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Examining the real costs of us manufacturing decoupling strategies

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EXAMINING THE REAL COSTS OF US MANUFACTURING DECOUPLING STRATEGIES

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I hereby declare that this Ph.D. dissertation is my original work
and it has been written by me in its entirety.
I have duly acknowledged all the sources of information
which have been used in this dissertation.

This Ph.D. dissertation has also not been submitted for any degree
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ABSTRACT

Examining The Real Costs Of US Manufacturing Decoupling Strategies

Jonathan Chee Sze Chiang

Decoupling strategies have been the main focus of supply chain and resource management studies. Increasingly, due to the shift in geopolitical dynamics, the term ‘decoupling’ is now used in finance, accounting, political, and strategic management fields to describe the effect from the fallout of tense international relations. Existing research on this topic includes modeling strategic retaliation theories and evaluating firm effects from an accounting and finance perspective. Yet, there still is little research published on meso-level analysis of the relationship between macro and micro factors that affect organizational decoupling strategies. This study hopes to add to this new body of research by exploring the real costs of a forced decoupling from one supply chain location to another. The author explains the various costs using three novel approaches: Industry Structure; Governmental Policy, and Leadership Succession.

The Industry Structure study investigates and proposes based on grounded theory how firms in China’s manufacturing supply chains are formed. A novel index is used to categorize the focal firms’ innovation strategies and corporate governance choices. The results show that some firms can withstand a forced decoupling better than others.

The Governmental Policy approach looks into the history of mobile phone manufacturing in China and the specific roles the Chinese State-Owned Enterprises

(SOEs) play in shaping the nation's sustained competitive advantage. A unique event study of foreign social media attacks is performed to understand the effects of exogenous threats to the state, and its subsequent reactions are observed and analyzed.

Finally, the Leadership Succession approach looks into the conduciveness of the proposed alternative sites to China. From a cultural similarity perspective, the study chose Taiwan but finds significant succession challenges with the next generation of leaders in family-owned firms. The findings suggest that weak leadership succession is occurring either because the successor does not have the intention of carrying on the business or if external political forces create adverse shocks to the supply chain, which can put the focal firms at a disadvantage. This leadership void and the firm's poor performance trend may cause it to be vulnerable to acquisitions, hostile or otherwise. This study concludes by presenting a case study of a large Taiwanese manufacturer that faced a non-family succession and was acquired by a Chinese SOE. As the global environment undergoes seismic shifts post Trump and pre-COVID vaccination, many scientific research fields are joining hands to recalibrate their datasets and research boundaries. This thesis emphasizes the need to conduct meso-level studies when exploring the topic of decoupling to give a richer context of understanding, which is vital for researchers in the pursuit of causal validity.

Keywords: decoupling, meso-level, industry structure, SOEs, leadership succession, social media attacks, supply chain, retaliation

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ACKNOWLEDGEMENT

The journey in producing this thesis was challenging. The world is still reeling from the aftershocks of the pandemic and global trade tensions. Much of our work here hinges on many assumptions because the data is only beginning to stream in. There is an urgent call to researchers to analyze the relationships between the causal effects and the phenomena of our current geopolitical realities. Organizations are left with many questions unanswered, leading them to chart their course with great uncertainty. A multi-disciplinary approach was needed and adopted to examine the implications set out in this dissertation.

Many contributors are equally responsible for making this research a reality. I could not have successfully done so without the help of my advisors from my dissertation committee. A huge thanks go to my chair, Professor Geng Xuesong, who worked tirelessly to ensure that this massive endeavor kept its fidelity, logic, and consistency. It has been as much a pleasure as it is an honour to have received his guidance.

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PREFACE

Trade Globalisation since the 1970s has transferred manufacturing activities towards the emerging countries, benefiting consumers in the rich world by reducing the costs of manufactured goods at the same time, lifting approximately a billion people out of poverty. However, one inevitable result of this transfer was a decline in available jobs in sectors of the United States (US) such as manufacturing, which disproportionately affected the populations of middle-America. For these people, lower living costs could not compensate for lower-income, resulting in the discontent that formed the Tea Party Movement and the rise of Donald Trump.

In the 2016 election, President Trump was elected via an electoral college system with only 46.1% of the popular vote (compared to Hillary Clinton's 48.2%) by a turnout of 55.7%. Therefore only 25.7% of the US population voted for Trump, which forms the same voter base that he hopes to rely on for the 2020 election. As we explore the Trump effect and COVID-19 on global supply chains, we must keep this Trump voter base in view. Trump understands that attending to the visceral concerns of his voter base, rather than to the global economic interests of those outside his support base, is the key to his re-election efforts.

Trump is emblematic of the many populist movements worldwide, which have gained momentum over the past decade since the Great Recession. Although globalization proponents may view his policies as a geo-political war of attrition,

the COVID-19 pandemic has shown them to be an indiscriminate shock to all nations and the global system in general. It is alternatively argued that the Trump effect on global supply chains may last only until the 2020 or 2024 elections, but COVID-19 may create a more fundamental shift in how international trade is structured. This discussion explores trade-offs that may shape this structure, and we propose a prediction of what impact the forces of Trump and COVID-19 may have beyond his presidency.

The Trump Effect

A central pillar of Trump's populist agenda is protectionism. In contrast with globalization, which encourages the borderless transfer of economic activity to where it is most efficient, protectionism restricts these transfers within national borders. This phenomenon has also driven significant structural changes, such as with Brexit in Europe. Trump has always held a protectionist view on foreign relations, withdrawing from trade agreements such as the Trans-Pacific Partnership (TPP) and the North American Free Trade Agreement (NAFTA).

Perhaps the most visible result of his protectionism on supply chains has been the trade war with China. One of the key drivers of globalization was unleashed in 2001 when China joined the WTO. Since then, global corporations have effectively placed their intellectual property (IP) at risk in exchange for access to China's markets. This arrangement is deemed as predatory IP violations by

Trump's administration, with officials such as Robert Lighthizer - Trump's US Trade Representative - encouraging manufacturers to return to the US. This strategy aligns Trump's interest in protecting American IP globally with his domestic agenda of providing employment to his voter base. There is proof that this policy has been working; the 2019 Kearney Reshoring Index showed a reversal of a five-year US off-shoring trend.

Additionally, the US Manufacturing Import Ratio (MIR), which measures total manufactured goods imports as a percentage of domestic manufacturing gross output, fell to 12.1% in 2019 after reaching a peak of 13.1% in 2018. We will have to also look at the current Chinese retaliation response as the U.S. tariffs fall mainly on multinational trade between the two countries. China is signaling that it is not going to hit global Supply chains - the Chinese are going to tax US soybeans or pork and start to purchase those from alternative countries. China will also withhold the sale of precious elements to US companies. These precious metals are critical components to the manufacturing of high tech products like mobile phones and satellite infrastructure – which one could argue is essential for 5G network development.

The most obvious cost of protectionism to Americans is an increase in the cost of goods. As emphasized by Nouriel Roubini, a venerated economist, protectionism and its resulting tariffs not only increase the price of imported finished goods for consumers but also raise the costs of imported inputs for

American manufacturers. Furthermore, because the lack of requisite talent in the US restricts specific jobs from returning to the US, and because negative supply shocks caused by trade war retaliation can bankrupt weak domestic producers, the US is at risk of stagflation.

The US seems to be bi-partisan when it comes to 'punishing' China. This particular policy was not started by Trump but merely magnified in focus – especially if the economic war escalates into an actual "hot" war. Should a "hot" war occur, the administration's hawks may pick a proxy fight over an area where the US can have: a dominant strategy, minimal troop commitments, and the lack of a protracted campaign. This possible location may be the troubled South China Sea, where there is increasing tension.

China is now the target of much international discontent; the Uyghurs persecution; the territorial disputes with India; the tension with the Australian forces and other vested players over the nine-dash line Militarisation; accusations of Huawei's spying attempts; currency manipulation; National Security Legislation in Hong Kong; the origins of COVID-19 and IP infringements are but some of the several issues that China has to contend with and resolve.

What is exacerbating the issues at hand is the presence of two accelerants. The first is China's refusal to back down on the issues that the international community at large is pressing for transparent accountability. The second is the

possibility of predatory actors within the pugilistic countries who wish to push to exact punitive measures on China – disguising intentions to default under the veil of international sanctions.

COVID-19

One of the critical benefits of globalization has been its ability to allow demand and supply to intersect most efficiently. This efficiency has enabled supply chain optimization using Just-in-Time (JIT) principles, stripping inventory costs out of products, in turn, lowering prices for consumers while padding profits for global companies. However, questions about the fragility of JIT supply chains were raised after the 2011 Fukushima earthquake, and black swan events such as COVID-19 have now cast further doubts on their robustness.

Just as Fukushima's effects on JIT supply chains was a precursor to COVID-19's impact, the SARS epidemic of 2002 can also be a reference point for the COVID-19 pandemic, specifically in terms of China's role in the world's supply chain. During SARS, China's global trade share was only 5%; it is presently ~13%. In addition, it was only producing commodities such as textiles and plastics that are lower in the value chain. In contrast, it is now leading the world in producing both high-tech input components and finished goods for the global market. The world's dependence on China's supply chain is illustrated not only by volume but also in

concentration. One such vulnerable sector is pharmaceuticals; for example, 80% of aspirin is manufactured in Hubei province, which was ground zero of this pandemic.

Efficiency favors concentration, while risk management favors diversification. Although spreading a supply chain over countries and continents may mitigate the supply risk of events such as COVID-19, taking such a step adds complexity and increases costs. These are the trade-offs that executives need to consider as they structure their supply chains in the wake of this pandemic CHEE, J., CHU, C., & LAY, C., (2020).

The Future - Multilateralism

Global supply chains currently face two major negative forces. The first force is the Trumpian protectionistic attempts to reverse the offshoring of jobs to advance American trade interests. The second force is the need to mitigate the supply risks exposed by COVID-19.

A possible result of Trump's proposed reshoring of talent back to the US and away from China is the lack of credible alternative resources. This gaping hole will strain supply chains as many companies may try to diversify their supply chains, albeit incoherently, to avoid tariffs. However, if China retaliates by closing its doors to global access, the resultant effect will be far worse than the initial remedy. This trade risk will likely be carried on to the next US administration as China is not

likely to give up too many concessions in the trade imbalance, and it shows signs of wanting to achieve a state of 100% supply chain self-sustenance.

To make matters worse, events such as COVID-19 are black swan events, and with asymmetrical infections and national shutdowns, affected firms may be forced to an exacerbated state. In combination, these two opposing forces may leave firms without any viable trade options and push to the brink of insolvency. An example could be a US firm forced to switch a component supplier blacklisted by the Trump administration to another source outside China. Notwithstanding the increase in costs and the downtime in production from switching out suppliers, the alternative sources could be shut down due to COVID-19. Although some companies may diversify production or increase inventories (where margins allow) to circumvent or mitigate these two forces, we believe that the global supply chain may face temporary disruptions but will not be fundamentally altered unless provoked.

One possible provocation could be the forming of multilateralism between the peripheral powers who Trump had isolated and are now ready to form a collegiate force with the US against the Chinese issues.

With this as the backdrop of geopolitical issues the world is facing, our study is timely. It explores the real costs of offshoring and /or onshoring of many industries that are currently located in China. The study proposes that there are costs

that are beyond the scope of traditional accounting methodology that have to be considered for policymakers and firms to evaluate the viability of such actions accurately.

1. INTRODUCTION

The purpose of the research is to examine the real costs of the strategies considered by the United States (US) to decouple its manufacturing operations from China. I propose that the policymakers and the firms affected may not have fully considered all the cost implications when contemplating such a strategy. These additional and unconsidered costs are not factored-in while using a traditional accounting approach for evaluating decoupling strategies. Instead, these real costs are endogenous, meaning that the risks of them occurring within the industry or the focal countries in question are harder to detect externally. In the global geopolitical arena, where political actors exert their interests for positional power, threats are exchanged exogenously. Without an integrated framework for understanding all the other real costs, the actors may push themselves inadvertently to mutually unbeneficial states. The acknowledgment of these real costs can very well serve to stave off untenable options currently being played out by both parties.

To begin the investigation, I perform an analysis of the Chinese mobile phone industry's supply chain. The choice of this industry is because of the considerable revenue spent and generated on it. In 2020, the mobile phone market has reached 44.85% of global market penetration, with a revenue stream of USD 410 billion. This industry also has the fastest turnaround of production because of its incredibly low-shelf life. This phenomenon is due to the symbiotic relationship between the Telcos and the equipment manufacturers, in which the cost of the phone

is amortized to the data plan that the user subscribes to. As a result, the device's cost, not payable upfront, is deemed acceptable, and the consumers are not averse to the idea of switching to a newer model every new cycle of production.

The magnitude and speed of its revenue streams are why this industry is in the US administration's crosshairs for trade sanctions and warrants our scholarly attention. To provide context for the arguments that will follow, I set out to list the unique taxonomy of the Chinese manufacturing supply chain. I will then attempt to show the real costs involved through three lenses: Industry Structure, Governmental Policy, and Leadership Succession.

Firstly, I propose that some firms will experience lower costs of decoupling because of their innovation characteristics. Industry Structure Costs are defined as the resources, time, and knowledge transfer needed to uproot an existing enterprise from China into an alternative country.

Secondly, there are many Chinese State-Owned Enterprises (SOEs) that seemed to have been propped up by massive internal injection of capital since the start of the trade spat between the US and China. I propose that any attempts to decouple may be met with an endogenous retaliation. This retaliation may bring about further unexpected costs (Governmental Policy Costs) for the relocator.

Lastly, I propose that many of the countries which serve as alternative sites to China are facing leadership succession challenges in their key industries. The lack of leadership succession poses an additional cost threat (Leadership Succession Costs) if these alternative site firms face hostile acquisition, especially from the Chinese SOEs.

Through each of these approaches, I propose separate theoretical constructs about the factors which contribute to additional costs not yet considered by general theories. I provide a literature review of previous scientific work on each of the extant theories and propose how I can contribute to the body of research. I also offer empirical methodologies of how I attempt to support my respective propositions.

Figure 1: Overview of the research

2. AN ANALYSIS OF THE CHINESE MOBILE PHONE INDUSTRY'S SUPPLY CHAIN

There is little argument about Motorola being the pioneer in the mobile telecommunication industry. In 1983, Motorola released the very first version of the mobile phone, the model DynaTAC 8000X. It managed to sell three hundred thousand units at an exorbitant four thousand US dollars, equivalent to eleven thousand dollars today. The first mobile phones were manufactured in the US, despite China already opening its doors to foreign firms. China needed to learn how to innovate its workforce, and Motorola had to enhance its scalability to bring the costs of manufacturing down.

In 1986, Motorola created the lean-manufacturing framework, Six-Sigma, which is still the standard-bearer today for firms to maximize yield processes. The Ministry of Posts and Telecommunications of China noted the trend and decided to adopt the Total Access Communication System (TACS) technology (TACS is the prehistoric relative of our current 5G technology).

Driving innovation was still very much only the Western firms' goal. China did not make its first significant leap into Mobile Technology until Motorola released the Global Packet Radio Services (GPRS) in 2000 and 2004; the Motorola Razor, commercial success for Motorola, having sold 130 million units.

China needed to bypass the birth pains of Innovation, but it lacked the know-how that the Western firms had spent decades of research and development (R&D) acquiring. The state found a simple and effective two-way strategy to begin planning for long-term domination of this critical industry that will have far-reaching implications for social and economic wealth.

Firstly, to satisfy the need for a growing economy to have access to mobile networks, China allowed a class of manufacturing firms dubiously called "ShanZhai" to develop second-generation (2G) mobile communications devices. Shanzhai manufacturers, also known as "Guerrilla manufacturers," are, at best, firms that are dangerously close to the definition of committing piracy of intellectual property design and brand. These Shanzhai manufacturers were often state-funded and licensed and perform the roles of white-box equipment manufacturers to Western firms seeking globalization of their supply chains. This bottom-up approach to innovation allowed China to help some of its fledgling firms learn technological lessons without trial and error. This arrangement was an almost unholy symbiotic relationship between the manufacturer and the lead brand. In exchange for providing cheap labor and favorable environmental policies, Western firms would have to allow certain concessions regarding intellectual property violations. The Shanzhai manufacturers would notoriously copy the mold-toolings and the parts to sell inferior versions on the secondary market to cater to the grassroots demand for low-cost devices.

Secondly, China would on a state-level create partnership opportunities with cross-industries like the Taiwanese integrated circuit design manufacturers such as MediaTek (Chen, Wen, and Tai, 2013; Liu and Chao, 2009; Sheng and Shi, 2010; Tse, Ma and Huang, 2009) with the Shanzhai manufacturers, thereby increasing the speed of the innovation transfer process.

The market changed dramatically with the advent of the 3G smartphone. In 2010, China recorded 800 million mobile phone subscribers in the Mobile Phone Market. A few homegrown brands like Lenovo, Huawei, and ZTE were already gaining a strong foothold on the domestic market and wanted to extend their reach into the international markets. However, to do so, these local brands needed to separate themselves from the supply chain reliance on Shanzhai manufacturers. At this time, China had already had four years of exposure to high-quality mobile manufacturing and was ready to make profound changes to the manufacturing sector.

Many of these Shanzhai manufacturers developed in the southern part of Guangdong, especially in the Shenzhen and Dongguan region, where about 30,000 companies now collaborate across the entire supply chain. The firms were formed based on their innovation choices. These choices specifically pertain to how they needed to deal with the industry problems encountered, the resources that they had, and the governance structure of the firm. These Shanzhai manufacturers started to either become component manufacturers, ODM (Original Design Manufacturer),

OEM (Original Equipment Manufacturer), EMS (Electronics Manufacturing Service), or JDM (Joint Design Manufacturer). The modularisation phenomenon of the industry structure will be discussed in detail in subsequent chapters. We discuss how the next evolution of change may soon be brought about by the exogenous threat of a global trade war between the US and China. An in-depth study is conducted to draw out a categorical taxonomy of these suppliers, and we further look into how they are grouped by industry structure and their ability to react to negative supply shocks like in the case of a forced relocation or what is known as decoupling.

3. SECTIONAL ABSTRACT

This study investigates and proposes based on grounded theory how firms in China's manufacturing supply chains are formed. Existing literature focuses on how supply chains work from operations efficiency, human resources allocation, sustainability, or engineering innovation perspectives. However, very little is understood about the history and considerations in these firms' structural formation. The reason researchers have very little information is because the firms' identities within the supply chain are often not discussed openly. Having an efficient supply chain of suppliers is a sustained competitive advantage. This study proposes to contribute to research in two ways. Firstly, a taxonomy of the firms within a unique but critical manufacturing supply chain, the mobile phone industry, is compiled and presented. This database, which contains its members' profiles and performance, is then categorized according to existing modular functional roles in a hierarchical format. Secondly, Knowledge-Based Theory (KBT) is used to explain the formation and functional logic of the modular structures of the members' roles. A novel empirical study is then performed to assign an "Innovation Composite Index" (ICI) to the firms. The assignment follows assumptions of how a firm's innovation and investment choices will affect its ability to react to exogenous threats like a forced decoupling from its existing supply chain. The hypothesis is that the higher the firm's ICI score, the more they are unlikely to be relocated to an alternative site because of the increase in costs due to the immobility of heavy-laden capital assets and from Knowledge Stickiness transfers. Moderating factors include the age and

size of the firm. The intuition is that the older and larger the firm is, the more likely it is to face inertia for change. The implication for policymakers and stakeholders is discussed within.

4. SECTIONAL INTRODUCTION

There have been numerous taxonomy studies about the manufacturing supply chains. The categorization of the firms studied are topical perspectives ranging from Environmental risk (Oliveira, F. N. de, Leiras, A., & Ceryno, P., 2019); Green practices (Kumar, V., Holt, D., Ghobadian, A., & Garza-Reyes, J. A., 2015); Operations Management (Papageorgiou, L. G., 2008); Quality (Huo, B., Ye, Y., Zhao, X., & Zhu, K. (2019) and Patterns of Supply Chain Practices (Paulraj, A., Chen, I. J., & Lado, A. A., 2012). Most of these studies are cluster analyses. While a cluster analysis provides alternative ways of categorizing firms in a supply chain, it does not contain granularity on the firm's strategies, capabilities, and capacity to deal with exogenous threats.

This study follows the theoretical work of (Grant, 1996) and Nickerson and Zenger (2004) in their Knowledge-based theory (KBT) of how firms are formed to solve problems and suggest a novel empirical way to demonstrate this.

This study developed an "Innovation Composite Index" (ICI). This index acts as an essential Independent Variable (IV), following some basic intuition. The higher the Plant Property and Equipment (PPE), the more vested the firm is in its capital assets, and relocating it will mean higher costs. The more employees (E) the firm has, the higher the likelihood of Knowledge Stickiness occurring during the Knowledge transfer process (Szulanksi, 1996; Huan et al., 2017). The more the firm's innovation (INN), the easier it is to transplant this knowledge to another site. (PPE&E) are negatively related to the ICI; while INN is positively related to the ICI ($ICI = \frac{PPE\ x\ E}{INN}$). The ICI; serves as one of the independent variables; there are also moderating factors like the size (market capitalization), age of the firm, and the CEO's education levels. The Dependent Variable (DV) is the probability of success of decoupling Tobin's Q.

Innovation-driven firms are often capital asset-light and focus on research and development in multiple streams of scientific disciplines (Arora & Ceccagnoli, 2006; Tang, Y., Hu, X., Petti, C., & Thurer, M., 2019).

Understanding how firms are arranged in the supply chain will help answer the main research question of whether firms can contemplate a complete and successful decoupling of its manufacturing supply chain from China. There is very little scholarly research done to define the participants' exact roles in the entire manufacturing supply chain because brands traditionally wish to keep their suppliers' identities to themselves. Building a stable and efficient supply chain

requires much work, time, and resources to get right (Rottman, 2008; Arrunada, B., Vazquez, XH., 2006). Given its relatively short shelf life and constant regeneration of iterations, the mobile phone industry has massive production and sales volumes. It attracts the best talents vying to be a part of the supplier vendor base (Kenney, M., Pon, B., 2011; Gartner, 2011; Ahonen, 2010).

Through research from secondary data sources, I manage to obtain the list of suppliers and the products and services they supply and create a comprehensive landscape (Huang, A., Stewart, R., Chen, L., 2010). This study hopes to contribute to the research on supply chains in three significant ways. Firstly by offering a unique network listing of the Chinese mobile phone manufacturing Supply Chain - this is useful for scholars to develop further due to the difficulty in obtaining this information. Secondly, this research provides a novel way of categorizing suppliers' roles in the supply chain by what innovation characteristics they adopt. Lastly, I offer an empirical method of determining the costs of relocating a firm to another location, based on its innovation characteristics and moderating factors like knowledge transfer stickiness, cultural distance, Chairman's education level, firm age, and market capitalization.

5. SECTION LITERATURE REVIEW

Global supply chains are facing negative supply shocks from many external threat sources. The Foreword section of this study, "Global Supply Chains: The Trump Effect & COVID-19" by Chee, J., Chu, C., & Lay, C. (2020), articulates what these supply shocks are and how the meso-level effects will play out. I performed a review of how existing taxonomies are done to categorize firms in the manufacturing supply chains. Topical studies include classification of firms according to the environmental risk that they pose (Oliveira, F. N. de, Leiras, A., & Ceryno, P., 2019); the level of Green standards it practices (Kumar, V., Holt, D., Ghobadian, A., & Garza-Reyes, J. A., 2015); The efficiency of its operations management (Papageorgiou, L. G., 2008); the quality standards it maintains Huo, B., Ye, Y., Zhao, X., & Zhu, K. (2019) and the patterns of supply chain management practices (Paulraj, A., Chen, I. J., & Lado, A. A., 2012). However, these studies do not provide the firm's granular details to evaluate its ability to handle supply shocks.

Firstly, I need to identify an industry that would be representative of the manufacturing landscape of China. The research selected the mobile phone industry because of the sheer volume of production and the revenue generated, as stated by (Kenney, M., Pon, B., 2011) and in the introduction section (above).

Through individual interviews extracted from management reports from BNP Paribas, Credit Suisse, Bank Julius Baer, the Wall Street Journal, The World Resources Institute, and KPMG's advisory services, a taxonomy of publicly listed firms is arranged according to their modular functions within the Chinese supply chain. The firms' profiles, shareholdings, and performance are extracted from ORBIS, CRSP, CSMAR, and EDGAR 10K reports. The hierarchical data set is first created based on whether the firm is a Lead Customer, Contract Manufacturer, Tier-One supplier, or a Tier-Two supplier.

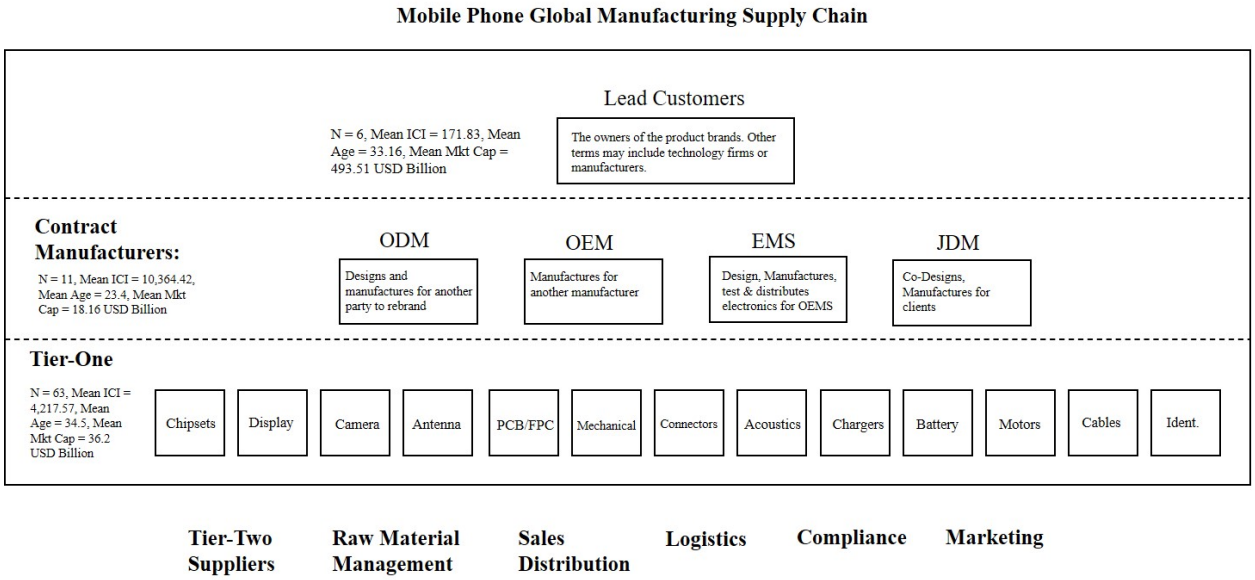


Figure 2: Taxonomy of suppliers in a mobile phone manufacturing supply chain

5.1 Firms' roles in the Hierarchical Structures

From Figure 2, the definitions of the hierarchical strata are set out. The Lead Customers are the owners of the final product, which includes the branding identity.

The Contract Manufacturers (CMs) directly serve the lead customers. These firms are responsible for assembling the entire product solution within the lead customers' allotted timeframes. The CMs usually play one or more roles such as ODM (Original Design Manufacturer), OEM (Original Equipment Manufacturer), EMS (Electronics Manufacturing Service), or JDM (Joint Design Manufacturer). The firms' roles are arranged according to the hierarchical structure Production Planning and Control (PPC) system proposed by Schneeweiβ, C. (1995).

An ODM is a manufacturer that can design and manufacture the product. However, ODMs typically white label manufacture the product for a customer. ODMs rarely take a stake in the brand of the product. An OEM is a firm that performs the role of manufacturing the product without much direct design intervention. The OEM may provide inputs for component fitting and assembly and orchestrates the other component suppliers' delivery. The EMS is a direct manufacturer that produces and assembles components for the OEM. A JDM performs a role that is a hybrid of an OEM and ODM, as it will design and build individual parts of the product which are not available off-the-shelf and assembles the other components which are.

Tier-One firms are component manufacturers that produce parts which, at the end of the cycle, will require very little or often, no more intervention from another supplier, save the assembly process. In the categories of a typical mobile phone supply chain, Tier-One supplier categories are Chipsets; Display; Camera;

Antenna; PCB/FPC; Mechanical; Connector; Acoustics; Chargers; Battery; Motor; Cables and Fingerprint Identification. This list is by no means exhaustive given the constant evolution of the mobile phone industry; there will inevitably be more categories that will spring out. Tier-Two firms are raw material suppliers to Tier-One firms. For the completeness of the study, I have annotated the Tier-Two firms herein. However, the Tier-Two firms have been excluded from our quantitative analysis because of the lack of information available.

Next, the firms' data on their corporate history, profile, shareholders information, and balance sheet items like Plant Property and Equipment, Long-term assets, Intellectual Property, Capital Expenditure (CAPEX) are listed. With this data, every firm's ICI is calculated, and its mean is measured against the other members within the categorical group and with the others in the taxonomy.

The intuition behind the ICI ($ICI = \frac{PPE\ x\ E}{INN}$)$/1000$ is that the lower the index score, the less it is ladened with Capital Expenditure, long-term assets, and the need for a large workforce, all of which may not be so mobile and transferable. On the denominator side, the more the firm invests in innovation, i.e., the number of patents it holds, the easier it will be to transfer its operations to another physical location. In order to calculate this INN score, the net other intangible assets allocated to the intellectual property value which the firm owns are added to the goodwill value. The goodwill entry on a firm's balance sheet is added because of the value of the brand of the firm, which adds to the enterprise value according to

(IASB: IFRS 3 Business combinations and IAS 38 Intangible Assets. FASB: SFAS 141 Business Combinations and FSAS 142 Goodwill and Other Intangible Assets) and (see: Mizik, 2009; Hsu, L., Fournier, S. and Srinivasan, S. (2011); Wiesel, T., Krausl, R. and Srivastava, R. (2012) for recent evidence of the link between brand and company value). Firms like APPLE, known as a lead customer in the taxonomy, do not directly manufacture their iPhones and are therefore not laden with the machinery's capital expenditure and the labor force needed for actual production. However, Apple owns the product's invaluable brand and the associated patents to innovate the functionality and design.

The lead customer's structure contrasts with the CMs' tasks to assemble the entire product line. The CM has to orchestrate the delivery to the client, the receipt of the Tier-One firms' finished components and assembly, testing, and certification of all the modular parts. Managing such an operation will require massive capital expenditure on factories and machinery and maintain a sizeable workforce to process every product component. Examples of such firm structures are Foxconn, which has 40 factories worldwide, and approximately one million employees and a relatively low value in its patents and goodwill (Chan, J., 2013).

Finally, the Tier-One firms sit uniquely between the CM and the lead customers. The Tier-One firms are broadly categorized into 13 modular groups, which are Chipsets; Display; Camera; Antenna; PCB/FPC; Mechanical; Connector; Acoustics; Chargers; Battery; Motor; Cables and Fingerprint Identification. For this

research's scope, the differences in infrastructural setups between the categories will not be discussed. Within each categorical group, it can be assumed that the members are competitors to each other. The competitive strategy of these Tier-One firms is that they are technical specialists in their respective fields of expertise. This chosen strategy means that though the Tier-One firm will have to be laden with Captial Expenditure and Labour, it will often have unique patents pertaining to the product's specialization. The addition of these patents is what makes it have a slightly lower ICI than CMs. However, as most Tier-Ones do not manufacture the complete product, they may not have as much goodwill or brand value as a lead customer, making their ICI higher than a lead customer. And as previously mentioned, the Tier-Two material suppliers to Tier-Ones are not included in this study due to the lack of public data.

Proposition #1: In the hierarchical structure, lead customers have the lowest ICI.

Proposition #2: In the hierarchical structure, CMs have the highest ICI.

Proposition #3: In the hierarchical structure, Tier-Ones have moderate ICI.

5.2 Knowledge-Based Theory (KBT) on the formation of the firm's roles

Using KBT, this study explains why firms choose their roles within the supply chain's hierarchical structures. Grant (1996) says that knowledge is specialized, and it resides in individuals. This collective knowledge is then passed on to the organization through mechanisms of integration and transfer. How these

transfers of knowledge are integrated into the organization will affect the organization's design, hierarchical structure, horizontal and vertical boundaries, and performance. However, this study differs from Grant (1996) in that I believe that knowledge can be generated. I then look to Nickerson and Zenger's (2004) research on how the basic unit of analysis of why firms exist is to identify the problems that it has to solve. The formation structure's primary rationale is to optimize the search for a solution and choose which type of governance it requires.

5.2.1 Definition of knowledge

Knowledge is simply defined by Grant (1996) as what the entity knows. The entity can be an individual founder who has the particular technical knowledge and starts his enterprise with a unique skill. The success of this enterprise rarely falls on one person, and soon, the founder will have to acquire skills from other entities to help him with the different aspects of making his enterprise a success (Rumelt 1984; Barney 1984; Wernerfelt 1984; Teece, D., G. Pisano, A. Shuen. 1997). How much knowledge he acquires depends on a few factors, two of the most important being time and funding.

To scale the firm's operations, it will be necessary to transfer the various knowledge. The founder will have to distinguish what kinds of knowledge are being held by the individuals, which will affect the transfer costs. Knowledge can then be broadly categorized as Explicit or Implicit knowledge. Explicit Knowledge is a

public good and can be communicated at zero marginal cost to the next person. Implicit knowledge is something that can only be transferred by application. If this knowledge is particularly challenging to be taught to another, it is deemed idiosyncratic (Hayek 1945: 521) and can be too costly and slow to transfer (Kogut and Zander, 1992).

5.2.2 Knowledge Hazards

If the knowledge is explicit, it can be appropriated. If it can be easily appropriated, it will be challenging to obtain intellectual protection (IP). Therefore, if a firm cannot get IP protection, it may have to erect barriers to entry by being a cost leader (Porter, M.E. 1997). To be a cost leader, it must undertake massive capital expenditure investment. As discussed in earlier chapters, China's initial mobile phone manufacturing industries received injections of cheap funds to start these enterprises (Pg. 15). Within this cost leadership strategy, innovation is not a priority of the firms.

Knowledge hoarding or strategic accumulation is a risk that is faced by lead customers. Knowledge hoarding is more prevalent in Tier-One firms, contending to be specialists and within their category. If firms hoard knowledge, it will not benefit CMs or lead customers, requiring multiple firms' open participation. The strategies that lead customers will adopt to mitigate these risks are to increase margins

payable to Tier-Ones, enticing them to share their knowledge and ensure that no one supplier is a single-source of supply.

5.2.3 The problems firms face and the threats of knowledge transfer

Having established the nature of knowledge available to it, the firm will now have to scope the landscape in terms of the problems it wishes to solve and the solution needed. The studies of Simon's (1962) complex systems and Kauffman's (1993) NK modeling are utilized. To simplify Simon's (1962) example of complex system interaction, the automobile's creation is a combination of the innovations of the bicycle, the internal combustion engine, and the horse carriage. The new knowledge generated is through the combination and interaction of various prior knowledge systems. The degree of interaction can be measured with Kauffman's model of measuring N (the number of interactions between entities) and K (the degree of interaction between them measured from zero to one).

Low-interaction/decomposable problems are those in which the value of the solution derived depends on little interactions between knowledge holders. This description aptly categorizes Tier-One firms. They operate independently of the other categories at the same hierarchical level because they produce according to their specialization. Tier-One firms are, of course, subject to minor interactions with their Tier-Two suppliers, but because the raw materials that are supplied by Tier-

Two firms are rarely proprietary and are subject to high competition, these interactions have very low K and are deemed negligible for this study.

High-interaction/non-decomposable problems are those that are faced by the lead customers. Although the eventual product's (i.e., an iPhone) design and intellectual property belong to APPLE, the company still has to contend with numerous interactions with vendors who have their proprietary techniques in their various modular formations that contribute to the entire production.

Moderate-interaction or nearly decomposable problems are those that are faced by the CMs. Here, sub-problems are defined as Tier-Ones' problems in manufacturing their components, which are mainly independent. However, a CM will have issues when designing the overall product, which requires the assembly of all the components. For example, a CM will have to work with the lead customer on designing the speaker system of the mobile phone; this interaction in itself is relatively straightforward. However, it will have to do deal with both the Tier-One manufacturers for the Speaker and the encasement housing to ensure the product fits the assembly level.

5.2.4 The methods firms use to seek solutions

The different types of problems that firms face will dictate the way in which they seek solutions. Low-interaction problems faced by Tier-One firms will be best

solved by a Directional approach, according to Nickerson and Zenger (2004). This method is characterized by small changes made to the product's development through points of feedback and trial results. Tier-Ones often take the main knowledge sets from their specialization and modify the design at the behest of the lead customer. This method is efficient and most effective for Tier-One firms.

In contrast, lead customers will adopt a heuristics approach to solving high-interaction problems. Lead customers are differentiated by their high levels of branding and innovation - firms like APPLE or Huawei are synonymous with cutting-edge technology. The burden of the level of innovation required from lead customers drives them to seek multiple angles of trials and designs. The ability to drop an undesirable design or knowledge set is critical. Therefore lead customers often rely on their innovation rather than laden capital assets meant for hardware manufacturing.

5.2.5 The governance methods available to managers

Based on Hayekian theories, free-market forces are the best governance method to manage Tier-One firms' decomposable problems. The price that the CMs are willing to pay for components will determine how Tier-One firms utilize their resources to respond to the price-driven demands. Part of this decision-making process explains why a Tier-One firm does not necessarily aspire to move up the hierarchical layers. Tier-One firms have relatively lower branding and innovation

than lead customers and may have issues obtaining leveraging facilities needed to attempt a move up the supply chain. If they cannot obtain leverage with the right risk levels, the rewards may not justify a move out of the strata they are in. As Tier-One firms have a relatively low number of interactions with other members in its category, a free-market force is the best option to help managers decide how to optimize their knowledge sharing.

A consensus-based hierarchy is best suited for lead customers. In this form of governance, priority is given to extensive knowledge sharing, even more efficient than that of the markets. In the example of the mobile phone industry, the product's functionality and design are not just the collaboration results within the supply chain members; they extend outwards to include users' opinions and even those of non-users. This mass collaboration can only be attempted by the lead customers who command the greatest share of the revenue streams. Once again, because lead customers must adjust to changing consensus, it should remain relatively capital asset unladen.

An authority-based hierarchy suits the CM, which has to efficiently guide the other firms to deliver their components in a timely and efficient manner independently. The heuristics that the CM has to employ is analogous to that of the music conductor. The CM has first to understand the composer's (lead customer's) work and propose an interpretation of how to execute it. The CM then has to choose the right ensemble to perform this task. To select the right ensemble, the CM has to understand the boundaries of the individual Tier-Ones firms' capability and capacity. Each of these Tier-One firms is like an individual musical instrument, first playing in sync with its section. The CM has to conduct the cadence and rhythm of all the sections to deliver the musical piece. The conductor is under the orchestra owners' employ. It also has to maintain the staff costs and the venue's maintenance regardless of whether it has been chosen by the composer to perform. Some CMs may have market capitalization larger than smaller lead customers, but its profit margins are not as high because of the 'orchestral' nature of its tasks rather than its specialization or innovation. The summary of the KBT concepts is shown in Figure 3.

Type of problems	Degree of knowledge set interactions (K)	Preferred solution search style	Transfer Knowledge need	Knowledge Hazard	Governance Form	Taxonomy Level
Decomposable	Low	Directional	Low	Low	Market	Tier-One Supplier
Nearly Decomposable	Moderate	Directional and Heuristics	Moderate	Moderate	Authority-Based Hierarchy	Contract Manufacturer
Nondecomposable	High	Heuristics	High	High	Consensus-Based Hierarchy	Lead Customer

Figure 3: KBT chart adapted from Nickerson and Zenger (2004)

5.3 What is Decoupling?

Wikner, J. (2014) provides examples of extant decoupling studies. Most of the current research describes decoupling strategies beginning with identifying a rupture point as a triggering event that will cause the supply chain to break down. This contingent event will then put into effect a series of strategies for the firm to switch the trigger source. The leading causes of these triggers can be attributed to supply- related issues like raw material shortage or process bottlenecks. In our study, this event definition refers to the forced relocation of foreign firms currently having manufacturing operations in China to alternative countries.

5.4 Moderating variables affecting the likelihood of a decoupling

Our Dependent variable (DV) is the Tobin's Q of the firm before and after the decoupling, and is calculated by the ICI variables and moderated by other variables like the firm's age, the Chairman's education, the market capitalization, the Culture distance between the current and alternate sites; and Knowledge Transfer Stickiness.

ICI measures how heavily laden a firm is with capital assets (PPE) and labor requirements (Number of employees) in its operations versus the amount of innovation it has. The innovation component comprises of the intellectual property it maintains and the brand value it possesses.

The age of the firm is an operationalization for inertia for change. The intuition is that the older the firm is, the more it is at ease with its current strategies, and the less likely it will contemplate a change.

The same intuition follows the variable of the education of the Chairman. The Chairman is still at its helm with many foundry manufacturers and retains a firm's paternalistic leadership control (Cheng, B., Chou, L., Wu, T., Huang, M., Farh, J., 2007). Our intuition that the less educated the Chairman is, the more risk-averse she will be to attempt a massive change. If faced with an exogenous threat to decouple, such leaders may be more minded to shift their sales markets to find other clients, at the expense of lower margins, than to attempt a decouple to continue servicing the account.

5.5 Culture Distance

According to Hofstede (2001), culture distance is measured as:

$$\boldsymbol{CD_j = \sum_{i=1}^{6}\left(\frac{(I_{ij}-I_{iu})^2}{V_i}\right)/6} \qquad (1)$$

The formula above is from Kogut and Singh (1988b, pg. 422), where CD is the culture distance (Hofstede, 2001) of the alternative country and origin state j. I_{ij} is the origin score on the i dimension of the culture distance; there are 6 of them in the Hofstede model Power Distance, Uncertainty Avoidance, Individualism vs. collectivism, Masculinity versus Feminism, Long-term versus short term orientation, and Indulgence versus Restraint (IVR). $\boldsymbol{I_{iu}}$ is the host score on the

dimension of the culture distance. The Hofstede Insights Culture COMPASS study was used for our comparison between the two countries; in the questionnaire, they define the specific Culture Distance dimensions as follows:

Power Distance Index (PDI)

This dimension is the extent to which those who are not in power think that power is not and should not be distributed evenly.

Individualism versus Collectivism (IDV)

Individualism is the extent that the country is expected to look out for its interests. The opposite is collectivism, where individual goals are forgone for the sake of the community at large.

Masculinity versus Femininity (MAS)

This scale measures not merely the perceived level of sexism but also includes factors like cooperation, modesty, and caring for the weak (Feminine) versus heroism, achievement, and assertiveness (Masculinity).

Uncertainty Avoidance Index (UAI)

This dimension measures the level of comfort that the country has with uncertainty. Countries with strong UAI have rigid codes of belief and behavior and do not accept unorthodoxy.

Long Term Orientation versus Short Term Normative Orientation (LTO)

Countries grapple with change differently. Some follow time-honored traditions and believe that what works in the past should be religiously observed. This dimension measure how much of the history the country adheres to when making future decisions. Low scores mean that the country prefers tradition and is suspicious of change. High scores indicate that the country is innovative and is continuously looking for ways to modernize.

Indulgence versus Restraint (IVR)

This dimension measures the need for a country to indulge in instant gratification versus delayed gratification. In this context, the country with restraint could be seen as one with long-term savings and investments, versus a country that maintains high debt levels.

5.6 Knowledge Transfer Stickiness

Szulanski (1996) 's seminal work on the stickiness in knowledge transfers in organizations shows several vital factors that may affect how smooth a firm's transfer of knowledge may be. These factors will have different degrees of effects at various stages of the firm's transfer. For our research, the firm's attempted decoupling is modeled after the firm's knowledge transfer of his study.

Szulanski (1996) proposes that when a firm is about to attempt a knowledge transfer from one entity to another, some of the source and the recipient's characteristics and the knowledge's content must be considered. The dependent variables are the various stickiness experienced at five stages of the transfer: the overall stickiness, the stickiness during initiation of the transfer; the stickiness during the implementation; the stickiness during the ramp-up; and the stickiness during the integration. For our study, I will utilize the overall stickiness as an aggregated score.

He provides the following as Independent variables for causing the stickiness in the knowledge transfers in his work. Our study involves firms already manufacturing at a very high precision level of accuracy and confidence. I model the assumptions with Szulanski's transfer variables. In his research, he has found that the three most significant factors that will influence knowledge transfer stickiness are Causal Ambiguity (.54), recipient Lacks Absorptive Capacity (.34), and both knowledge transfer parties having an Arduous Relationship (.33). I set out the definitions of the other independent variables.

Knowledge (Causal Ambiguity)

Causal ambiguity refers to the difficulty of determining what factors of production are needed to replicate capability in the alternative location (Lippman & Rumelt, 1984).

Knowledge (Unproven)

Rogers (1983) states that knowledge with a proven track record of success is easier to transfer.

Source (Lacks Motivation)

The source lacking motivation is when the knowledge sender has reasons for not wanting the transfer to happen by keeping truthful information.

Source (Lacks Perceived Reliability)

The source being perceived as reliable is when the source's knowledge is unquestioned because she is trustworthy on the subject matter.

Recipient (Lacks Motivation)

Katz and Allen (1982) have defined recipients lacking motivation as the Not Invented Here (NIH) Syndrome. NIH happens when the recipients lack the willingness to learn from the source because it feels that it understands the knowledge better than anyone else.

Recipient (Lacks Absorptive Capacity)

On an almost opposing end of the spectrum, the recipients may lack the absorptive capacity because of their inability to process the knowledge transferred by the source (Cohen, W. M., & Levinthal, D. A. 1990).

Recipient (Lacks Retentive Capacity)

Zaltman, G., Duncan, R. & Holbrek, J. (1973) state that if the recipients do not know how to retain the organization's knowledge with a mechanism that can quickly reproduce it, they do not use the new knowledge and revert to their status quo.

Context (Barren Organizational Context)

According to Bower, J., (2017), how well and how many times it takes to transfer knowledge successfully depends on how well the organization is formally structured.

Context (Arduous Relationship)

The ease of communication (Arrow, 1974) will help in the transfer of knowledge from source to the recipient, especially if both parties have a close working relationship (Marsden, 1990). If the parties do not possess these qualities, they may have an arduous relationship with transferring knowledge from one to the other.

The context of our study will be that of firms replicating their operations from one site to another (decoupling). Before the site is operational, audits will have to be conducted before the new site can come online. Therefore, I assume that Szulankski's identified independent variables most align with the types of organizations within our study. However, I caution the exclusion of the other

variables and suggest that the organizations that are contemplating a decoupling do measure for all the variables as a robustness check.

5.7 Multi-linear Regression

Finally, the study extracts from a separate database of top firms from various business sectors who have attempted a decoupling from their operations in China into alternative locations. The firm's market value before and after the decoupling is measured, and a Tobin's Q score is derived (Lewellen, B. 1997). The Tobin's Q measures the change in the market value of the firm before and after the decoupling. The market capitalization of the firm, six months before and after the decoupling, is recorded. If there were any difficulties in the relocation that affected the firm's performance, it would show up in the market capitalization results.

From the results, a multi-linear regression is run on all the variables Jobson, J.D. (1991). The validity of this finding will provide us with confidence in predicting the outcome of a potential decoupling with our taxonomy firms.

Proposition #4: There is a negative relationship between the ICI and Tobin's Q of a firm in the event of a decoupling.

6. METHODS

6.1 Preparing the Taxonomy

The top 189 suppliers representing the mobile phone manufacturing industry in China were extracted from ORBIS, CSMAR, and Bloomberg and targeted for data collection. These firms represent the top three strata in the supply chain. At the top of the chain are the Lead customers, who are the owners of the end-product. In the middle are the Contract Manufacturers who perform the design, manufacturing, and assembly of the product and are responsible for the final delivery to the lead customers. On the third level are the Tier-One manufacturers, who are the individual categorical component specialists. The products they manufacture can be categorized as finished and will have little to no intervention after that, save the assembly of them with other Tier-One components. Below the Tier-Ones are the Tier-Two suppliers who provide support or raw material resources to the Tier-Ones. The list is shortened to 80 firms because they are public firms with data available for extraction.

In the overview section, the firm's market capitalization, age, and nationality are logged. In the Profile section, the number of employees, the Chairman and CEO's education levels are logged and given a numerical representation (0 for non-degree; 1 for undergraduate courses; 2 for master’s and 3 for PhD.).

In the Balance sheet section, the Total assets, Net tangible assets, Goodwill, Intellectual Property assets, and Plant Property Equipment were recorded. These parameters went to calculating the ICI of the firms $ICI = (\frac{PPE\ x\ Employees}{Innovation})/1000$, where PPE is the Plant Property and Equipment, the total number of Employees, and Innovation, is the value of the firms' intellectual property assets and goodwill. The result is then divided by 1000 to make the number easier to visualize.

6.2 Calculating Culture Distance

Hofstede's Culture Distance Index of different countries (Hofstede, 2001) was utilized, and the COMPASS test was administered to measure the distance between China and the various alternative manufacturing sites, post decoupling.

$$\boldsymbol{CD_j = \sum_{i=1}^{6} \frac{\frac{(I_{ij} - I_{iu})^2}{V_i}}{6}}$$

Calculating the effects of Knowledge Transfer Stickiness

I rely on the findings from (Szulanski, 1996) on the three variables having the largest effect on Knowledge Transfer Stickiness in an organization. They are Causal Ambiguity, Recipient Lacking Absorptive Capacity, and Arduous Relationship.

As it will be challenging to access such data, pre-or post- decoupling, I am unable to factor in this variable in our present study. However, in the second study, from the data of firms that have made the decoupling, there are measurements of the net results of the transition from the changes in the market value of the firm Tobin's Q. The difference reflected in the Tobin's Q already factors in what it took to overcome the Knowledge Transfer Stickiness, which according to Szulanski, accounts for .14 of the overall outcome of the stickiness of knowledge transfer (Szulanski, 1996). These variables provide us with more granularity, but it does not change the significance of our primary findings.

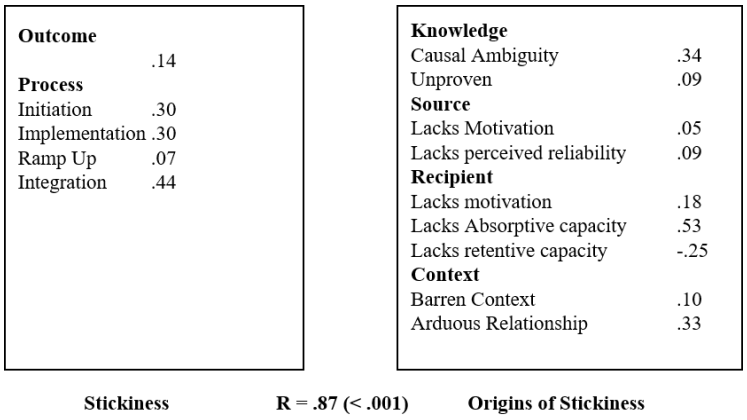


Figure 4: The Stickiness of Knowledge Transfer effects taken from (Szulanski, 1996, pg. 35).

6.3 Calculating Tobin's Q on firms which have decoupled

In a separate dataset, the top 26 firms which have decoupled their operations from China between 2017 and 2020 are extracted. Among all the other profiles, performance, and balance sheet data points like our main taxonomy study, their

total market, and asset values six months before and after their decoupling are recorded.

$$\text{Change in Tobin's Q} = \left(\frac{Total\ Market\ Value_{t+1}}{Total\ Assets_{t+1}}\right) / \left(\frac{Total\ Market\ Value_{t}}{Total\ Assets_{t}}\right)$$

For example, if firm A has $50 million of assets with 5 million shares outstanding, and a current share price of $2 before the decoupling, and $55 million of assets with 8 million shares outstanding and a share price of $1.7, six months after the decoupling - using the formula, I can calculate that Tobin's Q is:

Tobin's Q = [(5,000,000 x $2) / $50,000,000] / [(8,000,000 x $1.7) / $55,000,000] = 1.2

A score above 1 denotes that the firm's value has increased after the decoupling, indicating a positive outcome.

6.4 Multi-linear regression

A multi-linear regression is run on all the IVs in the sample of decoupled firms to look for significant relationships with the Tobin's Q. The possible relationships are then cross-checked with the firms in the taxonomy study to act as a predictor of the likelihood of the firm being able to decouple from the existing supply chain successfully.

7. RESULTS

Lead Customers	33.166	$493.514	1.830	1.330	$7.715	92,904.500	$10.490	171.
Contract Manufacturers (OEM/ODM)	23.400	$18.162	1.000	0.630	$3.482	193,042.500	$0.446	10,364.
Tier-One Firms	34.520	$35.676	1.240	1.100	$3.381	81,032.607	$0.775	4,149.
Correlations (Lead Customers)	*AGE*	*SIZE*	*CEO EDUC*	*CHAIR EDUC*	*PPE*	*EMPLOYEES*	*IP*	
AGE	1.000							
SIZE	0.424	1.000						
CEO EDUC	0.572	0.03**	1.000					
CHAIR EDUC	0.437	0.825	0.343	1.000				
PPE	0.383	0.981	0.215	0.810	1.000			
EMPLOYEES	0.580	0.325	0.925	0.328	0.425	1.000		
IP	0.614	0.960	0.038**	0.838	0.910	0.279	1.000	
ICI	-0.088	-0.04*	0.752	-0.205	0.071	0.787	-0.214	1.
Correlations (CMs)	*AGE*	*SIZE*	*CEO EDUC*	*CHAIR EDUC*	*PPE*	*EMPLOYEES*	*IP*	
AGE	1.000							
SIZE	-0.131	1.000						
CEO EDUC	-0.182	-0.253	1.000					
CHAIR EDUC	-0.626	0.404	0.069	1.000				
PPE	0.230	0.257	0.494	-0.029**	1.000			
EMPLOYEES	0.280	-0.137	0.419	-0.167	0.855	1.000		
IP	0.367	0.555	0.285	-0.180	0.796	0.455	1.000	
ICI	-0.504	-0.255	0.347	0.538	0.061	0.102	-0.255	1.
Correlations (Tier-One)	*AGE*	*SIZE*	*CEO EDUC*	*CHAIR EDUC*	*PPE*	*EMPLOYEES*	*IP*	
AGE	1.000							
SIZE	0.158	1.000						
CEO EDUC	0.076	0.084	1.000					
CHAIR EDUC	0.106	0.199	0.337	1.000				
PPE	-0.012**	0.718	-0.04*	0.085	1.000			
EMPLOYEES	-0.067	-0.003***	0.146	-0.176	0.266	1.000		
IP	0.222	0.495	0.074	0.066	0.231	0.091	1.000	
ICI	-0.004***	-0.083	-0.048*	0.179	-0.012**	0.118	-0.078	1.

age of all the categorical member firms are taken and displayed here (n = 6 for lead customers; n = 11 for CMs and n = 63 for Tier-Ones). AGE is the number of years since the firm's incorporation. SIZE is the Market Capitalization of the firm. CEO EDUC & CHAIR EDUC is the degree which the CEO or

Table 1: Summary of Hierarchical firm statistics and the individual strata correlations

7.1 Summary of statistics

From Table 1, it can be seen that the ICI scores support P#1, 2 & 3. This result supports the theory that the lead customers have strong branding and intellectual property assets. The lead customers also have less capital expenditure investments like PPE or the number of employees than is needed in a more labor-intensive environment. This structure adheres to the KBT (Nickerson & Zenger, 2004), explaining how firms like this are governed by a consensus-based structure to seek a heuristics method, to solve a non-decomposable problem.

The CMs have the highest ICI because they operate in a labor-intensive context, having to select and maintain suppliers, orchestrate the design and operations, and assemble all the components, and performing quality control. CMs, have a moderate amount of K interactions with the other members of the supply chain, which according to Kauffman (1993), explains why they have moderate decomposable problems and are best governed by an Authority-based hierarchy (Nickerson & Zenger, 2004).

The Tier-Ones are component specialists and maintain adequate innovation towards covering the scope of their expertise. The Tier-Ones still must support sizeable physical manufacturing operations but not to the extent of the CMs. The Tier-One is primarily responsible for its own components, and its finished products do not need further intervention. This structure makes the Tier-One best suited to be governed by free-market forces; these forces will drive the Tier-Ones to react efficiently and accurately to market demands.

7.2 Correlations & Observations (Lead Customers)

There is a positive and significant correlation between the size of the lead customer firms and the CEO's education level (0.03). This finding is supported by the fact that these firms use consensus-based governance in its knowledge management (Nickerson & Zenger, 2004). With a consensus-based approach, many inputs about product designs are sought, including the public's taste and preferences

for design and functionality. Getting the consensus right makes a great product, the key to building brand value (Chang, C., 2012). This approach strategy is also adopted by the lead customers in the choice of a CEO. The selection of a CEO for a lead customer is more stringent than the CMs and the Tier-Ones (Steuer, M., Abell, P., & Wynn, H., 2015). This phenomenon is further reflected in the non-significance of this pair-wise comparison for Tier-One firms and the CMs.

With the higher educated lead customer CEO, the firm's IP investment is also positive and significant. This phenomenon is not seen in the results for CMs and Tier-Ones.

Finally, we see a significant negative relationship between the lead customer firm's size and its ICI; this effect is not present in the CMs and Tier-Ones. This effect can be attributed to the lead customer firm being driven to achieve more innovation in its investment strategies than the CMs and Tier-Ones.

7.3 Correlations & Observations (CMs)

There is a significant and negative relationship between the Chairman's education level and the level of PPE invested. This phenomenon is in line with the later chapters' discussion on the provenance of these CMs (pg. 41). These baby-boomer founding chairmen started their enterprises with the state's assistance and were primarily interested in replicating technology rather than innovating.

7.4 Correlations & Observations (Tier-One)

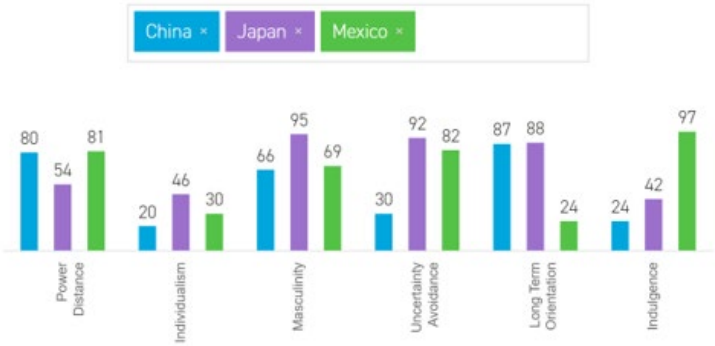
There is a negative and significant relationship between the Tier-One firm's age and the PPE it maintains on its books. This phenomenon can be attributed to the depreciation of the PPE value that these specialist firms utilize in the course of their work. It is not likely that within an accounting period of ten-years for straight-line depreciation of these manufacturing assets (Davies M., Paterson R., Wilson A., 1992), that these specialist firms will re-invest in other technologies, except in the event of an extraordinary shift in technology, the Schumpeter's theory of economic development (Becker, K., 2012).

There is a negative and significant relationship between Tier-One firm size and its number of employees. This effect is mainly due to the technological homogeneity and specialization nature of the tier-one firms. Tier-Ones strive for yield rates and invest in technology towards improving process cycles – this accounts for the moderate levels of innovation in their ICI. If there is an opportunity to automate their process to reduce manual labor and improve productivity, Tier-Ones will invest in developing customized solutions. This logic will lead to an explanation of the next phenomenon of the age of Tier-One firms. The older the Tier-One firm gets, there is a negative and significant relationship with the ICI index. The longer the homogenous firm is in business, the more time it will have time to fine-tune its operations through automation, which will reduce its need for

manual labor. This effect is seen in the negative and significant relationship between the PPE and the ICI (Frank, A., 2019).

7.5 Calculating Culture Distance

The Hofstede COMPASS for measuring country differences in culture was utilized. The various cross-comparisons between the current manufacturing location China and the potential alternative sites proposed by decoupling proponents were derived. The distance scores are reflected in the study of firms that have decoupled from China. The attributes for ascertaining culture distance are based on (Hofstede, 2001).



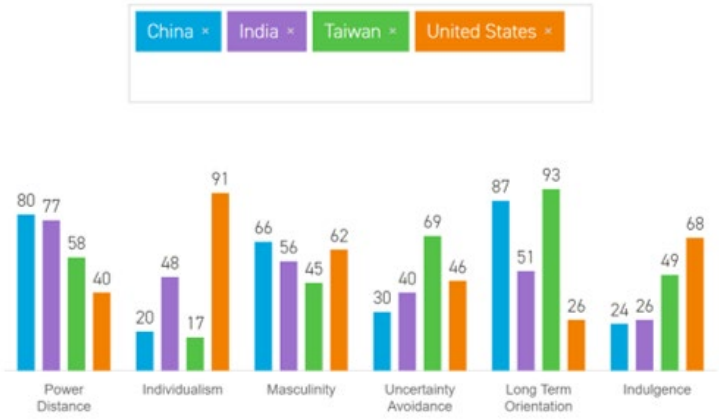


Figure 5: Culture Distance scores between China and various alternative sites

7.6 Controlling for Omitted Variable Bias (OVB) in the ICI

To ensure that we have taken into account the potential for omitting any bias in our ICI index, we attempt to introduce a control variable to explain for the PPE element in our main IV.

$$ICI = \frac{PPE \times E}{Inn} = \chi_{1i}$$

The intuition is that the PPE for a CM are capital intensive resources that require a lot of upfront investments with a relatively longer timeframe for return on asset investment. As such, we propose that the individual parts of the index have no independent effects. We do this by putting in the individual components of PPE; Number of Employees and the amount of Innovation investment as control variables back into the equation.

$$PPE = \chi_{2i}; E = \chi_{3i}; Inn = \chi_{4i}$$

The conditional mean independence in this case will be: $E\{\mu_i|\chi_{1i}, \chi_{2i}, \chi_{3i}, \chi_{4i} \dots\} = E\{\mu_i|\chi_{2i}, \dots\} = E\{\mu_i|\chi_{3i}, \dots\} = E\{\mu_i|\chi_{4i}, \dots\}$

$$Y_i = \beta_0 + \beta_1\chi_{1i} + \beta_2\chi_{2i} + \beta_3\chi_{3i} + \beta_4\chi_{4i} + \mu_i$$

$$\mu_i = \gamma_0 + \gamma_2 \chi_{2i} + \gamma_3 \chi_{3i} + \gamma_4 \chi_{4i} + \upsilon_i$$

To eliminate the OVB in $\widehat{\beta_1}$

$$Y_i = \beta_0 + \beta_1 \chi_{1i} + \beta_2 \chi_{2i} + \gamma_0 + \gamma_2 \chi_{2i} + \gamma_3 \chi_{3i} + \gamma_4 \chi_{4i_i} + \upsilon_i$$

$$Y_i = (\beta_0 + \gamma_0) + \beta_1 \chi_{1i} + (\beta_2 + \gamma_2)\, \chi_{2i} + (\beta_3 + \gamma_3)\, \chi_{3i} + (\beta_4 + \gamma_4)\, \chi_{4i} + \upsilon_i$$

This will give us an unbiased estimate effect of χ_{1i} on Y_i. We place the control variables back into the equation and find our results remain unchanged and robust.

7.7 Statistics of firms decoupled

A search was conducted with a Bloomberg terminal on the top 26 firms which have decoupled from China from 2017 to 2020. The firms represent a cross-section of different industries. The firms' profile, performance-related data, balance sheet items about calculating the ICI, the market value, the culture distance index (Hofstede, 2001) from China and the relocated site are tabulated and shown in Table 2.

Table 2: Summary statistics of firms that decoupled from China.

Country of Origin	Name of Firm	Relocated to from China	Culture Distance with China	Date of Decoupling	Mkt Cap of firm 6 months before Decoupling	Mkt Cap of firm at time of Decoupling	Mkt Cap of firm 6months after Decoupling	AGE (Year of inc)	Chairman Education	PPE (USD Bil)	No. of employees	IP(USD Bil)	ICI	Total Asset Value of firm (T-1)	Total Asset Value of firm (T+1)	Tobin Q_T-1	Tobin Q_T+1	Change in Tobin Q
Germany	Adidas	Vietnam	55.00	May-18	42.84	50.53	44.88	100.00	3.00	6.26	59,533.00	2.30	162.03	17.26	17.86	2.48	2.51	1.01
Taiwan	Asustek	Taiwan	-24.00	Jul-19	5.07	5.80	5.89	31.00	2.00	0.59	5,667.00	0.07	45.18	11.19	10.58	0.45	0.56	1.23
Japan	Casio	Thailand	48.00	May-19	3.44	3.11	4.64	74.00	1.00	0.55	11,193.00	0.07	93.28	3.16	3.18	1.09	1.46	1.34
US	Dell	Taiwan	-24.00	Jul-19	33.85	37.65	37.54	36.00	2.00	7.83	165,000.00	18.78	68.79	111.82	118.86	0.30	0.32	1.04
China	Goertek	Vietnam	55.00	Nov-18	5.42	3.63	4.99	19.00	2.00	1.58	59,611.00	0.35	265.39	4.53	5.28	1.20	0.95	0.79
US	GoPro	Mexico	-76.00	Dec-18	0.82	0.64	0.97	18.00	1.00	0.05	926.00	0.16	0.27	0.63	0.70	1.31	1.39	1.06
US	Hasbro	India	9.00	Jul-19	10.20	13.52	14.41	97.00	1.00	0.38	5,600.00	1.10	1.93	5.49	5.55	1.86	2.60	1.40
US	Hewlett-Packard	Taiwan	-24.00	Jul-19	17.50	20.24	20.91	81.00	1.00	6.05	61,600.00	19.40	19.21	51.76	52.24	0.34	0.40	1.18
S. Korea	Hyundai Motors	Indonesia	21.00	Jun-18	23.86	20.07	10.34	53.00	3.00	45.00	70,302.00	4.71	671.68	165.00	160.50	0.14	0.06	0.45
S. Korea	Kia Motors	India	9.00	Mar-19	12.54	13.06	14.00	76.00	2.00	14.10	35,675.00	2.25	223.56	46.93	46.06	0.27	0.30	1.14
Japan	Kyocera	Vietnam	55.00	May-19	18.88	24.64	25.52	61.00	1.00	3.20	75,505.00	2.18	110.83	27.37	30.56	0.69	0.84	1.21
US	L Brands	US	-26.00	May-19	8.78	6.61	4.90	57.00	1.00	5.53	83,700.00	1.03	449.38	7.82	10.63	1.12	0.46	0.41
Japan	Mitsuba	US	-26.00	Sep-18	0.21	0.12	0.11	74.00	1.00	0.79	28,230.00	0.05	414.04	3.20	3.21	0.06	0.03	0.53
Japan	Mitsubishi	Japan	-110.00	Feb-19	32.63	26.90	25.17	101.00	2.00	6.96	146,518.00	1.36	749.83	37.50	41.25	0.87	0.61	0.70
Japan	Nidec	Mexico	-76.00	Apr-18	81.01	90.42	85.52	47.00	1.00	3.79	117,000.00	3.22	137.71	16.20	17.06	5.00	5.01	1.00
US	Nike	Vietnam	55.00	Oct-19	127.63	139.37	112.47	56.00	1.00	7.96	75,400.00	0.49	1,224.87	23.72	31.34	5.38	3.59	0.67
Japan	Nintendo	Vietnam	55.00	Jun-19	36.65	42.15	48.10	131.00	2.00	0.77	6,200.00	0.13	36.08	16.05	17.44	2.28	2.76	1.21
Japan	Panasonic	Thailand	48.00	Oct-18	36.06	27.44	22.56	102.00	2.00	12.56	259,385.00	6.31	516.30	59.20	60.27	0.61	0.37	0.61
Taiwan	Quanta	Taiwan	-24.00	Nov-19	5.01	6.07	3.63	23.00	2.00	1.67	40,300.00	0.06	1,180.72	7.08	8.87	0.71	0.41	0.58
Japan	Ricoh	Thailand	48.00	Jan-19	6.64	7.30	7.17	84.00	1.00	2.37	90,141.00	2.06	103.71	24.17	25.74	0.27	0.28	1.01
Japan	Sharp	Indonesia	21.00	Jun-18	18.36	12.91	4.93	108.00	1.00	3.90	52,876.00	0.43	479.57	17.72	17.79	1.04	0.28	0.27
US	Sketchers	India	9.00	Oct-18	4.27	4.43	5.29	28.00	1.00	0.54	13,100.00	0.06	120.34	3.01	4.13	1.42	1.28	0.90
US	Stanley Black & Decker	US	-26.00	Jan-17	16.99	17.28	21.55	177.00	3.00	2.49	59,438.00	12.80	11.56	15.74	19.16	1.08	1.12	1.04
Japan	Toshiba	Japan	-110.00	Sep-18	19.57	20.50	18.18	145.00	2.00	3.47	125,648.00	1.20	363.33	41.95	38.76	0.47	0.47	1.01
US	Under Armour	Indonesia	21.00	Dec-18	8.14	7.59	10.71	24.00	2.00	1.38	16,400.00	0.59	38.56	4.24	4.68	1.92	2.29	1.19

7.8 Multi-Linear Regression results for decoupled firms

Regression Equation

Change in Tobin Q = 1.112 - 0.000642 ICI + 0.0051 Chairman Edu - 0.00012 AGE
+ 0.000213 CD China

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	1.112	0.143	7.80	0.000	
ICI	-0.000642	0.000143	-4.49	0.000	1.02
Chairman Edu	0.0051	0.0734	0.07	0.945	1.10
AGE	-0.00012	0.00124	-0.10	0.921	1.11
CD China	0.000213	0.000956	0.22	0.826	1.01

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.240209	50.78%	40.94%	19.47%

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	4	1.19054	0.29763	5.16	0.005
ICI	1	1.16413	1.16413	20.18	0.000
Chairman Edu	1	0.00028	0.00028	0.00	0.945
AGE	1	0.00058	0.00058	0.01	0.921
CD China	1	0.00287	0.00287	0.05	0.826
Error	20	1.15400	0.05770		
Total	24	2.34454			

Table 3: The regression results on the firms which have decoupled from China

There is a significant and negative relationship between ICI and the dependent variable Tobin's Q. Tobin's Q represents the positive change in the market value of the firm after decoupling. The ICI of a firm represents how capital assets and labor dependent it is over the innovation and brand value. This finding supports P#4.

	Tobin's Q	*Age*	*Chair Edu*	*ICI*	*CD with CHINA*
Tobin's Q	1.000				
Age	-0.032**	1.000			
Chair Edu	-0.01**	0.304	1.000		
ICI	-0.460	-0.066	0.095	1.000	
CD with CHINA	-0.028**	-0.100	-0.016**	-0.069	1.000

Table 4: Variable correlations for decoupled firms

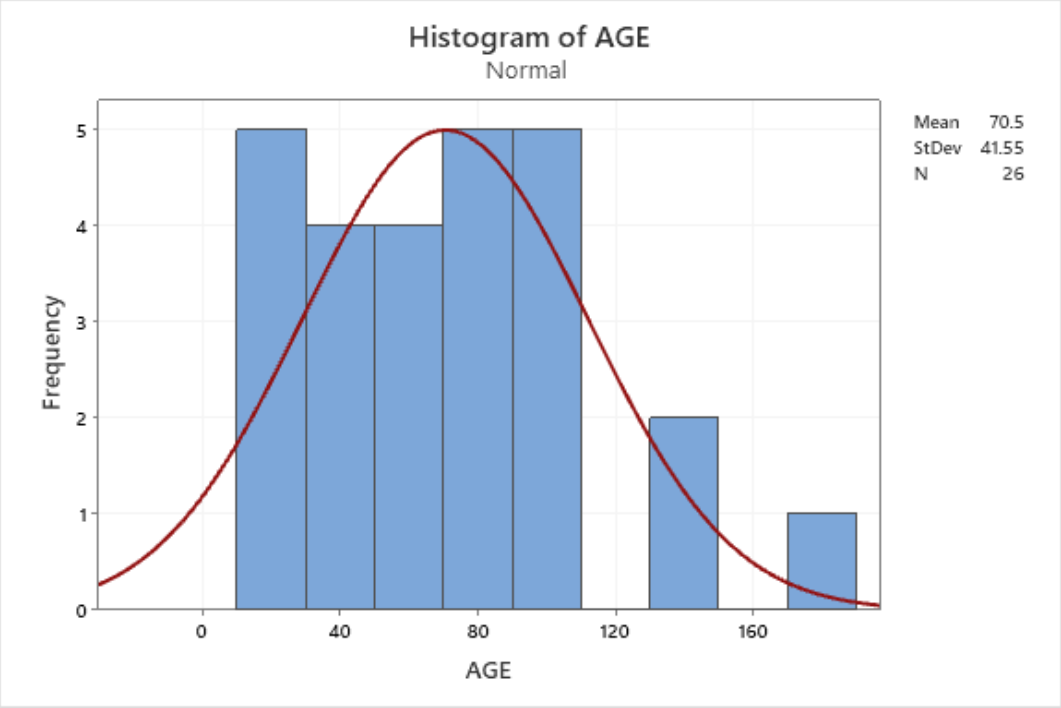


Figure 6: Distribution of firm age in Decoupling study.

8. DISCUSSIONS AND ALTERNATIVE PERSPECTIVES

8.1 On the possibility that firms' size will affect decoupling ability

Karlsson, J. (2020) has found in his study growth barriers related to firm size. The results of his study show that small firms have equity financing problems while large firms face barriers regarding competition and recruiting challenges. Based on the assumption by Karlsson, we expect to see a curvilinear relationship between the firm's size and the likelihood of decoupling for market capitalization. From figure 7, we can see no relationship between the firm size and the attempts at decoupling. The scatter dots represent the market cap and Tobin's Q in our survey

of the top 26 firms who have attempted to decouple from China from 2017 to 2020. The red curvilinear red represents the alternative view from Karlsson, J. (2020).

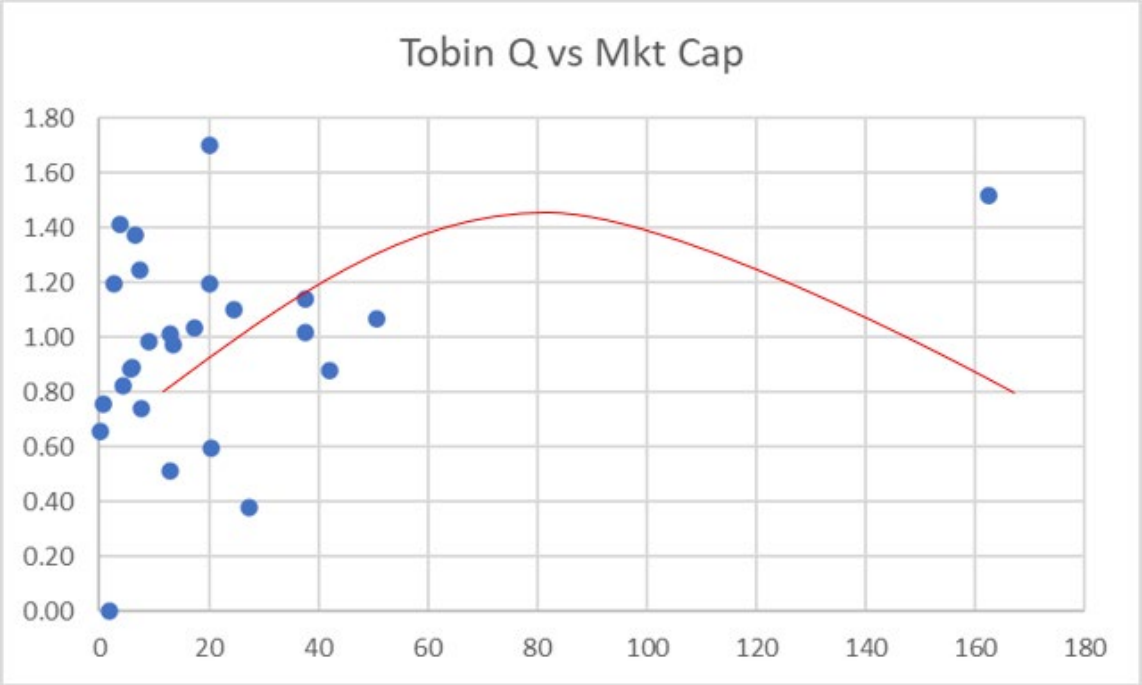


Figure 7: Tobin's Q vs. Market Capitalization with the overlay curve of an alternative view.

8.2 Resource-Based View (RBV) instead of KBT

Nikolaos, A. (2009) has drawn out a comprehensive study on the differences between using the RBV and KBT perspectives to explain a firm's competitive advantage. Strategic management studies trace the current form of RBV as an initial co-existence of Porter's competitive forces view (Porter, 1980) and the RBV of (Penrose, 1959; Rumelt, 1984; Teece, 1984; Wernerfelt, 1984; Barney, 1991).

The foundation of RBV is that successful firms will find their basis for competitiveness from developing unique capabilities, which may be implicit or intangible (see Teece *et al*. 1991). Rumelt (1984) defines RBV as the firm's unique resources and capabilities. Conner (1991) establishes a firm's RBV strategy as creating rent generating capacity through its resources and capabilities.

The RBV contrasts with the KBT proposed by Grant (1996), which attributes the firm's ability to maintain a competitive advantage by transfers of knowledge. Nickerson and Zenger (2004) differed in opinion with Grant, in that they proposed that knowledge can be generated and not merely transferred. While there may be some overlap in the definitions of capabilities and knowledge as firms' resources, the provision for resources in RBV runs counter to our proposition that physical assets may laden the attempts of a successful decoupling. The results from this study clearly show that resources that may work well for one context, in the event of an enforced decoupling, may act as a yoke that either laden the attempt or may cause the firm to go out of business altogether.

9. FUTURE RESEARCH

In the proxy for innovation, I used the public records of balance sheet entries to derive the inputs for creating the independent variable ICI. Munari, O. (2011) has drawn out a comprehensive valuation framework for measuring the economic value of IP assets. This study lacks granularity due to the inability to access data as

prescribed by Munari, O. (2011). With access to an extensive dataset, there will be such information as the various patents' ontology, its utilization rates, and the rents that it will generate, and, ultimately, its tenure. Some firms also have patents filed for defensive measures, and they present no apparent value on the books but have potential value in the event it can claim for infringements when they occur. This added information will provide greater accuracy to our ICI.

As proprietary industrial data about the supply chain is tough to come by, further studies to test this research's findings for cross-sectional validity are needed. This study currently views a decoupling as a one-way event. With more datasets from other industries, we may further explore an enhanced view of decoupling, not just as a one-time event. The focal firms may relocate with local partners' assistance who will bear some of the risks of hosting the new enterprise during its orientation period. We need to explore what are the likelihood and effects of either isomorphism occurring on the part of the focal firm post- decoupling or of predatory intentions of the local partners.

Another possible area of research is to investigate the intention of the firms seeking to decouple from their present location. The general assumption is that firms decouple to maintain a competitive advantage or to survive in the event of enforcement. There is evidence to show that the decision of firms to decouple may be due to negative sentiments towards the host country, especially so for family-owned enterprises in which the larger shareholders have opposing political

affiliations. From a causality standpoint, these potential negative sentiments could very well be driven by unfair practices that the decoupled firm may experience as a result of the host country favoring local enterprises. The research should look into ways on how to capture the sentiments and reactions of political and industry leaders to measure how sentiments will affect firm performance and their triggering effects.

10. SECTIONAL ABSTRACT

The study wishes to explore how State-Owned Enterprises (SOEs) respond to exogenous threats like embargos and tariffs. Existing literature often cites the SOEs' structural ills, specifically corruption, agency issues, and inefficiencies because of the hierarchical reporting structures. Following the start of the trade spat between the US and China, a sudden influx of studies presents the origins, operating structures, and reasons for the SOEs' successes and failures in China. Most of the data available are political white papers with little empirical research on the firm's effects of having an SOE governance. This study proposes a novel way to track SOE governance through its concerted strategic responses when faced with language use in media feeds as a signal to attack in a trade standoff. The tweets of President Donald Trump are tracked from the start of his Presidency to date. Tweets that referred to China and trade-related issues were compiled, and sentiment analysis was performed to determine if they were positive, negative, or neutral. These tweets were then categorized into an event study William A. Reese Jr. & Russell P. Robins (2017) and cross-checked with the Cumulative Abnormal Returns (CAR) of the stocks of a taxonomy of supply chain vendors in the Mobile Phone Industry. Accounting for control variables and time-lagged effects of the tweets, we find a significant and positive relationship between the number of strong tweets that Trump puts out about China's trade issues and SOEs' CAR.

Keywords: SOEs, Corporate Governance, Twitter, Event Study

11. SECTIONAL INTRODUCTION

"To lead people, walk beside them.

As for the best leaders, the people do not notice their existence.

The next best, the people honor and praise.

The next, the people fear; and the next, the people hate.

When the best leader's work is done, the people say,

We did it ourselves!"

— Lao Tzu

In 2020, Fortune Global 500 (FG500) states that there are 124 Chinese firms on its list (as compared with 121 US firms), accounting for almost half of its largest companies. Of these 124 firms, 48 of them are Central SOEs, which means that they are entirely run by the Chinese government (Kennedy, S., 2020; Lin, K., Lu, X., Zhang, J., Zheng, Y., 2020).

Since its meteoric rise starting in 1978, China has assimilated its socialistic history with its newfound entrepreneurial spirit (Huang, Q., Liu, X., & Li, J., 2020). China has three stock exchanges, where firms owned by the government are allowed to raise public institutional funds (Sturesson, J., McIntyre, S., & Jones, N. C., 2015), a thriving private enterprise sector (Huang 2003, 2010; Li, Ding, and Li 2015; Atherton and Newman 2017), and a system of SOEs. Our research will focus on the SOEs: we will explore the SOEs' structural variants and constructs of the SOEs; and their roles, functions and governance, their investment strategies, and

their reaction to external geopolitical events, thereby affecting the firms' performance.

The exogenic threat this study will be focusing on is the trade spat between the US and China. We define an exogenic risk as an event that happens external to the firm's scope of operations. This event threatens to adversely affect its performance (Corbo, L., Pirolo, L., & Rodrigues, V., 2018). An example of this could be the threat of a tariff or embargo by an influential political figure through social media (Dolezal, M., Ennser-Jedenastik, L., & Müller, W. C., 2016). There have been many studies on retaliation (e.g., Damore 2002; Druckman et al. 2010; Lau and Pomper 2004), but little research has been done on retaliation by not openly responding.

This study wishes to show that one of the ways in which a threatened party can retaliate is to appear not to offer an open response while planning for an attack. As the attack initiator is looking for an exogenic reaction to the threat it signaled, the last thing it expects is an endogenous response. For example, a US tweet about wanting to implement an embargo on Chinese product A_i, is an exogenous threat to the targeted Chinese firm i. The expected response will be an exogenous one if the Chinese also issues a similar threat for American competitive product B_j made by firm j. What will be unexpected is a silent retaliatory response such as a collegiate Chinese firm k which supplies raw materials to B_j, ceases supply. This example is an endogenous threat response. It is one of the benefits of having an

SOE structure, as a typical enterprise would not be allowed to contemplate such a response.

An event study (Reese, W., & Robins, R., 2017) of the tweets made by President Donald Trump from 2016 to the present was performed (Han, X., Gu, X., & Peng, S., 2019). There is a work by Nisar, Y. (2018) which seeks to find a correlation between public sentiment of local elections and stock market movements. I use a different methodology that will provide more robust results in the field of sentiment analysis.

The tweets that were in relation to China and Trade were compiled. An SVM wrapper was coded to perform a sentiment analysis (Dashtipour, K., Poria, S., Hussain, A., 2016) on the tweets. With a .75 confidence, the tweets were classified either as positive, negative, or neutral. A 'positive' tweet is one in which President Trump says something that favors US firms. A 'negative' one is a conciliatory tweet signaling a willingness to seek a peaceful resolution with China. The results are then time-stamped as event dates and cross-referenced to the taxonomy of suppliers in the Mobile Phone Manufacturing supply chain created in a previous study (Chee, J & Geng, X., 2021). The SOEs and the non-SOEs in the taxonomy are identified. The study finds significant results showing that the CAR for the Chinese firms with a three-day effect after the events have aggregate positive returns (winners), while the non-Chinese firms have the opposite effect.

Next, the winners are selected, and an analysis is performed of the firms' shareholdings structure. 41 of the 45 top shareholders of the winners are SOEs. Further, the share prices of these winners begin to experience massive gains in share price at the start of 2019. A cross-reference with our Twitter results shows that this was when the 'positive' sentiments were heightened. A concentration of 'positive' events means that the Twitter attack intensified against China. The results are a clear sign of potential retaliation by the SOEs. Once again, this action, conducted in silence and with such concerted efforts, can only be taken in an SOE governance environment.

Social media usage as an economic tool for an attack is a recent development that warrants further scholarship work. We hope to make three contributions to the field of research in corporate governance of SOEs and their strategic responses to exogenous threats.

Firstly, we propose that there is a relationship between the categorical use of positive or vitriolic use of Twitter feeds from top political leaders on the effects of stock prices movements of related counters that have great national interest (Ranco, G., Alexsovski, D., Caldarelli, G., Grcar, M., & Mozetic, I., 2015). Secondly, the study empirically shows how SOEs can adopt a relatively silent retaliatory response to threats given their construction and governance's unique nature. Thirdly, the study also draws attention to those combatants that face exogenous conflicts that may only be expecting signals on the same front. However,

further provocation may draw unexpected and indeed undesirable results. As the manufacturing supply chains exist in China, an endogenous response to this exogenous threat may be to close the local supply chain to non-collegiate firms. This form of localized response causes more harm to others is a well-proven phenomenon (Barker, J., & Barclay, P., 2016).

12. THEORETICAL DEVELOPMENT AND HYPOTHESES

12.1 The emergence of Chinese State-owned Enterprises:

Many imminent scholars had predicted the SOEs' demise (Kozminski, 1993; Spicer, McDermott, & Kogut, 2000); their views are that these large entities are riddled with corruption, inefficiencies, and agency issues. Contrary to their predictions, SOEs dominate the global economies; many are in the FG500's top firms (Kennedy, S., 2020). Among the top 500 global firms, 124 of them are Chinese firms. Out of the 124, 59 are fully controlled SOEs (Central SOEs), and 32 SOEs are managed by the Chinese Communist Party (CCP) (See Appendix 2: Chinese Companies in the Fortune Global 500 (2020)).

An SOE is defined as a firm in which assets are wholly owned by the state (National Bureau of Statistics 2002: Explanation of the Division Standard of Large/Medium/Small Sized Industrial Enterprises). SOEs have two variants: they are SOEs which are owned and managed by the local provinces, or they are Central

SOEs under the supervision of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC); state-the China Banking Regulatory Commission (CBRC), China Insurance Regulatory Commission (CIRC), and China Securities Regulatory Commission (CSRC); and the other central ministries (Lee, 2009). Mattlin, M., (2010) states that there is another class of SOEs called sub-national SOEs, and the official statistic put out by the Chinese government has the number of Sub-national SOEs as 100,000.

It can be inferred that the SOE corporate governance reflects the instructions and aspirations of the Chinese government. An exogenous threat to a firm or a specific industry may see a response coming from an entire nation with an orchestrated will of mind.

12.2 The role of the State-owned Enterprises

The SASAC mandates that the following industries are deemed to be of the highest order of importance and are "Strategic Industries": Defense; Utilities; Petrol and Petrochemical, Telecommunications, Shipping, Coal, and Civil Aviation. Industries that are deemed strategic must have the "full" protection and control by the state. The sectors that include Auto, Equipment manufacturing, Information Technology, Construction, Precious metals, chemicals and Surveying, and Design are designated "Pillar Industries." These industries are to be strongly protected and controlled (Guiding Opinion on Promoting the Adjustment of State-Owned Capital

and the Reorganization of State-Owned Enterprises. Government of China, 2006). This unique role that the SOEs perform for the nation means that if there were exogenous threats to these industries, the priority of the state's reaction will not be profit-driven but rather to maintain national interests.

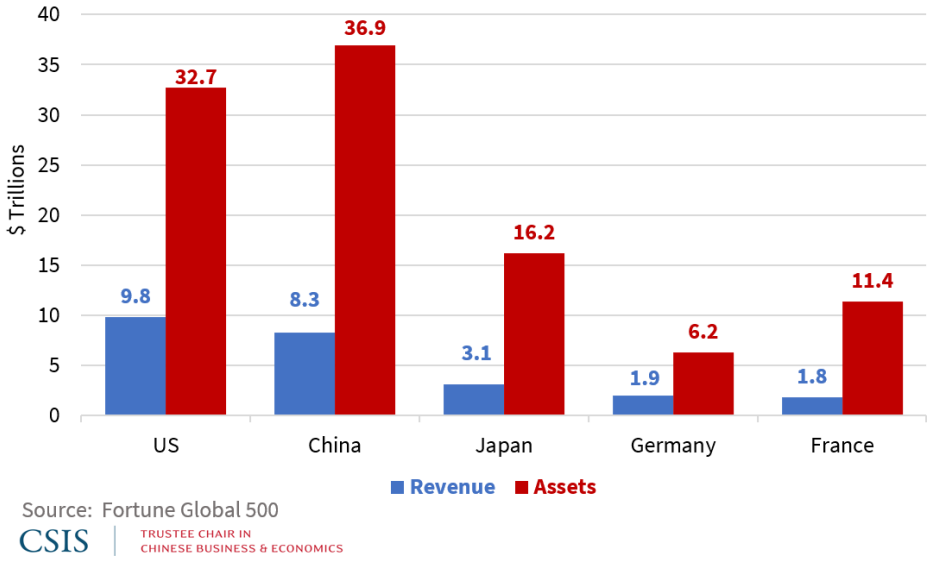
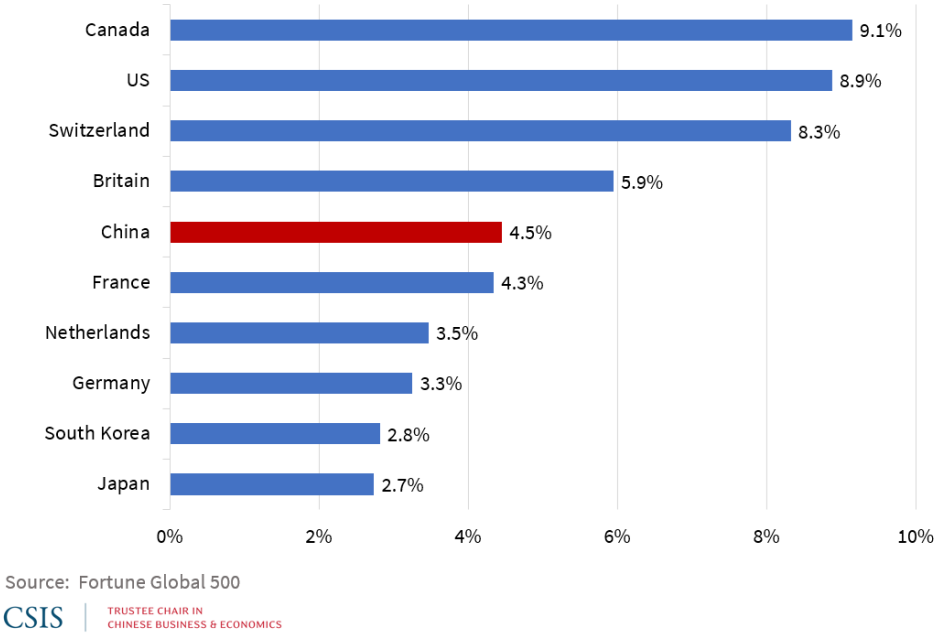


Figure 8 above (Revenue and Assets of top FG500 countries) and 9 below(Percentage of average gross margins of FG500 countries): Taken from (Kennedy, S., 2020 pg. 3-4)



Though the Chinese firms singularly dominate the total revenue generated by the FG500 firms, their average profit margin (Figure 9) is only in the mean range of the group. This phenomenon is partly because the state views the products managed by the Strategic and Pillar industries to be public goods, which are not entirely profit-driven but provide for the nation's greater good.

12.3 The influence of the government in State-owned Enterprises:

The Strategic and Pillar industries listed above are usually categorized as capital-intensive. Their strategic purpose and importance for the state has been highlighted. Apart from receiving large investments, the SOEs need a more extended gestation period and often legislative support, all of which is not possible with free-market forces. (Lin et al., 1998; Lin and Tan, 1999).

In the event of a negative shock to the economy, the state can maintain social stability by using SOEs as employment vehicles to absorb excess labor and to provide social security benefits, even if the demand for production reduces (Shleifer and Vishny, 1994). Bai et al. (2009) have shown that SOEs have a higher debt-to-sales ratio and an increased labor force than private firms. This further demonstrates the prevalence of protection that the SOEs receive from the state.

12.4 The use of social media in social economics:

Studies into the use of social media to enhance user perspective are relatively recent but prevalent in marketing (Constantinides, E., 2014; Kavoura, A., & Stavrianea, A., 2014). Social Media has changed the marketplace. Consumers of information in this space are difficult to court, satisfy, and retain. The barriers of entry for new content providers are relatively low because of the low set- up cost. This means that the market is saturated with a lot of information noise (Kim, Y., Huang, J., & Emery, S., 2016).

The way social media content tries to cut through the noise is to try to differentiate itself. Often, social media content attempts to seek validation from its consumers. The content which traditionally is favored and gets the most attention is shocking and controversial content. This shock effect is often derived from bullying and harassment tactics, made worse by the culprits hiding behind

anonymity (Kavoura, A., Stavrianeab, A., 2014; Whittaker, E., & Kowalski, R., 2014).

12.5President Trump and the use of Twitter:

Stolee, Galen, Caton, S. (2018) is one of the most comprehensive studies on President Trump's tweets, calling his use of the social media outlet as the new Presidential Talk. Others like Pain, P., & Masullo Chen, G. (2019) are very vocal about their view on Trump's use of Twitter. Their findings are that he uses the platform to cast himself as a political outsider above the petty quarrels. He tweets frequently and incoherently and, most noticeably, derisively.

Trump has tweeted 16,000 times since he had announced his candidacy in 2015. This amount of time spent to get his message across this platform is significant. Given that he is holding the most powerful political position in the world, it can be safely assumed that his words will carry some weight in affecting geopolitical platforms, especially the stock market. Tobias Burggraf , Ralf Fendel & Toan Luu Duc Huynh (2020) seems to have made an excellent cursory effort at tracking his tweets to the general stock indices. This study wishes to expand on their work and track specific movements of industry-specific stocks with longitudinal validity, controlling for variables like stock market general trends.

12.6 President Trump and the Trade war on China:

This study firstly wishes to examine the use of language on Twitter by Trump as a signal to attack or retaliate in an economic standoff or trade spate. The effects of the subsequent actions by both parties are examined. The antecedence of competitive strategic studies does not consider using social feeds as a tool of attack carefully. Secondly, this study's broader contribution is that the Chinese companies' silent retaliatory response, which has been either fuelled by or caused by these attacks, has spawned a new generation of competition to the incumbent technology manufacturers. Politically, given that most of his tweets have been Positive, we demonstrate a potential rise of a retaliatory force to dominate the manufacturing sector globally. President Trump has been the more vocal of the two sides, but we posit that silence on the Chinese part does not necessarily mean acquiescence. Kawabata, M. & Gastaldo, D. (2015) showed that silence is not fully understood in qualitative research.

12.7 Study 1: Twitter effects on manufacturing firms based in China

We chose a novel way of assessing SOEs' reaction to exogenous threats by analyzing the twitter account of President Donald Trump and the effects these tweets have on the industry many associate with the trade war – consumer electronics manufacturing. We posit that when he tweets something 'negative'' between China and the US, a Chinese component manufacturer's closing price rises.

This phenomenon has a negative relationship with the competitor of this manufacturer (the non-Chinese firms). We define a positive tweet as draconic against China and positive for a non-Chinese manufacturer. The opposite is when the President says something 'positive.' This study does not take any political judgment with the parties by assigning positive to one side and negative to the other. This assignment of terms is simply how a sentiment analysis is conducted. The terms are interchangeable and are not reflective of our opinion bias.

All of his tweets since the start of his Presidency to date (2016-2020), are extracted from a twitter database and compiled. A sentiment analysis is performed to rate each tweet based on whether it is positive or negative or neutral (Kunal, S., Saha, A., Varma, A., & Tiwari, V., 2018).

12.8 Identifying the SOEs from the non-SOEs in the taxonomy database.

The study followed Lim, L. G., Tuli, K. R., & Dekimpe, M. G. (2018) in their methodology of performing an event study. The selected tweets are assigned as individual events, and we cross-check the events with the stock prices of the taxonomy of firms in a previous study (Chee J., Geng, X., 2021). Then the Cumulative Abnormal Returns of each of the firms before the event and the three days after are tabulated.

12.9 Study 2: The use of silence to mask a retaliation

The winners and losers are recorded based on whether they have positive or negative returns. This study hypothesizes that the event study's main winners are Chinese firms, and the losers will be the non-Chinese firms. Then the firm's shareholding structures are analyzed. A search is also be conducted to ascertain if these Chinese winners are SOEs. It is this study's other hypothesis that the winners will most likely be SOEs.

H#1 An increase in social media inputs, measured by tweets, will trigger an increase in retaliatory response from the winners, which leads to a positive three-day effect on the CAR.

H#2: The winners of the Trump event tweet study will be Chinese firms.

H#3 The winners will Chinese SOE firms; the losers will be non-Chinese firms.

Next, the losers and winners' stock performances will be compared against the positive tweets' concentration at the start of 2019. There is a known phenomenon of US Presidents wanting to drive up political rhetoric ahead of a reelection campaign, something that is not limited to Trump (Bernhard, M., & O'Neill, D., 2019). From the first study, we see a strong concentration of Positive tweets made at the start of 2019 that has intensified since. The study then posits that

the concentration of these tweets will coincide with the intensity of the winners' stock movement and that this phenomenon will have no effect on the losers. A granger causality test will be performed to cross-check the relationship between Positive tweets and the winners' stock price increase.

H#4: The more positive tweets, the higher the CAR for the winners

H#5: There is a significant difference in how an SOE will react to the tweets of all sentiment types, to how a non-Chinese firm will respond.

Cultural differences towards silence make it challenging for researchers to interpret results. This body of work shows the importance of factoring 'silence' into traditional media communications' data analysis. Most quantitative models for stock-picking strategies have not been able to integrate inputs from social media because of the strategic periods in which the managers consider the data. In the frantic world of social media, particularly on platforms like Weibo and Twitter, instantaneous feeds require an equally prompt response. This drives the aggregated retail investor to behave according to what she reads and interprets.

13. METHODOLOGY

13.1 Study 1:

We chose a novel way of accessing these effects by analyzing the twitter account of President Donald Trump and then performing an Event Study on the impact his statements have on the industry that most people associate most with the trade war – consumer electronics manufacturing (Chee, J., Geng, X., 2021). The firms which are SOEs are identified. Of the 50 firms in the study, 14 out of 50 firms are SOEs. These findings are extracted from the CSMAR records of shareholders of the firm (Appendix X).

The hypothesis is that when he tweets something amicable about China, the closing price of a US component manufacturer drops on the first day. This effect will contrast to the counterpart of this manufacturer in terms of its direct Chinese competitor. The reverse effect is observed when the President says something negative about China. The impact of the tweets for three periods: before the event and the three days after.

Firstly, the Twitter database (www.trumptwitterarchive.com/archive) was searched and filtered for tweets that contained "Trump" & "China" & "Trade." There were 127 such entries. The results for re-tweets were excluded from our searches, and this number was reduced to 97. 15 tweets were stated with sarcasm

that was not picked up by the sentiment analysis, and they were taken out. Then, the remaining 80 individual tweets were tagged as Events (See Appendix 3).

13.1.1 Sentiment Study

Using Support Vector Machines (SVMs), a wrapper was created to parse the tweets that have been identified as events to analyze and classify them as either Positive, Negative, or Neutral. The effects of sentiments on the stock prices of the firms in our landscape study are examined.

Experiment 1: Sentiment analysis

I trained a Machine learning classifier for the task of sentiment analysis using sentiment140 dataset

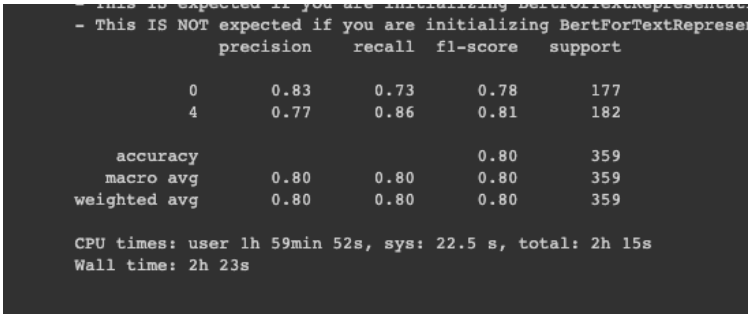


Figure 10: Evaluation of sentiment140 test set

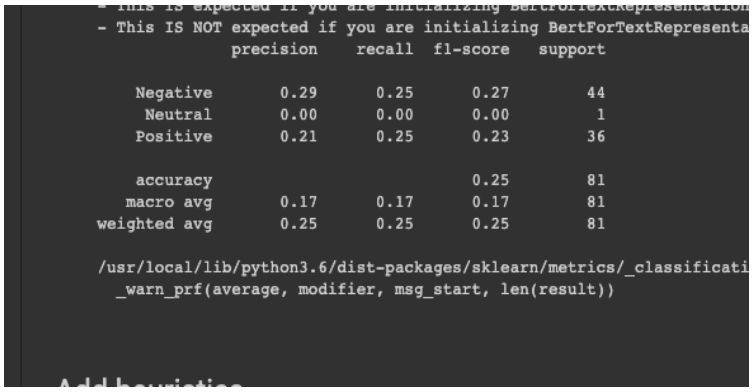


Figure 11: Evaluation of the provided test set

After analyzing these results, it seems apparent that this is more than a sentiment analysis classification; the task is about classifying tweets as to whether they are favorable to the USA or not.

Experiment 2: Sentiment analysis with heuristics

Rules for the classification:

For every sentence in a tweet, the sentiment using the classifier trained on experiment 1 will be created and assigned to either the USA or China by searching for keywords associated with the countries in the text, the keywords used to represent the countries are:

```
USA_WORDS = ["usa","401k", "America","america","USA",
"U.S","u.s", "US", "United States"]
CHINA_WORDS = ["China", "CHINA", "Xi", "Chinese"]
```

Figure 12: Assigning Country

Each sentence would be classified as positive, negative, or neutral using the following rule:

When assigned to the USA, if sentiment positive: positive label, if sentiment negative: negative label.

When assigned to China: if sentiment positive: assign a negative label; if sentiment negative: assign a positive label.

If a sentence does not contain any keyword or had keywords that belong to both countries, it would be classified as neutral. By choosing the majority label across all its sentences, we would classify a tweet.

E.g., sentences 1 and 2 are positive for the US; sentence 3 is negative for the US, then the tweet is positive.

Example 1: "China is cheating us. Joe Biden is Sleeping. I will make America great again." Here, the lexicon should pick (china + cheat) "Positive"; (Biden + Sleeping) "Positive"; (America + great) "Positive"

Example 2: "President Xi is a great friend. The talks are going well. The trade tariffs are paying off American Farmers."

(Xi + Friend) "Negative"; (Talks +well) "Negative"; (Tariffs + American) "Negative"

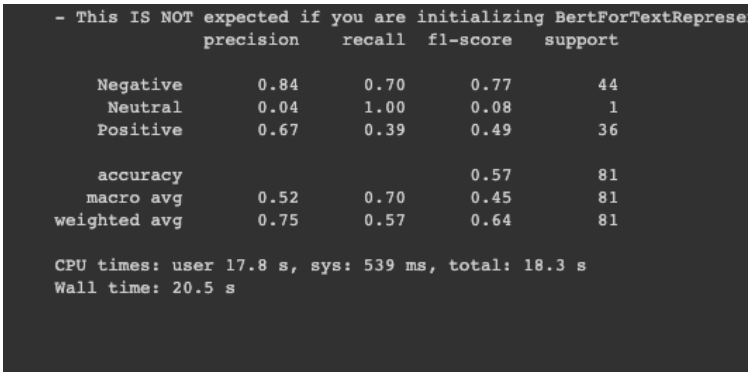


Figure 13: Evaluation of provided dataset

Experiment 3: Statement separation symbols

Building on experiment 2, separate statements in a tweet by "." instead of "".(i.e., without full stop between inverted commas)

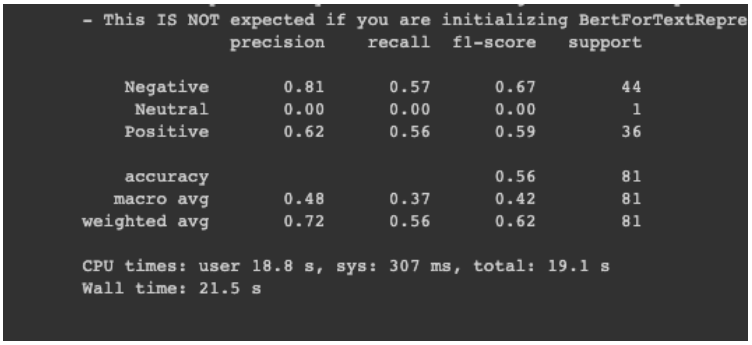


Figure 14: Separate Statements

Experiment 4: Classify surrounded text

Rather than breaking a tweet down by sentences, extract the text surrounding each of the matching keywords and classify it, for example, 'the USA is doing very good these days, and China is doing badly.'

From the above tweet, we would find the matching keywords USA and China, and for each, we would classify the text that surrounds each keyword by a distance of up to 3 words.

Statement 1: the USA is doing good - positive sentiment and talks about the USA

Statement 2: these days and China is doing bad - negative sentiment and talks about China.

Then both statements are classified as positive for the USA

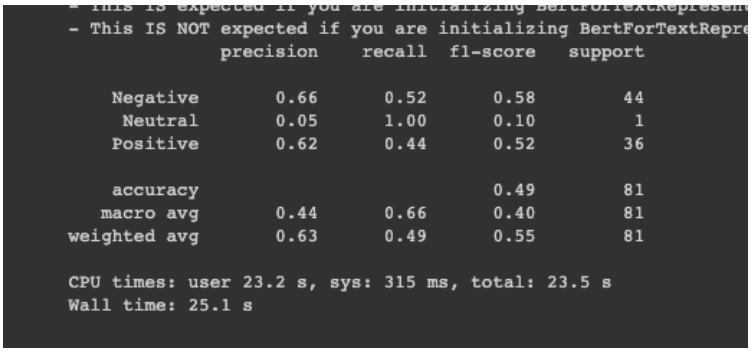


Figure 15: Both statements positive

Conclusions 1:

Experiment 2(E2) and experiment 3(E3) yield the best accuracy so far.

The script and results use the code from E2, which yields an overall 75% accuracy vs. 78% in E3. Still, when taking a closer look at the metrics, it is observed that E3 is better for classifying positive and negative labels, which are the most important for this task. At the same time, E2 is better for classifying a neutral label.

Experiment 5: if word "tariff" on tweet then mark as positive to the US

If a tweet contains "tariff," mark as positive without looking at anything else

```
- This IS expected if you are initializing BertForTextRepresen
- This IS NOT expected if you are initializing BertForTextRep
              precision    recall  f1-score   support

    Negative       0.89      0.57      0.69        44
     Neutral       0.07      1.00      0.13         1
    Positive       0.62      0.67      0.64        36

    accuracy                           0.62        81
   macro avg       0.53      0.74      0.49        81
weighted avg       0.76      0.62      0.66        81

CPU times: user 12.2 s, sys: 301 ms, total: 12.5 s
Wall time: 13.3 s
```

Figure 16: Contains "Tariff" and marked as positive

Experiment 6: (Figure 17 below) Assign Positive label to neutral tweets

```
- This IS NOT expected if you are initializing BertForTextRep
              precision    recall  f1-score   support

    Negative       0.84      0.70      0.77        44
     Neutral       0.00      0.00      0.00         1
    Positive       0.68      0.83      0.75        36

    accuracy                           0.75        81
   macro avg       0.51      0.51      0.51        81
weighted avg       0.76      0.75      0.75        81

CPU times: user 17.3 s, sys: 297 ms, total: 17.6 s
Wall time: 18.3 s
```

Experiment 7: (Figure 18 below) E5 and E6 combined

```
- This IS expected if you are initializing BertForTextRepres
- This IS NOT expected if you are initializing BertForTextRe
              precision    recall  f1-score   support

    Negative       0.89      0.57      0.69        44
     Neutral       0.00      0.00      0.00         1
    Positive       0.62      0.92      0.74        36

    accuracy                           0.72        81
   macro avg       0.51      0.49      0.48        81
weighted avg       0.76      0.72      0.71        81

CPU times: user 12.3 s, sys: 305 ms, total: 12.6 s
Wall time: 13.4 s
```

Conclusions 2:

According to E5, classifying based on whether the word "tariff" is on the tweet can increase accuracy. When combining the techniques of E5 and E6, the accuracy was less than for E6 alone. The best accuracy was achieved on E6 when treating neutrals as positive without associating the individual words.

A comparison of this study's sentiment analysis approach against Nisar, Y. (2018) is done in Appendix X.

14. Taxonomy of Mobile Phone Manufacturing Supply Chain and the stock price reactions

The mobile phone manufacturing supply chain firms in Chee, J & Geng, X.'s, (2021) study is used, and their stock prices are tracked based on the tweets' events. The opening and closing price of the stock on the day of the event is taken, and the change $R_d \frac{P_d - P_{d-1}}{P_{d-1}}$ is taken. The same effects are done for the next three days, t+1; t+2; and t+3. Before the results tabulation, the firms which are SOEs and non-SOEs, have been identified.

Control Variables

The opening and closing price of the particular stock market indices of the corresponding date for the corresponding firm are taken for all the events and the three days after.

Cumulative Abnormal Returns (CAR)

The aggregated returns of the firm throughout these 80 events (4 years of Trump Presidency) is derived $R_{i,d}$. The aggregated returns of the respective stock market indices of the specific firm are also calculated $E[R_{i,d}]$. The Cumulative Abnormal Returns (CAR) of these stocks for T+1, T+2, and T+3 are calculated $AR_{i,d} = R_{i,d} - E[R_{i,d}]$.

Winners and Losers

The winners and losers are those firms that have presented positive or negative net returns respectively after accounting for stock market indices movements.

Effects of the Twitter Sentiments on the determination of Winners and Losers

The Granger Causality test for Twitter sentiment and Price of the particular stock/firm $\rho\,(\mathrm{X},\mathrm{Y}) = \frac{<X_tY_t> - <X_t><Y_t>}{\sqrt{(<X_t^2> - <X_t>^2)(<Y_t^2> - <Y_t>^2)}}$ will be conducted to see how the positive, negative, and neutral tweets effect the price movements of the winners and losers.

The same test will also be conducted to see if the time series for each of the day's after the effects of the events can predict the others.

14.1 Study 2:

SOEs and winners

The study then looks into the profile of the winners and looks for their shareholding structure. Our proposition is that majority of the winners are Chinese firms and that they will be SOEs. It is easy to assume that one is dichotomous to the other. However, the relationship between both the propositions is mutually exclusive because the probability of a Chinese firm having positive net returns is not at the expense of a non-Chinese firm having negative net returns.

SOEs and retaliation

The stock price movements of the winners are compared with that of the concentration of the tweet sentiments. It is proposed that during the heightened positive tweets from Trump at the start of 2019, which resulted from a reelection campaign strategy to garner votes, the winners started to rally through the state's support.

15. RESULTS

Plotting the results of the CAR (Y-axis) of the firms (X-axis) in the taxonomy study (Chee, J., Geng, X., 2021) and taking the three days after effects, it is found that there is a positive rallying reaction by the Chinese firms, represented in red (26 out of the 50 firms in the data set) that presents itself after the third day (T+3).

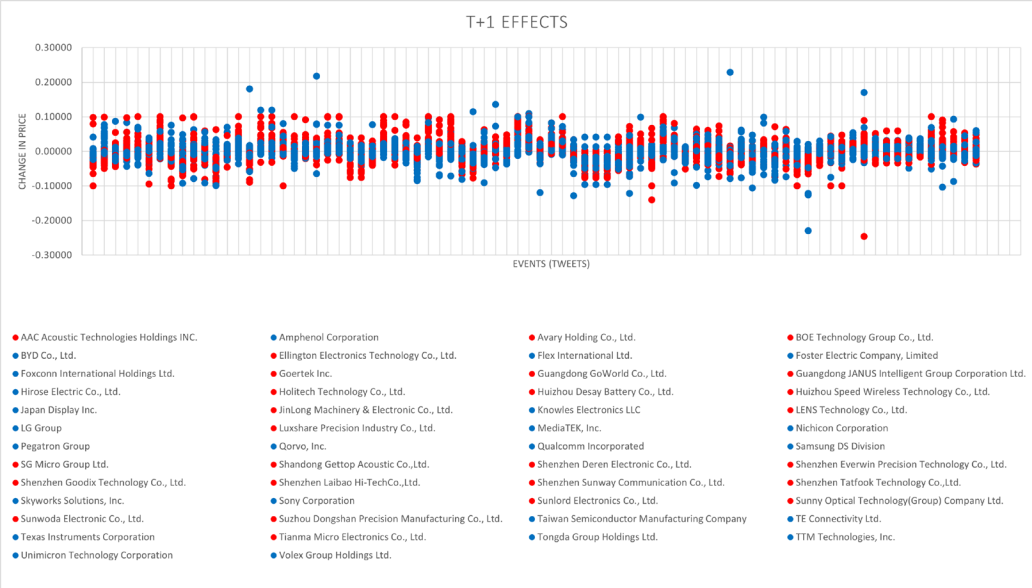


Figure 19: T+1 results, scattered with winners and losers. The winner's margins are insignificant

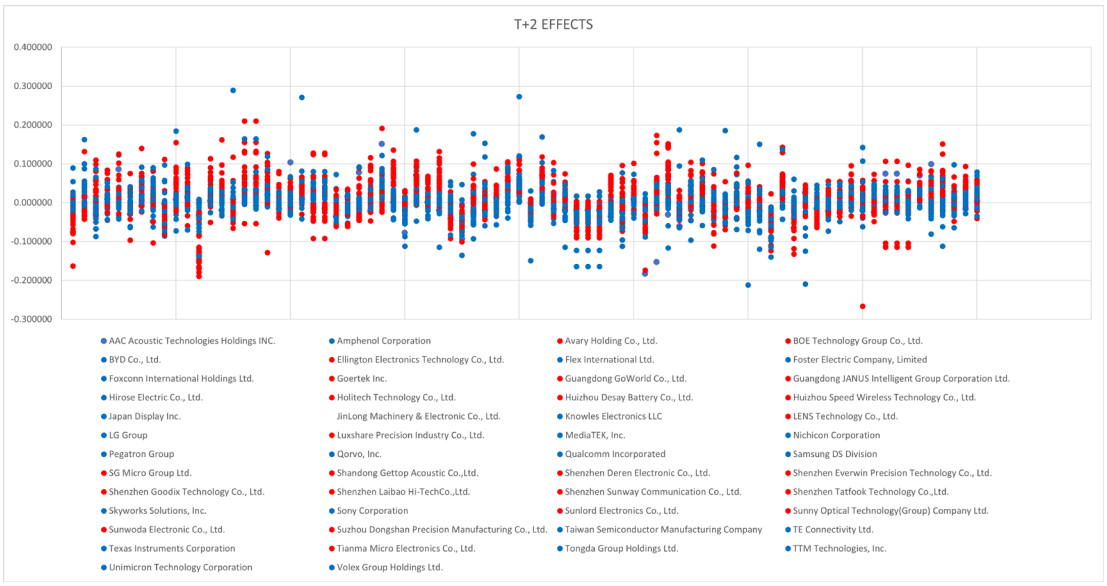


Figure 20: T+2 results. The winner's margins are still insignificant but increasing.

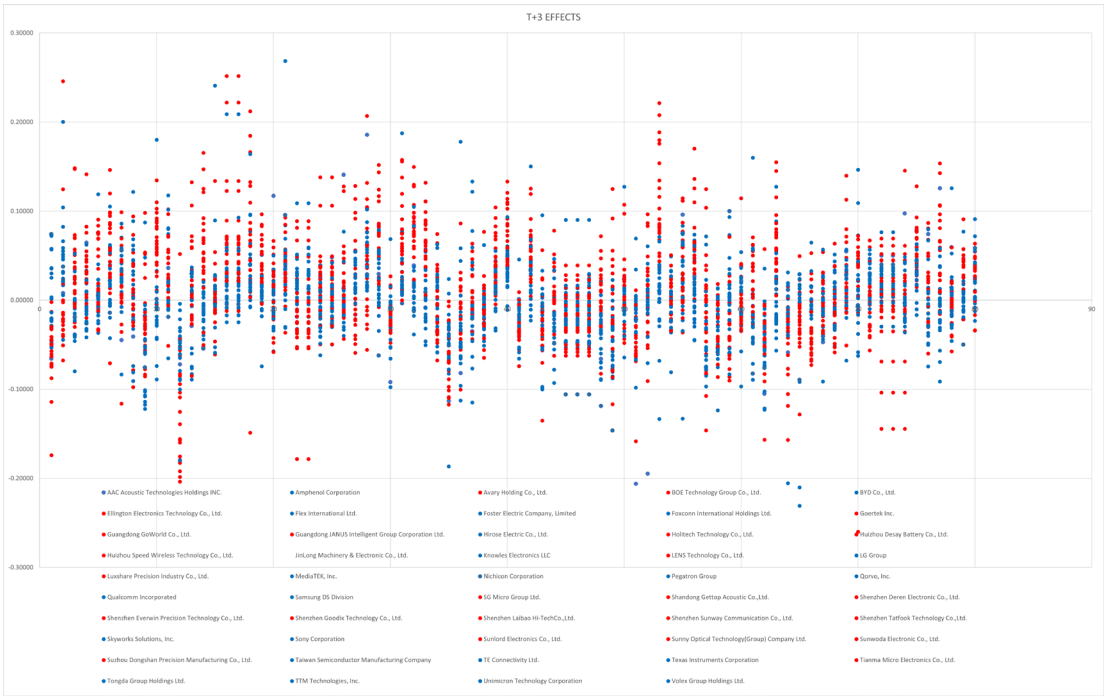


Figure 21 above shows the scattering plot of the CAR of Chinese (red) firms and non-Chinese firms (blue) in the three days after the events, over the aggregated

Twitter messages about China and Trade, during the 4-year Trump Presidency. The results show that there is a significant gain in Chinese firms after the third day. The average CAR of the winners in this event study is a net positive gain of 1.5%. Filtering out the firms, we see that winners are mainly Chinese (13 out of 15; r = 0.886). This is robust support for Hypothesis 1 & 2.

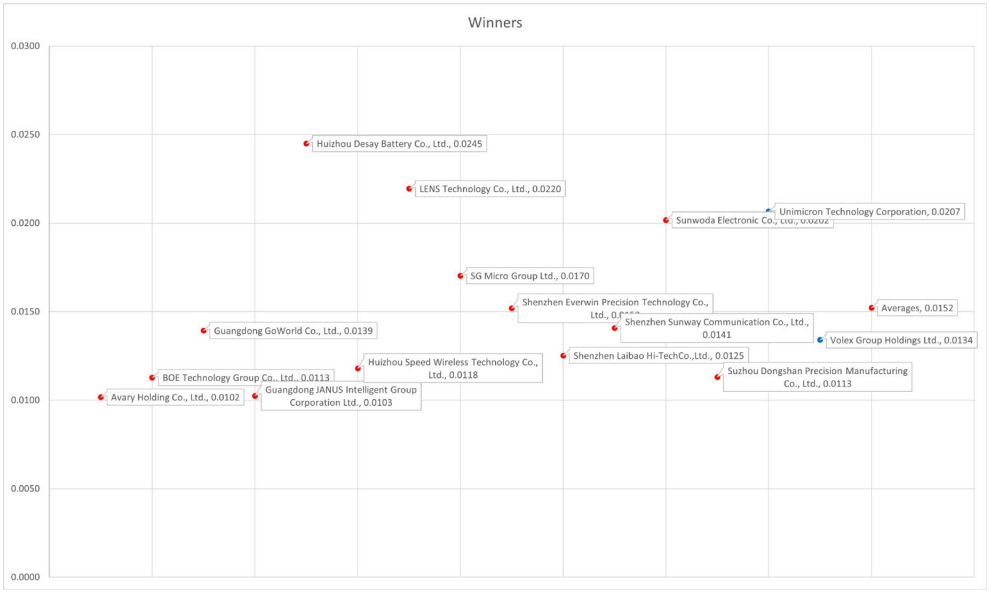
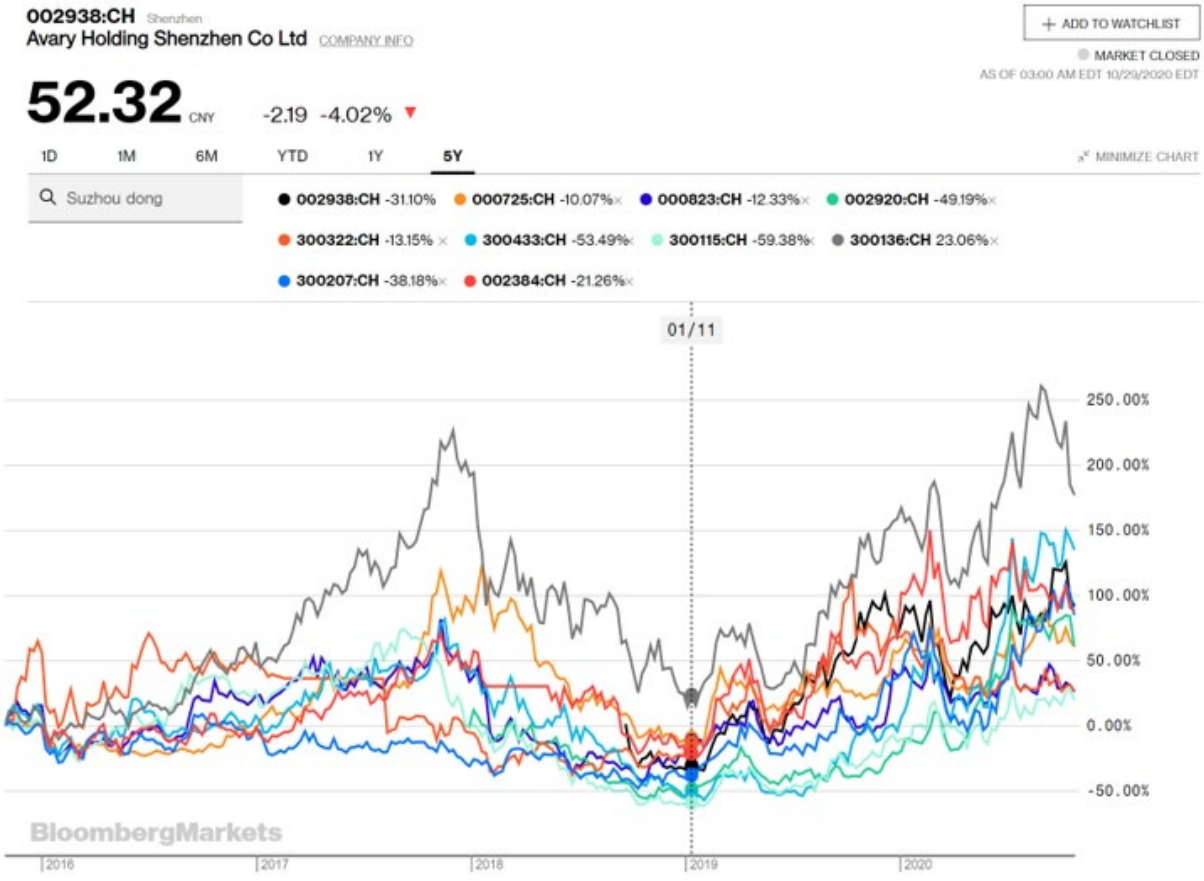


Figure 22 above shows the winners represented in red are Chinese firms.

There are no Chinese firms on the Losers list. The winners' ownership profiles were extracted from CSMAR, the websites, annual reports of the firms, and cross-checked with the National Bureau of Statistics (2003). It was found that 40 of the top 45 shareholders of the winners were SOEs (See Appendix X), thereby supporting H#3. This result means that every Chinese firm on the list of winners is a variant of SOEs, either a Central, SOE or Sub-national SOE.

Next, the SOEs winner's stock performance throughout the events from December 2016 to date is plotted out and overlapped on a trend chart in Figure 23.

Figure 23: Trend chart of SOE winners throughout the tweet event study with an added marker to show an inflection point



What is noticeable from the graph is a precise inflection and rallying point at the start of 2019. This chart had excluded one firm on the winners' list, but because it experienced an increase in CAR by almost a factor of 3 more than the other winners, its scale will attenuate this graph. This inflection and rallying point

can be explained by the concentration of the positive tweets that happened precisely at that point. In figure 24, the tweet sentiments are classified as 1 representing positive, 0 for neutral, and -1 for negative. As is apparent from the positive tweets' concentration in Figure 24 and compared with the rise of stock prices in the Chinese SOE winners, H#4 is strongly supported.

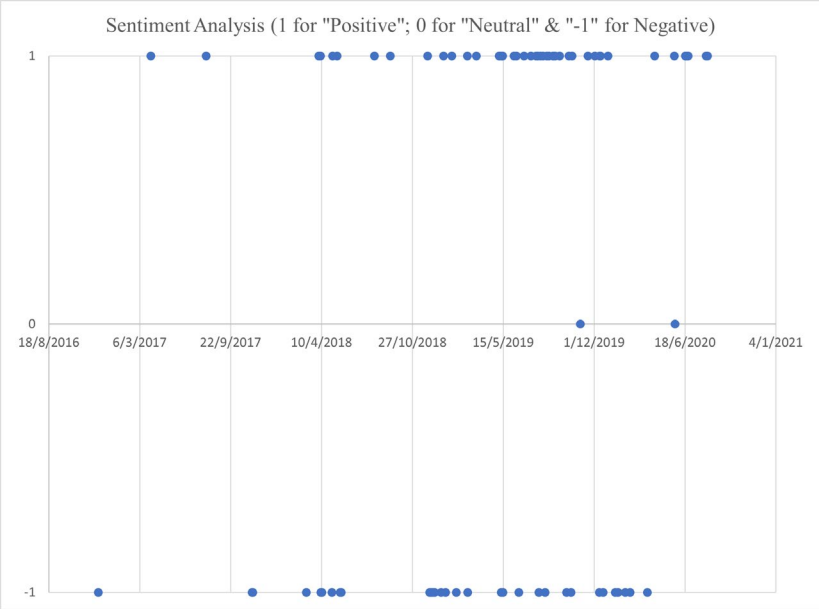


Figure 24 shows the concentration of Positive tweets

Granger Causality Test:

From Figure 25, we can see the results of the returns of the winners and losers by sentiment type over the three-time series. Unlike the CAR calculations, the stock index price movements were not considered because this is a firm-specific study of correlation to the effects of the tweets' sentiments. Including the results of the other firms which were not impacted by the tweets would make very little sense.

The results are then compared to whether the event was positive, negative, or neutral (1 for positive, 0 for neutral, and -1 for negative). A series of T-Tests were then run firstly on the effects of each of the event days on winners and losers. Then the results were cross-checked with the positive or negative sentiments' effect on the winners and the losers.

Figure 25 T-Test results on Winners' & Losers' T+1; T+2 & T+3 Effects from Sentiments

	Winners	Losers
Average returns of Positive tweets T+1	0.009168436	-0.002911685
Average returns of Positive tweets T+2	0.016421893	0.00094544
Average returns of Positive tweets T+3	0.017749348	-0.003171703
Average returns of Negative tweets T+1	0.002679561	-0.00240936
Average returns of Negative tweets T+2	0.00452617	-0.003263953
Average returns of Negative tweets T+3	0.01138792	-0.006726515
Average returns of Neutral tweets T+1	0.003419197	0.001536151
Average returns of Neutral tweets T+2	0.010998438	0.003824947
Average returns of Neutral tweets T+3	0.054298258	0.01402623

t-Test #1: (Winners' and Losers' differences in reaction to Positive Sentiments)

	Variable 1	*Variable 2*
Mean	0.014446559	-0.001712649
Variance	2.13345E-05	5.31598E-06
Observations	3	3
Pearson Correlation	0.317398471	
Hypothesized Mean Difference	0	
df	2	
t Stat	6.27569641	
P(T<=t) one-tail	0.012231466	
t Critical one-tail	2.91998558	
P(T<=t) two-tail	0.024462932	
t Critical two-tail	4.30265273	
Results are significant at 5%		

t-Test #2: (Winners' and Losers' differences in reaction to Negative Sentiments)

	Variable 1	Variable 2
Mean	0.006197884	-0.004133276
Variance	2.10549E-05	5.22625E-06
Observations	3	3
Pearson Correlation	-0.999893633	
Hypothesized Mean Difference	0	
df	2	
t Stat	2.602968984	
P(T<=t) one-tail	0.060656343	
t Critical one-tail	1.885618083	
P(T<=t) two-tail	0.121312686	
t Critical two-tail	2.91998558	

The results clearly show that the winners react significantly differently to the same tweets, whether negative or positive, to the losers. This phenomenon indicates that the two groups view the tweets' sentiment in a polar opposite manner of each other. For example, what one group feels is a positive message, is construed by another group differently. This finding provides very strong support for H#5.

Possibility of an SOE retaliation via announcements:

Trying to account for all the stock effects listed in this research based on Twitter responses is extremely challenging. To this study's credit, it tries to aggregate as many inputs from the various stock indices and its corresponding day performances for three days after each event over four years. Yet, to prove that this was a result of a silent retaliation requires further exploration that is beyond the scope of this study. I searched for the winners' pool of announcements around the individual events' time, and the results are as shown.

Of the 15 winners in the list, 11 are SOEs, 2 Chinese Non-SOEs, and two foreign firms. Of the 80 possible event dates listed, multiplied by the three days after, I take the product of the 15 firms and tabulated and calculated a possible 4800 entry-possibilities for announcement dates for these firms and record the announcements. In the 4800 possible entries, there were only 13 announcements issued in total. Only 2 firms are non-Chinese. 4 announcements are made by 2 SOE firms. Of the 4 announcements by SOEs during this period, 2 were 'negative', and

the announcement is not seen as retaliation as it was a cordial one to the SOEs. This means that there is a ($p < 0.05$**) chance of an SOE responding to the tweets with announcements to negate the effects.

Further investigations can look into the various corporate actions of the individual firms during the periods of these announcements. These announcements should include governmental responses as well.

Descriptive Statistics

	Mean	Std. Deviation	N
T1W	.0064291551	.0237986457	80
T2W	.0115280172	.0345853345	80
T3W	.0161184998	.0375755429	80
T1L	-.002599559	.0168985187	80
T2L	-.000666329	.0241538007	80
T3L	-.004163679	.0283720561	80

Correlations

		T1W	T2W	T3W	T1L	T2L	T3L
T1W	Pearson Correlation	1	.741	.586	.548	.455	.439
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	80	80	80	80	80	80
T2W	Pearson Correlation	.741	1	.868	.483	.528	.507
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	80	80	80	80	80	80
T3W	Pearson Correlation	.586	.868	1	.396	.486	.555
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	80	80	80	80	80	80
T1L	Pearson Correlation	.548	.483	.396	1	.878	.762
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	80	80	80	80	80	80
T2L	Pearson Correlation	.455	.528	.486	.878	1	.896
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	80	80	80	80	80	80
T3L	Pearson Correlation	.439	.507	.555	.762	.896	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	80	80	80	80	80	80

Figure 26: Correlations between winners and losers

A Pearson's correlation test was conducted for the winners against the losers for all the event time series. There is a positive and significant correlation between the winners and the losers within the group.

16. DISCUSSIONS & ALTERNATIVE PERSPECTIVES

The average firm age and market capitalization (USD) of the winners are 22.8 years old and $USD 6.97 Billion. In comparison, the average firm age and market capitalization (USD) of the losers are 48.5 years old, USD 20.23 Billion. The losers are more than twice the age of and have almost three times the market capitalization of the winners. These statistics eliminate any assumptions that it is the size and experience of the firm that enables a shock resistance to the exogenous threats.

What is, however, interesting to note is the capital asset nature of the winners and losers. A previous study (Chee, J., & Geng, X., 2021) has shown through their Innovation Composite Index (ICI) index that some foundry manufacturers are laden with capital intensive structures with relatively low emphasis on innovation. The ICI equation being ($\frac{PPE\ X\ Employees}{Innovation}$), where (Plant, Property, and Equipment (PPE), and the number of employees determines how laden the firm is to the location. The innovation is the amount of Intellectual Property the firm owns. The winners in this study have a mean ICI of 887.59 and the losers have a mean ICI of 15,878.41.

This study proposes a correlation between the efficacy of the SOEs' strategy of retaliation and the firms that the state chooses to protect and support (Chee, J., & Geng, X., 2021).

17. CONCLUSIONS

Given the unique nature of the governance of SOEs, this study shows that in the event of an exogenous threat, the state can play an essential role in providing guidance and protection to the critical strategic and pillar industries. Some of the crucial roles the state can provide for its SOEs are financial or fiscal assistance while maintaining control over the supply chain. This unified approach is an endogenous response to the exogenous threat. It is endogenous in nature because the assistance the state extends to its SOEs, are often opaque, internal, and not in direct response to the original threat. By providing the affected SOEs with assistance, the other firms will not be able to maintain their competitiveness.

18. SECTIONAL ABSTRACT

Family-owned firms make up a large portion of enterprises in Asian countries. A smooth transition of leadership is vital to the firm's development and survival. Many of these firms have very similar founder origins and are now facing transitional challenges. There exists very little research to explain the low rate of leadership succession in the Asian context. Due to previous studies' provenance, the extant definition of a successor is the custodian C.E.O., who may or may not be a family member. This study posits that the Generation X scion is now being groomed for succession and should rightly be defined as the successor. Based on the existing integrated leader traits and behaviors framework (L.T.B.), we attempt to empirically show how the difference in leader traits and behaviors of the founder and successor (Transfer parties or T.P.s) will affect the probability of a successful transition. We plan to use qualitative interviews with several key founders and potential successors of large manufacturing conglomerates in Taiwan. Our intuition is that the prestige and size of the firm, its age, industry type, and the abilities of the TPs are independent variables. The influence of the other parent, who is also a shareholder, and custodian C.E.O. approval will moderate the main constructs of L.T.B. differences and the firm's probability of a successful transition. The implications of this successful transition (or not) and how it will affect the firm's sustained competitive advantage and vulnerability to acquisitions are discussed later.

19. SECTIONAL INTRODUCTION

Family-owned firms have a strong foothold on the global economy (La Porta, López de Silanes, and Shleifer, 1999; Claessens, Djankov, and Lang, 2000; Faccio and Lang, 2002). The definition of a family-owned firm is one that has more than 5% of share ownership through family members (Li, 2017). The tabulation includes family trusts, counting towards ownership (Scholes, L., Wilson, N., 2014). Family-owned firms make up approximately 50% of the S&P 1500 and 33% of S&P 500 firms (Anderson and Reeb 2003; Chen, Chen, and Cheng 2008). Comcast, Cox, Cablevision, and Charter Communications are some of the family-owned firms in the United States still run by the founder and their heirs (Gilson and Villalonga, 2007). Many of the major newspapers are also family-owned. In Europe, most major beer breweries are actively owned and managed by families (Villalonga and Hartman, 2007). Increasingly, many other shareholders take ownership interests in family-owned firms (e.g., Carney & Child, 2012; Sacristán-Navarro, Cabeza- García, & Gómez-Ansón, 2015).

251 of the most-cited articles on family firms published between 1996-2010 are, according to De Massis, Sharma, Chua, and Chrisman (2012), 73% based on Western enterprises. Given the rise of trade tensions between the U.S. and China, much attention is placed on the decoupling efforts of relocating U.S. manufacturing interests away from China and into alternative sites. One of the most convenient

alternative locations is Taiwan (Lin, S., 2014). Convenience is defined by geographical and cultural distance proximity (Hofstede's, 1980; 2001).

The 1980s saw Taiwan achieve great commercial success with the emergence of high-tech manufacturing firms. In precision component engineering, microchip designs, and product assembly, the country is represented by market-leading firms like Acer, Taiwan Semiconductor Manufacturing Company, and Foxconn (Liu, Y., Lin, W., & Cheng, K. 2011). The majority of these firms are family-owned and are founded by baby boomers (Chiao, C., 2017) due to the provenance of the technology trends coinciding with the mean leadership age (Yu, H., Miller, P., 2005).

A founder may choose for tax efficiency purposes to set up separate and multi-layered funds to vicariously own shares in the firm. Claessens, S., Djankov, S., & Lang, L. H. P. (2000); Yeh, Y., Lee, T., & Woidtke, T. (2001); Shyu, J. (2011) have also determined that using different critical cut-off percentages of shareholdings, the definition of which firms should be classified as family-owned, varies greatly.

Upon determining which firms are family-owned, we can then conduct meaningful studies into comparisons of firm performances under the different governance systems. Anderson and Reeb (2003) claim that family firms perform better than do non-family firms in both profitability-based and market-based

measurement. Therefore, it is crucial for us to know what are the leadership succession trends.

Many studies have looked into leadership succession trends about these founders heading into retirement (Gardner Jr, 2009; Saporito & Winum, 2012) and dealing with leadership selection criteria (Ansari, I., Goergen, M., Mira, S., 2013). The Asian founder is known to have a Paternalistic leadership (P.L.) nature (Cheng, B., Chou, L., Wu, T., Huang, M., Farh, J., 2007). Farh and Cheng (2000) define P.L. as a style that is benevolent but stern and fatherly, filled with moral integrity and loyalty. This leadership style is very much aligned with how Ma and Tsui (2015) describe Confucianism philosophies prevalent among Asian leaders. Much of leadership succession research in Asia focuses specifically on Taiwan during the periods of 1990s to 2000s (e.g., Yu, H.C. & Miller, P 2005; Chung, C., & Luo, X., 2013; Li, 2017; Liu, Y., Lin, W., and Cheng, K., 2011). We note that these studies have temporal invalidity because the P.L. founder's Generation X children were not ready to take over. Studies show that because of a strong paternal sense, the founder will want the successor to be a family member, with a specific preference for the choice to be their direct descendants. From the previous research dataset's timeline, we can infer that it was examining the relationship between the founder and the custodian professional C.E.O.. C.E.O. approval serves as one of the moderating factors between the successful transition of the T.P.s and their L.T.B. differences. The other moderating factor is the presence of the other parent on the board of the company which mitigates the differences that may exist between the TPs. We use

the Integrated Leader Traits, Behaviours, and Effectiveness Model by (Derue, D., Nahrgang, J., Wellman, N., & Humphrey, S. (2011) to compare the differences between the T.Ps.

It is noted that most literature on leadership succession deals with the effects of the firms' performance (Chung, C., & Luo, X., 2013; Chen, X., Cheng, Q., & Dai, Z., 2013). This study hopes to add on to the existing work by considering the successor's leadership style or preferences for the actual transfer event.

This study intends to extract interview sessions of founders of the largest Taiwanese firms. We use The Taiwan Economic Journal (TEJ) database and T.W.S.E. Market Observation Post System (M.O.P.S) to sort and select out these firms by industry code and Market Capitalization (Gong, P., 2019). This process also gives us the firms' annual reports to look out for announcements about shareholding disclosures, disputes, and transfers. We are also cross-referencing shareholder details with a Bloomberg terminal (Sharma, A. 2015) because many shareholders use exchange-traded fund (ETF) or other forms of trusts to hold ownership (Neves, D., Fernandes C., Martins, P., 2019). The database of 848 firms were extracted and kept in our dataset. Of these, the top 56 firms according to market capitalization and public data available was used for our first two studies.

The codified interview statements (Rogers, 1991) are used to reflect the dimensions of the L.T.B. of the leaders and their thoughts and aspirations on their

successors, either incumbents or incoming. The differences between the T.P.s are tabulated. The results are then compared to what the firm's key employees perceive their new leader should possess. What leadership styles worked for the firm in the past may not be what is needed in the present and the future. Therefore, critical consideration of whether a successful transition of leadership will occur between T.P.s has to be which style the key employees feel more aligned.

The results are measured against the moderating factors, and a logit regression is performed to test for the probability of leadership succession between T.P.s (Shi, F., 2019).

In the third study, we utilized the remaining firms in our full dataset to track against previous research to see if there is a negative trend in successful leadership succession in family-ownership Claessens, S., Djankov, S., & Lang, L. H. P. (2000); Yeh, Y., Lee, T., & Woidtke, T. (2001); Shyu, J. (2011). The results are measured against the acquisition trends of Chinese SOEs (Baroncelli, Alessandro & Landoni, Matteo 2019). A Vulnerability Index is built to search for correlations between weak leadership succession, firm performance, strategic importance of the industry to the Chinese state, and the target firm’s vulnerability to acquisition.

Finally, we present a recent case study of the Taiwanese strategic contract manufacturer Wistron, for consumer electronics and how it was a vulnerable target for acquisition by a Chinese SOE, Luxshare. The case study foreshadows possible

outbound acquisition trends by Chinese SOEs (Sun, V., 2017) in strategic industries to gain a dominant global position.

Importance of this study

The contribution of our research to scholarship is three-fold. As the world is looking at the effects of the trade spat between the U.S. and China, firms affected have to consider relocating to alternative sites. From popular media, there is a general sentiment that there is a weakness in key emerging countries' firms partly because of the lack of succession planning. This study wishes to empirically demonstrate that the success or failure of leadership succession may be explained by the differences in L.T.B. of the T.P.s. Secondly, this study hopes to show that certain previously unconsidered moderating factors may affect the key constructs. Thirdly, we discuss the alternative views of what the implications of our findings may mean for the future of these firms. Finally, and perhaps the most pertinent factor for this study being justified as a logical continuation of the previous two sections, is that firm managers must consider the socio-economic landscape of the most practical alternative sites it intends to pursue following a decision to decouple. The evaluation of whether to proceed must include ancillary factors such as the leadership succession trends of a predominantly family business-orientated country.

20. THEORETICAL DEVELOPMENT & PROPOSITIONS

20.1 The profile of the Founder

1.1 On the Founder's Leader Traits and Characteristics:

Demographics

The founders of these top firms are typically baby boomers (Yu, H., Miller, P., 2015) who have strong political ties and are P.L. in nature. They have, on average, either no formal education or generic undergraduate degrees.

Task Competence

The way they drive their firms is firmly entrenched in Confucian philosophy Farh, J. L. & Cheng, B. S. (2000). The key precepts that are synonymous with this type of leader are a workhorse attitude and Conscientiousness. They value a no-nonsense approach to hierarchy in the workplace and possess good business acumen.

Interpersonal Attributes

They are usually introverted, loyal to relationships but do not trust easily, treat family well, and serve the leader faithfully and loyally. They do not usually freely express their opinions openly except to voice work-related concerns (Ma, L., & Tsui, A. S., 2015).

On the relationship between all dimensions of Leader Traits

An intuition, pre-results, is that the founder in his earlier years will have to depend mainly on Task Competence (Intelligence) to get the business started. Given the fledging environment of manufacturing in Taiwan, the lack of formal education (Demographics) may not be a disadvantage, but the founder will have to rely on contacts and a workforce who believes in him. To win trust, the founder must display a deep sense of Conscientiousness.

Proposition #1: The founder's Task Competence, with an emphasis on Conscientiousness, will have a larger effect score than all other Traits and Characteristics

1.2 On the Founder's Leader Behavior:

The founders' behaviors will primarily be characterized as:

Servant Leadership (Confucian precept of leader possessing humility) is key in a manufacturing environment with much of the labor force being entry-level operators; Directive - leading a large relatively entry-level skilled workforce has its unique complexities, and often the leader has to adopt a direct approach to achieve effective firm performance.

Proposition #2: The founder is more Task-Oriented with an emphasis on Servant Leadership and Directive, rather than change-oriented or passive leadership in nature.

20.2 The profile of the Successor

2.1 On the Successor's Leader Traits:

Demographics

It is found that the children of the founders are born between 1965 and 1980 and are called Generation X ("Xers") (Yu, H., Miller, P., 2015). There is relatively less distinction between genders between the Xers and baby boomers regarding leadership roles in family-owned firms. As Smola and Sutton (2002) have found, Gen X members grew up in an era of family, financial and social insecurity, remarkable diversity, and rapid geopolitical and economic change. These environmental factors led Xers to develop a deep sense of individualism over collectivism (Jurkiewicz & Brown, 1998; Smola & Sutton, 2002). This development thus leads them to be more skeptical and less loyal (Glass, 2007).

Task competence

As leaders, Xers are very result-orientated and place a higher premium on outcomes rather than the fidelity of the outcome (Glass, 2007). Xers have very strong leadership efficacy. Kupperschmidt (2000) describes Xers as technologically

competent and comfortable with diversity but is not as proficient with social media as subsequent generations (Lester et al., 2012); (Lester, Standifer, Schultz, & Windsor, 2012).

Proposition #3: The successor's task competence, with an emphasis on leadership efficacy, will have a larger effect score than interpersonal attributes or demographics.

2.2 On the Successor's Leader Behaviors:

Task-Oriented

The Xers value their commitment to their work more than their organization (Yu & Miller, 2005). The reason for this loyalty to the profession stems from them wanting to seek personal satisfaction. This want is also evident from them continually looking for ways to self-improve their skills (Sessa et al., 2007). They want and are willing to initiating new structures. Xers value a work-life balance. (Bennett, Pitt, & Price, 2012; Patterson, 2007; Sessa et al., 2007). This finding is further supported by Glass (2007), who has stated that Xers will more readily change jobs to find one that affords them more flexibility in job hours. Yet, (Johnson & Johnson., 2010) counters by saying that this wish for work-life balance is not necessary a self-centered behavior but rather an attempt to maximize their individual goals. This finding is further corroborated by Smola and Sutton (2002), which points out that this attitude is merely the Xers wanting to feel that they work

hard and play hard. They have a very realistic problem-solving style, emphasizing a preference for working with autonomy (Kupperschmidt, 2000). They want freedom from supervision more than Baby Boomers do (Jurkiewicz, 2000).

Proposition #4: The successor is more Task-Oriented, with an emphasis on Initiating Structure than change-oriented, relational-oriented, and passive leadership in nature.

20.3 The differences in the profiles of the founder and successor

3.1 What leader style suits the firm:

The study will model itself after the questionnaire format of Yasir, M., Imran, R., Irshad, M., Mohamad, N., & Khan, M. (2016). They interviewed employees to see what they thought of the efficacy of their leaders' leadership style and how they perceive it to affect firm performance. The difference, in this case, is what the key employees' value in the L.T.B., plotted against what the individual profile is of the T.P.s. For example, if the employees want a paternal and collectivistic leader - and the founder fits this profile while his successor is an individualistic and lassie-faire leader; then, the score will be a negative one. A neutral score will be if the T.P.s both share the same characteristics and the employees expected it of them. A high positive score will result if the employees are congruent with the successors' style but not that of the founder. This result denotes that an urgent succession is not merely a consideration but an organizational need.

20.4 Leader Traits and Behaviour differences and leadership succession

4.1 Independent Variables:

Prestige of firm

As Glass, A. (2007) has already described about the Xers, their decision to join their family enterprise is not based on loyalty. This study proposes that the firm's prestige will be one of the moderating factors between the key constructs. The more prestigious the firm, the more likely the successor will want to take over the role. We use the Gallup Poll 2020, which lists the Business Sector ratings of appeal, to apply a score on the industry's prestige.

Age of firm

Research by Myers, K.K., Sadaghiani, K.) (2010) has shown that Xers generally shy away from foundry manufacturing sectors. They may feel that it is a waste of their talents and want to invest their time in industries with a higher return rate on their investments. This sentiment is tied closely to the age of the firm. If the firm has been a foundry manufacturer for the last few decades without any innovation, it is doubtful that the Xer will be interested in taking over.

Size of firm

Research by (Cucculelli, M. (2008) shows that the firm's size will negate the negative effects of post-succession. The larger the firm the less likely there will be undesirable net effects.

Education of TPs

Wong, C. (2018) has shown that the education level of the successor will negate any differences she may have with the founder. The exception is when both the founder and the successor have highly regarded doctoral degrees.

4.2 Moderating factors:

Other Parent on the board

Shaheena Janjuha-jivraj (2004) has found that having a mother (or father) with shareholding is a good buffer between the T.P.s' differences. The study uses the Family FIRO (Family Interpersonal Relationship Orientation) model to gauge if the other parent's presence will have the ability to close any differentials that the other empirical variables may present.

Proposition #5: The effect of LTBD on the Probability of a leadership succession is moderated by the other Parent on the board.

C.E.O. approval (if the C.E.O. is a professional non-family member)

As discussed in earlier sections, the C.E.O. is a professional custodian executive entrusted by the founder to run the firm in his ending tenure. It is assumed that the founder took great care to choose his C.E.O. (Joon Mahn Lee, Yoon, D., & Boivie, S., 2020) and that the C.E.O. is assumed to be of good caliber. This study assumes that having C.E.O. approval will increase the effect of the relationship between the L.T.B. differences and the likelihood of leadership succession.

Proposition #6: The effect of LTBD on the Probability of a leadership succession is moderated by the custodian CEO approval of the successor.

20.5 Reduction in trend of leadership succession in Taiwan family firms

20.5.1 Family firm and succession (pre-2002)

Choosing the correct successor is a complicated process (Gomez-Mejia et al., 2001) and is vital for the survivability of the firm, especially when handing down from the first to the second generation. The issues that often plague family-owned firms which affect succession include internal family members having personal and conflicting agendas (Bertrand et al., 2008; Bertrand and Schoar, 2006), limitations of managerial ability (Pérez-González, 2006) and differences in management philosophy (Mullins and Schoar, 2016).

(Anderson and Reeb, 2003; Andres, 2008; Sraer and Thesmar, 2007) have shown that the process of finding the right successor is meant to increase the time horizon of the firm's trajectory to maintain or better its performance. Bennedsen et al., (2007) and Pérez-González, (2006) have shown that non-family successors come with far superior skills than a family successor (Pérez-González, 2006); this causes the firm to ultimately turn in poorer performance (Villalonga and Amit, 2006). In fact, Miller et al. (2007) find that lone family-owned firms perform better than family-owned firms with other members on board.

Bennedsen et al. (2015) tracked Taiwanese succession and stock movements during this period and have shown a significant reduction in stock performance after the succession. The main reasons that succession to a family member still goes through despite these cautionary signs are due to the cultural cohesiveness of the Chinese family units (Yen, 1994; Zapalska and Edwards., 2001). This is vastly different from Western cultures (Begley & Tan, 2001; Gatfield & Youseff, 2001; Pistrui, Huang, Oksoy, Jing, & Welsch, 2001)

20.5.2 Regulation Influx (2002-2007)

A slew of regulations began in 2002 that slowed down the rates of leadership succession in Taiwan family firms. Firstly, in February 2002, the TWSE required there to be two independent directors to serve on the boards and issued best practices guidelines. Next, in June 2002, an Investor Protection Act was passed to protect the rights of the investor from any illegal insider activities. The end of 2002

saw another set of regulations tightening how firms took out loans and the guarantees which it has to put in place to ensure that the firms did not leverage beyond their means.

In September 2003, the Taiwanese government eased the regulations regarding foreign investments and this allowed the influx of funds into family firms. This was the period when the Generation X successors were not ready to take over the firms and the firms were managed by custodian CEOs. This made the founder susceptible to accepting the offers of investors to participate in the shareholdings of the family firms.

Finally in 2007, there were many comprehensive regulations with regards to corporate governance, transparency of boards and liability of directors that were incepted to protect the investors. This robust framework encouraged foreign and domestic investors to place more confidence in family-owned firms. This invariably means that with more diversity of shareholders on board, the family's control of the family-owned firm was reduced and the possibility of a succession taking place, naturally, would also be reduced.

20.5.3 Family conflicts and rivalry

There is very little empirical research conducted on studying the effects of family conflicts and rivalry within the firm. However, there are many widely publicized Taiwanese infighting articles of family members jostling for power

within the firm, e.g., Chung, CH. (2016, May 15). Kiong, T. (2005) has shown through a detailed qualitative study on Chinese family firms that family conflicts are more prevalent and detrimental than publicly reported. This fracture in the relationship is also another reason why family controls can either weaken or are diluted. This effect happens when the family members are deadlocked about how to operate the firm, which then adversely affects firm performance.

20.6 Chinese SOE acquisition trends and the vulnerability of firms from poor leadership succession in Taiwan

20.6.1 Case Study of Luxshare Acquisition of Wistron

Lin, L. (2020). Charters the 40-year history of the Chinese SOEs and shows how it is critical tool for the strategic social-economic sustained growth of the state.

Year	No. of SOEs (Thousand)	Total Assets (Billion)	Total Liabilities (Billion)	Sales (Billion)	Net Income (Billion)	Lev %	ROA %	ROE %	ROS %
1997	262	12,497.5	7881.06	6813.20	79.12	67.10	2.30	1.70	1.20
1998	238	13,478.0	8440.93	6468.51	21.37	65.50	2.10	0.40	0.30
1999	217	14,528.8	9147.49	6913.66	114.58	65.40	2.70	2.10	1.70
2000	191	16,006.8	10,209.24	7508.19	283.38	66.00	3.30	4.90	3.80
2001	174	16,671.0	10,527.33	7635.55	281.12	65.00	3.30	4.60	3.70
2002	159	18,021.9	11,367.58	8532.60	378.63	64.80	3.60	5.70	4.40
2003	146	19,971.0	12,871.89	10,016.09	476.94	65.90	3.50	6.70	3.00
2004	136	21,560.2	13,883.91	12,072.20	736.88	65.70	4.50	9.60	6.10
2005	126	24,256.0	15,517.32	14,072.66	957.99	65.10	5.00	11.00	6.80
2006	117	27,730.8	17,929.37	16,239.03	1219.35	67.40	5.50	12.40	7.50
2007	112	34,706.8	20,247.25	19,483.53	1744.18	68.70	6.40	12.10	9.00
2008	110	41,621.9	25,000.84	22,939.79	1333.52	61.60	4.60	8.00	6.00
2009	111	51,413.7	31,541.69	24,301.54	1560.68	62.80	4.20	7.90	6.60
2010	113	64,021.4	40,604.32	31,499.39	2142.82	63.40	4.60	9.20	7.00
2011	135	75,908.2	48,609.08	38,634.14	2466.98	64.00	4.60	9.00	6.60
2012	147	89,489.0	57,513.54	42,535.65	2427.73	64.30	4.10	7.60	5.90
2013	156	104,094.7	67,097.46	47,112.51	2557.39	64.50	3.80	6.90	5.60
2014	160	118,471.5	76,595.59	48,909.91	2644.40	64.70	3.50	6.30	5.50
2015	167	140,683.2	92,441.72	45,735.20	2497.04	65.70	2.90	5.20	5.60
2016	173	154,914.2	101,521.49	47,439.16	2555.87	65.50	2.70	4.80	5.50

Table 5: Number of SOEs in China extracted from (Lin, L., 2020, pg. 34)

Sun, V. (2017) has shown that there is an increase in focus in the Chinese state to offer aggressive financing support for SOEs despite persistent lower firm performance. Baroncelli, L. (2018) highlights the strategies and justifications for Chinese SOEs making outboard acquisitions. From a political perspective, O'Connor, S. (2018) talks about how Chinese SOEs is used as a political tool by the state to gain advantage over its competitors, which includes strategically acquiring them.

Using Chen, YC. (2020, September 01). Taiwanese firms competing with Chinese SOEs. I narrate a short case study of an example of the potential relationship between a Taiwanese family-owned firm which faced leadership succession challenges and poor performance to it being vulnerable to acquisition by a Chinese SOE.

20.6.2 Vulnerability Index

As of 2018, the Global Family Business Survey shows that Taiwan only has 5% of its family-owned firms with a clear line of succession; this is below the global average of 16% (De Massis, Frattini, Majocchi, & Piscitello, 2018). I plot the trend of succession through the works of Claessens, S., S. Djankov and L. H. P. Lang (2000b); Yeh, L. (2003); Shyu, J. (2011) with this study's current extracted dataset.

	Year of data	Number of Taiex firms chosen	Number of Taiex firms which are Family owned (10% ownership)
Claessens et al. (2000)	1996	141	0.814
Yeh et al. (2001)	1994	208	0.656
Shyu (2011)	2006	465	0.415

Table 6: Decline in trends of family-owned firms in Taiwan

A Vulnerability Index (VI) is thus proposed to show that a relationship exists between the likelihood of a family-owned firm being acquired by a Chinese SOE (DV) and the focal firm's performance, and the weak leadership succession (IVs). The focal firm being in a strategic industry is in accordance to the SASAC definition of 'Strategic' or 'Pillar' industries. According to the "Guiding Opinion on Promoting the Adjustment of State-Owned Capital and the Reorganization of State-Owned Enterprises", the SASAC chairman states that the defense, electric power and grid, petroleum and petrochemical, telecommunications, coal, civil aviation, and shipping are to be designated "strategic" industries and equipment manufacturing, auto, information technology, construction, iron and steel, non-ferrous metals, chemicals, and surveying and design to be "pillar" industries (Szamosszegi, A., & Kyle, C., 2012).

$$\text{SOE Acquisition} = \beta_0 + \beta_1 Succession + \beta_2 Firm\ Performance + \beta_3 Strategic\ Industry + \epsilon_1$$

21. METHODOLOGY

21.1 Measure of what constitutes a family-owned firm

Given that the study investigates the effects of the founder, successor and firm's key attributional relationships with leadership succession, we need to understand the board construct and controls of the focal firms. The firm can be considered family-owned if the family member(s) have control of the board; this is determined by sufficiency of shareholding and decision voting. Family control is according to (Yeh et al., 2001) the sum of three forms of direct and indirect ownership: direct shares owned by family members; cross-shareholdings of conglomerate group; and nomial agent shareholders.

Firstly, this study will have to determine a critical percentage value that is acceptable as sufficient ownership and control. Cubbin and Leech (1983) and Leech (1987a, b) developed a method whereby the critical level is calculated as:

$$P^* = Z_\alpha \sqrt{\frac{\pi H}{1 + Z_\alpha^2 \pi}}$$

Where P* is the critical value; Z_α is the probability of a vote at a shareholder meeting; π is the probability of shareholders exercising their vote and H is the ownership concentration. H is the Herfindahl Index that is calculated as such:

$$H = \sum_{i=1}^{k} (\frac{S_i}{n_i})^2 * n_i$$

21.2 Study 1:

This first study firstly gathers data about the top 56 firms in Taiwan in terms of market capitalization. The Taiwan Economic Journal (TEJ) database has the most comprehensive listing of Taiwanese public firms. The database was used to gather general information, including the founder, successor, firm, profiles of the board members, and any affiliates, and the shareholding structure from 2007 to 2020. Then we supplemented this with the information from the T.W.S.E. Market Observation Post System (M.O.P.S), which contains the critical records of all announcements made about public-listed Taiwan firms. Thirdly, we extract data from Compustat Global on Wharton Research Data Services (W.R.D.S.), any articles we can find about these top 56 firms. Fourth, we extract popular news mediums like Twitter, Facebook, CableTV, and print media for interviews conducted by the founders or successors of these firms, and we collate the data. The data is then sorted and codified based on the categories intended to match the L.T.B. (Derue et al., 2011).

The study author recruited two independent research assistants to collate the data based on the mediums stated above. They started to search for keywords, statements, questions, or comments that have the following themes and categorize them accordingly into the following L.T.B. categories. This data can come from

opinions made about the T.P.s by other parties or T.P.s directly through interviews or statements, or written biographies. The ranking is done by the number of times these attributes surface in the adjectives' raw data. A Cronbach alpha is calculated for inter-rater reliability Taber, K.S. (2018).

21.3 Information Extraction:

The raters are asked to pick up the following sentiments to fit the appropriate L.T.B. attributes. The demographics section of the L.T.B. is largely controlled for because, for gender and culture attributes, we know that the study is predominately male and between parent and child. The age is a given that the founder is a baby boomer, and the successor is a generation behind him. However, the education of the T.P.s is the only attribute that will be noted as it forms part of the intuition that the training which the T.P.s receive will directly affect their leadership style.

21.4 Leaders Traits and Characteristics

Task Competence:

Intelligence. To be drawn from words that mean the following: to comprehend, astute, quick-minded, intelligent, sharp, witty, cerebral.

Conscientiousness. This attribute is drawn from expressions that refer to them doing their work meticulously with care, being organized, or hardworking, goal-orientated.

Openness to experience. The leader is open to new processes and ideas. The leader will build diverse teams rather than have a team with the same characteristics as themselves.

Emotional Stability. To be drawn from instances when the leader gave a calm response to a crisis, either from a challenge in the family or social context.

Technical Knowledge. This information can be drawn from their specialized training indicated in their profile and any skills they have developed through work experience.

Leadership self-efficacy. To be derived from anything that points to the T.P.s being motivated and motivating others.

Interpersonal attributes:

Extraversion. How outgoing or boisterous the leader is. Typical actions would include assertiveness and being very sociable. Appearing in socialite articles does denote a particular preference for the outward show of wealth (McCabe, K., & Fleeson, W., 2012).

Agreeableness. Agreeableness is an attribute in which the leader exhibits prosocial tendencies; this can be derived from the charity work that we can find the T.P.s performing (Yarkoni, T., Ashar, Y., & Wager, T., 2015).

Communication skills. When the leader frequently conducts talks or press briefings and is eloquent and skillful in his oratorical abilities.

Emotional intelligence. Able to control one's emotions despite there being a setback. This attribute also applies to being sensitive to others' emotions.

Political skills. Many of Taiwan's leaders have to contend with challenging conditions of managing their political affiliations and maintaining good relations with their host country. This acumen also extends to the recent increase of Donald Trump's policies, which may drive a wedge between these Taiwanese firms and China.

21.5 Leaders' Behavior

Task-Oriented:

Initiating Structure. The leader's ability to draw out roles, initiate actions, organize group activities, and track goals for the leadership and the followers.

Contingent reward. Certain leaders use a reward system to recognize the merit of the performance regardless of their positions in the firm's hierarchical system.

MBE-active. The leader leads by example. They are active in the management and operations of the firm.

Boundary Spanning. The ability to have cogent actions and plans for the firm across different countries.

Directive. Provide clear rules and regulations for staff to follow. Usually, directive leaders will also enact punishment when the goals are not met.

Relational-Oriented:

Consideration. Leaders with this attribute usually exhibit supportive and friendly behavior and are openly communicative in style.

Empowerment. Trusting in their staff to do the task. The opposite of micro-management.

Participative. Involves all members of the organization for activities, including decision-making processes.

Developing. The leader is willing to develop talent within the organization. Words like 'nurturing' can also be taken in the same context.

Enabling. Feel confident to let others take the lead in the organization.

Servant leadership. This attribute includes empathy, listening to others, awareness

Change-Oriented:

Transformational. Fostering group goals. High expectations of performance. Clear articulation of vision.

Charismatic, Inspirational. Emotional attachment to the firm. Emphasis on follower self-esteem, trust, and confidence.

Task Competence	Intelligence	To be drawn from words that mean the following: to comprehend, astute, quick-minded, intelligent, sharp, witty, cerebral.
	Conscientiousness	To be drawn from expressions that refer to them doing their work meticulously with care, or being organized; or hardworking, goal orientated.
	Openness to experience	The leader is open to new processes and ideas. The leader will build diverse teams rather than to have a team have the same characteristics as themselves
	Emotional stability	To be drawn from instances when the leader gave a calm response to a crisis, either from a challenge in the family or social context.
	Technical knowledge	This information can be drawn from their specialized training in the profile and any skills that they have developed through the course of the work
	Leadership self-efficacy	To be derived from anything that points to the TPs being motivated and motivating others.
Interpersonal Attributes	Extraversion	How outgoing or boisterous the leader is. Typical actions would include assertiveness and being very sociable. Appearing in socialite articles do denote a particular preference for the outward show of wealth
	Agreeableness	The leader exhibits prosocial tendencies; this can be derived from the charity work that we can find the TPs performing
	Communication skills	When the leader frequently conducts talks or press briefings and is eloquent and skillful in his oratorical abilities
	Emotional intelligence	Able to control one's emotions despite there being a setback. This attribute also applies to being sensitive to others' emotions
	Political skills	Leaders show composure when contending with very challenging conditions of managing their political affiliations and maintaining good relations with their host country
Task-Oriented	Initiating structure	The ability of the leader to clearly draw out roles, initiate actions, organize group activities and track goals for the leadership and the followers.
	Contingent reward	Certain leaders used a reward system to give recognition to the merit of the performance regardless of their positions in the hierarchical system of the
	MBE-active	The leader leads by example. They are active in the management and operations of the firm.
	Boundary spanning	The ability to have cogent actions and plans for the firm across different countries.
	Directive	Clear rules and regulations for staff to follow. Usually directive leaders will also enact punishment when the goals are not met.
Relational-Oriented	Consideration	Leaders with this attribute usually exhibit supportive and friendly behaviors, and are openly communicative in style
	Empowerment	Trusting in their staff to do the task
	Participative	Involves all members in the organization for activities, including decision making processes
	Developing	The leader is willing to develop talent within the organization
	Enabling	Feel confident to let others take the lead in the organization
	Servant leadership	Having empathy, listening to others, awareness
Change-Oriented	Transformational	Fostering group goals. High expectations of performance. Clear articulation of vision.
	Charismatic, inspirational	Emotional attachment to the firm. Emphasis on follower self-esteem, trust and confidence.
	MBE-passive	Hands off approach. Not actively involved in the business, directly or indirectly until the problem becomes too large to ignore, then the leader steps
	Laissez-faire	Trust their followers without needing to have much intervention.

Figure 27: LTB Extraction guideline

MBE-passive. The opposite of the MBS-active. Hands-off approach. Not actively involved in the business, directly or indirectly, until the problem becomes too large to ignore, then the leader steps-in.

Laissez-faire. Not to be confused with a leader that does not care. Laissez-faire leaders trust their followers without needing to have much intervention.

21.6 Preparing the results

The results are cross-tabulated and measured for correlations firstly within the T.P.s and then between them. Firstly, the inter-rater's reliability is conducted, and the Cronbach's Alpha Taber, K.S. (2018) is compared between the two analysts. Then the scores for the categorical section of the L.T.B.S. are averaged, and the means are compared with the T.P.s.

21.7 Study 2

21.7.1 Dependent Variable.

The dependent variable is the probability of a successful leadership transition. We obtain data from TEJ and MOPS, which are successful and unsuccessful leadership transitions. We then regress the Independent Variables (IV) below to draw an aggregate confidence level and draw out a probability success range.

21.7.2 Independent Variables

Leader Traits and Behaviour Difference (L.T.B.D.)

Like Study 1, we now focus our gathering of another set of data from Senior Managers and Private Equity Hedge funds managers who have interests in these focal firms in which our T.P.s are involved. This new data set extracts what other vested interest parties feel about the focal firms' leadership. Vested parties are senior managers, formerly or currently employed within the firm, and hedge fund managers who have investment portfolio interests in the focal firms.

This study utilizes the BARCLAYHEDGE Portal, which has, among other things, an extensive global network of hedge funds data on firms. The data includes analyst reports on the firms' corporate profile, investment details, performance, strategies, trading, underlying holdings, and quality data. The findings are matched to the criteria and format of Study 1. They are referenced as the public's perceived importance of what the focal firms need from their leaders to maintain their competitive advantage in the future.

The study splits the findings for firms that have already undergone a successful transition of power to the next generation and those who either have not or are unable to. The individual L.T.B. scores of the T.P.s are matched against the public's opinion, and the difference is taken as the distance between them.

Education

Ranked in the following order: No formal education; generic degree; advanced degree- not related and advanced degree – related. Each will get a score of between 0 – 3. For example, the Generic degree is 1. Therefore, if the successor is to take over a manufacturing firm producing mobile phones and she has an M.B.A., she will get a score of 2.

Prestige of Firm

We use the Gallup Poll listing of popular business category listings 2020 (See Appendix X) as our guide to assign the net positive index score to the various industries that the T.P.s may be in. The intuition is that the more prestigious the firm is, the more likely the successor is willing to take over the leadership succession even if the L.T.B.D. between the two may be large

Age of firm

The firm's scores are in terms of the number of years since the inception of the firm. The age of the firms is obtained from the TEJ and MOPS database. The intuition behind this is that the older the firm is, the more it is entrenched in its structure and the less likely it will want to change. If the T.P.s has a low differential, then this issue will not affect the DV much.

21.8 Moderating Variables

C.E.O. approval

The moderating variable above will be assigned a dummy variable of 1 if present and 0 if not. The opinion of the C.E.O. reflects on whether there will be support for the incoming successor. As previously established, the C.E.O. is a custodian executive who has been handpicked by the founder to run the organization. It will have to be assumed that the C.E.O. is of a competent caliber if she was chosen and has the best insights into what is needed in the firm in terms of leadership traits and behavior. Therefore, having the C.E.O. validate this transition is an essential factor in the key constructs Wang, Y. Z., Lo, F. Y., & Weng, S. M. (2019).

Other Parent on Board

The Family FIRO (Family Interpersonal Relationship Orientation) model in figure 2 proposed by Danes et al., (2002) and Doherty & Colangelo, (1984) to be applied in a family business context, provides for an interesting study of how the other parent (other than the founder) will play a mediating role between the founder and successor traits and behavior dynamics. This research is promising but will not be the focus of this study.

The FIRO models suggest that two essential conditions must be present for the best results to manage a shift in power change in the family. Firstly, the individual constructs of the three dimensions of Inclusion, Control, and Integration must undergo a restriction. Secondly, for the change to be optimized, the restructuring must happen in the dimensions' sequential order.

For our study, we will assume that because the other parent is a shareholder in the family-firm in our research, it means that the family unit is with "Inclusion." Given that the other parent is collaborative to the founder's more dominating role in the Control dimension, we expect there to be a canceling effect in the event of a power struggle between founder and successor. Finally, Janjuha-jivraj, S. (2004) shows that having the other parent in a family firm setting provides fellowship among the members. Therefore, I assign a dummy variable onto the equation; 1 if there is another parent on the board of directors and 0 if there is not.

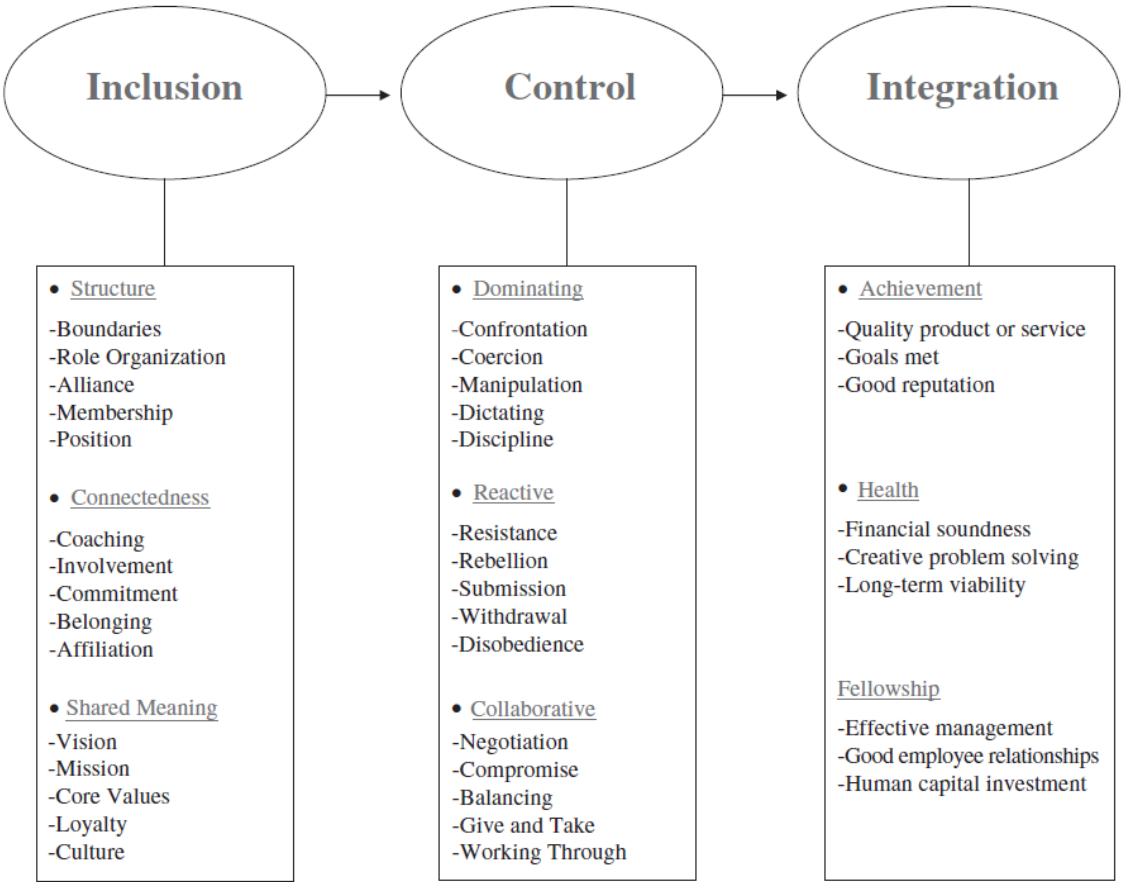


Figure 28: The Family FIRO model by Danes et al., (2002)

21.9 Regression

The results will then be formalized in a logit regression (Baron, R. M., & Kenny, D. A., 1986). The study extracts from our data set the firms that have successfully perform a leadership transition between T.P.s.

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 CEO + \beta_3 OParent + \beta_4 Prestige + \beta_5 Age + \epsilon_1 (1)$$

Next, we run two other regressions based on the moderating variables of the other parent on the firms' board and the CEO approval of the successor to moderate the effects of the LTBD on the Probability of a successful leadership succession.

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 OParent + \beta_3 LTBD * OParent + \epsilon_1 \quad (2)$$

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 CEO + \beta_3 LTBD * CEO + \epsilon_1 \quad (3)$$

The moderating variables, if proven to be related, are removed and the regression is run again to test for differences in the probability of the firm undergoing a successful leadership succession.

22. RESULTS

22.1 Inter-rater reliability:

Two separate analysts were given 190 articles about the founders', successors', and public's opinions about the protagonists' various L.T.Bs (See Appendix 5). The analysts were asked to extract and record based on the 26 categories of Derue et al.'s L.T.B. attributes. The analysts listed the number of times the particular trait, characteristics, or behavior of the focal protagonist was mentioned in the article. These articles include the public's opinion pieces of what the firm or industry needs from its leaders to bring success to its performance.

I measure a quantity which is a sum of K components $X = Y_1 + Y_2 + \cdots +$ Y_k where the Cronbach Alpha Taber, K.S. (2018) is defined as:

$$\alpha = \frac{K}{K-1}(1 - \frac{\sum_{i=1}^{k} \sigma_{yi}^2}{\sigma_x^2})$$

Table 7: Cronbach's alpha on inter-rater reliability

		Intelligence	Conscientiousness	Openness to experience	Emotional stability	Technical knowledge	Leadership selfefficacy	Extraversion	Agreeableness	Communication skills	Emotional intelligence	Political skills	Initiating structure
	Founder Perceived Importance	55	92	17	11	52	76	7	8	14	16	61	30
	Successor Perceived Importance	55	48	40	23	42	52	12	10	22	13	60	44
Rater 1	Public Perceived Importance	39	32	33	6	34	28	2	10	16	8	36	35
	Founder Perceived Importance	45	80	15	14	50	72	9	9	12	15	50	28
	Successor Perceived Importance	58	51	39	23	38	49	11	10	19	13	55	45
Rater 2	Public Perceived Importance	43	30	32	6	31	28	2	10	17	9	36	39
Variance		50.81	535.25	97.56	49.81	60.14	354.81	15.81	0.58	10.56	8.56	106.22	41.81

Contingent reward	MBE-active	Boundary spanning	Directive	Consideration	Empowerment	Participative	Developing	Enabling	Servant leadership	Transformational	Charismatic, inspirational	MBE-passive	Laisser-faire	Total Score
10	31	29	73	30	15	23	40	13	48	19	15	2	0	787
10	10	29	26	13	15	35	32	7	13	24	4	1	2	642
10	11	16	15	10	6	24	23	8	12	15	4	0	0	433
9	34	26	64	25	14	21	37	11	40	19	16	2	0	717
14	12	27	24	13	15	34	32	8	14	21	2	1	2	630
11	11	17	16	12	6	24	23	8	12	16	3	0	0	442
2.56	103.81	29.33	539.56	56.47	17.14	30.47	41.14	4.47	222.81	9.00	33.89	0.67	0.89	

Attributes	26.00
Sum of item variances	2424.08
Variance of total Score	17290.25
Cronbach Alpha α	0.89

From Table 7, the inter-rater reliability is strong, with a Cronbach Alpha score of .89 Taber, K.S. (2018).

Descriptive Statistics Summary:

The results categorized by Founder and Successor are listed in Tables 8 & 9.

Founder Perceived Importance (Task Competence)		*Founder Perceived Importance (Interpersonal Attributes)*	
Mean	51.83	Mean	21.60
Standard Error	13.63	Standard Error	10.26
Median	53.50	Median	15.00
Mode	#N/A	Mode	#N/A
Standard Deviation	33.39	Standard Deviation	22.94
Sample Variance	1114.97	Sample Variance	526.30
Kurtosis	-1.22	Kurtosis	4.39
Skewness	0.07	Skewness	2.07
Range	86.00	Range	55.00
Minimum	12.00	Minimum	7.00
Maximum	98.00	Maximum	62.00
Sum	311.00	Sum	108.00
Count	6.00	Count	5.00

Table 8: Founders' Leaders Traits and Characteristics Score

With a mean score of 51.83, the founder's task competence is the highest rated leader trait and characteristics (Table 8). Table 7 shows that the highest score in the task competence section is Conscientiousness. This result is strong support for proposition #1.

Founder Perceived Importance (Task-oriented)		*Founder Perceived Importance (Relational-oriented)*		*Founder Perceived Importance (Change-oriented)*	
Mean	34.80	Mean	28.83	Mean	9.00
Standard Error	10.54	Standard Error	5.80	Standard Error	4.71
Median	30.00	Median	27.50	Median	8.50
Mode	#N/A	Mode	#N/A	Mode	#N/A
Standard Deviation	23.57	Standard Deviation	14.22	Standard Deviation	9.42
Sample Variance	555.70	Sample Variance	202.17	Sample Variance	88.67
Kurtosis	3.10	Kurtosis	-1.71	Kurtosis	-4.91
Skewness	1.42	Skewness	0.27	Skewness	0.11
Range	64.00	Range	35.00	Range	19.00
Minimum	10.00	Minimum	13.00	Minimum	0.00
Maximum	74.00	Maximum	48.00	Maximum	19.00
Sum	174.00	Sum	173.00	Sum	36.00
Count	5.00	Count	6.00	Count	4.00

Table 9: Founders' Leaders Behavior Score

With a mean score of 34.8, the founder's task-oriented behavior is the highest rated leader behavior attributes (Table 9). Table 7 shows that the highest score in the task-oriented section is Directive. This result is strong support for proposition #2.

Successors' Perceived Importance (Task Competence)		*Successors' Perceived Importance (Interpersonal Attributes)*	
Mean	43.00	Mean	23.60
Standard Error	4.50	Standard Error	9.33
Median	45.50	Median	14.00
Mode	52.00	Mode	#N/A
Standard Deviation	11.03	Standard Deviation	20.85
Sample Variance	121.60	Sample Variance	434.80
Kurtosis	2.01	Kurtosis	4.01
Skewness	-1.42	Skewness	1.99
Range	29.00	Range	50.00
Minimum	23.00	Minimum	10.00
Maximum	52.00	Maximum	60.00
Sum	258.00	Sum	118.00
Count	6.00	Count	5.00

Table 10: Successors' Leaders Traits and Characteristics Score

With a mean score of 43, the Successors' task competence is the highest rated leader trait and characteristics (Table 10). Table 7 shows that the highest score in the task competence section is Leader Self-efficacy. This result is strong support for proposition #3.

Successors' Perceived Importance (Task-oriented)		*Successors' Perceived Importance (Relational-oriented)*		*Successors' Perceived Importance (Change-oriented)*	
Mean	23.20	Mean	19.33	Mean	7.75
Standard Error	5.60	Standard Error	4.64	Standard Error	5.45
Median	26.00	Median	14.50	Median	3.00
Mode	#N/A	Mode	#N/A	Mode	#N/A
Standard Deviation	12.52	Standard Deviation	11.36	Standard Deviation	10.90
Sample Variance	156.70	Sample Variance	129.07	Sample Variance	118.92
Kurtosis	-2.04	Kurtosis	-1.55	Kurtosis	3.73
Skewness	0.04	Skewness	0.72	Skewness	1.92
Range	29.00	Range	28.00	Range	23.00
Minimum	10.00	Minimum	7.00	Minimum	1.00
Maximum	39.00	Maximum	35.00	Maximum	24.00
Sum	116.00	Sum	116.00	Sum	31.00
Count	5.00	Count	6.00	Count	4.00

Table 11: Successors' Leaders Behavior Score

With a mean score of 23.2, the Successors' task-oriented is the highest rated leader behavior (Table 11). Table 7 shows that the highest score in the task-oriented section is Initiating Structure. This result is strong support for proposition #4.

L.T.B. differences between T.P.s according to public opinion

Successful Leadership Transfer		Founder Perceived Importance	Successor Perceived Importance	Public Perceived Importance	LTBD
Task Competence	Intelligence	38	32.5	16	5.50
	Conscientiousness	66	34.5	19	31.50
	Openness to experience	11	16.5	17.5	5.50
	Emotional stability	11.5	9	3	2.50
	Technical knowledge	37	22	10	15.00
	Leadership self-efficacy	58.5	39.5	9.5	19.00
Interpersonal Attributes	Extraversion	5.5	5.5	0	0.00
	Agreeableness	7.5	7	4	0.50
	Communication skills	4.5	16.5	3	-12.00
	Emotional intelligence	14.5	7	3.5	7.50
	Political skills	41.5	39.5	17.5	2.00
Task-Oriented	Initiating structure	25	26	10	-1.00
	Contingent reward	5	8	6.5	0.00
	MBE-active	25.5	11	6	14.50
	Boundary spanning	25.5	21	8.5	4.50
	Directive	39	19	9	20.00
Relational-Oriented	Consideration	21.5	12	8	9.50
	Empowerment	8.5	13	3	-4.50
	Participative	15.5	22.5	10	-7.00
	Developing	24	23	10	1.00
	Enabling	9	3.5	3	5.50
	Servant leadership	29	9	7	20.00
Change-Oriented	Transformational	15	13.5	8	1.50
	Charismatic, inspirational	11	2	2.5	8.00
	MBE-passive	2	1	0	1.00
	Laissez-faire	0	2	0	-2.00
Sum of differences					148.00

No-Success Leadership Transfer		Founder Perceived Importance	Successor Perceived Importance	Public Perceived Importance	LTBD
Task Competence	Intelligence	12	24	25	12.00
	Conscientiousness	20	15	12	5.00
	Openness to experience	5	23	15	2.00
	Emotional stability	1	14	3	-9.00
	Technical knowledge	14	18	22.5	4.00
	Leadership self-efficacy	15.5	11	18.5	-4.50
Interpersonal Attributes	Extraversion	2.5	6	2	-3.50
	Agreeableness	1	3	6	2.00
	Communication skills	8.5	4	13.5	-4.50
	Emotional intelligence	1	6	5	3.00
	Political skills	14	18	18.5	4.00
Task-Oriented	Initiating structure	4	18.5	27	14.50
	Contingent reward	4.5	4	4	0.50
	MBE-active	7	0	5	-3.00
	Boundary spanning	2	7	8	5.00
	Directive	29.5	6	6.5	22.50
Relational-Oriented	Consideration	6	1	3	1.00
	Empowerment	6	2	3	2.00
	Participative	6.5	12	14	5.50
	Developing	14.5	9	13	-2.50
	Enabling	3	4	5	1.00
	Servant leadership	15	4.5	5	9.50
Change-Oriented	Transformational	4	9	7.5	2.00
	Charismatic, inspirational	4.5	1	1	3.50
	MBE-passive	0	0	0	0.00
	Laissez-faire	0	0	0	0.00
Sum of differences					72.00

Table 12: L.T.B.D. between T.P.s for successful/ non-successful or pending transitions

To tabulate the Sum of Differences $LTBD_j$, of j firms, the individual attribute i differences, are measured from the difference between the public opinion P_j and then among the founders F_j and the successors S_j, where $LTBD_j = \sum_{i=1}^{26}(|S_j - P_j| - |F_j - P_j|)$.

From the logic of the equation, the closer the successor's L.T.B. is to the public's opinion, and the further the founder is, the result will be a larger positive number. If the founder's L.T.B. is deemed to be more desirable than the

successor's, then the score will be negative. The results show that the $LTBD_j$ for the successful transition group ($LTBD_j = 148$) is higher than the non-succession group ($LTBD_j = 72$) for all attribute scores. The study will use this score to represent those firms that have yet to conclude or have not gone through a succession—the individual L.T.B.D. Scores are calculated based on the most prominent L.T.B.D. Differences of the specific T.P.s.

The scores are input into a regression table with the other I.V.s.

Age of Firm	Market Cap USD Bil	Is the other Parent involved in the business? Y/N	Custodian CEO Approval? Y/N	Founder Education	Successor Education	Prestige (According to Gallup)	LTBD	Employees	PrSucss
23.00	9.42	1.00	1.00	0.00	2.00	27.00	53.00	65,695.00	1.00
31.00	6.30	0.00	0.00	0.00	0.00	27.00	63.00	17,000.00	0.00
24.00	3.81	0.00	0.00	2.00	0.00	27.00	63.00	40,000.00	0.00
36.00	4.79	1.00	1.00	1.00	3.00	27.00	92.50	46,000.00	1.00
19.00	17.70	0.00	1.00	0.00	3.00	24.00	58.00	57,000.00	1.00
71.00	3.70	1.00	1.00	1.00	1.00	27.00	74.00	12,000.00	1.00
53.00	4.09	1.00	1.00	0.00	0.00	32.00	56.50	28,590.00	1.00
19.00	4.28	0.00	0.00	3.00	2.00	24.00	10.00	12,506.00	0.50
49.00	10.11	0.00	0.00	3.00	3.00	11.00	35.50	9,071.00	0.50
18.00	12.32	0.00	1.00	2.00	2.00	24.00	30.00	27,000.00	1.00
24.00	29.02	0.00	0.00	2.00	0.00	27.00	63.00	22,913.00	0.00
36.00	2.83	1.00	1.00	1.00	3.00	27.00	79.00	64,000.00	1.00
18.00	12.30	0.00	0.00	1.00	0.00	24.00	63.00	27,000.00	0.00
45.00	17.27	0.00	1.00	1.00	1.00	27.00	3.50	83,000.00	1.00
18.00	10.69	0.00	1.00	1.00	2.00	24.00	36.00	8,337.00	1.00
52.00	9.10	1.00	1.00	0.00	0.00	16.00	63.50	18,000.00	1.00
75.00	4.79	0.00	1.00	1.00	2.00	58.00	59.00	67,000.00	1.00
51.00	1.26	1.00	1.00		2.00	25.00	81.00	6,678.00	1.00
55.00	14.07	1.00	1.00	0.00	2.00	11.00	89.50	10,000.00	1.00
28.00	26.18	1.00	0.00	1.00	0.00	11.00	89.50	10,000.00	1.00
19.00	14.56	0.00	1.00	0.00	2.00	34.00	42.50	42,030.00	1.00
46.00	37.30	0.00	0.00	1.00	0.00	27.00	63.00	1,000,000.00	0.00
23.00	0.81	1.00	0.00	0.00	1.00	27.00	73.00	3,950.00	1.00
19.00	7.74	0.00	0.00	0.00	2.00	24.00	12.00	10,509.00	1.00
56.00	5.70	0.00	0.00	0.00	2.00	24.00	63.50	2,000.00	1.00
17.00	3.32	0.00	0.00	1.00	0.00	27.00	63.00	56,000.00	0.00
45.00	2.83	0.00	0.00	1.00	0.00	27.00	63.00	23,000.00	0.00
33.00	14.20	0.00	1.00	0.00	1.00	27.00	21.00	2,576.00	1.00
29.00	9.90	0.00	0.00	0.00	3.00	58.00	78.00	32,696.00	1.00
23.00	37.50	0.00	0.00	2.00	0.00	27.00	63.00	17,058.00	0.00
18.00	13.09	0.00	0.00	2.00	0.00	24.00	63.00	6,202.00	0.00
62.00	16.29	1.00	1.00	0.00	2.00	11.00	70.50	52,000.00	1.00
25.00	6.19	1.00	0.00	1.00	2.00	27.00	70.50	3,375.00	0.50
13.00	5.62	0.00	0.00	2.00	2.00	27.00	38.50	177,950.00	0.50
32.00	3.19	0.00	1.00	1.00	2.00	27.00	39.50	400,000.00	1.00
42.00	9.38	0.00	1.00	0.00	2.00	35.00	25.50	30,000.00	1.00
32.00	9.71	0.00	1.00	2.00	2.00	27.00	60.00	40,000.00	1.00
44.00	1.29	1.00	1.00	3.00	3.00	27.00	70.50	1,630.00	1.00
105.00	5.80	0.00		1.00	2.00	24.00	12.00	4,000.00	0.50

18.00	3.62	0.00	1.00	1.00	2.00	34.00	58.00	17,470.00	1.00
32.00	2.45	0.00	0.00	2.00	0.00	27.00	63.00	240,000.00	0.00
18.00	4.79	0.00	0.00	1.00	0.00	24.00	63.00	9,582.00	0.00
105.00	2.48	0.00	0.00	3.00	0.00	24.00	63.00	5,387.00	0.00
74.00	8.13	0.00	1.00	1.00	2.00	11.00	30.00	10,618.00	1.00
9.00	8.96	0.00	0.00	3.00	0.00	24.00	63.00	8,948.00	0.00
56.00	1.20	0.00	1.00	0.00	1.00	27.00	53.50	3,722.00	1.00
33.00	391.63	0.00	0.00	3.00	0.00	27.00	63.00	48,752.00	0.00
53.00	12.19	1.00	1.00	0.00	2.00	58.00	25.50	188,931.00	1.00
54.00	2.00	1.00	1.00	0.00	2.00	27.00	53.00	4,931.00	1.00
55.00	2.03	1.00	1.00	0.00	2.00	16.00	63.50	5,000.00	1.00
	2.60	0.00	1.00	0.00	0.00	58.00	55.00	47,115.00	1.00
19.00	2.76	0.00	0.00	1.00	0.00	27.00	63.00	82,955.00	0.00
15.00	2.27	0.00	0.00	1.00	0.00	27.00	63.00	5,000.00	0.00
43.00	6.12	0.00	0.00	1.00	0.00	27.00	63.00	5,000.00	0.00
18.00	7.54	0.00	1.00	2.00	2.00	24.00	20.00	8,000.00	1.00
96.00	4.40	1.00	1.00	0.00	2.00	24.00	12.00	6,009.00	1.00

Table 13: Table of firms (firms which have successfully transition are assigned 1.0, firms which do not have succession in place is assigned 0, and firms which are pending a transition is assigned 0.5)

22.2 Regression Results

Table 14: Regression Results (All variables as IVs)

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.197276	84.55%	81.46%	73.35%

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	9	9.5851	1.06501	27.37	0.000
Age of Firm	1	0.0005	0.00052	0.01	0.909
Market Cap USD Bil	1	0.0011	0.00112	0.03	0.866
Is the other Parent involved in	1	0.1564	0.15642	4.02	0.051
Custodian CEO Approval? Y/N	1	1.0555	1.05551	27.12	0.000
Founder Education	1	0.3367	0.33668	8.65	0.005
Successor Education	1	0.7169	0.71689	18.42	0.000
Prestige (According to Gallup)	1	0.0102	0.01025	0.26	0.610
LTBD	1	0.3224	0.32244	8.29	0.006
Employees	1	0.0508	0.05076	1.30	0.259
Error	45	1.7513	0.03892		
Total	54	11.3364			

Regression Equation

PrSucss = 0.604 - 0.00014 Age of Firm + 0.000092 Market Cap USD Bil
+ 0.1499 Is the other Parent involved in + 0.3697 Custodian CEO Approval? Y/N
- 0.0943 Founder Education + 0.1356 Successor Education
+ 0.00144 Prestige (According to Gallup) - 0.00516 LTBD - 0.000000 Employees

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0.604	0.153	3.94	0.000	
Age of Firm	-0.00014	0.00125	-0.12	0.909	1.13
Market Cap USD Bil	0.000092	0.000542	0.17	0.866	1.11
Is the other Parent involved in	0.1499	0.0748	2.00	0.051	1.50
Custodian CEO Approval? Y/N	0.3697	0.0710	5.21	0.000	1.78
Founder Education	-0.0943	0.0321	-2.94	0.005	1.40
Successor Education	0.1356	0.0316	4.29	0.000	1.65
Prestige (According to Gallup)	0.00144	0.00280	0.51	0.610	1.14
LTBD	-0.00516	0.00179	-2.88	0.006	1.58
Employees	-0.000000	0.000000	-1.14	0.259	1.03

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 CEO + \beta_3 OParent + \beta_4 Prestige + \beta_5 Age + \epsilon_1 (1)$$

In this first regression, I ran all the variables as IVs to show the basic relationship between them. In the DV input, I have assigned the firms which have successfully transitioned a value of 1. The firms which have no successor in the pipeline are then assigned a zero, and the firms which have a successor in waiting are assigned a 0.5.

The overall regression shows robust results for the overall relationship between the I.V.s and the DV (R-sq (adj) = 81.46%). In the 9 I.V.s, nine are used for degrees of freedom. There are 45 degrees of freedom

for error, which equates to having more precise observations for coefficient estimates.

There is a significant relationship between the other parent on board of the company as a predictor of a leadership succession ($p = 0.051$, significant at 90% CI). When the T.P.s have a large difference in leadership styles, the other parent acts as a mediating figure. The presence of the other parent on the board of directors speaks of the closeness of the family unit and how that dynamic plays into the corporate governance of the Taiwanese family-owned firm. This result supports the FIRO model proposed by Danes et al., (2002) and Doherty & Colangelo, (1984).

There seems to be a significant relationship between the custodian C.E.O. approving the incoming successor as a predictor of a leadership succession ($p < 0.01$). Wang, Y. Z., Lo, F. Y., & Weng, S. M. (2019) states that having the leader of the firm's approval is vital to winning the general staff's image and trust. In turn, this will increase the confidence of the shareholders and institutional investors. We will test this out as a moderating variable subsequently.

Founders of such traditional businesses expect their successors to be well-equipped to handle the rigors of taking over the business (Dyck, Mauws, Starke, & Mischke,2002). The founders in our study set have sent

their children to overseas tertiary education. There is a significant relationship between the successor's education and the likelihood of successful leadership succession. There is a negative and significant relationship between the founder's education and the DV. Roberts, K. (2012) have shown that baby boomers were brought up in a generation that had less opportunity to attend tertiary education. Loyalty to the family unit had to take precedence, and the members would have to sacrifice personal advancement by forgoing further education. The exceptions to this phenomenon are when the founder has an advanced doctoral degree. In those instances, either the successor has the same education level as the founder, or there will not be a successful succession.

There is a strong and negative relationship between the L.T.B.D. and the predictor of a leadership succession ($p < 0.01$). L.T.B.D., as discussed, is the distance between the founder and successor's leader traits, characteristics, and behavior, compared to that of what the employees and public deemed is necessary for the sustained competitive advantage of the firm. The further the distance, the larger the L.T.B.D. number, the less likely a successful succession will occur.

22.4 Test for Moderating Variables

Next, the moderating effects of the Other parent being on the board and the custodian CEO approval of the successor on the LTBD between the TPs and the DV are investigated.

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 OParent + \beta_3 LTBD * OParent + \epsilon_1$$

(2)

Table 15: Regression of the moderating variable on the IV (LTBD) and the DV.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
LTBD	56	3.50	92.50	54.0893	21.45145
Is the other Parent involved in the business? Y/N	56	.00	1.00	.3036	.46396
Valid N (listwise)	56				

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Interaction, Zscore: LTBD, Zscore: Is the other Parent involved in the business? Y/N[b]	.	Enter

a. Dependent Variable: PrSucss

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.653[a]	.426	.393	.35565

a. Predictors: (Constant), Interaction, Zscore: LTBD, Zscore: Is the other Parent involved in the business? Y/N

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.883	3	1.628	12.867	.000[b]
	Residual	6.577	52	.126		
	Total	11.460	55			

a. Dependent Variable: PrSucss

b. Predictors: (Constant), Interaction, Zscore: LTBD, Zscore: Is the other Parent involved in the business? Y/N

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.608	.051		11.967	.000
	Zscore: LTBD	-.193	.052	-.424	-3.753	.000
	Zscore: Is the other Parent involved in the business? Y/N	.244	.053	.535	4.578	.000
	Interaction	.124	.051	.272	2.457	.017

a. Dependent Variable: PrSucss

It is shown that there is a significant (p = 0.017) effect of the moderator (Other parent on the board) on the LTBD and the effects it has on the DV. This shows strong support for P#5.

Next, the Moderator of CEO approval of successor is regressed on the LTBD and DV.

$$Pr_{succ} = \beta_0 + \beta_1 LTBD + \beta_2 CEO + \beta_3 LTBD * CEO + \epsilon_1$$

(3)

Table 16: Regression of the moderating variable on the IV (LTBD) and the DV.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
LTBD	56	3.50	92.50	54.0893	21.45145
Custodian CEO Approval? Y/N	55	.00	1.00	.5273	.50386
Valid N (listwise)	55				

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Interaction2, Zscore: Custodian CEO Approval? Y/N, Zscore: LTBD[b]	.	Enter

a. Dependent Variable: PrSucss

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804[a]	.646	.625	.28188

a. Predictors: (Constant), Interaction2, Zscore: Custodian CEO Approval? Y/N, Zscore: LTBD

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.384	3	2.461	30.979	.000[b]
	Residual	4.052	51	.079		
	Total	11.436	54			

a. Dependent Variable: PrSucss

b. Predictors: (Constant), Interaction2, Zscore: Custodian CEO Approval? Y/N, Zscore: LTBD

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.662	.039		16.951	.000
	Zscore: LTBD	-.029	.042	-.062	-.701	.486
	Zscore: Custodian CEO Approval? Y/N	.361	.039	.784	9.136	.000
	Interaction2	.031	.043	.064	.729	.469

a. Dependent Variable: PrSucss

It is shown that there is no significance in the effect of the moderator (CEO approval) on the LTBD and the effects it has on the DV. There is no support for P#6. However, this finding is noteworthy as it indicates that as an IV, this variable has a significant effect on determining the likelihood of a successful transition of leadership between the TPs. However, when there is a large difference in the LTBD of the TPs, the CEO approval plays no significant part in the eventual succession.

Controlling for the presence of the other parent:

At some time, the effect of the presence of the other parent may fade. This fading effect can be attributed to divorces, shifting preferences (in the event the successor's sibling rivals for leadership and the other parent shifts the preferential parental support) and illness or death. I take equation 1 and run the IVs this time removing the Other Parent on the firm's board variable.

Age of Firm	Market Cap USD Bil	Custodian CEO Approval? Y/N	Founder Education	Successor Education	Prestige (According to Gallup)	LTBD	Employees	Prsucc w/o Oparent
23.00	9.42	1.00	0.00	2.00	27.00	53.00	65,695.00	1.00
31.00	6.30	0.00	0.00	0.00	27.00	72.00	17,000.00	0.00
24.00	3.81	0.00	2.00	0.00	27.00	72.00	40,000.00	0.00
36.00	4.79	1.00	1.00	3.00	27.00	56.00	46,000.00	1.00
19.00	17.70	1.00	0.00	3.00	24.00	58.00	57,000.00	1.00
71.00	3.70	1.00	1.00	1.00	27.00	74.00	12,000.00	0.50
53.00	4.09	1.00	0.00	0.00	32.00	56.50	28,590.00	0.50
19.00	4.28	0.00	3.00	2.00	24.00	35.00	12,506.00	0.50
49.00	10.11	0.00	3.00	3.00	11.00	55.00	9,071.00	0.50
18.00	12.32	1.00	2.00	2.00	24.00	30.00	27,000.00	0.50
24.00	29.02	0.00	2.00	0.00	27.00	72.00	22,913.00	0.00
36.00	2.83	1.00	1.00	3.00	27.00	65.00	64,000.00	0.50
18.00	12.30	0.00	1.00	0.00	24.00	72.00	27,000.00	0.00
45.00	17.27	1.00	1.00	1.00	27.00	3.50	83,000.00	1.00
18.00	10.69	1.00	1.00	2.00	24.00	36.00	8,337.00	1.00
52.00	9.10	1.00	0.00	0.00	16.00	63.50	18,000.00	0.50
75.00	4.79	1.00	1.00	2.00	58.00	59.00	67,000.00	0.50
51.00	1.26	1.00		2.00	25.00	55.00	6,678.00	0.50
55.00	14.07	1.00	0.00	2.00	11.00	55.00	10,000.00	0.50
28.00	26.18	0.00	1.00	0.00	11.00	58.00	10,000.00	0.00
19.00	14.56	1.00	0.00	2.00	34.00	42.50	42,030.00	1.00
46.00	37.30	0.00	1.00	0.00	27.00	72.00	1,000,000.00	0.00
23.00	0.81	0.00	0.00	1.00	27.00	63.00	3,950.00	0.50
19.00	7.74	0.00	0.00	2.00	24.00	12.00	10,509.00	0.50
56.00	5.70	0.00	0.00	2.00	24.00	55.00	2,000.00	0.50
17.00	3.32	0.00	1.00	0.00	27.00	72.00	56,000.00	0.00
45.00	2.83	0.00	1.00	0.00	27.00	72.00	23,000.00	0.00
33.00	14.20	1.00	0.00	1.00	27.00	21.00	2,576.00	1.00
29.00	9.90	0.00	0.00	3.00	58.00	57.00	32,696.00	0.50
23.00	37.50	0.00	2.00	0.00	27.00	72.00	17,058.00	0.00
18.00	13.09	0.00	2.00	0.00	24.00	72.00	6,202.00	0.00
62.00	16.29	1.00	0.00	2.00	11.00	62.00	52,000.00	0.50
25.00	6.19	0.00	1.00	2.00	27.00	70.50	3,375.00	0.50
13.00	5.62	0.00	2.00	2.00	27.00	38.50	177,950.00	0.50
32.00	3.19	1.00	1.00	2.00	27.00	39.50	400,000.00	0.50
42.00	9.38	1.00	0.00	2.00	35.00	25.50	30,000.00	1.00
32.00	9.71	1.00	2.00	2.00	27.00	60.00	40,000.00	0.50
44.00	1.29	1.00	3.00	3.00	27.00	66.00	1,630.00	0.50
105.00	5.80	0.00	1.00	2.00	24.00	45.00	4,000.00	0.50
18.00	3.62	1.00	1.00	2.00	34.00	58.00	17,470.00	0.90
32.00	2.45	0.00	2.00	0.00	27.00	72.00	240,000.00	0.00
18.00	4.79	0.00	1.00	0.00	24.00	72.00	9,582.00	0.00
105.00	2.48	0.00	3.00	0.00	24.00	72.00	5,387.00	0.00
74.00	8.13	1.00	1.00	2.00	11.00	30.00	10,618.00	1.00
9.00	8.96	0.00	3.00	0.00	24.00	63.00	8,948.00	0.00
56.00	1.20	1.00	0.00	1.00	27.00	53.50	3,722.00	0.50
33.00	391.63	0.00	3.00	0.00	27.00	72.00	48,752.00	0.00
53.00	12.19	1.00	0.00	2.00	58.00	25.50	188,931.00	1.00
54.00	2.00	1.00	0.00	2.00	27.00	53.00	4,931.00	1.00
55.00	2.03	1.00	0.00	2.00	16.00	63.50	5,000.00	0.50
58.00	2.60	1.00	0.00	0.00	58.00	55.00	47,115.00	0.50
19.00	2.76	0.00	1.00	0.00	27.00	72.00	82,955.00	0.00
15.00	2.27	0.00	1.00	0.00	27.00	72.00	5,000.00	0.00
43.00	6.12	0.00	1.00	0.00	27.00	72.00	5,000.00	0.00
18.00	7.54	1.00	2.00	2.00	24.00	20.00	8,000.00	0.50
96.00	4.40	1.00	0.00	2.00	24.00	12.00	6,009.00	1.00

Table 17: Prsucc without the Other Parent IV

In the original equation, the regression results show that 34 out of 56 firms have undergone a leadership succession. However, removing the IV of the other parent on the firm's board reduces this number to 12, as seen from Table 17 above. The results show that when the other parent's moderating effect is not present, either due to end of tenure or from a change in governance structure of the firm, the succession which is not a one-off time event, will be called once again into question, should there still be a large LTBD between preceding and current leader.

22.5 Study 3

Trend of leadership succession in Taiwan Family-owned firms

From our dataset of 848 listed firms on TWSE extracted from TEJ Plus database, we identified 534 firms as having at least two family members as shareholders. Using Cubbin and Leech (1983) and Leech (1987a, b) critical value point in which a firm is deemed as family-owned (10%), the number of firms that qualify reduced to 220. This shows a significant reduction in leadership succession trends as studied by Claessens, S., Djankov, S., & Lang, L. H. P. (2000); Yeh, Y., Lee, T., & Woidtke, T. (2001); Shyu, J. (2011), compared to our existing data. The explanations for this trend has been dealt with in (pg. 91-93). From the chart, we see that there is a 2.5% per annum decline on the number of family-owned firms that have a successful succession, over the last 24 years. The result shows alignment with Wang, L. (2019) where the Global Family Survey 2018 states that only 5% of family-owned firms have a clear path to succession.

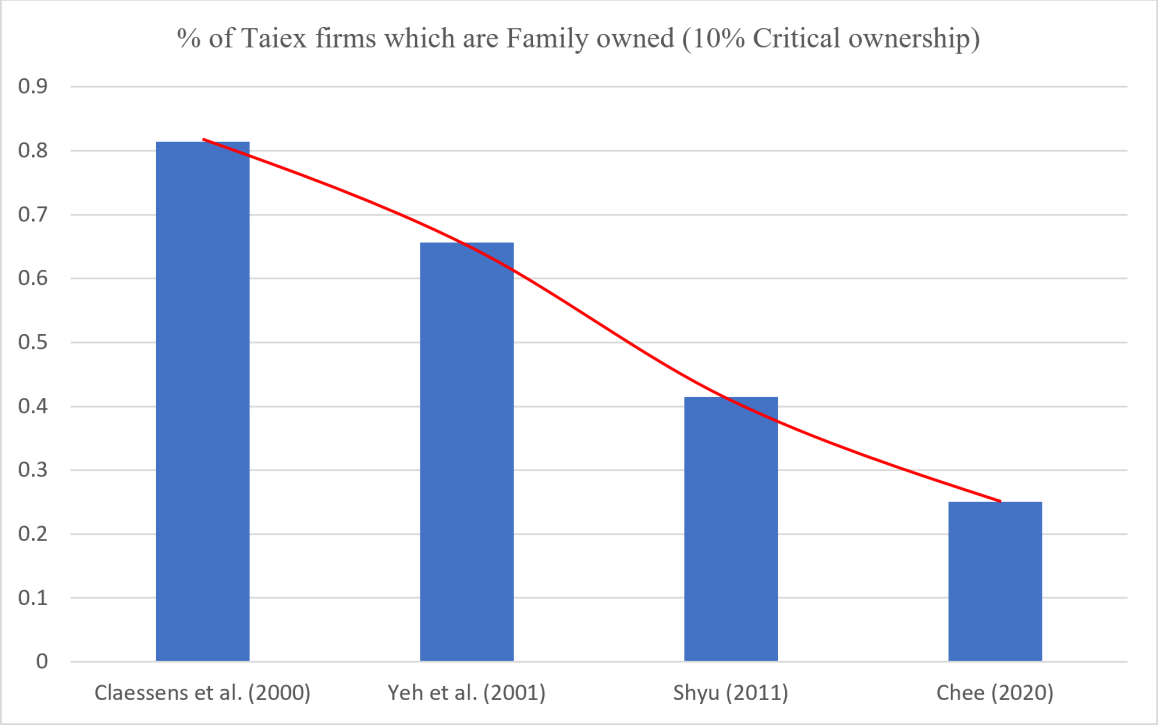


Table 18: Trend of family-owned succession over the study periods.

Trend of increasing Chinese SOE outbound acquisitions in Strategic and Pillar industries

Industry and year distribution of Chinese outbound M&As.

Panel A: Industry distribution

Industry	Number
Agriculture, forestry and fishing	3
Mining	25
Construction	2
Manufacturing	133
Transportation, communications, electric, gas and sanitary services	9
Wholesale trade	2
Retail trade	2
Real estate	33
Services	14
Public administration	1
Total	224

Panel B: Year distribution

Year	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Number	1	2	6	6	15	6	13	26	20	28	25	37	34	5	224

Table 19: Chinese Outbound M&A activities up to 2013 extracted from (Sun, V., 2017, pg. 380)

Excerpts from Tang, F. (2020, November 3). Beijing looks to make state firms 'better and bigger' shows clearly the Communist Party's Central Committee mandate for Chinese industries to increase its might through its investment vehicles and SOEs. The pathway forward to this five-year plan is through acquisitions and improvements in production efficiencies.

Vulnerability Index

The vulnerability index is used as a tool to link the declining trend of leadership succession in family-owned firms with the increase in Chinese SOE acquisition intentions. The other variables are as follows: if the firm is at lower than one value of Tobin's Q (denoting that the market value of the firm is lower than the actual assets); if the firm is not in the strategic or pillar industries list of SASAC it is assigned 0, 1 if it is pillar and two if it is strategic; and finally, if the firm has a possible successor in the waiting (assigned value 0.5) or if the succession had already taken place (assigned value 0), and if there is not (assigned value 1).

$$\text{SOE Acquisition} = \beta_0 + \beta_1 Succession + \beta_2 Firm\ Performance + Strategic\ Industry + \epsilon_1$$

The 56 firms in table 17 are run again firstly with the full factors and then without the primary moderating variable (Other parent on board) to test for the vulnerability of the firm to an SOE acquisition. The results are shown in Table 20.

Name of Firm	PrSucss	Tobin's Q	Industry Type	V Index				
ASE Group	1.00	0.6	1	2.60	Largan Precision	1.00	0.2	1	2.20
Asus	0.00	1	1	2.00	Master Kong	1.00	0.2	0	1.20
AU Optronics	0.00	2	1	3.00	MediaTek	0.00	0.4	1	1.40
Catcher Technology	1.00	0.9	1	2.90	Mega Financial Holding	0.00	0.8	0	0.80
Cathay Financial Holding	1.00	1.2	0	2.20	Nan Ya Plastics	1.00	0.6	1	2.60
Chang Chun	1.00	1.1	0	2.10	Nanya Technology	0.50	0.6	1	2.10
Cheng Shin Rubber	1.00	0.6	1	2.60	Pegatron	0.50	0.9	1	2.40
China Development Financial	0.50	1.3	0	1.80	Pou Chen Corp	1.00	1	1	3.00
China Steel	0.50	0.8	2	3.30	President Chain Store	1.00	0.4	0	1.40
Chinatrust Financial Holding	1.00	0.9	0	1.90	Quanta Computer	1.00	0.5	1	2.50
Chunghwa Telecom	0.00	0.4	2	2.40	Ruentex Industries Ltd.	1.00	1.9	0	2.90
Compal Electronics	1.00	1.3	1	3.30	Shanghai Commercial and Savings Bank	0.50	0.6	0	1.10
CTBC Financial Holding	0.00	0.9	0	0.90	Shin Kong Financial	1.00	1.5	0	2.50
Delta Electronics	1.00	0.5	1	2.50	Synnex Technology	0.00	0.6	1	1.60
E.SUN Commercial Bank	1.00	1.8	0	2.80	Taishin Financial Holdings	0.00	1.1	0	1.10
Evergreen	1.00	1.2	1	3.20	Taiwan Business Bank	0.00	1	0	1.00
Far Eastern New Century	1.00	1.3	0	2.30	Taiwan Cement	1.00	0.8	1	2.80
Farglory	1.00	1.2	1	3.20	Taiwan Cooperative Bank	0.00	0.8	0	0.80
Formosa Chemicals	1.00	0.6	1	2.60	Taiwan Glass Industry	1.00	1.2	0	2.20
Formosa Plastics Corp	1.00	0.6	1	2.60	Taiwan Semiconductor Manufacturing	0.00	0.2	1	1.20
Fubon Financial Holding Co.	1.00	1.2	0	2.20	Uni-President Enterprises	1.00	0.4	0	1.40
Hon Hai Precision Industry	0.00	1	1	2.00	Walsin Lihwa	1.00	1.5	1	3.50
HTC	1.00	1.2	1	3.20	Wan Hai Lines	1.00	0.9	1	2.90
Hua Nan Financial	1.00	0.7	0	1.70	Want Want Holdings	1.00	0.2	0	1.20
Hung Tai Group	1.00	0.3	0	1.30	Wistron	0.00	0.9	1	1.90
InnoLux Corporation	0.00	3	1	4.00	WPG Holdings	0.00	0.9	0	0.90
Inventec	0.00	0.7	1	1.70	Yageo	0.00	0.2	1	1.20
					Yuanta Financial Holding	1.00	1	0	2.00
					Yuen Foong Yu Group	1.00	0.3	0	1.30

Table 20: Firms' Vulnerability Index

Descriptive Statistics

N	Mean	StDev	SE Mean	95% CI for μ
56	2.132	0.795	0.134	(1.870, 2.394)

μ: population mean of V Index
Known standard deviation = 1

Test

Null hypothesis H_0: $\mu = 3$
Alternative hypothesis H_1: $\mu \neq 3$

Z-Value	P-Value
-6.49	0.000

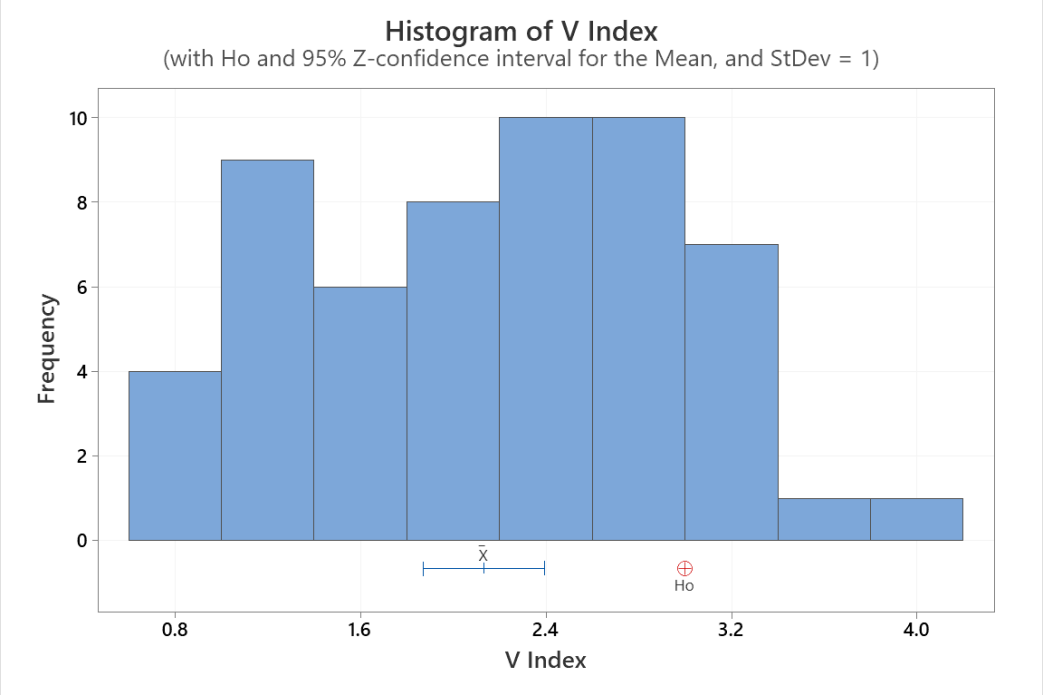


Table 21: Firms' probability of being subjected to Acquisition using the Vulnerability Index

The results show with a 95% level of confidence, the probability of the companies not likely to be acquired is a total of 9 firms. This finding means that the other 47 top firms may be vulnerable to a merger. This result agrees with our intuition that the firms with poor performance, low leadership succession probability and belonging to an industry that coincides with the sectors that the SOEs deem critical are more prone to be acquired.

One of the limitations of this study is that the study's subject is relatively new, and not much data is currently available. I attempted to support this theory with a recent and significant case study of a Taiwanese family-owned firm with a high Vulnerability Index and was acquired by a Chinese SOE.

23. THE RISE OF CHINESE STATE-OWNED ENTERPRISES

The Chinese government is implementing a comprehensive, long-term industrial strategy to ensure its global dominance…. Beijing's ultimate goal is for domestic companies to replace foreign companies as designers and manufacturers of key technology and products first at home, then abroad.

U.S.-China Economic and Security Review Commission

It was a cool breezy July morning in 2017; Simon Lin and his management team from Wistron Corporation were visiting IoT platform solutions provider Smartiply's offices in New Jersey. Founded by self-made billionaire Lin, Wistron is one of the largest contract manufacturers for Apple. Smartiply is one of Wistron's many diversified investments. Lin is known within the industry as a strategist who believes in planning well ahead for the future.

Lin started Wistron twenty years ago, after leaving Acer, where he was CEO of its products business unit. Wistron is an Original Design Manufacturer (ODM) – a company that designs and produces products for other companies. He tells the members of Smartiply at the end of the visit that the key to success is passion, and profit is merely a side-effect. Little does he know that three years later, he will announce at a press conference that he is selling the firm's flagship iPhone manufacturing plants to Luxshare Precision Industry. In a carefully worded script, he says that this sale is only for its China operations. Winstron will now focus on

its Indian plants, where it will retain ownership and will try to continue manufacturing iPhones, albeit in another country. Since late 2018, Wistron has allocated $340 million to build its Narasapura plant. This location would be one of two plants that is part of Wistron's plans to decouple from China. This strategy may seem logical in the face of the global crisis caused by the COVID-19 pandemic and the Trump administration's policies regarding U.S.-China trade. Wistron, like many other firms that are caught in between the dispute between the two countries, had to bear the brunt of trade tariffs imposed by the U.S. and are not seeing retaliatory measures by China through restrictions in the supply lines. Therefore, to find a safe haven from the trade stand-off, Wistron is hedging its bets by moving to Narasapura and Karnakata in India, which are expected to bring in US$40 billion of revenue. Wistron's initial plan was to shift part of its supply chain to India to continue its high-end mobile phone production. The firm had enough cash reserves to make this move; the shareholders applauded this sensible plan; the Indian government welcomed this move and was willing to support Wistron's infrastructural requirements; the company's management and staff were committed and ready to make this move; and most importantly, Apple gave Wistron its all-important approval.

Shortly after the press conference in July 2020, Wistron announced that the company would no longer manufacture iPhones in India. Instead, the firm would focus on products with a greater mix. At precisely the same time, Wang Laichun, the billionaire owner of Luxshare, the company which acquired Wistron's China

operations, was seen smiling with Apple CEO Tim Cook, both dressed in factory suits at the Luxshare plant. She announced with pride that Luxshare has just won the contract to manufacture Apple's AirPods.

23.1 Simon Lin and the inevitable fate of Wistron

Lin began his career in 1979 at Acer as a sales manager. Armed with a Computer Science degree from Taiwan's National Chiao Tung University, he gradually rose to become the electronics firm's CEO in 1997. Analysts have lauded Lin's ability to sense prevailing market conditions and make decisive and key decisions to increase the competitive position of the firm. Shortly after taking the helm Acer, he left the company to start Wistron, an Acer spin-off that was founded to broaden its investment horizons into different electronic verticals. Lin staffed his operations with many Acer alumni.

Lin has constantly been on Forbes Asia's Top 50 richest list. His focus has been on strategic investments into innovation. From its initial foray into manufacturing computer hardware supplies, Wistron now has an impressive 83,000 staff, with a key focus on artificial intelligence and 5G investments to bring the company one step closer to participating in the fourth industrial wave brought about by the Internet of Things (IoT). Lin says that his three-part strategy calls for breaking into new markets, investing in new technology, and acquiring larger rivals. Lin, like most heads of Taiwanese family-owned firms beginning to face

succession challenges, is now handing over the future of Wistron to a custodian CEO who is not a family member.

23.2 Wang Laichun and the rise of Luxshare

Wang came from a modest background and started her career in 1987 in Shenzhen at Ocean Precision Computer Connector Factory – Foxconn's first factory in Mainland China. With only a high school diploma, the 21-year-old started as an entry-level line section factory operator. As this was the initial phase of China's consumer electronics manufacturing operations, the conditions were less than ideal. Although water and power outages were common, what made living and working conditions at times unbearable was the militant work regime that caused high staff turnovers. Within a decade, Wang rose to section chief at Foxconn. While this rise in position within her former company was impressive, what was astonishing was her next vocation transition. In 2004, Wang and her brother Laisheng acquired Luxshare. Very little is known about Luxshare's history before the Wang siblings took over. Six years later, the firm went public, and Wang became an instant billionaire.

Luxshare is now one of Foxconn's main rivals, contracting manufacturing for some of the largest consumer electronics brands in the market. Mirroring the words of the 19th-century French microbiologist, Louis Pasteur, she told a Shenzhen newspaper in 2010 that the secret to her success was that "Chance only favors the

prepared." Since then, Luxshare has been on an acquisition spree, purchasing critical suppliers on the Apple supply chain. Some other aggressive expansion examples are an $89.5 million bid for Merry Electronics, another Taiwanese family-owned firm based in Suzhou. Merry produces key acoustics components for audio headsets. Within a week of the initial sale being blocked by the Taiwanese regulators, Luxshare was able to circumnavigate the deal structure by investing directly in Merry's Suzhou plant. The strategy adopted by Luxshare was to have control of the manufacturing plant, as this essentially gave it control of the business.

This example of the expansionary efforts of Chinese firms into the Taiwan electronics sector underscores the growing trends of acquisition into critical industries. To understand the rationale behind this trend, we need first to ask several vital questions: Who are the acquirers that are currently behind the acquisitions of these key sectors? What are the types of firms that are of interest to the Acquirers? Why is Taiwan the choice location of these acquisitions? Why are these firms in Taiwan vulnerable now to these acquisitions?

23.3 Chinese State-Owned Enterprises (SOEs)

SOEs are often seen as large entities that are riddled with corruption, inefficiencies, and agency issues. Despite these negative first impressions, SOEs dominate the global economy. Among the top 500 international firms, 124 of them

are Chinese. Out of the 124, 59 are fully controlled SOEs (central SOEs) and 32 are managed by the Chinese Communist Party (CCP).

An SOE is defined as a firm in which the state wholly owns assets. SOEs have two variants: those that are owned and managed by the local provinces, and central SOEs, which fall are under the supervision of the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC); China Banking Regulatory Commission (CBRC), China Insurance Regulatory Commission (CIRC), China Securities Regulatory Commission (CSRC), and the other central ministries. Another class of SOEs is sub-national SOEs, which number around 100,000, according to official statistics by the Chinese government.

The SASAC mandates that the following industries are deemed to be of the highest order of importance and are "strategic industries": defense; utilities; petrol and petrochemical, telecommunications, shipping, coal, and civil aviation. Industries that are deemed strategic must have the "full" protection and control of the state. The auto, equipment manufacturing, information technology, construction, precious metals, chemicals and surveying, and design industries are known as "pillar industries," and are to be "strongly" protected and controlled.

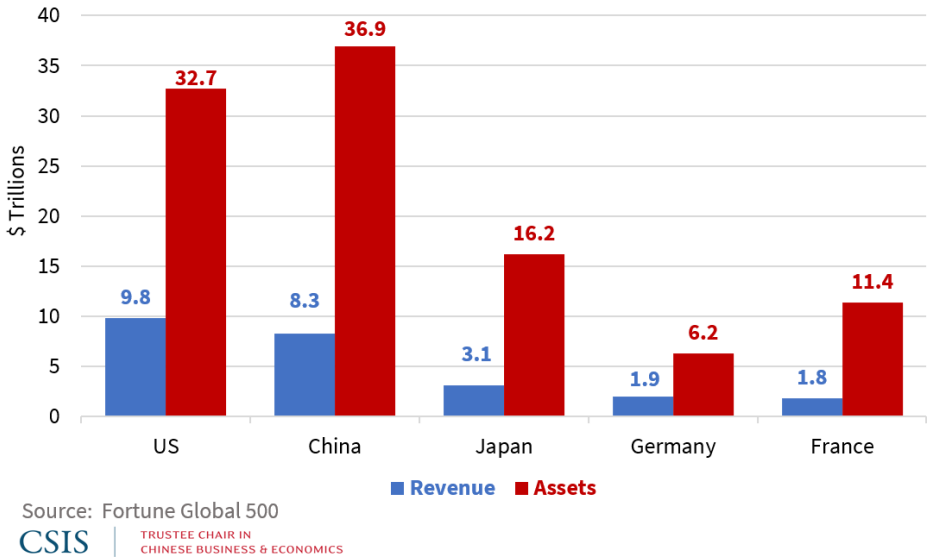


Figure 29 : Revenue distribution of top countries in FG 500 (Source: Kennedy, S., 2020)

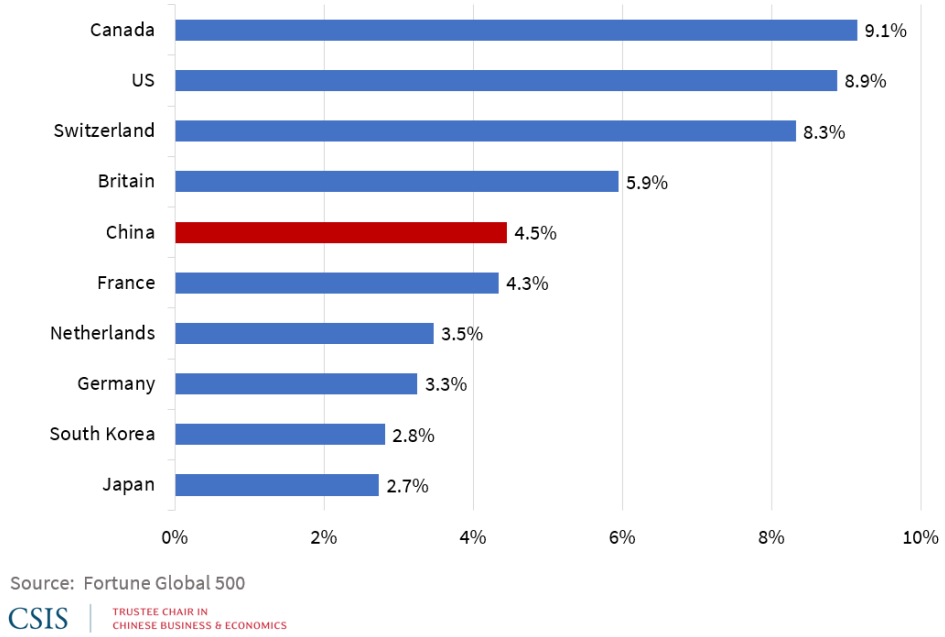


Figure 30: Average Gross Margins by Country (Source: Kennedy, S., 2020)

Chinese firms make up the majority of the total revenue generated by firms in the Fortune Global 500. However, their average profit margin is only in the mean range of the group(Figure 2). This phenomenon is partly due to the Chinese state government's view that some Strategic and Pillar industries are public goods, which cannot be entirely profit-driven but have to make allowance to provide the nation's greater good. The Strategic and Pillar industries listed above are usually categorized as capital-intensive. Apart from receiving large and relatively cheap investments, the SOEs need a longer gestation period and legislative support. All of which is not possible with free-market forces.

In the event of a negative shock in the economy, the state can maintain social stability by using SOEs as employment vehicles to absorb excess labor and provide social security benefits; even if the demand for production reduces, previous research has shown that SOEs have a higher debt to sales ratio and an increased labor force than private firms. This further demonstrates the large scope of protection that the SOEs receive from the state.

23.4 Taiwan: a critical alternative manufacturing site

The Taiwanese electronics industry has long been, for the better part of the last 40 years, a key pillar for the nation's prosperity. Foxconn, Mediatek, Pegatron, Quanta, and Taiwan Semiconductor Manufacturing Company (TSMC) are key suppliers to the world's top electronics brands. Being among the pioneers of China's

consumer electronics industry, these firms were allowed to expand and thrive with state support. The Chinese government, in exchange, was able to provide peripheral supporting resources and infrastructures to these key Taiwanese pioneering firms.

However, in the last ten years, we see an emerging trend of firms like Luxshare springing up within a very short period and making seemingly impossible acquisitions of their foreign rivals. These acquisitions seem impossible from the view that within the short period of operation, under normal circumstances and normal credit valuations, the acquirer would not be able to amass the financial resources for such maneuvers. There is very little doubt in investment circles that these acquisitions have been possible due to the state subsidies and the relatively low costs of funds. Even before the acquisition occurs, the pressures of having to compete with an SOE with enormous resource advantages will mean maintaining survivability; these foreign firms will have to reduce margins and increase efficiencies. If they somehow have sufficient production differentiation and self-reliance to maintain their market share, then they may be additionally subjected to asymmetrical corporate social responsibility (CSR) audits and withholding taxes.

The rate of these acquisitions has accelerated in the last four years with the Trump administration's aggressive stance and its accusation of China’s unfair trade practices. The threat of admonition and blacklisting suppliers of key industries that obtain their parts made in China has forced several firms to start contemplating decoupling from their existing supply chains and temporarily relocating to ride out

the storm, hoping that the next administration will take a different stand. For firms that have roots in Taiwan, nationalistic sentiments may dictate shifting to a site that has the least cultural distance and knowledge transfer difficulties

There is a flaw in this strategy: if these Taiwanese firms want to decouple their supply chain from China successfully, they need to have the entire chain be available to them at the alternative site. If it still has to rely on China for peripheral support, China will sooner close its access to critical raw material supply, which will cause massive supply risks to the decoupled firm.

23.5 What does the future hold for Taiwan's family-owned firms?

Some studies that show that leadership succession is on the wane in the Taiwanese family-owned firms, and as a result, they have experienced declining performances over the last ten years. Firm performance in Taiwanese family-owned firms has been shown to correlate positively with the level of family control. The trend of weak leadership succession can be attributed to differences with the founder that drives the successor to not want to carry on the family business, the new generation's perceived reduction in the prestige level of these foundry manufacturing firms, and decreasing profitability that drives the family to divest into other businesses.

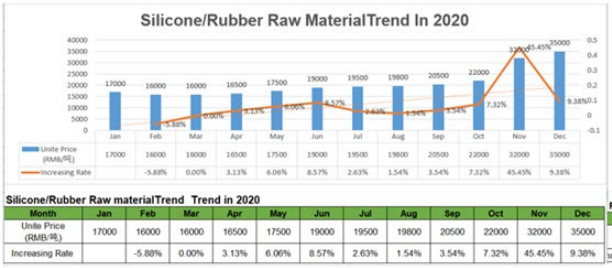
Furthermore, there are increasing signs to suggest that negative supply chain shocks are starting to creep in. There has been a major increase in the price of raw materials like industrial metals and polymers:

Silicon/Rubber: RMB 17,000/ton (January 2020) to RMB 35,000/ton (December 2020) (+106%)

PC: RMB 19,950/ton (January 2020) to RMB 24,300/ton (December 2020) (+22%)

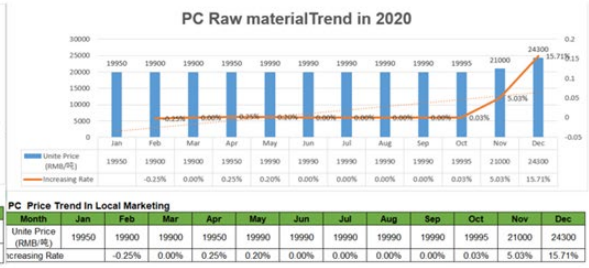
Aluminium: RMB 14,675/ton (January 2020) to RMB17360/ton (December 2020) (+18.3%)

Copper: RMB 48,797/ton (January 2020 to RMB 56,216/ton (December 2020) (+15.2%)



Silicone/Rubber Raw materialTrend Trend in 2020

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Unite Price (RMB/吨)	17000	16000	16000	16500	17500	19000	19500	19800	20500	22000	32000	35000
Increasing Rate		-5.88%	0.00%	3.13%	6.06%	8.57%	2.63%	1.54%	3.54%	7.32%	45.45%	9.38%



PC Price Trend In Local Marketing

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Unite Price (RMB/吨)	19950	19900	19900	19950	19990	19990	19990	19990	19990	19995	21000	24300
Increasing Rate		-0.25%	0.00%	0.25%	0.20%	0.00%	0.00%	0.00%	0.00%	0.03%	5.03%	15.71%

Aluminium Ingot Price Trend in 2020

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Unite Price (RMB/吨)	14675.79	13865	12585	12417.62	13541.11	14142.5	14861.74	14945.24	14991.82	15125.63	15921.43	17360
Increasing Rate		-5.52%	-9.23%	-1.33%	9.05%	4.44%	5.09%	0.56%	0.31%	0.89%	5.26%	9.04%

Copper Ingot Price Trend in 2020

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Unite Price (RMB/吨)	48796.88	45559.5	41530	41642.38	43822.11	46924.29	51281.74	51347.27	51892.73	51783.75	53380.45	56216
Increasing Rate		-6.63%	-8.84%	0.27%	5.23%	7.08%	9.29%	0.13%	1.06%	-0.21%	3.08%	5.31%

Table 21: Raw Materials (for consumer electronics) Price Trends 2020

With this rate of increase, many intermediary firms that purchase these materials from stockists will face stock hoarding and price gouging, which will effectively drive their margins into unsustainability. An interesting point to note is that many of these raw materials are owned by central SOEs.

24. IMPLICATIONS OF RESEARCH

This study hopes to provide an essential contribution to the subject of leadership succession in Asian family-owned enterprises. The relationship between T.P.s is not fully understood because previous studies focused on the social and psychological effects of generational differences between baby boomers and generation X. Extant studies have not utilized their findings into a formalized setting where the variables are operationalized to gauge how they may affect leadership succession. A novel method is proposed to interpose these differences and cross-check it with other vested interest parties.

Another contribution of this study is in the considerations of including the dynamics of the successor obtaining the seal of approval from a sitting custodian C.E.O. and the presence of another parent on the board, which will explain somewhat the complexity and dynamic nature of how relationships play a vital role in family-owned firms.

In the broader context of researching decoupling strategies of the players in the current trade spat between the U.S. and China, understanding what is the current strength of the proposed alternative manufacturing sites (Taiwan being the most likely replacement in the event of forced offshoring) is a critical factor that is scarcely understood. The logic is if the largest and most crucial firms in alternative

manufacturing sites have weak leadership succession, then these focal firms may be the target of acquisition from non-collegiate entities.

25. ALTERNATIVE CONSTRUCTS

One possible alternative view is that the Asian founder has sentimentality and will pass the leadership to the child-successor no matter what our construct proposes. As a counterpoint, the study sets out to show the falling trends of profit margins in the industrial sector that the founder started with, to the time that his tenure is about to close. According to (Goodstein, E., 1992), most foundry industries have faced declining margins over the last two decades, mainly due to more efficient competition.

I used Aswath Damodaran's N.Y.U. Stern dataset of Return of Equity (R.O.E.) trends of all U.S. industries to cross-reference with our dataset. The average R.O.E. of the electronics sector in 1999 was 7.89% after adjusting for Research and Development (R&D). The latest R.O.E. of the same industry stands at -8.5%. With these statistical trends indicating a more risky industry that the founder is about to hand down to his successor in and the founder’s propensity to be more risk-averse towards the end of his tenure (Goodstein, E., 1992), it is unlikely that a leadership succession will happen for sentimental reasons.

Therefore, our proposition maintains that it is the measurable differences between the T.P.s that will ultimately determine leadership succession probability.

26. LIMITATIONS & FUTURE RESEARCH

Much of the research conducted is founder-focused. There is little that can be inferred about the successor except for passing remarks about their social life, education, and minor roles in developmental projects within the firm. Future research can find social media inputs about the successors and track their traits and behaviors outside of the firm to gather further data to add to the study's richness.

Barnes, L. B., & Hershon, S. A., (1989) and Mazzi, C., (2011) show that leadership succession is still a strong phenomenon in the U.S. (see Appendix 5: List of top U.S. firms still owned by families with successful leadership transition). Yet, Asian family firms seem to be facing a crisis in leadership succession (Fernández-aráoz, C., Iqbal, S., & Ritter, J., 2015). Future research can expand to studying the differences in both the Asian and Western contexts of firms that makes these asymmetric phenomena exist.

Cirillo, A., Pennacchio, L., Carillo, M., & Romano, M. (2019) shows that as the founder is closer to the end of his tenure, he becomes risk-averse. This observation may run counter to the Asian Paternalistic Leadership trait in the founder type in our study. Will the founder, now about to end his tenure on a high

note, want his successor to possibly sully it? Or will the founder want to ensure that succession occurs at all costs, regardless of the successor's suitability?

27. RESEARCH CONCLUSION

The topic of Decoupling is crucial across multi-disciplines. Leaders in the private and public sectors are trying to navigate the increasingly complex relationship between the US and China and other geopolitical dynamism. To charter this tenuous path, organizations are keen to understand how decoupling will impact their businesses and recovery options, significantly worsened by the weight of the supply shocks caused by COVID. To maintain causal validity, researchers not only have to recalibrate some of their existing datasets and construct boundaries, but they may have to adopt a multi-disciplinary approach by integrating different working models.

The idea of decoupling seemed to have begun during the Trump administration, when Congress, with bi-partisan support, passed regulations to mitigate the imbalances in trade between China and the US. Such punitive measures include trade tariffs imposed on Chinese firms and US affiliated firms, which have parts having manufacturing origins in China. As a result, affected firms started to make plans to relocate out of China into alternative locations. Most of the firms' decisions to relocate focus mainly on accounting cost components. Very few

managers give adequate consideration to the other costs that are associated with such decisions. This lack of information leads to an exploration of this research question: What are the real costs of decoupling strategies of the US in relation to China?

To understand how this research question was answered, we have to firstly track the US and China relationships beginning in the 1970s to the present day, as this provides a backdrop of how political interests often intersect with business interests. The first pivotal moment in the bilateral relations was memorialized by the image of Deng Xiaoping wearing a ten-gallon hat at a rodeo in Texas in 1979. This first visit to the US by Deng was made possible after a very successful 7-year campaign started by the Nixon administration to engage China. This change in sentiments came after decades of mistrust stemming from conflicts in the Korean War and of China undergoing a tumultuous cultural revolution. Even after the Tiananmen incident of 1989, both parties were able to iron out their differences politically because it was in their business interest to continually engage each other. This halcyon period carried onto the 1990s where there were unprecedented exchanges of trade and ideas. US firms were pushing their globalization plans into China. In exchange for the innovation and technology transfer from the US, China provided abundant resources and infrastructure, the most valuable contribution initially being a relatively low-cost labor force. As long as there was alignment between the business and political interests, both parties benefitted.

The first signs of divergence happened during the Obama administration. In a 2012 meeting with President Xi in Beijing, it was obvious that the new Chinese perspective no longer had watchwords that aligned with the US democratic governance. The almost perfunctory reception that Obama received in China signaled a new Chinese perspective that it was ready to shape its new path on its own. China wants to write a new narrative which does not include the US. The Belt and Road Initiative (BRI), the militarization of the South China Sea, the revamping of the Hong Kong Legislative system and the various diplomatic rows with the Five Eyes clearly show that China wants to change the global order and is not interested in piece-meal compromises. The US in return started stern rhetoric against China with regards to intellectual property violations and unfair trade practices. Donald Trump then became President. With Stephen Bannon as the US President's chief strategist, the American administration affronted every possible grievance that the US had with China. At the time of this writing, there is a blanket tariff on almost all Chinese goods coming into the US. As a result, many firms have begun to contemplate decoupling their operations from China to escape the economic fallout. Firms make the decision to decouple either indirectly from costs concerns or directly through the threat of being blacklisted by the US State Department.

In the process of considering decoupling strategies, I have encountered many firms which calculate their moves based on flawed binary logic. On the revenue side, they justify the decoupling from an opportunity cost point of view. If they do not comply with the regulations, they will be blacklisted and therefore not

be able to trade. Without trade, the future of the firm is lost. On the costs side, the Net Present Value (NPV) calculations are derived from the accounting costs of relocating to another location. This set of perspectives is too limited and myopic. In order to fully assimilate the political interests of the two divergent superpowers, we need additional perspectives to appreciate the possible ramifications of continued actions taken by both actors. To obtain a holistic view, both macro and micro views of this conflict had to be considered. Meso-level studies are those that occur in the middle of both the macro and micro views. These studies are traditionally difficult to perform as they require data that is specific to the industry insiders and are often not publicly available. In order to take sampling points from a meso-level, I chose the Mobile phone industry as a starting point in the investigation. The mobile phone industry firstly captures the development of the US and China relationship in the similar period as our intended study. Secondly, this industry, due to its size and revenue contribution to both economies, is the main subject of the trade strife. Finally, due to the wide-ranging manufacturing disciplines that go into the supply chains, we expect to obtain the most cross-sectional validity from choosing this industry as our starting focal point.

From the taxonomy research, we extract and provide a unique landscape of the main categorical players in the supply chain of a typical mobile phone manufacturing supply network. This taxonomy provides us with the base to study the three lenses in which I intended to chart out my answers to the main research

question. These lenses are Industry Structure, Governmental Policy and Leadership Succession

With the Industry Structure lens, I use the Knowledge-Based Perspective to explain how firms are formed and governed based on the problems that they wish to solve in order to maintain a sustained competitive advantage. A novel Innovation Composite Index was calculated for all the focal firms in the taxonomy study. With this index I proposed that firms with a higher score are less likely to decouple from their current manufacturing sites in China because of the heavy investment into immobile capital assets and manpower while having relatively low interests and investments into branding and intellectual property assets. Other factors which affect the firms' costs of decoupling include the stickiness of knowledge transfer when relocating to the alternative sites, cultural distance, the Chairman's education level, firm age, and market capitalization. Firms that attempt a decoupling having not factored in these additional transactional costs may find themselves with a negative return on investment.

Next, with a Governmental Policy lens, I hypothesize that as a result of the US and China trade spate, firms will have various responses to the exogenous threats like tariffs. I conduct an aggregated event study of President Trump's Twitter feeds pertaining to trade and China throughout the four years of his presidency and match it with the taxonomy of the study firms' performances during the same period. I find that the winners are significantly Chinese firms, and the

losers are the non-Chinese firms. I also find a strong correlation in the concentration of the vitriolic statements and the significant stock performance of the winners. Further, I also find that the majority of the Chinese firms that are the winners are State-owned enterprises (SOEs). I then highlight the history and role of the Chinese SOEs and find that they are a unique structural component of government-owned companies that have enormous resources and support to gain and take away advantages from their competitors in the name of protecting national interests.

Finally, with a Leadership Succession lens, I take a unique viewpoint of proposing that in alternative sites to China post- decoupling, there may be challenges arising from the lack of leadership transfer between founder and successor. This is a micro-level study of the top firms in the Taiwan stock exchange. I find that most of the firms are family-owned and they are facing succession issues due to several key factors like differences between the traits, characteristics and behavior; and the educational differences of the founder and the successor. I also find that there is an interesting and unique discovery of the moderating role of the presence of the other parent on the board of the firm which helps to mitigate the differences between the founder and successor. I propose that these Taiwanese family firms with poor firm performance and weak leadership succession are vulnerable to potential acquisition by the Chinese SOEs. I create a Vulnerability Index and run the regression on the initial study data set and find that there is a strong relationship between the likelihood of an acquisition by a SOE and weak leadership succession. I conclude the research by introducing a case study of a

Taiwanese family-owned firm which faced leadership succession challenges and was acquired by a Chinese SOEs for strategic reasons.

I conclude my research by inviting more scholarly research into the lenses that I have proposed across to the other industry sectors. My research is by no means exhaustive due to the non-availability of certain data that is non-public. From the work that I have done, I am confident that I have proven that the study of decoupling strategies deserves more scholarly attention as it will affect what awaits the world economy as it comes out of a Post-COVID environment. Policy makers are now looking to the Biden administration to unwind much of strife that was pinned onto the previous president. However, if the perspectives in this study are correct, then on a micro-level, firms may have drastically underestimated their ability to withstand the global trade spate, and the differences that divide both superpowers may be too deep for them to have any meaningful re-engagement.

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29. APPENDIX

Appendix 1: Taxonomy Table

Table 1:

Lead Customers

	Company	LOCAL (CN)	AGE (Year of inc)	SIZE(Mkt Cap) Bil USD	CEO Education	Chairman Education	PPE (USD Bil)	No. of employees	IP(USD Bil)	ICI
1	Apple	NO	44.000	1,960.000	2.000	3.000	37.000	137,000.000	32.000	158.406
2	Samsung	NO	51.000	327.700	2.000	1.000	1.070	105,257.000	12.350	9.119
3	Huawei	YES	33.000	122.000	3.000	1.000	5.090	194,000.000	1.660	594.855
4	Lenovo	YES	36.000	7.570	2.000	2.000	2.000	63,000.000	6.200	20.323
5	OPPO	YES	25.000		1.000	0.000	0.119	40,000.000		
6	XiaoMi	YES	10.000	50.300	1.000	1.000	1.010	18,170.000	0.240	76.465
Average		**0.670**	**33.166**	**493.514**	**1.830**	**1.330**	**7.715**	**92,904.500**	**10.490**	**171.834**

Contract Manufacturers (OEM/ODM)

	Company		AGE (Year of inc)	SIZE(Mkt Cap) Bil USD	CEO Education	Chairman Education	PPE (USD Bil)	No. of employees	IP(USD Bil)	ICI
1	Foxconn International Holdings Ltd.	NO	30.000	2.610	2.000	0.000	11.500	1,020,000.000	1.020	11,500.000
2	Wistron Group	NO	19.000	3.260	1.000	1.000	1.565	82,955.000	0.014	9,545.925
3	Pegatron Group	NO	13.000	6.130	2.000	2.000	3.010	177,950.000	0.008	66,953.688
4	Flex International Ltd.	NO	30.000	5.630	2.000	1.000	2.300	200,000.000	0.330	1,393.939
5	BYD Co., Ltd.	YES	25.000	60.250	2.000	1.000	9.020	220,000.000	1.740	1,140.460
6	Luxshare Precision Industry Co., Ltd.	YES	16.000	54.300	0.000	2.000	2.340	137,284.000	0.153	2,099.638
7	Longcheer Technology(Shanghai) Co., Ltd.	YES								
8	Huaqin Telecom Technology Co., Ltd.	YES						25,000.000		
9	Wingtech Technology Co., Ltd.	YES	27.000	25.130	0.000	0.000	0.820	22,467.000	0.660	27.914
10	Shenzhen Kaifa Technology Co.,Ltd	YES	35.000	5.420	0.000	0.000	0.568	29,676.000	0.080	210.700
11	Shenzhen Zowee Technology Co., Ltd.	YES	16.000	0.725	2.000	0.000	0.216	15,093.000	0.008	407.511
Average		**0.630**	**23.400**	**18.162**	**1.000**	**0.630**	**3.482**	**193,042.500**	**0.446**	**10,364.419**

List of Tier 1 Suppliers

	Company		AGE (Year of inc)	SIZE(Mkt Cap) Bil USD	CEO Education	Chairman Education	PPE (USD Bil)	No. of employees	IP(USD Bil)	ICI
A1	Taiwan Semiconductor Manufacturing Company	NO	33.000	383.660	1.000	3.000	47.000	51,297.000	2.100	1,148.076
A2	Samsung DS Division	NO	51.000	327.700	2.000	1.000				
A3	Qualcomm Incorporated	NO	35.000	126.570	2.000	2.000	3.080	37,000.000	5.300	21.502
A4	MediaTEK, Inc.	NO	23.000	36.730	3.000	2.000	1.430	17,554.000	0.540	46.486
B1	Samsung DS Division	NO	51.000	327.700	2.000	1.000				
B2	LG Group	NO	73.000	12.850	2.000	2.000	1.450	72,000.000	2.300	45.391
B3	BOE Technology Group Co., Ltd.	YES	27.000	25.960	0.000	0.000	31.000	68,175.000	1.070	1,975.164
B4	Japan Display Inc.	NO	18.000	0.390	0.000	3.000	1.350	9,840.000	0.131	101.405
B5	Biel Crystal (HK) Manufactory Ltd.	YES								
B6	Holitech Technology Co., Ltd.	YES	17.000	2.430	0.000	0.000	0.957	24,621.000	0.108	218.169
B7	Shenzhen Laibao Hi-TechCo.,Ltd.	YES	28.000	1.730	0.000	0.000	0.174	1,129.000	0.014	14.032
B8	LENS Technology Co., Ltd.	YES	18.000	19.930	0.000	0.000	3.820	198,990.000	0.430	1,767.772
B9	Tianma Micro Electronics Co., Ltd.	YES	37.000	5.160	2.000	2.000	6.950	39,842.000	0.303	913.868
C1	Sony Corporation	NO	74.000	101.560	1.000	1.000	12.010	111,700.000	8.580	156.354
C2	LG Group	NO	73.000	12.850	2.000	2.000	1.450	72,000.000	2.300	45.391
C3	Shenzhen O-film Tech Co.,ltd.	YES	19.000	7.640	1.000	1.000	1.730	36,434.000	0.308	204.646
C4	Sunny Optical Technology(Group) Company Lt	YES	36.000	18.990	2.000	0.000	1.190	20,180.000	0.068	353.150
C5	Leica Microsystems, Inc.	NO	51.000	147.330	1.000	1.000	2.500	71,000.000	11.600	15.302
D1	Qorvo, Inc.	NO	7.000	15.150	1.000	1.000	1.320	8,600.000	0.809	14.032
D2	Skyworks Solutions, Inc.	NO	58.000	23.920	2.000	2.000	1.206	9,030.000	0.108	100.835
D3	Shenzhen Sunway Communication Co., Ltd.	YES	14.000	7.990	3.000	1.000	0.355	7,244.000	0.126	20.410
D4	Huizhou Speed Wireless Technology Co., Ltd.	YES	16.000	0.960	3.000	0.000	0.064	2,060.000	0.007	17.816
D5	OmniVision Technologies, Inc.	YES	20.000	0.028	2.000	2.000				
D6	Sunlord Electronics Co., Ltd.	YES	15.000	2.980	0.000	1.000	0.459	5,895.000	0.059	45.861
E1	Avary Holding Co., Ltd.	YES	21.000	15.860	0.000	0.000	1.500	35,050.000	0.252	208.631
E2	Unimicron Technology Corporation	NO	30.000	4.190	2.000	2.000	1.800	30,448.000	0.006	8,699.429
E3	TTM Technologies, Inc.	NO	42.000	1.280	2.000	2.000	1.040	25,700.000	0.332	80.506
E4	Mektron Corporation	NO	81.000	1.880	1.000	1.000	2.370	40,492.000	0.040	2,399.151
E5	Suzhou Dongshan Precision Manufacturing Co.,	YES	22.000	6.850	0.000	0.000	1.690	20,581.000	0.055	632.398
E6	Ellington Electronics Technology Co., Ltd.	YES	20.000	1.480	1.000	1.000	0.153	5,500.000	0.001	841.500
E7	Guangdong GoWorld Co., Ltd.	YES	23.000	1.000	0.000	0.000	0.297	6,727.000	0.017	119.636

F1	Foxconn International Holdings Ltd.	NO	30.000	2.610	2.000	0.000	11.500	1,020,000.000	1.020	11,500.000
F2	BYD Co., Ltd.	YES	25.000	60.250	2.000	1.000	9.020	220,000.000	1.740	1,140.460
F3	Flex International Ltd.	NO	30.000	5.630	2.000	1.000	2.300	200,000.000	0.330	1,393.939
F4	Suzhou Dongshan Precision Manufacturing Co.,	YES	22.000	6.850	0.000	0.000	1.690	20,581.000	0.055	632.398
F5	Pegatron Group	NO	13.000	6.130	2.000	2.000	3.010	177,950.000	0.008	66,953.688
F6	Guangdong JANUS Intelligent Group Corporati	YES	17.000	2.280	0.000	0.000	0.139	2,080.000	0.027	10.910
F7	Shenzhen Tatfook Technology Co.,Ltd.	YES	19.000	1.560	2.000	2.000	0.189	5,460.000	0.055	18.763
F8	Tongda Group Holdings Ltd.	YES	42.000	0.370	0.000	2.000	0.778	22,000.000	0.060	108,695.000
G1	Amphenol Corporation	NO	88.000	32.570	2.000	3.000	1.190	74,000.000	0.442	14,230.000
G2	Molex, Inc.	NO								
G3	TE Connectivity Ltd.	YES	20.000	31.080	1.000	1.000	3.570	78,000.000	1.590	175.132
G4	Luxshare Precision Industry Co., Ltd.	YES	16.000	54.300	0.000	2.000	2.340	137,284.000	0.153	2,099.638
G5	Foxconn International Holdings Ltd.	NO	30.000	2.610	2.000	0.000	11.500	1,020,000.000	1.020	11,500.000
G6	Shenzhen Deren Electronic Co., Ltd.	YES	31.000	1.160	0.000	0.000	0.228	11,661.000	0.119	22.342
G7	Shenzhen Everwin Precision Technology Co., L	YES	19.000	3.146	2.000	0.000	0.529	21,606.000	0.027	423.318
G8	Hirose Electric Co., Ltd.	YES	83.000	4.270	1.000	1.000	0.625	4,737.000	0.024	124.396
H1	Goertek Inc.	YES	19.000	18.410	3.000	2.000	1.911	59,611.000	0.391	291.347
H2	AAC Acoustic Technologies Holdings INC.	YES	27.000	8.630	0.000	0.000	2.660	39,895.000	0.063	1,697.931
H3	Foster Electric Company, Limited	NO	71.000	0.230	2.000	2.000	0.170	23,930.000	0.002	1,984.439
H4	Knowles Electronics LLC	NO	74.000	1.390	1.000	1.000	0.240	8,500.000	0.092	22.174
H5	Shandong Gettop Acoustic Co.,Ltd.	YES	19.000	0.490	2.000	2.000	0.062	2,643.000	0.014	11.705
I1	Luxshare Precision Industry Co., Ltd.	YES	16.000	54.300	0.000	2.000	2.340	137,284.000	0.153	2,099.638
I2	Shenzhen Sunway Communication Co., Ltd.	YES	14.000	7.990	3.000	1.000	0.356	7,244.000	0.126	20.467
I3	SG Micro Group Ltd.	YES	13.000	7.030	1.000	2.000	0.006	399.000	0.001	2.128
J1	BYD Co., Ltd.	YES	25.000	60.250	2.000	1.000	9.020	220,000.000	1.740	1,140.460
J2	Sunwoda Electronic Co., Ltd.	YES	23.000	5.720	2.000	2.000	0.933	24,425.000	0.094	242.431
J3	Huizhou Desay Battery Co., Ltd.	YES	35.000	1.680	0.000	0.000	0.128	9,744.000	0.026	47.970
J4	Nichicon Corporation	NO	70.000	0.480	0.000	0.000	0.319	5,409.000	0.009	191.719
K1	Luxshare Precision Industry Co., Ltd.	YES	16.000	54.300	0.000	2.000	2.340	137,284.000	0.153	2,099.638
K2	AAC Acoustic Technologies Holdings INC.	YES	27.000	8.630	0.000	0.000	2.660	39,895.000	0.063	1,697.931
K3	Texas Instruments Corporation	NO	90.000	127.600	1.000	1.000	3.640	29,768.000	0.409	264.928
L1	Luxshare Precision Industry Co., Ltd.	YES	16.000	54.300	0.000	2.000	2.340	137,284.000	0.153	2,099.638
L2	Volex Group Holdings Ltd.	NO	101.000	0.321	1.000	1.000	0.031	6,158.000	0.016	11.931
M1	Authen Tec, Inc.									
M2	Shenzhen Goodix Technology Co., Ltd.	YES	18.000	13.450	2.000	2.000	0.053	1,623.000	0.113	0.761

Appendix 2: (Taken from Kennedy, 2020, pg. 8). How companies are classified in China

Registration status	Definition
Domestically Funded Enterprises	
State-owned enterprises	Non-corporate economic entities, where all assets are owned by the state.
State-holding enterprises	Enterprises where the percentage of state assets (or shares by the state) is larger than any other single share holder of the same enterprise.
Collective-owned enterprises	Economic entities where assets are owned collectively. Ownership is considered to be public.
Cooperative enterprises	Economic units set up on a cooperative basis, with funding partly from employees of the enterprise and partly from outside investment, where the operation and management is decided by all the members who also participate in the production.
Joint ownership enterprises	Economic units established by joint investment by two or more corporate enterprises or institutions of the same or different types of ownership.
Limited liability corporations	Economic units with capital from 2 to 49 investors. Limited liability corporations include state sole funded corporations and other limited liability corporations.
Share-holding corporations Ltd.	Economic units with total registered capital divided into equal shares and raised through issuing stocks.
Private enterprises	Economic units invested or controlled (by holding the majority of the shares) by natural persons who hire workers for profit-making activities. Included in this category are private limited liability corporations, private share-holding corporations Ltd., private partnership enterprises and private sole investment enterprises.
Foreign Funded Enterprises	
Enterprises with Funds from Hong Kong, Macao and Taiwan	All industrial enterprises registered as the joint-venture, cooperative, sole (exclusive) investment industrial enterprises and limited liability corporations with funds from Hong Kong, Macao and Taiwan.
Foreign funded enterprises	All industrial enterprises registered as the joint-venture, cooperative, sole (exclusive) investment industrial enterprises and limited liability corporations with foreign funds.

Source: National Bureau of Statistics of China.

Appendix 2a: (Taken from Kennedy, 2020, pg. 8). The summary of firms in China

	Number of industrial enterprises	
SOE + SHE	20,510	1
SOE	9,105	2
Implied SHE	11,405	3=1-2
State joint ownership enterprises	131	4
Joint state-collective enterprises	169	5
State sole funded limited liability corporations	1,454	6
Minimum number of enterprises for which SOE ownership is not specified	9,651	7=3-4-5-6

Source: National Bureau of Statistics of China.

Appendix 3: List of Tweets

S/No	Date/Time	Tweets	Sentiment
1	06-08-20	RT @GOP: "Joe Biden's polices put China first, and America last."	1
2	03-08-20	RECORD HIGH NASDAQ! It would all come crashing down, including your Jobs, Stocks, and 401k's, if Sleepy Joe ever became President. China and others would own us!!!	1
3	24-06-20	Biden failed with China. They took us to the cleaners! I got $Billions out of China, and gave much of it to our targeted farmers!	1
4	19-06-20	The Democrats are doing totally false advertising. They have done NOTHING for years, including when Sleepy Joe was V.P., and they now have a Fake ad that my China Deal is losing us jobs. Opposite, & China is paying us $BILLIONS. Also, I LOVE Seniors & protect Preexisting C's.	1
5	18-06-20	It was not Ambassador Lighthizer's fault (yesterday in Committee) in that perhaps I didn't make myself clear, but the U.S. certainly does maintain a policy option, under various conditions, of a complete decoupling from China. Thank you!	1
6	27-05-20	We have informed both India and China that the United States is ready, willing and able to mediate or arbitrate their now raging border dispute. Thank you!	0
7	25-05-20	Nobody in 50 years has been WEAKER on China than Sleepy Joe Biden. He was asleep at the wheel. He gave them EVERYTHING they wanted, including rip-off Trade Deals. I am getting it all back!	1
8	11-04-20	The Wall Street Journal Editorial Board doesn't have a clue on how to fight and win. Their views on Tariffs & Trade are losers for the U.S., but winners for other countries, including China. If we followed their standards, we'd have no Country left. They should love Sleepy Joe!	1
9	27-03-20	Just finished a very good conversation with President Xi of China. Discussed in great detail the CoronaVirus that is ravaging large parts of our Planet. China has been through much & has developed a strong understanding of the Virus. We are working closely together. Much respect!	-1
10	18-02-20	...product and goods to China and other countries. That's what trade is all about. We don't want to make it impossible to do business with us. That will only mean that orders will go to someplace else. As an example, I want China to buy our jet engines, the best in the World	-1
11	07-02-20	Just had a long and very good conversation by phone with President Xi of China. He is strong, sharp and powerfully focused on leading the counterattack on the Coronavirus. He feels they are doing very well, even building hospitals in a matter of only days. Nothing is easy, but	-1
12	22-01-20	One of the many great things about our just signed giant Trade Deal with China is that it will bring both the USA & China closer together in so many other ways. Terrific working with President Xi, a man who truly loves his country. Much more to come!	-1
13	16-01-20	One of the greatest trade deals ever made! Also good for China and our long term relationship. 250 Billion Dollars will be coming back to our Country, and we are now in a great position for a Phase Two start. There has never been anything like this in U.S. history! USMCA NEXT!	-1
14	31-12-19	I will be signing our very large and comprehensive Phase One Trade Deal with China on January 15. The ceremony will take place at the White House. High level representatives of China will be present. At a later date I will be going to Beijing where talks will begin on Phase Two!	1
15	20-12-19	Had a very good talk with President Xi of China concerning our giant Trade Deal. China has already started large scale purchaes of agricultural product & more. Formal signing being arranged. Also talked about North Korea, where we are working with China, & Hong Kong (progress!).	-1
16	14-12-19	Chuck Schumer sat for years during the Obama Administration and watched as China ripped off the United States. He & the Do Nothing Democrats did NOTHING as this $ carnage took place. Now, without even seeing it, he snipes at our GREAT new deal with China. Too bad Cryin' Chuck!	1
17	13-12-19	We have agreed to a very large Phase One Deal with China. They have agreed to many structural changes and massive purchases of Agricultural Product, Energy, and Manufactured Goods, plus much more. The 25% Tariffs will remain as is, with 7 1/2% put on much of the remainder	1
18	12-12-19	Getting VERY close to a BIG DEAL with China. They want it, and so do we!	-1
19	02-12-19	U.S. Markets are up as much as 21% since the announcement of Tariffs on 3/1/2018 - and the U.S. is taking in massive amounts of money (and giving some to our farmers, who have been targeted by China)!	1
20	17-11-19	Our great Farmers will recieve another major round of "cash," compliments of China Tariffs, prior to Thanksgiving. The smaller farms and farmers will be big beneficiaries. In the meantime, and as you may have noticed, China is starting to buy big again. Japan deal DONE. Enjoy!	1
21	31-10-19	China and the USA are working on selecting a new site for signing of Phase One of Trade Agreement, about 60% of total deal, after APEC in Chile was canceled do to unrelated circumstances. The new location will be announced soon. President Xi and President Trump will do signing!	0
22	13-10-19	CHINA HAS ALREADY BEGUN AGRICULTURAL PURCHASES FROM OUR GREAT PATRIOT FARMERS & RANCHERS!	1

23	11-10-19	Good things are happening at China Trade Talk Meeting. Warmer feelings than in recent past, more like the Old Days. I will be meeting with the Vice Premier today. All would like to see something significant happen!	-1
24	06-10-19	@ 60Minutes "forgot" to report that we are helping the great farmers of the USA to the tune of 28 Billion Dollars, for the last two years, paid for out of Tariffs paid to the United States by China for targeting the farmer. They devalued their currency, therefore paying the cost!	1
25	01-10-19	Congratulations to President Xi and the Chinese people on the 70th Anniversary of the People's Republic of China!	-1
26	16-09-19	Producer prices in China shrank most in 3 years due to China's big devaluation of their currency, coupled with monetary stimulus. Federal Reserve not watching? Will Fed ever get into the game? Dollar strongest EVER! Really bad for exports. No Inflation...Highest Interest Rates..	1
27	06-09-19	"China is eating the Tariffs." Billions pouring into USA. Targeted Patriot Farmers getting massive Dollars from the incoming Tariffs! Good Jobs Numbers, No Inflation(Fed). China having worst year in decades. Talks happening, good for all!	1
28	03-09-19	We are doing very well in our negotiations with China. While I am sure they would love to be dealing with a new administration so they could continue their practice of "ripoff USA"($600 B/year),16 months PLUS is a long time to be hemorrhaging jobs and companies on a long-shot.	1
29	01-09-19	Peter Morici, Economist: Tariffs will not impact American consumers that much because the Chinese currency has gone down, which gives our importers a discount. Importers can find suppliers outside of China. Absolutely worth it, we don't want to be servants to the Chinese! This is about American Freedom. Redirect the supply chain. There is no reason to buy everything from China!	1
30	23-08-19	Our Country has lost, stupidly, Trillions of Dollars with China over many years. They have stolen our Intellectual Property at a rate of Hundreds of Billions of Dollars a year, & they want to continue. I won't let that happen! We don't need China and, frankly, would be far.	1
31	18-08-19	Our economy is the best in the world, by far. Lowest unemployment ever within almost all categories. Poised for big growth after trade deals are completed. Import prices down, China eating Tariffs. Helping targeted Farmers from big Tariff money coming in. Great future for USA!	1
32	14-08-19	I know President Xi of China very well. He is a great leader who very much has the respect of his people. He is also a good man in a "tough business." I have ZERO doubt that if President Xi wants to quickly and humanely solve the Hong Kong problem, he can do it. Personal meeting?	-1
33	10-08-19	China wants to make a deal so badly. Thousands of companies are leaving because of the Tariffs, they must stem the flow. At the same time China may be hoping for a Democrat to win so they could continue the great ripoff of America, & the theft of hundreds of Billions of $'s!	1
34	05-08-19	China is intent on continuing to receive the hundreds of Billions of Dollars they have been taking from the U.S. with unfair trade practices and currency manipulation. So one-sided, it should have been stopped many years ago!	1
35	01-08-19	We look forward to continuing our positive dialogue with China on a comprehensive Trade Deal, and feel that the future between our two countries will be a very bright one!	-1
36	30-07-19	China has lost 5 million jobs and two million manufacturing jobs due to the Trump Tariffs. Trumps got China back on its heels, and the United States is doing great. @AndyPuzder @MariaBartiromo	1
37	26-07-19	Apple will not be given Tariff waiver, or relief, for Mac Pro parts that are made in China. Make them in the USA, no Tariffs!	1
38	15-07-19	China's 2nd Quarter growth is the slowest it has been in more than 27 years. The United States Tariffs are having a major effect on companies wanting to leave China for non-tariffed countries. Thousands of companies are leaving. This is why China wants to make a deal.	1
39	29-06-19	...again with China as our relationship with them continues to be a very good one. The quality of the transaction is far more important to me than speed. I am in no hurry, but things look very good! There will be no reduction in the Tariffs currently being charged to China.	1
40	18-06-19	Had a very good telephone conversation with President Xi of China. We will be having an extended meeting next week at the G-20 in Japan. Our respective teams will begin talks prior to our meeting.	-1
41	12-06-19	"Biden would be China's Dream Candidate, because there would be no more Tariffs, no more demands that China stop stealing our IP, things would go back to the old days with America's manufacturers & workers getting shafted. He has Zero Credibility!" @IngrahamAngle So true!	1
42	07-06-19	China is subsidizing its product in order that it can continue to be sold in the USA. Many firms are leaving China for other countries, including the United States, in order to avoid paying the Tariffs. No visible increase in costs or inflation, but U.S. is taking in Billions! [	1
43	14-05-19	When the time is right we will make a deal with China. My respect and friendship with President Xi is unlimited but, as I have told him many times before, this must be a great deal for the United States or it just doesn't make any sense. We have to be allowed to make up some..	-1
44	13-05-19	There will be nobody left in China to do business with. Very bad for China, very good for USA! But China has taken so advantage of the U.S. for so many years, that they are way ahead (Our Presidents did not do the job). Therefore, China should not retaliate-will only get worse!	1
45	12-05-19	We are right where we want to be with China. Remember, they broke the deal with us & tried to renegotiate. We will be taking in Tens of Billions of Dollars in Tariffs from China. Buyers of product can make it themselves in the USA (ideal), or buy it from non-Tariffed countries..	1
46	11-05-19	I think that China felt they were being beaten so badly in the recent negotiation that they may as well wait around for the next election, 2020, to see if they could get lucky & have a Democrat win - in which case they would continue to rip-off the USA for $500 Billion a year.	1

47	10-05-19	Over the course of the past two days, the United States and China have held candid and constructive conversations on the status of the trade relationship between both countries. The relationship between President Xi and myself remains a very strong one, and conversations	-1
48	08-05-19	Guess what, that's not going to happen! China has just informed us that they (Vice-Premier) are now coming to the U.S. to make a deal. We'll see, but I am very happy with over $100 Billion a year in Tariffs filling U.S. coffers...great for U.S., not good for China!	1
49	06-05-19	The United States has been losing, for many years, 600 to 800 Billion Dollars a year on Trade. With China we lose 500 Billion Dollars. Sorry, we're not going to be doing that anymore!	1
50	16-03-19	Google is helping China and their military, but not the U.S. Terrible! The good news is that they helped Crooked Hillary Clinton, and not Trump....and how did that turn out?	1
51	25-02-19	China Trade Deal (and more) in advanced stages. Relationship between our two Countries is very strong. I have therefore agreed to delay U.S. tariff hikes. Let's see what happens?	-1
52	24-02-19	I am pleased to report that the U.S. has made substantial progress in our trade talks with China on important structural issues including intellectual property protection, technology transfer, agriculture, services, currency, and many other issues. As a result of these very	1
53	31-01-19	China's top trade negotiators are in the U.S. meeting with our representatives. Meetings are going well with good intent and spirit on both sides. China does not want an increase in Tariffs and feels they will do much better if they make a deal. They are correct.	-1
54	21-01-19	China posts slowest economic numbers since 1990 due to U.S. trade tensions and new policies. Makes so much sense for China to finally do a Real Deal, and stop playing around!	1
55	08-01-19	Talks with China are going very well!	-1
56	03-01-19	The United States Treasury has taken in MANY billions of dollars from the Tariffs we are charging China and other countries that have not treated us fairly. In the meantime we are doing well in various Trade Negotiations currently going on. At some point this had to be done!	1
57	29-12-18	Just had a long and very good call with President Xi of China. Deal is moving along very well. If made, it will be very comprehensive, covering all subjects, areas and points of dispute. Big progress being made!	-1
58	14-12-18	China just announced that their economy is growing much slower than anticipated because of our Trade War with them. They have just suspended U.S. Tariff Hikes. U.S. is doing very well. China wants to make a big and very comprehensive deal. It could happen, and rather soon!	-1
59	11-12-18	Very productive conversations going on with China! Watch for some important announcements!	-1
60	07-12-18	China talks are going very well!	-1
61	06-12-18	Statement from China: "The teams of both sides are now having smooth communications and good cooperation with each other. We are full of confidence that an agreement can be reached within the next 90 days." I agree!	-1
62	04-12-18	The negotiations with China have already started. Unless extended, they will end 90 days from the date of our wonderful and very warm dinner with President Xi in Argentina. Bob Lighthizer will be working closely with Steve Mnuchin, Larry Kudlow, Wilbur Ross and Peter Navarro.	-1
63	29-11-18	Billions of Dollars are pouring into the coffers of the U.S.A. because of the Tariffs being charged to China, and there is a long way to go. If companies don't want to pay Tariffs, build in the U.S.A. Otherwise, lets just make our Country richer than ever before	1
64	08-09-18	Apple prices may increase because of the massive Tariffs we may be imposing on China - but there is an easy solution where there would be ZERO tax, and indeed a tax incentive. Make your products in the United States instead of China. Start building new plants now. Exciting!	1
65	04-08-18	Tariffs are working far better than anyone ever anticipated. China market has dropped 27% in last 4months, and they are talking to us. Our market is stronger than ever, and will go up dramatically when these horrible Trade Deals are successfully renegotiated.	1
66	23-05-18	Our Trade Deal with China is moving along nicely, but in the end we will probably have to use a different structure in that this will be too hard to get done and to verify results after completion	-1
67	21-05-18	On China, Barriers and Tariffs to come down for first time.	-1
68	14-05-18	ZTE, the large Chinese phone company, buys a big percentage of individual parts from U.S. companies. This is also reflective of the larger trade deal we are negotiating with China and my personal relationship with President Xi.	1
69	04-05-18	Our high level delegation is on the way back from China where they had long meetings with Chinese leaders and business representatives. We will be meeting tomorrow to determine the results, but it is hard for China in that they have become very spoiled with U.S. trade wins!	1
70	02-05-18	Our great financial team is in China trying to negotiate a level playing field on trade! I look forward to being with President Xi in the not too distant future. We will always have a good (great) relationship! [	-1

71	10-04-18	Very thankful for President Xi of China's kind words on tariffs and automobile barriers...also, his enlightenment on intellectual property and technology transfers. We will make great progress together!	-1
72	08-04-18	President Xi and I will always be friends, no matter what happens with our dispute on trade. China will take down its Trade Barriers because it is the right thing to do. Taxes will become Reciprocal & a deal will be made on Intellectual Property. Great future for both countries!	-1
73	07-04-18	The United States hasn't had a Trade Surplus with China in 40 years. They must end unfair trade, take down barriers and charge only Reciprocal Tariffs. The U.S. is losing $500 Billion a year, and has been losing Billions of Dollars for decades. Cannot continue!	1
74	04-04-18	We are not in a trade war with China, that war was lost many years ago by the foolish, or incompetent, people who represented the U.S. Now we have a Trade Deficit of $500 Billion a year, with Intellectual Property Theft of another $300 Billion. We cannot let this continue!	1
75	07-03-18	China has been asked to develop a plan for the year of a One Billion Dollar reduction in their massive Trade Deficit with the United States. Our relationship with China has been a very good one, and we look forward to seeing what ideas they come back with. We must act soon!	-1
76	09-11-17	I don't blame China, I blame the incompetence of past Admins for allowing China to take advantage of the U.S. on trade leading up to a point where the U.S. is losing $100's of billions. How can you blame China for taking advantage of people that had no clue? I would've done same!	-1
77	08-11-17	Looking forward to a full day of meetings with President Xi and our delegations tomorrow. THANK YOU for the beautiful welcome China! @FLOTUS Melania and I will never forget it!	-1
78	29-07-17	I am very disappointed in China. Our foolish past leaders have allowed them to make hundreds of billions of dollars a year in trade, yet...	1
79	30-03-17	The meeting next week with China will be a very difficult one in that we can no longer have massive trade deficits..	1
80	04-12-16	Did China ask us if it was OK to devalue their currency (making it hard for our companies to compete), heavily tax our products going into	-1

Appendix 4: Shareholders of Winners

Note: According to the Opinion of the National Bureau of Statistics on the Definition of State-owned Enterprise, SOEs can be categorized in a broad sense or in a narrow sense.
In a broad sense, SOEs refer to enterprises with state capital, which can be further categorized into three levels:
(1) wholly state-owned enterprise ("WSOE"): All the capital of the SOE is owned by the state;
(2) state controlling enterprises: This includes absolutely state controlling enterprise (state capital accounting for more than 50% of the equity interest) and relatively state controlling enterprise (state capital accounting for less than 50% of the equity interest but relatively greater than other kinds of capital; or, although state capital not greater than other kinds of capital, the state has actual control over the enterprise by way of agreement);
(3) state holding enterprise: such enterprise has part of the state capital, but the state does not control it.
In a narrow sense, SOEs refer to wholly state-owned enterprises.
Please note that in this table, "Y" refers to the enterprises which shall be deemed as SOEs in a broad sense, and we have indicated the wholly state-owned ones for your easy reference.

S/n	Firm Names	Chinese Name	SOEs (Y/N):
1	HuaAn Fund Management Co., Ltd	华安基金管理有限公司	Y
2	Huaan Media & Internet Balanced Fund	华安媒体互联网混合型证券投资基金	N
3	Bosera Asset Management Co., Ltd.	博时基金管理有限公司	Y
4	China Investment Corp. (Investment Management)	中国投资有限责任公司	Y (WSOE)
5	Invesco Great Wall Quantify Select Equity Fund	景顺长城量化精选股票型证券投资基金	N
6	HSBC Jintrust Management Co., Ltd.	汇丰晋信基金管理有限公司	Y
7	China Asset Management Co., Ltd.	华夏基金管理有限公司	Y
8	Aegon-Industrial Fund Management Co., Ltd.	兴证全球基金管理有限公司	Y
9	GF Shuangqing Upgrades Mixed Fund	广发双擎升级混合型证券投资基金	Y
10	Penghua Fund Management Co., Ltd.	鹏华基金管理有限公司	Y
11	Chang Xin Asset Management Co., Ltd.	长信基金管理有限责任公司	Y
12	Bosera Asset Management Co., Ltd.	博时基金管理有限公司 (the same as No.3)	Y
13	Truvalue Asset Management Co. Ltd.	创金合信基金管理有限公司	Y
14	Bohai International Trust Co., Ltd.	渤海国际信托股份有限公司	Y

15	Government Pension Fund - Global (The)	——	Y
16	Ruffer LLP	Ruffer SICAV - UK Mid & Smaller Companies Fund	N
17	HuaAn Fund Management Co., Ltd.	华安基金管理有限公司 (the same as No.1)	Y
18	China Investment Corp. (Investment Management)	中国投资有限责任公司 (the same as No.4)	Y (WSOE)
19	Bosera Group.	——	Y
20	China Southern Group	——	Y
21	China Investment Corp. (Investment Management)	中国投资有限责任公司 (the same as No.4)	Y (WSOE)
22	Zhongtai Securities Co., Ltd. (Investment Management)	中泰证券股份有限公司	Y
23	Bill & Melinda Gates Foundation Trust (Investment Management)	比尔及梅林达盖茨信托基金会	N
24	Harvest Fund Management Co., Ltd.	嘉实基金管理有限公司	Y
25	China Investment Corp. (Investment Management)	中国投资有限责任公司 (the same as No.4)	Y (WSOE)
26	Guohua Life Insurance Co. Ltd.	国华人寿保险股份有限公司	Y
27	Tibet Trust Corp. Ltd.	西藏信托有限公司	Y (WSOE)
28	Beixin Ruifeng Fund Management Co., Ltd.	北信瑞丰基金管理有限公司	Y
29	Yunnan International Trust Co., Ltd.	云南国际信托有限公司	Y
30	Cathay Life Insurance Co., Ltd. (Invt Port)	國泰人壽保險股份有限公司	N
31	Ruffer SICAV - UK Mid & Smaller Companies Fund	——	N
32	HFT Investment Management Co., Ltd.	海富通基金管理有限公司	Y
33	Hwabao CSI Technology Top Index ETF	华宝中证科技龙头交易型开放式指数证券投资基金	Y
34	China Life Asset Management Co., Ltd.	中国人寿资产管理有限公司	Y
35	Guotai CSI All Share Communication Devices ETF	国泰中证全指通信设备交易型开放式指数证券投资基金	Y
36	Harvest Fund Management Co., Ltd.	嘉实基金管理有限公司	Y
37	China AMC CSI 5G Communication Index ETF	华夏中证5G通信主题交易型开放式指数证券投资基金	Y
38	E Fund Management Co., Ltd.	易方达基金管理有限公司	Y

39	GF Innovation Upgrade Flexible Allocation Balanced Fund	广发创新升级灵活配置混合型证券投资基金	Y
40	HuaAn Fund Management Co., Ltd.	华安基金管理有限公司 (the same as No.1)	Y
41	Bosera CSI Central-SOEs Innovation Driven Index ETF	博时中证央企创新驱动交易型开放式指数证券投资基金	Y
42	Da Cheng Fund Management Co., Ltd.	大成基金管理有限公司	Y
43	China Resources SZITIC Trust Co., Ltd.	华润深国投信托有限公司	Y (WSOE)
44	Tibet Trust Corp. Ltd.	西藏信托有限公司 (the same as No.27)	Y (WSOE)
45	Vanguard Total International Stock Index Fund	——	N
46	Quaero Capital SA	——	Y

Appendix 5: Description of Sentiment Analysis approach versus Nisar, Y. (2018)

I set out to show the difference between the sentiment analysis model built in the publication T.M. Nisar, M. Yeung, and this study's Custom Classifier Deep Learning model. The comparison is made in 3 sections: Goals, Models, and Performance

Goals

T.M. Nisar, M. Yeung research goal was to investigate the following:

Does a correlation exist between public sentiment regarding the local elections and stock market movements in the FTSE?

Does causation exist between public sentiment regarding the local elections and stock market movements in the FTSE?

T.M. Nisar, M. Yeung built a system to perform Sentiment analysis on an aggregate of tweets representing the U.K. population during the 2016 election days. They analyzed 60944 tweets from users that represented the general population; they used general hashtags that did not have any political bias: #PollingDay, #mayorElection, #LondonElects, and filtered tweets from users which location was the U.K.

Once they aggregated the tweet population's sentiment, they then looked for correlations between this sentiment and stock market valuations.

In this study, Donald Trump's tweets about the USA and China's trade war were utilized. An assumed relationship between these tweets and the stock prices existed. A classifier was developed to predict whether, for a particular tweet, the U.S. or China will improve its stock performance.

Models

T.M. Nisar, M. Yeung used a system called Umigon, a lexicon-based sentiment classifier which, given a tweet, outputs labels positive, negative, or neutral using a series of heuristics. It has four steps:

Detect emojis and onomatopes: They list the most common exclamations and emojis and use regular expressions to capture the variety of forms they can assume; if such a form is found in the tweet, the related sentiment (positive or negative) is saved and will be evaluated at a final stage for the global sentiment of the entire tweet; also heuristics are used.

Detect if specific hashtags are present (Umigon applies a series of heuristics matching parts of the hashtag with lexicons)

Brake the tweet into n-grams, and for each, find the presence in several lexicons; after an n-gram matches a lexicon, heuristics may be applied to obtain the sentiment associated with that n-gram

Umigon will apply heuristics to output a sentiment label: positive, negative, or neutral based on the above features.

For this study, a classifier was built using the following assumptions:

For positive classification:

"If the tweet has positive words and talks about the USA, then it's positive."

"If the tweet has negative words and talks about China, then it's positive."

For negative classification:

"If the tweet has negative words and talks about the USA, then it's negative."

"If the tweet has positive words and talks about China, then it's negative."

The main difference between the models is that this study's system is not done once a sentiment label is obtained for the tweet. The goal is to predict if the tweet was beneficial to the U.S. rather than just obtaining the sentiment (e.g., T.M. Nisar, M. Yeung).

The system consists of 3 stages:

1- Break the tweet down into sentences.

2- For each sentence in a tweet, a sentiment and country label are obtained.

3- For each sentence, a final label table is drawn out by applying the rules defined at the beginning of this section using the sentiment and country classification labels.

3- The label that appears the most frequently would become the final choice for the tweet. If the number of positive and negative labels is the same, the tweet would be labeled neutral.

The sentiment analysis pipeline consists of 3 stages:

1) pre-process text: remove accents, replace URLs with a token, remove emojis, remove HTML, remove user mentions

2) convert the text into word embeddings using a pre-trained ROBERTA language model

3) Trained a one-layer neural network classifier using the word embeddings as features and the sentiment as a label. The classifier was trained using Sentiment 140, a dataset of 1600000 tweets labeled with either positive or negative sentiment.

Country detection:

A simple heuristic was used to detect the country; a lexicon was built for China and one for the USA, each containing words that were good predictors of the country. USA lexicon contains words: "usa","401k",

"America","america","USA", "U.S","u.s", "US", "United States". China Lexicon contain words: "China", "CHINA", "Xi", "Chinese".

A text sentence will be associated with the country if it has more matching words for one country than for the other.

Performance

Sentiment analysis Performance comparison

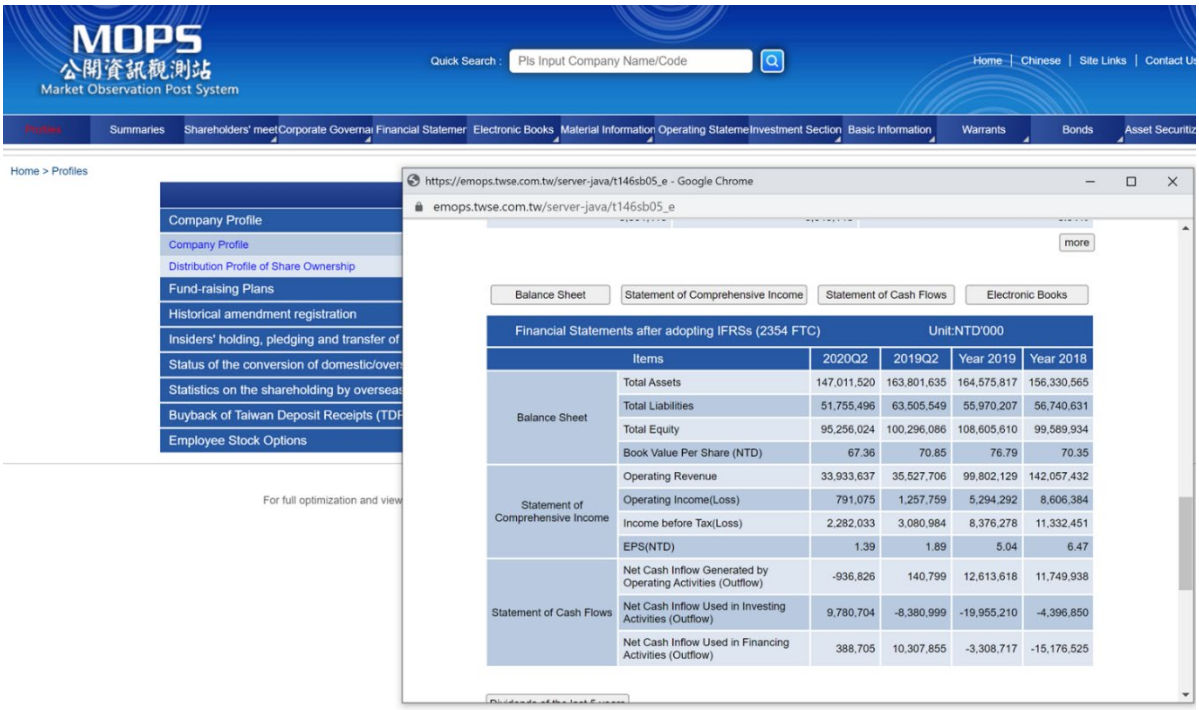
Metrics from my system evaluated on sentiment140's test set:

0: negative - 1: positive

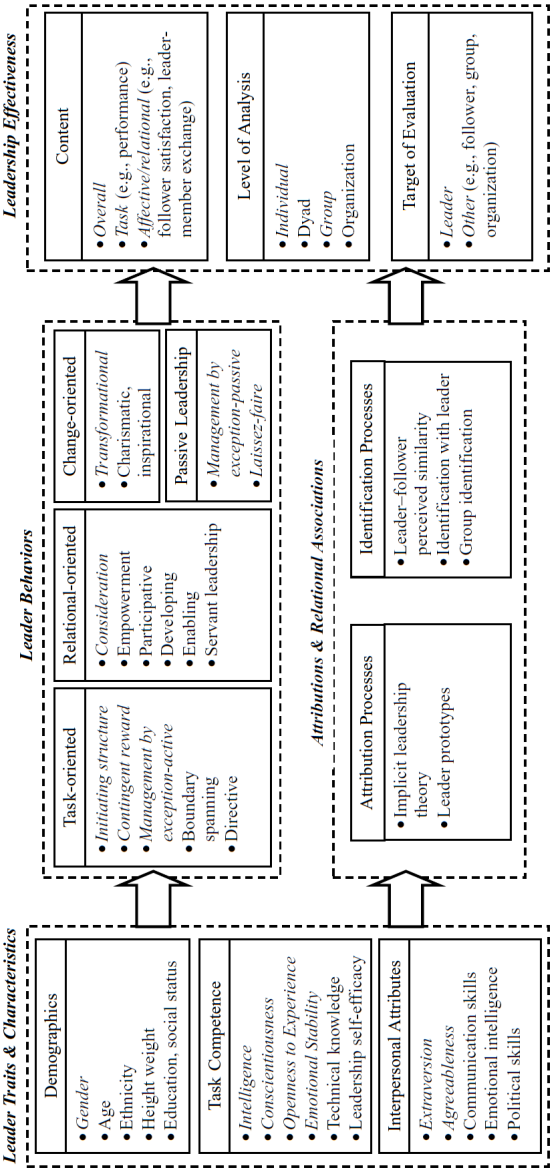
	precision	recall	f1-score	support
0	0.83	0.73	0.78	177
4	0.77	0.86	0.81	182
accuracy			0.80	359
macro avg	0.80	0.80	0.80	359
weighted avg	0.80	0.80	0.80	359

The difference in performance is due to two reasons. The Umigon system was built in 2013 using heuristics; its performance is inferior to the one used by this study's deep learning SOTA model. Umigon was not designed to classify factual tweets that mention adverse events (e.g., "Renewed fighting rocks Syria: An early morning explosion rocked the flashpoint city of Deir Ezzor on Saturday"). In their test set, they would, by default, classify factual tweets as negative sentiments.

Appendix 6: M.O.P.S. database



Appendix 7: (Derue et al., 2011) Integrated Model of Leader Traits and Behaviors



Appendix 8: Gallup Polls on Popular Industry Trends 2020

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Business and Industry Sector Ratings

On another subject, for each of the following business sectors in the United States, please say whether your overall view of it is very positive, somewhat positive, neutral, somewhat negative or very negative. How about ... ?

July 30-Aug. 12, 2020

	Total positive	Neutral	Total negative	Net positive
	%	%	%	
Farming and agriculture	69	19	11	+58
Grocery industry	63	24	12	+51
Restaurant industry	61	24	15	+46
Computer industry	56	31	12	+44
Retail industry	53	28	18	+35
Accounting	42	50	8	+34
Automobile industry	48	35	16	+32
Electric and gas utilities	50	29	20	+30
Real estate industry	47	32	20	+27

Net positive is Total % positive minus Total % negative (in percentage points)

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	Total positive	Neutral	Total negative	Net positive
	%	%	%	
Telephone industry	47	32	20	+27
Banking	46	32	22	+24
Internet industry	49	23	27	+22
Healthcare industry	51	17	31	+20
Education	48	20	32	+16
Travel industry	41	34	25	+16
Publishing industry	38	40	22	+16
Airline industry	41	33	26	+15
Oil and gas industry	43	25	32	+11
Television and radio industry	41	26	34	+7
The legal field	34	38	28	+6
Movie industry	37	30	33	+4
Advertising and public relations industry	33	34	32	+1
Sports industry	30	29	40	-10
Pharmaceutical industry	34	17	49	-15
The federal government	30	20	50	-20

Net positive is Total % positive minus Total % negative (in percentage points)

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Appendix 9: Top U.S. firms still owned by families with a successful leadership transition

Company	Family	Country	Sector	Revenue 2010 (bn)	Revenue 2009 (bn)	Family ownership
Walmart	Walton	US	Food retail	$419.00*	$405.00*	44.7%
Ford	Ford	US	Automobiles	$128.95	$116.28	40% [v]
Cargill	Cargill/MacMillan	US	Agriculture	$107.90*	$115.10*	90%
Koch Industries	Koch	US	Oil/agriculture	$106.00+	$100.00	84%
Comcast	Roberts	US	Media	$37.90	$35.75	33.3% [v]
News Corp	Murdoch	US	Media	$32.81*	$30.42*	39.7%[v]
George Weston	Weston	Canada	Food	$32.00	$31.82	62.5%
Mars	Mars	US	Food	$30.00	$28.00	100%
Tyson Foods	Tyson	US	Food	$28.43*	$26.70*	69.8%[v]
Bechtel Group	Bechtel	US	Construction	$27.90	$30.80	100%
Publix Super Markets	Jenkins	US	Food retail	$25.10*	$24.32*	68.55%
C&S Wholesale Grocers	Cohen	US	Food retail	$19.40*	$20.40*	100%
Bombardier	Beaudoin-Bombardier	Canada	Manufacturing	$17.71*	$19.36*	54.2%[v]
Love's	Love	US	Retail	$17.00+	$12.60	100%
HE Butt Grocery	Butt	The U.S.	Food retail	$16.20+*	$15.10*	100%
Empire Company	Sobey	Canada	Food retail	$15.51*	$15.01*	88.11%[v]
Gap	Fisher	US	Retail	$14.66*	$14.19*	32%
Loews Corporation	Tisch	US	Conglomerate	$14.61	$14.11	32%
Cox Enterprises	Cox	US	Media	$14.60	$14.30	99%[v]
Meijer	Meijer	US	Food retail	$14.10*	$14.25+*	100%
Reyes Holdings	Reyes	US	Food and beverage	$13.50+	$12.50	100%
Thomson Reuters	Thomson	Canada	Media	$13.06	$12.94	55%
Enterprise Holdings	Taylor	US	Transportation	$12.60	$12.10	100%
Fidelity Investments	Johnson	US	Finance	$12.30	$11.49	50%+
Rogers Communications	Rogers	Canada	Media	$12.18	$11.73	90.9%
Marriott International	Marriott	US	Hotels	$11.69	$10.90	36.5%
Canadian Tire	Billes	Canada	Conglomerate	$10.32	$10.02	61.4%
Cumberland Farms	Haseotes	US	Food retail	$10.00*+	$6.57*	100%
Nordstrom	Nordstrom	US	Retail	$9.31*	$8.25*	25.79%
JM Family Enterprises	Moran	US	Retail	$9.30	$8.40	100%
Huntsman Corporation	Huntsman	US	Chemicals	$9.25	$7.66	37.02%
Amway	Andel & DeVos	US	Retail	$9.20	$8.40	100%
SC Johnson and Son	Johnson	US	Retail	$9.00+*	$8.96*	100%
Gordon Food Service	Gordon	US	Food retail	$8.50+*	$7.14*	100%
Giant Eagle	Shapira	US	Food Retail	$8.20*	$8.61*	100%
Menards	Menard	US	Retail	$8.00*	$6.95*	100%
Estee Lauder Companies	Lauder	US	Retail	$7.79	$7.32	83%
Advance Publications	Newhouse	US	Media	$7.30+	$6.25	100%
Jim Pattison Group	Pattison	Canada	Conglomerate	$7.20	$5.90	100%
Carlson Company	Carlson	US	Travel & hospitality	$6.50	$3.90	100%
McCain Foods	McCain	Canada	Food	$6.24*	$6.10*	100%

Saputo	Saputo	Canada	Food	$6.04*	$6.02*	33.67%v
Wegmans Food Markets	Wegman	US	Food retail	$5.60	$5.15	100%
Meadowbrook Meat Company	Wordsworth	US	Food	$5.55	$5.99	100%
Maple Leaf Foods	McCain	Canada	Food	$5.17	$5.44	31.34%v
RaceTrac	Bolch	US	Food retail	$5.00 +	$4.70	100%
Kelly Services	Adderley	US	Business services	$4.95*	$4.31*	93%v
The Washington Post Company	Graham	US	Media	$4.72*	$4.38*	70%v
Perdue	Perdue	US	Food	$4.60	$4.50	100%
JR Simplot Company	Simplot	US	Food	$4.60	$4.50	100%
Sheetz	Sheetz	US	Food retail	$4.50*	$4.01*	100%
Levi Strauss	Haas	US	Retail	$4.41*	$4.10*	100%
Kohler	Kohler	US	Construction	$4.30+	$4.68	96%+
James Richardson & Sons	Richardson	Canada	Agriculture & finance	$4.20+	$4.08	100%
Hallmark Cards	Hall	US	Retail	$4.10	$3.72	66.6%+
Cascades	Lemaire	Canada	Packaging and papers	$4.07	$4.04	32%
Dot Foods	Tracy	US	Food	$3.70+	$3.40	100%
Gulf States Toyota	Friedkin	US	Transportation	$3.65+	$4.10	100%
Golub Corporation	Golub	US	Food retail	$3.60+	$3.30	100%
Shaw Communications	Shaw	Canada	Media	$3.54*	$3.87*	79%
Hyatt Hotels Corporation	Pritzker	US	Hotels	$3.52	$3.33	73%v
Grocers Supply	Levit	US	Food retail	$3.40+	$3.01	100%
Belk	Belk	US	Retail	$3.35*	$3.50*	85%+
Walsh Group	Walsh	US	Construction	$3.34	$3.32	100%
Hearst Corporation	Hearst	US	Media	$3.25	$3.85	100%
Molson Coors Brewing Company	Coors/Molson	US	Beverages	$3.25	$3.03	42.5%v
Brown-Forman	Brown	US	Beverages	$3.22*	$3.19*	67.2%v
Raley's supermarkets	Teel	US	Food retail	$3.20	$3.10	100%
E & J Gallo Winery	Gallo	US	Beverages	$3.17+	$3.00	100%
Holiday Companies	Erickson	US	Food retail	$3.15+	$3.00	100%
Schneider National	Schneider	US	Transportation	$3.10	$2.90	100%
Gilbane	Gilbane	US	Construction	$3.05+	$3.14	100%
Rich products	Rich	US	Food	$3.00+	$2.90	100%
Drummond Company	Drummond	US	Mining	$3.00	$2.85	100%
Follett Corporation	Follett	US	Retail	$2.95+	$2.72	100%
Amkor Technology	Kim	US	Manufacturing	$2.94	$2.18	55.9%
Swift Transportation	Moyes	US	Transportation	$2.92	$2.57	62.2%
Alex Lee	George	US	Food retail	$2.90+	$3.00	100%
The Lefrak Organization	LeFrak	US	Property	$2.70+	$2.80	100%
Schnuck Markets	Schnuck	US	Food retail	$2.60+	$2.50	100%
American Financial Group	Lindner	US	Finance	$2.55	$2.41	25%
Jean Coutu Group	Coutu	Canada	Pharmaceuticals	$2.54*	$2.36*	55%
WL Gore and Associates	Gore	US	Retail	$2.53+	$2.60+	75%+
EllisDon	Smith	Canada	Construction	$2.51+	$2.39	55%
Asplundh Tree Expert Company	Asplundh	US	Business services	$2.50	$2.38	100%
Milliken and Co	Milliken	US	Manufacturing	$2.48+	$2.27	50%
Foster Farms	Foster	US	Food	$2.47+	$2.20	100%

Young's Market Company	Underwood	U.S.	Beverages	$2.45+	$2.12	100%
Ebsco Industries	Stephens	US	Media	$2.40+	$2.30	100%
Wilbur-Ellis	Wilbur	US	Chemicals	$2.35+	$2.20	100%
Fry's Electronics	Fry	US	Manufacturing	$2.30+	$2.10	100%
Plastipak Holdings	Young	US	Packaging	$2.10+	$2.00	100%
Hunt Construction Group	Hunt	US	Construction	$2.00+	$2.14	100%
JE Dunn Construction Group	Dunn	US	Construction	$1.90	$2.30	95%
Day & Zimmermann Group	Yoh	US	Construction	$1.85+	$2.14	100%
Zachry Corporation	Zachry	US	Construction	$1.80+	$1.94	100%
EA Fish Companies	Fish	U.S.	Construction	$1.70+	$1.70	100%
American Greetings	Weiss	US	Retail	$1.59*	$1.64*	45%
Valhi	Simmons	US	Conglomerate	$1.59	$1.27	92.2%
84 Lumber	Hardy	US	Construction	$1.45+	$1.35	100%

Appendix 10: Interview Sources and Extracts

S/No	Date	Leader	Source	Title
1	05/26/10	Terry Gou	https://www.nytimes.com/2010/05/27/technology/2	There were bows and an apology from Terry Gou,
2	05/26/10	Terry Gou	https://www.nytimes.com/2010/05/27/technology/2	As part of a hastily assembled, carefully orchestrated news conference and tour led by Mr. Gou, Foxconn executives defended their labor practices, even as they vowed to do everything possible to prevent more young people from taking their own lives.
3	2/2/17	Leslie Koo	https://magazine.wharton.upenn.edu/digital/taiwans-	My parents taught me to be humble, to be honest and to have faith in the goodness of human nature.
4	2/2/17	Leslie Koo	https://magazine.wharton.upenn.edu/digital/taiwans-	When I assumed responsibility for TCC, I learned that there were many problems that had been neglected for too long. Many of the problems had been either solved or glossed over by my father's reputation and age. No one could challenge him, of course.
5	2/2/17	Leslie Koo	https://magazine.wharton.upenn.edu/di	In addition, the entire organization was both conservative and complacent. No one took initiative. No one was accountable. There was enormous internal resistance to change. I could see quickly what would happen when my father retired. The organization would still be unable to change, but no one would protect it from shareholders, customers and competitors.
6	09/28/17	Wang Yung-ching	https://international.thenewslens.com/article/79878	Tsai and others worry that conservative attitudes toward business strategy will dominate, blunting Taiwan's competitive edge. "They don't really innovate," he says. "They operate."
7	09/28/17	Wang Yung-ching	https://international.thenewslens.com/article/79879	A significant issue in Taiwan continues to be the reluctance by senior management or independent directors to challenge the controlling family, even in the face of poor decision-making or illegal behavior,
8	09/28/17	Chang Yung-fa	https://international.thenewslens.com/article/79879	In a society that highly values personal relationships, and where the senior level of business and politics is populated by a relatively small group with longstanding personal relationships, independent directors can be reluctant to question or challenge corporate behavior."
9	09/28/17	Chang Yung-fa	https://international.thenewslens.com/article/79879	members of the Chang family battling over top leadership positions, in the process creating chaos and perhaps even future business rivals.
10	09/28/17	Chang Yung-fa	https://international.thenewslens.com/article/79879	When the founder does not accept the second generation's refusal, such disputes can drag on for years, creating tension within the family and gumming up an already difficult process.

11	10/10/19	Morris Chang	https://ec.ltn.com.tw/article/breakingnews/2936643	可以嚴格，但要公平，且要有方向！
12	11/12/19	Terry Gou	https://www.ettoday.net/news/20191122/1585880.h	台灣，誰能接班呢？
13	11/12/12	Barry Lam	https://articles.zkiz.com/?rbid=39822	林百里之子首度告白創業心路
14	7/1/19	Barry Lam	http://www.27434.com/info/2023.html	富二代林宇辉创业心路独白
15	8/16/09	Leslie Koo	https://business.sohu.com/20100816/n274249365.sh	深耕华南还是重点，不会轻言放弃。
16	5/14/14	Barry Lam	https://ec.ltn.com.tw/article/paper/778911	沒有自由、平等、民主 國家不會繁榮
17	21/6/05	Chang Yung-fa	https://mssl.eslite.com/Main/ProductExRead/231313	女性的工作能力從來不輸男性，只要肯努力，為什麼不能上船？妳們就來考啊！
18	3/1/20	Pierre Chen	https://www.wealth.com.tw/home/articles/21506	不問過程問結果！
19	11/8/18	Jensen Huang	https://tw.appledaily.com/property/20180811/XHZ	她根本不知道我們說得對或錯，儘管如此，父親的夢想和母親對我們成功的願望，最終把我們送來美國。我欠他們太多了。
20	6/5/18	Jensen Huang	https://www.cnbc.com/2018/05/06/nvidia-ceo-my-m	“I’m the product of my parents’ dreams and aspirations,”
21	12/6/17	Yun Peng Chang	https://kknews.cc/education/p5yexez.html	專業不對口,不同崗位由於工作性質不同，對報考對象也就有了不同的要求
22	10/1/20	Yun Peng Chang	https://money.udn.com/money/story/5613/4280560	據華南員工透露，張雲鵬生性溫和，開會時從未動怒，一向都以「解決事情」為主要優先，同時，總是可以用最快的效率完成各種會議，提升全集團的工作效能。
23	15/6/20	Bruce Cheng	https://www.cw.com.tw/article/5100709?template=t	「環保不只是利己行為，或為自己跟子孫的生存，更是一種生活方式，人對自然環境的態度有四個階段：欣賞、探索、認知、珍惜。
24	12/5/19	Bruce Cheng	https://www.wealth.com.tw/home/articles/20698	她是好太太，更是鄭崇華事業上好幫手
25	21/11/08	Shih Chang Hsu	https://taiwanhong.pixnet.net/blog/post/208694	施崇棠的 小孩，絕對有能力購買頂級精品，但他們節儉程度卻更勝一般家庭的孩子。他們天賦異 稟嗎，未必。否則，秘訣何在？

26	25/4/18	Shih Chang Hsu	https://www.businessweekly.com.tw/magazine/Arti	這場採訪一開始，他的告白竟是：「真的很對不起他（徐世昌），很抱歉，是我修行不夠，放不下……。」
27	4/9/12	Chao Yao Tong	https://blog.xuite.net/alfa2331/blog/134409070	許多人都對當年經國先生「今天不做，明天就後悔」的決心津津樂道，事實上，這句話是趙耀東先說的。
28	10/7/03	Jeff Koo Sar	https://tw.nextmgz.com/realtimenews/news/1340357	辜濂松認為，和信起碼要承認有這個債務，並訂出還款計畫，而不是放著不管。他要辜成允認帳，沒想到辜成允不願意。辜成允說：「這是我哥哥的事，跟我無關。」
29	9/12/19	Jeff Koo Sar	https://www.gvm.com.tw/article/69856	有四個兒女的辜仲諒帶著兩個兒子，首度在家族場合中亮相，一同「開箱」百年洋樓。不時展露爽朗笑容的他說，「這次特別帶老大、老二來，就是要讓他們感受一下～（提醒他們飲水思源？）對！」
30	1/7/17	Hong Lao Ju	https://english.cw.com.tw/article/article.action?id=83	His most indelible moment came on his first trip to Singapore to meet with a maker of hard disk drives. Horng recalls that immediately upon entering the meeting he was subjected to rude questioning from the fresh-out-of-college procurement manager: "What's your competitive advantage? Why should I use you?"
31	8/10/20	Douglas Hsu	https://money.udn.com/money/story/5612/4920526	5G需求很高、很踢躍：而針對全球經濟景氣變化，他坦言「很難回答」，但台灣展望應該很樂觀，明年基本上也樂觀，但仍要轉型面對新時代。
32	23/6/20	Douglas Hsu	https://www.bcc.com.tw/newsView.4254802	張清芳婚變 徐旭東震驚：What can I say?
33	7/1/19	Nan Chou Huang	https://ec.ltn.com.tw/article/paper/1259515	黃男州表示，玉山經營很有特色。尤其是員工向心力很強，員工在市場買入或是持股信託，總計持有玉山金持股比重高達2成，更有9成員工持有玉山金股票，這是別的金控公司沒有的，更是玉山最穩定的一股力量。
34	10/6/20	Wang Yung-ching	https://wealth.businessweekly.com.tw/GArticle.asp	王永慶的觀點是，既然賺錢這麼辛苦，自然是「重如泰山」，想要讓王永慶把收進皮包裡的錢再掏出來，就需要一個站得住腳的理由。
35	25/9/19	Yao Ying Lin	https://tw.nextmgz.com/realtimenews/news/479008	但林耀英不放棄，看準光學產業有機會從日本轉到台灣，再次鼓動保勝的同事陳世卿、謝文琛（已歿，為現任董事謝銘原父親），以及梁忠仁、梁博仁兄弟，1980年在東海大學對面設立大根精密做玻璃鏡片。
36	13/12/13	Yao Ying Lin	https://blog.xuite.net/jmessong/blog/176805316	即使有這樣的「教訓」，林耀英依舊不改本色，對匯率波動始終抱持順其自然的態度。
37	25/9/19	Yao Ying Lin	https://www.chinatimes.com/realtimenews/2019092	針對家族持股轉讓，林恩平曾在日前表示，由於法人股東處分股票較為困難，因而將持股轉讓至控股公司，這是為了長期持有股票，為公司長治久安所做的設計。
38	16/11/19	Ming Cheih Tsai	https://tw.nextmgz.com/realtimenews/news/482776	家族坐擁320億以上資產，蔡明介一向非常低調，甚至有著「最討厭受訪科技老董」稱號。
39	25/8/20	Ming Cheih Tsai	https://www.cw.com.tw/article/5101656?template=t	教育讓孩子更勇敢看世界
40	19/10/20	Wen Chang Ke	https://www.chinatimes.com/newspapers/20201019	柯文昌說，許多企業家想回饋社會，特別是跟他同一代、將要退休者，尤其是科技界，也想協助家鄉發展，可以從地方創生做起。目前已獲得蔡明忠、童子賢、杜俊雄等三位董座響應，童子賢從一開始就贊助池上秋收稻穗藝術節，杜俊雄則長期贊助池上藝術村、穀倉藝術館，蔡明忠今年更加碼投入池上地方創生計畫
41	25/7/20	Tzu Hsien Tung	https://ctee.com.tw/news/tech/307232.html	和碩董事長童子賢24日表示，台灣專注發展科技產業，是上半年維持經濟成長的關鍵，但台灣只注重科技產業，是「偏食的小孩」。
42	20/5/20	Tzu Hsien Tung	https://buzzorange.com/techorange/2020/05/20/boar	製造業單打獨鬥不再受用，童子賢預言：全球產業將出現「新聯盟」

43	13/12/18	Tzu Hsien Tung	https://news.cnyes.com/news/id/4254358	台灣有很多優秀的科技人才，如何透過整合，把科技的進步推向下一個時代，是台灣未來應該共同努力的目標。
44	7/4/16	Chin Yen Kao	https://www.businesstoday.com.tw/article/category/	高董事長是相當感恩的人！因為統一創業時在這裡開戶，給他很多支持，所以他交代所有幹部
45	14/4/16	Chin Yen Kao	https://buzzorange.com/techorange/2016/04/14/story	在《高清愿咖啡時間》一書中，他自述，因幼時出身基層，事事必須配合別人，才因此養成十分規律的生活習慣，之後無論是成家或創業，都依循著這套規律辦事。
46	1/4/16	Chin Yen Kao	https://www.thenewslens.com/article/39360	高清愿對台灣的最大貢獻，是以替代進口的方式轉型台灣經濟。當年以紡織起家，沒有絲毫食品製造經驗，為了不與老東家台南紡織競爭，高清愿因緣際會走入食品業，做起當時幾乎全賴進口的麵粉與飼料
47	21/8/08	Chao Yao Tong	https://blog.xuite.net/envjames/twblog/151720761	今日的成果，要歸功於趙耀東在創辦時奠定的核心價值與踏實精神。
48	11/1/15	Chao Yao Tong	http://blog.udn.com/Horace2007/20120623	他，不畏強權壓迫、不受威脅利誘，人稱「趙鐵頭」。他，直指沈疴弊端、杜絕冗濫浪費，號稱「趙三呆」。 他，直指沈疴弊端、杜絕冗濫浪費，號稱「趙三呆」。
49	8/5/18	Nan Chou Huang	https://csr.cw.com.tw/article/40497	「試想能夠被創辦人選上、帶出團，是何等的榮耀，其他同事知道了，也會更努力，希望下一次被選上，」李吉仁說。對於黃永仁來說，這也是一個就近觀察接班梯隊的機會，利用旅程了解這群人的家庭背景、態度與價值觀。
50	19/10/20	Nan Chou Huang	https://www.gvm.com.tw/article/75154	每次世界性的大震盪，對企業來講都是一個新的起跑點
51	13/10/20	Wang Wen Yuan	https://money.udn.com/money/story/5612/4931807	商業活動幾乎全面停滯，期許政府審慎面對，也應該兼顧防疫要求與經濟發展。儘快適度開放國際商業活動，有限度地鬆綁邊境管制，才能確保產業持續營運，讓台灣度過危機。
52	25/8/20	Wang Wen Yuan	https://www.storm.mg/article/2974309?page=1	蔡練生表示，儘管半導體產業雖屢創佳績，但塑化、鋼鐵、機械產業都呈現衰退，工總建議政府，協助推動整併，因應後疫情時代「小量生產」模式，補強台灣產業價值鏈最弱的二端，增加科技預算強化科技連結，加速推動產業AI數位轉型，並且扶植資通訊產業以外的第二支經濟支柱。
53	12/6/20	Jia Chu Zhang	https://www.epochtimes.com/b5/20/6/12/n12180995	展望今年表現，開發金表示，主要研究機構多保守預估今年的全球經濟增長，除美中第一階段貿易協議的落實程度及後續談判進程等
54	16/4/19	Jia Chu Zhang	https://tw.appledaily.com/property/20190614/7K5(	但張家祝強調，併中壽是很大的計劃，會審慎評估、執行，做出對公司最有利的決定，美中貿易戰等因素都需考量，不可能貿然決定，且評估後會報請主管機關，若有具體變更，會及時跟股東以及社會大眾報告。
55	8/7/17	Jia Chu Zhang	https://www.chinatimes.com/newspapers/20170708	熟識他的開發金高層透露，張家祝一直很在乎股東權益，認為開發金控在資本的利用上有壓力，也就是有其急迫性去化資金，因此從去年底開始推動工銀改制
56	23/1/20	Kuo Wei Zhang	https://tw.news.yahoo.com/%E7%88%B8-%E6%88	「爸，我的新公司今天開航啊」！
57	27/5/20	Kuo Wei Zhang	https://www.setn.com/News.aspx?NewsID=750047	張榮發的老二張國明及老三張國政陣營在商討策略時，曾有人建議和已出走的張國煒聯盟，但張國煒在2016年父親張榮發過世後，依據張榮發的遺囑出任集團總裁，立即被大房三位哥哥掃地出門，並自創星宇航空。
58	17/9/17	Kuo Wei Zhang	https://news.cnyes.com/news/id/3920250	父親張榮發在世時「像活在他的陰影下，但現在覺得非常值得懷念，影響自己的性格養成非常大」

59	25/6/20	Robert Lo	https://tw.appledaily.com/property/20200625/U5Z	市場觀察認為，羅才仁接掌大位後，夫婦兩人作風強勢，「偏偏近年來正新業績明顯退步，今年第一季又大虧，家族成員因此再也按耐不住。」
60	17/6/20	Luo Jye	https://money.udn.com/money/story/5612/4640457	羅結去年3月以高齡95歲辭世，沒想到精心布局超過十年的接班人，竟然短短一年就發生變動。由於羅結的長子羅明和個性不羈、無意接班
61	1/5/19	Luo Jye	https://www.setn.com/News.aspx?NewsID=534863	蔡上機表示，羅家的墓地後背靠山，前有平坡平原，遠方也能看見流水，最遠處又能看到台中市霧峰山區，為絕佳的環境風水，前途發達，尤其東方有流水，稱為「青龍出水」，有利事業興旺、財源滾滾。 而羅結未讓長子接棒，而是交由次子羅才仁接掌，受到全球車市衰退、原物料上漲、匯損等問題衝擊，力拼谷底翻身
62	7/12/12	Andre Koo	https://www.ettoday.net/news/20121207/137078.ht	直到最近中信金找了台塑王家、旺中蔡家購買壹傳媒，專注公益活動的辜仲諒才再度活躍在螢光幕前，以媒體老闆的身份再起。辜家老二辜仲瑩與老三辜仲立，在外也都闖出好成績，大大拓展了中信辜家的事業版圖。
63	17/1/20	Andre Koo	https://www.msn.com/zh-tw/news/national/%E3%8	不只對老婆貼心，辜仲立對老臣部屬也常展現貼心的一面，「我年紀比他大，走在樓梯邊，他總是讓我走在有扶手哪頭。」中實控股董事長黃炳彰笑著說。
64	16/11/15	Andre Koo	https://ec.ltn.com.tw/article/paper/932734	因父親辜濂松喜愛紅酒，從辜仲立成年、到了可以喝酒的年紀，辜濂松就開始訓練、教導他喝紅酒，也讓辜仲立愛上紅酒。
65	7/11/20	Sheng Hsuing Hsu	https://www.ettoday.net/news/20201107/1849329.h	許勝雄強調，第三就是在地化的概念，因為沒有進到經濟體，所以要簽署特別優惠條件，而台積電的能量、條件、人力、技術、創新都有條件，因此前往美國市場投資，從政治．經濟、產業競爭、區塊競爭都是有必要的事情，為了永續發展很合理也很應該要去。
66	11/8/20	Sheng Hsuing Hsu	https://tw.stock.yahoo.com/video/%E4%BB%81%E	許勝雄首度正面回應，他說現在努力塑造好的經營環境，也持續培養幹部，更笑說自己是工作狂不會這麼早退休。
67	7/4/20	Sheng Hsuing Hsu	https://www.chinatimes.com/newspapers/20200407	許勝雄坦言，如果沒有中美貿易戰、如果沒有疫情的變數，在全球化、自由化大者恒大、強者恒強的法則下，沒有任何一個國家能夠與大陸競爭，但是，如今全球化、自由化的輻射放大能量，被疫情「鎖住」，不但無法無限制的擴大，部分產業、供應鏈還因此會被其他國家取而代之，也進一步的讓全球分的體系，在不同的國家產生不同的機會與發展。
68	6/11/20	Yancey Hai	https://www.gvm.com.tw/article/75670	怎麼做到呢？「事實上有個很基本的東西，你氧氣很多，就會覺得很好，就是這麼簡單！」海英俊說。
69	17/9/19	Yancey Hai	https://news.cnyes.com/news/id/4383260	海英俊表示，面對數位轉型趨勢，企業需要一步一步慢慢來，而資料就像是以後的石油，而資料安全與上雲端的儲存空間就顯得相當重要，如果資料儲存不安全，後果恐怕會比無人機攻擊煉油廠更嚴重。
70	6/12/19	Ping Feng Zhen	https://tw.nextmgz.com/realtimenews/news/484932	鄭平分析說，現在技術仍然重要，「但要先知道賣到哪裡，做什麼應用。」不只要有技術，服務能力、設計能力都很重要。
71	16/3/19	Pei Ying Lee	https://www.ettoday.net/news/20190316/1400571.h	然而在他41歲那年，他卻選擇放棄相當重用他的公司IBM，回台工作，不僅薪水還變少了，一家四口還得跟著他從美國大陣仗回台，他笑說，「當時女兒還小，是用籃子提回來的」。
72	30/5/19	Pei Ying Lee	https://news.cnyes.com/news/id/4328705	李培瑛表示，基於尊重法律、客戶與公司營業秘密，不便說明客戶營運資訊，公司也將在法規許可下，包括符合台灣的國貿法、公平交易法、國際反托拉斯法、歐盟隱私法與美國對華為的禁令等，支持客戶，盡力符合客戶需求，以免除法規與營運上的風險。
73	16/5/19	Adam Lin	https://www.ettoday.net/news/20190615/1467934.h	林恩平坦言：「我父親的概念是，家族成員大家都要工作去賺錢，不能只靠股利過生活。」
74	12/6/18	Adam Lin	https://www.mirrormedia.mg/story/20180612fin009	【大立光股東會】股王喊擴夢幻新廠 林恩平：拜託政府協助
75	17/6/20	Ting Li Lin	https://ec.ltn.com.tw/article/breakingnews/3200577	廣達董事長林百里與副董事長梁次震雙雙退出廣明董事會，引發外界聯想，對此，廣明強調，兩人退出董事會早在數個月前就決定

76	16/2/20	Shih Chi He	https://udn.com/news/story/7251/4630229	廣達總經理何世池日前在重大訊息發表會中指出，廣明將維護公司與股東權益，預計另發起一案，將向德州檢察體系舉發惠普證人在法庭作證過程中說謊，研議尋求再上訴。據悉，廣明持續採取「邊打邊談」策略，一邊持續上訴，另一方面也持續與惠普協商。
77	26/10/20	Tsai Eng Ming	https://www.ctwant.com/article/80792	蔡衍明說，他雖然在大陸發展事業，但在年輕時也見證了台灣的經濟發展，「對我來說，台灣跟大陸都是我的家，我現在才知道台灣年輕人是怎麼看我的，說真的那種冤枉跳海都洗不清。
78	14/6/20	Tsai Eng Ming	https://www.chinatimes.com/newspapers/20200614	「台灣人不能被看衰小」
79	13/1/20	Simon Lin	https://www.cw.com.tw/article/5098585?template=t	「成為一名CEO的先決條件是要有熱忱，如果你自己都沒熱忱，別人怎麼跟你熱起來？無論對人、對事或對產業，熱忱都是一樣的，」
80	6/7/20	Simon Lin	https://udn.com/news/story/7253/4681629	林憲銘預估，居家辦公需求在第三季還會延續一些，但不希望延續太久，主因居家工作需求拉長，等於代表消費性市場將大幅衰退，這將影響緯創消費性電子如智慧裝置產品的營運。
81	5/9/19	Chi Mau Sheih	https://money.udn.com/money/story/5649/4029564	業界形容謝繼茂「聰明、做人圓融、沉穩、內斂；處事果決、負責任」。行政院副院長陳其邁出席中華電信活動時，也曾說謝繼茂是「很會做生意的聰明人」
82	27/4/19	Zhen You	https://www.ntdtv.com.tw/b5/20190427/video/2445	「設定的一些目標，都已經算是達成了，不負所托，我覺得對得起自己的良心，所以在這個時候，離開應該是一個最好的時機。」
83	9/12/16	Zhen You	https://www.chinatimes.com/newspapers/20161209	47年來，他最喜歡回到故鄉走走看看，因為這是他人生的起點，為他的幼年教育打下基礎，讓他有信心迎向人生挑戰。
84	19/11/17	Zhen You	https://www.ettoday.net/news/20171119/1055234.h	市場人士預測，從這個月到年底，將可能頻頻出現平台業者（有線電視系統商、中華電信MOD）和頻道業者之間的爭戰，板塊大挪移，電視產業將會非常「熱鬧」，不過消費者收視戶有福了，長期媒體通路壟斷，因此而打破。
85	12/2/18	Lin Yu Jia	https://tw.news.yahoo.com/%E7%99%BE%E5%BC	過去我父親也做了不少建築事業，剛畢業時我就在想，做房地產可能比做工業獲利多，但父親主張我們兄弟都要進台玻，因為他的意志力比我強，所以我只能服從。」
86	20/4/16	Lin Bo Feng	https://www.cw.com.tw/article/5075874?template=t	「我培養嘉宏擔任工總理事，並讓嘉宏、嘉祐擔任工商協進會的青年委員。」
87	9/5/19	Lin Bo Feng	https://tw.appledaily.com/property/20190509/PTC	親身經歷過從早工作到半夜的記者工作，林伯豐相當體諒媒體工作者的辛苦，所以他很阿莎力說：「會盡量滿足媒體的需求」。
88	8/11/20	Lin Bo Feng	https://money.udn.com/money/story/5612/4998980	林伯豐指出，供應鏈重組是著眼於美國與大陸市場的兩種思考，如果要重新組成瞄準美國市場的供應鏈，那台灣企業其實有優勢，而政府應該認真思考，台灣企業的優勢為何，以及具體需求是什麼，這不像進口萊豬由美國說了算。
89	9/6/20	De Ying Liu	https://www.businesstoday.com.tw/article/category/	技術領先還是第一，有了這項利器，全球就會需要你，不管你站在哪邊。這就是我們在國際大國抗衡中的應對方式，找到公司的價值，就是面對世界改變，最好的抵抗力。」
90	30/10/20	De Ying Liu	https://ctee.com.tw/news/tech/360698.html	國際情勢日益緊繃，全球晶圓代工龍頭台積電不僅本業獲利屢創新高，重要的產業地位更被認為是台灣的「護國神山」、「矽屏障」。台積電董事長劉德音指出，台積電之所以成為現在的台積電，其實有五大要素。
91	25/12/19	Bor Yi Huang	https://www.businesstoday.com.tw/article/category/	外表雖然像個普通中年大叔，但只要一開口，邏輯清楚、口條清晰的論述，很快就能抓住眾人目光，這就是黃博怡。
92	2/2/20	Bor Yi Huang	https://money.udn.com/money/story/5613/4317738	據悉，黃博怡相當認可張志堅進入台企銀從基層做起迄今超過35年的資歷，且歷經多個業務單位，與經營團隊合作默契佳，因此也不希望空降破壞和諧，在大選已過，本月上旬張志堅在代理總經理滿三個月之際，即傳出張志堅可望在農曆年假後、最快在本月內獲通過真除。
93	7/11/16	Bor Yi Huang	https://www.chinatimes.com/newspapers/20161107	「捨棄短期追求，成就長期的經營」，黃博怡說，自己對於精神承傳有很深的體會，由於金融的運作來自人們的信任，希望能以金融研訓院作為平台，讓更多銀行家共同落實社會責任，成就國家社稷的長期繁榮。

94	3/4/18	Wu Tian Yu	https://www.chinatimes.com/realtimenews/2018040	吳田玉指出，只要日月光的競爭能力能超越全球其他對手，就算面臨中美貿易、兩岸關係有問題、原材料加價，日月光和全球對手都會受到同樣折磨，但到最後還是看自己多能幹、有多強，看誰的體質強。
95	19/12/13	Chang Shen Cheng	https://www.ettoday.net/news/20131219/308231.ht	台灣封測霸主、中國最吃得開的溫州台商日月光集團董事長張虔生，縱橫商場數十年來，向來靠著豐沛的政商人脈而無往不利，儘管公司常捲入「內線交易」、「利益輸送」的新聞，卻是關關難過關關過，屢屢化險為夷。
96	24/1/17	Chang Shen Cheng	https://www.chinatimes.com/realtimenews/2017012	日月光表示，張虔生及張洪本此次申報贈與鼎固持股，均為單純信託考量，並無任何出售或釋出鼎固持股計畫。經過移轉後，兩人個人名下已無直接的鼎固持股。據了解，此舉節稅效益不大，主要是提前為家族財產進行規畫
97	3/5/19	Wen Bo Lin	https://www.cna.com.tw/news/afe/201905030087.as	林文伯表示，目前為止，矽品業績還能創新高，代表日月光投控運作有效率，日月光投控董事長張虔生決策是對的；張虔生對於投控旗下矽品、環旭電子和日月光半導體同等對待，沒有感受到壓力，是雙贏的結果。
98	12/2/18	Wen Bo Lin	https://www.cmmedia.com.tw/home/articles/8525	「沒想到這世界混亂成這個樣子，連矽品這樣的公司都會被購併」，但若是從世界潮流來看，林文伯心裡似乎比較放的下，他舉例，Avago（安華高）併購LSI，隨後又合併Broadcom（博通），合併完還以博通存續，甚至博通還計畫併購高通，而「高通是IC設計之神」，更提到張忠謀退休後誰主導，「也是很有趣的問題」。
99	6/11/18	Wen Bo Lin	https://tw.appledaily.com/finance/20181106/I2FNB	林文伯指出，聯電是除了台積電之外，台灣最重要的半導體公司，好歹也是擁有好幾萬員工的半導體產業，可是現在卻看到政府沒有任何對策，好像只有一個台積電一樣。
100	4/11/20	Peng Shuang Lang	https://udn.com/news/story/7238/4988778	這次新冠肺炎所帶來的經濟影響和衝擊，可能還會延續數年，全球尋求經濟復甦的態勢不會改變，台灣應善用自己的優勢，把握發展契機的態勢，也不會改變。他強調，疫情造成「逆全球化」的趨勢不會改變，產業發展在面對嚴苛的供應鏈碎片化挑戰，產業供應鏈配合局勢發展，進行適當調整的腳步也不會改變。
101	27/9/20	Peng Shuang Lang	https://ec.ltn.com.tw/article/paper/1402382	彭双浪指出，過去的時代是三百六十行，但現今遠遠超過三萬六千行，產業隨時都有新發展，卻找不到適用的法令或主管機關，產業界對政府將推動的數位發展部抱持高度期待；他點出，數位發展不外乎就是盼能藉由智慧科技，帶給民眾幸福有感的生活。
102	15/10/18	Wang Yong Jing	https://news.tvbs.com.tw/politics/1010359	十年前的今天，從美國紐澤西州傳出王永慶夢中辭世的消息，台塑四寶一天市值蒸發了六百多億，兩岸各界除了緬懷這位台灣經營之神，更不捨的是，台灣從此失去了一步一腳印打造石化王國、用一生證明自己所說「天下沒有容易之事，但也沒有絕對做不到的事」的企業家。
103	18/9/20	Wang Yong Jing	https://turnnewsapp.com/wd/199637.html	事實上，若兩岸發生衝突，美國最近做的一份民調顯示，只有35%美國民眾贊成援助台灣；可想而知，台灣若選擇當美國人的「刺蝟」，「白死」的可能性很大。但若換個角度，台灣跟大陸合作，那就像小蛇跟大蛇過馬路，兩岸好，台灣更好。台灣「經營之神」的「合作的蛇」論，值得我們深思。
104	18/9/19	Wang Yong Jing	https://www.mirrormedia.mg/story/20190917inv019	本刊調查，王永慶因為與李寶珠相戀，意外讓二房楊嬌與大房王月蘭的感情更加親密。李寶珠進到王家，一開始在王永慶的控制下，三個妻子相處還算不錯，李寶珠也曾與婆婆王詹樣合影，後來李寶珠加入照顧婆婆，王永慶帶著母親及李寶珠搬離錦州街的家，住進台塑大樓，二房楊嬌與大房王月蘭互動更加密切。
105	24/6/19	Chen Bo Ting	https://news.ltn.com.tw/news/society/breakingnews/	瑞博國際整合行銷有限公司在2015年6月27日於八仙樂園舉辦「彩色派對」時，發生粉塵爆炸，導致486人傷亡；士檢偵查後認定，引燃火勢主因是電腦高溫所致，無關場地，僅起訴派對主辦人、瑞博實際負責人呂忠吉，陳柏廷等8人均獲不起訴。
106	30/10/20	Wang Ke Jie	https://www.wealth.com.tw/home/articles/28198	「內容台一定要成為電視機中的必備頻道才能生存，誰有版權，誰就有價值、被取代性就低。」王克捷分析
107	3/11/20	Huang Wei Xiang	https://www.chinatimes.com/newspapers/20201103	「台灣中小企業若持續過往的單打獨鬥，難以與大型跨國企業的資源優勢抗衡，企業需要透過結盟合作或透過併購提升經營規模、對企業資源整併進行有效利用或加速創新，或針對產業水平或垂直布局組成艦隊來以因應未來商業生態系的競爭，方能在國際商業舞台上與跨國企業一較高下。」
108	10/1/20	Huang Ri Can	https://meet.bnext.com.tw/articles/view/45967	看清楚後天，今天才不會走錯路
109	22/10/20	Huang Ri Can	https://www.cw.com.tw/article/5102389	「未來十年，是台灣成熟產業和新創合作的關鍵十年，」論壇共同主辦單位、台灣產業創生平台創辦人暨董事長黃日燦表示，過去台灣產業偏向代工思維，擅長看今天，很少產業能前瞻「後天」。
110	18/6/20	Huang Ri Can	https://tw.appledaily.com/property/20200618/37TN	黃日燦指出，納智捷品牌初期確實有一些成績，很可惜最後差那麼一點，但去年經過策略調整後，未來採取開放平台模式，與鴻海的合作可以期待，需要外界給予更多鼓勵。

111	11/8/20	Shen Shang Hong	https://www.cmmedia.com.tw/home/articles/22859	「電線電纜本來是很生硬的東西，我們應該在生硬的銅上面加上人文的東西。」
112	30/8/19	Shen Shang Hong	https://tw.news.yahoo.com/%E5%8F%B0%E7%81	未來電子醫療部分，在醫療照護器材及輔具方面也走向電子化及資通訊的路，讓肢體障礙的扶助及慢性病、高齡居家照顧更方便安全。此外，晶祈生技也以電子神經界面進行技術創新，以仿生視網膜讓因視網膜失明的人可重拾光明，如同電子眼一樣，相信可以大大造福人類。
113	13/8/18	Ma Zhi Ling	https://money.udn.com/money/story/5648/3973635	即便馬志玲已失智、失能而長期臥病，但在女兒馬維欣的心目中，他永遠都是那個白手起家，一切靠自己的「頂天立地」企業家。
114	7/8/20	Kuo Ming Zhen	https://www.gvm.com.tw/article/74077	「明知道小孩打了藥後會很痛苦，小孩有多怕到醫院去！我卻必須硬著心腸，把小孩送去給人折磨，你知道身為一個爸爸有多心痛嗎？」
115	20/6/19	Hong Jing Yang	https://www.ettoday.net/news/20190620/1471909.h	法人表示，洪進揚續任董座，打破前董座王志超回鍋掌舵的傳言。人稱「超哥」的王志超是征戰面板業30年的老將，除了催生奇美電五代廠，更促成2009年底群創與奇美電合併。
116	20/6/18	Hong Jing Yang	https://ec.ltn.com.tw/article/breakingnews/2463517	王志超說，這一路走來關關難過關關過，面板產業有許多甘苦，因為時間上排不出來，對股東與同仁不太公平，因此，請辭由洪進揚接手，小股東質疑群創股價太低，這重責大任就要交給洪進揚，未來將由洪進揚以及技術副總丁景隆、總經理蕭志宏這鐵三角，繼續為群創打拼。
117	16/12/19	Hong Jing Yang	https://udn.com/news/story/7240/4230401	他說，面對產業嚴峻考驗及國際詭譎多變情勢下，將帶領顯示器產業完整的供應鏈協助政府智能創新發展政策，加強整合上、中、下游供應鏈力量，共同發展先進技術及新興應用產品，以提升產業價值及國際競爭力，發揮台灣在全球平面顯示器產業的關鍵影響力。
118	30/7/20	Lin Wen Li	https://tw.appledaily.com/local/20200730/NYRT2F	其中林文理還供出，黃伯川曾親口對他說：「廖燦昌董事長有來關心這個案子，希望幫遠航公司能增貸多一點」，因此把遠航的核貸金額調高，並要求經辦人孫玉美在一周內馬上做出核貸。
119	9/7/20	Jensen Huang	https://www.businessweekly.com.tw/business/blog/	不要浪費才能在別人已經做得夠好的事
120	24/6/19	Jensen Huang	https://www.chinatimes.com/newspapers/20190624	你對晶圓代工的遠見，雙贏的長期夥伴哲學，以及「跳火圈」般的卓越執行力，如此的領導精神讓台積電成為所有客戶都能倚賴的基石。你用一生心血成就了今日的台積電，它是一個卓越、極具重要性的企業，廣受產業、夥伴、及競爭者所景仰，也是國家的驕傲，藝術的呈現。我珍惜我倆之間美好的回憶，那些不可思議的旅程以及偶爾的威士忌談心，與你共事是我職涯中最棒的回憶之一。
121	10/9/20	Zhang Qian Sheng	https://ec.ltn.com.tw/article/breakingnews/3287245	張虔生認為，創新可以帶來進步，利用人工智慧、大數據與雲端科技，讓工廠本身能夠具有思考、偵測、學習與調整的異質整合能力，為客戶爭取產品上市時間，提供卓越的產品品質，具備跟客戶產品設計端整合的能力，才是實現數位轉型。
122	30/4/18	Zhang Qian Sheng	https://ec.ltn.com.tw/article/paper/1196441	1984年，張虔生看好台灣半導體業發展，在「張媽媽」支持下，南下高雄楠梓創立日月光半導體的封測廠，不了解IC的「張媽媽」跟著兒子轉戰高科技業，當時60歲的她，每天坐鎮工廠，在生產線一站一站學起，住廠3年，為日月光後來稱霸封測產業奠定紮實基礎。
123	29/1/14	Zhang Qian Sheng	https://www.ettoday.net/news/20140129/321134.ht	高雄地檢署調查高層通聯紀錄和查扣相關資料，月初宣布偵結，認為K7廠排放有害廢水、汙泥，張虔生對此並「不知情」，也沒有指示排放，因此做出不起訴，但起訴蘇炳碩、廢水組主任蔡奇勳、工程師何登陽、劉威呈及游志賢等5人。
124	8/7/20	Tong Zi Xian	https://tw.stock.yahoo.com/video/%E7%A0%B4%E	「那年輕一代呢，如果只願意非常地溫馴，非常地服從，那我反而會很擔心說，我們的下一代，其實不會有創造力，如果不會有創造力，你面對新型態的網路經濟、新型態的國際競賽，你就會繼續淪為被動的一種經濟型態，你會走不出去。」
125	10/7/20	Tong Zi Xian	https://tw.news.yahoo.com/%E4%B8%8D-%E6%A	童子賢：「是一種很珍貴的，一種幸福的機會，要好好地掌握，那有一天到了都市，我的學長，台北工專的學長吳清友，奇怪都是念工專的，怎麼開起書店來了。那他跟我提起很多構想，那也擄獲我的心，從外面看說是獲得我的支持，但是我也覺得很幸運，何其幸運這個社會裡面有人念工程出身，但是他不被工程的領域所拘泥。他發現這個社會缺少一些東西，他願意去開創，所以台灣社會有了還滿美好的誠
126	5/6/20	Tong Zi Xian	https://tw.stock.yahoo.com/video/%E5%92%8C%E	員工是企業最重要的資產，若不是傷筋挫骨，都不該隨意裁員或放無薪假。他也觀察到世界的製造方式與社會互動，都將因為疫情而加速改變，疫情將對產業與社會制度造成什麼後果？
127	20/6/20	Chen Rong Hua	https://www.businesstoday.com.tw/article/category/	今年資本市場經營權之爭，可說是高潮迭起，一波未平 一波又起！繼友訊之爭，市場派的台鋼集團謝裕民輕鬆打敗公司派的胡雪後，這兩天爆出冷門的是正新輪胎，董事長羅才仁被他的姐夫陳榮華拉下馬，家族成員爭奪經營權掀上枱面。

128	12/11/20	Bruce Cheng	https://technews.tw/2020/11/12/bruce-cheng-chung-l	也因此有機會和劉校長有更多互動，許多餐敘和活動他總是妙語如珠，表現出深厚的人文素養，經常讓身為理工學弟的我，感到望塵莫及。我們共同參與的成大電機系友會，劉炯朗學長對老師及師母體貼照顧，即使他在國際獲得傑出學術成就，但與系友見面時，卻仍維持一貫謙遜與幽默的態度，讓大家如沐春風。
129	3/5/18	Bruce Cheng	https://fnc.ebc.net.tw/fncnews/politics/36168	鄭崇華直言，「我敢打賭，後面不用核四，是不行的」。對於封存核四，他認為，這是非常Stupid的，這會害死台灣的老百姓，讓台灣工業搞不起來，沒有電誰會來投資？
130	25/2/17	Bruce Cheng	https://www.chinatimes.com/newspapers/20170225	科大範圍則針對自動化學程內容設計課程、教材，帶動學生學習動機，提升學習成效，強化學生在工業自動化領域的專業實力，未來能學用合一，厚植台灣競爭力。
131	15/11/20	Du Shu Wu	https://ctee.com.tw/people/snapshot/367827.html	「真正的工程師是廢寢忘食的。」杜書伍為了推廣電腦，白天不僅當工程師兼業務、四處拜訪客戶，晚上10點回家後還挑燈夜戰，研究技術、編輯雜誌，隔天7點再早起上班。如此7、8年，他每天只睡5小時，體重從65公斤暴瘦到56公斤。有次設計農會豬隻拍賣系統的專案，他夜夜通宵趕工，儘管三天睡不到5個小時，他也甘之如飴。
132	6/3/12	Du Shu Wu	https://www.cw.com.tw/article/5030891	我講個平常最容易犯的錯誤。剛開始，聯強找通路業務，因為市場沒有這方面經驗的人，所以找資質好的人重新訓練。你沒有想到，他讀書很好，邏輯很強，但不食人間煙火，他不願意去了解實務，那你就失敗了。
133	19/7/18	Du Shu Wu	https://www.cw.com.tw/article/5091151?template=t	創新其實不難！聯強總裁杜書伍：就是不斷地做「加減乘除」
134	4/3/20	Wu Dong Liang	https://www.mirrormedia.mg/story/20200303fin004	意圖挑戰吳東亮的寶佳，曾表態挑選入主金控的3項條件，分別是有賺錢、股價在淨值以下，以及「董事長年紀已長，兒子不願意接班。」會看上台新金就是因為吳東亮的一雙兒子接班意願不高。
135	17/6/20	Wu Dong Liang	https://www.fountmedia.io/article/61065	彰銀董事改選在即，外傳面對公股陣營來勢洶洶，台新金董事長吳東亮也不是省油的燈，正低調布局多搶1席，有外界認為，哥哥吳東進帶領的新光金也有難解課題，但兩人「公司治理」卻差很大
136	15/1/20	Wu Dong Liang	https://money.udn.com/money/story/5648/4290375	董事會歷練，讓吳東亮學會從宏觀角度看事情。如今，35歲的吳昕豪，循著爺爺栽培父親模式，從董事做起、即將進入董事會接班歷練，開啟人生的新篇章。
137	13/10/20	Cheng Mei Ling	https://ctee.com.tw/news/finance/360838.html	而倘若一銀總經理鄭美玲內升，由於她是一銀基層出身，且主掌包括國外、授信、財務等多部門業務，因此不論是專業度或是對一銀本身的了解，均為其強項。決策高層在人選最後如何決定，最快今日見分曉。
138	11/6/19	Cheng Mei Ling	https://www.cmmedia.com.tw/home/articles/16026	曾經擔任荷商安智銀行台灣總經理、國泰世華柬埔寨子行董事長的梁敬思則在臉書上感嘆，「這年頭的公股行庫董事長或總經理可真不好當」，碰到高層指示的燙手山芋放款案若拍馬屁迅速通過，擔心未來幾年出事可能吃不了兜著走；但若秉持專業不配合，烏紗帽可能就此難保。
139	25/8/20	Tsai Ming Zhi	https://tw.stock.yahoo.com/video/%E7%96%AB%E	講話不疾不徐，搭配沉穩穿著，這是金融業許多大老闆的風格，但仔細觀察股東會上的富邦金控董事長蔡明興，豹紋眼鏡框卻透露出巧思，而他的哥哥，台灣大哥大董事長蔡明忠也在一旁陪著，兩人合作無間，共同面對未知的疫情。
140	17/5/20	Tsai Ming Zhi	https://money.udn.com/money/story/5613/4569295	蔡明興同樣也認為2020年全球景氣放緩與金融市場不確定風險，可能壓抑民間消費成長力道，不過他樂觀認為美中貿易衝突將持續為台灣電子業出口帶來轉單效益，刺激企業提高在台產能配置，且台商回台投資效益持續發酵，風電與5G布建陸續進行，有助延續國內固定投資增長，出口及企業投資兩大關鍵動能仍將支持台灣今年經濟維持穩定擴張。
141	2/2/17	Zhang An Ping	taiwannews.com.tw/en/news/3086243	"TCC is a listed company, I have 40 years experience in the cement industry as a professional manager, since the board elected me as chairman, I will hold this position for a long time." When asked about the succession arrangements for next generation of Koo family members, Chang said:" We will talk about that later! "
142	17/11/20	Zhang An Ping	https://finance.ettoday.net/news/1856558?redirect=	張安平反思，大自然改變了嗎？氣候改變了嗎？以往的科學以及經濟發展的成功造成了問題嗎？我們鼓勵發展，鼓勵科技進步而忽略了人的生活嗎？也忽略了因為發展所帶來的社會責任嗎？
143	21/8/20	Zhang An Ping	https://www.storm.mg/article/2963318	「包括幫花蓮處理垃圾、包括DAKA（太魯閣族語瞭望之意）的成立，對台泥來說都不賺錢。但為什麼要做，我希望對社會國家有責任。台泥不停把最新科技拿來運用，針對垃圾處理有相當多事情要做，這只是第一步。」
144	19/4/19	Zhang An Ping	https://www.chinatimes.com/realtimenews/2019041	希望能在人類文明發展史上具如此重要意義的城市貢獻一份心力。張安平並表示，雲朗如伕再拓新點，核心價值將建立在「your place in history」。
145	25/8/20	Xu Peng	https://ctee.com.tw/news/finance/323959.html	企業擴大營運，定期增資是很正常的現象，經常需要增資，先決條件是要在投資人心目中贏得相信，即企業要能順利擴展，每年都能穩定發放股利，這是循環，即企業要經營得好、經營得獲利，才能建立信心，籌資才會很容易，這是新光金控未來很大的挑戰。
146	10/12/15	Xu Peng	https://news.ltn.com.tw/news/politics/breakingnews/	林創辦人過世實在是非常令人感傷，如此熱愛台灣的人離開，也希望《自由時報》能在各個面向，繼續落實創辦人「愛台灣」的理念。
147	20/6/20	Eugene Wu	https://www.taipeitimes.com/News/biz/archives/202	"I just do not want to be like my father, who died of sudden cardiac arrest in the office. He faced heavy psychological and physical pressure 34 years ago, when the economy entered a recession," Wu said."There is no rule that we must die on the battlefield," he added.
148	13/11/20	Eugene Wu	https://money.udn.com/money/story/5613/5012851	除了鼓勵企業同仁及社會大眾以實際行動陪關懷並伴長者，同時邀請長輩一起學習摺製小提燈，增添長者生活樂趣。每年也會看到許多老頑童們「現學現賣」，看到自己親手完成的燈籠成品，成就感十足，讓同仁們都沉浸在滿滿的幸福喜悅中。

149	29/6/20	Eugene Wu	https://ctee.com.tw/people/interview/292521.html	「沒有人規定將士一定要戰死沙場，我不想跟爸爸一樣」，新光金股東會每年都在新光南京大樓舉行，而新光集團創辦人吳火獅34年前就在股東會場下一層樓的辦公室裡猝逝，吳東進說當時也很不景氣，吳火獅身體、精神都承受很大壓力，才突然離世
150	31/7/19	Eugene Wu	https://www.mirrormedia.mg/story/20190730fin002	吳家親友透露：「7月初董事會上，老大眼見董座之位無望，想說拿副董事長也好，結果沒成功，後來決定改派Cynthia（吳東進長女吳欣盈）進來當董事。」
151	9/5/19	Lin Yu Jia	https://tw.appledaily.com/property/20190509/PTC	「信守承諾、看到未來的投資先機、工作認真，不只是上下班而已，24小時都在工作，半夜想到什麼馬上起床做筆記」。
152	25/11/16	Lin Bo Feng	https://magazine.chinatimes.com/change/201702130(	父親淡淡問他『你將來是要坐辦公室?還是像現在這樣去做工人?你自己選擇吧！』『那時候我深刻體會，日出而作、日入而息，真的不是我喜歡的生活』。
153	9/3/20	Andre Koo	https://www.forbes.com/sites/pamelaambler/2020/0	“We’re very good at finding niche markets,” says Koo, 52, who owns a controlling stake in Chailease and is one of its executive directors. “We are very confident we can manage the risk profiles for those markets very well.”
154	14/6/13	Andre Koo	https://www.taipeitimes.com/News/biz/archives/201	“It is time I vacate the chairmanship to give the other Chailease [Holding] executives more room to steer the company,” the 45-year-old Andre Koo said, calling the move “unprecedented” since Taiwanese businesspeople tend to hold on to top management positions until their 60s or 70s, or beyond.
155	21/8/20	Rock Hsu	https://www.taipeitimes.com/News/front/archives/2	He also said that both sides must achieve consensus to arrive at a long-term solution and should endeavor to work toward a mutually beneficial working relationship.
156	18/11/20	Rock Hsu	https://ec.ltn.com.tw/article/breakingnews/3355213	許勝雄建議，政府必須積極接洽其他經貿國家或大的經濟體簽訂CPTPP或個別FTA，如果可以簽訂下來，就會吸引企業在台投資；倘若相關貿易優惠協定沒有辦法簽定的話，企業就改去全球布局，台灣就業機會不增加、所得不增加，消費也不會增加，可能陷入惡性循環。
157	11/8/20	Rock Hsu	https://tw.stock.yahoo.com/video/%E4%BB%81%E	仁寶接班計畫？ 董座許勝雄：我是工作狂不會早退休
158	26/10/20	Terry Gou	https://www.mirrormedia.mg/story/20201026fin007	「就鴻海公司的政策而言，我們通常不對市場臆測發表評論，但我們可以肯定地說，關於工作小組的任何揣測，均非基於事實，我們沒有召開會議，或有任何接觸，鴻海的管理團隊也沒有採取其他特殊措施。
159	14/9/18	Morris Chang	https://www.taiwannews.com.tw/en/news/3529894	Chang also said competitors around the world will always try to challenge TSMC’s dominant position in the semiconductor industry, but he believed that the company will “continue to overcome various challenges, perform miracles once again, and make the largest contributions it can to our homeland” with the leadership of the new chairman and CEO.
160	6/4/20	Morris Chang	https://tw.asiatatler.com/society/%E5%BC%B5%E5	「很多人問我會不會擔心，但其實在那個當下，你的精神跟思維是跟災情混在一起的；比如高雄氣爆現場都還有（瓦斯）味道，花蓮可能還在地震，你不會想到自己的安危。如果是自己的小孩或是先生，我絕對不會要他們去，而且別人去我不放心，我要自己感受到那個現場狀況，才知道我做的決定是對還是錯。」
161	26/9/19	Simon Lin	https://news.cnyes.com/news/id/4208060	黃柏溥以房屋作比喻，以前企業好像找人、訓練，好像住透天厝，自己建造一棟新房屋，別人怎樣與我們無關，但是 GOLF 像是集合式住宅，甚至可以 open house，互相交流可以讓大家更為進步。
162	1/9/16	Shui Kuang Shi	https://www.taipeitimes.com/News/front/archives/2	“As the compliance failure took place during my term as Mega Bank president, my role to help is discredited with my supervisors also questioned,” Shiu said in his resignation letter.
163	1/9/16	Shui Kuang Shi	https://news.pts.org.tw/article/333464	兆豐犯了申報方面的問題 但是被渲染成洗錢的事情 實際上是不正確的 我們兆豐同仁會繼續努力 會把這些澄清能夠真相大白 還兆豐同仁一個清白
164	22/5/08	Robert T Huang	http://news.sina.com/sinaus/104-000-000-000/2008-	業界談到新聚思，立刻聯想到的就是它的靈魂人物黃德慈，而新聚思的踏實文化也著實反應著黃德慈的性格，“我們就是靠『實戰經驗』。”黃德慈這四個字道出一步一腳印的”70億旅程”，“要把通路做好，要做到一萬分之一(Basis Point)的管理。”顯然地，Synnex做到了。

165	24/6/10	Robert T Huang	https://www.businesswire.com/news/home/2010062	“It has been an honor and a privilege to serve this great company over the past 30 years. This is an outstanding organization. No company is more committed to serving its vendors, customers, employees and stockholders. Even though I will retire from the Board, I look forward to contributing to SYNNEX in other positive ways. I wish Dwight, Kevin and all the employees of SYNNEX the best of success.”
166	21/5/20	Chih Hsien Lo	https://www.cw.com.tw/article/5100384?template=t	全天候生活產業，永遠沒有最好、不會飽和
167	24/6/20	Chih Hsien Lo	https://tw.appledaily.com/property/20200624/XLV	我們跟全家不一樣，在做很多事情都有差別，「他們有他們的優點，我們也有我們的強項」，雙方都是各自發展，沒有要跟誰比。
168	7/7/19	Chih Hsien Lo	https://www.inside.com.tw/article/16825-uni-presid	羅智先表示，現在消費習慣和型態正在轉型，不能再用過去五十年的既有方法去思考。如果不改變組織，大家的思考模式就不會改變。尤其明年開始，除了台灣之外，全亞洲都會變成一個自由貿易區，要如何調度貨物成為一大課題。統一現在所做的，是為未來五十年布局規畫。
169	2/10/19	Chih Hsien Lo	https://finance.ettoday.net/news/1547923?redirect=	統一集團近年積極發展美麗事業，由董事長羅智先的夫人高秀玲擔任董座，親自督軍康是美、統一夢時代百貨等事業體；據了解，高秀玲不僅坐陣百貨的內訓課程，羅智先董事長為了體驗美麗經濟，也在太座建議下養成每晚敷面膜的習慣。
170	22/6/17	Chih Hsien Lo	https://finance.ettoday.net/news/950063?redirect=1	「公司發展到一定規模，就要從價值的角度去思考。」統一過去花了很多時間在做調整，到現在可說是告一段落，「現在還留下來的品牌，未來都要持續強化。」
171	15/11/20	Bruce Cheng	https://money.udn.com/money/story/5612/5016929	鄭崇華強調，我們長期受惠於台大所培育出來的優異人才，能在社會各個領域做出傑出的貢獻，在台達的台大校友表現也都十分傑出。事實上，我們跟台大早在數十年前就開始有許多深入的合作，例如曾經透過基金會，與機械系合作開發太陽能車以及電動車的計畫，在當時這是非常前端的創新題材，因此不但獲得許多寶貴的經驗，也吸收了許多參與計畫的優秀人才，讓我們後來在再生能源領域和電動車領域
172	16/8/20	Bruce Cheng	https://ctee.com.tw/people/snapshot/319062.html	鄭崇華、鄭平雖然是父子，鄭平在台達電內的領導風格、做事方法，與父親鄭崇華大不相同。工程師出身的鄭崇華，對技術十分熱衷、對新的產品與技術趨勢很敏銳，很多事都是先做再說，相較之下，鄭平非技術出身，做決策之前必定多方諮詢，也會請外部的管理顧問公司幫忙。
173	23/3/18	Ping Cheng	https://www.cw.com.tw/article/5088862	我不會變成天花板，不用都聽我的
174	3/5/18	Ping Cheng	https://www.cmmedia.com.tw/home/articles/9714	從那時候開始，鄭平不僅是台達電大股東而已，他還身兼台達電董事以及執行長三重身份，不過就在鄭平正式接班後，一向是外資寵兒的台達電開始飽嘗外資賣股之苦，從去年5月開始外資一路大賣，如今股價跌至五年新低，甚至面臨百元保衛戰。
175	5/2/19	Bruce Cheng	https://tw.nextmgz.com/realtimenews/news/484930	在鄭崇華宣布退休鄭平接棒後，她不再參與董事會討論。但做為母親，不可能不關心兒子發展。謝逸英是丈夫鄭崇華、兒子鄭平、鄭安和弟弟謝深彥背後，最有影響力、最強大的力量，台達電辦公室裡那間神秘辦公室，只要謝逸英在裡面，自有其安定人心的力量。
176	11/11/20	Wang Wen Yuan	https://tw.news.yahoo.com/%E7%8E%8B%E6%96	工總理事長王文淵出席與會，致詞時表示，穩定的兩岸關係才能有利工業發展。
177	5/6/20	Wang Wen Yuan	https://www.chinatimes.com/realtimenews/2020060	他說當然也有一些廠商會受到好處，台化也有部分產品受益，但對整個台化還是受到影響，防疫生活會變成新常態，所以也存在新商機，台化要做的就是在未來幾年想辦法捉到新商機、強化自身的能力控制市佔率，目前看到的新商機主軸圍繞著居家辦公趨勢，帶動小家電需求，另外，還有就是防疫產品當然還是最重要，永久性的防疫，類似呼吸器等，也是可以關注的市場趨勢。
178	20/8/17	Richard Chang	https://news.cnyes.com/news/id/3898220	每個人的職涯或人生，都不會是一路順遂，遇到挫敗、難關、逆境是在所難免的。用球場來看最清楚，當你遇到一個強隊做為你的對手，每次防守都很吃力，每次得分都很費力，覺得自己怎麼打都打不贏，當你好不容易打贏的那一天，代表什麼？
179	21/5/15	Richard Chang	https://www.managertoday.com.tw/articles/view/50	「你說公司待遇好，到底好不好？員工都在看你做不做得到。」張嗣漢強調，員工工作就是為了養家、賺錢，當然也有人喜歡公司的環境，但待遇是許多人最為關心的事。
180	18/7/17	Richard Chang	https://www.cw.com.tw/article/5083927?template=t	人生如球賽，最好的教練就是自己

181	6/9/12	Yeh Kuo Yi	taipeitimes.com/News/taiwan/archives/2012/09/06/2	Prosecutors said that since Yeh had admitted to the misconduct and agreed to return 22 residences to the city government within six months, they had decided to grant him and other defendants suspended indictments.
182	12/6/20	Yeh Kuo Yi	https://money.udn.com/money/story/5612/4631004	英業達股東會 葉國一兒子正式進董事會
183	20/7/20	Zhuo Tong Hua	https://money.udn.com/money/story/5649/4714244	英業達董事長卓桐華認為，賺錢是企業的使命，但「偉大的企業」則要善盡企業社會責任，英業達的主管，都在努力盡企業社會責任，讓英業達邁向「偉大的企業」。
184	11/1/19	Zhuo Tong Hua	https://finance.ettoday.net/news/1354433?redirect=	接班才短短一年半時間，卓桐華帶領英業達締造兩次的全年營運高峰，在經營管理上有什麼心法？卓桐華用很生意人的口吻說「這沒什麼，有賺錢最重要」。但他也透露，關鍵是把士氣帶起來。
185	16/1/19	Zhuo Tong Hua	https://www.bnext.com.tw/article/51939/inventec-2(	今年保守估與去年持平，因為「今年是變化的一年」，他以一個字形容是「易」，衍生出「變易」、「不易」、「簡易」三大方向。
186	18/3/20	Chang Yung-fa	https://www.taiwannews.com.tw/en/news/3899456	According to the will, made Dec. 16, 2014, Chang Kuo-wei will be the sole inheritor of his father’s money, shares, and private property. The court decision can be appealed.
187	20/1/16	Chang Yung-fa	https://www.joc.com/maritime-news/container-lines/	No successor was named for Mr. Chang, who was surrounded by a close circle of top executives."All companies of Evergreen Group are run by professional management teams and maintain normal operations. There are no management changes or issues of succession," the company said in a statement.
188	3/7/13	Chang Yung-fa	https://www.forbes.com/sites/ralphjennings/2013/07	Credit his mother for raising Chang to be honest and ethical, as the Evergreen Group's publicity office tells the story. It was good preparation for some tough years: His father, who also worked in marine shipping, died when Chang was 18, leaving him and his mother to care for two brothers and two sisters. Chang's wife would later sway him to consider good deeds to secure a spot in the afterlife.
189	22/2/16	Chang Kuo Wei	https://www.joc.com/maritime-news/container-lines/	Evergreen Group will have no chairman following the death of company founder Chang Yung-fa, but will appoint senior executives for each of the company’s subsidiaries, according to published reports in Taiwan.One of the sons, Chang Kuo-wei, the chairman of EVA Air, had stated in an internal announcement last week that he was to inherit the fortune of his father and would succeed him as chairman of the group.
190	12/3/16	Chang Kuo Wei	https://news.ltn.com.tw/news/focus/breakingnews/1(	In a statement issued through his lawyer, Chang Kuo-wei raised concerns about possible disruption to the airline’s operation following a sudden change in leadership.He also questioned whether the process conforms to procedural compliance, according to the statement.