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# Features of Chinese Financial Investors in Europe – A Peer-Group Analysis

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### Abstract

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*Chinese PE investment still constitutes a fraction in Europe in comparison with the US and intra-European counterpart. However, since 2014, an upward trend of Chinese PE investments in Europe can be seen. This thesis draws comparisons between investment activities of Western vs. Chinese financial investors in Europe. Based on the empirical assessment of two datasets (each N=150), it raises the question of underlying strategic and investment rationales of Chinese financial investors in Europe in comparison to a respective Western peer group. The thesis concludes that Chinese financial investors do not significantly invest more in politically strategic sectors than their Western counterpart. However, they show significant difference in terms of deal structure. Chinese financial investors tend to build investor groups significantly more often than Western financial investors.*

## *Introduction*

In emerging markets such as China, PE is gaining increasing importance and has begun to stronger interconnect with traditional PE markets, such as the US and Europe. Driving factors are the thriving technology sector, increasing wealth of individuals, a push for diversifying risk and assets, fierce competition at home as well as slowing domestic growth. However, Chinese outbound portfolio investment has been under more rigid control by the Chinese government and has thus become more volatile than foreign direct investment.

Compared to the US and European markets in 2017, constituting a transaction volume of 594 billion USD<sup>1</sup>, respectively 140 billion EUR<sup>2</sup>, the PE-market in China has grown sixfold from 35 billion USD (2012) to 223 billion USD<sup>3</sup> (2016). In addition, the share of Chinese financial investors engaging in foreign transaction more than doubled between 2013 and 2017, from 13 (2013) to 30 percent (2017)<sup>4</sup>. By now, 33 Chinese PE funds are among the 300 biggest PE funds worldwide<sup>5</sup>.

This thesis specifically poses questions about financial investors and their investment rationale in Europe. Considering the role of Chinese state capitalism abroad, the question arises: Which investment strategies do Chinese financial investors pursue in comparison with other international financial investors? Are they mostly politically driven or is there a growing trend towards classic return-driven investment among Chinese financial investors? This thesis draws a comparison between activities of international and Chinese financial investors in Europe and investigates strategic rationales and investment motives. The main research question is:

***"What are the investment rationales of Chinese financial investors in Europe, in comparison with Western financial investors, between 2012 and 2018?"***

The aim of the thesis is to highlight the different characteristics of the motives of Chinese financial investors compared to international financial investors. The first part of the thesis describes the relevant theoretical and analytical framework from the Western and Chinese perspective, which lies behind the investment rationales of financial investors. The second part describes the methodology approach, divided by a quantitative and qualitative part. The third part depicts relevant findings of the quantitative and qualitative analysis. In the fourth and final part, the author draws overall conclusions and provides an outlook on possible future trends.

Comparing Chinese financial investors with Western financial investors does not intend to benchmark the Chinese PE industry against the US or Europe, but rather help to work out and illuminate differences in investment approaches and understanding.

## *Literature Review: Chinese Private Equity globally and in Europe*

This thesis contributes to the current ongoing debate in academics and public media to what extent Chinese outbound investment is driven by political and government rationale and the implications for European businesses and political representatives.

Data on Chinese private equity and their outbound activities is still rare, but the situation has improved over the last years. Several Asian data bases provide regular statistics and analysis, like the China Venture Capital Association (CVCA), AVCJ (Asian Venture Capital Journal), Preqin and Zero2IPO. Since 2016, China joined the Coordinated Portfolio Investment Survey (CPIS) conducted by the IMF and started to publish country-specific figures on overseas portfolio investment<sup>6</sup>. Current data of CPIS shows, that in 2017 Hong Kong (39%), the US (27%), Cayman Islands (8%), UK (4%), Luxembourg (2%), Germany (2%) and France (2%)<sup>7</sup> are among the top 10 destinations of Chinese Outward Portfolio investments.

Several studies in the past have assessed the structure, characteristics and performance of the Chinese PE market as well as implications for foreign PE funds entering the Chinese market: Ahlstrom & Bruton 2006, Bruton & Ahstrom 2003, Bruton et al. 2005, Bruton and Yeh (2007) and White et al. (2002), Vega (2004), Bruno et al. (2004), Wright (2007) and Haberich (2011). Their main results will be picked up in detail in chapter 2, when assessing the Chinese setting of the PE industry. Qian (2010) and Wright (2007) oppose the European and Chinese VC market, arguing that liberalization of the Chinese capital market should be further promoted by the government. Schalast/Tiemann/Tuppi (2009) assessed the role of Sovereign Wealth Funds (SWFs) from BRICS-countries on financial markets and their implications on German corporations. They found no evidence for politically motivated investments and further indicate that participant corporations have no concerns about SWF investment activities.

Major contributions to this topic have been made by business practitioner accounts, generally confirming the growing influence of Chinese financial investors in the European M&A and PE market in the last years and share optimistic views about future developments. PwC (2017) argues that Chinese financial investors, including insurers, government and industry funds, SOE funds and private-company funds will be among the drivers of outbound M&A. BakerMcKenzie (2018) also takes a deeper look into this topic, arguing that, while domestic PE deals amounting to 754, Chinese outbound PE deals climbed to 315 in 2017 compared to 278 in 2016<sup>8</sup>. The author also argues, that China's biggest tech companies Baidu, Alibaba and Tencent (BAT) are changing the PE landscape in China<sup>9</sup>. Houlihan Lokey (2017) argues, that China's outbound investment activity has started with policy-driven acquisitions by large SOEs, but has rapidly developed into an area in which PE firms are quite active<sup>10</sup>. It also argues, that Chinese private equity might differ from other Western PE funds, in including the Chinese business angle in the selection and evaluation processes of prospective portfolio companies. Golden Bridge (2013) investigates previous experience of Chinese VC investors in Europe. The study received an overall positive feedback and concluded, that due to cultural and system differences, due diligence processes should be taken more seriously. Invest Europe (2017) emphasizes the growing

importance of Asian institutional investors, which contributed 15% of the total amount fundraised in the European PE industry in 2017<sup>11</sup>.

Few academic research papers have been published on this topic, probably because Chinese financial investors act behind the curtain and so far have no significant impact on the European market in comparison to their strategic counterparts.

The various business reports mentioned above are helpful to keep on track in regard to current trends and developments of Chinese PE firms in Europe. They do not, however, link the facts and trends with the Chinese settings. This thesis aims to fill this gap and wants to provide a first interpretation of characteristics of Chinese financial investors in Europe and their investment rationale.

### *Background: Developments of the Chinese PE Industry*

In order to properly understand the investment rationales and motives of Chinese Financial Investors in Europa, one has to look behind the curtain and assess historically and structurally the development of the Chinese PE industry at home.

Mainly four developments have shaped the Chinese PE industry since its emerging in the 80s:

First, like the rest of the business and finance landscape, the Chinese PE industry has been gradually reformed and privatized over the last decades. Whereas the first domestic PE funds in the 80s were all state-backed funds, such as local government agencies and universities, gradually new actors emerged: Chinese privately-owned corporates, which gained massive profits by IPOs abroad and consequently founded investment arms. This type of Chinese PE fund dominates in the current domestic market.

Second, the Chinese government has tightly controlled the in- and outflow of PE investment and other short-term capital as it was worried about financial volatility and currency instability. Outbound portfolio investment was often downgraded by the Chinese government as “irrational outbound investments” and restricted investments in non-strategic assets like real estate, entertainment and sports sectors. Thus, the PE market was mainly focused on the home-bias for a long time.

Third, as a lack of diversity and the suffering from a huge “home bias” toward domestic assets<sup>12</sup>, the Chinese PE industry thus got more internationalized in the last years. They are intuitively urged to look abroad.

Fourth, the Chinese government has opened up certain channels for qualified investors in the last years. as a consequence of the “forced” internationalization development. Accompanied by the qualified domestic institutional investors (QDII) program, they i.e. eased the insurance regulatory requirements, one of the most important groups of institutional investors.

## Hypotheses

In the context of the previous discussion about financial investors and current developments in China, this thesis contributes to the following hypothesis:

*Hypothesis 1: Chinese financial investors are significantly more often driven by politically strategic rationales than Western financial investors.*

In order to confirm or reject this hypothesis, the following six sub-hypotheses will be assessed:

*Hypothesis 1.A: Chinese financial investors are significantly more often state-owned or state-backed in comparison with Western financial investors.*

*Hypothesis 1.B: Chinese financial investors significantly more often invest in target countries with high strategic value in comparison with Western financial investors.*

*Hypothesis 1.C: Chinese financial investors more often invest in sectors with high politically strategic relevance in comparison with Western financial investors.*

*Hypothesis 1.D: Chinese financial investors do acquire a significantly higher share of target companies than Western financial investors.*

*Hypothesis 1.E: If Chinese financial investors are state-backed or state-owned, they significantly invest more often in sectors with high strategic relevance.*

*Hypothesis 1.F: If Chinese financial investors form group of investors, they significantly invest more often in sectors with high politically strategic relevance.*

## Empirical Approach

The dataset was conducted by the databases MergerMarket and Thomson Reuters. It includes two samples, which comprises a representative array of 150 deals by Chinese financial investors (sample 1) and 150 Deals by US and European (Western) financial investors (sample 2).

In Table 1, the independent and dependent variables, we used to test our hypotheses are defined as follows:

Table 1: List of independent and dependent variables for Regression Modell

No.	Category	Description
<b>Independent variables</b>		
$x_1$	Date of Transaction	The year of closing the transaction.
$x_2$	Global Innovation Index (GII)	Annual ranking of countries by their capacity for, and success in, innovation. The score ranges from 0 (not innovative) to 100 (most innovative) in the empirics.

$x_3$	Credit Rating	Financial indicator of debt securities assigned by Standard & Poor's (S&P). The Rating ranges from AAA (Prime) to C (In default), which was transferred into numbers from 21 (Prime) to 0 (in default) in the empirics.
$x_4$	Ownership	A dummy variable equal to 1 for a bidder company with majority state-ownership structure (> 50%), else 0
$x_5$	Deal Value	Size of deal value in million USD. The log of this variable is used in the empirics to account for nonlinearity in the economies of scale
$x_6$	Percentage of Share	Percentage of share acquired by the bidder company, ranging from 0 to 100 percent.
$x_7$	Deal Structure	A dummy variable equal to 1 for an investment made by two or more investors, else 0 for a stand-alone investor.
<b>Dependent variables</b>		
$x_8$	Politically Strategic Investment	A dummy variable equal to 1 for an investment in a politically strategic sector.
$x_9$	Strategic Investment	A dummy variable equal to 1 for an investment in a strategic sector, else 0 for investment in non-strategic sector.

One way to categorize different investment rationales (dependent variables) is based on the target sector chosen by the investor. The range of sectors can be divided into three categories:

1. **Politically strategic sectors** are defined as sectors affecting *security* and *public order*, according to the definition of the Framework for the Screening of Foreign Direct Investments of the European Union<sup>1314</sup>.
2. **Strategic sectors** include the subsector from 1) politically strategic sectors and comprise sectors, which in the long term are *sustainable for the national economic value chain* and *decisive for future technology upgrades*, like e-commerce and automotive & components.
3. **Non-strategic sectors** are sectors, which are seen neither as crucial for a technology upgrade nor of high strategic relevance for national value chains, like real estate business, sport & entertainment and tourism.

Hypotheses 1.A-1.D will be assessed by descriptive statistics. Hypotheses 1.E and 1.F will be assessed by logit regression models.

Comparison tests between independent and dependent variables were calculated and for both samples a correlation matrix created. The correlation with high results (> 0,5) and medium results (> 0,3) were highlighted. Thus, we can assess the relationship between independent and dependent variables but also across different independent variables. In addition, covariances were calculated for sample 1 and 2 between independent and dependent outcomes. Also, differences between means, medians, and proportions for different groupings of the two samples were assessed.

Regression analysis assesses causal relations between variables, while controlling for other things being equal<sup>15</sup>. In this thesis, a regression equation is used to assess the likelihood of an investment being made in a political, respectively economic or non-strategic, sector. Since the dependent variables (politically strategic, strategic and non-strategic sectors) only assume two discrete values (0;1) the logistic regression analysis by the following nonlinear equation is applicable<sup>16</sup>.

$$E(y) = \frac{e^{b_0 + b_1x_1 + \dots + b_px_p}}{1 + e^{b_0 + b_1x_1 + \dots + b_px_p}}$$

We use the estimated logistic regression equation to estimate the probability of investing in a politically or strategic sector. Binary logistic regression procedure was used to compute estimates of the model parameters  $\beta_0, \beta_1 \dots, \beta_n$ . Four different logistic regression models with different selection of the independent variables (table 1: 1-7) and the two dependent variables (table 1: 8-9) (with a significance level alpha = 0,05 and classification cut off 0.5) have been applied.

Followed by the application of four different regression models we carry out tests for significance. We conduct a test for overall significance, which is based on a chi-squared distributed test statistic G. If the G-test shows an overall significance, a t-test reveals whether each of the individual independent variables has a direct and significant relation with the dependent variables<sup>17</sup>.

## Results for Descriptive statistics

**In comparison to Western financial investors, deal volume<sup>18</sup> (n=80) by Chinese financial investors markedly picked up since 2013.** In terms of deal value<sup>19</sup>, Western and Chinese PE investments show similar developments over time, marking a downturn in 2016 and a peak in 2017, as seen in figure 1 and 2.

Figure 1: Chinese PE investments [n=80]

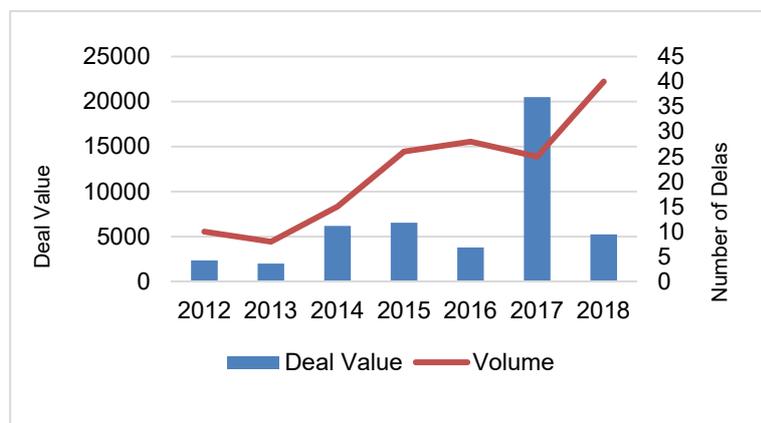
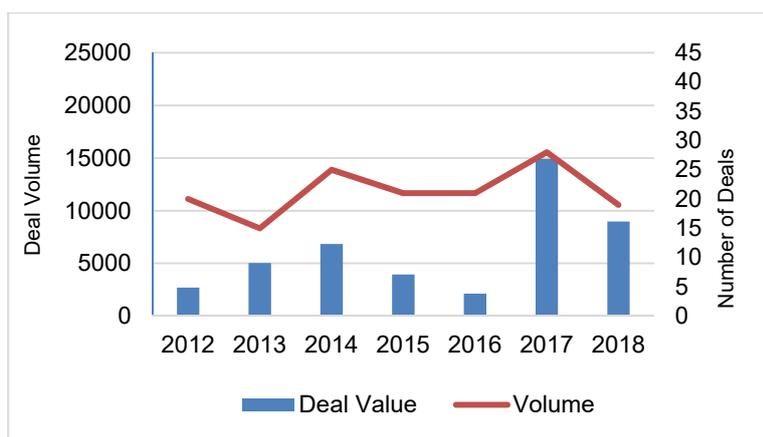


Figure 2: Western PE investments [n=150]



Source: Own presentation based on MergerMarket, ThomsonReuters

**In addition, the comparison of Chinese and Western PE investments shows significant differences regarding the majority ownership structure.** The Chinese GP landscape is significantly more often dominated by state-owned actors in comparison with Western PE funds.

In 16 cases, of Chinese PE investments, the ownership-structure couldn't be clearly identified. Out of the remaining 139 observations of the Chinese sample 31 private equity deals made by Chinese bidders are state-owned, in comparison with 5 of 148 Western financial investments. This observation is consistent with previous studies, which argue that state capitalism is playing a dominant role in Chinese outbound investments. Thus, Hypothesis 1.A can be confirmed.

**Also, the descriptive statistics shows that there is no significant difference in countries targeted by Chinese and Western financial investors.** The means of the Global Innovation Index (GII), respectively, Credit Rating Score by Standard & Poor (S&P) are 55,6 versus 56, respectively, 18,5 versus 18,1. Thus Hypothesis 1.B is rejected.

**Both Chinese and Western financial investors invest equally often in sectors that are considered as politically strategically relevant.** The comparison shows, that in 39% of the cases, Chinese investors invest in *politically strategic sectors*, the Western investors in 40% of the cases. **However, regarding investments in strategic sectors, the comparison test shows significant differences between the two types of investors:** The proportion of investments carried out by Chinese financial investors is significantly higher in comparison with their Western counterparts (80 % versus 70%). Thus, the ratio between strategic and non-strategic sectors for Chinese and international financial investors is 80 to 20 (CHN), respectively, 70 to 30 (Western). Hence, Hypothesis C is only partly confirmed.

**Lastly, Chinese and Western investments show significant differences in relation to percentage of share acquired.** For the Chinese PE investments, 109 out of 150 transactions offer details on the *percentage of shares* acquired by the investors in comparison to 149 observations for Western PE investments. The data indicates, that Western investors acquire a higher share on average than Chinese bidder group: 88% versus 69%. In politically strategic sectors, this difference is more pronounced: 89 % versus

60%. To summarize, Western financial investors tend to acquire a higher share in M&A-Deals than their Chinese counterpart. Thus, the Hypothesis 1.D is rejected.

## Results for Regression Model

Table 2 and 3 present the correlation matrices for the selected factors for Chinese and Western PE investments, this is for illustrating the dependencies between the factors:

Table 2: Chinese PE investments - Correlation matrix of governance and economic factors

	Politically strategic sector	% of shares acquired	Deal Structure	Ownership	Strategic sectors	Credit Rating	GII
Politically strategic sector	1						
% of shares acquired	-0,1526	1					
Deal Structure	0,2598	-0,1550	1				
Ownership	0,1764	-0,1245	-0,0479	1			
Strategic sector	0,4194	-0,1350	0,1335	0,0445	1		
Credit Rating	0,1347	0,2031	0,1131	-0,1916	-0,0543	1	
GII	-0,0177	0,2547	-0,0026	-0,2142	-0,1775	0,7984	1

Source: Own calculations

Table 3: Western PE investments -Correlation matrix of governance and economic factors

	Politically strategic sector	% of shares acquired	Deal Structure	Ownership	Strategic sectors	Credit Rating	Deal Value	GII
Politically strategic sector	1							
% of shares acquired	0,0755	1						
Deal Structure	0,0655	0,1217	1					
Ownership	-0,0972	-0,0169	0,0515	1				
Strategic sector	0,5430	-0,1376	-0,0351	-0,0856	1			
Credit Rating	-0,0276	-0,0317	0,0329	0,0195	0,1146	1		
Deal Value	0,0659	0,1350	0,0118	0,2018	0,0952	0,0377	1	
GII	-0,0640	0,1007	0,0748	-0,0895	-0,0014	0,7424	0,0499	1

Source: Own calculations

The following present logit models for determining the likelihood of whether Chinese financial investors investing in politically strategic sectors (first dependent variable; Model 1, 2) or in strategic sectors (second dependent variables; Model 3 and 4).

For each of the two dependent variables we present two sets of explanatory variables to show robustness to different specifications. Model 1 and 3 (n=136) includes the governance factor for *investor's ownership* and the factor *deal structure*, Model 2 and 4 includes economic factors for *innovation level* and *credit score* of target countries as well as the factor *percentage of share acquired*. We also checked *deal value* and *date of transaction* but those had no significant influence in models 1-4.

In Table 4 (model 1), we see that  $\beta_0 = -1,2196$ ,  $\beta_1 = 1,3815$ ,  $\beta_2 = 0,9973$ , with  $\beta_1$  quantifying the influence of deal structure, and  $\beta_2$  quantifying the influence of investor's ownership for explaining the likelihood of Chinese PE investments in politically strategic sectors. We test model 1 for significance and obtain a chi-squared test statistic  $G=15,5$  under degrees of freedom equal 2, which imply a p-value of 0,0004. We therefore reject the null hypothesis (with a failure rate of 0,04%) and conclude that the model is significant in explaining the investments of Chinese investors by governance factors.

Model 1 shows a positive and significant relation ( $\beta_1 = 1,3815$ ), between the *deal structure* and *investments in politically strategic sectors*. *Privately-owned investor groups* are 54,0% likely to *invest in politically strategic sectors* in comparison to a likelihood of 22,8% for a *stand-alone, private-owned investor*. A *state-owned, stand-alone investor* is 45,6% likely to *invest in a political strategic sector*. This likelihood significantly increases to 76,1% for state-owned investor forming an investor group. In addition, the Hosmer-Lemeshow test confirms that the likelihoods are robust and do not differ significantly from the observed counterparts. The results show that the likelihood of Chinese investments in politically strategic sectors is higher for a privately-owned investor group (54,0%) than for a state-owned stand-alone investor (45,6%). Therefore, the variable "groups of investors" is seen to be more significant than the variable "ownership", when assessing the Chinese investment rationales in politically strategic sectors.

Table 4: Model 1- Governance factors explaining the likelihood of Chinese PE investments in politically strategic sectors

	$\beta$	s.e.	Wald	p-value
Intercept	-1,2196	0,2645	21,258	0,000004
Deal Structure	1,3815	0,4177	10,9358	0,0009
Ownership	0,9973	0,4390	5,1604	0,0231

Source: Own calculations

Model 2 (n=98) analysis the influence of the factors (independent variables) *innovation level* and *credit score* of the target country as well as the factor *percentage of share acquired*. Table 5 reveals significance of those factors. With applying a nonlinear concave transformation (i.e. the square root function) to the variable *% of share* we managed to increase the validity of the model. In model 2, we see that  $\beta_0 = 1,9142$ ,  $\beta_1 = -0,1485$ ,  $\beta_2 = 0,3905$ ,  $\beta_3 = -0,15576$ , with  $\beta_1$  quantifying the influence of *% of share*,  $\beta_2$  quantifying the influence of *crediting rating*, and  $\beta_3$  quantifying the *influence of innovation level* for explaining the likelihood of Chinese PE *investments in politically strategic sectors*. We test model 2 for significance and obtain a chi-squared test statistic  $G=13,8$  under degrees of freedom equal 3, which imply a p-value of 0,003. Thus, the model is significant (with a failure rate of 0,3%).

Table 5 shows a negative and significant relation between the *level of shares acquired* and the likelihood of Chinese investments in politically strategic sectors. Also, the *innovation level of the target country* is negative and significantly related to the likelihood of *Chinese investments in politically strategic sectors*. These negative signs of those coefficients imply that the likelihood of *Chinese investments in politically strategic sectors* is increasing with a decreasing *level of shares acquired*, and decreasing *innovation level*.

The likelihood for investments in politically strategic sectors increases significantly for transactions with percentage of share smaller than the 49% level: Whereas the likelihood for investments in politically strategic sectors ranges between 13 and 23% in case more than 49% of shares are acquired. The likelihood increases to 50,5% and 69,9%, in case less than 25% percentage of shares are acquired by Chinese financial investors.

The *credit rating score*, is positive and significantly related with the likelihood of Chinese investments in politically strategic sectors. This implies increasing likelihood with increasing *credit rating*. In this case, the likelihood for investments in politically strategic sectors increases, when investing in countries with a credit rating score BBB+ and better. The likelihood is between 13% and 15% when investing in countries with a credit rating score BBB (coding 13) and lower, whereas the likelihood significantly increases to a range of 30% and 60%, when investing in countries with credit rating score BBB\* (coding 14) and higher.

Table 5: Model 2 - Economic factors explaining the likelihood of Chinese PE investments in politically strategic sectors

	$\beta$	s.e.	Wald	p-value
Intercept	1,9142	1,7158	1,2445	0,2645
% of share	-0,1485	0,0813	3,3405	0,0675
Credit Rating	0,3904	0,1450	7,2514	0,0070
GII	-0,1576	0,0549	8,2180	0,0041

Source: Own calculations

From model 1 and 2 we conclude, that *governance factors* have more influence than *economic factors* for assessing, whether Chinese financial investors target politically strategic sectors or not. Model 1 constitutes only a failure rate of 0,04% in comparison with 0,3% in Model 2.

In models 3 and 4, we check, whether *governance* and *economic* factors help explain the likelihood of Chinese PE investments in strategic sectors. Testing model 3 (table 6) for significance we obtain failure probability of 25,4% based on a test statistic 2,74 with degrees of freedom 2. In comparison with Chinese investments in politically strategic sectors (Model 1), the governance factors – ownership and deal structure – are not significantly related and thus inconclusive when assessing the likelihood of Chinese investments in strategic sectors.

Table 6: Model 3 - Governance factors explaining the likelihood of Chinese PE investments in strategic sectors

	$\beta$	s.e.	Wald	p-value
Intercept	0,9772	0,2531	14,9059	0,0001
Deal Structure	0,7933	0,5342	2,2052	0,1375
Ownership	0,3034	0,5132	0,3495	0,5543

Source: Own calculations

In model 4, we see that  $\beta_0 = 6,6099$ ,  $\beta_1 = -0,0902$ ,  $\beta_2 = 0,2861$ ,  $\beta_3 = 1,0861$ ,  $\beta_4 = -0,1793$ . Testing model 4 for significance we obtain a chi-squared test statistic  $G=10,8$  under degrees of freedom equal 3, which yields a p-value of 0.013. We therefore reject the null hypothesis and conclude that the model is significant (with a failure rate of 1,3%).

Table 7 shows a positive and significant ( $\beta_2 = 0,2861$ ) relation between the credit rating score of the target country and the likelihood of Chinese investments in strategic sectors. In addition, the Global Innovation Index is positive and significant related ( $\beta_3 = 0,1793$ ) with the dependent variable.

Table 7: Model 4 - Economic factors explaining the likelihood of Chinese PE investments in strategic sectors

	$\beta$	s.e.	Wald	p-value
Intercept	6,6099	2,3758	7,7405	0,0053
% of share	-0,0902	0,0929	0,9426	0,3315
Credit Rating	0,2861	0,1476	3,7592	0,0525
GII	-0,1793	0,0688	6,7921	0,0091

Source: Own calculations

Both in model 2 and 4, the economic factors play a significant role when assessing the Chinese investment rationales in strategic sectors. In contrast to that, governance factors are only significantly related when assessing Chinese investment in politically strategic sectors; governance factors are not significant for Chinese investments in strategic sectors in general.

From the results above, we conclude to reject hypothesis 1.F and accept hypothesis 1.G. Regression models have also been applied to the sample of Western financial investments. In contrast to Chinese financial investors, the governance and economic factors discussed above are insignificant for investments in strategic sectors taken by Western financial investors. The coefficients for the governance factors –ownership and deal structure – are not significantly different from 0. Therefore, we do not gain any explanatory power for those factors.

Above, we summarized the main quantitative results regarding investment rationales of Chinese financial investors in comparison to Western financial investors. Chinese and Western financial investors significantly differ in terms of investor's majority ownership, deal structure and shares acquired. They don't significantly differ in terms of selected target countries and sectors. Both, governance factors and economic factors, have an impact on the investment rationale of Chinese financial investors, but not on the investment rationale of Western financial investors.

### *Summary of European M&A-Deals by Chinese vs. Western Investors*

The above results reveal four main findings.

**First, since 2014, an upward trend in outbound investment activities by Chinese financial investors in Europe is recognized.** The strong growth rate in public and private wealth, the willingness of the government to gradually open the Chinese financial market and thus strengthen its currency internationally is assumed to be the reason for this development. The results are consistent with previous findings about Chinese PE investment in Europe.

**Second, Chinese GPs, who invest in Europe, are significantly more often state-owned in comparison with Western financial investors.** These Chinese policy funds and state-

owned conglomerates mainly operate under a political investment agenda and dilute the typical risk-/reward-legitimation of a PE firms' business model. The Silk Road Fund and the China CEE-Fund constitute the second generation of Chinese policy funds and were solely founded for the purpose of promoting national industrial and infrastructural programs like the OBOR-initiative and the "Made in China-2025" program.

However, since 2015 the number of deals made by Chinese state-owned financial investors has declined, which can either be the consequence of increasing privately-owned PE firms going abroad in relative terms or due to discriminatory treatment by European authorities and/or deal parties.

**Third, widespread assumptions on Chinese Investors are misleading. Western and GPs equally often invest in sectors with high strategic political relevance, like in infrastructure, technology and industrials.** For this type of sectors, Chinese financial investors are even more risk-averse, as indicated by the credit score rating of the target countries, than Western investors. According to our data, despite isolated cases of rather risky investments in eastern European countries, Chinese financial investors diversify their risks more across target countries in politically strategic sectors than their Western counterparts.

**Due to regulatory requirements and systemic differences of the PE market in China, the ratio of investments between strategic and non-strategic sectors by Chinese and Western financial investors significantly differ:** 80 to 20 percent of total Chinese PE investments, respectively, 70 to 30 percent of total Western PE investments. Non-strategic sectors like "Financials", where especially traditional, purely commercial-driven GPs and LPs invest, still play a subordinate role for Chinese financial investors in comparison with Western financial investors.

**Also, Chinese financial investors, on average, tend to acquire a lower level of percentage of shares than their western counterparts.** This difference is even more pronounced, when focusing on investments made only in politically strategic sectors. The level of shares acquired by Chinese financial investors is negatively linked with investments in politically strategic sectors. This finding indicates that Chinese PE investments in politically strategic sectors decline accompanied by the increasing level of shares acquired. A possible explanation for this could be that Chinese financial investors face discriminatory treatments due to the increasing defensive policy measures by European authorities and/or due to parties involved during the bidding process.

**And fourth, against normal practice, Chinese financial investors tend to more frequently build investor groups, when engaged in a M&A deal in Europa in comparison to the Western counterparts.** In this way, the cooperation with other investor group parties, often companies with international experienced management teams, can help Chinese financial investors to overcome agency problem and thus help increase overall attractiveness in the European deal and investment landscape.

## *Conclusion*

To sum up, this thesis has shown, that – objectively - Chinese and Western financial investment's rationale do not significantly differ in terms of sectors and countries. However, due to systemic and historical reasons the two types of investors differ in terms ownership-structure and ratio of non-strategic vs. strategic investment. Chinese financial investors are required by the Chinese government, and due to regulatory issues, to invest more strategically. This is also the case when it comes to PE investments. Portfolio investments are mainly considered to be “irrational” and dangerous for the economic stability of the country by Chinese government.

While selecting and evaluating high-growth potential portfolio companies, Chinese PE funds inherently take the complementary value of a portfolio company's product and services in terms of national value chain upgrade into account. To the risk-/reward-perspective from traditional western financial investors, the „politically or economically opportunistic” investment rationale can be added, when talking about Chinese financial investors' activity in Europe. As far as the Chinese system still puts up barriers in a large number of growth potential market sectors for foreign investors and companies, European companies are willing and kind of forced into these cooperation constellations and deals.

The constellation of PE funds, backed by corporates, has direct consequences for the deal dynamic, contract structures and transaction processes as well as indirect consequences on the European PE market in general, which is largely driven by the risk/review perspective from traditional western financial investors. However, the consequences for the latter is estimated to be only marginal, since Chinese PE investments are still making up a minor fraction of total investments in these categories in Europe.

It is important to note, that the differences between the Chinese and European private equity markets are big. The Chinese PE market is still very young and dynamic, thus changes happen fast. Therefore, this study can only be a beginning of analysing the challenges and opportunities of these two worlds. It rather provides a snapshot of the current situation.

The success and performance factors of Chinese PE funds was not subject of this thesis and would be interesting to assess in future work. In addition, factors like management incentive strategies and target companies' characteristics by Chinese financial investors would be interesting to examine in future research work. The legal, respectively contractual, consequences and patterns of Chinese financial investor's increasing participation in the European PE market is an important research field for future work as well.

This thesis' results are relevant for several reasons. First, portfolio investment is poised to grow rapidly. Chinese households and corporations are not well-diversified and suffer from a huge “home bias” toward domestic assets. A normalization of holdings toward a diversified portfolio could trigger trillions of dollars of outbound investment from China in coming decades. This shift will depend on whether the Chinese government is confident enough to allow such outflows and what the timetable for a further opening will be<sup>20</sup>. In the near future, policymakers will continue to heavily control outbound portfolio investment flows, until efforts to generate greater inflows have reached a desired level. A next economic crisis will also offer opportunities for the Chinese PE funds to establish themselves more steadily in the European market.

Secondly, it is important to further observe the rapid increase in Chinese VC investment in Europe. In 2017, growth capital in Europe still represented less than 7.5% of overall funding in comparison to total private equity raised, which is critical and the reason why many European startups end up in the hands of third country companies or investment funds<sup>21</sup>. Large global technology companies from the US and China are increasingly active on the global stage, taking over the role of VC-investor and filling the gap for start-ups in late stage funding. VC-deals with Chinese parties have been especially successful in the healthcare sector, an here mostly in later stage investment phases. In the US, Chinese co-investments already account for 9% of VC deals in total.

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## Footnotes

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<sup>1</sup> Adam Lewis, "The US PE Industry in 11 Charts - Pitchbook," 2018, <https://pitchbook.com/news/articles/the-us-pe-industry-in-11-charts>.

<sup>2</sup> PwC, "Private Equity Trend Report 2018: The Coming of Age," Yale Review, no. February (2018), <https://doi.org/10.1111/yrev.13304>.

<sup>3</sup> Adam Lewis, "The US PE Industry in 11 Charts - Pitchbook," 2018, <https://pitchbook.com/news/articles/the-us-pe-industry-in-11-charts>.

<sup>4</sup> David Brown and Christopher Chan, "PwC M&A 2017 Review and 2018 Outlook," PwC, no. January (2018), [http://www.pwccn.com/webmedia/doc/635579478792786949\\_ma\\_press\\_briefing\\_jan2015.pdf](http://www.pwccn.com/webmedia/doc/635579478792786949_ma_press_briefing_jan2015.pdf).

<sup>5</sup> PEI, "Private Equity International: PEI 300," 2018. <https://www.privateequityinternational.com/database/#!/pei-300>.

<sup>6</sup> Unknown, "China's Outbound Portfolio Investment up by June," China Daily, 2016, [http://www.chinadaily.com.cn/business/2017-11/28/content\\_35093484.htm](http://www.chinadaily.com.cn/business/2017-11/28/content_35093484.htm).

<sup>7</sup> IMF, "Coordinated Portfolio Investment Survey (CPIs)," n.d., <http://data.imf.org/?sk=B981B4E3-4E58-467E-9B90-9DE0C3367363&slid=1481577756129>.

<sup>8</sup> Baker McKenzie et al., "The China Special 2018," Private Equity International, no. May (2018), p.5.

<sup>9</sup> Baker McKenzie et al., p.12

<sup>10</sup> Jeffrey Wilson and Naveet McMahon, "Chinese Private Equity: Outward Bound," Houlihan Lokey Newsletter, no. 10 (2016), p.1, <https://doi.org/10.3905/jpe.2006.635430>.

<sup>11</sup> Invest Europe, "European Private Equity Activity 2017 - Statistics on Fundraising, Investments & Divestments," no. May (2018), p.7, <https://www.investeurope.eu/media/711867/invest-europe-2017-european-private-equity-activity.pdf>.

<sup>12</sup> Gryphon Scientific, "China's Biotechnology Development: The Role of US and Other Foreign Engagement," 2019, [https://www.uscc.gov/sites/default/files/Research/US-China Biotech Report.pdf](https://www.uscc.gov/sites/default/files/Research/US-China%20Biotech%20Report.pdf), p.60.

<sup>13</sup> European Parliament and The Council, "Regulation of the European Parliament and of the Council Establishing a Framework for the Screening of Foreign Direct Investments into the Union," 2019., p.22.

<sup>14</sup> Note that the category "politically strategic sectors" is a subset of "strategic sectors". Thus, their sum of investments does exceed the total sample size n=150. In contrast to that, the sum of investments in strategic sectors and non-strategic sectors equals the total sample size.

<sup>15</sup> Douglas J. Cumming and Sofia A. Johan, "Overview of Institutional Contexts and Empirical Methods," *Venture Capital and Private Equity Contracting*, 2013, 61–76, <https://doi.org/10.1016/b978-0-12-409537-3.00003-7>, p.71.

<sup>16</sup> David R. Anderson et al., *Statistics for Business and Economics* (London: Thomson Learning, 2007), p.598.

<sup>17</sup> Anderson et al., p.601.

<sup>18</sup> The term *deal volume* refers to number of deals made by investors,

<sup>19</sup> *Deal value* describes the price of the deal paid by the acquiror.

<sup>20</sup> Gryphon Scientific, "China's Biotechnology Development: The Role of US and Other Foreign Engagement."

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<sup>21</sup> European Political Strategy Centre, “EU Industrial Policy after Siemens-Alstom,” 2019,  
[https://ec.europa.eu/epsc/publications/other-publications/eu-industrial-policy-after-siemens-alstom\\_en.](https://ec.europa.eu/epsc/publications/other-publications/eu-industrial-policy-after-siemens-alstom_en.), p.15.