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \beta_{12} GROWTH_{i,t} + \epsilon$ .

## CONCLUSION

It is widely recognized that internal audit is one of key factors in achieving good corporate governance. (Goodwin-Stewart and Kent, 2006; Christopher, 2012). Internal audit function is vital to firms (Gramling et al., 2013). Internal auditors help prevent the occurrence of financial reporting fraud and thus can assure financial reporting quality (Achneider, 2009; Carey and Simnett, 2006). Despite of the importance of internal audit for firms, prior literature lacks enough empirical evidence on how internal auditors affect financial reporting quality. Whether internal auditors would be required to be responsible for the material financial reporting failure (Prawitt et al., 2009) such as restatements is necessary to be examined. Past restatement literature has documented that particular persons involving in assuring financial reporting quality such as the CEO, the CFO, outside directors, external auditors and audit committee members would be punished for restatements (Land, 2010; Xiaoxiang et al., 2013). They are likely to face the reduction of compensation (including salaries and bonuses), lawsuits, the dismissal and even lose their reputation in the labor markets. However, past studies do not show strong evidence about whether restatements lead to the punishment of internal auditors such as internal auditor turnover. Furthermore, family dominance can be

examined via family shareholding and family directorship. Family members may exert their influence to intervene internal auditor turnover in restating firms via their shareholding or directorship. This suggests that family dominance is likely to affect internal auditor turnover in restating firms. From 2007, Taiwanese regulations have been significantly improved internal audit functions and the independence and professional skill of internal auditors. Hence, this paper examines our sample firms before 2007 so as to understand how family dominance affect the relationship between restatements and internal auditor turnover before issuing stricter regulations on internal auditors.

Considering the unique nature of restatements, this paper focuses on mandatory restatements to examine the relationship among mandatory restatements, family dominance (family shareholding and family directorship) and internal auditor turnover. The findings show that only family shareholding can negatively affect the relationship between mandatory restatements and internal auditor turnover in particular years. The findings do not show that family directorship can affect the above relationship. Several studies have documented that the punishment effect for the particular persons involving in restatements will increase with restatement severity (Wang and Chou, 2011). Hence, this paper also further examines the above relationship in the case of the restatement severity. When further examining the restatement severity, the findings show that family shareholding can negatively affect the relationship between the restatement severity and internal auditor turnover whereas family directorship can positively affect the relationship between the restatement severity and internal auditor turnover in particular years.

To some extent, family dominance can intervene internal auditor turnover in the outbreak of mandatory restatements. Family members are likely to exert their influence to affect the turnover of internal auditors in the reveal of restatements. If family members hold firm shares, they are likely to seek their benefits via their influence (Yeh and Woidtke, 2005) by deterring internal auditor turnover because internal auditors may have personal connections with family members before issuing stricter regulations on internal auditors in Taiwan. There are similar findings in the case of the restatement severity. However, family directorship only positively affects the relationship between the restatement severity and internal auditor turnover. This shows family members serving directors would be favor of internal auditor turnover because they are authorized to assure financial reporting quality and would bear more outside pressure when the restatement severity increase. This paper is limited to examine the years before 2007 because regulations on internal audit functions and the independence and the professional skill of internal auditors were significantly improved from 2007. Future research can examine the moderating effect of family dominance from 2007 so as to provide the understanding on whether family dominance can still affect the above relationship when strengthening internal audit functions and the independence and the professional skill of internal auditors. Besides, future research can also use other governance indicators to examine the moderating effect of mandatory restatements and internal auditor turnover such as board seats so as to provide more understanding on how corporate governance affects internal auditor turnover in restating firms.

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# **PROPAGATING THE IMAGE WITH PLAUSIBLE DENIABILITY: COVERT MEDIA POLITICAL CAMPAIGNS IN THE CONTEXT OF POSTWAR POSTMODERNITY**

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## **ABSTRACT**

*This paper shows that international social media disinformation campaigns reflect the emergence of the nuclear era ending war as a viable deliberate policy option for great powers towards each other. They instead engage in competitive interference within the polities of third actors as well as targeting not only one another, but their own national public opinion. They aim to empower their respective local political allies at the expense of the perceived local confederates, witting or unwitting, of the other great power competitor. The paper explains that the rise of nationalism increased local resistance and thereby increased the political costs of overt external intervention. Postwar international human rights norms came to include national self-determination, making covert intervention abroad politically preferable by governments as well. The paper demonstrates that these propaganda operations are labelled as disinformation because their external state instigation is therefore purposefully obscured. These trends contributed to the emphasis on covert intervention and the creation of national security bureaucracies for implementing it. Today's hybrid warfare covert competitive interference is familiar. Russian state operative Internet-based covert intervention in the 2016 American presidential election highlights that the United States is fully integrated into the postmodern world that it helped create after 1945.*

**JEL:** K24, K33, K42

**KEYWORDS:** Hybrid Warfare, Nationalism, Social Media

## **INTRODUCTION**

Competitive Cold War aid and assistance included financial and military support to respective local clients, exacerbating deadly conflicts within polarized communities around the world. Great power competition became indirect; the nuclear setting made avoiding the outbreak of direct conflict the primary, but not the only, high level strategic foreign policy goal. The US and the USSR responded to solicitations from readily identified local political actors in third states in more or less intense conflict with local opponents. They solicited US or Soviet external aid and assistance to prevail in their local struggle, and inexorably, their opponents sought aid from the other superpower opponent (Cottam, 1967). Great power competition for international influence and control focused on dominating polities, supporting local actors as political clients. The nuclear era was concurrent with the rise of mass political participation in the so-called developing world, and a feature of its expression included nationalism. The postwar focus of this competitive intervention increasingly was on polity constituencies, such as discontented ethnic minorities and classes, in addition to individual, cooperative political figures. Resistance to external intervention within the target polity intensified, raising the costs to the intervening power in attempting to control the target's foreign policy. Washington as well as Moscow interfered covertly and indirectly through local clients, which served to obscure this external intervention in the eyes of local public opinion (Schmitt 2018, 38-39). It thereby reduced immediate political resistance and lowered its immediate costs to the intervenor.

These efforts to obscure external intervention also served to reduce domestic resistance within the US to this intervention while the US promoted itself as an advocate for national self-determination (Downes and Lilley, 2010, 291). Ultimately, if a local client risked overthrow, the US and the USSR would at times directly intervene against the threatening local actor. E.g. the US intervened in Korea and Vietnam, the USSR in Afghanistan and earlier in Hungary and Czechoslovakia.

“The covert aspect of information and propaganda dissemination ... has been of exceptional importance during the Soviet-American cold war” [*sic*] (Cottam and Gallucci, 1978, 32). This external intervention, if perceived by particular local actors in effect as an intolerable infringement on national sovereignty, would generate resistance. This opposition would often be suppressed, if necessary, through authoritarianism, justified as necessary for modernization (Duara, 2011). The rationalization was typically the portrayal of a dire threat from the aggressive other side in this local aspect of the global Cold War struggle. This intervention would contribute to intensifying domestic polarization within the target polity. The resulting exacerbation of the perceived threat from the local other would thus appear to vindicate the intervention by their respective external patrons in the eyes of each local side. Disinformation as part of what is often today called “hybrid warfare” would encourage this mobilization against the perceived threat (Isikoff and Corn 2018, 44). The local contestant and its external patron would portray this resistance-themed disinformation against the portrayed threat to national sovereignty as local in origin. The external instigation and support for one side or the other would be intentionally obscured, if not hidden (Voss 2016, 40). The extent to which this resistance was accepted as fundamentally local was limited; concealing indefinitely external involvement involving numerous individuals is not possible.

The lack of clarity of involvement, together with attitudes of suspicion and paranoia that emerge from generations of obscured imperial control, create fertile conditions for conspiracy theories. Post-colonial, so-called Third World polities are particularly prone to such perceptual stereotypical tendencies (Gray, 2010). Even so, the popularity of conspiracy promoter Alex Jones in the US is evidence of this mass public predisposition in at least one so-called developed state (Williamson, 2018). Large media company outlets market authors claiming conspiratorial threats to American national sovereignty by cabals of domestic and external adversaries. These narratives generate high sales volume and profits (Rutenberg, 2018). Hostility towards this intervention and the local actors supposedly cooperating in it is intensified due to perceived treasonous disloyalty, deceitfulness and underhandedness. The inherent malfeasance of the other requires that the perceiver maintain its own external cooperative alliances in order to counteract the former. The former may represent some perceived global movement risking critical national values with an array of international actors overtly and covertly in league with the despised local other. The perceiver must find and solicit counterbalancing external actors who shares its concerns about the fundamental values at stake.

The term, hybrid warfare, is problematic. Aside from the exploitation of new media and communication infrastructure technologies, Washington as well as Moscow displayed this covert policy behavior historically (Renz, 2016, Ransom, 1977). Target polities included domestic public opinion as well as foreign publics (Wilford, 2017). In an attempt at clarification, Schnauffer advocates for the term, non-linear warfare. He highlights the disinformation campaign component of a sovereign state’s assault upon the resistance national morale of a target polity by intensifying polity polarization (2017, 22). Schnauffer reserves the term, hybrid warfare, for a sovereign state’s sponsorship of an insurgency against a target actor. In late 2018, the term hybrid warfare still dominates news media headlines. They showcase the combination of national security organizational resource deployments along with exploiting Internet-based technologies to affect the target polity’s power capabilities (Cottam and Gallucci, 1978). These attacks include covert psychological social media-oriented public opinion campaigns and damaging Internet-based infrastructure hacking attacks to achieve national security and foreign policy objectives.

This paper aims to elaborate on the internal, state-level factors of analysis that shape a state’s international behavior, including the formation of preferences for tactical foreign policy aims (Waltz, 1954[2001]). The

neoclassical realist literature on international relations focuses analytical attention on the particular internal political characteristics of polities in shaping their international behavior. Neoclassical realism concentrates on the sources of the prevailing, yet evolving, distinctive behavioral patterns that states display in their relations with other actors (Kitchen, 2010). At the core of neoclassical realism, “grand strategy emerges through these processes of empirical assessment [of the political environment (BD)] and ideational competition within the state” (Kitchen, 2010, 136). This competition occurs among its different internal political constituencies. Domestic constituency political dynamics articulated in ideational forms mediate between this empirical assessment of the political environment and a state’s foreign policy. These mediating variables, in the words of various neoclassical realists, include, *inter alia*:

divisions between and within elites in the foreign policy executive (Lobell, 2003, 2009); entrenched strategies formed at the national level during previous historical periods (Brawley, 2009); the need or desire of parts of the governing class to appeal to nationalist sentiment, even in contexts of economic interdependence (Sterling-Folker, 2009); embedded ideological constructions in the domestic political culture within which national foreign policy must be justified (Dueck, 2004, 2006, 2009); the ability of powerful domestic forces to shape the pursuit of the national interest by threatening the security in office of the government (Ripsman, 2009); the capacity of some states relative to others to ‘extract’ resources for the purposes of foreign policy (Taliaferro, 2009); and the role of a strong, coherent state, with a complementary ideology, to make expansionary policy on the part of a state possible [*sic*] (Schweller, 2008, 2009) (Quinn 2013, 164). The paper focuses on the forces of nationalism as a critical mediating variable in assessing post-Cold War external competitive political interference in the internal political dynamics of states. This paper applies the conceptualization of nationalism by Cottam and Cottam (2001) as the overarching framework for analyzing Moscow’s post-Cold War hybrid warfare campaign targeting the US. It thereby highlights critical shared elements in post-Cold War grand strategy. While structural realism emphasizes security maximization amidst international anarchy, neoclassical realism emphasizes states’ proactive policies to influence and shape their “environment” (Sears, 2017, 23). These policies target the policy making dynamics within polities to influence this political environment. This paper highlights the influence of Cold War-era organizational actors as domestic political vested interests that shape today’s foreign policy. It incorporates neoclassical realism’s orientation towards a historical sociological path dependency approach (Zodian, 2015, 189). These domestic vested interests, including the Cold War-founded national security establishments, are significant domestic factors shaping the foreign policy processes within their respective polities. Their influence includes constituting the prevailing behavioral patterns of an initiator state regarding attempts to generate influence within the policy making processes of a target state in the nuclear setting. Nationalism helps energize these behavioral patterns.

## LITERATURE REVIEW

This political dynamic of competitive international interference to support the political influence of cooperative clients thereby intensifying domestic polarization continues in the post-Cold War context. The state-level political environment is one in which popular political awareness and expectation in effect to participate in policy making is nearly total among the global population (Cottam and Cottam 2001, 39). National self-determination concomitantly has become a human right, albeit one contentiously defined (Cassese, 2005, 16, 39, 63, 75, 84, 207). External interference in a polity’s domestic political affairs is prone to be suspect by major constituencies in the target polity as a violation of this national community right. As with other forms of political interaction, social media and the Internet more broadly have facilitated this intervention. It has also provided greater opportunities to obscure the sources of this interference/intervention/violation (Sanger, 2018a, para. 22). The local client’s actions on behalf of its external intervening patron are less likely to be rejected by other constituencies within the target polity through concealing this external patronage. Thereby, it lessens the possibility of a coordinated response by political actors within the polity to the cyber-intervention as well as to social media disinformation influence campaigns. So-called legitimation domestically of a policy proposal by these clients typically requires that

this external actor's instigation and patronage of the local client and its policy positions remain masked. It must be at least questionable and plausibly deniable, i.e. target polity consensus around 100% certainty of foreign origination cannot be achieved. If it is not concealed, then it must be publicly justified by claiming it is a counteraction to the imperialist intervention of another external actor.

Concomitantly, one's own collaboration with external actors is self-servingly perceived as not being collaboration. The collaboration may be explicit, i.e. overtly or covertly receiving funds and other material support from an external actor. The collaboration may be implicit, i.e. benefiting from externally-supported social media disinformation campaigns that were not formally requested by the local actor. Since the expenditure of resources was not in the form of a direct allocation into a local client's bank account or other direct gift, it may be more readily characterized as insignificant. It is not likely to be viewed as treasonous, particularly if the external actor is already viewed as an ally. Some American and European national political actors and constituencies view Putin's regime in Moscow as a redoubt for traditional, so-called Christian, conservative family and national values (LaFranchi, 2016). Post-Soviet era cooperation with Putin's regime is less likely to be viewed as vulnerable to charges of treason. It is rather to be seen as a recourse and resource to resist the assimilationist cosmopolitanism that so-called globalist values and their transnational and local carrier constituencies pose. According to this worldview, they are allegedly a threat to the nation's sovereignty and therefore ultimately to the nation's very existence.

American conservative populist nationalists have dismissed allegations that the Trump campaign won the 2016 presidential campaign with significant covert assistance from Moscow (Buskirk, 2018). They apparently view the threat to the American nation from globalist forces as so dire that they need allies from corresponding conservative populist nationalists in other polities rejecting globalization (Tharoor, 2016). In accordance with the psychological balancing maxim that the enemy of my enemy is my friend, they tend to perceive these related nationalists in accordance with the positive, ally stereotype (see Table 1). Treason never occurred; treason occurs only in promoting the influence of an enemy. Conservative Christian nationalist, anti-globalist Russia is not an enemy. Cooperating in the influence efforts by an initiator actor perceived, self-servingly or otherwise, as having benign motives is not treason:

[...] Trump lavished praise on the Russian hacking effort [against the Democratic National Committee, with this material later distributed by Wikileaks (BD)]. Referring to State Department emails that were deleted from Hillary Clinton's private email server, Trump announced at a campaign press conference: "Russia, if you're listening, I hope you're able to find the 30,000 emails that are missing . . . I think you will probably be rewarded mightily by our press." One month before the election, Trump announced: "I love Wikileaks." Trump clearly understood that the Russian hack was politically beneficial to his campaign [...] a study by Politifact found that Trump referred to Wikileaks a total of 124 times during the last month of the campaign (Gaughan, 2017, 104). Gaughan describes Trump's response to Moscow's actions as "stunning" (Ibid.). Proving intent to participate wittingly in a criminal conspiracy or collusion is necessary to convict a participant on a charge of distributing illegally obtained classified or proprietary information (Savage, 2018a, Savage, 2018b).

Intermediaries between Julian Assange, Wikileaks' founder, and Russian intelligence agencies providing the hacked emails facilitates legally "plausible deniability" regarding Assange's intent in obtaining them (Barnes, Goldman and Savage, 2018, para. 23). Gaughan's theme is that the 1970's-era US Federal Election Campaign Act (FECA) is outdated. The evidence is not clear that the Trump campaign's Russian contacts were illegal under FECA (2018, 104). Not surprisingly, at least one prominent Trump partisan views them as not illegal, not to mention treasonous (Buskirk, 2018). Trump in mid-2018 enjoyed exceptionally stable and high approval survey ratings among Republican party self-identifiers at 88%, while 7% of Democrats rated his performance positively (Dunn, 2018). In sum, among Trump partisans, treason is not an issue, except insofar as Trump opponents attempt to make it an issue to weaken Trump domestically. Republican party self-identifiers tend not to share the view of post-Soviet, anti-globalist Russian foreign policy behavior

and capability as being urgently dangerous to the US. Benefitting politically from Russian interference within the US polity does not constitute treason. The utilization of Russian influence does not justify in effect nullifying the 2016 US presidential election result and the subsequent US foreign and domestic policy process outcomes that derive from it.

Table 1 shows the negative and positive image simplification tendencies, i.e. stereotyping, towards which political contestants engage upon confronting a perceived challenge, whether it be threat or opportunity. The positive ally stereotype of another is derivative of a shared perceived threat from another actor, i.e. the enemy of my enemy is my friend. On the basis of the components of the stereotype of a target held by an initiator, the initiator adopts behavioral tendencies, i.e. policy pattern inclinations. As simplifications, stereotypes are in opposition to perceiving complexity in the internal politics determining the policies of a target actor and contribute to ineffective policies, or worse. Stereotyping associates with intense emotional affect and constitutes a pathology in the initiator actor’s policy making process. Nationalism associates with stereotyping (Cottam and Cottam, 2001, 99-121). A negative comparative evaluation of self with a perceived, threatening, aggressive target actor seen as superior in capability and culture leads to the conspiratorial worldview inherent in the imperial stereotype.

Table 1: Image Attributes of a Perceived Source of Comparative Challenge (I.E. Threat or Opportunity) to Perceived Status of the Nation

Image/ Stereotype	Capability (as Perceived)	Culture (as Perceived)	Intentions (as Perceived)	Decision Makers (as Perceived)	Threat/Opportunity (as Perceived)
“Enemy”	Equal	Equal	Harmful	Small elite	Threat
“Barbarian”	Superior	Inferior	Harmful	Small elite	Threat
“Imperial” (stereotype of targeted imperial power by the colonial/client) [emphasis BD]	Superior	Superior	Harmful	A few groups	Threat
“Colonial/Client” (stereotype of targeted colonial subject by the imperial power)	Inferior	Inferior	Benign	Small elite	Opportunity
“Degenerate”	Superior or equal	Weak-willed	Harmful	Confused, differentiated	Opportunity
“Rogue”	Inferior	Inferior	Harmful	Small elite	Threat
“Ally” (the individual social relationship analogue is “friend.”)	Equal	Equal	Good	Many groups	Threat (jointly shared towards a third actor by two “allies”; i.e. the enemy of my enemy is my “friend”)

The “ally” stereotype is derivative of a perceived intense threat (Cottam and Cottam, 2001, 98). Western conservative populist nationalists are prone to perceive an imperial threat to national sovereignty from globalization and its perceived globalist advocates. These conservative populist nationalists are correspondingly predisposed to perceive other conservative populist nationalists in the international community as external allies in their respective internal struggles with their perceived globalist adversaries including their domestic agents. This table was also reproduced by the author in an earlier article (DeDominicis, 2013, 52).

In this worldview with Russia as an ally, conservative populist nationalists from Russia having influence in the American polity is actually benevolent. It is certainly not a source of treasonous threat since both are supposedly fighting common enemies, e.g. political Islamist militants as well as transnational governance networks undermining traditional values. Corresponding historical cases include American prevailing views regarding London’s influence over US foreign policy in the twentieth century and the influence of the Zionist lobby today. Sheldon Adelson with his wife, Miriam, were the biggest donors to Republican 2018 midterm congressional election campaigns. Their support acknowledges the Trump administration’s intensification of US backing for Israel, particularly moving the US embassy to Jerusalem from Tel Aviv (Peters, 2018). Immediately after the November 2018 US midterm elections, Trump awarded Miriam Adelson the Presidential Medal of Freedom (Krugman, 2018). In this worldview, the Cold War has been replaced by a loose alliance of nationalist actors who collectively see themselves resisting globalists seeking

to undermine and eventually erase national sovereignty (Chhor, 2017). Putin's Russia is in the camp of the former, supporting other nationalists such as the formerly-named National Front in France, and the Trump political phenomenon in the US (Henley, 2017). The political far-right has long fixated on George Soros' alleged globalist activities (Porubcansky, 2018). At least one EU establishment figure has called such populist nationalist forces a "fifth column" in Europe alleging hidden substantial support from Moscow (Stone, 2018). Each camp uses the supposed treasonous, conspiratorial collaboration of the other with external forces to justify its own cooperation, if not collaboration, with its external allies. The US rightwing religious political movement has been noticeably reticent to call attention to, not to mention condemn, the Trump administration. "Republican promises to shift the Supreme Court further to the right ... have been one of the major reasons conservatives say they are willing to tolerate an otherwise dysfunctional Republican-controlled government" (Peters and Dias, 2018, para. 8).

The Cold War demonstrated how great powers fight their conflicts in the nuclear setting. A primary imperative is to maintain the greatest degree of control possible over potentially escalatory conflict dynamics. The US government has not formally declared war in its use of deadly force in international relations since the Second World War. One aim has been to avoid attempting to formulate a national public consensus that would politically further constrain presidential decisional latitude in a crisis (Boylan and Phelps, 2001). States are more likely to combat indirectly, by competing for influence within the polities of third actors. For this type of covert intervention to have greater effect, the source of the disinformation and black propaganda must be interpreted to be within the target polity itself. This imperative derives from the rise of mass public political participation including the ascent of nationalism and the preoccupation with national sovereignty. The proponent of the disinformation who is external to the targeted national polity must be not only hidden. The product must be portrayed as a product of autonomous elements within the targeted polity. "Black Elevation" is one notorious case regarding a covert Russian government-propagated Internet-based US influence campaign during the 2016 US presidential election campaign (Frenkel, 2018). It built on already-existing American societal polarization around the Black Lives Matter movement. Intensifying polarization through encouraging opposing sides simultaneously appears to be the Russian modus operandi (Conger and Savage, 2018). News reports reiterate the efforts by these Russian state actors to keep their lobbying efforts hidden (Rosenberg, Vogel and Benner, 2018).

Disinformation campaigns obscure their external patronage to avoid interpretation of the motives of the collaborators that would allow for target perceiver dismissal of the misinformation as foreign propaganda (Roose, 2018c). Moscow's interest in doing so lies partly in the Cold War legacy of such programs (Allen and Moore, 2018, Abrams, 2016). Prior to social media disinformation campaigns, the importance of identifying a source of organized political effort as a foreign government has expression in the requirement to register as a foreign agent. US law enforcement agencies arrested former Trump presidential campaign manager Paul Manafort for violating the US Foreign Agents Registration Act (FARA) among other charges (Vogel, 2018). Trump US presidential campaign manager Manafort hid the Ukrainian government as the client behind his firm's lobbying activities on President Yanukovich's behalf. The unfolding of the 2016 US presidential campaign and its consequences have revitalized the previously somnolent enforcement of FARA (LaFraniere, 2018).

Public international law has long required that individuals working as agents of influence for a foreign government must declare publicly their status. "States have always vigorously protested and claimed compensation when foreign States have exercised on their territory public [i.e. state government-orchestrated (BD)] activities that have not been previously authorized. They have also reacted in this way when the public action on their territory had been performed secretly or by State agents allegedly acting as private individuals" [*sic*] (Cassese, 2005, 51). Under pressure from the US government, Facebook now requires that purchasers of political ads verify that they are "United States citizens or permanent residents" (Frenkel and Isaac, 2018a, para. 11). A "loophole" in Facebook's new ad policy "allows advertisers, once they have verified their identities and are approved to run political ads, to fill the "paid for by" field in their



ads with whatever text they want, essentially letting them disguise their identity” (Roose, 2018b, para. 12). Facebook reported foreign-based social media influence campaigns targeting the US 2018 midterm congressional elections and other global targets (Guynn, 2018).

Not only international actors seek intermittently to hide and deceive target perceivers regarding instigation of social action. Political donors may prefer to hide their contributions purposefully if legally feasible: so-called dark money donors (Ridout, Franz and Fowler, 2015, 156). They seek to obscure themselves as the source in order to avoid strategically undesirable interpretations of intent. Thereby, by avoiding disclosure they aim to generate or support the desired influence on the target by the discreetly or indirectly supported political campaign or lobbying effort. One media report quotes one Democratic party activist claiming that research shows, “[t]hey [American voters (BD)] really dislike dark money and any type of political spending [but they] trust outside-group ads more than they trust candidate ads” (Burns, 2018, para. 25). Astroturfing, “that much-loathed, much-feared practice of faking grass-roots support online,” utilizes the capacities of the Internet to more readily mispresent sources, levels and types of public support (Dewey, 2016, para. 4). Internet communication generates concern that large organizations disguise their identities to seek “grassroots” credibility for greater influence over their targets, i.e. they “astroturf” (Shafie, 2008, 401). Astroturfing at the international level involves for-profit companies hiding behind the façade of a non-profit, non-governmental organization (NGO) that implies universalistic humanitarian motivation. It thereby increases their influence within the process of global policy making. Durkee highlights the challenges of astroturf activism at the international business regulatory level regarding, for example, tobacco commerce. UN-approved regulations currently forbid for-profit businesses from the formal right of consultancy input into UN international treaty negotiations (2017, 206). For-profit corporations create and manipulate non-profit NGOs to mask their covert business input into UN international treaty-making via the formal designation as an UN NGO consultant:

As for transparency problems, the fact that the identities of the actors driving the agenda are obscured (an *opacity* problem) renders more complex the more common problem that it is difficult to determine an organization’s mission and, in turn, its fidelity to that mission (a *mission accountability* problem). These problems make it challenging for gatekeepers to do their job, which perhaps explains the fact that those gatekeepers have largely avoided excluding organizations for opacity or mission accountability issues (a *gatekeeping* problem). Finally, a legal regime that forces nonprofit organizations either to engage in astroturf activism or to not participate at all sacrifices benefits the private sector may otherwise offer to the lawmaking process (an *access* problem) [*sic*] (Durkee, 2017, 243-44).

Durkee calls for full disclosure of for-profit business influence in UN treaty-making by modifying the current international legal regulatory regime. “An international lawmaker must be able to identify and rely on the authenticity of the mission the organization pursues in order for the lawmaker to effectively assess that input” (Durkee, 2017, 245). I.e. the international lawmaker has to have a plausible opportunity to discern the ultimate motivation of the NGO to evaluate its input. Generally, by disguising its intent or instigation, a political actor thereby aims to generate the desired cognitive and affective response from the target perceiver (Aakhus, 2016, 202-03). The perceiver’s interpretation of the public campaign would be negatively skewed should the perceiver see the particularistic, for-profit motivation behind the advocacy of a public policy position. As Heider (1958[2015]) noted, participant observers as so-called naïve scientists tend to evaluate and attribute motives while interpreting the significance of a perceived action by another (Harris and Fiske, 2008, 210-11, Körner, Tscharaktschiew, Schindler, Schulz and Rudolph, 2016, 2-3). Inferences regarding a perceived causal actor’s mental state are critical for understanding and explaining social phenomena (Vogeley, 2013, 297). Political contestants generating disinformation have an incentive to hide their partisan association so that the receiver is less prone to dismiss the disinformation for what it is, i.e. partisan propaganda. The rise of dark ads on social media is a feature both of domestic and external covert disinformation campaigns (Singer, 2018b).

According to social psychological concepts of motivational attribution, cognitive dissonance and balancing, a perceiver will tendentiously impute plausible causation to a political act if one is not explicitly provided (Pishghadam and Abbasnejad, 2017, 137). The notion of transparency requires awareness of sponsorship for a political act. With or without transparency, the perceiver will likely attribute, correctly or not, sponsorship. Making this sponsorship known allows the perceiver to have what he or she believes to be the minimum necessary information. It is needed to attempt plausibly to predict the political implications of the perceiver's own choice of behavior in response. On the basis of understanding the source and motivation, and therefore the real significance, of the public statement claim, the perceiver selects his or her own response to the attempt to persuade this perceiver.

### Regime Control and Political Legitimation

The history of Donald J. Trump's national political career raises questions about whether the chief executive of the US government actually believes the conspiracy theories which he has promoted continuously:

"We have a president who pushes these ideas because he built a coalition that believes in conspiracy theories," said Joseph Uscinski, an associate professor of political science at the University of Miami who studies conspiracy theories. "He has to continue pushing these ideas to keep his people motivated" ... "If we had President Jeb Bush, we wouldn't be wondering if he believed these theories" (Roose, 2018a, para. 21, 25). Trump politically exploited successfully the American cultural "institutionalized technique for recreating the sacred" to become the national leader (Mast, 2016, 243, referencing Durkheim, 1912 [1995] and Shils and Young, 1953). A core component of Trump's coalition are evangelical Christians perceiving a threat to American national sovereignty, equated effectively with protecting traditional patriarchal White Judeo-Christian supremacy (Hummel, 2016, 3, 5). The global postwar rise of political sectarianism emerges amidst religious community political mobilization in response to intensifying community challenges from perceived out-groups (Martin, 2014). Political Islam has been excoriated in Western media, but it is a global phenomenon in response to weakening of traditional community ties and bonds of solidarity (Sajoo, 2017).

National self-identity expression amidst globalization's attendant economic insecurity and social anxiety tends increasingly to shift in terms of compensatory attitudes to a traditional, conservative focus. It emphasizes stereotyped romantic parochiality of the nation: workplace, home, family and church. When utilitarian economic control incentives weaken, i.e. "eudaemonic legitimation" declines, then this neo-traditional propaganda may compensate as nationalism remains a political regime's foundation (Robinson, 2017, 348). The political struggle over legitimation is as much about controlling public political participation in the policy making process as it is about promoting it (Brown and Jones, 2000). Outsourcing and privatization is a way to manage public opinion participatory critique by obfuscating the linkage with public/state institutions. Interference in the sovereign affairs of the national polity critically threatens the authority of perceived political collaborators/traitors, including their policy proposals.

Perception of imperialism is subjectively defined; the degree and extent of external actor's influence within the target is intolerable, i.e. imperialistic, if the target actor(s) perceive it so. The issue then becomes how widespread and intense within the polity is this perception of imperialism. Worldwide conservative nationalist populism as a reaction to globalization is characterized by elements of the imperial stereotype motivating it in reacting to global capitalism (see Tables 1, 2 and 3). The imperial stereotype reflects the Hobson-Lenin perception of motivation of global capitalism (Cottam, 1977, 70-71). The imperialist's motivation is to exploit the perceiver's national community via neo-colonial instruments of informal, behind-the-scenes control (Ibid.). Table 2 elaborates upon the imperial stereotype in terms of the politically relevant components of the simplified image in regard to policy making in an initiator actor perceiving an imperial threat from a target. This image associates with familiar and tragic conspiracy theories that still emerge in today's political discourse, e.g. anti-Semitism. In the contemporary setting of nuclear weaponry and globalizing economics, actors holding this stereotype tend to see the threat from multilateral

international political economic agreements and frameworks. Trump exploited this sentiment as a critical component of his successful presidential election campaign.

Table 2: The Imperial Stereotype

Motivation of Target:	A Simple, Single-Minded, And Aggressive Motivation to Control in Order to Control, Exploit and Assimilate.
Decisional Locus of Target:	A diffuse and obscured but monolithic network decisional structure.
Decisional Style of Target:	Characterized by a superior degree of rationality and technical competence, sufficient to plan and orchestrate elaborate conspiracies, i.e. the hidden hand behind political events and trends.
Capability of Target:	Its capability advantage derives from the imperial power’s cultural and technical superiority. The imperial actor is extraordinarily clever and competent, and has access to virtually infinite external technical resources. The true nature of the hidden master plan may be revealed and the requisite national will and determination mobilized to counteract national assimilation through nationalist militant action. If the anti-sovereign national assimilation scheme it has propagated is revealed and resisted, then the highly rational imperial threat will seek new means of covert neocolonial imperial control. E.g. obstruction of multilateral trade, labor and finance liberalization is supplanted by UN-orchestrated global cooperation to combat alleged human-induced climate change.
Those Compatriots Who Disagree with the Above Portrayal of the Target:	Those citizens who fail to understand this picture of the imperial master are either traitorous imperial globalist agents or, at best, naïve dupes of traitorous imperial globalist agents.

*Data adapted from Cottam and Cottam, 2001, 111-14, Cottam, 1977, 70-73. The imperial stereotype derives from perception of threat from an actor perceived as superior in culture and capability. It typically is associated with colonial and post-colonial communities. It also applies in postmodern developed societies experiencing increasing socio-economic income differentials. As a consequence of globalization, production, commerce and financial transactions generate distribution of benefits tending toward the more highly educated as a minority of society. Those without higher education tend to remain at the base of the consumption percentile. 33.4% of US adults had a bachelor’s degree or higher in 2017 (United States Census, 2017). 65% of jobs in 2020 will require post-secondary education (Lumina Foundation, 2015).*

Table 3 summarizes the emotional affective and behavioral policy predispositions that associate with each negative stereotype; as noted, the ally stereotype is derivative of a shared perceived threat. The imperial stereotype leads to behavioral action by the initiator in unstable political conditions. The possibility of challenging the imperial threat is no longer perceived as hopeless because perceived weaknesses and vulnerabilities have emerged. The extended, deep 2008 global recession accelerated the pace of societal change, e.g. the election of an African-American as US President, intensifying the mobilization of conservative populist nationalism.

Table 3: Images and Policy Predispositions

Image/Stereotype of Perceived Challenger	General Policy Predispositions Towards Perceived Challenger	Policy Predispositions Towards Perceived Challenger in Intense Conflicts
“Enemy”	Wary suspicion, containment	Hostility, defense
“Barbarian”	Fear, form alliances	Preemptive strikes, precipitate alliance intervention (potential for genocide)
“Imperial” (stereotype of the imperial actor by the colonized)	When domination is stable: fear, avoid conflict, submit	When conflict is unstable: anger, shame, struggle for liberation
“Colonial/Client” (stereotype of targeted colonial subject by the imperial actor)	Paternalistic policy guidance and direction	Most commonly nonviolent repression
“Degenerate”	Contempt, mobilize for competition	Disgust, offensive aggression
“Rogue”	Derogate, isolate	Hostility, violent repression (potential for genocide)

*Each image/stereotype has policy behavior trend patterns that associate with it (Cottam and Cottam, 2001, 100). The deep, extended global economic recession in 2008 disrupted the regime control system in place in the US and elsewhere as illustrated by the election of an African-American as US president and his re-election in 2012 (see Table 6, Figure 1 and Figure 3). US White traditional conservative self-identifiers tended to react strongly to this accelerated political evolution in the American polity. The vulnerable Democratic female candidate for president as Obama’s successor further instigated a response from this constituency viewing its position under continuing challenge, energizing the Tea Party movement and Trump presidential campaign. This table was also reproduced by the author in an earlier article (DeDominicis, 2013, 54).*

### The Imperial Image and the Plausibly Deniable Hidden Hand

Cottam and Cottam note that nationalistic elements within the so-called developed world continue to see neo-colonial imperial threats to the sovereignty of the nation. Progressive elements have tended to abandon nationalism as a progressive vehicle and as an ideal for promoting social change, at least to varying degrees. This abandonment is most advanced among the progressive elite in continental Western Europe (2001, 48). Significant components of the mass public remain nationalistic and they can be mobilized by political entrepreneurs, especially during periods of accelerating societal change (Ibid., 53). In the conspiratorial imperial worldview, on the surface the system appears to operate through local leaders. Cottam and Cottam note that in fact this nationalistic element tends to view the imperial threat as pulling the strings, often at a level of great detail. Orchestrating developments of extraordinary complexity and doing so with great subtlety is the view of this conservative nationalistic/populist societal constituency towards the perceived imperial threat. The description of this style has it operating through a “hidden hand” (2001, 112-13). This hidden hand purportedly orchestrates conspiracies working through suspect, scapegoated groups and particular, publicly vilified individuals (Druxes and Simpson, 2016, 8). Budapest-based Hungarian analyst Ivan Dénes, witnessing the rising political hegemony of Viktor Orban’s Fidesz conservative nationalist populist movement, describes the rhetoric these movements employ:

The offenders are never flesh-and-blood figures, but rather mythic beings exempt from the rules of human coexistence and communication. [...] It goes back to disastrous experiences of political terror, mass murder, military occupation, or territorial loss (cases, such as: Italy, 1796-1797, 1809; Germany, 1806, 1918, 1945; Spain, 1808-1809, 1936-1939; France, 1793, 1870, 1940; Poland, 1795, 1831, 1863, 1939, 1947; Hungary, 1849, 1920, 1944/1945, 1949, 1956/1957). And these instil an overwhelming fear of the possibility of their reoccurrence, the whole community trying to avoid this at any price and by any means. Its usual concomitant is a conspiracy theory with the victimized image of the community self and a diabolic image of an enemy bent on conquering, exploiting or annihilating it [*sic*] (2012, 521-22). Echoes emerged in Trump’s January 2017 inauguration speech claiming “American carnage” within the disproportionately white US interior due to global finance and trade liberalization (Berezin, 2017, 327).

Trump’s electoral strategy focused on traditional conservative American White mobilization against groups that appear to threaten traditional values corresponding with the former’s authority predominance. It invoked scapegoating to appeal to those resenting loss of socio-economic status due to increasingly inadequate skills in the globalizing American economy. “I love the poorly educated!” Trump shouted in early 2016 at one campaign rally (Berezin, 2017, 324). In Germany, “right-wing populism generally holds Russia up as a model against local democratic elites” (Druxes and Simpson, 2016, 5). The European regional integration variant of globalization appears to benefit most strongly a constituency which tends to be younger and multilingual along with higher levels of higher educational certification:

[...] [Y]ounger Europeans are more likely to report an attachment to the European Union than those 55 and over, according to the most recent Eurobarometer survey. In Britain before the [Brexit (BD)] balloting, surveys showed that 57 percent of voters ages 18 to 34 wanted it to remain in the bloc. (An identical percentage over age 55 supported the Leave campaign.) (Breedon, 2016, para. 14). They are prone to exploit the substantive social mobility and social creativity/self-identity innovation opportunities that Europeanization creates for the multilingually-skilled and more highly-educated.

As Cottam and Cottam note, social creativity/self-identity innovation opportunities involve the individual or group perceiver adopting different comparative dimensions. These dimensions must be materially feasible and substantive as a basis for engaging in action responses, e.g. Europeanization, to a negative comparative self-evaluation. In response to an unfavorable in-group comparative self-evaluation, individual social mobility and ingroup social creativity support peaceful conflict resolution. Social competition, in contrast, involves severing the perceived, zero-sum competitive relationship. It may be exhibited by a

national minority seeking self-determination by seceding, violently or otherwise, to create a sovereign state (2001, 98). In a nation state, this perception of threat as perceived by the nationalistic, traditional constituency today tends to shift towards those perceived domestic proponents of globalization. Political entrepreneurs, e.g. Trump, may emerge to exploit this perception of fear and encourage perceptions of injustice and unfairness during these periods of accelerating societal change. Such periods include phases of acceleration of extensive socio-economic restructuring of society, as occurred in the developed world in the 1930s and again in 2008.

Cottam and Cottam note that when the weaker, subordinate group considers the relationship and interaction as unjust, then emotions and action preferences will be different on both sides. Experiencing jealousy, the weaker party seeing an imperial threat will make claims, argues Smith (1993, cited in Cottam and Cottam, 2001, 113). Equality (of resources, status, or power) will be a demand while the conflict receives considerable attention. Even though they are well aware of the potential consequences, rebellion may be the consequence as anger and shame accompany the feeling of jealousy and can push people toward antagonistic and hostile actions. An important component in producing the propensity for hostile action toward a more powerful group is the lack of what the subordinate group perceives as fairness. Such actions are likely when social mobility and creativity are not perceived as options and when the subordinate group identifies alternatives (2001, 113-14). In such situations, i.e. the deep global recession that began in 2008, the extremity of mutual stereotyping increases among constituencies polarizing around intrastate traditional political polarization fault lines.

Cottam and Cottam claim that the conditions of not having options for social mobility and creativity occur when the superior group is not permeable and when the salience of the attachment to one's group is highest (Lalonde and Silverman, 1994, cited in Cottam and Cottam, 2001, 114). For the latter conditions to be in place, the subordinate group must perceive the system of dominance to be unstable. This instability provides the subordinate group with cognitive alternatives to the current system. The salience of social identity increases people's sense of reality and arousal in such situations and emotional intensity would increase. The identification of alternate options together with threats to prevailing goals and standards can provoke these conditions (2001, 114). The insurgent Trump campaign articulated alternate, stereotype-based options while simultaneously intensifying perceived threats to traditional norms in mobilizing support. As explained below, Internet social media facilitate increasing the salience of social identity.

Labelling as rational or irrational reflects the colonial stereotype when perceiving an influence expansion opportunity challenge from a target perceived as weaker in culture and capability (see Tables 1 and 3, Cottam and Cottam, 2001, 118-21). An actor seeking to civilize a target weaker in perceived capability and culture will determine what is appropriate behavior, and inappropriate behavior is irrational. A perceived barbarian threat from a powerful actor would also be characterized as irrational as well as cruel and dangerous (see Tables 1 and 3, Cottam and Cottam, 2001, 108-11). In sum, the terms rational and irrational are rhetorical political weapons aiming for influence if not control by the deployer of these terms. In the policy making process, the term is also employed as part of the political struggle over policy options in terms of stereotyping opponents. Allies of globalization would point to the material wealth that epistemic communities such as neoclassical economists would highlight as a consequence of trade liberalization (Mkandawire, 2010). Some structural realists would also point to the benefits of international organization under US leadership for its allies to gain security benefits from American benign hegemony (Steele, 2007). Being rational in these terms is being a supporter of neoliberal and structural realist formulae for promoting global peace and prosperity under US postwar global leadership.

## DATA AND METHODOLOGY

This study has relied on a survey of the public record as well as triangulation using conclusions and information provided in peer-reviewed scholarly publications. This analysis relies upon *New York Times*

investigative reporting partly because scholarly research indicates that it is the most influential US news outlet via agenda setting for other media news outlets (Denham, 2014, 18-19). This study outlines a framework for comprehending the political incentives behind externally-originated covert disinformation operations as well as local political propaganda campaigns. Note that the legacy of Cold War covert operations is used to justify current covert operations, e.g. the Iranians have called their cyberespionage hacking corps the “Ajax Security Team” (Sanger and Erlanger, 2014, para. 14). The name “Ajax” corresponds with the codename for the 1953 CIA operation that overthrew the Iranian secular nationalist prime minister Mohammad Mossadeq to install Shah Mohammad Reza Pahlavi (Blout, 2015, 35).

During the Cold War, the American leadership tended to defer from highlighting the covert, long-term, continuous struggle with the USSR to intervene globally (Carson and Yarhi-Milo, 2017). Competitive pressures confronting the for-profit media would also comport with its consumer public’s emotional predisposition to avoid cognitive dissonance by deemphasizing these events. These US actions, while supposedly necessary to contain a nuclear-armed, Soviet enemy aggressor, were discomfiting to an American public generally disengaged from foreign affairs (Cottam and Gallucci, 1978, 32-33). The American romantic self-image included a commitment to national self-determination. Participating to varying degrees in the overthrow of foreign regimes would be generally uncomfortable for American public opinion due to “cognitive dissonance” (Adie, 2003, 13). In the Cold Warrior viewpoint, American citizen voters often did not understand the nature of threat to their national security that enemy Soviet worldwide subversion efforts posed. The Soviet leadership had the advantage in that it allegedly did not have to worry about Soviet public opinion. The US national security establishment would need some degree of insulation from American public opinion pressure in carrying out its long-term global struggle with Moscow and its allies, a struggle that was often covert (Segal, 1994, 389-90).

The end of the Cold War appeared to vindicate this long-term battle of the vast US national security establishment (Platon, 2015). The USSR, seen after the Second World War as bent on attempting what Hitlerian Germany failed to achieve, surrendered its empire and collapsed (Cox, 2011, 629-30). The Cold War witnessed terrible suffering and the deaths of millions in places like Southeast Asia. Yet, the imperialist, nuclear-armed Soviet Union was defeated and expired without another, worldwide hot war. In this Cold Warrior worldview, forty-five years of persistent resistance by Cold War containment institutions, despite numerous obstacles and intermittent failures of US political leadership, had succeeded. These institutions included the intelligence and covert action arms of the US national security establishment, who were able to compensate for the (alleged) intermittent failures of US political leadership.

Few international relations experts anticipated Gorbachev’s détente strategy not to mention the end of the Cold War and the peaceful dissolution of the USSR (Winzowski, 2017, 682). Yet, this apparent victory appeared to illustrate to them that they understood the challenges to US national security, while the mass public requires leadership. If leadership is poor, then public opinion will not be supportive. Even so, among the most militant Cold Warriors, the stakes were too high to allow US national security policy to be made by fickle public opinion as represented by the Congress. Lt. Col. Oliver North admitted to lying to the US Congress about US covert operations for this reason during the public US Congressional Iran-Contra hearings (“Special to the New York Times,” 1987). Congressman Lee Hamilton (D-Ind.), chairman of select House committee on the Iran-Contra scandal, responded, “the task of leadership is to build public support for policy” (Hamilton, 1987, para. 23).

Public opinion abroad was to be influenced, led and, if necessary, circumvented internationally and a similar imperative had come to apply to US domestic public opinion. These Cold War trends lead to an increasing convergence between US military and covert intelligence operations (Chesney, 2012). The US national security establishment that emerged out of the Cold War claiming victory was strengthened and adapted to meet the new challenge of the G.W. Bush administration’s war on terror (Patman, 2009). The post-Soviet Moscow security establishment interfered in the 2016 US presidential election to manipulate or at least

influence US public voter opinion. The consequences confirmed the necessity of leadership in shaping US public opinion by the US national security establishment (McGeehan, 2018, 56-57). The elected leadership should be the face of this control, a domestic form of internal, informal control over public opinion. It conforms with the elite paradigm of politics as articulated by Mills (1956 [2000]). Those not equipped educationally or temperamentally to participate satisfactorily in this US-led, Cold War-founded globalization may react negatively to their perceived marginalization. Donald J. Trump claims to represent them (Kardaş 2017, 8-9). Amidst this polarization, each flank may scapegoat and stereotype the other, instigated by the 2008 recession, the longest and deepest recession since the 1930s.

Trump's support base appears to represent the anxiety and insecurity of sections of American society that perceive a threat from the forces and consequences of globalization. They perceive a threat to their positive identity self-evaluation, and this threat is imperial in nature, i.e. superior in culture and capability: global capitalism and globalization. Global capitalism as well as the international regulation of its behavior and side effects is stereotypically portrayed and perceived as a threat to the sovereignty of the nation state. This segment of the public tended to support Donald J. Trump because they trusted him as a perceived American traditional conservative White advocate as having the political capacity to confront these forces. Trump is a "master of the deceptive arts [...] [and] in a treacherous world, you need a treacherous ally -- treacherous, at least, to your mutual enemies" (Ogden, 2018). Hence, "'I can't really say that anything he says is true," a Wyoming Trump supporter told us a few days ago, "but I trust him." More to the point, as his former press-manager-for-a-moment, Anthony Scaramucci, put it: "He's an intentional liar. It's very different from just being a liar liar.'" [sic] (Egan, 2018, para. 10-11).

#### The Globalization of Hybrid Warfare

This need to maintain plausible deniability as achieved through manipulation of social media had precedents in the rise of outsourcing of security operations to private sector contractors. The Russian government has relied on covert military outsourcing through mercenary groups associated with the Moscow authorities such as the Wagner group (Higgins and Nechepurenko, 2018, Ilyushina, Hodge and Shukla, 2018). After the collapse of the USSR, NATO outsourced military advising to a for-profit consultancy group of former US officers for Croatia's summer 1995 offensive to expel Serb forces to end the Bosnian war (Cohen, 1995). Booz Allen, Boston Consulting Group, and McKinsey closely engage the Saudi government in providing a wide range of national security-related services while simultaneously coordinating with Washington (Forsythe, Mazzetti, Hubbard and Bogdanich, 2018). The use of contractors as mercenaries or otherwise is an ancient practice because of its political utility (Peters, 2006). States view the outsourcing governments as having state responsibility for the behavior of these outsourced contractors, but to the public the outsourcer's control over them is obscured. A blowback danger is that the arms-length relationship leads to the potential for contractors developing capacities for government service to be co-opted via monetary gain by other governmental actors. Palantir, Cambridge Analytica and Strategic Communications Laboratories with relationships with state agencies apparently developed capacities exploited by other private actors. These actors may have had relationships with other state agencies (Confessore and Rosenberg, 2018).

Outsourcing these services including cyberattacks adds another layer of plausible deniability. Private contractors working with the US or Russian national security establishment can plausibly, if not convincingly, appear to be private actors responsible for their own deeds. Reporting of discussion for greater reliance on private contractors to replace US forces in Afghanistan is the latest proposal for US official state responsibility to be diluted. Erik Prince, the founder of the Blackwater firm involved in fighting at the beginning of the US occupation of Iraq, has proposed this privatization of western security activities in Afghanistan. The Kabul government's position appears increasingly precarious since the US drew down its force level to a small fraction of its troop strength at the height of the US-led occupation. Critics of this proposal include Brian Katulis, a senior fellow at the left-leaning Center for American

Progress. Katulis noted that privatization would make oversight of the Afghan fighting harder for Congress and others because knowing precisely what is happening in the war. One report quoted Katulis: “It makes an already murky position murkier ... The cost savings is not worth the potential damage to oversight of U.S. national security” (Lee, Kube and Lederman, 2018). The Trump administration confronts a political crisis due to its difficulty in delivering on its campaign promise to resolve favorably the “stalemate” in the generation-long Afghanistan war (Woodward, 2018, 222, 258, 260).

Making the public political situation murkier is in fact one of the tactical aims of privatization. By establishing an arms-length relationship via mercenary contractors, the government aims to obscure publicly its responsibility for policy actions undertaken by utilizing for-profit outsourcing. The aim in covert disinformation campaigns is to exacerbate polarizations within the target state that already exist (Satariano, 2018). Isikoff and Corn report that General Valery Gerasimov, chief of staff of the Russia’s armed forces, in February 2013 published an article in an obscure Russian military journal. Gerasimov outlined the harnessing of social media to “weaponize political divisions within another nation” through information warfare to weaken targeted governments and regimes (2018, 44).

Isikoff and Corn note that as one part of the reformulated doctrine of “hybrid warfare,” Gerasimov called for greater reliance on nonmilitary means to achieve political and strategic goals. The role of social media in facilitating what became known as the Arab Spring apparently illustrated the usefulness of social media for achieving desired political outcomes in targeted polities. “Frontal engagements” by military units would become “a thing of the past” (2018, 44). Isikoff and Corn labelled this portrayal the “Gerasimov doctrine” (2018, 190). The St. Petersburg-based, unofficial state sponsored hacking group, the Internet Research Agency, illustrated the effectiveness of this hybrid warfare tactic in the 2016 US presidential campaign. “With fewer than a hundred operatives ... the I.R.A. achieved an astonishing impact: Facebook estimates that the content reached as many as a hundred and fifty million users” (Osno, 2018, para. 12). The degree of American cultural discourse awareness and sophistication in the Agency’s ongoing “Project Lakhta” American polarization promotion disinformation campaign has increased (Goldman, 2018, para. 5). The US government has intensified its cybernetic countermeasures (Barnes, 2018). Russian specialists trained Burmese military personnel in social media disinformation techniques, exacerbating virulent domestic ethnic animosities and targeting externally-based dissidents (Mozur, 2018).

The for-profit motive has interacted with the national security establishment to promote outsourcing. Digital media companies oppose restrictive privacy laws because they reduce their capacity to aggregate and sell data to public opinion campaigners as well as private sector marketers (Confessore, 2018). The *New York Times* reported that Facebook expanded its own outsourcing to a public relations firm, Definers Public Affairs, beyond media monitoring to campaigning against further government regulation. Definers in summer 2018 tied the Facebook regulation campaign to liberal Jewish-Hungarian billionaire financier and philanthropist George Soros. Soros has long been a focus of globalist conspiracy theories among conservative nationalist populists (Frenkel, Confessore, Kang, Rosenberg and Nicas, 2018, para. 94). Concerns about national economic technological competitiveness have also inadvertently facilitated hybrid warfare. The developers of so-called 5G digital technology highlight the necessity of gathering personal data to create communication links between a consumer and his or her device to cater to the consumer’s preferences (Wallace, 2018, para. 1). 5G technology has also been referred to as the internet of things. So-called smart machines rely on aggregated data of its owner’s preferences through recording and analyzing the owner’s myriad choices. It follows much the same logic as targeted advertising towards specific viewer audiences. Cyberattacks are useful in the nuclear era because they are disruptive and costly but identifying the source is difficult and time consuming (Sanger, 2018b). Culpability is never so obvious because undeniable public evidence of an attack is absent. The US and Israel have never admitted to their Stuxnet cyberattack against Iran’s nuclear weapons program, which the latter never publicly admitted existed (Sanger, 2018b). As blowback, Stuxnet via the Internet then infected computer systems far beyond Iran (Broad, Markoff and Sanger, 2011). Irrefutable evidence of a Pearl Harbor-type cyberattack would generate



a nationalist public reaction that would necessitate a proportionate response in the era of mass politics. Any government failing to do so would risk regime change.

Strong retaliation to a cyberattack that is demonstrably attributable to another regime that causes real regime instability may also generate concern regarding escalation. According to Isikoff and Corn, in contemplating retaliation for Russian cyberattacks during the 2016 presidential campaign, the Obama administration considered sanctions. Rogue regime-type public sanctions like those applied to Iran, e.g. banning any firm doing business with Russian banks from working with US financial institutions, were contemplated. Highlighting Obama administration trepidation regarding such retaliation, one administration official reacted that such sanctions would be interpreted by Putin as an attempt at regime change. “Speaking metaphorically” according to Isikoff and Corn, a top Obama aid responded “this could lead to nuclear escalation” (2018, 195). Media reports highlight that US security officials limit their cybernetic countermeasures against Russian hacking efforts to avoid provoking Russian escalation to direct military confrontation (Barnes, 2018). The political vulnerability of the nuclear-armed Russian regime, together with the relative deprivation of the Russian economy, themselves are a source of diplomatic bargaining leverage towards the US. In sum, the US has more to lose economically, while perceived post-Soviet Russian authority desperation and irrationality in confronting a much more powerful US constrains the US (Cottam and Gallucci, 1978).

This competitive interference is directed at targets that go far beyond officials in government bureaucracies. They include targets within the broader polities, including constituency leaders and activists to increase polarization between constituencies in the polity. Establishment elite control in the targeted polity becomes more difficult as these constituencies transfer their allegiance and obedience to political entrepreneurs seeking access to resources. Precedents can perhaps be located in the total warfare doctrines that came to prevail during the mid-twentieth century, i.e. all societal constituencies contribute to the war effort (McGeehan, 2018, 52). Therefore, they are prospective targets, even if they are formally civilians. The post-1945 nuclear setting also required specific, covert/unofficial/informal targeting of particular civilian as well as military constituencies if only to reduce the potential for uncontrolled escalation (Carson, 2016).

This theme of intensifying polarization has been emphasized in recent media reporting on Russian state-sponsored social media activity among the US public. Social media globally has contributed to the intensification of polarization around long-existent cultural, racial, ethnic and sectarian conflicts due to the nature of the social media business model (Shane, 2017). Social media account holders can self-select to be on particular distribution lists for particular content, including content that portrays itself as news. Social media platforms like Facebook use algorithmic formulae to select and direct content regardless of accuracy to selected account holders. These computer software formulae route this content on the basis of account holder interest as algorithmically inferred from their aggregated previous content viewing selections, selected likes/dislikes, selected friends, and other inputs. A result is the intensification of so-called echo chamber effects on citizen perceptions and attitudes, effects that associate with stereotyping (DiFonzo, Suls, Beckstead, Bourgeois, Homan, Brougher, Younge, Terpstra-Schwab, 2014). This term describes the consequence of the opportunities for news media consumers to select news outlets that comport with their pre-existing ideological views. These outlets have vastly expanded beginning with the rise of cable television. The US Federal Communications Commission during the Reagan administration accelerated this process with the jettisoning of the Fairness Doctrine in 1987. Adopted in 1949 by the Federal Communications Commission, “requiring a reasonably balanced presentation” of alternative political opinions, it built on the earlier 1927 Radio Act (Lepore, 2018, para. 7). The Fairness Doctrine was rarely enforced (Clogston, 2016, 377-78).

The intensely-competitive for-profit news media business generates products for consumption that ideologically interpret current events in accordance with various editorial slants. The modal consumer/citizen tends to make news media consumption choices that correspond with their existing

political perceptions and attitudes. Discordant information and framing that generates unpleasant emotional responses because it conflicts with these strongly held perceptions and attitudes can much more readily be avoided. The effect is to reinforce pre-existing consumer/citizen political perceptions and attitudes on a variety of issues. The greatly increased diversity of news sources has reinforced self-validation of socio-political self-identity for the media-consumer/citizen. He or she can find apparent confirmation for their pre-existing more or less intensely held political views from intensely competitive for-profit news media product vendors. The latter stridently claim to be authorities as part of their marketing strategies, thereby supporting this self-validation, including a belief of membership in a legitimated social identity community. These political views include implicit and explicit shared elements of favored worldviews regarding political causation and effects. These worldviews include identification of benign and malign actors and their influences, real or conspiratorially imagined.

Emotional affect associates with stereotypical image formation (Cottam and Cottam, 2001, 99-105). Actors more inclined to nationalistic behavior are more prone to stereotyping and affect, *ceteris paribus* (Ibid., 105-121). As national news outlets, framing of news reports tends to relate ultimately to implicit or explicit implications for the well-being of the nation (Horton and Brown, 2018, 3). The definition and conceptualization of well-being and even survival of the nation are also defined according to the respective worldview/editorial slant. Emotional affect among the public audience/citizenry constituency/market share is likely to be aroused. It must be aroused; emotional stimulation and gratification drives consumption and consumer allegiance while competing for advertising and subscription revenue. The façade of objectivity in news reporting must be maintained and lip service paid to it as part of the marketing strategy for all news products to be promoted for consumption as news. Maintaining this consumer allegiance in what has become a fragmented, very diverse set of ideological niche markets becomes a business imperative. Serving/pandering to these niche market expectations to maintain market share tends to reinforce and intensify these pre-existing viewpoints.

This dynamic of maintaining media-consumer/citizen allegiance in this context tends towards stereotyping non-conforming views as not only incorrect, but morally wrong, even reprehensible. In effect, reinforcing political in-group tendencies concomitantly reinforces differentiation from political out-groups (Bruchmann, Koopman-Holm and Sherer, 2018). The news media thereby acts metaphorically not only as an echo chamber for the media-consumer/citizen but also as an amplifier. The news media rather less serves as a set of institutions where the consumer/citizen can expose their preconceptions to testing through contact with additional information. This latter portrayal may always have been at best an ideal. It may have been part of the general metaphor of the news media as the “watchdog of democracy” (Orzeata, 2016, 135). Another is the media as the vehicle for the “marketplace of ideas” (Asenas and Hubble, 2018, 38). Discordant information was harder to avoid or dismiss in the postwar era with at least the pro-forma existence of the Fairness Doctrine and national television news limited to three networks.

The echo chamber effect is a term used to describe a source of American political polarization with the development of the Internet-based social media vehicle for media product distribution (Matakos, Terzi and Tsaparas, 2017). The rise of Internet social media has greatly magnified this dynamic, at times with violent, tragic results. One report noted that a Sri Lankan militant used Facebook to broadcast paranoia and hatred that contributed to an anti-Muslim riot that killed one person and made many more homeless. The report quoted a Sri Lankan official several days after the arrest of this militant, “Facebook doesn't seem to get that they're the largest news agency in the world” (Fisher, 2018, para. 8). Facebook's algorithmically driven content distribution system reflects these dynamics, with “reality-distorting misinformation that can run rampant on the newsfeed, which promotes content that will reliably engage users; extremism and hate speech that tap into users' darkest impulses, and polarize politics; malicious actors granted near-limitless reach on one of the most sophisticated communications platforms in history, relatively unchecked by social norms or traditional gatekeepers; and a private company uneager to wade into contentious debates, much less pick winners and losers” (Fisher, 2018, para. 10).

The imputation of motive is essential in planning personal as well as organizational and national strategy towards another actor. Transparency regarding financial sponsorship of political advertisements has always been part of contemporary regulation of campaign financing (Bauer, 2018). The concern regarding corporate influence over politics relates to the vast financial reserves available to the private sector. Voters need to know the funders behind a political campaign to predict with a degree of self-assurance what a successful campaigner will do once in office. It assumes that financial incentives are an important motivator for political behavior. Concurrently, campaigns require funds to succeed regardless of their ultimate motivation or strategic goal. Identification of the financial donor to a campaign provides insights into what those strategic goals may well be. Predictability is necessary to reduce insecurity and to limit fear and polarization within society. Transparency in sponsorship facilitates inferring motivations and therefore permits the citizen voter to predict with more security the consequences of his or her own political participation actions. The absence of transparency contributes to anxiety and fear and the consequent stereotyping of global capitalism as a source of imperial threat. It enhances support for a Donald J. Trump figure. Nation states have vastly more resources to deploy in interfering in the internal political processes of target states via social media while choosing to conceal their involvement (Bauer, 2018).

Use of social media user data allows microtargeting to focus appeals towards particular groups to intensify affective hostility towards other groups within the same polity (Singer, 2018a). Exacerbation of US polarization by Russian actors in the midst of the prevailing imperial stereotype among some constituencies fearing globalization extends even to controversies such as the effect of vaccines (McNeil, 2018). Russian internet hackers/imposters encouraged polarization by instigating counter-protests against a 2018 Washington DC “United the Right Rally II.” It had been organized a year following the Charlotte, Virginia 2017 protests and violence (Conger and Savage, 2018, para. 16). Weakening the power capability of a state can involve weakening the governmental and, more broadly, regime stability by increasing the intensity of societal political polarization within it. Raising the intensity of public political polarization can contribute to undermining the political mobilization base available to the authorities. Increasing internal political conflict can also undermine the international appeal of the ideology that a particular government claims to represent (Cottam and Gallucci, 1978). The 2018-19 US partial government shutdown over funding to fulfill a polarizing 2016 Trump campaign pledge to build a wall on the Mexican border further undermines the US potential power base. E.g. it degrades the appeal of US federal government employment by the highly-skilled (Robertson, 2019).

## RESULTS AND DISCUSSION

In relation to external intervention and polarization, this section comparatively analyzes the controversy regarding claims of American White hostility to challenges to its core cultural status within the polity. Challenges to this status due to increasing ethno-racial diversity concomitant with economic globalization contribute to a political context more vulnerable to societal polarization. As formulated by Gordon (1964) and elaborated upon by Alba and Nee (1997), the core culture is that cultural community that politically dominates the state. The core community generates positive and negative incentives to minorities to accommodate to the core, and if permeable, into which they may assimilate (Oh, 2011). Short of assimilation, minorities are subject to hierarchical status stratification (Alba and Nee, 1997). According to Gordon (1964), the White Anglo-Saxon Protestant (WASP) community constitutes the core community that historically dominates the American state. The core de facto imposes the traditional stereotyped standards for evaluation of the appropriateness of socio-political behavior within the polity. Antonsich notes that the continuous political tension and contestation involved in assimilation highlights that this sociological process involves struggle among ethnic and sectarian in- and out-groups. The ethnic/ethno-sectarian majority group is typically the gatekeeper (2012, 73). Gorski (2016) provides a sociological analysis for what is today called American white Christian nationalism in explaining the strong appeal of Trump among white Christian evangelical voters. Setzler and Yanus (2018) found that perception of threat to American traditional racial and gender role norm prejudices, not gender or education level, most strongly

correlated with voting for Trump. This section concludes with implications for American domestic and foreign policy.

### Authoritarian Populism

The relationship of sectarian collective identity to nationalism in American authoritarian populism is an important theoretical issue to comprehend the significance of the globalization of hybrid warfare. The relationship between national and religious identity is “extremely opaque” (Hobsbawm, *Nations and Nationalism*, 1990, 71 cited in Cottam and Cottam, 2001, 21). Cottam and Cottam note that emotional attachments to the dignity and esteem of religious communities can also become particularly important as mass political participation characterizes a national community. As mass politics becomes a characteristic feature of the political development process, religious-community attachments became especially important in much of the world in the twentieth century. Today, polarization occurs around the sectarian community component of national identity. Groups within the nation-state may share a first-intensity attachment to the national community and also to a religious community, but the intensity of attachment to the religious community varies greatly. This polarization among religious and territorial national community attachments is most intense in the Middle East. It is also present in the Christian political movement in the US, the influence of the Jewish right in Israel, and the Hindu nationalist movement in India (2001, 66-67).

People having important values will tend to perceive the political environment in ways which allow them to avoid making difficult choices in that choosing one value means sacrificing others. They instead perceive/impute motivations to salient political actors so that they do not perceive a situation in which they have to make a difficult choice. I.e. they engage in cognitive balancing (Heider 1958[2015]). Cottam and Cottam elaborate that citizens who share a primary intensity self-identification both with the territorial national community and their sectarian community identity will tend to reconcile these values. They will incline to perceive a political context in which they are allowed cognitively and affectively to promote the influence and well-being of both simultaneously. Little conflict will be perceived to exist between the two. Defending one requires defending the other. E.g. a strong American national and conservative Christian evangelical community self-identifier will tend to see both as sharing the same enemies (e.g. political Islam) and allies (e.g. Israel). The members of the national community, however, who identify with the religious community but with a lesser level of emotional intensity will demonstrate a stronger inclination to view religion in doctrinal terms, and not as a national duty.

They will tend to resent, often with very great intensity, any moral diktat from religious leaders, i.e. they are so-called secular nationalists. This polarization prevails in the Islamic Republic of Iran: a post-authoritarian populist political regime (2001, 67) (see Figures 2 and 3). Political trends are increasing the likelihood of such regime characteristics in the US. Cottam and Gallucci define the modes of control constituting a political regime in the following manner: Coercion - the use of force and fear to compel a people to acquiesce to the authority of a government; Utilitarian - the satisfaction of material consumption and career influence demands of the members of the public; “Normative habitual - a non-conscious acceptance of government authority via an acquiescence in the customary norms through which authority is exercised; Normative active - the attraction of support for authority through the device of manipulation of symbols with high saliency” (Cottam and Gallucci, 1978, 15-16). This conceptualization of control system elaborates upon a framework which Etzioni initially presented for the analysis of control systems in complex organizations (Etzioni, 1961). An authoritarian populist regime (a fascist regime is the European variant, see Table 4) is fundamentally different from a Stalinist-type regime (e.g. Baathist Iraq, North Korea, see Table 5). If much of the population experiences coercion but another part gives enthusiastic support because of effective symbolic appeals which their leaders make, then the willingness to make sacrifices will vary. The 1939 Nazi German leadership controlled a polarized society with an enthusiastic constituency base and a large, cowed minority. State leaders mobilized societal resources for a militantly aggressive foreign policy (Cottam and Cottam, 2001, 144-45).

Cottam and Cottam argue that fascism, i.e. authoritarian populism, is a political regime type, not an ideology. The agency of state terror and a demagogic manipulation of national romantic symbols are the means by which an aspiring elite establish and maintain totalitarian control over a society. It is the defining characteristic of the phenomenon of fascism. Likely to fail is the search for a doctrinal definition of fascism. Examples of authoritarian populism include 1939 Nazi Germany, Fascist Italy and Imperial Japan as well as 1980 Iran. Of these three among great powers: Hitlerian Germany, Fascist Italy and Imperial Japan, only Japan clearly met this ideal-typical definition (2001, 273). Cottam and Cottam maintain that the aspiring elite in Japan was the Japanese military and it was already a core element in the ruling elite. It was in fact an institution which had solidly established itself, having deep cultural roots, rather than being a vanguard of a counter-elite. Elite alteration was underway in Imperial Japan but nothing comparable occurred to the elite replacement which occurred in Germany and Italy (2001, 136).

Table 4 illustrates the political regime, i.e. the control system, in Hitlerian Germany on the eve of what became the Second World War. It illustrates the orientations by which the revolutionary Nazi authorities maintained their control over the German state; normative habitual control was a tertiary component of the regime. Hitlerian Germany arguably approached the ideal-typical exemplar of a militantly aggressive modern great power nation state. By comparatively applying this abstract framework, the implications of the internal nature of a regime regarding the government’s foreign policy behavioral predispositions may be highlighted. Mobilization of the enthusiastically supportive majority of the public required manipulation of stereotypical images of self and other that appealed to the mass public, i.e. nationalistic stereotypes. Reliance upon such nationalistic, normative active appeals made delivery of successful results through a militantly belligerent foreign policy as critical for regime survival. The repulsion generated in the large minority was countered by coercion, i.e. terror delivered through a state coercive bureaucratic apparatus.

Table 4: The Political Control System in 1939 Germany

A	Normative active Coercion
B	Utilitarian
C	Normative habitual

*The control system in a polity describes the relationship between the political authorities and the public. Hitlerian Germany was relatively less effective compared to the US control system in mobilizing its full potential power base for war because of the intense polarization within society (see Figures 1 and 2). An intensely motivated, large constituency constituted Hitler’s support base, but a large section of the society was terrorized into silence and submission, including the liberal intelligentsia. The liberal traditional elite would re-emerge after the removal of the relatively thin Hitlerian ruling elite through conquest and occupation. The lasting impact of the Nazi regime on the society would appear relatively minimal (Cottam and Gallucci, 1978, 16, Cottam and Cottam, 2001, 144-45).*

Determining the political control system (regime) in place in a polity is necessary for estimating the mobilizational base of a state actor. This type of regime is predisposed towards expansionism in international relations because of its reliance on satisfaction of national grandeur predilections among its core support group. Normative active control typically involves leadership manipulation of romantic nationalist self-identity community symbols. For the leadership manipulating these symbols to have credibility, successful delivery of national grandeur achievements becomes a pressing political imperative. These romantic stereotypical images of self have corresponding negative stereotypical images of other. The multi-generational conflicts between Germany and France and Poland had institutionalized these stereotypical images of self and other among a modal segment of the German public. Hitler’s promise to restore Germany’s past perceived greatness would involve targeted enemies that were scapegoated as responsible for Germany’s degradation (Salvendy, 1999, 152-53). Hitler’s domestic appeals and policies were highly polarizing; a large segment of the public found particular policies to be sufficiently provocative to engage in effective nonviolent resistance (Dombrowski, 2000). The foreign policy behavior patterns which this symbol manipulation would promote and support added fear and horror to this distaste among this segment of society. The intensity of societal political polarization increased (Sekulic, 2010).

An authoritarian populist regime in a great power state risks suicide in attacking another great power in the nuclear era. Use of deadly force to afford national grandeur rather focuses on punishment of so-called rogue states, i.e. lesser, (heretofore) non-nuclear states with authorities stereotyped as international criminal outlaws (see Tables 1 and 3, Cottam and Cottam, 2001, 116-17). The provision of national grandeur integrates with the provision of sectarian identity satisfaction in the era of mass politics and nuclear weapons. The Trump administration may also compensate by appealing to its elite constituency base components by appearing to demonstrate the primacy of the US in renegotiating trade relations. One report quotes a George W. Bush administration official on Asian policy, Michael Green, characterizing the Trump administration's attitudinal behavior: "The White House approach to every country now is that we want you to cave on these random issues we have chosen, which are prioritized by nothing more than presidential whim [...] And you have to visibly lose on them. There are no win-wins" (Gardiner, 2018, para. 15).

For the modal American citizen, the details of trade agreements are esoteric. Radical rejection of existing trade agreements would cause such immediate economic dislocation that mass public support for the government may be threatened. One component for a control formula in this context is to focus more on the perceived internal adversary, portrayed as undermining so-called traditional national American values (Seaton, 2017). These traditional values are heavily sectarian in nature in regard to their stereotyped source, as well as in terms of their contemporary legitimation. The postwar conflict between Western (including Israel) and some Muslim communities may set the stage for Muslim communities internally and externally to be vulnerable for scapegoating. They may become adversarial foci as part of an American national grandeur strategy. Regarding nuclear-armed great powers such as China, the displacement towards competition in the so-called soft power arena as part of the nuclear setting includes a greater emphasis on promoting clients. One would expect that an expansionist Trump administration will more likely support liberal democratic, prosperous Taiwan's aspirations towards international recognition as a sovereign state (Chin, 2016). Among the rogue states that are targets of US foreign policy, Saddam Hussein's Iraq was closer to the 1939 Soviet regime, as is the regime in North Korea. Table 5 highlights the regime that existed in Stalin's multinational Soviet Union at the start of the Second World War. While both Stalin's USSR and Hitlerian Germany were highly coercive, revolutionary regimes, they differed in their capacity to mobilize potential power resources through symbolic mass public appeals. Nation states, as opposed to multinational states like the USSR or Yugoslavia, have the power potential mobilizational advantage. Cottam and Cottam note that legitimate nation state authorities more effectively mobilize the public to accept sacrifices to create military and other policy instruments to achieve government policy objectives. This capacity stems from the shared, sole, primary intensity loyalty of the public to the territorial community bounded by the state, which comprises by definition their national identity. This national community may be collectively defined by its members as traditionally sharing the same ethnicity, race, sect or territory (2001, 2). Despite generations of often highly coercive policy efforts to create a prevailing Soviet national identity, the dissolution of the USSR demonstrated that a shared Soviet territorial identity remained relatively weak. The traditional national ethnic identities within it remained predominant as displayed once the coercive Soviet coercive control element disintegrated.

In the Soviet case, the symbols of Marxism-Leninism excited a comparatively small proportion of the public, disproportionately represented in the state control bureaucratic apparatus. After the initial phase of the German invasion, the Soviet authorities would resort to the manipulation of the romantic symbols of the Russian nation to mobilize Soviet resources more effectively. They thus made a normative active control mode a primary facet of the wartime regime (Cottam and Cottam, 2001, 214-15). Myers (2010) has argued that the North Korean regime authorities initially inherited and adopted the Japanese imperial fascist regime model. Cottam and Cottam argue that comparatively, the US had a better support base for the purpose of granting a government the latitude to mobilize the community's resources to meet a perceived external challenge. Its regime demonstrates primary reliance upon habitual, customary support for the authority system from the large majority of the population and not necessarily for any particular set of leaders. The ability to mobilize will be particularly strong if, when confronted with a major challenge, the political

leaders can count on the population to respond favorably to calls to action. It will react with excitement to a heavily symbolic appeal for support during a crisis. Such a government has broad legitimacy. The regimes in 1939 USSR and Germany lacked such broad legitimacy (2001, 142-44).

Table 5: The Political Control System in 1939 USSR

A	Coercion
B	Utilitarian
C	Normative active
	Normative habitual

*The revolutionary Stalinist regime intensively manipulated symbols of Marxism-Leninism but it generated relatively much less enthusiastic response from the general public beyond the enthusiastic minority that provided the personnel for the state apparatus. The poor performance of the Soviet army in the opening stages of the German invasion illustrated the mobilizational weakness in this regime. The Soviet leadership adjusted the regime to include intensive manipulation of traditional romantic symbols of Russian nationalism and the fighting ability of the Soviet army increased. It concurrently undermined efforts to convince the non-Russian segments of the Soviet public that the Soviet Union was not in effect a neo-colonial version of the Russian empire (Cottam and Gallucci, 1978, 16, Cottam and Cottam, 2001, 145-47, 214-17).*

Examples of regimes having broad legitimacy include 1939 United States, as well as the liberal democratic regime in the American nation state prior to the election of Trump. Table 6 portrays the political regime, i.e. the relationship between the state authorities and the American public, throughout most of the twentieth century. This type of political regime is most effective in mobilizing the state’s potential power resources. The citizenry overwhelmingly assumes the authorities to be nationally representational and rightfully occupying their position. The modal American citizen views politics as a voluntary part-time activity that delegates policy making to the government. Citizens should obey the law (even if privately at times they do not). Mass political mobilization to sacrifice material wealth and personal well-being to achieve government-articulated goals increases significantly during wartime. This so-called rally around the flag phenomenon describes the capacity of the state authorities to utilize effectively normative active, symbolic nationalist appeals during a time of perceived external threat.

Table 6: The Political Control System in 1939 USA

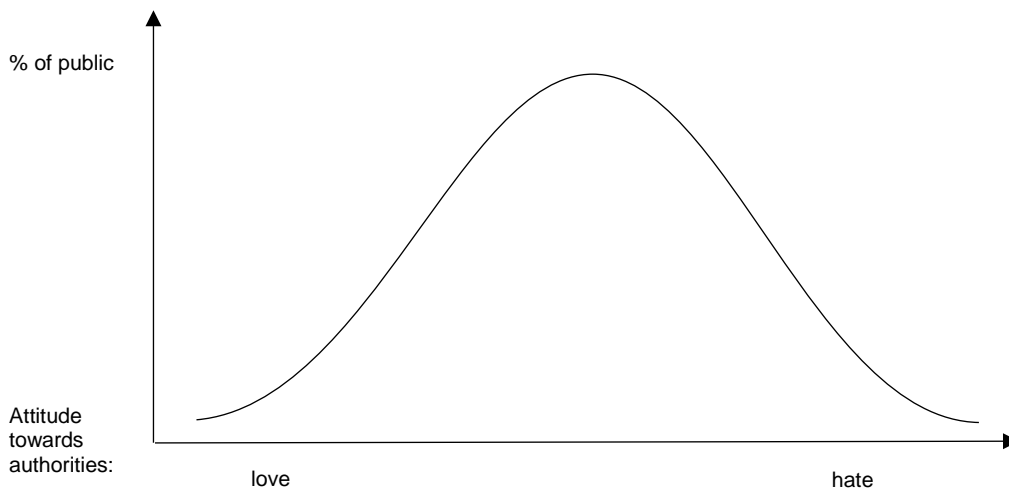
A	Normative habitual	During crises, the so-called rally around the flag phenomenon
B	Utilitarian	
C	Coercion	
	Normative active	

*The American regime control system is the most effective in mobilizing the power potential base of the community because of its relative lack of intensive societal polarization during most of the twentieth century. A normative habitual regime relies upon habitual obeisance of the public to the authorities through internalization of the authority norms of the society as personal moral expectations of right and wrong. In effect, the members of the public do not perceive themselves as being controlled. This system came under challenge during the 1960s with anti-Vietnam War mobilization providing much of the impetus. The end of the war and mandatory military service, as well other accommodations to minority demands, reconstituted the regime (Cottam and Gallucci, 1978, 16, Cottam and Cottam, 2001, 142-44).*

The traditional US control system corresponds with a society relatively lacking in intense political polarization. Figure 1 represents the American national political environment within which the authorities, and the government more specifically have functioned within most of the twentieth century. As Lipset explains in his analysis of so-called American exceptionalism, the absence of political polarization derives from the comparative, generally low level of salience of political mobilization within the US. The relative weakness of class polarization, for example, is due to a variety of historical and cultural factors. They include founding by European congregationalist protestant sectarian immigration, indigenous population extinction, removal and displacement as well as geographic isolation. The post-Civil War vast economic expansion of the US provided additional incentives to pursue personal needs through private economic and civil society associations. Social movements tended to seek access to utilitarian resources rather than

revolutionary change. The American citizenry consequently is more likely to view individual and group social deviance as an individual, personal failing, rather than as a social justice issue. African-American enslavement and its societal stereotype legacies constitute the great exception within American exceptionalism (1997). They generate the most important dynamic fault line for potential American political polarization.

Figure 1: The US Public’s Affective Orientation Towards the Authorities, Prior to Trump’s Election



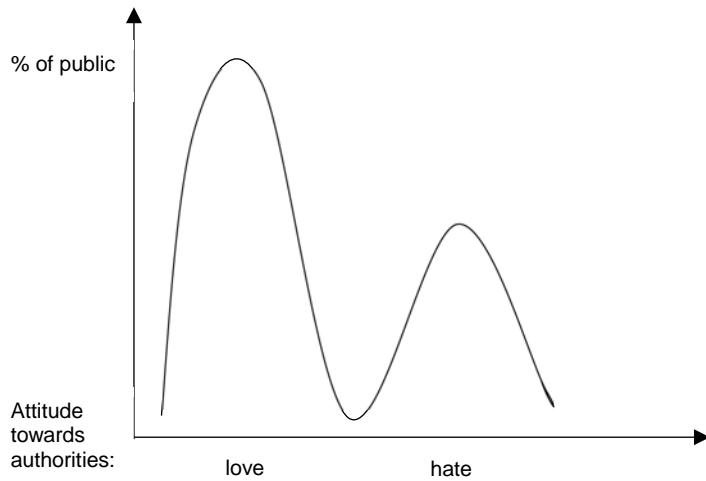
*The typical twentieth century US authority relationship with the public was one characterized by moderation in terms of general public overall restraint in the intensity of enthusiasm or dislike towards the authorities. More recently, the US polity has shown trends in polarization with intensifying mutually perceived threat among societal sectors towards each other. The Trump political campaign and administration has fortified this polarization by exploiting these cleavages to make them more salient for the aim of mobilization of electoral support. The Trump campaign was evidently supported in these tactics covertly through Internet social media intervention by state-affiliated Russian actors.*

The American context contrasts with the relationship in 1930s Nazi Germany and Fascist Italy and 1980 Iran between the authorities and the public. Figure 2 portrays the intense polarization in these authoritarian populist regimes. The majority of the adult population enthusiastically supports the authorities. They are highly receptive to the latter’s reliance upon appeals to established positive and negative stereotypes of national self and other. These portrayals include internal opponents as agents of national degeneracy and treason. They are coercively targeted and scapegoated, and they are politically immobilized through terror. Authority system legitimation requirements create strong political incentives for the government to seek achievement of national grandeur through external aggressive, imperialist behavior.

In the post-revolutionary Iranian context, the regime has evolved away from the ideal-typical authoritarian populist regime in Khomeini’s Iran that emerged immediately after the overthrow of the Shah. The US and British helped install the Shah’s regime in 1953 through covert subversion of the secular nationalist elected government under prime minister Mohammad Mossadeq. The Shah, Mohammad Reza Pahlavi, claimed that his authoritarian government’s policies were a modernizing force pulling Iran into US-led secular modernity (Pahlavi, 1961). Khomeini’s core supporters tended to view the Shah’s domestic enthusiasts as blasphemous traitors. Figure 3 arguably shows the evolution of such an authoritarian populist nation state regime which is not destroyed by war and occupation as were Nazi Germany, Fascist Italy and Imperial Japan. Intense societal political polarization still characterizes the regime, but the control system has become institutionalized in this post-revolutionary era. The rules for avoiding persecution are more clear, i.e. reliance on normative habitual obedience has increased. Enthusiasts and enemies of the regime authorities now each constitute significant minorities, with the rest of the politically attentive adult population accommodating or acquiescing to the authorities.



Figure 2: The 1939 Japanese, German and Italian Public, 1980 Iranian Public's Attitudes to the Authorities

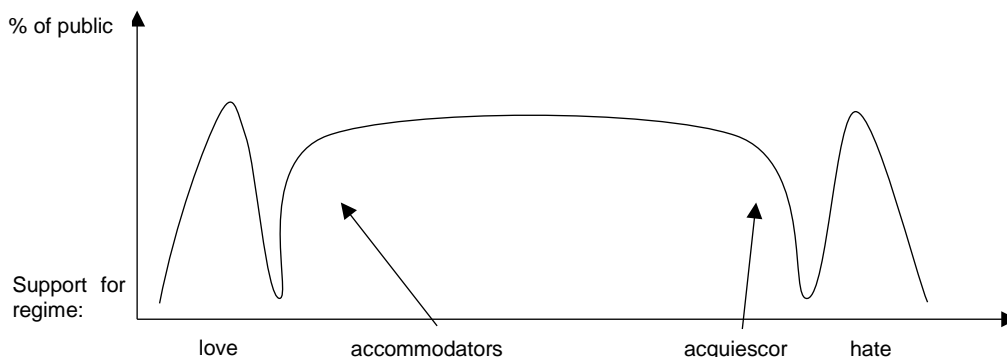


*The closest to an ideal-typical polarization within a so-called developed nation state is Hitlerian Germany. This polity, with its starkly polarized contrasts in perceptions of the ruling authorities, also had its consequences in seeing the opposing base constituency in intensely threatening, contemptuous terms. This type regime also characterized Khomeini's Iran. Charges and suspicion of treason characterize the political discourse in such polarized polities with totalitarian control systems.*

The post-revolutionary phase of the regime implies national institutionalization, i.e. greater normative habitual control. The charismatic founder of the authoritarian populist regime left the scene, taking his political magnetism with him. He bequeathed to his successors the bureaucratic coercive control apparatus which remains a critical support constituency of the regime. The post-revolutionary authorities supplement their continued primacy through provision of utilitarian economic and participation benefits as well as assertive external national influence promotion. They do so within a context of higher levels of national institutionalization of the processes of public and foreign policy making. As noted above, increasing polarization characterizes nation state policy making elsewhere. Post-revolutionary Iran may provide insights into political trends that associate with populist conservative nationalist social movements that are the core support base for the US Trump administration. It may also point to the domestic and foreign policy behavioral predispositions that associate with those that succeed in taking control of the state.

As Cottam and Cottam highlight, a common consensus between these two militant poles in Figure 3 regarding the external and internal challenges to the shared national community commonly is unlikely to emerge. Regime enthusiasts equate their sectarian identity community membership with Iran national community membership. Regime opponents tend to be secularists. The result is the emergence of a sharp polarization between these two groups. The former, for example, favors expenditure of national resources to protect Iran's core culture co-religionist Shiite Muslims throughout the Middle East. In their worldview, an intensely assertive international position is necessary for the well-being, even long-term survival, of the Islamic republic. The latter will tend to resent the costs and burdens upon the Iranian national community due to opposition from the opponents to Iran's influence expansion in Lebanon, Yemen, Syria and Iraq and elsewhere. They will come to view each other with intense distaste. This polarization phenomenon is increasingly prevalent throughout the world, but especially so in Muslim states. The consequences include both very positive and very negative affective responses having a focus on the forces of politically resurgent Islam (2001, 53-55). Polarization is a tendency present in the US, India, Israel as well as in other great power states, e.g. Russia and China. The affective response can be sufficiently serious to produce hatred at a level of intensity which can in the extreme produce violent responses. With the 2016 election of US President Donald J. Trump supported by the covert Internet-based intervention of Russian state-sponsored actors, American polarization trends are arguably intensifying.

Figure 3: Post-Revolutionary Iranian Public’s Attitudes to the Islamic Republic Authorities (and Towards Which Other Polities May be Evolving)



*The US and other developed polities do not display the extreme polarization present within Hitlerian Germany at the height of the latter regime’s reliance on normative active control. The US and other developed states may rather be moving in a direction in accordance with a picture that prevails in the post-Khomeini Islamic Republic of Iran. It may correspond to the type of regime towards which the Trump administration as a consequence of policies strengthening American polarization trends risks steering the US. Undocumented immigrants as well as gender and religious minorities and others, e.g. legal abortion access supporters, are currently groups at risk of scapegoating and becoming targets of increasing levels of societal and governmental coercion.*

## CONCLUDING COMMENTS

In the nuclear setting, interfering in target polities’ policy making processes is an important tactical means by which states engage in cold war. Hot war among great powers is suicide in the nuclear era, although accidental military escalation may occur, e.g. the 1962 Cuban Missile Crisis. This threat of accidental escalation during a crisis is itself a source of diplomatic bargaining leverage especially in the nuclear era (Cottam and Gallucci, 1978). This additional diplomatic bargaining leverage is the incentive for states to develop and deploy nuclear weapons. The Cold War’s indirect, covert and overt competitive interference in the politics of third actors is the historical template by which state leaders choose to fight wars in the nuclear context. Post-Cold War globalization has facilitated the polities of the nuclear powers themselves as well becoming targets of competitive interference, today labelled hybrid warfare. The goal of this paper has been to analyze hybrid warfare within its postwar historical context. Its theoretical contribution lies within the framework of neoclassical realism, focusing specifically on the implications of nationalism in relation to hybrid warfare state behavior. It outlines the implications of nationalism in the nuclear setting for hybrid warfare, focusing on the high-profile case of Russian covert intervention in the US 2016 presidential election campaign. The necessity of an appropriate theory of nationalism for this analysis led the author to apply the framework developed by Cottam and Cottam (2001). This analysis relied on information in the public record, particularly investigative reporting by *The New York Times* and other newspapers of record in this current, unfolding inquiry.

This analysis demonstrated how an initiator state can seek to instigate regime evolution in a nation state target in a direction exhibiting polarization. That state’s foreign policy is more prone to display belligerent behavior in foreign affairs in reaction, *ceteris paribus*. E.g. US relations with Russia and China appear to be worsening at the time of this writing. Stereotype-based, dysfunctional assumptions regarding target actors will tend to correlate more closely with foreign policy behavior choices in such polarized polities. The result can be an increasing propensity towards foreign policy entanglements from which the target state may have great political difficulty extracting itself. Cottam and Cottam note that nation state polities are more willing to grant their leaders the decisional latitude they desire to seize perceived opportunities to expand the state’s international influence. Nationalistic polities are likely to constrain greatly the decisional latitude of a leader to withdraw, because it risks suffering a serious blow to collective national self-esteem after much sacrifice (2001, 13). The domestic political difficulty the US had in leaving Vietnam illustrated

this dynamic. Such dilemmas will be more typical in the present era of direct military intervention in the internal politics of non-nuclear third states. The US leadership appears to face a comparable dilemma in multi-ethnic, Sunni Muslim-dominated Afghanistan (Riedel, Bergen, Anderson and Sageman, 2010, Nordland and Abed, 2018). In Iraq, US forces have clients in the large majority Shiite Arab and Kurdish population who tend to share a perceived a threat from Sunni Muslim-dominated pan-Arabism and pan-Islamism, e.g. the Islamic State (Iov and Marincean, 2017). Immediately after US President Trump's December 2018 announcement of US military withdrawal from Syria, strong US domestic political opposition to US withdrawal continues to build (Sanger, Weiland and Schmitt, 2019).

This analysis found that authoritarian populism in the interwar period is typically portrayed as a world historical aberration. Most recent trends indicate that it is a directional tendency towards which the post-Cold War world may be moving more generally. Hitlerian Germany was the closest in reality to an ideal-typical case of an authoritarian populist regime in a great power pursuing an intensely revisionist, imperialist foreign policy. It remains a real exemplar by which to evaluate these tendencies today in other great power states. If so, then it was not really an aberration but rather the most militant illustration. Polarization is a critical issue in correlating with the type of domestic political control system regime a state manifests. As the intensity of domestic political polarization intensifies in Russia, China, the US and elsewhere, their respective foreign policies will evolve accordingly. Widespread nuclear weapons capability is a critical differentiating historical factor in postwar foreign policy behavior.

Regarding limitations of this paper, it presents indications and warnings in terms of worst-case scenarios derived from the historical experiences with Germany, Italy and Japan in the 1930s and Iran in the 1980s. The analysis underlined that it is not claiming that the US regime is now similar to these regimes. In terms of countervailing forces, the political role of economic vested interests must not be underestimated as well as overestimated. The vast vested economic interests that have evolved amidst globalization may have the capacity to restrict the political latitude to adopt policy decisions that would generate large economic dislocation. Such disruption would be necessary to mobilize the mass public. Foreign policy crises may mobilize nationalist forces that temporarily override economic interest group lobby pressures in the foreign policy making process. The American mass public is otherwise generally disengaged from US factional establishment elite versus counter-elite struggles that threaten postwar global political and economic cooperative regimes (Tavernise, 2018).

On the one hand, the threat of disruption alone will not automatically restrict US presidential decisional latitude. Such disruption may generate greater support for American nationalist militancy amidst societal polarization. In the Trump administration, the establishment elite has intervened to preserve the US-Republic of Korea Free Trade Agreement, NAFTA and the World Trade Organization since Trump's inauguration (Woodward, 2018, xvii-xxi, 233, 264-65). The establishment elite has the responsibility longer term to mobilize its constituencies to constrain foreign policy belligerence deriving from American conservative populist nationalism. How they may do so is an issue of practical political significance. What observers may have taken for granted for most of the postwar era can no longer be viewed as such. Trump White House trade advisor Peter Navarro castigated members of the American business community lobbying Washington to prevent escalation of the US-China trade conflict: "*When these unpaid foreign agents engage in this kind of diplomacy, so-called diplomacy, all they do is weaken this president and his negotiating position [...] No good can come of it. If there is a deal, if and when there is a deal, it will be on President Donald J. Trump's terms, not Wall Street terms*" (Palmer, 2018, emphasis BD).

On the other hand, this analysis seeks to avoid hyperbole while comparatively examining other historical cases, highlighting only potential implications of current events. The US witnessed high levels of polarization in the 1960s and early 1970s, which lead to the resignation of US President Richard Nixon. The post-Vietnam resurgence of conservatism leading to the Reagan presidency did not lead to dangerous levels of American political polarization. A key differentiating factor for today's context is the absence of

a common perceived great power ideological and military threat in the form of the USSR. The absence of such a unifying threat may paradoxically displace threat perception towards the internal in the form of stereotyped agents of globalization. Further research may focus on the behavioral patterns of authoritarian great power regimes perceiving imperial threat from alleged foreign-initiated conspiratorial orchestration of a “color revolution” (Cave and Buckley, 2019, para. 18).

Future research might focus on the relationship of American nationalist sentiment as affiliated with particular national institutions, e.g. the intelligence community. Globalization and Internet social media have facilitated external interference in the internal politics of target states. The response is likely to be the evolutionary strengthening of the national security state that first emerged in the twentieth century (Frenkel and Isaac, 2018b). These national security institutions may seek to channel conservative nationalist populism in directions that consolidate their own authority within the control regime. An arena of symbolic contestation may be intensified focus on alleged conspiratorial globalist foreign state threats to national sovereignty. Some Trump supporters such as Roger J. Stone Jr. raise alarms of a so-called deep state in league with George Soros scheming to circumvent the democratically expressed will of the American electorate (Newman, 2018). How the US justice system responds to these claims would be another research focus.

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# **THE EFFECT OF HIGH PERFORMING BULLYING BEHAVIOR ON ORGANIZATIONAL PERFORMANCE: A BULLYING MANAGEMENT DILEMMA**

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## **ABSTRACT**

Workplace bullying is well-documented as harmful to individuals and organizations. What has not been explored as thoroughly is the management dilemma human resources and business leaders face when the bully is a high-performing worker making significant financial or operational contributions to the organization. High-performing bullies make it harder for leaders to know when and how to intervene. In this phenomenological study, the authors compare the positive and negative organizational effects of maintaining high-performance bullies in the workplace. The authors review the literature to identify the differences between demanding and bullying behaviors. Examples are provided that illustrate why high performing bullies remain in organizations, how their behavior is exposed to public view, and the resulting consequences and outcomes. The mitigating role of social media in resolving bullying in organizations is revealed to be definitive. In conclusion the authors suggest managing high-performance bullies through a combination of education, organizational structure, job design coupled and a pro-active data gathering process through social media and internal outreach.

**JEL:** M100

**KEYWORDS:** Bullying, Management, Human Resources, Performance Management

## **INTRODUCTION**

Most people associate the idea of bullying with children in a schoolyard. However, there is a lesser known serious problem among working adults. The Workplace Bullying Institute reports bullying among American workers is a significant workplace problem. Among United States workers, 38% report they have been the subject of bullying (Namie, 2017). Even though bullying occurs in the workplace, research is lacking and there are few studies documenting the problem (Georgakopoulos, Wilkin, & Kent, 2011; Namie & Namie, 2009). Organizational bullying becomes even more difficult to identify and address when the bully is a high performing employee. Workplace bullying causes a drain on employees and managers that is both physical and emotional. If it permeates the organization, the result can be a toxic workplace environment (Hollis, 2012). Workplace bullying that leads to a toxic work environment affects employee's health, reduces productivity and morale, and results in higher turnover (Hollis, 2012; Keashly & Neuman, 2010; Persky, 2018). However, the negative effects of workplace bullying may be offset by significant financial gains or organizational achievements as a direct result of the bully's work efforts. The high-performing bully is often characterized as a demanding individual who gets results (Daniel, 2009).

It is difficult to manage workplace bullying because in most US states it is not defined as illegal behavior. There are few laws addressing bullying in the workplace, and it may be difficult to quantify the business

impact of such behavior, particularly if the bully produces outstanding financial and operational results (Daniel, 2009). Organizational policies against workplace bullying are not common because there is no legal imperative to do so (Cowan, 2012). Individuals bullied in the workplace are affected physically and mentally, but bullied workers also contribute to the economy's loss of productivity, reduced efficiency, and lower profitability (Georgakopoulos et al., 2011). Measured on a national level, workplace bullying is estimated to cost up to \$43.4 billion (Indvik & Johnson, 2012). What has not been explored as thoroughly is the management dilemma human resources (HR) and business leaders face when trying to reconcile the disconnect between a high performing bully's work performance and the negative effects of bully behavior on company employees, brand, productivity, and financial output. Steve Jobs, the former CEO of Apple, has been described as a bully (Streitfeldt, 2011; Gibbs, 2014), but this did not stop Apple from becoming one of the most financially profitable organizations (Apple, 2018). High performing bullies make it harder for leaders to know when and how to intervene to stop bullying escalation and negative effects. The problem is how should the organizational leadership (CEO, Board of Directors, Senior Leaders) respond to workplace bullying by a high performing manager. For example, what would you do if you worked in a leadership position at Apple and an employee complained of bullying by Steve Jobs?

## LITERATURE REVIEW

What is the definition of workplace bullying? Workplace bullying can be defined as negative, persistent, pervasive and extreme abuse (Cowan & Fox, 2014). The recipient of bullying behavior (the target) often views the bully as more powerful, which results in the target becoming distressed and humiliated (Cowan & Fox). Carroll Brodksy was one of the first investigators to study and write about bullying in workers compensation cases in the 1970s. Brodksy's definitive work on this subject, *The Harassed Worker* (1976) described emotional abuse at work defined as primarily psychosocial and non-sexual, which often resulted in severe trauma to the individual. These findings were later reported by Leymann (1986), a Swedish psychologist, described *mobbing* as negative and abusive group behaviors targeted to specific workers. In the 1990s British journalist, Andrea Adams, first used the phrase, "workplace bullying" during a radio show while promoting a book on the topic (Adams 1992).

Workplace bullying is generally not classified as illegal in the United States unless the target is a member of a protected class defined by race, religion, gender or country of origin (Hollis, 2012; Indvik & Johnson, 2012). Workplace bullying generally avoids being classified as harassment because the negative behaviors fall under the company's policies and rules governing behavior or are part of the organization's culture (Crumpton, 2014). Harassment is defined as unwelcome or offensive conduct based on an individual's race, color, gender, or religious affiliation (Hollis, 2012). Identifying bullying behavior and addressing it in organizations is made more difficult because the bully and the target are often alone or the actions taken by the bully may be subtle and discreet (DelliFraine, Mclelland, Erwin & Wang, 2014; Indvik & Johnson, 2012). Further, what one individual considers bullying behavior may not necessarily be the same as another. As Bjorkqvist, Osterman, and Hjelt-Back, (1994) research showed, how people are treated by fellow employees has a significant affect on their self image.

The research on the impact to bullied victims appears to be consistent. Victims experience emotional and physical reactions, which can result in declining health (Kivimäki et al., 2003; Nielsen & Einarsen, 2012). Ongoing bullying can lead to symptoms including a loss of concentration, depression, and post-traumatic stress disorder (Bjorkqvist et al., 1994; Harber et al., 2013; Kivimäki et al., 2003;). Kivimäki et al., 2003 conducted a longitudinal study of 5,432 hospital workers and found there to be a significant relationship between the incidence of depression and bullying (Kivimäki et al., 2003). Additional results of the study showed a correlation between bullied victims and an increase in cardiovascular disease (Kivimäki et al., 2003). Another study among female educators reported that bullied victims indicated the experience was devastating to their work, their careers, well-being, collegiality, and service quality (Sedivy-Benton et al., 2015). The research also noted victims felt violated and abused, isolated and at a loss as to where to seek

help (Sedivy-Benton et al., 2015). As there are few laws against workplace bullying, these behaviors are not always addressed in organizational policy manuals. Bullied victims often report that bringing their concerns to their Human Resources (HR) department results in no corrective action (Cowan & Fox, 2014; Harber, Donini, & Parker, 2013; Namie, 20017). Cowan and Fox (2014) interviewed HR professionals, and found many organizations lacked a policy specifically addressing bullying conduct, had no protocols for handling the problem or disciplining the individuals responsible. Cowan and Fox (2014) indicated there has been “little research dedicated to understanding the HRP’s [human resource professional] viewpoint or role regarding bullying situations” (p. 120). In addition to the lack of definition of workplace bullying, the HR department often reports directly to the president or a senior operating officer in the organization. Given senior leadership in organizations is commonly compensated based on the financial improvement in the organization, high-performing bullies may be kept in their position despite bullying because they contribute to the organizational bottom line and higher compensation to senior leadership.

High-performing bullies financial or operational contributions to the organization are shown to be offset by reduced organizational productivity, increased dissatisfaction, and employee turnover (Hollis, 2012; Williams & Ruiz, 2012). Hollis (2012) surveyed 401 college and university participants across the Northeast and found 25% of those reporting being the victims of bullying responded by looking for a new job. Hollis (2012) also found 71% of those who were bullied said the experience gave them a less favorable view of their university. More than 50% of those bullied reported trouble sleeping, and 40% described difficulties in concentrating (Hollis, 2012). Hollis’s (2012) study showed people who feel bullied are less committed to their organization and are considering resignation. They have a reduction in their work commitment level and consider leaving the organization. If the bully is a high-performer or popular with senior leadership, the problem is exacerbated.

## DATA AND METHODOLOGY

This study used a combination of secondary and primary research. Secondary sources provided case study examples of workplace bullying situations that were made public by newspapers or other published sources. Primary research was conducted using in-depth interviews with employees in higher education. Twelve interviews were conducted with administrators, faculty and human resource personnel to gain the insight and experience with workplace bullying. The interviews were confidential, and thus no identifying information on the bully or the target is used. The results are provided in summary along with findings of the secondary research. Demanding, high-performing managers differ from bullies in their focus on business issues rather than on the individual’s perceived failings (Daniel, 2009). It is particularly challenging to address negative bullying behavior when the bully is a high performer in the organization. Leadership worries that it will be hard to replace the lost earnings of the high value bully. However, research indicates that while a high performer may bring in strong individual results, he/she can have negative effects on the team’s overall performance. Four case study examples of high performing bullies are presented, showing the effect of the bullying behavior, and the organizational response.

Sutton (2007) describes a situation at Men’s Wearhouse with a successful sales person who was not a team player. After attempts to change behavior and repeated warnings from leadership, Men’s Wearhouse removed the salesperson despite his high sales record. After he left the total store sales volume increased by nearly 30%. Even though no single person sold as much as the bully had, the team’s overall performance improved. Sutton (2007) describes another, similar organization, this time a fortune 500 company, that focused on removing known bullies. After removing the employees known for negativity the company’s performance improved and it moved from the middle range to one of the best performers in its industry. Mari Ellen Loijens was the top fundraiser at the Silicon Valley Community Foundation (SVCF). The SVCF is a tax-exempt public charity and the largest community foundation in the world with USD 13.8 B in assets, whose donors include well-known Silicon Valley businesses such as Microsoft (Special Report, Turmoil at the SVCF, 2018; Gelles, 2018). SVCF mission is to ‘...partner with donors to strengthen the common good

locally and throughout the world' (Silicon Valley Community Foundation, 2018). Mari Ellen Loijens was the organization's top fundraiser, who reported to Emmett Carson, the executive director. "She brought in the money," said Rebecca Dupras former Vice President for Development at SVCF (Dupras, 2018; Gelles, 2018). Interviews with employees and colleagues at the foundation asserted she bullied and demeaned colleagues, made sexually and racially insensitive remarks and threatened physical violence, which was reported to the executive director (Dupras, 2018; Gelles, 2018). Although complaints were submitted to human resources and Emmett Carson, no action was taken until the issue was made public in the *Chronical of Philanthropy* in early 2018. When the issue was brought to the attention of Emmett Carson by the *Chronical* an internal and external investigation began. The result of the investigation revealed a toxic culture, a history of unresolved complaints and concerns, very high turnover, poor social media profile, and donors turning away from creating accounts at SVCF (O'Neil; 2018 April 26; Gelles, 2018) and 65 employees at SVCF sent a letter to SVCF Board describing the toxic environment and lack of response to management. In this case, the SVCF appeared to define high performance behavior as increasing short-term financial gains, although the ultimate objective was to increase the SVCF's ability to grow.

Consequences of the investigation included removal of Loijens, Carson, and the HR Director, and appointment of a new executive director and HR director (O'Neil, 2018 May 1). Very visible and poor PR for SVCF resulted from multiple publications of the story. In this case the root cause of the problem was organizational focus on financial results, infrastructure management, and HR lack of power or checks and balances (Cantor, 2018; Gelles, 2018; O'Neil, 2018 April 26) The tipping point was the investigative reporting begun from an inside tip, leading to full exposure of the issue, not the reports to Emmett Carson and the HR Director. It is noted a review of the Glassdoor site for SVCF reveals no new updates after August 2018 and reviews on the site are not positive (Glassdoor, 2018).

A similar situation arose at Billboard-Hollywood Reporter Media Group in July of 2018. John Amato the company chief executive, was highly regarded for turning a dull industry publication into a glossy, hybrid consumer publication (Sisario, 2018). However, reports circulated that he was protecting his long-time friend and record industry executive Charlie Walk from negative publicity arising from sexual harassment articles. Amato's interference with editorial decisions on the story was brought forward to *The Daily Beast* which published an investigative report on the subject (Tani, 2018). When its journalists' independence was questioned, Billboard launched an internal investigation. At the same time, as part of an investigative report, the *New York Times* interviewed fifteen current and former employees about the culture at Billboard. Interviews and correspondence with the current and former employees revealed complaints about Amato filed with the HR department (Sisario, 2018). In this case, a high performing leader was accused of creating a bullying and intimidating culture, sexual harassment, and squashing stories about people with whom he was connected which resulted in investigative reporting and multiple news articles. Amato resigned, and the company faced negative publicity.

Steve Jobs, the former CEO of Apple, has been described as a bully (Streitfeldoct, 2011; Gibbs, 2014), but this did not stop Apple from becoming one of the most financially profitable organizations (Apple, 2018). In 1981, Apple Computer went public and recruited John Sculley from Pepsi-Cola to be Apple's CEO. Steve Jobs was put in charge of the team creating the McIntosh computer and appointed the company's chief visionary. Jobs recruited the team to produce the McIntosh computer and their division became a company within a company, often competing with other, more profitable parts of the organization (Siegal, 2011). He and his team worked from their own dedicated building over which they flew a pirate flag and Jobs is quoted as having said, 'It is better to be a pirate than to be in the navy' (Siegal, 2011). Jobs was known as a relentless boss, who was aggressive, rude, and rough in his management and interactions with employees (Simon & Young, 2005) which led to a power struggle with Sculley. The power struggle and Jobs' poor interpersonal relationships led Apple's Board to remove Jobs from the leadership position. The experience made an impression on Jobs, and although he never lost his aggressiveness, he became a better leader for the experience (Siegal, 2011) and was brought back to the company in 1997.

## RESULTS

High performing bullies make it harder for leaders to know when and how to intervene to stop bullying escalation and negative effects. Demanding managers who lack managerial experience, training, or coaching, may become bullies and sensitive or stressed staff may become overwhelmed. Dr. David Clyde, CEO and President of Spinnaker Medical Consultants International, LLC in an interview with Dr. Janet L. Walsh for this paper reported,

*“Some hard-driving managers don’t understand the pressure they put on people in day-to-day business operations. Sometimes managers increase expectations on people who don’t know how to say no, so the employee becomes stressed because they know they can’t do it all and don’t know what to do. Managers need to understand how to allocate work and how to give feedback for improving skills and time management, setting standards too high, so productivity decreases. If the employees are stressed enough, they have to see their doctor or go on medication (Walsh, 2018).*

The illustrations from Men’s Warehouse, Loijens, Amato, and Jobs, fit the pattern of high-performing bullies. They were individuals whose behaviors included “threats, intimidation, exploitation, control, humiliation/embarrassment, a failure to communicate, manipulation, ostracizing or ignoring employees, engaging in a pattern of obstructive behavior, and gossiping or spreading rumors” (Daniel, 2009). These behaviors are consistent with identified bullying behavior as opposed to demanding executives who tend to be more positive in the interactions and have been described as, “objective, fair, self-controlled, results-oriented, and organizationally-focused” (Daniel, 2009).

The HR department is a first step in many cases, for reporting bullying behavior. The actions of the HR department are key in establishing the overarching reputation of the company. A research study by Lopez-Fresno, Savolainen, and Shrivastava, P. (2018) showed E-HRM, Glassdoor, LinkedIn, Facebook, and HR communications are the major factors that influence the trust building among applicants in the digital age. HR can be a change agent to overcome negative digital influences and as such, can play a strong role in combatting bullying behavior that stymied by HR, gets reported online. In addition, HR can be a resource for targets and bystanders to report their experiences safely. HR can provide direction to resources to assist individuals who are being bullied. HR can also re-educate bullies through coaching, job redesign, performance management and compensation restructuring.

Effectively responding to a situation that involves a high performer and specifically an individual in a leadership role, is somewhat like responding to bullying situation involving any contributors. First, the safety and well-being of the target must be assessed. An indication that an employee is in a bullying situation is when health has been affected, and they have or are in process of seeking medical assistance (Walsh, 2018). Bullying can trigger the need for emotional first aid to support the target through coaching and professional assistance. When meeting with the target, it is important to hear their experiences, what happened and when, and whether there are individuals to be contacted to gather more information reinforcing the targets concerns. When dealing with a high performer/leader, there is nuance in taking next steps. Confronting high performing managers or employees who bully involves a unique dynamic as there is often resistance on the part of the leader to engage and confront. Empowering the leader to engage, approaching the leader from a stand point of wanting to minimize surprises for them, and offering tools and resources can enable them to confront the behavior more readily, especially when balancing the impact to them individually, the effected unit, and overall performance of the organization.

It is important to engage the leader of the high performing bully as they are critical in disrupting the ongoing or escalating behavior. This applies to all levels of leadership including the C-Suite. It has been observed that leaders, especially leaders supervising a high performing bully, almost act in a co-dependent manner and resist the idea that the behavior is so severe, as illustrated with SVCF and Emmett Carson

(Zapf, Einarsen, Hoel & Vartia, 2003). The advantage of reaching out directly to the leader demonstrates respect for their role and can help minimize the leader being surprised about the gravity of the problem and reduce their subsequent defensiveness. Ironically, it empowers the leader to act and acknowledge a problem. In the author's experience, the bully will not take complaints about their behavior seriously until their leader does and is clear the bully is accountable for the behavior, which must stop. Several interventions exist to support the bully concerning changing their behavior. The first is individual coaching. Coaching can be effective in assisting the bully to recognize how their behavior may be perceived and experienced by the target and the co-workers witnessing the behavior. Witness's observation and experience around bullying behavior is important to capture both for understanding the problem and impact of the bullying behavior and ensuring support is available for those individuals as well.

Multi-rater feedback also referred to as 360-degree feedback can be an effective way to deliver information to an employee for development. Multi-rater feedback generally includes performance feedback to and individual from supervisors, co-workers, peers, and subordinates. This process ultimately requires the leader and organization to hold the perpetrator accountable for their behavior and any further consequences. As with any performance feedback, the feedback must include consequences for positive and negative performance. Supervisory management must be prepared to act on the results; if they do not, there can be little expectation for improvement in the bullying behavior. For example, if compensation for individuals is based on more than just their financial contributions, bullying behavior may be addressed. If a bonus, salary increase, or other reward is dependent on satisfactory multi-rater feedback, a bully may be more conscious of their behavior. Again, if supervisory management does not reduce compensation as a result of poor multi-rater feedback, behavior is unlikely to change.

As HR is often the first point of contact when an individual is bullied, requiring HR to present a "state of the organization" report to a company's board of directors including a description of complaints about management can make senior leaders aware of the extent to which bullying exists in the organization. A direct line of reporting on the subject to the company board means problems with bullying in senior management ranks will be more difficult to ignore. The issue will be raised directly to the board, where multiple individuals with oversight into the performance of the organization will be made aware of the information. As previously mentioned, the organization, particularly organizational leadership, should seek out and review online comments and information about individuals and the company. Sites like Glassdoor enable multi-rater company feedback, which may illuminate potential trends and problems. In addition to social media review, exit interviews may be reviewed to identify trends in a department or with individuals. As a final suggestion, organizations might consider having an outside resource, medical insurance or a doctor for example, to whom bullied individuals might contact for support and assistance to address the physical aspects of bullying.

## **CONCLUDING COMMENTS**

This paper represents initial research to identify ways to address high performing employees who engage in workplace bullying behavior. The data was collected from published studies and reports on bullying, the causes and effects of bullying behavior on organizations. There is limited research on managing high performing bullies and organizational actions. There are, however, multiple accounts of high performing bullies in the media, which can be further researched on employee evaluation sites such as Glassdoor. Data used was gathered via case study examples of organizations in the technology, non-profit and retail sectors which had to confront a high performing employee who was also a workplace bully. The authors found that research done prior to the year 2000 may not consider the social media implications, particularly after the "Me Too" cultural issues in the US in 2017 and 2018. The authors research found organizations may not have a code of conduct policy because bullying is not considered illegal in most US states. Organizations fail to address workplace bullying from high performers do so primarily for financial reasons.

They do not want to lose the revenue generated from the high performing bully. However, research suggests the organization may find financial returns increase when the bully is removed.

The organization structure may not include a way for employees to report bullying or a process for the HR department to manage the bullied employee's complaints. HR may report to the bully or have limited power to make the bully stop. Without an organizational structure or pathway to address high-performing bullying, employees turn to social media and the court of public opinion. When employees describe bullying on social media the company reputation can suffer significant negative consequences, particularly if the press launches an independent investigation. The authors suggest the organization, and particularly the HR leader research the company reputation on social media to identify potential issues before they become a problem. They suggest organizations create a code of conduct with a clear reporting structure so executive management is made aware of bullying issues and can intervene. Using a 360-degree performance appraisal document for managers is not uncommon and would reveal the way in which a bully relates to others in the organization. Tying this type of performance review to financial compensation would provide a cause and effect check on a high performing bully's behavior. Companies in the study using 360-degree reviews found it an effective method to check high performing bully behavior.

Limitations with respect to this research include the case study/empirical focus and limited collection of original data. Additionally, further research would be enhanced with a consistent definition of a high performing employee who also engages in behavior that meets the profile of workplace bullying. This may allow for consistent recommendations to address the program. Research into organizational values and how those values are communicated and enforced in organizations might further illuminate this subject. Human Resources role in addressing and managing workplace bullying is an area for more study. Specifically, how can HR professionals be more effective in addressing the target, bystander(s) and the perpetrator and can their relationship with C-Suite level executives be leveraged to garner a stronger response to address the problem before losing high performing talent. Finally, additional research is warranted on the role of the HR department in managing organizational reputation, particularly in social media.

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# **AN OVERVIEW OF BLOCKCHAIN TECHNOLOGY BASED ON A STUDY OF PUBLIC AWARENESS**

Mitch Kramer

## **ABSTRACT**

*Blockchain Technology is one of the latest technological advancements and has the potential to benefit many organizations. The focus of this paper is to provide an overview of Blockchain Technology to render a better understanding of what it is and how it operates. Another section of this paper will include a variety of questions that should be asked to determine if Blockchain Technology is the optimal solution for organizations. Within this section, how Blockchain Technology can be beneficial to organizations will also be summarized. Subsequently, there is a discussion showing how different industries are currently learning how to utilize the technology in order to gain an advantage in their sectors. This paper will also examine the results of a study conducted to assess public knowledge of Blockchain Technology.*

**JEL:** D83, L86, M15, O00

**KEYWORDS:** Blockchain Technology, Bitcoin, Ethereum, R3 Consortium, Hyperledger Fabric, Technology Acceptance, and Awareness

## **INTRODUCTION**

**W**hich new technology has the ability to change the way organizations do business? The answer is Blockchain Technology. Blockchain Technology will be the focus of discussion, including significant milestones in its brief history. Blockchain Technology is an important subject matter since, in early 2016, the Wall Street Journal reported that the financial industry has invested (over \$1 billion) in the financial industry by exploring and developing solutions with Blockchain Technology (Kursh and Gold, 2016). As well, Gartner Inc. predicts that “Blockchain’s business value-add will grow to \$176 billion by 2025” (Lovelock and Furlonger, 2017). Other papers have been written comparing this technology with other technological solutions. The focus of discussion in other papers shows the technology in industry-specific situations. This paper contributes to the current literature in several different ways. It allows readers to comprehend Blockchain Technology by defining the technology while discussing the five core principles. It will also look into how Blockchain Technology advanced when Ethereum and the Hyperledger Fabric was introduced. As well, the paper will examine the questions organizations have to ask to determine if Blockchain Technology is the right solution for their needs; how this technology will improve their processes; and will it address other issues they are facing within their organization. This paper will also look into industry initiatives using Blockchain Technology.

Based on the results of a study, there is a lack of public awareness; this paper was written to help address this situation as well as to share information in order to increase awareness and acceptance. The perspective from others also shows the lack of awareness and that they feel increased knowledge will change the public's perception on Blockchain Technology in a more positive light. Awareness and acceptance are essential to the future of this technology. The remainder of the paper is organized as follows. In the next section a literature review and some background information is provided. The following section discusses the data and methodology used in the paper. The paper continues with a presentation of analysis results. The paper closes with some concluding comments.

## LITERATURE REVIEW AND BACKGROUND

Blockchain Technology, what is it? "The Blockchain is a decentralized ledger of all transactions across the peer-to-peer network. Using this technology, participants can confirm transactions without the need for a central certifying authority" (PWC, 2018). For those readers who are unfamiliar with Blockchain Technology, think of it as an enormous database. It records and stores all transactions. These transactions are stored on either a private or a public network. They are linked (and chained) from the beginning of each transaction; each transaction has a connection from the previous one; hence the name, Blockchain. How did Blockchain Technology start? Satoshi Nakamoto introduced it in 2008. Satoshi Nakamoto introduced Bitcoin and Blockchain Technology in a white paper (Satoshi Nakamoto, 2008). From that white paper, Blockchain Technology started to be noticed. The first Bitcoin was mined was on January 4, 2009, and the first payment was made on January 11, 2009. The software for Blockchain Technology (Bitcoin) was then released as open source code on January 15, 2009, allowing anyone with the required technical knowledge to be involved (Evans-Greenwood, Hillard, Harper, and Williams, 2016). In May 2010, the purchase of two pizzas was made with 10,000 Bitcoins (Bitcoin, 2010). This purchase was the first known transaction with Blockchain Technology. It is crucial to remember Bitcoin is not Blockchain Technology; Bitcoin uses the technology.

Blockchain Technology further expanded when Vitalik Buterin released a white paper in December 2013. He proposed that a single foundation layer of Blockchain (known as Ethereum, which uses smart contracts) would be reprogrammed to execute any arbitrarily complex computation and incorporate numerous other projects. "The intent of Ethereum is to merge together and improve upon the concepts of scripting, altcoins, and on-chain meta-protocols, and allow developers to create arbitrary consensus-based applications that have the scalability, standardization, feature-completeness, ease of development and interoperability offered by these different paradigms all at the same time. Ethereum does this by building what is essentially the ultimate abstract foundational layer: a blockchain with a built-in Turing-complete programming language, allowing anyone to write smart contracts and decentralized applications where they can create their own arbitrary rules for ownership, transaction formats, and state transition functions" (Buterin, 2013). From another perspective, Blockchain Technology can be viewed similarly to Microsoft DOS when it first came out. Software companies used Microsoft DOS to start programming and building different applications; by doing so, this allowed developers to write, test and execute their decentralized application. In late July 2014, The Ethereum Project, a decentralized Blockchain based on a platform, which enables smart contracts, launched the sale of Ethereum (Ethereum.org, 2014). NASDAQ announced in May 2015 that it planned to leverage Blockchain Technology as an enterprise-wide initiative. NASDAQ began the Open Assets Protocol, a colored coin innovation built on Blockchain. "Nasdaq will launch blockchain-enabled digital ledger technology that will be used to expand and enhance the equity management capabilities offered by its Nasdaq Private Market platform. Nasdaq's blockchain technology will offer efficient, fully-electronic services that facilitate the issuance, transfer, and management of private company securities" (Recupero and Briganti, 2015).

In September 2015, multiple financial institutions (including Barclays, Credit Suisse, Goldman Sachs, JP Morgan, and RBS) founded the R3 Consortium. The need for the R3 Consortium was due to the shared frustration with banks and other financial institutions having multiple generations of legacy financial technology platforms that struggled to interoperate, which led to inefficiencies; risk; and spiraling costs (R3, 2015). The R3 Consortium was aware of the power that Blockchain Technology could have in the financial markets. In December 2015, The Linux Foundation project launched the Hyperledger Fabric, a Blockchain framework to develop applications. This project was an open-source community to help with the development of the technology and brought leadership into Blockchain. Hyperledger Fabric started with seventeen companies. The companies used this platform to collaborate and advance Blockchain Technology in businesses. Currently, there are over 130 members around the world (Gupta, 2017).

"Hyperledger Fabric is a platform for distributed ledger solutions, underpinned by a modular architecture delivering high degrees of confidentiality, resiliency, flexibility, and scalability. It is designed to support pluggable implementations of different components, and accommodate the complexity and intricacies that exist across the economic ecosystem" (Github, 2018). In February 2017, the Enterprise Ethereum Alliance originated. The Enterprise Ethereum Alliance formed to connect Fortune 500 enterprises, startups, academics, and technology vendors with Ethereum subject matter experts. This Alliance learned from and built upon the only smart contract supporting Blockchain currently running in real-world production. Ethereum defined enterprise-grade software capable of handling the most complex, highly demanding applications at the speed of business (Entethalliance.org, 2017).

### How Blockchain Technology Operates

Blockchain Technology has five core principles: 1) Distributed Database 2) Peer-to-Peer Transmission 3) Transparency with Pseudonymity 4) Irreversibly of Records 5) Computational Logic (Iansiti and Lakhani, 2017). Iansiti and Lakhani (2017) explained the five principles by stating: all users have access to the entire distributed database including its history; no one controls any part of data; the transactions can be verified without any issues; all parties can review the documents without a go-between; the communication occurs directly, peer-to-peer transmission instead of a central node. Each node stores and forwards the data to all other nodes. All transactions are transparent with pseudonymity. These transactions show their value and are evident to anybody with access to the system. A unique 30-plus alphanumeric address identifies each node, or user, on the Blockchain. Transactions happen between Blockchain addresses. Users can choose whether or not to make these transactions anonymously. Because all transactions are linked to the one before, none of the transactions that are entered can be changed; this is called irreversibly of records. There are computational algorithms that are deployed to ensure every transaction is permanent, numbered in an orderly manner and available to all others on the network. The Blockchain transactions are tied to computational logic and in essence, programmed.

### Determining if Blockchain Technology Is the Optimal Solution

The subsequent information will outline what an organization will need to address to determine how Blockchain Technology can improve their processes and increase efficiency within the organization. How does an organization know if Blockchain Technology is right for them? Each organization has different needs. Organizations have to ask the appropriate questions to determine if Blockchain Technology will help and if it is the correct solution. Detailed answers must be provided before proceeding with a use case. All organizations look for answers either to correct or to improve a process. They also seek answers to gain valuable knowledge, increase revenue, or decrease expenses. They need to see which technological advances will influence their business. Tapscott and Tapscott mention, "The technology most likely to change the next decade of business is not the social web, big data, the cloud, robotics, or even artificial intelligence. It's the blockchain, the technology behind digital currencies like Bitcoin" (Tapscott and Tapscott, 2016). Previous papers have addressed the questions determining whether an organization can benefit from using Blockchain Technology. The two different perspectives below offer their opinions regarding which questions to ask to determine if Blockchain Technology is the right solution. According to Brakeville and Perepa, the organization has to answer the following questions: Is a business network involved? Is consensus used to validate transactions? Is an audit trail, or provenance, required? Must the record of transactions be immutable, or tamper proof? Should dispute resolution be final? (Brakeville and Perepa, 2016) In their article, Brakeville and Perepa declared that if the answer to the first question were "Yes" and at least one other response was "Yes" then a use case would be beneficial.

*Gupta asked the following questions:* "Does my business network need to manage contractual relationships? Do we need to track transactions that involve more than two parties? Is the current system overly complex or costly, possibly due to the need for intermediaries or a central point of control? Can the network benefit

from the increased trust, transparency, and accountability in recordkeeping? Is the current system prone to errors due to manual processes or duplication of effort? Is the current transaction system vulnerable to fraud, cyber-attack, and human error?" If the answer was "Yes" to any one of these questions, then a use case should be performed to determine if Blockchain Technology would be the right solution (Gupta, 2017). Within both of these papers, the business network was discussed. The question of business network involvement is a non-starter since all organizations should be on a business network; their success depends on it. If they do not have a business network, the other questions are not relevant and should not be a factor in determining if Blockchain Technology will be beneficial. Further to this point, a use case is justified when there is a need for validation of transactions, an audit trail is required, and the record of transactions involves two or more parties. The records need to be tamper proof. A use case would also be utilized in some instances where conflict resolution must be finalized. Another justifiable instance is if the current system is overly complicated or costly. All organizations and industries have the fear that their current transaction systems are vulnerable to fraud, cyber-attack and human error. If the current system were susceptible to errors in manual processes or duplication, then Blockchain Technology would be beneficial to the organization. Many organizations including the Government can benefit from increased trust, transparency and accountability.

Other questions and roadblocks that an organization will need to address are: What are the technological constraints on infrastructure? Is the in-house talent adequate for implementation of this project? What are the costs of the use case and the whole project? Is there a need to be aware of any legal or regulatory requirements? To elaborate: before an organization can start to develop a Blockchain solution, they need to discern if they already have the necessary talent or if outside consultants will be required. The team (or individual) responsible will need to make sure all questions or concerns are addressed and that there is a strategy in place. They will also need to know the limits of the organization. The organization needs to provide detailed information regarding their expectations. A strong use case, prototype, and pilot need to be identified. This project will not be inexpensive, nor quickly implemented. The organization needs to ensure the necessary steps have been performed in order to be ready to proceed. The benefits of using Blockchain Technology for organizations includes the validation of transactions, a decreased risk of fraud and/or cyber-attack and a smaller likelihood for human error. Organizations and Governments can benefit from improved confidence and clarity. More specifically, the benefits of Ethereum, with smart contracts and Hyperledger Fabric support the trusted relationships between two or more parties. Additional benefits are provided below as seen through the industry initiatives.

### Industry Initiatives

Blockchain Technology will have a substantial impact on recording private and public information. Financial markets and cryptocurrencies have already met with success by using Blockchain Technology. Now other industries are getting involved. Below are some examples of a few different industries that are exploring if Blockchain Technology is the right technological solution for their sectors.

*Automotive:* Schade and Pytel with Ginkgo Management Consulting see that Blockchain Technology can have a valuable impact on the automotive industry. It will combine automation with transparency and validate the transaction process. The use of smart contracts will help facilitate this process. They discussed this approach within the automotive industry. It includes manufacturing, design, recycling, maintenance, supply chain and use phases. They discussed this theory in their abstract; they have not been involved in the design process (Schade and Pytel, 2017).

*Government:* The National Research Council of Canada launched a live trial of public Blockchain Technology in the administration of government contracts. They will be using Ethereum smart contracts. The National Research Council will publish information on original and modified contribution agreements



in real time. They will gauge to see if this has potential and allows for more transparency for better functionality of public programs (Government of Canada, 2017).

*Healthcare:* In January 2017, IBM and The United States Food and Drug Administration (FDA) signed a two-year agreement to explore potential Blockchain applications for employee health records (EHRs), clinical trials, internet-of-things, genomics and more (Millard, 2017). As mentioned by the chief science officer at IBM Watson Health, “The healthcare industry is undergoing significant changes due to the vast amounts of disparate data being generated, and Blockchain Technology provides a secure decentralized framework for data sharing that will accelerate innovation throughout the industry” (Millard, 2017).

*Real Estate:* Sweden is creating projects for real estate where they are developing and testing a Blockchain Land Registry. The “testbed-project” was built on private Blockchain that was run by a group of public and private companies. The software application that managed the contracts was controlled and recorded on Blockchain Technology. “The solution provides value by improving processes associated with land registration and real estate transactions” (Kairos Future, 2017).

*Software:* Oracle Corporation announced that they had launched Enterprise-Grade Blockchain Cloud Service to their customers. “The advanced, enterprise-grade distributed ledger cloud platform helps customers increase business velocity, create new revenue streams, and reduce cost and risk by securely extending ERP, supply chain, and other enterprises SaaS and on-premises applications to drive tamper-resistant transactions on a trusted business network” (Caputo and Reeves, 2017). Blockchain Technology with Enterprise Resource Planning (ERP) systems is forward thinking. It has an opportunity to change the way all transactions are managed particularly within Accounts Payable and Procurement. The number of industries impacted is vast. Different companies, countries, and industries are looking for ways to utilize Blockchain Technology to their best advantage. Blockchain Technology can have a positive impact on organizations if they plan accordingly and execute the plan correctly. Each of these industries is demonstrating different initiatives to verify if Blockchain Technology will work within their sector.

## DATA AND METHODOLOGY

If Blockchain Technology is the future, a study was necessary to determine the knowledge that business professionals currently have with regard to it. Are business professionals aware of Blockchain Technology? Based on a particular study there seems to be a lack of awareness. Surprisingly, the response rate was 100 percent; the expectation was to receive 90 percent or higher. According to the results of a study (Appendix A) conducted on November 27, 2017, there is a lack of awareness. The study was distributed to 53 participants, including some Certified Public Accountants (CPAs). All 53 responses were received by November 29, 2017. The study was distributed directly or sent via email to the participants. Participants were asked not to research information on any of these questions by internet searches before answering. As well, they were asked not to disclose their responses to one another. The study included the following questions: Have you ever heard of Bitcoin? Have you ever heard of Ethereum? Is there a future of Blockchain Technology? Is there a future in the distributed ledger? What is Bitcoin? A copy of the study can be viewed in the Appendix section.

## RESULTS

Detailed results are discussed below. In Table 1, the first question showed that 70 percent of participants had heard of Bitcoin. The second question was about Ethereum; only four percent of the participants had heard of it. The question asking, “Is there a future of Blockchain Technology?” showed there seems to be a lack of awareness because 83 percent had never heard of it. In addition, 87 percent had never heard of a Distributed Ledger. It was interesting to see that less than six percent of participants felt that there would not be a future for Blockchain Technology. In Table 2 the responses to the multiple-choice question, "What

is a Bitcoin?” Eighty-five percent of the participants did not know that it was mined using mathematics. Approximately eight percent of the participants thought it was stock traded on either the New York Stock Exchange (NYSE) or NASDAQ. To summarize these results, it appears that many people have heard about Bitcoin from a variety of sources including the news, the internet, or social media. The study also revealed the lack of awareness of Blockchain Technology itself.

Table 1: Responses to Study on Familiarity with Blockchain Technology

Question	Yes	No	Never Heard of It
Have you ever heard of Bitcoin?	37	16	n/a
Have you ever heard of Ethereum?	2	51	n/a
Is there a future in Blockchain Technology?	6	3	44
Is there a future in the Distributed Ledger?	4	3	46

*This table shows the results of a study distributed to business professionals to assess their knowledge of Blockchain Technology. The numbers in Table 1 were the total responses for each question. The percentages in the body of the paper were rounded to the nearest whole number. Seventy percent of participants had heard of Bitcoin; less than four percent have heard about Ethereum; eighty-three percent had never heard of Blockchain Technology; and eighty-seven percent had never heard of Distributed Ledger.*

Table 2: Responses to the Multiple-choice question, what is a Bitcoin?

Casino Coin From Las Vegas	Mined Using Mathematics	Stock Traded on NYSE or NASDAQ	Same as Gold	None of the Above
0	8	4	3	38

This table shows the results of the multiple-choice question, what is a Bitcoin? The numbers in Table 2 were total responses for the question. The percentages in the body of the paper were rounded to the nearest whole number. Eighty-five percent of the participants did not know that it was mined using mathematics. Approximately seventy-two percent of the participants answered none of the above. No participants thought it was a Casino Coin from Las Vegas. Awareness will be enhanced through education and training which will then lead to greater acceptance of Blockchain Technology among business professionals. To put this in perspective, Folkinshteyn, Lennon, and Reilly researched the comparison between Bitcoin and the World Wide Web (WWW). They analyzed the similarities and differences, for each, based on historical development. They discussed that when the World Wide Web was first introduced, it was new technology and initially had a slow start with a limited number of users and benefits. "Like Netscape, Bitcoin as a particular system/currency may or may not survive for the long term. But like the WWW, blockchain technology upon which Bitcoin is built, with the ability to validate and timestamp events without relying on a central authority, is here to stay. It is a platform for innovation whose history is only beginning" (Folkinshteyn, Lennon, and Reilly, 2015). Many advocates for Blockchain Technology agree that Blockchain Technology will follow the same path as the World Wide Web.

David Huseby (Security Maven for Hyperledger) discussed milestones this year for Blockchain Technology in an interview with JAXenter (a website for developers). He stated, "This is the year when non-technical and generally uninterested people will learn about and begin to understand what a Blockchain is. 2018 is a year of building public awareness and acceptance of this technology" (Motroc, 2018). Bahga and Madisetti also mention, "Blockchain is a nascent technology and is mostly adopted in the financial sector (Bitcoin being the most popular application). Lack of awareness about the Blockchain technology in other sectors is affecting its widespread adoption" (Bahga and Madisetti, 2016).

**CONCLUDING COMMENTS**

The above information gives an overview of Blockchain Technology. The timeline highlights provide the reader an overall history of the technology, including the inception of Ethereum that led to the different projects: Ethereum Project, R3 Consortium, Linux Foundation Project and the Enterprise Ethereum Alliance. Initiatives within several industries including Automotive, Government, Healthcare, Real Estate, and Software were examined. The importance of appropriate questions and detailed planning were addressed as necessary components in order to determine if Blockchain Technology will work for an organization. This paper reviewed the steps an organization needs to follow before they can develop a Blockchain solution. The five core principles provide insight and valuable knowledge in learning about the basics of Blockchain Technology. This paper was written to provide additional literature to help increase awareness of Blockchain Technology and what it entails. A need for information is evident from the results of a study distributed to fifty-three business professionals in November 2017. Shockingly, the results of the study showed over 83 percent of respondents had never heard of Blockchain Technology. If there is heightened awareness and more education about Blockchain Technology, then the acceptance and approval will follow. Upcoming research will show which industries initiatives achieved the most successful results with Blockchain Technology. Blockchain Technology is the future, and it is exciting!

**APPENDIX**

Appendix A: Study Questions

I would like to ask you for some assistance with a study that I am doing. I have a few questions to ask. Your answers will help me greatly with my paper.

No.	Question	Answer Options		
1	Have you ever heard of Bitcoin?	YES	NO	
2	Have you ever heard of Ethereum?	YES	NO	
3	Is there a future in Blockchain Technology?	YES	NO	NEVER HEARD OF IT
4	Is there a future in the distributed ledger?	YES	NO	NEVER HEARD OF IT
5	What is a Bitcoin?			
A	A) Casino coin from Las Vegas			
B	B) Mined using Mathematics			
C	C) Stock traded on the NYSE or NASDAQ			
D	D) Same as Gold			
E	E) None of the above			

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## **BIOGRAPHY**

Mitch Kramer's focus for the past 20 years has been Enterprise Application Software. He is a member of the International Institute of Business Analysis. His previous research papers appear in the Review of Business and Finance Studies. He has a Bachelor of Commerce in Accountancy and a Certificate in Management. He lives with his wife Michelle, in Florida.



# **THE IMPACT OF KEY FACTORS OF THE FAST FOOD RESTAURANT ON PURCHASE INTENTION**

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## **ABSTRACT**

*This study examines the Fast Food Restaurant, Mos Burger, a famous Japanese brand. We use this restaurant as an example to explore the effects of brand reputation, brand identification, perceived quality, perceived value, corporate image and purchase intention. A questionnaire survey was conducted on the consumers of the Mos Burger. The results show that brand reputation has a significant positive and direct influence on brand identification and perceived quality. Brand identification, perceived quality and perceived value has a significant positive and direct influence on purchase intention. Perceived quality has a significantly positive and direct influence on perceived value, and it influences purchase intention indirectly through perceived value. We also find demographic variables of the Mos Burger consumer have no significantly different perception on brand reputation, brand identification, perceived quality, perceived value, corporate image and purchase intention.*

**JEL:** M1, M10

**KEYWORDS:** Brand Reputation Brand Identification, Perceived Quality, Perceived Value, Purchase Intention

## **INTRODUCTION**

With economic development and the structural changes of industries, Taiwan has evolved from an agricultural society to an industrial society and further to a service-oriented society. According to National Development Council of Taiwan, the contribution of the service industry to Taiwan's total GDP in 2016 reached 63.15%, exceeding common levels among advanced countries (Executive Yuan in Taiwan, 2017). Taiwan has entered an era dominated by the service industry. Identifying how to survive intense competitions and win consumer trust in this industry is important. Food and beverage services represent a major sector in Taiwan's service industry. The changes of domestic people's dietary habits and lifestyles have boosted growth of food and beverage sales in Taiwan. A survey conducted by Taiwan Dietitian Association (2017) shows the population of out-eaters, for at least one of their daily meals, in Taiwan has exceeded 20 million people. Some 80% of these individuals dine out for at least two of their daily meals. Out-eaters spent 430 billion dollars on their meals in 2013. In 2014, the amount exceeded 500 billion dollars, equivalent to a 15% growth (Liu, 2016). Fast food is one of the favorite choices among domestic people. In Taiwan, Mos Burger is one of three leading fast food brands. It ascended to the second largest fast food brand in 2008.

To create product diversification, Mos Burger has adopted a strategy that differs from the low-price and high-advertisement-exposure strategies commonly used by American fast food stores in Taiwan. Its strategy is to provide tasty, healthy, and safe meals to consumers while positioning their products in the high-quality and high-price segment (Mos Burger, 2018). This study uses Mos Burger as an example to investigate the relationship among brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. The issue of this study is to identify factors in purchase

intention of Mos Burger in Taiwan. The remainder of this paper is as follows. We provide a literature review and align our work with the relevant literature including brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. The data and methodology and results sections follow. Finally, some concluding comments are provided.

## LITERATURE REVIEW

According to Herbig & Milewicz (1994), brand reputation is consumers' consistent judgment of the products or services of a brand over a period of time. In other words, brand reputation is the synthesis of consumers' attitudes toward and perceptions of a brand over time (Punjaisri & Wilson, 2007). Simonin & Ruth (1998) defined brand reputation as customers' familiarity with, awareness of, or impression with, the reliability of a brand. Wang (2009) suggested that brand reputation is a business' or organization's image and brand awareness among the general public.

Brand identification is also viewed as "brand identity". It refers to visible elements of a brand, such as logo and symbol, that identify and distinguish the brand in the consumers' mind. From a brand managers' viewpoint, it is the way that a business wants consumers to perceive its brand (Aaker, 1996; Keller, 1998). Bergami & Bagozzi (2000) defined brand identification as consumers' recognition of a brand. Lu (1996) suggested that brand identification is the degree to which consumers psychologically favor a specific brand among products of the same category. Lastovica & Gardner (1978) showed that brand identification is a method of brand selection for customers. Kapferer (1992) also pointed out that brand identification is the foundation for delivering brand messages to customers. The messages include signs, data, and other product-related information. Brand identification covers numerous dimensions, including product attributes, brand personality, culture, and consumer relationships.

Aaker (1991) defined perceived quality as a customer's perception of the overall quality of a product or service. It is the customer's subjective preference and satisfaction with the overall quality of the product or service of a brand compared to alternative brands (Chen & Yeh, 2007). Zeithaml (1988) suggested that perceived quality is the consumer's judgment about a product's overall excellence or superiority. In a research of the effect of perceived quality and customer knowledge on customer loyalty, Huang (2006) viewed perceived quality as perceived value of the attributes of the product or service. She argued that customers recognize the quality of an attribute of a product or service when the perceived value of the attribute exceeds its cost.

Heskett, Sasser & Schlesinger (1997) defined perceived value as a ratio of the customer's perceived quality earned to the price or cost when buying a product or service. Teas & Agarwal (2000) mentioned that perceived value is the customer's judgment of a product or service based on perceptions of what is sacrificed and what is earned. Customers' intention to buy a product or service is affected by the perceived value of the product or service. Oliver & Desarbo (1988) suggested that consumer perceived value has its root in equity theory. When buying a product or service, if the outcome received by the customer exceeds all the costs incurred, consumers will perceive a higher value of the product or service.

Martineau (1960) defined corporate image as the sum of consumers' perceptions, attitudes, and judgments of an organization by its activities or behaviors. Barich & Kotler (1991) described corporate image as the overall impression an organization or company has made on the general public's mind. Dowling (1986) pointed out that corporate image is the result of the interaction of a person's beliefs, ideas, feelings, and impression about an organization. Goldberg & Hartwick (1990) suggested that customers tend to have higher intention to buy from a company and better accept the advertisements of the company when they find its corporate image more reliable.



Dodd, Monroe & Grewal (1991) defined purchase intention as the degree to which the customer is inclined and willing to buy a certain product or service. Zeithaml (1988) stated that purchase intention is based on and driven by perceived benefits and value. Consumers' purchase intention varies by individual intrinsic characteristics, extrinsic characteristics, objective value, quality, and value perceptions. Schiffman & Kanuk (2000) stated that purchase intention is the likelihood of buying a certain product or service, and higher intention indicates higher likelihood. Morwitz & Schmittlein (1992) argued that purchase intention can be a predictor of actual buying behavior. Consumers have an intention to buy a product or service when they have a positive impression with, or a positive attitude toward, the product or service. Hence, purchase intention can be interpreted as the possibility of customer's purchase of a certain product or service.

## DATA AND METHODOLOGY

In this study, we examine research questions from Mos Burger consumers' perspective. In assessment of brand reputation. We adopt the questionnaire of brand reputation designed by Wang (2009) to develop a single dimension for measurement. Brand identification is measured by four dimensions, including product, corporate, brand personality, and symbol as integrated and developed by Aaker (1996) & Chen (2011). Stevenson (2002) proposed seven dimensions of perceived quality including product performance, aesthetics, characteristics, safety, reliability, durability, and overall perception. However, durability is excluded because it is not a key factor for fast-food restaurants. This study utilizes six dimensions as follows: product performance, aesthetics, characteristics, safety, reliability, and overall perception to measure perceived quality. Perceived value is measured by four variables introduced by Sweeney and Soutar (2001), including emotional value, social value, price value, and quality value. Corporate image is measured along the three dimensions, institution image, function image and product image, suggested by Walters (1978). Purchase intention is measure it through a single dimension developed by Zeithaml (1988). According to Zeithaml (1988), the purchase intention of consumers is based on perceived benefits and values.

In this study, we will also explore the extent to which perceptions of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention vary by demographic variables. The research structure of these variables and the impacts on brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention, and consumers' perceptions on them is illustrated in Figure 1.

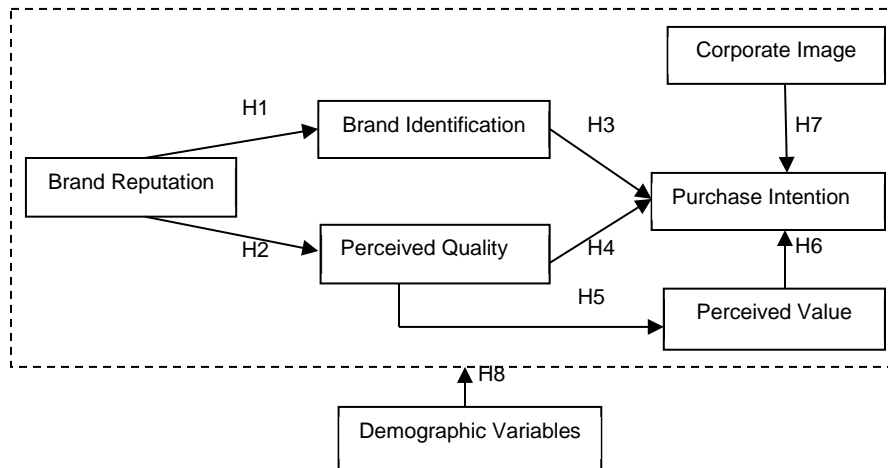
### The Impact of Brand Reputation on Brand Identification

Brand image is part of brand reputation. Therefore, brand reputation in this study includes brand image. In the past, many researchers also proposed the effect and relationship between brand image and consumers' own brand identification. Hawkins et al. (2005) pointed out that consumers choose the brand that is consistent with their own image. Higher consumers' satisfaction with the brand image leads to a higher tendency toward consumer's brand identification. Wang (2009) explored the Influence of brand reputation, interactive relationship of service providers and students on students' word-of-mouth behavior for universities. The result of this study shows that brand reputation of universities and colleges has a significantly positive effect on brand identification of undergraduates based on brand reputation as the measure dimension. Higher brand reputation of universities leads to a higher tendency toward brand identification of undergraduates.

Chen and Chuang (2011) showed that brand reputation of universities and colleges has a significantly positive impact on brand identification of undergraduates. In addition, Ting & Wang (2011) found, from word-of-mouth behavior, that university brand reputation and teacher-student relationships both help to enhance undergraduates' brand identification with their own universities. We infer that brand reputation affects consumers' brand identification positively. Therefore, this study proposes the following hypothesis:

*H1: Brand reputation is significantly and positively related to brand identification.*

Figure 1: Research Structure



This figure shows the research structure of the impacts among brand reputation, brand identification, perceived quality, perceived value, corporate image, purchase intention, and consumers' (Mos Burger) perceptions on them.

The Impact of Brand Reputation on Perceived Quality

Dodds et al. (1991) indicated that higher brand reputation leads to higher perceived quality due to the high overall rating. Grewal et al. (1998) noted that higher brand reputation leads to a higher tendency toward perceived quality. Therefore, brand reputation is positively related to perceived quality. However, Purohit & Srivastava (2001) found that consumers have higher perceived quality through better-reputable retailers. Chen & Yeh (2007) probed the relationships among brand image, brand relationship, and perceived quality of cosmetics brands. Their evidence suggested that functional brand image (brand reputation) has a significant and positive effect on perceived quality. Tsai's (2005) study of the fried chicken fast food restaurant revealed that brand reputation is positively related to perceived quality. We infer that brand reputation affects perceived quality positively. Therefore, this study proposes the following hypothesis:

*H2: Brand reputation is significantly and positively related to perceived quality.*

The Impact of Brand Identification on Purchase Intention

The process of brand identification is related to self-cognition through the cognition of brand. This implies the individual owns attitude and opinion about a brand. Many studies in the past, have found that brand identification of consumer attitude has a direct and strong effect on purchase intention (Bruner & Kumar, 2000; MacKenzie & Lutz, 1989; Wahid & Ahmed, 2011). Huang & Huang (2014) found, in their study of the impact of consumer participation in online community activities on purchase intention, that brand identification has the most effect on purchase intention. Tsai et al. (2014) examined the influences of brand story and brand strength on consumer-brand identification and purchase intentions. Their findings showed consumer-brand identification has a significant positive impact on purchase intention. Based on this literature, we infer that brand identification affects purchase intention positively. Therefore, this study proposes the following hypothesis:

*H3: Brand identification is significantly and positively related to purchase intention.*

The Impact of Perceived Quality on Purchase Intention

Perceived quality plays an important role in the purchase behavior of consumers. When consumers evaluate a product, the product quality is the first factor considered. Therefore, consumers' perceived quality of products directly enhances their purchase intentions (Monroe & Krishnan, 1985). According to Thaler (1985), a better perceived product quality is associated with higher purchase intention. Chen (2014) investigated the impact of motivation, involvement, perceived quality, and perceived value on purchase intention for protectors. Their empirical evidence also confirmed that perceived quality is most related to purchase intention of personal safety protectors for riders of large heavy motorcycles.

Tsai (2013) examined consumers' perceived quality and purchase intention towards the clothing brand country of origin and country of manufacture. She found that perceived quality and purchase intention are positively related. Pan (2012) conducted a survey study of the relationship between consumer perceived quality, perceived value and purchase intention of national apparel brands. Her study showed that consumers' perceived quality and purchase intention are positively related. Lin's (2014) research of the impact of brand image, perceived quality, and perceived value on purchase intention for baking bread indicated that perceived quality has a significantly positive effect on purchase intention for consumers who purchase baking breads. The findings of Monroe & Krishnan (1985) also confirmed that perceived quality of consumer product has a significantly positive influence on purchase intention. From the above-mentioned literature, we infer that perceived quality affects purchase intention positively. Therefore, this study proposes the following hypothesis:

*H4: Perceived quality is significantly and positively related to purchase intention.*

The Impact of Perceived Quality on Perceived Value

Monroe & Krishnan (1985) analyzed the impact relationships among perceived quality, perceived value, and perceived sacrifice. They found that perceived value is a result of the perceived quality relative to the perceived sacrifice of consumers. Therefore, higher perceived quality leads to higher perceived value. Zeithaml (1988) also empirically confirmed that consumers' perceived quality for the product and perceived value are positively related. Chen (2013) explored relationships among perceived price, perceived quality, perceived value to customer satisfaction and customer loyalty for the popsicle industry in Hualien. His findings suggested that perceived product quality has a positive impact on perceived value.

Wang (2014) also conducted a study to investigate consumer's purchase intention for 4G LTE mobile internet services and found that consumer's perceived quality can positively affect his perceived value. In a study on customer perceived quality, perceived value, and satisfaction of the budget airline, Chen (2014) showed that the perceived quality of customers is positively related to perceived value. Lin (2014) found that perceived quality has a significantly positive influence on perceived value for consumers who purchase baking breads. From the above-mentioned literature, we infer that perceived quality affects perceived value positively. Therefore, this study proposes the following hypothesis:

*H5: Perceived quality is significantly and positively related to perceived value.*

The Impact of Perceived Value on Purchase Intention

Dodds et al. (1991) pointed out that customers usually have an acceptable price in their minds when they buy a product. Perceived value is referred to as the price of the product sold which is lower than perceived appropriate in the consumer's mind. Therefore, purchase intention is enhance with increase of perceived value. Wei & Chuage (2010) investigated the impact of psychological risk, product knowledge and perceived quality on consumer purchasing intention. Their empirical evidence confirmed that consumer's

perceived value for 3G mobile phones is positively related to purchase intention. In a study of the impact of brand image and perceived value on purchase intention for Quaker health food, Chao (2012) also found that perceived value has a significantly positive influence on purchase intention.

Chen (2014) explored the research of purchase intention of personal safety protectors and indicated that perceived value for riders of large heavy motorcycles is positively. Lin (2014) pointed out in his study of the effect of brand image, perceived quality, and perceived value on purchase intention for baking bread that perceived value and purchase intention are positively related. From the above-mentioned literature, we infer that perceived value affects purchase intention positively. Therefore, this study proposes the following hypothesis:

*H6: Perceived value is significantly and positively related to purchase intention.*

#### The Impact of Corporate Image on Purchase Intention

Hawkins et al. (2004) argued that product image can affect consumers' purchasing decisions and purchase intention. When consumers have a positive image or impression for the enterprise, they promote purchase intentions. Lin & Tseng (2008) analyzed the influence of brand strategy and corporate image on consumer purchase intention and found that the corporate image has a positive effect on customer purchase intention. Corporate image enhances consumers' perception of an enterprise, product or service, and reduces the uncertainty of those who make purchase decisions to promote purchase intention of goods provided by firms with good image (Robertson & Gatignon, 1986). Better corporate image leads to higher purchase intention (Wu et al., 2012).

Chen (2002) also noted that a good corporate image can make consumers better trust the product or service thereby enhancing satisfaction and purchase intention of the product or service. Chiang's (2013) study of the relationship among corporate image, convenient, promotions, website functions and customer's purchase intention revealed that corporate image has a significantly positive relationship and impact on customer's purchase intention. From the above-mentioned literature, they inferred that corporate image affects purchase intention positively. Therefore, this study proposes the following hypothesis:

*H7: Corporate image is significantly and positively related to purchase intention.*

#### Perception Differences of Demographic Variables for Brand Reputation, Brand Identification, Perceived Quality, Perceived Value, Corporate Image, and Purchase Intention

Lin et al. (2013) conducted a survey study of coffee chain stores. Their study showed that consumers' perception of brand reputation varies significantly by demographic variables. Hong (2006) showed that consumer perception of brand identification varies by demographic variables in a study of brand identity on basketball shoes. Chen & Yeh (2007) investigated the perceived quality of cosmetics through demographic variables. In their study, customers' perceived quality varies across age, occupation, and gender. In Liu & Ruan's (2014) research of the relationship between users' perceived value and satisfaction of applications on smart mobile devices, users' perceived value varies by demographic variables. Chiang (2013) also pointed out that consumer perception of corporate image varies through demographic variables.

Lee et al. (2009) also confirmed that customer perception of online purchase intention varies by demographic variables in a study of purchase motivation when on-line shopping. We infer that demographic variables have different perceptions on brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. Therefore, this research proposes the following hypothesis:

*H8: Demographic differences exist in perception of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention.*

#### Data

We use seventy question items including brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention in this research (excluding demographic variables). We distributed a total of 560 copies of the questionnaire across the nation. We calculated the minimum sample size from every region and excluded duplicate responses or responses with incomplete answers based on population statistics by region as released by Directorate-General of Budget, Accounting, and Statistics, Executive Yuan in 2014.

This study was based on data from the questionnaire titled “An Effect of the Key Factors on Purchase Intention.” We eliminate responses with incomplete answers or too many unanswered questions. Acceptable responses were coded and filed. Finally, 470 acceptable responses were obtained, 152 of which came from northern Taiwan, 167 from central Taiwan and 151 from southern Taiwan and other areas. The response rate was 83.93%. The questionnaires were distributed to consumers who had purchased at the Fast Food Restaurant- Mos Burger. We surveyed restaurants across Taiwan including the northern area, the central area, the southern area, and the eastern area in Taiwan. The data were collected for the period 9/1/2014 through 12/31/2014.

### **RESULTS**

Data analyses were completed using SPSS 22.0 and AMOS 21.0. The methods adopted included reliability analysis, one sample t-test analysis, factor analysis, correlation analysis, linear structural relation model, independent sample t-test analysis, and one-way analysis of variance.

Reliability values of all factors were greater than 0.7, with the overall reliability coefficient of Cronbach's  $\alpha$  at 0.961, which indicates high-level stability of the reliability of questionnaires administered in this study (Devellis, 1991). Correlation coefficients between revised items and overall items in this study were greater than 0.4 thereby meeting the requirement proposed by Choi & Lee (2003). Overall, the data demonstrate high level of stability and consistency, enabling subsequent analysis results to be more significant.

#### One Sample t Test Analysis

The analysis utilized a one sample t-test to test null hypothesis  $H_0: \mu$  (mean of the population)  $\leq 3$ , while alternative hypothesis  $H_1: \mu > 3$ . Results show the degree of satisfaction (agreement) analyzed by each question of the questionnaire. In the areas of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention, all questions show  $p=0.000$ , which is less than the level of significance of  $\alpha=0.001$ . The results show that for questions on brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention, most participants selected the options satisfied (agreed) or very satisfied (very agreed). Therefore, we conclude that questions on brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention have reached the “satisfy” (“agree”) or above consensus level.

#### Factor Analysis

We use Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy proposed by Kaiser (1974) to evaluate if data are appropriate for factor analysis. KMO ranges between 0 and 1.  $KMO = 1$  indicates that all the variables can be completely explained by other variables. To meet the requirement for factor analysis, the KMO value should be greater than 0.6. According to Chang (2000), the suggested conditions for factor analysis include factor loadings  $> 0.4$ , eigenvalue  $> 1$ , and cumulative variance explained  $> 50\%$ .

Wu (2011) proposed the Bartlett's sphericity test to examine if data are good for factor analysis. In Bartlett's test, the correlation coefficient between variables is tested. A significant coefficient indicates the presence of common factors in the correlation matrix, and data are good for factor analysis. In our factor analysis, all the variables met the suggested levels of KMO, Bartlett's test, factor loading, eigenvalue, and cumulated variance explained. In other words, our study variables are appropriate, meaningful, and reliable. We performed principal component analysis (factor analysis) to extract one dimension of brand reputation, named "brand reputation", four dimensions of brand identification, respectively named "product", "symbol", "corporate", and "brand personality", six dimensions of perceived quality, respectively named "aesthetics", "product performance", "safety", "overall perception", "reliability", and "characteristics", four dimensions of perceived value, respectively named "emotional value", "social value", "price value", and "quality value", three dimensions of corporate image, respectively named "institution image", "product image", and "function image", and one dimension of purchase intention, named "purchase intention".

### Correlation Analysis

Using correlation analysis, we assessed whether a significantly positive correlation exists between brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. Pearson's correlation analysis method was employed to analyze the correlation between brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. Results show that a significantly positive correlation exists between brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention.

### Linear Structural Relation Model

A linear structural relation model (Structural Equation Modeling; SEM) is created to examine whether the path coefficient of the variables was significant. The goodness-of-fit test was conducted on the factors of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. For assessment indices of the goodness-of-fit of the overall model, we used the chi-square/degree of freedom ( $\chi^2/df$ ) value. The value for this study was 1.343, which means that it had considerable explanatory abilities. Moreover, goodness-of-fit index (GFI) 0.873, adjusted goodness-of-fit index (AGFI) 0.834, normed fit index (NFI) 0.865, and comparative fit index (CFI) 0.960 were obtained for the data. These figures were acceptable values being greater than 0.8 (inclusion; the lowest standard value) (Scott, 1994). Root mean square residual (RMR) value was 0.019, within the acceptable level, and root mean square of approximation (RMSEA) value was 0.027, which is also within an acceptable level.

Results show that overall structure of the model employed in this study possessed good fit, with a level of significance of  $\alpha = 0.001$ . The standardized regression coefficient of consumers' perceptions of brand reputation related to brand identification was 0.845, with a p-value less than the significance level of  $\alpha = 0.001$ . The results show a positive and direct correlation exists between the two variables. Higher satisfaction of brand reputation increases consumers' satisfaction with brand identification.

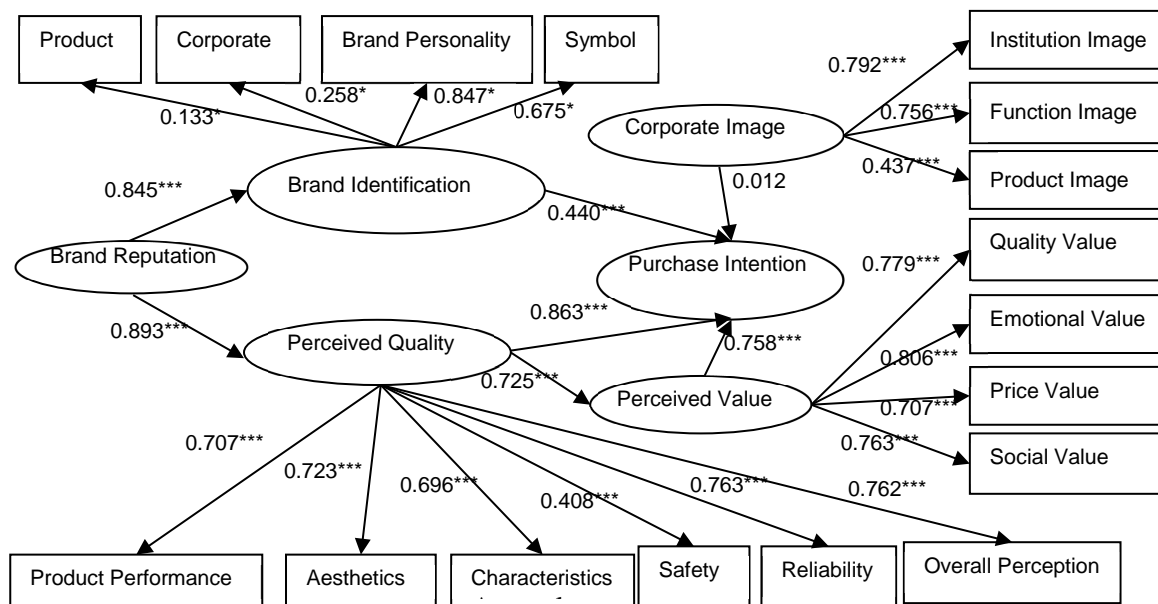
The standardized regression coefficient of brand reputation related to perceived quality was 0.893, with a p-value below the level of significance  $\alpha = 0.001$ . This finding shows that a positive and direct correlation exists between the two variables. Higher satisfaction of brand reputation increases perceived quality. The standardized regression coefficient of brand identification related to purchase intention was 0.440, with the p-value below the level of significance of  $\alpha = 0.001$ . The findings show that a positive and direct influence exists between the two variables. Higher satisfaction of brand identification increases purchase intention.

The standardized regression coefficient of perceived quality related to purchase intention was 0.863, with the p-value below the level of significance of  $\alpha = 0.001$ . The findings show that a positive and direct influence exists between the two variables. Higher satisfaction of perceived quality increases purchase

intention. The standardized regression coefficient of perceived quality related to perceived value was 0.725, with the p-value below the level of significance of  $\alpha = 0.001$ . The findings show that a positive and direct influence exists between the two variables. Higher satisfaction of perceived quality increases perceived value. The standardized regression coefficient of perceived value related to purchase intention was 0.758, with the p-value below the level of significance of  $\alpha = 0.001$ . The findings show that a positive and direct influence exists between the two variables. Higher satisfaction of perceived value increases purchase intention. The standardized regression coefficient of corporate image related to purchase intention was 0.012, with the p-value above the level of significance of  $\alpha = 0.001$ .

The findings show a positive and direct influence doesn't exist between the two variables. Higher satisfaction of corporate image doesn't increase purchase intention. Overall, a total of six paths were significantly positive and the results supported Hypotheses 1, 2, 3, 4, 5, and 6 (H1, H2, H3, H4, H5, H6). But, one path was not significantly positive and the result didn't support Hypotheses 7 (H7). Based on the above illustration, the path analysis of the goodness-of-fit of the overall model is displayed in Figure 2.

Figure 2: The Path Analysis of the Goodness-of-Fit Structure of the Overall Model



This figure shows the regression estimates of the equation:  $Y1=0.845X1$  ( $Y1$ : brand identification;  $X1$ : brand reputation; the standardized regression coefficient was 0.845); the regression estimates of the equation:  $Y2=0.893X1$  ( $Y2$ : perceived quality; the standardized regression coefficient was 0.893); the regression estimates of the equation:  $Y3=0.440Y1$  ( $Y3$ : purchase intention; the standardized regression coefficient was 0.440); the regression estimates of the equation:  $Y3=0.863Y2$  (the standardized regression coefficient was 0.863); the regression estimates of the equation:  $Y4=0.725Y2$  ( $Y4$ : perceived value; the standardized regression coefficient was 0.725); the regression estimates of the equation:  $Y3=0.012Y5$  ( $Y5$ : corporate image; the standardized regression coefficient was 0.012); the regression estimates of the equation:  $Y3=0.758Y4$  (the standardized regression coefficient was 0.758). \*\*\*indicates significance at the 0.1 percent level, \*indicates significance at the 5 percent level.

Independent Sample t-Test Analysis

We further performed independent sample t-test to compare perceptions of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention between genders. Levene's test, with assumption of equal variances, showed no significant difference in perception of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention between genders.

### One-Way Analysis of Variance

One-way ANOVA is a method for analyzing perceptual differences across demographic variables. We first used the test of homogeneity to examine if the assumption of homogeneity of variance was violated. An insignificant p-value indicates that data are good for ANOVA. In ANOVA, a significant p-value is required for subsequent Scheffé's post-hoc comparison. The analysis results showed that consumers' perceptions of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention did not vary significantly by age, marital status, education degree, occupation, place of residence, average monthly income, and average yearly frequency of consumption or purchase. Hence, H8 was not supported.

### **CONCLUDING COMMENTS**

In this study, the subjects are consumers of Mos Burger in Taiwan (north, central, south, east, and offshore islands). We administered a questionnaire to explore the relationship of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention. Our findings are summarized as follows: The one-sample t-test showed that scores for brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention were all above the "agree" level. Correlation analysis confirmed that brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention were all positively inter-related to the level of significance. The theoretic model was further tested using structural equation modeling. The results indicated good model fit. The effects analysis showed that brand reputation had a significantly positive and direct effect on brand identification and perceived quality. Brand identification, perceived quality, and perceived value had a significantly positive and direct effect on purchase intention. Perceived quality had a significantly positive and direct effect on perceived value and purchase intention indirectly affects purchase intention through perceived value.

The results supported Hypotheses 1, 2, 3, 4, 5, and 6 (H1, H2, H3, H4, H5, H6), but they did not support Hypotheses 7 (H7). The independent-sample t-test showed that consumers' perceptions of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention did not significantly differ between genders. In further one-way ANOVA, we confirmed that perceptions of brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention did not significantly vary across other demographic variables either. Thus, Hypothesis 8(H8) was not supported. This study has a limitation in collecting the data of the questionnaires by the convenient sampling method due to limited time, cost and labor. The result of this study also could not be generalized to the perceptions of all Mos Burger consumers in other countries because it only investigated the consumers for the domestic Mos Burger in Taiwan. Another limitation of this paper occurs because consumers took a long time to fill out the questionnaires with some having an unserious attitude regarding the questionnaire.

In a future research, we plan to examine other types of the fast food restaurants such as McDonald's, Kentucky Fried Chicken(KFC), and Burger King. Doing so will enable us to understand whether differences in consumers by type of restaurant produce different results. Another interesting issue would explore the influence of other interference variables such as herding behavior, personality characteristic, and perceived risk on influence brand reputation, brand identification, perceived quality, perceived value, corporate image, and purchase intention.

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