

N° TSE-484

April 2014

"The Cost of Political Tension: An Anatomy"

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Abstract

The paper examines how increased political tension affects stock returns and identifies the channels through which this occurs. Focusing on Taiwan's sovereign debate, we find that non-violent events harming the political relationship with mainland China are associated with an average daily drop of 200 basis points in Taiwanese stock returns. Expectations of mild tension also adversely affect stock returns. The impact is stronger on firms located close to potential conflict zones and on Taiwanese firms openly supporting the pro-independence party. The adverse effect on political opponents concentrates on those firms economically exposed to mainland China through either investments or exports.

JEL classification: F51, G14, G15

Keywords: political tension, political connections, China, Taiwan

Acknowledgements: We are grateful for valuable comments from Augustin Landier, Harminder Singh, Shang-Jin Wei, Qing Xia and participants at seminars at Toulouse School of Economics, University of Iceland, the 21th SFM conference in Taiwan, 2013 World Finance & Banking symposium in Beijing and 2013 Econometric Society China Meeting.

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1 Introduction

While it has been documented that physical violence in political disputes can negatively impact asset prices (e.g. Abadie and Gardeazabal, 2003; Zussman and Zussman, 2006; Besley and Mueller, 2012), other cost factors of political tension have largely been left unexplored. This paper studies the non-violent, but highly tense, conflict between China and Taiwan to identify the cost of political tension that can be attributed to the use of political power or economic pressure. The study further merges with research on the value of political connections (e.g. Fisman, 2001; Faccio, 2006) by demonstrating that the cost of conflict is partly attributable to economic and strategic targeting of political opponents.

To elaborate, the paper examines how increased political tension in Taiwan's sovereignty debate has affected stock returns using two different data sources. First, major political events are recorded back to 1995 and constitute the basis of an economic event study. Despite none of the events having led to direct physical confrontation or violent actions, the results show that on average Taiwanese stock returns fall by 400 basis points in the course of two days (announcement date and the following trading day), which translates into an average 200 basis point drop in daily returns. Moreover, the adverse effect is long-lasting and suggests a real economic impact of political tension. Second, the analysis also employs survey data available since 2006, where the Taiwanese public is asked about their short-term expectations on political tension with mainland China. This analysis yields consistent results, where months of increased expected political tension are associated with lower average stock returns. The two different methodological approaches also indicate that the negative impact of political tension extends to Chinese stock returns, where the impact is less severe, consistent with the mainland's military and economic strength vis-à-vis the island of Taiwan.

The paper is also among the first to explore the channels through which political tension affects stock returns. The results suggest a credible risk of war since firms located relatively close to potential conflict zones experience a larger drop in stock returns when tension rises. Of primary interest, however, the paper additionally reveals that the cost of political tension also stems from economic pressures targeted at selective companies.

Specifically, as the main political debate in the cross-strait relationship centers on the issue of Taiwan independence, we study the impact of political tension on firms associated with either of the two opposing political axis in Taiwan. Using a unique, hand-collected dataset on political connections, the paper uncovers a differential stock price reaction, where Taiwanese firms politically connected to the pro-independence coalition ('anti-China' firms) are more negatively affected than firms publicly supporting a Chinese national identity ('pro-China' firms). Evidence shows that Taiwanese firms labeled as 'unfriendly' to mainland China are particularly targeted in times of political distress. Further analysis shows that these economic pressures on political opponents concentrate on those with high mainland exposure through either exports or investment. Additionally, as there is no evidence that firms offering brand-name consumer-products to mainland China are more vulnerable to political tension compared to others, the economic pressures are not likely to be driven by Chinese consumers, but rather by a politically strategic government response.

The paper differs in three aspects from other conflict-specific case studies on political instability and asset price reactions. First, existing studies mostly focus on armed conflicts, such as World War II (Frey and Kucher, 1999; Waldenström and Frey, 2006), the war in Iraq (Amihud and Wohl, 2004; Rigobon and Sack, 2005; Wolfers and Zitzewitz, 2009), the Northern-Ireland conflict (Besley and Muller, 2012), the Basque conflict in Spain (Abadie and Gardeazabal, 2003), the civil war in Angola (Guidolin and Ferrara, 2007), the Palestinian-Israeli conflict (Zussman and Zussman, 2006; Zussman, Zussman and Nielsen, 2007; Jaeger and Paserman, 2008), etc. In contrast, our two measures of political tension – obtained from historic events and survey data – do not cover periods of physical confrontation. Instead, the events include relatively 'softer' acts (such as speeches or statements by political figures) and the surveys capture expected political tension, which offers a relatively subtle measure of the public's political sentiment.\(^1\) Our paper most closely relates to work by Fisman, Hamao and Wang (Forthcoming) examining the market

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¹ This also differs from e.g. Berkman, Jacobsen and Lee (2011), who despite including (but not limiting themselves to) non-violent events, focus on selective and extreme disaster risk. Additionally, rather than studying effects on asset prices, a related literature examines the impact of military hostility and mistrust on international trade (e.g. Martin, Mayer and Thoenig, 2008; Guiso, Sapienza and Zingales, 2009; Glick and Taylor, 2010).

reaction to increased cultural aversion in the Sino-Japanese relation. Similar to their approach, our study focuses on the financial impact of a shift in the general political climate, which offers broad implications as the majority of international political conflicts do not escalate into direct violence.

Second, by measuring political tension by both historic events and public opinion surveys, this paper is the first to capture and compare the effects of both realized/current and expected/future political instability. This differs from e.g. Fisman, Hamao and Wang (Forthcoming) who focus on two long-lasting and stormy episodes of political tension between China and Japan. Our results not only show that distress events strongly affect stock returns (200 basis point average daily drop), but expectations on future tension are similarly associated with a statistically significant and economically relevant decline in stock returns (approx. 25 basis points). Moreover, as the 2006-2011 survey data covers a period where no major adverse events are recorded, the results imply that political tension is costly at all times, rather than merely being limited to times of concrete conflict or immediate crisis.

Lastly, the paper contributes by exploring the mechanism through which political tension ends up being costly, showing that both risk of war and economic pressure are at play. This is made possible by examining the heterogeneous effects on firms across political connections, geographical locations and their degree of economic linkage with China. As described above, evidence shows that the price of political tension originates not only from the threat of military action, but also from economic pressures primarily targeting companies with mainland exposure and considered hostile towards the Chinese authorities. These results are consistent with anecdotal evidence and empirically verify that the political tactics utilized by mainland China align with historical threats made by Chinese officials. To exemplify this, the Taiwan Affairs Office – a Chinese agency responsible for setting and implementing policies related to Taiwan – stated in 2004 that Beijing does not welcome any Taiwanese business people who "make money in the mainland and then go back to the island to support Taiwan independence" (China Daily, 2004; Taipei Times, 2004).

Overall, this paper relates to several highly tense political confrontations arising worldwide, such as the Falkland Islands sovereignty conflict, U.S.A.'s embargo on Cuba,

Russia-Ukraine gas dispute, Bolivia-Chile sea access debate, strained Sino-Japanese relations, China-Vietnam territorial and oil rights disputes, etc. - all of which are characterized by high tension but no ongoing day-to-day physical confrontation. This paper offers insights into the financial costs – and the channels through which they occur – of such non-violent political disputes. Moreover, the results are of wider interest considering China's growing economic influence and their increasing potential of imposing costly economic restrictions. A recent example includes the conferral of the 2010 Norwegian Nobel Peace Prize to the Chinese human-rights activist Liu Xiaobo, which was not only met with harsh criticism by the Chinese authorities, but also precipitated harsh economic consequences. Specifically, China suspended all on-going talks on a free-trade agreement with Norway, imposed additional import controls and sudden restrictions on shipment entries – leading to a 62% drop in sales of the Norway's famed salmon to China.² The findings of this paper are consistent with such examples, as shifts in the political climate in the Taiwan-China cross-strait relationship not only impact average Taiwanese stock returns, but particularly affect those firms associated with the 'undesirable views' of the pro-independence party.

The paper proceeds with a brief description of the cross-strait relationship (section 2.1), followed by an introduction to the data (2.2), the measures of political tension (2.3), the classification of both geographical conflict zones (2.4) and political connections of firms (2.5) and a discussion of the identification strategy (2.6). The empirical analysis of the average effect of political tension (3.1) is then succeeded by a separately breakdown across geographical locations (3.2), political connections (3.3), and economic linkages (3.4). Lastly, section 4 concludes.

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² See e.g. CNN (2010), The Independent (2011) and The Economist (2012). The Chinese authorities moreover snubbed Norwegian ministers and suppressed the news in China (Washington Post, 2010; The Economist, 2012). Norwegians are also the only Europeans not eligible for visa-free visits to Beijing (Financial Times, 2012).

2 Methodology

2.1 Setting

Taiwan's sovereignty has long been disputed, with mainland China claiming ownership of the island. To provide a brief historical background of the setting, the Chinese Civil War was fought in 1927-1949 between the Communist Party of China and the governing party of the Republic of China. The war ended with mainland China being taken over by the Communist Party and establishing present day People's Republic of China. The receding government resettled to the island of Taiwan, which formally still bears the name Republic of China. No peace treaty has ever been signed and mainland China still claims the island of Taiwan (and vice versa). The cross-strait relations in the post-war era have accordingly been characterized by periodic political crises and occasional threats of military action.

The present day political landscape in Taiwan consists of two dominant party coalitions that disagree on whether to move towards increased independence or, alternatively, strengthen mainland integration. On one side is the Pan-Green Coalition, led by the Democratic Progressive Party (DPP), which primary political axis involves Taiwan independence over Chinese reunification. On the other side is the Pan-Blue Coalition, led by the Kuomintang Party (KMT), literally meaning the Chinese National People's Party, which favors a Chinese national identity over a separate Taiwanese one. The latter standpoint accordingly implies a more soft cross-strait policy and increased economic linkage with mainland China.³

2.2 Data

The study covers political events occurring since 1995 and is further supplemented with survey data available since 2006 (see full description in section 2.3). Daily stock market data and annual financial statement data is compiled from the Thomson One Banker platform, which incorporates Thomson Financial databases such as Datastream and Worldscope. Additionally, industry level data on exports and investments of Taiwanese

³ In more detail, the Pan-Green Coalition is an informal political alliance consisting of the Democratic Progressive Party, Taiwan Solidarity Union and the minor Taiwan Independence Party. The Pan-Blue Coalition is a political alliance consisting of the Kuomintang, the People First Party and the New Party.

firms in mainland China is obtained from the Taiwanese Bureau of Foreign Trade and the Taiwan Stock Exchange. Table 1 shows the summary statistics of the key variables used in the econometric analysis.

As shown in Table 1, the study includes approximately 700 Taiwanese firms and twice as many Chinese firms, where the exact number varies across the two data samples and time periods (cf. panels A and B). The firm samples are limited to publicly listed and active Taiwanese firms that are not government operated. The same restriction is not feasible for Chinese firms, as government involvement has historically been applied to nearly all of the firms. The summary statistics are broken down across those Taiwanese firms that support either of the two political parties (pro- vs. anti-China views, cf. section 2.5). Similarly, the table separately summarizes the sub-sample of Chinese firms that are geographically close to Taiwan compared to those that are not (i.e. South-East vs. non-South-East firms, cf. section 2.4).

2.3 Measures of Political Tension

The study offers two types of measures of political tension. First, major political events in history are recorded and constitute the basis of an economic event study. Second, the analysis also employs survey data, which offers a repeated monthly measure of the expected political tension among the general Taiwanese public.

A. Events: Sudden and Unexpected Elevation of Tension

The International Crisis Group (ICG) records political events across the world and documents them in their regular Crisis Watch reports. Events that deteriorate the political climate between Taiwan and China are recorded by ICG back to 2003. Additionally, we collect historical data by compiling events listed on the Chinese-language Wikipedia page "The Timeline of Cross-Strait Relations" back to 1995. During the post-2003 period, the major events reported by the two sources are the same. Both sources list the original news reports of each event, allowing us to identify the date when the event first appeared in the press. An event is only included if i) it is indisputable that it increases the cross-strait political tension between Taiwan and China, ii) it is generally unexpected, iii) the event date

(the first time it was reported in the press) can be clearly defined and iv) there is no counteracting or tension-worsening events in the two months surrounding the event date. This process results in six notable events that are described in detail in Appendix A. All events are sparked by controversial statements or actions involving the political status of Taiwan (e.g. pro-independence sentiments, description of 'state-to-state' or 'one-country-on-each-side' relations, etc.), but where no actual physical confrontation materializes. As outlined in the appendix, the starting point of our sample is marked by the so-called 1995-96 Taiwan Strait Crisis, and the sample ends with the last event covered noted by ICG in early 2006.⁴

B. Survey Data on Tension Expectations

The Taiwanese "Global Views Survey Research Center" has since 2006 conducted regular surveys on locals' views on the cross-strait relationship, where in each survey 1,000 people in Taiwan above 20 years old are contacted via computer-assisted telephone calls. Although these surveys have only been conducted since June 2006, they have been repeated every month during this period and provide a unique indication of the public's short-term expectations on the political climate towards mainland China. More precisely, the survey asks: "In general, what is your opinion on the relationship between Taiwan and the mainland next month comparing with this month?" The research center processes the responses and provides a monthly continuous measure on expectations that allows us to construct a month-by-month dummy variable capturing the expected tension over the June 2006 – September 2011 period (1 for months in which tension is expected to rise, 0 otherwise).

The survey data offers a unique supplement to the event data as it captures changes in expected political instability, rather than changes caused by actual realized events. In other words, rather than being solely based on major moments in history, the survey data offers a more subtle 'day-to-day' measure in the political attitude of the general public. Additionally,

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⁴ Upon an email inquiry of why there are no tension increasing events documented after 2006, the ICG replies that "Our publication is mainly designed to alert readers to situations where there is particular risk of new or significantly escalated conflict … there have been no significant developments recently that have warranted the inclusion of the Taiwan Straits."

as no events harming the cross-strait relationship are documented after 2006, this measure provides additional evidence of the cost of political tension in relatively stable times. Thus, one can expect a relatively lower impact of political tension on stock returns using this 2006-2011 measure of political tension.

2.4 Risk of War by Geographical Location

In order to investigate whether any detrimental effect of political tension stems from increased risk of war, we evaluate (in section 3.2) the effects of increased tension on firms close to potential areas of military warfare, relative to firms in more distant areas. However, as the island of Taiwan is relatively small, such a comparison is not meaningful among Taiwanese firms. Instead, we examine Chinese firms close to the island of Taiwan compared to Chinese firms headquartered in other more distant parts of the mainland. The geographical location of firms is based on their local province as stated in their financial accounts. The firms classified as close to Taiwan are those nearby the South-East coast of China, i.e. firms located in the provinces of Fujian, Guangdong, and Zhejiang, and the Municipality of Shanghai. A map of Taiwan and these mainland provinces is provided in Appendix B. All of the gray-colored coastal provinces are within reach of the Taiwanese mobile land-attack cruise missile system (Thim, 2013; Wendell, 2013). Furthermore, in case of military warfare the involvement of this coastal region is enhanced by the U.S. being a de facto ally of Taiwan and historically having ordered U.S. aircraft carriers to be present in this conflict zone (BBC, 2014).

2.5 Targeted Economic Pressure and Political Connection

To examine whether economic pressure contributes to the cost of political tension, the paper explores if the impact of political tension differs across the political connections of Taiwanese firms (section 3.3). As economic pressure can be used more discriminatively than warfare, we hypothesize that Taiwanese firms are hurt more by increased tension if they are considered uncooperative by the Chinese government. Political connections of these firms provide us a possibility to test the hypothesis.

More precisely, we determine a firm's political association according to the political connection of its founders or managers. A firm is classified as 'anti-China' if its founder or manager supports Taiwan independence or the DPP (or other parties in the Pan-Green Coalition). Conversely, if the founder/manager supports reunification with the mainland, the KMT or other Pan-Blue Coalition parties, the firm is defined as 'pro-China'.

In order to gather this information we first hand-collect a list of founders and managers of the firms that are listed on the Taiwan Stock Exchange. We then use the Google search engine to find news reports on the political connections of every name on our list. The key words in the search are a combination of the names of the founder (who often is also the chairman), the manager, the name of the firm, one of the names of leaders of the major parties (Chen Shui-bian, Lee Teng-hui, Lien Chan, Ma Ying-jeou, Soong Chu-yu, Tsai Ing-wen) and one of the terms "Democratic Progressive Party", "Kuomintang", "Taiwan Independence" or "referendum". We read through the top 30 search results and repeat every search for each combination of key words in both simplified Chinese and traditional Chinese. When filtering the search results we ignore articles from personal blogs, unless we find the same information from other formal sources. Also, we attempt to find the same information from both Taiwanese and Chinese media and limit ourselves to classifying only cases where there is no disagreement across media outlets on the political connection of firms.

Using this information, political connection is established through either observed party ties or public statements. First, the political connection can be established if the founder/manager of a firm is a member of a given party, has ever been an officer in the government or an associated organization of the party, or has a close personal relation with the main leaders of the party. Second, business executives in Taiwan sometimes make public statements to express their supports towards Taiwan independence, the referendum on Taiwan's UN membership, and/or one of the political parties. If a business executive has been making consistent statements over the sample period, his/her political connection is classified accordingly. In the end, this process results in 28 firms classified as anti-China and 41 firms as pro-China (the sample with full data availability varies across regressions).

The political connections of these firms and the corresponding sources are outlined in Appendix C.⁵

2.6 Empirical Strategy and Identification

In the event study, the basic regression equation is of the following form:

$$y_{ite} = \beta_1 TensionEvent_{te} + FirmControls_{ite} + a_i + \gamma_e + \varepsilon_{ite}, \tag{1}$$

where y_{iie} is daily percentage return for stock i on day t of event e. Each event window spans 20 weekdays before and after the event day, where all other dates are excluded from the sample, and thus t constitutes the time period [-20, 20]. We focus on the effects of each event across two days, i.e. the event dummy $TensionEvent_{ie}$ equals to 1 on each announcement day and the following trading day, and 0 otherwise. Thereby we incorporate potentially lagged reactions and take into account that an announcement may arrive late in the day when markets have (almost) closed. In all specifications, we control for firm fixed effects (a_i) and event fixed effects (γ_i) that respectively filter out the average return of each firm and the average return of all firms within each event window. Thus, the estimated coefficients report the impact of political tension on stock returns above and beyond the average return in the corresponding event period. Firm controls include firm size, leverage, and return on assets, as defined in Table 1. Also, in all firm-level regressions we allow the error term (ε_{iii}) to be correlated both across time for any given firm and across firms within the same day of each event. Regression (1) is run separately for all Taiwanese and all Chinese firms.

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⁵ Additionally, it should be noted that a total of 14 firms are observed to have switched from anti-China to pro-China in the sample period, while there is no switch in the reverse direction. This occurs if managers or founders have changed their statements and this change was received by the public as a surprise. These firms are excluded from the main analysis of the paper in order to produce results that are purely based on sharp and uncontested identification of political connectedness.

⁶ Given the sheer mass of possible news outlets in both China and Taiwan, it generally infeasible to pinpoint the exact timing of when a news announcement first appeared within each day.

⁷ It should be noted that additionally controlling for market returns when estimating the effect on the firm sample would not be valid. Specifically, since harmful political events also affect the overall stock market (as verified in regressions 2, 4, 6 and 8 in Table 2), the effect of political tension on each stock would not be fully captured by the event dummy if the market return is also included as a control. Instead, arguably more appropriately, we include period fixed effects (a dummy for each event window) to filter out average returns, implying that the event dummies measure the effect of political tension beyond the average market performance within the event period.

The identifying assumption in this specification is the exogeneity of each event, which creates an unexpected, sudden, and one-time increase in political tension. Hence, for each event – excluding the announcement day and the following trading day from the event window – the average return during the remaining 38 weekdays provides a measure of normal returns for each stock. Although in principle tension may either ease or build up after the first two days, our event selection procedure provides insurance that no other major events occur within the event window. Besides, as is documented in the next section, within the 40-weekday window most of the stock price impact is realized on the event day and the following trading day.

When investigating heterogeneous effects of political tension, e.g. effects on Taiwanese firms by political connections, we further expand the above regression into the following form:

$$y_{ite} = \beta_1 Tension Event_{te} + \beta_2 (Tension Event_{te} \times AntiChina_i) + Firm Controls_{ite} + a_i + \gamma_e + \varepsilon_{ite}$$
. (2) In this case, we run regressions only for politically connected Taiwanese firms, where $AntiChina_i$ is equal is equal to 1 if the firm is connected with pro-independence parties and 0 if it is connected with the pro-unification parties. Similar specifications are adopted when exploring the effects on Taiwanese firms along other dimensions and on Chinese firms by geographical location. To make causal inference, the additional identifying assumption is that the events do not affect location and political connection directly. This assumption may be violated if firms migrate or change political connection upon seeing negative effects of the events. Although there is no evidence showing that Chinese firms move away from the South-East coastal area, it is true that some Taiwanese firms have switched from anti-China to pro-China (cf. footnote 5). This switching possibility should mitigate the long-run negative effects of political tension. Thus, despite the 40-weekday event window partially addressing this potential bias, the estimates should nonetheless be viewed as conservative lower bounds, as further discussed in section 3.3.

Finally, with monthly survey data on political tension, the main regression specification is:

$$y_{im} = \beta_1 Tension Expectation_m + Firm Controls_{im} + DPP in power_m + a_i + \gamma_1 m + \gamma_2 m^2 + \varepsilon_{im},$$
 (3)

where the outcome variable is the average daily return of stock i in month m and the main explanatory variable, TensionExpectation, is constructed from monthly survey data from June 2006 to September 2011. Using public opinion polls conducted by a Taiwanese research center (cf. discussion in section 2.3), we define this month-by-month binary dummy as taking a value of 1 in months in which the Taiwanese public expects the political tension with mainland China to rise over the next month, and 0 otherwise. The identifying assumption here is that the tension expectation measure is exogenous conditional on other controls included in the regressions. This assumption will be violated if an omitted variable correlates with both tension expectations and stock returns, which we partially address by including a wide range of plausible explanatory variables and a quadratic time trend controlling for other unobservables. Specifically, the same set of firm controls is included as before and additionally the average stock return under different regimes is filtered out by including a binary dummy (DPP in power) that equals 1 whenever the DPP proindependence party is in power in Taiwan, and 0 otherwise (in contrast, there is no variation in this variable within any of the event windows in the event-study regressions). Lastly, when exploring heterogeneous effects (similarly to equation 2 above) we interact the variable of interest (*TensionExpection*) with the political connection of Taiwanese firms, geographical location of Chinese firms, and/or other firm characteristics. The additional identifying assumption becomes similar to the one in the event study, i.e. that a change in tension expectations does not change firms' location or political connection.

3 Empirical results

3.1 Average Effect

Table 2 shows the average effect of political tension on stock returns. The table first reports in regressions (1)-(4) the event-study estimates of consequential events harming the political relationship between China and Taiwan (events are detailed in Appendix A). The remainder of the table (regressions 5-8) reports the estimates associated with increases in

⁸ In principle, we could add higher order functions of time to control for time trends. However, given the sample size and the limited variation in our tension expectation measure, a higher order time trend is likely to absorb all the variation in the tension measure.

expected future tension levels, as evaluated by public opinion polls among the Taiwanese public. In both the analyses the estimates are reported separately for Taiwanese and Chinese listed firms, where in each case the effect is examined on both the underlying firm sample and the local value-weighted stock index.

Regression (1) in Table 2 reports the first key result of the paper, showing that tensionincreasing events are on average associated with a drop in stock returns of 2.05 percentage points for Taiwanese firms, which cumulatively amounts to 4.10 percentage points during the announcement date and the following trading day. The decline is both statistically significant and economically large. For example, this can be compared to Berkman, Jacobsen and Lee (2011), who study a broader sample of international political crises over 1918-2006 and find a more modest 0.12 percentage points reduction in monthly world stock returns. In contrast, other studies focusing exclusively on the effects of violent conflicts document a quantitatively larger response. Specifically, Wolfers and Zitzewitz (2009) estimate a 1.50% decline in U.S. stock price in the run-up of the Iraq invasion in 2003, and Zussman and Zussman (2006) relate assassinations of senior political targets to a 0.71 - 1.11% daily drop in the Israeli stock index. Thus, considering that the underlying events in our sample do not entail any reports of property damage or loss of life (even though they may involve implicit threats thereof), the estimate in regression (1) is comparatively large. The impact of political tension is further verified in regression (2), which reports a strongly significant 1.67 percentage point drop in the value-weighted Taiwanese stock index (TAIEX). Together with regression (1), this establishes the overall detrimental impact of political tension on Taiwanese firms.

Regressions (3) and (4) in Table 2 repeat this analysis for Chinese firms and find that political tension is costly to Chinese firms as well. On average, each tension event leads to a daily drop of 0.72 - 1.19 (or cumulatively over two days 1.42 - 2.38) percentage points in Chinese stock returns, where the stock index refers to the Shanghai Composite Index of all A-shares. Thus, compared to Taiwanese firms, the impact of a strained cross-strait relationship is statistically weaker and economically more modest for the Chinese sample, which intuitively conforms with the military and economic strength of mainland China visà-vis the island of Taiwan. Consistently, the results are both qualitatively and quantitatively

similar for the Shenzhen stock index, which covers China's second largest stock market (not reported, but available in Table A.1 in an online appendix).

The second half of Table 2 offers evidence on the negative effects of expected tension on stock returns with monthly data. The month-by-month binary dummy (*TensionExpection*) takes the value of 1 in months in which the Taiwanese public expects the political tension with mainland China to increase over the next month, and 0 otherwise. This variable is available in 2006-2011, and as no major events occur in this period (cf. Appendix A) one may expect a relatively lower impact on stock returns compared with the results of the event study. Overall, despite the methodological differences across the two approaches, the results using survey data align with those of the event study, indicating a negative impact of increased political tension. As expected, the magnitudes are generally lower in magnitude compared to the event study and the effect is weaker on Chinese firms compared to Taiwanese firms.

In addition to offering supporting evidence to previously established event study results, these results are of interest in their own right as they show the existence of a detrimental effect of expected increases in political tension, even if no major events may realize (as is true for the 2006-2011 period). In other words, these results indicate that 'day-to-day' changes in the political climate have a significant economic impact even in relatively politically stable times. Overall, Table 2 therefore implies that not only do non-violent political events negatively affect stock returns, but so do changes in the political atmosphere that are not accompanied by any particular or concretely defined political events. Thus, the overall cost of political tension is likely to be more extensive and far-reaching than previously documented in the literature.

Cumulative Impact

Before turning to the mechanism through which political tension causes drops in stock returns, we study its cumulative impact and find evidence of a long lasting impact. We apply the standard event-study methodology with a constant mean return model (MacKinley, 1997), where abnormal returns over a [-20,+59] event window are defined as

the realized return on each stock minus its average return over the prior 80 weekdays.⁹ Figure 1 reports the cumulative abnormal return (CAR) across all Taiwanese firms. The figure reveals that the immediate impact is quite strong, i.e. around 2 percentage points drop per day during the first two days, remarkably consistent with estimates in Table 2 considering the methodological differences. In the following three weeks (until weekday 15), CAR stays relatively stable within the range of -3.4 to -5.3 percentage points. Further drops during days 15-20 lead CAR to reach -7.8 percentage points on day 20, although CAR is measured less precisely as we move further away from the event day.¹⁰ Beyond the first month (day 20), the effect is furthermore persistent and long-lasting with no clear sign of immediate reversal. To provide confidence bounds we further regress CAR on 10-day-period dummies to establish the average CAR within each sub-period and the confidence interval thereof. The confidence bounds naturally widen over time as the event date becomes more distant, but it nevertheless takes more than 2 months (around 50 weekdays) until the tension effect nears non-significance. In summary, the political tension has sizeable stock market impact, which is also long-lasting.

Lastly, these results imply that increased political tension has real effects rather than only affecting investor sentiment. More precisely, if the effect is purely sentiment driven and has no impact on the real economy, then the effect would be temporary and prices would soon revert to prior levels reflecting only fundamentals. Alternatively, if political tension has real effects then no immediate return reversal should occur, i.e. the impact of increased political tension would be permanent. As Figure 1 depicts a long-lasting effect without immediate reversal, it indicates real detrimental effects of political tension that are not merely sentiment driven. In section 3.4 this result is further supported with evidence

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⁹ As an alternative approach to predict the normal return, we also estimate a market model following MacKinley (1997) where realized stock returns are regressed on market returns for the preceding time period [-100,-21]. The results are available in Figure A.1 in an online appendix and are similar to those presented in Figure 1. However, for the methodology to be valid, it must be assumed that overall market returns are unaffected by the individual events, which is violated (cf. regression 2 in Table 2).

¹⁰ The sudden drop in CAR on days 0 and 1 and its relative stability on other days provide a justification for our identification assumption. That is, the events cause an unexpected one-time increase in political tension on days 0 and 1, while tension is relatively constant on other days in the [-20, 20] event window. Furthermore, as noted in section 2.6, if tension still builds up after the first two days, our approach provides a lower bound of the actual effect.

of a disproportionate decline in stock returns among Taiwanese firms economically exposed to mainland China through either exports or mainland investment.

3.2 Geographical Location: Risk of War

Although political tension negatively affects stock returns, it is not fully understood through which mechanism this happens. To identify whether risk of war is a significant source of political tension costs, we compare stock returns across firms' geographical locations. As previously described in section 2.4, Chinese firms located closer to the island of Taiwan, i.e. in the South-East coastal provinces, are more likely to be influenced by an increased risk of war, compared with those situated elsewhere in mainland China (cf. figure in Appendix B).

We confirm the existence of risk of war by reporting differential effects by geographical location in regression (1) of Table 3. The results show that the negative impact of political tension is stronger for South-East coastal firms, who experience an additional 27 basis points decline in stock returns per day – or 54 points cumulatively in two days – relative to more distant firms, who are less exposed to military conflict between China and Taiwan. This result is further supported by the analysis of survey data in regression (2).

This suggests that the risk of war contributes to the cost of political tension.¹¹ Furthermore, since mainland China dwarfs Taiwan in terms of military power, this is a particularly notable result. Specifically, despite the relatively lower risk and weaker impact of a Taiwanese attack, Chinese firms are nonetheless adversely affected. Accordingly – although it cannot be established with a similar geographical analysis for the relatively small island of Taiwan – it is reasonable to presume that the threat of military action is even costlier for Taiwanese firms.

explained by trade links.

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¹¹ Alternatively, it could be argued that Chinese firms close to Taiwan on average do more business with Taiwanese firms, thereby explaining this geographical pattern. However, after further controlling for investment and export by Taiwanese firms to the mainland, the geographical pattern remains unchanged (these results are available in Table A.3. in an online appendix). Thus, these geographical results cannot be

3.3 Political Connection: Economic Pressure

Although it may be tempting to attribute all the negative effects of political tension to the increased risk of warfare, other forces may be at work. In particular, recent incidents suggest that China exploits its economic importance and influence in international political conflicts. The aforementioned Nobel Peace Prize disagreement with Norway and recent Sino-Japanese conflicts constitute only two such examples. Another high-profile example is the on-going territorial dispute in the South China Sea between China and (among others) the Philippines, which has been associated with sudden restrictions on all banana imports from the Philippines to China, in addition to Beijing issuing a travel advisory that portrays the Philippines as anti-China (Washington Post, 2012). Thus, in this section we attempt to examine whether China may have asserted selective economic pressures on Taiwanese businesses that can be classified as anti-China.

As previously noted, the primary debate across Taiwanese political parties involves the issue of Taiwan independence versus eventual unification with China. Thus, we classify firms as either pro-China (KMT and/or eventual unification supporters) or anti-China (DPP and/or independence supporters) based on party ties or public statements made by senior management, as described in section 2.5 and fully documented in Appendix C. We correspondingly define the binary dummy variable *AntiChina* to take the value of 1 for anti-China firms and 0 for pro-China firms.

The results show heterogeneous effects across political connections of firms, where anti-China firms are on average hurt more by increased political tension. This is shown in Regression (3) in Table 3, which interacts measures of political tension with political party ties (cf. equation 2 in section 2.6). More precisely, anti-China (pro-independence) firms experience a 21–basis-point larger fall in daily stock returns compared with pro-China firms favoring mainland unification. This accumulates to 42 basis points over the course of the announcement day and the following trading day. The 2006-2011 survey measure of Taiwanese tension expectations produces consistent results, as reported in regression (4).¹²

¹² Furthermore, an extended placebo analysis shows that these results are unique to events harming the cross-strait relationship. Specifically, we repeat the analysis using three events that do not relate to the conflict, i.e. i) the 21 September 1999 earthquake in Taiwan, ii) the 9/11 terrorist attacks in 2001 and iii) increased tension

The differential effect across political party ties is both economically and statistically significant. Moreover, for the following two reasons, these estimates are likely to represent a lower bound of the detrimental effect. First, while increased political tension may induce economic pressures targeted towards political opponents of mainland China, it also increases the probability that the Taiwanese pro-independence party comes to (remains in) power. In other words, as political tension rises, so does the probability of having a Taiwanese government that is friendlier towards anti-China firms (defined as those publicly supporting it). 13 As increased political tension thereby also positively affects anti-China firms, the estimates in Table 3 merely represent the *net* effect of these two counteracting channels. Second, since senior management of anti-China firms are likely to be aware of some of the political risks associated with their pro-independence sentiments, they may already have taken measures to dampen any detrimental effects. For example, anti-China firms may already be hedging their political risks by reducing their relative economic exposure to mainland China. Thus, the empirical analysis only picks up the non-hedged effect of political tension, which further implies that the estimates in Table 3 represent a lower bound of the total costs of political tension to anti-China firms.

3.4 The Channel of Economic Pressure

The heterogeneous effects across political party ties indicate that the cost of political tension originates not only from risk of war, but also from the risk of selective economic pressures imposed by mainland China. Such economic actions could be implemented by

in Japan-Taiwan relations following the 'Lianhe fishing boat incident' on June 10 2008, where a Taiwanese fishing vessel collided with a Japanese patrol vessel in disputed territorial waters claimed by both sides. This placebo event study shows no indication of an amplified negative effect on anti-China firms (in fact, the effect is non-significantly positive), thereby ruling out that the results in Table 3 merely reflect a more general return differential across political parties in times of distress. This analysis is available in Table A.4 in an online appendix.

¹³ This is verified in two ways. First, we take the change in the popularity of the two parties (measured by so-called Kuomintang Trust Index and Democratic Progressive Party Trust Index) and regress that on the *TensionExpectation* dummy. The results show that increased tension expectations are associated with a statistically significant increase in support of the DPP pro-independence party in 2006-2011, while support for the KMT decreases. Second, using the events of the presidential election in Taiwan in 2004 (DPP won) and 2008 (DPP lost), we see that DPP winning (losing) the elections is associated with relatively higher (lower) returns of firms politically connected to the DPP. These supplementary results are available in Tables A.5-A.6 in an online appendix.

either the Chinese authorities (cf. page 4 quote on pro-independence businessmen being unwelcomed to the mainland) or stem directly from consumer choices made by the Chinese public. This section examines through which of these channels the negative impact arises.

The More Economically Exposed Anti-China Firms Are to The Mainland, the More They Are Hurt

To identify the channel through which anti-China firms are adversely affected, we first examine whether the impact differs with firms' business exposure to mainland China. If the negative effect of supporting Taiwan pro-independence originates from economic pressures, one would expect anti-China firms with high mainland dependence to be more severely affected. This follows from those firms being particularly vulnerable to any restrictions imposed by the Chinese authorities or to changes in Chinese consumer demand. This subsection empirically tests these hypotheses and discusses the accompanying details thereof.

Taiwanese firms' exports to mainland China is the most direct measure available on mainland exposure. Annual export by industry to mainland China is obtained from the Taiwanese Bureau of Foreign Trade. As firm-level export data is unavailable (and likely to be endogenous in any case), each firm's economic exposure is defined as the total exports of its industry to mainland China (in the calendar year prior to each event), normalized by total exports to all countries during the same period. To analyze the relationship between the cost of political tension and export intensity to mainland China, regression (1) in panel A of Table 4 reports the results of interacting this measure with tension events and firms' political party ties.

The results show that an unexpected increase in political tension is not costlier to anti-China firms than to pro-China ones if firms have no exports to mainland China (nonsignificant -0.06). This intuitively follows from those firms being less vulnerable to the economic pressures imposed by the mainland, while at the same time these firms may still benefit from the pro-independence party being more likely to take power as tension increases (cf. discussion in section 3.3), resulting in a cancellation of the two counteracting effects. Instead, the negative impact concentrates on anti-China firms with mainland exports (-0.03*). Thus, economic pressures are most severe among anti-China firms that the mainland can most easily target.

Regression (1) in panel A of Table 4 yields three additional results. First, heterogeneous effects by exposure imply that the drop in stock returns following increased political tension represents a true impact on the real economy, rather than solely a sentiment driven stock price movement. This aligns with the long-lasting effect of increased tension previously established in Figure 1.¹⁴ Second, the effect on anti-China firms is not a result of potential targeted bombing. More exactly, if there was a risk that military actions by mainland China were specifically directed towards their political opponents, then the negative effect of political tension would not be restricted only to those anti-China firms who export to the mainland. This result therefore reinforces the role of economic pressure, underlining that the costs go beyond those attributable to the risk of war. Third, the estimates show that pro-China firms benefit from exporting to China when keeping political tension constant (0.01**), while anti-China firms in the same industry do not enjoy this positive effect (0.01-0.01=0). This indicates that impact on anti-China firms is not merely a result of industry targeting (e.g. targeting industries with many anti-China firms), but is more selective and strategic than that.

The results in regression (1) can be further verified by another measure of mainland exposure, namely the amount of mainland investment undertaken by Taiwanese firms. This measure is motivated by Imai and Shelton (2011), who show that stock prices of Taiwanese firms with mainland investment are sensitive to the electoral outlook of the 2008 Taiwanese presidential elections. However, it should be emphasized that this investment

¹⁴ One may alternatively argue that investors merely expect Taiwanese exporters supporting proindependence to be particularly hurt, which in principle is sufficient to drive down stock prices even in the absence of any real effects on exports. However, it is unlikely that investors hold on to such beliefs for extended periods without any supporting evidence. Indeed, tension between Taiwan and the mainland has created numerous incidences (including the six major events in our paper) from which investors can easily learn and adjust their expectations. It is thus doubtful that investors systematically form erroneous expectations. Besides, real declines in exports following political tension are likely and have been documented in Fuchs and Klann (2011), who show that countries whose leaders met with the Dalai Lama, the exiled Tibetan leader, suffered a swift decline of 8.1% - 16.9% in exports to China. In general, the costs of political tension on the stock market may also further feed into the overall macro economy as demonstrated by Bloom and Baker (2012) and Bloom et al. (2012).

measure captures a different aspect of mainland exposure than exports, as mainland investments may not necessarily translate into goods or services offered to the mainland market (for example, the Taiwanese firm Foxconn has factories in China producing iPhones that are sold not only in China, but worldwide). This investment data is obtained from the Taiwan Stock Exchange and gives the total cumulative investment (without depreciation) in mainland China by all listed firms in a given industry, which we normalize by the total asset value of all listed firms in that industry.

Regression (2) in Table 4 applies this measure of mainland exposure and confirms previous results.¹⁵ As before, among firms without mainland exposure, increased political tension does not adversely affect anti-China firms more than pro-China ones, consistent with non-investing firms being less vulnerable to economic pressures from the mainland. In fact, the positive impact of political tension – such as higher probability of a favorable pro-independence party coming to power – outweighs the negative effects, resulting in a significantly positive effect (0.57**). The results further confirm that the extra negative effect on anti-China firms centers entirely on those with mainland exposure (-0.47***). In contrast, for pro-China firms the negative impact of tension is mitigated when having mainland investment (by an amount of 0.16***). This differential effect across political parties increases with the level of mainland investment. Lastly, this specification provides even stronger evidence against military actions targeted towards only anti-China firms. Specifically, anti-China firms with high levels of mainland investment are more severely affected by political tension (-0.47***), despite having far less exposure to targeted bombing (as plants located on the mainland are unlikely to be bombed).

While the above results do not identify whether economic pressures are induced by either the Chinese government or the Chinese public, they nonetheless suggest the former. Specifically, in order for the negative economic impact on anti-China firms to be a consumer reaction, the Chinese public would not only have to be fully aware of the political connections of Taiwanese firms, but also be able to identify those anti-China firms

¹⁵ The investment measure is not available before 1998 (at which time its disclosure became mandatory), but to allow for inclusion of the events occurring in the pre-1998 period, the time-constant average of this measure is applied (explaining why some terms drop out in regressions due to firm fixed effects).

investing in mainland China (which is non-obvious if they are not selling their products in China). This information is more likely to be documented by Chinese government identities that serve to both monitor and react to tensions in the cross-strait conflict. To test this more carefully, we next examine whether the negative impact on anti-China firms is more severe for those offering well-known consumer products to the Chinese public.

It's Not the Consumer, it's the Government

This subsection presents evidence that the negative impact on economically exposed anti-China firms is not driven by consumer's boycotting their products. As increased tension has no stronger impact on anti-China firms offering well-known consumer products in mainland China, we conclude instead that the negative effect must be initiated by mainland authorities.

If Chinese consumers boycott products of anti-China Taiwanese firms, one may argue that consumer products are likely to be more severely hit than products sold directly to businesses. A complication, however, is that it can be argued that the Chinese authorities are similarly more likely to target consumer goods compared to business-to-business products. Specifically, systematic restrictions on business-to-business products imposed by the Chinese authorities are likely to be met with discontent from the mainland industries, whereas intervention in the consumer market may face relatively less resistance among mainland consumers, who with little or no effort can divert their purchases towards non-Taiwanese substitutes (unlike mainland businesses that tend to have long-term contracts with Taiwanese firms). Thus, to reliably test whether the economic cost of political tension stems from either Chinese consumers or the Chinese government, it is not sufficient to compare only consumer and business-to-business products.

As a more fruitful approach, we hypothesize that consumer goods with recognizable brands will be more severely hit than others, if Chinese consumers indeed boycott products of anti-China Taiwanese firm. More precisely, when exports to the mainland are further decomposed into brand name consumer products and other (non-brand) consumer

products, consumer boycott leads to a stronger effect on branded consumer goods producers independent of the government's action.¹⁶

To test this hypothesis, we collect additional information to categorize the products of every firm. Two dummy variables, ConsumerBrand and ConsumerNonBrand, are defined, taking the value of 1 if they belong to the corresponding category and zero if a firm mainly produces business-to-business products. To do this, we first identify consumer-focused firms as those for which the largest fraction of revenue comes from the sales of consumer products. For each year of operation this information is obtained from firms' annual reports and the Taiwan Stock Exchange, where we allow for the possibility that a firm changes categories over the sample period by using the information in the previous calendar year to determine a firm's category at each point in time. We then further classify consumer focused firms as selling brand name products if they appear in publicly reported lists of the top 100 Taiwanese brands as classified by 'BrandingTaiwan.org' (established by the Taiwanese Bureau of Foreign Trade) or in the top 10 or 20 as classified by Wikipedia's 'Branding Taiwan' in various years.¹⁷ This breakdown across product types is shown in regressions (3)-(4) in Table 4. As we explicitly control for both the brand and non-brand consumer dummies in the regression analysis, the underlying benchmark category consist of firms producing business-to-business products.

Focusing solely on the estimates that directly test our hypothesis (highlighted in bold), regression (3) reveals that the incremental adverse effect of political tension on anti-China

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¹⁶ To elaborate in more detail, if the government takes no targeted action but *only consumers* target brand name consumer products, we can conclude that a negative impact on those producers is initiated by mainland consumers (and if there is no measurable effect, then there is no consumer reaction). Similarly, if *also the government* specifically targets brand name consumer products we would observe a larger impact on firms selling brand name consumer products (i.e. the stronger effect is independent of the government actions). In this latter case, however, we cannot distinguish between a consumer or government driven effect. But this does not become an issue since the results (in Table 4) show no incremental effect on consumer brand producers, implying no consumer reaction (and no government reaction targeted only on consumer brands). Thus, based on these results the only assumption needed (to conclude that consumers do not react) is that the negative effect of a potential consumer boycott is not being cancelled out by government actions directly aimed at assisting anti-China firms offering brand-name consumer products.

¹⁷ The top 100 brand names in 2011 as classified by 'BrandingTaiwan.org' are available here: http://100.brandingtaiwan.org/files/winner.pdf. Similarly, Wikipedia.org provides Branding Taiwan top 10 or 20 lists in 2003-2011, on webpage

http://zh.wikipedia.org/zh-cn/%E5%8F%B0%E7%81%A3%E5%9C%8B%E9%9A%9B%E5%93%81%E7%89%8C, and also separately for the 2004-2008 period, on webpage

http://zh.wikipedia.org/zh-cn/%E5%8F%B0%E7%81%A3%E5%84%AA%E8%89%AF%E5%93%81%E7%89%8C.

firms is not present among firms exporting business-to-business products (the interaction term *Exposure* * *AntiChina* * *TensionEvent* produces a non-significant coefficient of 0.00). The targeted-economic-pressure effect must therefore concentrate on anti-China firms exporting (either brand or non-brand) consumer products. The results indicate that in times of increased tension only non-brand consumer firms with anti-China ties are more adversely affected compared to their pro-China counterparts (-0.12**). More to the point, the results in no way indicate that brand name consumer products are more severely affected in times of political distress (-0.03), implying that the negative impact on anti-China firms is unlikely to be driven by a consumer reaction. Instead, the non-significant impact on brand name exporters rather suggests a government response.

Similar to regression (3), the detailed breakdown for the mainland investment variable is carried out in regression (4). However, it should be re-emphasized that this measure of mainland exposure is silent on whether investment outcomes are actually being offered to the Chinese public or not (cf. iPhone example, where only a fraction of the investment output is offered for retail sale in China). Hence, as the mainland investment variable offers a relatively opaque channel to Chinese consumers, the results cannot offer a fully conclusive interpretation. Keeping this caveat in mind, the key message of regression (4) is again that anti-China firms investing in the production of brand name products are more severely affected compared to their business-to-business counterparts (0.90).

Lastly, the full analysis is repeated in panel B of Table 4 for the more subtle, monthly survey measure of political tension covering the relatively peaceful 2006-2011 sub-period. Perhaps non-surprisingly, this data does not offer enough variation in political tension to identify a differential effect in times of distress (cf. non-significant coefficients -0.00 and 0.00 in regressions 1 and 2 of panel B, respectively). A further breakdown in regressions (3)-(4) similarly (and consistently to panel A) does not produce a more negative reaction for anti-China firms exporting or investing in brand name consumer goods (0.01 and 0.10).

To summarize, the results show that those anti-China firms exporting brand name consumer products to mainland China are not more adversely affected than those exporting less well known consumer products, suggesting that economic pressures on anti-China firms do not originate from the Chinese public, but rather from a strategic

government response. The mechanism through which this happens can in practice be varied, ranging from explicit import restrictions (cf. salmon dispute with Norway) to indirect regulations or restraints (e.g. sanity issues raised with bananas from Philippines). The results of this paper are not only aligned with such anecdotal evidence, but also support existing research on the political tactics of mainland China. Most notably, Fisman, Hamao and Wang (Forthcoming) study the impact of recent adverse shocks to the Sino-Japanese relationship and similarly find that Japanese firms with high China exposure suffer disproportionate declines in stock returns. They also show that the effect on Japanese firms is concentrated in industries competing with Chinese state-owned enterprises, which suggests that the economic cost of political tension originates from government-induced restrictions that damage the competitive environment of Japanese firms.¹⁸

4 Concluding remarks

In this paper we study the financial cost of relatively 'soft' political tension by examining the dispute between Taiwan and mainland China. This is among the first papers to study the cost of non-violent political tension and to identify the channels through which firms are affected. We show that this cost is not only limited to significant escalation in tension caused by consequential events, but it is also substantial even when the expected tension mildly varies, which has not been previously established in the literature.

In other words, the paper reveals that the cost of political tension is more comprehensive than previously documented. First, even non-violent and relatively mild political tension is associated with a sizeable drop in the stock market. Second, not only do realized distress events strongly affect stock returns, but increases in expected future tension levels are also associated with declines in present stock returns. Third, the negative

¹⁸ Moreover, the Chinese-Japanese relationship has been more strongly characterized by consumer hostility than the Chinese-Taiwanese one. To exemplify this, as of November 25, 2012, a search on Google.com using the key words 'boycott' and 'Taiwanese products' (*dizhi taiwan huo*) in simplified Chinese, gives 4.25 million hits, whereas combining the words 'boycott' and 'Japanese products' (*dizhi rihuo*) results in 10.2 million hits. Thus, considering that research shows no indication that Chinese consumers systematically boycott Japanese products, it is non-surprising that the same applies to Taiwanese products.

stock market impact is not solely driven by threat of violence, but is supplemented by economic penalties targeted at selected businesses. These financial costs, which are both centrally organized and politically strategic, are shown to have significantly damaging and long-lasting effects.

While the focus of our paper is on Taiwan and mainland China, there is reason to believe that the results apply to a broader set of highly tense, yet non-violent, political disputes worldwide. In support of this, a small body of cross-country literature associates political crisis risk with adverse stock market outcomes (Diamonte, Liew and Steven, 1996; Berkman, Jacobsen and Lee, 2011). Hence, empirically documenting the sizeable distress costs in the absence of physical confrontation has wider implications, since this characterizes the majority of international political conflicts.

Finally, the results of the paper are inevitably of interest given the growing worldwide influence and economic muscle of China (and other autocratic emerging countries). Evidence indicates that mainland China uses this to its advantage by directly targeting Taiwanese political opponents that are economically exposed to the mainland. Our econometric analysis thereby supports the more casual observation that China systematically punishes their political adversaries. The analysis further reveals that these economic penalties do not stem from consumer boycotts of well-known products, but are rather initiated by the Chinese authorities.

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Figure 1. Cumulative Abnormal Returns

The graph presents the evolution of cumulative abnormal returns (CAR) for Taiwanese stocks during the pooled event window of all events. The abnormal return is calculated as the realized return beyond the average return during the 80 weekdays prior to the event window, i.e. days [-100, -21]. This calculation of returns is at the firm-event level, i.e. for each firm in each event we calculate a different normal return based the average return during the estimation window. The confidence intervals are established around 10-day average CARs, which are obtained by regressing CAR on period dummies (one for each interval [-20, -11], [-10, -1], ..., [50, 59]) and estimating firm-day clustered standard errors thereof. When calculating the confidence intervals we assume that normal returns are estimated without error, cf. MacKinley (1997). Detailed regression results are available in an online appendix (Table A.2).

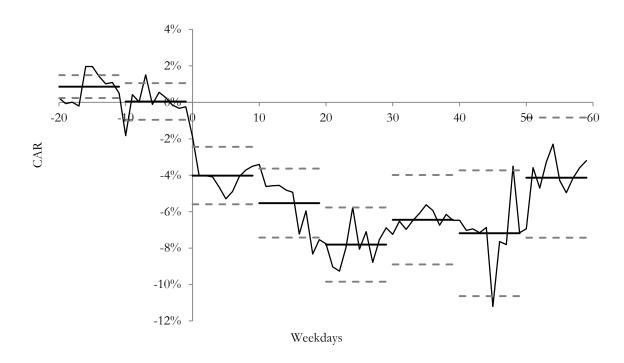


Table 1. Summary Statistics

The table reports means of key variables with standard deviations in parenthesis. The daily data consists of the 20 weekdays before and after each event. Anti- and pro-China firms are those supporting Taiwan independence or mainland integration, respectively. Chinese coastal firms are those located in the southeast coastal areas of China (cf. Appendix B). Index returns represent the TAIEX and Shanghai composite stock indexes. Assets are reported in inflation adjusted (1998 base year) local currency, leverage is debt proportional to equity and return on assets is net income relative to total assets. Exports to mainland China and cumulative mainland investment are at the industry level (the latter is only available since 1998). The data is winsorized at the 1st and 99th percentiles.

Panel A: Daily data for event study, 1995-2006

	Taiwan				China	
	All firms	Anti-China	Pro-China	All firms	Coast	Non-Coast
Number of firms	657	27	40	1,314	399	915
Daily index return (%)	-0.17 (1.54)			0.13 (1.68)		
Daily sample return (%)	-0.19 (2.64)	-0.19 (2.49)	-0.21 (2.58)	0.05 (2.56)	0.05 (2.56)	0.05 (2.56)
Assets (billions)	26.87	74.94	67.69	2.90	3.54	2.59
Leverage	(66.66) 0.37	(144.66) 0.28	(113.28) 0.38	(7.10) 0.47	(8.76)	(6.12) 0.47
Return on assets	(0.38)	(0.34) 0.03	(0.38) 0.04	(0.43) 0.02	(0.43)	(0.43) 0.02
Mainland exports / Total exports (%)	(0.08) 8.34 (11.78)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)
Mainland investm. / Total assets (%)	2.47 (2.19)					

Panel B: Monthly data for survey regressions, 2006-2011

	Taiwan			China		
	All firms	Anti-China	Pro-China	All firms	Coast	Non-Coast
Number of firms	733	28	41	1,566	510	1,056
Monthly (avg. daily) index ret. (%)	0.005			0.04		
, , , , , , , , , , , , , , , , , , , ,	(0.37)			(0.41)		
Monthly (avg. daily) sample ret. (%)	0.002	0.004	0.002	0.07	0.06	0.07
, , , , , , , , , , , , , , , , , , , ,	(0.63)	(0.61)	(0.60)	(0.75)	(0.73)	(0.75)
Assets (billions)	36.74	153.85	111.61	6.67	7.16	6.43
,	(111.08)	(298.05)	(218.05)	(30.13)	(31.26)	(29.58)
Leverage	0.33	0.20	0.35	0.47	0.43	0.48
	(0.37)	(0.28)	(0.37)	(0.44)	(0.43)	(0.45)
Return on assets	0.04	0.03	0.03	0.03	0.04	0.02
	(0.07)	(0.06)	(0.08)	(0.06)	(0.05)	(0.07)
Mainland exports / Total exports (%)	18.61					
	(14.84)					
Mainland investm. / Total assets (%)	3.51					
,	(2.28)					

Table 2. Political Tension and Average Returns

This table presents results from regressions equations (1) and (3) outlined in section 2.6, where the dependent variable is daily percentage returns in columns (1)-(4) and average daily percentage return within the month in columns (5)-(8). The daily data consists of the 20 weekdays before and after each event, where the dummy *TensionEvent* takes value 1 on announcement days and the trading day that follows, and 0 otherwise. Survey data is available 2006-2011 and the dummy variable *TensionExpectation* takes value of 1 in months when political tension is expected to increase over the next month, and 0 otherwise. The dummy *DPP in power* that takes value one when the pro-independence party is in power in Taiwan, and zero otherwise. Event study regressions include period fixed effects filtering out average return within each event window. Two-way clustered standard errors (clustering on firm-day) are reported in firm level regressions (1), (3), (5) and (7). Standard errors robust to both arbitrary heteroskedasticity and arbitrary autocorrelation are reported in index regressions (2), (4), (6) and (8). Statistical significance is reported at the 10% (*), 5% (**) and 1% (****) level.

	Event study (daily)					Survey data (monthly)				
	Taiwanese firms		Chinese firms		Taiwanese firms		Chinese firms			
	(1) Firm sample	(2) Stock index	(3) Firm sample	(4) Stock index	(5) Firm sample	(6) Stock index	(7) Firm sample	(8) Stock index		
TensionEvent	-2.05*** (0.71)	-1.67*** (0.33)	-0.72** (0.36)	-1.19** (0.58)						
TensionExpectation					-0.27*** (0.10)	-0.23** (0.11)	-0.02 (0.14)	-0.15* (0.08)		
Ln(Total Assets)	-0.03		-0.03		-0.01		0.01			
	(0.05)		(0.04)		(0.05)		(0.04)			
Leverage	0.00		0.04		-0.11**		-0.00			
	(0.08)		(0.03)		(0.05)		(0.02)			
Return on Assets	2.07***		0.55***		1.02***		0.62***			
	(0.35)		(0.21)		(0.33)		(0.20)			
DPP in power					0.14	0.19	0.22	-0.10		
					(0.30)	(0.13)	(0.42)	(0.20)		
Number of obs.	87,989	233	167,321	230	43,694	63	90,818	63		
Number of firms	657	-	1,314	_	733	-	1,566	_		
Period fixed effects	Yes	Yes	Yes	Yes	-	-	-	-		
2nd order time trend	-	-	-	-	Yes	Yes	Yes	Yes		
Firm fixed effects	Yes	-	Yes	-	Yes	-	Yes	-		
R ²	0.04	0.07	0.01	0.05	0.07	0.14	0.02	0.08		

Table 3. Tension Costs: Risk of War and Economic Pressure

This table presents results from linear regressions estimating the effect of political tension across geographical locations and political connections of firms (cf. regression equation (2) in section 2.6 for the daily event study). The sample period, dependent variable and measures of tension are as defined in Table 2. The *SouthEast* dummy takes value 1 for firms located in the South-East coastal regions close to Taiwan, and 0 otherwise (cf. Appendix B). The *AntiChina* dummy variable takes value 1 for firms supporting Taiwan independence and 0 for firms supporting mainland integration. Due to firm fixed effects these time-constant dummies drop out when not interacted with political tension measures. In the event study, two-way clustered standard errors are reported in parenthesis, while the monthly regressions show standard errors that are robust to both arbitrary heteroskedasticity and arbitrary autocorrelation. Statistical significance is reported at the 10% (*), 5% (**) and 1% (***) level.

	Risk o (Chinese		Economio (Taiwane	1
	(1) Event study (daily)	(2) Survey data (monthly)	(3) Event study (daily)	(4) Survey data (monthly)
TensionEvent	-0.63* (0.36)		-1.69** (0.65)	
TensionExpectation		-0.01 (0.14)	, ,	-0.27*** (0.09)
SouthEast * TensionEvent	-0.27* (0.14)			
SouthEast * TensionExpectation		-0.03** (0.01)		
AntiChina * TensionEvent			-0.21** (0.10)	
AntiChina * TensionExpectation			` ,	-0.06* (0.03)
Ln(Total Assets)	-0.03 (0.04)	0.01 (0.04)	-0.04 (0.08)	0.10 (0.07)
Leverage	0.04 (0.03)	-0.00 (0.02)	0.08 (0.10)	-0.22*** (0.06)
Return on Assets	0.55*** (0.21)	0.62*** (0.20)	2.15** (1.05)	1.08*** (0.39)
DPP in power		0.22 (0.42)		0.19 (0.26)
Number of obs.	167,321	90,818	10,126	4,281
Number of firms	1,314	1,566	67	69
Period fixed effects	Yes	-	Yes	-
2nd order time trend	-	Yes	-	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
R ²	0.01	0.02	0.03	0.09

Table 4. The Channel of Economic Pressure

This table presents results from linear regressions estimating the effect of political tension across political connections and economic mainland exposure of Taiwanese firms. The sample period, dependent variable, measures of tension and political views (*AntiChina*) are as defined in Tables 2-3. Mainland exposure (*Exposure*) is defined either as i) total exports of each firm's industry to mainland China (in the previous calendar year) normalized by the total exports to all countries, or as ii) cumulative investment (without depreciation) in mainland China of each firm's industry normalized by the total asset value of that industry. Both measures are in percentage terms. Since the investment variable is unavailable prior to 1998 we apply the time constant average thereof, leaving it unreported due to the fixed effects. Consumer focused firms are classified as those for which the largest fraction of revenue comes from the sales of consumer products, which we further categorize as brand name retailers if they rank among the top 100 Taiwanese brands on brandingtaiwan.org. All regressions include the same control variables as previously applied in Tables 2-3 (DPP in power, log-assets, leverage and ROA). Also, the (interactions of) dummies ConsumerBrand, ConsumerBrand * AntiChina, ConsumerNonBrand, ConsumerNonBrand * AntiChina are all included in the regressions but not reported to conserve space. In the event study, two-way clustered standard errors are reported in parenthesis, while the monthly regressions show standard errors that are robust to both arbitrary heteroskedasticity and arbitrary autocorrelation. Statistical significance is reported at the 10% (*), 5% (***) and 1% (****) level.

Panel A: Daily event study

	Mainland	l Exposure	Consumer	Consumer Brand Names		
	(1) Exports	(2) Investment	(3) Exports	(4) Investment		
TensionEvent	-1.90***	-2.06***	-2.04**	-2.49***		
AntiChina * TensionEvent	(0.71) -0.06 (0.09)	(0.67) 0.57** (0.26)	(0.86) -0.13 (0.48)	(0.75) 0.39 (0.36)		
Exposure	0.01**		0.01**			
Exposure * TensionEvent	(0.00) 0.04	0.16***	(0.00) 0.02	0.31*		
Exposure * AntiChina	(0.03) -0.01***	(0.03)	(0.03) -0.01***	(0.18)		
Exposure * AntiChina * TensionEvent	(0.00) -0.03* (0.02)	-0.47*** (0.10)	(0.00) 0.00 (0.01)	-0.24 (0.28)		
ConsumerBrand * TensionEvent			0.20	0.27		
ConsumerBrand * AntiChina * TensionEvent			(0.44) -2.55*** (0.77)	(0.56) -3.48 (7.52)		
ConsumerBrand * Exposure			-0.01*	(7.32)		
ConsumerBrand * Exposure * TensionEvent			(0.01) 0.09***	-0.16		
ConsumerBrand * Exposure * AntiChina			(0.03) -0.02	(0.14)		
ConsumerBrand * Exposure * AntiChina * TensionEvent			(0.01) - 0.03 (0.02)	0.90 (3.19)		
ConsumerNonBrand * TensionEvent			0.28	1.34***		
ConsumerNonBrand * AntiChina * TensionEvent			(0.59) 0.46***	(0.36) -0.43		
ConsumerNonBrand * Exposure			(0.11) -0.04***	(0.53) -0.06		
ConsumerNonBrand * Exposure * TensionEvent			(0.01) 0.19**	(0.09) -0.33*		
ConsumerNonBrand * Exposure * AntiChina			(0.07) 0.05***	(0.17) 0.18		
ConsumerNonBrand * Exposure * AntiChina * TensionEvent			(0.02) -0.12** (0.06)	(0.13) - 0.17 (0.37)		
Number of observations	10,126	10,126	10,126	10,126		
Number of firms Period fixed effect	67 Yes	67 Yes	67 Yes	67 Yes		
2 nd order time trend Firm fixed effect R ²	Yes 0.03	Yes 0.03	Yes 0.04	Yes 0.04		

Panel B: Monthly survey data

	Mainland	l Exposure	Consumer	Brand Names
	(1) Exports	(2) Investment	(3) Exports	(4) Investment
TensionExpectation	-0.28***	-0.32***	-0.37***	-0.40***
AntiChina * TensionExpectation	(0.09) -0.07 (0.05)	(0.09) -0.04 (0.06)	(0.10) 0.00 (0.05)	(0.11) -0.03 (0.05)
Exposure	-0.02***		-0.03***	
Exposure * TensionExpectation	(0.01) 0.00 (0.00)	0.02 (0.01)	(0.01) 0.004** (0.001)	0.03* (0.02)
Exposure * AntiChina	0.02** (0.01)	(0.01)	0.03*** (0.01)	(0.02)
Exposure * AntiChina * TensionExpectation	0.00 (0.00)	0.00 (0.02)	-0.00 (0.00)	0.00 (0.02)
ConsumerBrand * TensionExpectation			0.42***	0.27**
ConsumerBrand * AntiChina * TensionExpectation			(0.11) -0.17	(0.13) -0.38
ConsumerBrand * Exposure			(0.39) 0.03*	(0.68) -0.01
ConsumerBrand * Exposure * TensionExpectation			(0.01) -0.02***	(0.04) -0.04***
ConsumerBrand * Exposure * AntiChina			(0.005) -0.07***	(0.01)
ConsumerBrand * Exposure * AntiChina * TensionExp.			(0.01) 0.01 (0.01)	0.10 (0.17)
ConsumerNonBrand * TensionExpectation			0.17**	0.20**
ConsumerNonBrand * AntiChina * TensionExpectation			(0.08)	(0.10) -0.09
ConsumerNonBrand * Exposure			(0.09)	(0.10) 0.01
ConsumerNonBrand * Exposure * TensionExpectation			(0.01) -0.01**	(0.06) -0.05
ConsumerNonBrand * Exposure * AntiChina			(0.004) 0.01	(0.03) 0.07***
ConsumerNonBrand * Exposure * AntiChina * TensionExp.			(0.02) 0.01 (0.01)	(0.003) - 0.02 (0.05)
Observations	4,281	4,281	4,281	4,281
Number of id Period fixed effect	69 -	69 -	69 -	69 -
2 nd order time trend	Yes	Yes	Yes	Yes
Firm fixed effect	Yes	Yes	Yes	Yes
\mathbb{R}^2	0.09	0.09	0.10	0.09

Appendix A. Events

The table outlines the major events that are used in the event study analysis. These events are compiled from Crisis Watch reports provided by the International Crisis Group and from the Chinese-language Wikipedia page "The Timeline of Cross-Strait Relations." Both sources list news articles reporting on each event and we provide examples of these references in the last column of the table.

Date	Event	Description	Detailed reference
July 18, 1995	1995-96 Taiwan Strait Crisis	After a speech made by Lee Teng-hui, president of the Republic of China (Taiwan), on "Taiwan's Democratization Experience", the People's Republic of China (mainland China) states that Lee harbors pro-Taiwan independence sentiments and is therefore a threat to stability in the region. Simultaneously, it is announced that China's military will launch missile tests and fire ground-to-ground missiles from July 21 to 28 on the high seas of the East China Sea.	China's official Xinhua News Agency (18 July) and The New York Times (21 July, "Chinese Missile Tests Seen as Intimidation").
March 5, 1996	Taiwan's First Presidential Election	Beijing intended to intimidate the Taiwanese electorate from voting for Lee Teng-hui in the 1996 presidential election and therefore, on March 5 1996, China's official Xinhua News Agency announced that the People's Liberation Army would stage a new series of missile exercises just off Taiwan's coast from March 8 to 15.	China's official Xinhua News Agency (March 5) and CNN (March 8, "Nations Condemn Chinese Missile Tests").
July 10, 1999	"Special State to State"	In his Deutsche Welle interview, Taiwan's president Lee Tenghui defined the Taiwan's relations with mainland China as "Special State to State", implicitly implying that Taiwan and China are separate countries. China reacts furiously as it considers Taiwan a renegade province and the comment breaks from the long-standing 'one China' policy.	Reuters (July 12, "Taiwan Says Junking 'One China' Doctrine").
August 3, 2002	"One Country on Each Side"	The concept of "One Country on Each Side" is espoused by Chen Shui-bian, the President of the Republic of China, regarding the political status of Taiwan, emphasizing that the People's Republic of China and Taiwan are two different countries (namely "one China, one Taiwan"), as opposed to two separate political entities within the same country of "China".	BBC News World Edition (August 3, "Taiwan Head Backs Independence Poll").
March 14, 2005	The Anti- Secession Law	The Anti-Secession Law is a law of the People's Republic of China. It formalized the long-standing policy of the People's Republic of China to use "non-peaceful means" against the "Taiwan independence movement" in the event of a declaration of Taiwan independence. The law was announced and simultaneously passed on March 14 (without any discussion, as is typically the case in mainland China).	Washington Post (March 14, "China Puts Threat to Taiwan into Law").
February 27, 2006	National Unification Council Ceasing to Function	Tension rose between Beijing and Taipei after Taiwan President Chen Shui-bian announced on February 27 that the National Unification Council and its guidelines would cease to function. The move brought condemnation from Beijing that called Chen a troublemaker and saboteur.	The New York Times (February 28, "Taiwan's Leader Defies Beijing's Warnings").

Appendix B: Geographical Location

The figure shows the provinces of China, where those geographically closest to Taiwan are highlighted in grey. These are the provinces of Fujian, Guangdong, and Zhejiang, and the municipality of Shanghai. Firm location is based on firms' headquarter as stated in their financial accounts data obtained through Thomson Financial.



Appendix C: Political Connection

The table lists the set of politically connected Taiwanese firms, where the classification is based on online search criteria detailed fully in section 2.5. The names are transcribed from Chinese into Latin scripts by the pinyin system and other commonly used names are also provided. It should be stressed that each classification has at least two sources, but for brevity only one of these is reported in the table. Also, direct web links are in some cases suppressed only to conserve space (e.g. in the cases where room is reserved for particular remarks).

Firm	Anti/Pro	Founder/Chairman/CEO	Remarks / online source:
Accton Technology	Anti	An-Jie Huang (An-Jye Huang), Shiming Zhang	http://www.libertytimes.com.tw/2003/new/may/6/today-e6.htm
Acer	Anti	Zhenrong Shi, Zhentang Wang, Jianren Weng	http://epaper.usqiaobao.com:81/qiaobao/html/2007-09/08/content_3783.htm
Shin Hai Gas	Anti	Shouzhen Ding, Mingxing Lin	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Mercuries Data Systems	Anti	Hedong Chen, Xiangli Chen, Xiangzhong Chen	Hedong Chen was ROC presidential advisor and major donor to a think tank affiliated with DPP.
Cathay Real Estate Development	Anti	Qingkui Zhang, Luque Huang, Qingkui Zhang	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Hwang Chang General Contractor	Anti	Chengjin Jiang, Chonglei Huang	http://www.appledaily.com.tw/appledaily/article/headline/20080529/30599829
Hota Industrial Manufacturing	Anti	Guorong Shen, Junzhi Chen	http://www.businesstoday.com.tw/v1/content.aspx?a=W20111102026
Shinkong Insurance	Anti	Xinhong Wu, Wenquan Zhan	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Taiwan Mobile	Anti	Mingxing Cai, Xuanwu Lai	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Fubon Financial	Anti	Mingzhong Cai, Tianxing Gong	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Cathay Financial	Anti	Hongtu Cai, Zhanggen Li	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Hong YI Fiber Industry	Anti	Zhenrong Shi (a.k.a. Stan Shi), Zhaojia Luo	http://epaper.usqiaobao.com:81/qiaobao/html/2007-09/08/content_3783.htm
Taishin Financial	Anti	Dongliang Wu, Longzheng Chen	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Shin Kong Financial	Anti	Dongjin Wu, Peng Xu	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Chong Hong Construction	Anti	Wenzhao Li, Yaozhong Li	http://www.nownews.com/2008/12/19/320-2382961.htm
Lien Chang Electronic Enterprise	Anti	Yuren Huang, Maoxiong Huang, Zhengang Chen	http://www.nownews.com/2007/08/16/10844-2142153.htm
Phytohealth	Anti	Chengjia Li, Wenhua Chen	http://www.chineseunb.com/bbs/showthread.php?t=15288&langid=12
Maywufa	Anti	Chengjia Li, Yuru Lai	http://www.chineseunb.com/bbs/showthread.php?t=15288&langid=12
Mercuries & Associates	Anti	Hedong Chen, Xiangli Chen	Hedong Chen was ROC presidential advisor and major donor to a think tank affiliated with DPP.
Taiwan Shin Kong	Anti	Fengyao Li, Bofeng Lin	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Shinkong Synthetic Fiber	Anti	Dongshen Wu, XianZhong He	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Shinkong Textile	Anti	Xinhong Wu, Jinfa Qiu	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Tsrc	Anti	Qi Yin, Shaoyu Wang, Weihua Tu	http://zh.wikipedia.org/wiki/%E6%AE%B7%E7%90%AA
The Great Taipei Gas	Anti	Wenyi Wang, Rongfu Xie	http://old.npf.org.tw/PUBLICATION/FM/095/FM-C-095-041.htm
Weltrend Semiconductor	Anti	Ximing Lin, Kunchan Cai	http://www.lihpao.com/?action-viewnews-itemid-55314
Creative Sensor	Anti	Yuren Huang, Maoxiong Huang, Yucang Xie	http://www.nownews.com/2007/08/16/10844-2142153.htm
FIC Global	Anti	Mingren Jian	http://www.nownews.com/2007/08/16/10844-2142153.htm
Continental Engineering	Anti	Qi Yin (a.k.a. Nita Ing), Yiqian Hong	http://zh.wikipedia.org/wiki/%E6%AE%B7%E7%90%AA
Chinese Maritime Transport	Pro	Yin'gang Peng, Shundi Hong	Close family relations to high-level members of KMT
Twinhead International	Pro	Yunren Gao, Sifu Gao	http://zh.wikipedia.org/zh-cn/%E9%AB%98%E8%82%B2%E4%BB%81
BES Engineering	Pro	Qingjing Shen, Weili Cai	http://zh.wikipedia.org/wiki/%E6%B2%88%E6%85%B6%E4%BA%AC
Unitech Printed Circuit Board	Pro	Pingzhao Zhang, Yuanming Zhang, Zhenghong Xu	Membership of KMT
Hsin Kao Gas	Pro	Tianmao Chen, Jiandong Chen	Membership of the KMT Central Standing Committee
VIA Technologies	Pro	Xuehong Wang (a.k.a. Cher Wang), Wenqi Chen	http://zh.wikipedia.org/wiki/%E7%8E%8B%E9%9B%AA%E7%B4%85
President Securities	Pro	Qingyuan Gao, Ahua Zheng, Kuancheng Lin	http://www.hudong.com/wiki/%E9%AB%98%E6%B8%85%E6%84%BF
Kian Shen Corporation	Pro	Shiquan Chen, Shaobao Mai	http://www.businessweekly.com.tw/article.php?id=42127
China Television	Pro	Shengfen Lin, Tailin Li	Run by KMT before December 2005
Cheng UEI Precision Industry	Pro	Taiming Guo (a.k.a. Terry Gou), Taiqiang Guo	http://udn.com/NEWS/NATIONAL/NATS3/6782486.shtml
Carnival Industrial	Pro	Kaitai Yan, Yucheng Jiang	http://www.businessweekly.com.tw/article.php?id=42127

China Motor	Pro	Kaitai Yan	http://www.businessweekly.com.tw/article.php?id=42127
Taiwan Acceptance	Pro	Kaitai Yan	http://www.businessweekly.com.tw/article.php?id=42127
China Petrochemical Development	Pro	Qingjing Shen, Xijin Cai	http://zh.wikipedia.org/wiki/%E6%B2%88%E6%85%B6%E4%BA%AC
Chunghwa Picture Tube	Pro	Tingsheng Lin, Shengchang Lin	Tingsheng Lin was a member of the KMT.
Jean Company	Pro	Zhenyuan Lin	Zhenyuan Lin is the son of Tingsheng Lin
Elitegroup Computer Systems	Pro	Wenyan Linguo, Zhihong Xu	Wenyan Linguo is the wife of Tingsheng Lin
Giant Manufacturing	Pro	Jinbiao Liu, Xiang'an Luo	Advisory to ROC president (KMT's Yingjiu Ma)
Power Quotient International	Pro	Taiming Guo (a.k.a. Terry Gou), Taiqiang Guo	http://udn.com/NEWS/NATIONAL/NATS3/6782486.shtml
Hon Hai Precision Industry	Pro	Taiming Guo (a.k.a. Terry Gou)	http://udn.com/NEWS/NATIONAL/NATS3/6782486.shtml
HTC Corp.	Pro	Xuehong Wang (a.k.a. Cher Wang), Yongming Zhou	http://zh.wikipedia.org/wiki/%E7%8E%8B%E9%9B%AA%E7%B4%85
Sinopac Financial Holdings	Pro	Shouchuan He, Zhi'ang Xiao	URL suppressed for brevity
Chinatrust Financial	Pro	Liansong Gu, Yikui Wu	http://zh.wikipedia.org/wiki/%E8%BE%9C%E6%BF%82%E6%B7%9E
Altek Corp.	Pro	Shanke Xu, Ruwen Xia	http://www.businessweekly.com.tw/article.php?id=42127
Pan-International Industrial	Pro	Songfa Lu, Songfa Lu	http://udn.com/NEWS/NATIONAL/NATS3/6782486.shtml
Uni-President Enterprises	Pro	Qingyuan Gao, Zhixian Luo	http://www.nownews.com/2003/09/06/703-1509446.htm
President Chain Store	Pro	Qingyuan Gao, Zhongren Xu	http://www.nownews.com/2003/09/06/703-1509446.htm
Foxconn Technology	Pro	Dongliang Lin, Hanming Li	Membership of Foxconn Technology Group
Taiwan Glass Industry	Pro	Bofeng Lin, Boshi Lin	http://www.nownews.com/2003/11/09/185-1540845.htm
Ta Chong Bank	Pro	Jianping Chen, Rongdong Cai	http://zh.wikipedia.org/wiki/%E9%99%B3%E5%BB%BA%E5%B9%B3
Tatung Company	Pro	Tingsheng Lin, Weishan Lin, Wenyan Linguo	Wenyan Linguo is the wife of Tingsheng Lin
Ten REN Tea	Pro	Mingxing Li, Renzong Lin	http://zh.wikipedia.org/wiki/%E6%9D%8E%E6%98%8E%E6%98%9F
Teco Electric & Machinery	Pro	Zhaokai Liu, Chunzhi Qiu	Brother of Zhaoxuan Liu(a former Premier of the Republic of China, from KMT)
Tecom	Pro	Zhaokai Liu, Hede Guan	Brother of Zhaoxuan Liu(a former Premier of the Republic of China, from KMT)
Ton YI Industrial	Pro	Qingyuan Gao, Zhizhong Chen	http://www.nownews.com/2003/09/06/703-1509446.htm
TTET Union	Pro	Qingyuan Gao, Yisheng Huang	http://www.nownews.com/2003/09/06/703-1509446.htm
Taiwan Mask	Pro	Sanke Xu, Biwan Chen	http://www.businessweekly.com.tw/article.php?id=42127
Yulon Motor	Pro	Kaitai Yan, Guorong Chen	http://www.businessweekly.com.tw/article.php?id=42127
Yuen Foong Yu Paper	Pro	Xiuying Qiu, Peng, Zhong	Membership of SinoPac Holdings Co whose director is Chuanshou He
Yulon Nissan Motor	Pro	Kaitai Yan, Wenrong Cai	http://www.businessweekly.com.tw/article.php?id=42127
Green Energy Technology	Pro	Weishan Lin, Helong Lin	Tingsheng Lin is a member of the KMT.