

China, Economic Friend or Foe? How does an increase in trade with China shape societies' opinion of China? Fornes, Ilyana

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Bachelor Thesis

China, Economic Friend or Foe? How does an increase in trade with China shape societies' opinion of China?

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Introduction to Research Question

China's potential rise as a contester to the neoliberal world order, which current revolves around the hegemonic United States (U.S), has brought academic curiosity on state relations with China. China's exponential economic growth, acquired under a communist regime, has both fascinated and troubled onlookers. Its growing power on the international stage is in simultaneity with the rise of anti-globalization and populism. Living in an age of neoliberalism and capitalism, there is the underlying assumption that trade benefits all and always. However, it is undeniable that backlash is growing. Domestic masses are recoiling from the increasing transnational interconnectedness of their societies and economies, perceiving their economic prosperity, sovereignty, and identity as being chipped away by foreign states, foreign companies, and foreign diasporas.

Unfortunately, the current literature, rather sparse, on what drives differences in opinions of foreign countries, still shows bias towards theorisation and small-N or case studies (Chu, 2021, p. 970). While Constructivist theory has significantly contributed to the field by using the argument of identities and ingroup-outgroup differentializing, its theorization is almost entirely backed by qualitative analysis. More specifically, there has been growing interests in the relation between trade and inter-state tensions, but the research is riddled with ambiguous conceptualisations and conflictual theorizations (Barbieri et Schneider, 1999, p. 390). Furthermore, much of the quantitative research on trade has used conflict as the dependent variable, espousing state-centrism and ignoring domestic forces. Analysing this topic through a quantitative method can help in uncovering influences on domestic opinion.

Therefore, this thesis wishes to build on the pre-existing literature on ingroup-outgroup distinctions, focusing more specifically on economic interactions and trade, whilst remedying for the above-mentioned gaps. Through a statistical analysis, the thesis answers this research question:

RQ: How does an increase in trade with China shape societies' opinion of China?

The thesis wishes to contribute to the Constructivism theory by employing a quantitative approach in order to generalise the nature and the significance of the relationship between trade with China and public opinion of China. By analysing this interaction quantitatively, the thesis can open the pathway for deeper subsequent qualitative research focusing on the factors of opinion. Furthermore, the thesis helps foreign policy makers better understand and predict public approval or disproval of their state's economic decisions in the international sphere, as well as help in better understand the role of national identities and diversity on society's perceptions of others internationally. China has invested considerably since the 1990s in building for itself a positive image; nonetheless, foreign societies are still largely divided on whether China is worth to befriend or beware (Xie et Page, 2013, p. 851). Therefore, this thesis pinpoints the factors that can shape favourably opinions and which should be taken into account by countries wishing to project a positive national image.

Literature Review

To appropriately contextualise the subsequent statistical analysis within pre-existing academic findings, theories, and conceptualisations, this thesis' literature review and theoretical framework will transpose the ingroup/outgroup demarcation theory in order to argument that interactions lead to the creation of identities between trading societies, as there is still little theoretical work on the identity expression and formation through economic processes such as trade. Second, it will analyse the assumption that identity formation requires the denigration of other identities, leading to the formation of negative opinions of other identities and those that ascribe to them. This framework is visualised in Figure 1.



Figure 1: Relation between interactions between ingroup and outgroup, formation of identity, and formation of negative opinions.

Dominant classical American International Relations (IR) started off with the assumption that state interactions were outside the influence of domestic institutions; as put by Kissinger, "foreign policy begins where domestic policy ends" (1966, p. 503). This methodological nationalism, the tendency to assume a national/international divide and to view the state as one homogenous nation, has been critiqued for being too simplistic for accurate theorization (Beck, 2007, pp. 287, 289; Putnam, 1988, p. 433). Within the reality of the globalised world, where transnational and trans-societal links have rendered the idea of a nation-state redundant, Cable's (1995, pp. 38, 46) statement that the nation-state still persists has lost its relevance. The international/national distinction wrongfully assumed that politics and policymaking happen separate from the *demos* that politics is meant to represent and be accountable to; hence academics have called for a more consistent convergence of the two spheres in research (Chernilo, 2011, p. 99). For example, Putnam (1988, p. 427) believes that the literature should bring more focus on how and when the domestic and international realm interact, while Shulman (1998, p. 110) calls for closer scrutinization to how domestic national identities shape and are shaped by international interactions. Fortunately, IR has transitioned to merging the domestic and international realm, such as how China is being perceived not only by political elites, but by the domestic masses as well (Burkhanov & Chen, 2017, p. 20). Consequently, this thesis will

adopt trade as a form of interaction, in order to understand how it influences the domestic sphere's perspective of other countries.

It is largely thanks to Constructivism that identity has become important in the interpretation of interactions between states, showing how identities form and are expressed when interacting with others (Shain & Barth, 2003, pp. 457-458; Berenskoetter, 2014, p. 267). Wendt (1992, p. 404) famously refuted Realism's assumption that the international order is naturally anarchic, arguing that states have no identities prior to interaction, as their interactions are themselves reflections of their identities. The logic here is that of the double hermeneutic: identity cannot exist without a medium through which it can be expressed; in this particular context, the identity of groups (referring broadly to states and societies who view themselves as part of a common collective) can be perceived and interpreted by others only through interactions. It is through this process that ingroups are able to understand whether the outgroup's identity makes the latter a friend or a foe, and subsequently dictates what kind of interactions the groups will engage in (Allan, Vucetic & Hopf, 2018, p. 848).

After identities have been formed through initial interactions, they shape the future interactions between groups, as well as the perceptions each group has of the other. However, there is extensive debate in literature across various big theories on whether different identities held by the outgroup and ingroup automatically leads to tense interactions, and how this can be applied to trade. It is useful to take into account the different strands of thinking of each IR theory, in order to present a broader picture that takes into account a range of important mechanisms. The Liberal argument currently sustained by today's world order assumes that all trade promotes a sense of community and peace between ingroups and outgroups (Barbieri & Schneider, 1999, p. 389; Lu & Thies, 2010, p. 348). Therefore interactions such as trade aligns the interests of the outgroups and ingroups, despite their difference, and hence leads the ingroup to positively perceive the outgroup. In line with this side of the debate, Lebow (2008, p. 479) suggests that identity formation and differentializing from the outgroup's identity does not necessarily bring outgroup hostility, as ingroup identities can exist independently from the nature of attitudes towards outgroups. As empirical backing, Lu and Thies' (2010, p. 363) research focusing on conflict as dependent variable, found that bilateral trade interdependence between countries

reduces the probability of territorial, policy, and regime conflicts. On the other hand, social identity theory posits that strong ingroup identification, namely identifying strongly with one's group characteristics, must lead to a strong separation from and competition with the outgroup (Adbelal, Herrera, Johnston & McDermott, 2006, p. 699). Shih (2012, p. 73) sees the process of self-identification as a process through which individuals may expand their identity onto others and dominate or assimilate others. The neo-Marxist argument that groups have a natural tendency to focus on relative gains means that symmetrical interactions bring peace, while asymmetrical interactions such as trade bring tensions (Mercer, 1995, p. 241; Barbieri et Schneider, 1999, p. 388). This is why trade interactions where the ingroup is benefiting more than the outgroup, such as importing to the outgroup, can lead to positive opinions, while trade interactions where the outgroup is gaining more, such as exporting to the ingroup, can be seen as the outgroup overpowering the ingroup (Barbieri et Schneider, 1999, p. 390). Due to insufficient Constructivist theorisation on outgroup/ingroup perceptions, the thesis will supplant its Constructivist starting point of the cyclical relationship between interactions and identity with the neo-Marxist assumption that groups focus on relative gains.

However, the us-versus-them denigration has been discovered empirically in research on state relations with China and ingroup societies vis-à-vis Chinese outgroups. Although Chinese diasporas are not directly pertinent to the research question, it is worth noting that the exclusion of diasporas by ingroup societies has served as evidence for some scholars that interactions can trigger stronger ingroup identities due to perceived conflicts of interest and competition for relative gains (McKeown, 1999, p. 327; Mercer, 1995, p. 245). There has been extensive analysis on how Chinese diasporas are often viewed as representations of China itself, leading to suspicion and hostility (Chan, 2015, p. 108; Fitzgerald 1972, p. 104). Surveys conducted by the Pew Research Center identify trade deficits with China as a key concern of the American public, amongst other concerns such as Chinese human rights policies and environmental degradation (Silver, Devlin & Huang, 2020, p. 3). Furthermore, different political identities between democratically-valued societies and authoritarian-valued societies can lead the former to assess the latter as a threat in international politics (Chu, 2021, p. 962; Allan et al. ,2018, p. 858). Evidence from a study on India shows that the country's society is worried that engaging in relations with China can pose a threat to its democratic identity (Allan et al., 2018, p. 863).

However, the intensity of societal unfavourable opinions of China varies across regions, with China's involvement in Latin America perceived as neo-colonialism, involvement in Philippines weakening public diplomatic inroads, and involvement in Africa perceived positively as Foreign Direct Investment increases (Paz, 2006, p. 111; Yeo et Gloria, 2023, p. 41; Rebol, 2010, pp. 153, 162).

There has been empirical evidence that trade can negatively impact the opinion by ingroups of outgroups. Trade policies, regarded as "battlegrounds [to spread] universal values" (Cable, 1995, p. 35), serve as interactions for groups to assert their identity over the others, such as in the evidence of trade policies being used to pursue environmental causes, human rights, and better labour standards. This is in line with Shih's (2012, p. 73) argument that ingroups may use interactions to spread their identities, showing that ingroups view their values as dominant over other, lesser values; this entails a negative perception of outgroup identities and values. Ballard-Rosa, Jensen, and Scheve's (2022, p. 1) quantitative analysis shows that American individuals living in diverse environments facing more intense competition from Chinese imports tend to enforce social norm conformity so as to regain identity dominance. Furthermore, former U.S president Trump's trade war with China has been found to coincide with the souring of Chinese public opinions towards the U.S, showing that economic policies between countries do have an influence on public opinions (Jin, Dorius & Xie, 2022, p. 18).

As this review of the existing literature has highlighted, the field of International Relations has moved past the divide between the international and domestic. The inclusion of identity has helped deepen the analysis of interactions, and may be applied to economic interactions such as trade. However, there is still severe contestation on whether different identities of the ingroup and outgroup yield to negative relations, with empirical evidence supporting both sides. Keeping the complexity of the topic in mind, this thesis wishes to bridge Constructivism and quantitative analysis in how trade influence domestic opinions.

Theoretical Framework

The foundation for this thesis' argument is the Constructivist's notion that interactions lead to identity formation. This is accompanied by the social identity theory, where processes of ingroup

identity creation is seen as requiring the devaluation of outgroups; hence, any shared identity, such as national identity, requires the devaluation of other identities and outgroups (Abdelal et al., 2006, p. 699). With this logic, albeit heavily contested in academia, after the formation of identities through interactions, these identities then shape interactions. Strong ingroup identities lead to strong ingroup preferences and favouritism, which is assumed to lead to the denigration of the identity of the outgroup. This denigration is expressed through negative interactions with the outgroup. This theory assumes simultaneous ingroup favouritism and outgroup denigration, building on the fact that as ingroups' identities become stronger, their demarcation with other outgroups becomes more apparent, which is tied to discrimination and ethnocentrism (Brief et al. 2005, p. 831). This is in line with the realistic group conflict theory, which assumes competition between groups, prejudice towards outgroups, and ingroup solidarity (Brief et al. 2005, p. 831). The assumption that strong ingroup identities lead to outgroup identity denigration is not very successfully argued in literature, hence the thesis will use the neo-Marxist assumption that groups focus on relative gains. The focus on relative gains is assumed to come from identity. As posited by Cable, a focus on relative gains, more specifically economic ones, are part of a "national economic purpose" (1995, p. 48), and so arguably are part of the country's identity. Indeed, a focus on relative gains can be connected to the group's necessity to be proud in its identity, and pursue shared interests and goals, which may be economic in nature (Abdelal et al., 2006, pp. 695, 698). This merging of different theories can help against identified gaps in the assumptions and serve as a reliable connection between identity and trade.

In line with the above presented theories, the thesis will employ this theoretical argument : Trade interactions, sub-divided into imports and exports, leads to the creation and expression of identities; the more groups trade with one another, the more the ingroup identity solidifies and is contrasted to the identity of the outgroups. This separation between groups leads to the ingroup focusing on relative gains when interacting with the outgroup. Therefore, if the ingroup feels as if the outgroup is gaining more through the interactions, it will feel as if its identity is threatened, and view the outgroup's identity negatively. On the other hand, if the ingroup feels as if it is gaining the most in the interaction, it will not feel threaten, and so view the outgroup neutrally or positively.

Hence, the thesis' adopted hypothesis is as follows:

H1: An increase in imports from China will negatively affect societies' opinions of China.H2: An increase in exports to China will positively affect societies' opinions of China.

Key terms and Concepts

Societies' Opinion

The use of the concept of society has been critiqued in international relations, as scholars such as Chernilo (2011, p. 103) see the idea of society as reflecting methodological nationalism, implying an idea of a harmonious nation-state. When scholars have tried to remedy to the apparent methodological nationalism in the concept, such as Wendt's definition of society as a sort of collective consciousness, their conceptualisations have been regarded as ambiguous (Bereksoetter, 2014, p. 267). But it can be argued that this is rightfully so; in line with transcending the international/domestic line, as well as with the increasing interconnection of people across borders, the concept of society is becoming much harder to pinpoint (Levitt & Schiller, 2004, p. 1007). Scholars such as Bourdieu and Levitt & Schiller (2004, p. 1008) have opted to use the concept of social fields instead, highlighting fluid boundaries, overlapping social networks sustained by embedded-within individuals. However, due to the thesis' quantitative approach, as well as due to how surveys were carried out in order to assess domestic opinions, the conceptualisation of society will unfortunately have to be limiting. A society will be conceptualised as all those living within the border of a state, and a society's opinion will be conceptualised as the opinion shared by the majority of individuals living within the border of a state.

Trade

Trade has been chosen as the independent variable in this thesis in order to specifically look at one important component of foreign policy: economic diplomacy (Mohapatra & Tripathi, 2021, p. 161). Trade is one expression of foreign policy, which is the collection of objectives the state wishes to fulfill at the international stage (Levi, 1970, p. 3). Society's perception of trade is important to both understand whether the Neoliberal assumption that all trade is good holds amongst the masses. This thesis will conceptualise trade as the important component of a state's economic foreign policy vis-à-vis other countries, consisting of the voluntary exchange of goods and services between at least two states.

China

Finally, in order to avoid state-essentialism, China cannot be viewed as just the state, the government, and the political elite. There is no stable definition nor boundary as to what makes something Chinese (Chan, 2015, p. 122; Fitzgerald, 1972, p. 103). However, the thesis will not seek to find the essential characters of what makes something Chinese or China, instead conceptualising China as the national image of China that is interpreted by the ingroup. It is the perception by the ingroup of all that relates to the country, namely its government its values, its culture, and its people.

Methodology and Analysis

Research design

This thesis will pursue a quantitative analysis on the role of trade on societal opinions of China, more precisely through a linear regression, with the purpose to identify potential variables that influence opinions of foreign countries. As it seeks not to explain how trade has influenced opinion over the years, but rather to first investigate whether there is a significant interaction between these two variables, a linear regression is preferable, as the dependent variable (Favourability Percent towards China) is continuous. This is in line with Jin et al.'s (2022, p. 23) use of a stepwise linear regression approach in assessing the predictive power of each predictor variable on Americans' attitudes towards trade with China. The analysis will be done using the R Studios Software.

For each of the two independent variables, the analysis will report on four models, with each model adding an additional control variable:

 $log (Favourability_{towardsChina}\%) = \beta 0 + log (\beta 1_{imports})$ $log (Favourability_{towardsChina}\%) = \beta 0 + log (\beta 1_{exports})$

 $log (Favourability_{towardsChina}) = \beta 0 + log(\beta 1_{imports}) + \beta 3_{democracy}$ $log (Favourability_{towardsChina}) = \beta 0 + log(\beta 1_{exports}) + \beta 3_{democracy}$

 $log (Favourability_{towardsChina}) = \beta 0 + log(\beta 1_{imports}) + \beta 3_{democracy} + log (\beta 4_{GDPpercapita})$

$$\begin{split} \log \left(Favourability_{towardsChina}\right) \\ &= \beta 0 \ + \log \left(\beta 1_{exports}\right) + \beta 3_{democracy} + \log \left(\beta 4_{GDPpercapita}\right) \end{split}$$

*the reason as to why some predictors are logged is explained in the Analysis section

Operationalisation

Society's Opinion of China

The dependent variable was taken from the Pew Research Center's Spring 2014 Global Attitudes Survey, Spring 2015 Global Attitudes Survey, and Spring 2016 Global Attitudes Survey Reports (Wike, Stokes, Poushter & Oates, 2014; 2015; 2016). The surveys consist of a sample of at least 1,000 people from each country answering various questions either through telephone or face-to-face interviews, with the sample being usually stratified by region and urbanicity. The specific on interest is the following : *'Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion of China*'. Finally, the responses are weighed to correct for unequal selection probabilities, based on variables such as gender, age, and education (*International Surveys*, Pew Research Center). The responses are then converted into percentages of population having unfavourable/favourable opinions of China. Past articles, such as Xie & Page's (2013, p. 852) 2007 analysis, have used Pew Research Center's percentages of the public having favourable views towards China.

As the thesis employs a linear regression, the year 2015 was selected as it had the highest number of countries investigated (38). However, to increase the number of cases, opinions of China in 2014 and 2016 from countries who were not surveyed in 2015 were included. Six countries' opinion data comes from 2014 (Bangladesh, Colombia, Egypt, El Salvador, Greece, Thailand) and five countries' opinion data comes from 2016 (Bolivia, Hungary, Netherlands, Nicaragua, Sweden). This has been done in order to produce more generalizable and accurate results; indeed, questions have been raised by scholars on the accuracy of evidence in the literature, due to the small number of cases used (Barbieri & Schneider, 1999, p. 396). While the introduction of data from other years may introduce bias and lead to inaccurate results, when comparing the regressions when the cases are from 2015 and when the cases include opinions from 2014 and 2016, it has been found that there is no significant difference in the two adjusted R squared, and that the export model with just opinions from 2015 violated linearity, while the

import model with only 2015 opinions showed autocorrelation. Therefore, the thesis will assume that the added 11 countries would have had similar favourability percentages in 2015 and will use the dataset opinions from 2014 and 2016.

<u>Trade</u>

Trade will be operationalised into two distinct independent variables: import and export. It is worth to take these two components of trade into account. There is evidence that high levels of imports are detrimental to a country's economy, and lead to negative opinions of the exporting outgroup (Ballard-Rosa et al., 2022, p. 4). In Rebol's (2010, p. 161) analysis, African perceptions of the Chinese, while generally positive, are negatively impacted by an increase in Chinese imports. Therefore, the ingroup interprets imports as primarily benefitting the exporting (Brief, Umpires, et al. 2005, p. 831). Exports, on the other hand, should represent the other side of the coin, namely that the ingroup sees its role as exporter as a source of power, and hence does not feel threatened by the outgroup.

Imports and Exports data was taken from the Direction of Trade Statistics (DOTS) of the International Monetary Fund (IMF) Database, containing the value of merchandise in U.S. Dollars imported and exported between IMF countries, as well as two UN members not part of the IMF (Cuba and North Korea) and twenty other states and non-sovereign entities (Marini, Dippelsman & Stanger, 2016, p. 5). Imports are reported on a Cost, Insurance, and Freight (CIF) basis, which means that the receiving country must pay for the cost of the merchandise, as well as its insurance and freight expenses. Exports are reported on a Free On Board (FOB) basis, differentiating whether it is the buyer who is liable for the merchandise during its transportation (FOB origin or shipping point), or if it is the seller (FOB destination). Trade Balance was not included in the analysis as a variable, as the negative values, due countries importing more from China than they export to it, cannot be logged. The data is obtained from the states that directly report to the organisation and is supplemented with data from the COMETEXT database sourced by EUROSTAT for all European Union countries, and data from UN COMTRADE for the countries that do not report to the IMF (Marini, Dippelsman & Stanger, 2016, p. 6).

Controls

Democracy

Controlling for the democracy index of the countries takes into account their adopted political and social identity, whether society is more inclined towards Neoliberal values or authoritarian ones. As discussed previously, ingroups living in democracies and that espouse democratic values can view China's authoritarian values as conflictual with their identity and can lead to negative perceptions. The Economist Intelligence Unit (2022) ranks the democracies. The Democracy index consists of 60 indicators that are divided in five categories: electoral process and pluralism, civil liberties, functioning of government, political participation, and political culture. The Democratic index is used instead of the popular Freedom House Index, as the latter does not take into account civil liberties, and hence ignores a strong component of a democratic identity.

Gross Domestic Product per Capita (GDP per capita)

GDP is considered as an accurate representation of the economic development of countries. By including this control in the model, the regression can account for the possibility that poorer countries might view China favourably as a potential investor and option for the current state of affairs, precisely because of their lack of economic prosperity (Rebol, 2010, p. 160). By dividing GDP by population, it is easier to capture the average well-being and economic standards dispersed amongst the population. The GDP per capita is taken from The Maddison Project which relies on the extrapolation method, benchmarking the year 1990 and using growth rates from countries' national accounts, and dividing it by the population size (Bolt & van Zanden, 2020).

Analysis

North &South	Europe	Africa &	Asia & Oceania
America		Middle East	
United States;	United Kingdom;	South Africa;	Japan*;
Canada;	France;	Egypt;	Australia;
El Salvador;	Germany;	Ethiopia;	Bangladesh;
Mexico;	Italy;	Ghana;	India;
Nicaragua;	Netherlands;	Kenya;	Indonesia;
Argentina;	Sweden;	Nigeria;	South Korea;
Bolivia;	Greece;	Senegal;	Malaysia;
Brazil;	Spain;		Pakistan;
			Philippines;

Chile; Colombia; Peru; Venezuela	Russia; Ukraine; Hungary; Poland	Tanzania; Uganda; Burkina Faso; Israel; Jordan; Lebanon; Palestinian ter.*	Singapore; Thailand; Vietnam*;
N=12	N=12	N=14	N=12
$\mathbf{N} \leftarrow \mathbf{O} \leftarrow \mathbf{V}$		1	\mathbf{T}

Note: Countries with asterisks (Japan, Palestinian territories, Vietnam) are identified as influential cases, and are omitted in certain models.

Table 1: List of Cases used in Analysis



Figure 2: Intensity of Import from China, 2015





Figure 4: Percent of people favourable towards China, 2015



How Imports from CHN change Opinion of CHN, 2015

Figure 5: Changes in Favourability Percent towards China across Intensity of Imports from China, 2015



How Exports to CHN change Opinion of CHN, 2015

Figure 6: Changes in Favourability Percent towards China across Intensity of Exports to China, 2015

Based on Figure 5 and 6, the percentage of people who own favourable opinions of China decreases as their state engages in more trade (both import and export) with China. However, the overlap in the grey area representing the confidence interval shows that there is uncertainty in the nature of the relationship, as it includes the possibility that the relationship is negative, positive, or that there is no rate of change (and hence no relationship). Therefore, a linear regression model can help in understanding the nature of the relationship better. The assumptions of a linear regression were checked, and the results can be viewed in the Appendix.

	Model 1	Model 3	Model 4
(Constant)	5.36***	4.72***	4.74***
	(0.57)	(0.48)	(0.45)
Imports (logged)	-0.06*	-0.01	0.03
	(0.03)	(0.02)	(0.03)
Democracy Index		-0.07**	-0.04
		(0.02)	(0.02)
GDP per capita			-0.13**
(logged)			
			(0.05)
R^2	0.11	0.25	0.36
Adj. R ²	0.09	0.21	0.32
N	49	48	48

Table 2: Regression with Imports (logged) as Independent variable and Favourability Percent towards China (logged) as the criterion.

Note: OLS regression coefficients with standard errors in brackets.

****p < 0.001, **p < 0.01, *p < 0.05

Model 1 represents the baseline, simple linear regression model. Both the independent variable Imports and the dependent variable Favourability Percent were logged to remedy for autocorrelation, a violation of a linear regression . Japan was removed in Model 1 and in all subsequent models as it was as an influential case, and hence skews the results and negatively affects their accuracy. While logging the variables does bring a more complicated interpretation, it allows the model to meet the key assumptions for a linear regression of homoskedasticity, normality, independency, and linearity of residuals.

In Model 1, as both variables are logged, a 1% increase in imports from China, in billions USD, leads to a 0.06 (SE=0.03) percentage point decrease in the percent of people favourable towards China. This relationship is found to be statistically significant (p<0.05). However, the R^2 value shows that only 11% of the variation in favourability towards China is accounted by how the variation in imports from China. Therefore, the model is poor in explaining how people's opinions of China are shaped by imports.

Model 3 includes the states' democratic index rating as a control variable. The variable was left unlogged, as it produced a stronger R^2 and adjusted R^2 value than when it is logged, and Vietnam was removed because it is an influential case. It was also found through an ANOVA test comparing Model 3 to the baseline Model 1 that Model 3 is a significantly better fit (F=9.15, p=0.004) for the data, compared to the baseline model. Multicollinearity was checked for, and the results showed that the two predictors were independent of one another (tolerance statistic = 0.73). However, it is important to note that, while Model 3 met the assumptions of homoskedasticity, normality, and linearity of residuals, it showed signs of autocorrelation (DW=1.45, p=0.02) after Vietnam was removed from the analysis. This should be taken into account when interpreting these results, as this severely damages their reliability.

In Model 3, a 1% increase in imports from China, in billions USD, leads to a 0.01 (SE=0.02) percentage point decrease in the percent of people favourable towards China, but the relationship is not statistically significant (p=0.65). A one point increase in a state's democracy rating, on a ten point scale, leads to a 0.07 (SE=0.02) percentage point decrease in the percent of people favourable towards China, and the relationship is statistically significant (p<0.01). The R² shows that 25% of the variance in favourability towards China is accounted by including both imports from China and a country's democratic strength. The adjusted R² (0.21) shows that Model 3 is better in explaining variance than Model 1 (0.09).

Model 4 includes the states' democratic index rating and GDP per capita. The newly-added control variable was logged, as leaving the GDP per capita unlogged violated the assumptions of linearity, homoskedasticity, and normality of residuals. There were no influential cases, so the only cases that were omitted from previous models were Japan and Vietnam. The ANOVA test comparing Model 4 to Model 3 shows that the former is a statistically significantly better fit (F=7.86, p=0.007). Multicollinearity was checked, and the tolerance statistic values of 0.48, 0.59, and 0.39 for the independent variable, democracy, and GDP respectively shows that the predictors are independent of one another. Furthermore, the inclusion of GDP per capita logged helped in alleviating the autocorrelation found in Model 3 (DW=1.93, p=0.34), and the model respected the assumptions of homoskedasticity, normality, and linearity of residuals. Finally, another regression was run to see whether there is an interaction between the variables of democracy and GDP per capita logged, but the interaction effect was not statistically significant. In light of all these findings, Model 4's results can be considered insightful in answering the research question.

In Model 4, a 1% increase in imports from China, in billion USD, leads to a 0.03 (SE=0.03) increase in the percent of people favourable towards China, but the relationship is not statistically significant (p=0.22). A one point increase in a state's democracy rating, on a ten point scale, leads to a 0.04 (SE=0.02) decrease in the percent of people favourable towards China, but here also the relationship is not statistically significant (p=0.10). However, a 1% increase in a state's GDP per capita results in a 0.13 (SE=0.05) decrease in the percent of people favourable towards China is accounted for by the model, and the adjusted R^2 (0.32) shows that, overall, Model 4 is the best fit out of the three models.

	Model 1	Model 3	Model 4
(Constant)	4.59***	4.30***	4.77***
	(0.41)	(0.32)	(0.29)
Exports (logged)	-0.03	0.01	0.06**
,	(0.02)	(0.02)	(0.02)
Democracy Index		-0.09***	-0.05*
		(0.02)	(0.02)
GDP per capita			-0.19***
(logged)			(0.04)
\mathbb{R}^2	0.05	0.26	0.48
Adj. R ²	0.03	0.23	0.44
Ν	47	45	44

Table 3: Regression with Exports (logged) as Independent variable and Favourability Percent towards China (logged) as the criterion.

Note: OLS regression coefficients with standard errors in brackets. *** = 0.001 ** = 0.001

 $p^{***} p < 0.001, p^{**} p < 0.01, p^{*} < 0.05$

Model 1 represents the baseline, simple linear regression model. Both the independent variable Exports and the dependent variable Favourability Percent were logged to remedy for autocorrelation. Japan and Palestine were removed in Model 1 and in all subsequent models due to being influential cases. Logging both the independent and dependent variables led to the model meeting assumptions of homoskedasticity, normality, independent, and linearity of residuals.

In Model 1, as both variables are logged, a 1% increase in exports to China, in billions USD, leads to a 0.03 (SE=0.02) percentage point decrease in the percent of people favourable towards

China. This relationship is not statistically significant (p=0.14). Furthermore, the R² value shows that a mere 5% of the variation in favourability towards China is accounted by how much the state exports to China. Therefore, quantity of exports alone is not enough to explain differences in people's opinions of China.

Model 3 includes the states' democratic index rating as a control variable. The variable was left unlogged, as the model had a stronger R² and adjusted R² value when compared with when the control variable is logged. Here too, Vietnam was removed from the model and for the subsequent model because it is an influential case and skews the findings . It was also found through an ANOVA test comparing Model 3 to the baseline Model 1 that Model 3 is significantly a better fit (F=13.58, p<0.001) for the data compared to the baseline model. Multicollinearity was checked for, and the results showed that the two predictors were independent of one another (tolerance statistic = 0.71). Model 3 met the assumptions of homoskedasticity, normality, and linearity of residuals, and had no autocorrelation (DW=1.60, p=0.07). Therefore, results from Model 3 can be assumed to be reliable and accurate.

In Model 3, a 1% increase in exports to China, in billions USD, leads to a 0.01 (SE=0.02) percentage point increase in the percent of people favourable towards China, but the relationship is not statistically significant (p=0.44). On the other hand, a one point increase in a state's democracy rating, on a ten point scale, leads to a 0.09 (SE=0.02) percentage point decrease in the percent of people favourable towards China, and the relationship is statistically significant (p<0.01). The R² shows that 26% of the variance in favourability towards China is accounted by including both Imports from China and a country's democratic strength. The adjusted R² (0.23) shows that Model 3 is much better in explaining variance than Model 1 (0.03).

Model 4 includes the states' democratic index rating and GDP per capita. The new control variable was logged, as the model produced a stronger R^2 and adjusted R^2 value. There were no influential cases found, so the only cases that were omitted from previous models were Japan, Palestine and Vietnam. The ANOVA test comparing Model 4 to a Model 3 shows that the former is a statistically significantly better fit (F=18.38, p<0.01) than the latter. Multicollinearity was checked, and the tolerance statistic values of 0.45, 0.60, and 0.38 for the independent variable,

democracy, and GDP respectively shows that the predictors are independent of one another. Furthermore, the model respected the assumptions of homoskedasticity, normality, linearity, and independence (DW=2.42, p=0.90) of residuals. Finally, another regression was run to see whether there is an interaction between the variables of democracy and GDP per capita logged, but the interaction effect was not statistically significant. In light of all these findings, Model 4's results can be considered insightful in answering the research question.

In Model 4, a 1% increase in exports to China, in billion USD, leads to a 0.06 (SE=0.02) increase in the percent of people favourable towards China, and the relationship is statistically significant (p<0.01). A one point increase in a state's democracy rating, on a ten point scale, leads to a 0.05 (SE=0.02) decrease in the percent of people favourable towards China, and the relationship here is also statistically significant (p=0.03). Furthermore, a 1% increase in a state's GDP per capita results in a 0.19 (SE=0.04) decrease in the percent of people favourable towards China. The R² shows that 48% of the variance in favourability towards China is accounted for by the model, and the adjusted R² (0.45) shows that, overall, Model 4 is the best fit out of the three models.

Here are the updated equations, using results from the models in order to predict the percentage of public favourability towards China. The equation representing model 3 for imports is omitted, due to the identified autocorrelation.

 $log (Favourability_{towardsChina}\%) = 5.36 - 0.06 (logimports)$ $log (Favourability_{towardsChina}\%) = 4.59 - 0.03 (logexports)$

 $\log (Favourability_{towardsChina}) = 4.30 + 0.01(\log exports) - 0.09(democracy)$

 $\log(Favourability_{towardsChina})$

= 4.74 + 0.03(logimports) - 0.04(democracy) - 0.13(logGDPpercapita)log (Favourability_{towardsChina}) = 4.77 + 0.06(logexports) - 0.05(democracy) - 0.19(logGDPpercapita)

Conclusion and Reflection

Results of the Research

Two important components of trade, imports and exports, are found to have different influences on society's opinion towards China. When a country's democratic level and GDP per capita is taken into account, imports did not produce a significant impact on opinion, and neither did the democratic level of the country. However, as a country's GDP per capita increases, society's opinion of China sours. This is in-line with Xie et Page's (2013, p. 850) findings that publics in poorer countries have a more favourable image of China than those in more economically prosperous states. This can potentially be explained by China's important role for poorer countries in increased competition for infrastructure projects and lower prices of domestic goods with Chinese goods hitting the domestic market (Rebol, 2010, p. 156). Furthermore, this can also serve as a potential route of research on how some developing countries' societies may perceive China favourably as an alternative to the current international order. Indeed, theories such as the economic dependence theory, posit that developed countries, those with high levels of GDP per capita, are leeching off of poorer countries, and hence severely limiting the development of the latter (Barbieri & Schneider, 1999, p. 389). Therefore, it can be hypothesised that countries who have lower GDP per capita feel cheated by the current international order, and are greatly aided by China's domestic involvement, as it attracts foreign attention (Rebol, 2010, p. 156).

On the other hand, exports did significantly influence opinion towards China. Interestingly enough, when democracy and GDP per capita were accounted for, higher levels of exports led to more favourable opinions, meaning that not all interactions between groups lead to negative perceptions of the outgroup by the ingroup. Interactions are much more complex that assumed by literature, where it is posited ingroup favouritism leads to distrust and a sense of moral superiority over the outgroup (Brewer, 1999, p. 442). Indeed, this finding can be interpreted as evidence that relative gains are crucial to ingroups in deciding how to perceive the outgroup (Halevy, Bornstein & Sagiv, 2008, p. 405). But it may also be that the importance attributed to relative gains over absolute gains depends on the societies' environment, such as economic prosperity, and identity. Exports enrichen countries, and lead to economic prosperity, as well as imply that other countries rely on these exports, boosting the power and status of the exporting country and its society. While much of the literature has been focused on theorization and qualitative analysis, this thesis' quantitative outlook can open the door to investigate interactions in a more mathematical view. Here, game theory can be a significant aid in understanding the relation between identities and relative gains (Barbieri et Schneider, 1999, p. 388).

Furthermore, when the independent variable was exports, increases in GDP per capita and in the strength of democracy led to significantly poorer opinions of China. Similarly to imports, countries who have lower GDPs per capita can see China as a potential economic ally and also as a valid alternative to the current international order. The more democratic a country, and by extension its society, the poorer the opinions of China. This suggests that democratic society's look disapprovingly on the authoritarian values of China, strengthening the theory that differences in identities between ingroups and outgroups lead to the ingroup denigrating the identity and values of the outgroup, more favourable towards groups with similar identities and values. The statistical analysis did not identify any interaction between economic prosperity (GDP per capita) and democracy. While not so pertinent to the research question, this finding may indirectly contribute to the ongoing academic debate on the relationship between democracy and economic prosperity, taking into account trade relations (Drury, Krieckhaus & Lusztig, 2006, p. 133).

In light of the statistical analysis results, the hypothesis (H1) that an increase in imports from China will negatively affect opinions of China must be rejected. Model 4 for imports showed that no relationship between imports and opinions has been found. On the other hand, the hypothesis (H2) that an increase in exports to China will positively affect opinions of China cannot be rejected. Model 4 for exports showed that there was a positive relationship between exports and opinions.

Strengths and Weaknesses of the research

The use of linear regression models has both strengths and weaknesses vis-à-vis answering the research question. In terms of strengths, a linear regression helps identify the existence, nature, and magnitude of relationships. However, because the data has an inherent temporal component, where the opinions, trade levels, democratic strength, and GDP per capita relies on the results of the past, a cross-sectional analysis does not entirely capture the relationship, as time plays a

significant part. This is why Model 3 for imports suffered from autocorrelation, and why the independent, dependent, and GDP per capita had to be logged in order to strengthen the results of the model vis-à-vis the autocorrelation of the residuals. However, this does not mean that a Repeated Measures Analysis (RMA), which takes into account the influence of time on the relationship and includes within-in case effects, would have been better for the research question. On the contrary, this thesis simply wishes to investigate whether the theoretical assumptions of relationship between interactions, identity, and perceptions of outgroups in the literature are supported statistically. Now that there is greater quantitative understanding in the effect of the three predictors on opinion, further research should employ RMA to see how trade levels have influenced opinion of China over time.

An important weakness is that the research question was guided partly by the rather limited pool of existing datasets on the topic. It is quite difficult to quantify identity, interactions, and group opinions. For example, inflows of Chinese nations into the countries of interest were used initially as a predictor. Unfortunately, the database that convened the most, the OECD statistics database, only carried information for the OECD countries. When the datasets were synthesised with the available opinion data, only 11 countries had both information on net inflows of Chinese nationals and opinions of China (OECD.Stat). While a linear regression was run nonetheless with the control being net inflows (Model 2 is included in the Appendix), ten cases are not enough for two predictors and the results cannot be considered as remotely accurate (Green, 1991, p. 500). The lack of datasets on diasporas can explain in part why there has been little quantitative research on how diasporas affect opinion of their homelands. Furthermore, Barbieri and Schneider (1999, p. 400) have pointed out that the official trade statistics, such as those communicated to the IMF and used in the analysis, are often undervalued or overvalued for political or economic reasons, which might in itself reflect the political relationship of the country vis-à-vis China.

In the context of other research, there is a marked lack of robustness across findings, for example those between trade and conflict, due to the different results found (Barbieri et Schneider, 1999, p. 401). Furthermore, Xie and Page (2013, p. 852) consider themselves the first to use survey data to investigate factors in variations in public opinions of China; this shows how literature has

lagged in utilising surveys to make sense of societal relations. This thesis' use of surveys has important advantages, namely having a large-N design that can help in generalizing factors across countries, avoiding the subjective bias that comes with coding in qualitative analysis, and little measurement errors in the Pew surveys (Xie et Page, 2013, p. 865).

Recommendations for Future Research

As mentioned previously, this thesis wishes to serve as a starting point for more significant research on the role of trade, political values, and economic prosperity, on perception of countries' national images. While trade here was investigated by dividing it into two components, imports and exports, it would be interesting to operationalise it as a country's level of economic relations with China, more precisely looking at trade with China in proportion to a country's total trade (see Xie et Page, 2013, p. 863). This can help capture the complex relationship of economic interdependence (Barbieri & Schneider, 1999, p. 399). As flagged before, further research should be consecrated in including game theory to make sense of societal opinions and identities, as societies who see themselves as poorer may focus rather on absolute gains over relative ones. Furthermore, this thesis has omitted looking at recent opinions of China, as they could have been stained by the recent COVID-19 pandemic (Jin et al., 2022, p. 18). This could be interesting to investigate under a RMA analysis, to precisely see how previously identified factors (trade, democracy, and GDP per capita) were weakened or exacerbated during the period. Finally, it is inarguable that perceptions are mired by today's mass media (Xie et Page, 2013, p. 855). Therefore, a triangulated approach, using both statistics as well as a qualitative content analysis of media, can bring even more reliable, accurate, and generalizable findings on the topic of mass opinions.

- Abdelal, R., Herrera, Y. M., Johnston, A. I., & McDermott, R. (2006). Identity as a Variable. *Perspectives on Politics*, 4(04). <u>https://doi.org/10.1017/S1537592706060440</u>
- Allan, B. B., Vucetic, S., & Hopf, T. (2018). The Distribution of Identity and the Future of International Order: China's Hegemonic Prospects. *International Organization*, 72(4), 839–869. <u>https://doi.org/10.1017/S0020818318000267</u>
- Ballard-Rosa, C., Jensen, A., & Scheve, K. (2022). Economic Decline, Social Identity, and Authoritarian Values in the United States. *International Studies Quarterly*, 66(1), sqab027. <u>https://doi.org/10.1093/isq/sqab027</u>
- Barbieri, K., & Schneider, G. (1999). Globalization and Peace: Assessing New Directions in the Study of Trade and Conflict. *Journal of Peace Research*, 36(4), 387–404. <u>https://doi.org/10.1177/0022343399036004001</u>
- Beck, U. (2007). The Cosmopolitan Condition: Why Methodological Nationalism Fails. *Theory, Culture & Society*, 24(7–8), 286–290. <u>https://doi.org/10.1177/02632764070240072505</u>
- Berenskoetter, F. (2014). Parameters of a national biography. *European Journal of International Relations*, 20(1), 262–288. <u>https://doi.org/10.1177/1354066112445290</u>
- Bolt, J., & van Zanden, J. L. (2020). Maddison style estimates of the evolution of the world economy: A new 2020 update [Data file]. Maddison Project Database. Retrieved from <u>https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2020</u>
- Brewer, M. B. (1999). The Psychology of Prejudice: Ingroup Love and Outgroup Hate? *Journal of Social Issues*, 55(3), 429–444. <u>https://doi.org/10.1111/0022-4537.00126</u>

- Brief, A. P., Umphress, E. E., Dietz, J., Burrows, J. W., Butz, R. M., & Scholten, L. (2005). Community Matters: Realistic Group Conflict Theory and the Impact of Diversity. *The Academy of Management Journal*, 48(5), 830–844.
- Burkhanov, A., & Chen, Y.W. (2016). Kazakh perspective on China, the Chinese, and Chinese migration. *Ethnic and Racial Studies*, 39(12), 2129–2148. https://doi.org/10.1080/01419870.2016.1139155
- Cable, V. (1995). The Diminished Nation-State: A Study in the Loss of Economic Power. *Daedalus*, *124*(2), 23–53.
- Chan, S. (2015). The Case for Diaspora: A Temporal Approach to the Chinese Experience. *The Journal of Asian Studies*, 74(1), 107–128. <u>https://doi.org/10.1017/S0021911814001703</u>
- Chernilo, D. (2011). The critique of methodological nationalism: Theory and history. *Thesis Eleven*, *106*(1), 98–117. <u>https://doi.org/10.1177/0725513611415789</u>
- Chu, J. (2021). Liberal Ideology and Foreign Opinion on China. *International Studies Quarterly*, 65, 960-972.
- Drury, A. C., Krieckhaus, J., & Lusztig, M. (2006). Corruption, democracy, and economic growth. *International political science review*, 27(2), 121-136.
- Economist Intelligence Unit. (2022). Democracy Index 2022: Out of the Abyss? [Data file]. Retrieved from https://www.eiu.com/topic/democracy-index
- Fitzgerald, S. (1972). China and the Overseas Chinese: A study of Peking's changing policy 1949-1970. Cambridge, United Kingdom: Cambridge University Press.
- Green, S. B. (1991). How Many Subjects Does It Take To Do A Regression Analysis. *Multivariate Behavioral Research*, 26(3), 499–510. <u>https://doi.org/10.1207/s15327906mbr2603_7</u>

- Halevy, N., Bornstein, G., & Sagiv, L. (2008). "In-group love" and "out-group hate" as motives for individual participation in intergroup conflict: A new game paradigm. *Psychological science*, 19(4), 405-411.
- Jin, Y., Dorius, S., & Xie, Y. (2022). Americans' Attitudes toward the US–China Trade War. *Journal* of Contemporary China, 31(133), 17–37. <u>https://doi.org/10.1080/10670564.2021.1926089</u>

Kissinger, H. A. (1966). Domestic Structure and Foreign Policy. Daedalus, 95(2), 503-529.

- Lebow, R. N. (2008). Identity and International Relations. *International Relations*, 22(4), 473–492. https://doi.org/10.1177/0047117808097312
- Levi, W. (1970). Ideology, Interests, and Foreign Policy. *International Studies Quarterly*, 14(1), 1– 31. <u>https://doi.org/10.2307/3013538</u>
- Levitt, P., & Schiller, N. G. (2004). Conceptualizing Simultaneity: A Transnational Social Field Perspective on Society. *International Migration Review*, 38(3), 1002–1039. <u>https://doi.org/10.1111/j.1747-7379.2004.tb00227.x</u>
- Lu, L., & Thies, C. G. (2010). Trade Interdependence and the Issues at Stake in the Onset of Militarized Conflict: Exploring a Boundary Condition of Pacific Interstate Relations. *Conflict Management and Peace Science*, 27(4), 347–368. <u>https://doi.org/10.1177/0738894210374410</u>
- Marini, M., Dippelsman, R., & Stanger, M. (2018). IMF Working Paper: New Estimates for Direction of Trade Statistics. *International Monetary Fund*, 1-37.
- McKeown, A. (1999). Conceptualizing Chinese Diasporas, 1842 to 1949. *The Journal of Asian Studies*, 58(2), 306–337. <u>https://doi.org/10.2307/2659399</u>

Mercer, J. (1995). Anarchy and Identity. International Organization, 49(2), 229–252.

- Mohapatra, A., & Tripathi, A. (2021). Diaspora as a soft power in India's foreign policy towards Singapore. *Diaspora Studies*, 14(2), 161–178. <u>https://doi.org/10.1080/09739572.2021.1935108</u>
- Organisation for Economic Co-operation and Development. (n.d). *International Migration Database*. Retrieved from <u>https://stats.oecd.org/Index.aspx?DataSetCode=MIG</u>.
- Paz, G. S. (2006). Rising China's 'Offensive' in Latin America and the U.S. Reaction. Asian Perspective, 30(4), 95–112.
- Pew Research Center. (n.d.). International Surveys. Retrieved from <u>https://www.pewresearch.org/our-</u> methods/international-surveys/
- Pew Research Center. (2019, January 8). *Country Specific Methodology*. Retrieved from <u>https://www.pewresearch.org/methods/interactives/international-methodology/global-attitudes-</u> <u>survey/france/2015/</u>
- Pew Research Center. (2020, October 5). Increasing Negative Evaluations of China. Retrieved from https://www.pewresearch.org/global/2020/10/06/unfavorable-views-of-china-reach-historichighs-in-many-countries/pg_2020-10-06_global-views-china_0-05/
- Putnam, R. D. (1988). Diplomacy and Domestic Politics: The Logic of Two-Level Games. *International Organization*, 42(3), 427–460.
- Rebol, M. (2010). Public Perceptions and Reactions: Gauging African Views of China in Africa. *Turkish Journal of International Relations*, 9(4), 149-186.
- Shain, Y., & Barth, A. (2003). Diasporas and International Relations Theory. *International Organization*, 57(3), 449–479. <u>https://doi.org/10.1017/S0020818303573015</u>

- Shih, C. (2012). Assigning Role Characteristics to China: The Role State Versus The Ego State1: Assigning Role Characteristics to China. *Foreign Policy Analysis*, 8(1), 71–91. <u>https://doi.org/10.1111/j.1743-8594.2011.00158.x</u>
- Silver, L., Devlin, K., & Huang, C. (2020). Unfavorable Views of China Reach Historic Highs in Many Countries. *Pew Research Center*, *6*, 1-28.
- Wendt, A. (1992). Anarchy is what States Make of it: The Social Construction of Power Politics. *International Organization*, 46(2), 391–425.
- Wike, R., Stokes, B., Poushter, J., & Oates, R. (2014). Global Opposition to U.S Surveillance and Drones, but Limited Harm to America's Image: Many in Asia Worry about Conflict with China. *Pew Research Center*.
- Wike, R., Stokes, B., Poushter, J., & Oates, R. (2015). Global Publics Back U.S on Fighting ISIS, but are Critical of Post 9/11 Torture: Asian Nations Mostly Support TPP, Defense Pivot – but Also Value Economic Ties with China. *Pew Research Center*.
- Xie, T., & Page, B. I. (2013). What Affects China's National Image? A cross-national study of public opinion. *Journal of Contemporary China*, 22(83), 850–867. <u>https://doi.org/10.1080/10670564.2013.782130</u>
- Yeo, A., & Gloria, E. (2023). National Identity and the Limits of Chinese Public Diplomacy in the Philippines. *Journal of Contemporary China*, 32(139), 35–53. <u>https://doi.org/10.1080/10670564.2022.2052438</u>

Appendix

Table 4: Regression with Imports (logged) as Independent variable and Inflows of Chinese nationals (logged) as control, on Favourability Percent towards China (logged)

$\begin{array}{cccc} \hline (\text{Constant}) & 3.89^{**} & \\ & (1.21) \\ \text{Imports (logged)} & 0.02 & \\ & (0.06) \\ \hline \text{Inflows from} & -0.06 & \\ \hline \text{China (logged)} & & \\ \hline & & \\ \hline & & \\ R^2 & 0.13 & \\ \text{Adj. } R^2 & -0.03 & \\ N & & 12 & \\ \end{array}$		Model 2	
$\begin{array}{cccc} (1.21) \\ \text{Imports (logged)} & 0.02 \\ (0.06) \\ \text{Inflows from} & -0.06 \\ \text{China (logged)} & \\ \hline & \\ \hline & \\ R^2 & 0.13 \\ \text{Adj. } R^2 & -0.03 \\ \text{N} & 12 \\ \end{array}$	(Constant)	3.89**	
$\begin{array}{cccc} \text{Imports (logged)} & 0.02 \\ & (0.06) \\ \text{Inflows from} & -0.06 \\ \text{China (logged)} & \\ \hline & \\ \hline & \\ R^2 & 0.13 \\ \text{Adj. } R^2 & -0.03 \\ \text{N} & 12 \\ \end{array}$		(1.21)	
$(0.06) \\ Inflows from -0.06 \\ (0.06) \\ \hline (0.06) \\ \hline R^2 \\ Adj. R^2 \\ N \\ 12 \\ (0.03) \\ \hline R^2 \\ -0.03 \\ \hline R^2$	Imports (logged)	0.02	
$ \begin{array}{c} \mbox{Inflows from} & -0.06 \\ \mbox{China (logged)} & & & \\ \hline & & & \\ \hline R^2 & & 0.13 \\ \mbox{Adj.} \ R^2 & & -0.03 \\ \ N & & 12 \end{array} $		(0.06)	
$\begin{tabular}{c} China (logged) & (0.06) \\ \hline R^2 & 0.13 \\ Adj. R^2 & -0.03 \\ N & 12 \end{tabular}$	Inflows from	-0.06	
$\begin{tabular}{ccc} (0.06) \\ \hline R^2 & 0.13 \\ Adj. R^2 & -0.03 \\ N & 12 \end{tabular}$	China (logged)		
R ² 0.13 Adj. R ² -0.03 N 12		(0.06)	
Adj. R ² -0.03 N 12	R ²	0.13	
N 12	Adj. R ²	-0.03	
	N	12	

Note: OLS regression coefficients with standard errors in brackets. $^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$ Although migration was to be used as a control variable, there were insufficient cases that had both data for opinion towards China and inflows of Chinese nationals. Therefore Model 2, having an insufficient number of cases (approximately 10 cases per predictor are needed) as well as showing signs of heteroskedasticity and violating linearity, is simply included to show general patterns, but the control variable was dropped from Model 3 and 4. Therefore, the model's results can be considered as inaccurate, and are not worth an analysis.



Figure 6: Overview of Analysis of Assumptions of Model 4

Upper-left corner: assumption of homoscedastic residuals is met; there is a uniform spread of residuals with no apparent funnel-shape.

Upper-right corner: assumption of normality is met; the points all relatively fall on the line, and there is no strong S-shape.

Lower-left corner: assumption of linearity is met; the red line is relatively straight with little rate of change and does not show a parabola-like shape or a sharp increase or decrease.

Lower-right corner: no influential cases; there are no cases that are past the grey-dotted lines in the lower and upper corner, which are the cook's distance cut-offs.

Table 5: Regression with Exports (logged) as Independent variable and Inflows of Chinese nationals (logged) as control, on Favourability Percent towards China (logged)

	Model 2
(Constant)	3.55**
	(0.87)
Exports (logged)	0.02
	(0.06)
Inflows from	-0.04
China (logged)	
	(0.07)
R ²	0.04
Adj. R ²	-0.16
Ν	11

Note: OLS regression coefficients with standard errors in brackets. ***p < 0.001, **p < 0.01, *p < 0.05 Although migration was to be used as a control variable, there were insufficient cases that had both data for opinion towards China and inflows of Chinese nationals. Therefore Model 2, having an insufficient number of cases (approximately 10 cases per predictor are needed) as well as showing signs of heteroskedasticity and violating linearity, is simply included to show general patterns, but the control variable was dropped from Model 3 and 4. Therefore, the model's results can be considered as inaccurate, and are not worth an analysis.



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Lower-left corner: assumption of linearity is met; the red line is relatively straight with little rate of change and does not show a parabola-like shape or a sharp increase or decrease.

Lower-right corner: no influential cases; there are no cases that are past the grey-dotted lines in the lower and upper corner, which are the cook's distance cut-offs.