



DOI 10.2478/sbe-2018-0025

SBE no. 13(2) 2018

GOVERNMENT OWNERSHIP IN LISTED FIRMS AROUND THE WORLD

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Abstract:

Based on the first of its kind large-scale research on worldwide government ownership from 47 countries, the results show that government owners like to be the largest blockholders; if government is the largest blockholder, the size of its ownership is also quite big. Government ownership is mostly distributed in banks, infrastructure and public utility companies, and strategic manufacturing companies. While there are various theoretical arguments on the size and industry distribution of government ownership, this study provides first-ever empirical evidence. In sum, this paper contributes significantly and originally to our understanding on government ownership, and lay out further directions for future research on the complicated corporate governance issues of government ownership.

Key words: *Government Ownership; State Ownership; Blockholder*

1. Introduction

Government ownership (or state ownership, state and government are used interchangeable in this whole text) is generally referred to government ownership or control of enterprise at any level, federal or local (state, provincial, municipal). Government ownership exists throughout the history. Sobel (1999) argued that government ownership in mills and metal working was common in the ancient Near East. Dennis and Iacono (1996) noted that by the time of the Industrial Revolution in the western countries and their colonies, government ownership was marginal. However, during the Great Depression and after the World War II, concerned about the market failure, the governments became more involved in ownership of firms through either setting up firms directly or nationalizing the private-owned corporations. The below Table 1 shows some major events of government ownership in corporations in the 1930-40s.

Table 1: Major Events of Government Ownership in Firms in the 1930-40s

Country	Major Events of Government Ownership in Firms
USA	1933: Tennessee Valley Authority was set up to provide navigation, flood control, electricity generation, fertilizer manufacturing, and economic development in the Tennessee Valley.
UK	1933: The London Passenger Transport Board (later British Transport Commission) was set up to be responsible for public transport in London 1938: The Coal Commission (later National Coal Board) was set up to own and manage all coal reserves 1939: The British Overseas Airways Corporation was set up 1943, The North of Scotland Hydro-Electric Board was founded to design, construct and manage hydroelectricity projects in the Highlands of Scotland. 1946, the privately-owned Bank of England (the central bank) was nationalized. 1947, the privately-owned Cable and Wireless was nationalized. 1948, The British Electricity Authority (Later Central Electricity Authority, the Central Electricity Generating Board) was established with the nationalization of the Great Britain's electricity supply industry. 1948, the whole gas industry was nationalized
Continent Europe	France 1938: Société Nationale des Chemins de fer français (French National Railways) was formed. 1945: the automaker Renault was nationalized. 1946: Charbonnages de France was created to run the mining business 1946: Électricité de France was founded to nationalize the production, transporting and distribution of electricity. 1946: Gaz de France was established to produce, transport and distribute nature gas. Germany: Most enterprises in East Germany were nationalized after World War II Italy: 1933: The Istituto per la Ricostruzione Industriale (Institute for Industrial Reconstruction) was set up to rescue and nationalize companies. Spain: 1941: The Red Nacional de los Ferrocarriles Españoles (Spanish National Railway Network) was created with the nationalization of Spain's railways. Poland: After the World War II, most of the enterprises were nationalized. Romania: 1948: the new Romanian regime nationalized all existing private firms.
Other Countries	Australia: 1947: the leading airline company Qantas was nationalized Canada: 1944: Hydro-Québec was established by the Government of Quebec to be responsible for the generation, transmission and distribution of electricity. India: 1949: the privately-owned Reserve Bank of India (the central bank) became fully owned by the Government of India.

Sources: www.wikipedia.org. Further detailed information for every firm is available from the corresponding individual entry of Wikipedia

There was also a nationalization wave in the new independent countries since the 1950's. Rondinelli and Iacono (1996) argued that the government ownership in developing countries was regarded as a means to promote growth. Noll (2000) argued that a historical resentment of foreign ownership in many large firms in these countries was another reason for nationalization.

The Global Finance Crisis beginning with the subprime mortgage crisis in 2007 gave the government another opportunity to get involved in ownership of corporations. For example, the US Federal Government acquired corporations which were not chartered or created by the Federal Government. They fell into two categories: incidental government corporations, which were temporarily in possession of the

government as a result of a seizure of property of a debtor to the Government, and government-acquired corporations, which stock or assets had been purchased by the Federal Government as a result of the corporation being “too big to fail”. These included: Citigroup, General Motors and AIG (American International Group). The Icelandic government nationalized Iceland’s largest commercial banks including Kaupthing, Landsbanki, Glitnir and Icebank. The British government also nationalized some of its big banks including the Northern Rock, Bradford & Bingley and the Royal Bank of Scotland. The Dutch government nationalized the Dutch activities of Belgian-Dutch banking and insurance company Fortis.

These government-owned firms are either under direct management of government under budgetary control or defined as public corporations whose corporate finances are separate from government budget. However, these government-owned firms are generally regarded as less efficient than their private counterparts. The explanations include: government-owned firms, which were clustered in markets with monopolistic or severely imperfect industrial structures, have objectives such as political considerations rather than pure profit or firm value maximization; although the corporation is owned by the public, there are no shares trading in the stock market, which reveals the crucial performance information; the management then has more discretion (see Kay and Silberston 1984); government-owned firms have a ‘soft budget constraint’ (Kornai 1980; Megginson, Ullah and Wei 2014). There is a more complicated principal-agent problem in government-owned firms, i.e., a chain of voters – government – management (Estrin and Perotin 1991). As a result of this governance problem, besides using government ownership to pursue political power, politicians are also interested in their own income, one source of which is bribes (Shleifer 1998), and government-owned firms have less innovations than private firms (Shleifer 1998). Megginson and Netter (2001) concluded that “the weight of empirical research is now decisively in favor of the proposition that privately-owned firms are more efficient and more profitable than otherwise comparable government owned firms.”

After extensive debate and research on how deeply the government should be involved in economy, in the 1980s under the leaderships of Margaret Thatcher in the UK and Ronald Reagan in the USA, privatization gained worldwide momentum (Winston Churchill's government's privatization of the British steel industry in the 1950s was labeled as the first privatization by Megginson and Netter 2001). Some of the major privatization cases include Societe Generale, Banque Nationale de Paris, and France Telecom in France, British Petroleum and British Telecommunications in the UK, Deutsche Telekom in Germany and the Australian telecom firm Telstra. Before 1980s, the major privatizations include selling the majority government ownership in Volkswagen to small investors in West Germany in 1961 and the significant privatization program in Chile in the 1970s. The most recent notable privatization cases include the Japan Post in 2007, which was the largest bank (with USD 3 trillion in deposits) in the world (Faiola 2005), the world’s largest IPO ever of the Industrial and Commercial Bank of China in 2006 (Businessweek 2006), and the selling of US government ownership in Citigroup in 2010 and so on (Washington Post, 2010).

However, state owned enterprises (SOEs) from emerging economies such as Brazil, China, India, Kuwait, Malaysia, Russia, and Saudi Arabia, and from advanced economies such as Denmark, France, Norway, and South Korea, have extended their global reach (Economist 2012).

Besides resulting from the nationalization and the after (partially) privatization, government ownership can also be from the investments from the Sovereign Wealth Fund (SWF) defined as a fund owned by the government composed of financial assets for purpose of investment (Liu 2016). Some notable SWFs include the Kuwait Investment Authority, Abu Dhabi Investment Authority and Singapore's Temasek Holdings. SWFs have emerged as yet another vehicle for channeling state investments in the global arena (Sauvant and Jongbloed 2012). Recent studies on SWFs focus on the investment patterns of SWF portfolios (Balding 2008; Sun, Li, Wang and Clark 2013), stock market performance by employing event studies (Chhaochharia and Laeven 2008; Bortolotti, Fotak and Megginson 2015) and the perspective of public investment (Gelb, Tordo, Halland, Arfaa and Smith 2014)

After a 100% government-owned firm gets (partially) privatized, the stock information is available to the public and government. The soft-budget problem is also lessened. However, there may arise another conflict between the government and private shareholders over objectives. The private shareholders pursue firm value maximization and the government owners have dual goals of political and economic considerations. The government control firms provide employment and other benefits to supporters for the favor of votes and political contributions (La Porta, Florencio and Shleifer 2002). Previous studies mainly focus on the comparison of corporate performance before and after privatization (Megginson and Netter 2001) and economic development function of government ownership, the role of government ownership in firm performance from the viewpoint of corporate governance is rarely explored. This study will focus on the listed firms each of which has at least one government blockholder from the corporate governance perspective. These government blockholders are either largest or non-largest shareholders, i.e. second, third or even fourth largest.

In the United States, the Securities and Exchange Commission requires the disclosure of "control entities" that hold 5% or more of firm equity. Many studies in both the U.S. and other countries have focused on blockholders, using the SEC 5% threshold as their measurement scheme (Boyd and Solarino 2016). According, here a government blockholder is defined as a government owner holding at least 5% shares. This paper is organized as follows. Section 1 describes the data employed in this paper. Section 2 discusses the size of government blockholding ownership. Section 3 analyzes the industry distribution of government blockholding ownership. Section 4 concludes.

2. Data

The primary ownership data was collected from OSIRIS provided by BvD (Bureau Van Dijk). It contains 35,098 listed firms with a total of 304,366 shareholders from 120 countries as of 2006. This is a larger sample of countries and firms than any previous research into international ownership such as the 691 firms from 27 countries in La Porta et al. (1999), 2,980 firms from 8 countries in Claessens, Djankov and Lang (2000) and 5,232 firms from 13 countries in Faccio and Lang (2002).

In OSIRIS, there are 11 types of shareholders, which are as follows

- Banks and financial companies
- Insurance companies
- Industrial companies
- Public authorities / State / Government
- One or more known individuals or families
- Foundations (incl. Research institutes)
- Mutual & Pension Funds / Nominees / Trusts / Trustees
- Employees / Managers / Directors
- Individuals and families, unnamed (ex. of wording: "private shareholders")
- Bulk lists of companies and private owners
- Public (used only for publicly listed companies)

The above classification method is possibly not exclusive. However, because only "Public authorities / State / Government" is considered in selecting government shareholders, it will not influence the analysis. The government owner can be the largest shareholder or non-largest shareholder.

The first key issue is the identification and re-classification of government shareholders classified as being "Public authorities / State / Government" in OSIRIS. Except for those which are clearly identified as government shareholders in OSIRIS, the internet resources are the main means to make justification. Some government shareholders have been misidentified in BvD and then deleted in the datasets. Table 2 is the identification work conducted.

Table 2: Identification of Government Owner

Institution Name	Country	Original Identity	New Identity	No of Firms
Public Investment Commission	South Africa	State, Public authority	Mutual & Pension fund/Trust/Nominee	16
Social Security System	Philippine	State, Public authority	Mutual & Pension fund/Trust/Nominee	6
General Organization for Social Insurance GOSI	Saudi Arabia	State, Public authority	Mutual & Pension fund/Trust/Nominee	3
Public Pension Institution	Saudi Arabia	State, Public authority	Mutual & Pension fund/Trust/Nominee	1
National Insurance Board (NIB)	Trinidad and Tobago	State, Public authority	Mutual & Pension fund/Trust/Nominee	1

National Social Security Authority	Zimbabwe	State, Public authority	Mutual & Pension fund/Trust/Nominee	1
National Council for Social Security	China	State, Public authority	Mutual & Pension fund/Trust/Nominee	1
Public authority for Social Insurance	Oman	State, Public authority	Mutual & Pension fund/Trust/Nominee	3
State Board of administration of Florida Retirement System	USA	State, Public authority	Mutual & Pension fund/Trust/Nominee	1
Treasury Stock	Japan	State, Public authority	Owed by Itself	1
Treasury Stock	Korea	State, Public authority	Owed by Itself	1
Bureau of Crown property	Thailand	State, Public authority	Individual(s) or family(ies)	2

Note: Institution Name is the blockholder name which appears in OSIRIS. Country is the origin of institution. Original Identity is the type of blockholder classified by OSIRIS. New Identity is its new classification of blockholder after double-checking. No of Firms is the number of firms that the institution invests in as blockholder(s).

Source: Public Investment Commission, available online at <http://www.pic.gov.za>; The Social Security System (SSS) Philippine available online at <http://www.sss.gov.ph>; General Organization for Social Insurance. available online at <http://www.gosi.gov.sa>; Bureau of the Crown Property or Crown Property Bureau (Thai) available online at http://en.wikipedia.org/wiki/Bureau_of_the_Crown_Property.

Table 2 show that the government organizations which operate private capital (social security capital) are excluded from being government blockholders. They are reclassified as being pension funds. It is argued that if the clients have not the rights to choose their own investment plans, these institutions may still be considered as government firms. The finding is that for the Public Investment Commission (South Africa), all investment decisions are negotiated individually with each client. Some of the funds of the Florida Retirement System are optional, and some not. From this point of view, these two can be regarded as private firms. As to other Public Pension Institutions, which are all from developing countries, no enough information about their investment strategies is available. So, in order to make the datasets more accurate and consistent, this kind of organizations are excluded from being government shareholder. Treasury stocks are also excluded from being government shares. Another “fake government agency” is the “Bureau of Crown Property” which is reclassified.

The second key issue in firm ownership research is to determine the size of the ownership. The ultimate ownership rather than direct ownership is widely adopted. The difference between these two can be shown as follows.

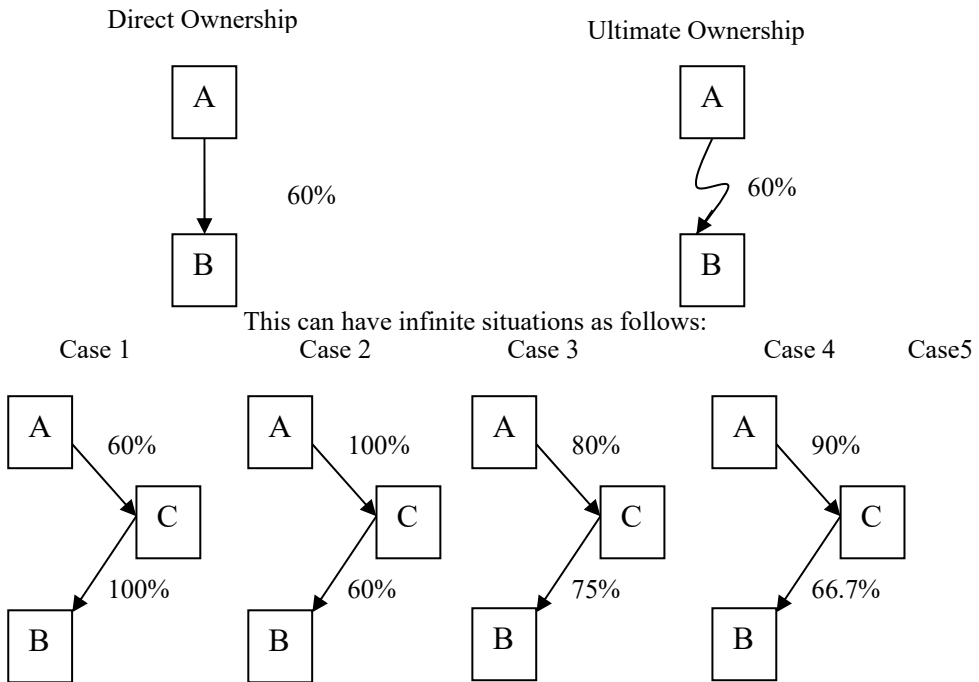


Figure 1: Exhibition of Direct Ownership and Ultimate Ownership

Because BvD never computes weighted averaged percentage of indirect ownership between a shareholder and a subsidiary, double checking and calculation of the ultimate ownership is necessary. The alternative data provider is Lexis/Nexis (through which the WorldScope, the Major Companies Database and Thompson Financials Extel Cards are accessible). Holderness (2009) uses Lexis-Nexis, and Claessens et al. (2000) and La Porta et al. (1999) used WorldScope. Li, Moshirian, Pham and Zein (2006) also use OSIRIS but concluded that the differences between the results with different data vendors are not significant. All these three vendors only provide direct ownership information; however, the direct shareholders can be traced upward and the ultimate owners can be finally found. Besides annual reports, the official websites are also very useful in finding share information in some countries. However, if the ownership information in OSIRIS is very suspicious such as the overall ownership size is greater than 100%, the date of multiple ownership is greatly different and no other options are available, these observations are then deleted.

The third issue is the determination of the ultimate owner. Since no agency or firm can own shares in a government, this ultimate owner issue is not a concern if the government is the largest blockholder. However, this is still a concern when the government is the not the largest blockholder. In this study, ultimate owner(s) are

defined as those shareholders who own at least 24.99% of the shares at each step of the ownership chain.

While such great efforts have been done to the data cleaning process, there are still several issues that may potentially compromise the accuracy of the government ownership data collected. Firstly, large shareholders may be more observable in some countries due to the presence of ownership disclosure requirements imposed on institutions (see Li et al., 2006). In countries such as Australia, India, Norway, Finland and Sweden, the ownership information of listed companies is easily obtained through annual reports and even their websites. In some countries of the Middle East, except for those whose stocks are listed in Europe or America, the ownership information will generally not be displayed in their annual reports and websites. In this case, the primary database is the main source. In Asia, although ownership information is available at most times, the complex related-party transactions make it difficult to identify the ultimate owner and its ownership size. Secondly, some companies only provide non-English annual reports and web pages. This is very common in South America and in some countries of Africa.

In the end, 469 firms which each has at least a government blockholder from 75 countries are collected, cleaned and complied. They are mainly from 2004 and 2005. Few previous studies have explored such a large number of listed firms with government ownership. The number of listed firms with government ownership in La Porta et al. (1999) is 122. The number is 138 in Claessence et al. (2000). La Porta et al. (2002) analyzed the government ownership in ten largest banks in each of 92 countries. But their datasets include unlisted banks as well. But in some specific countries, government ownership is not marginal. 13.4% of listed firms in Finland (Maury and Pajuste 2005), 23.6% in Singapore and 18.2% in Malaysia (Claessence et al. 2000), 70% in Austria, 50% in Italy and 45% in Spain (La Porta et al. 1999) have shares held by government. According to Economist (2012), SOEs have become more prevalent recently not only in developing countries but also in many developed countries.

3. Size of Government Blockholding Ownership

There are in total 518 government blockholders within 469 firms. It means that some firms have at least two government blockholders. Some government owners are the largest shareholders while some are not. The below Table 3 shows the summary statistics of government ownership when government is largest and non-largest blockholders.

Table 3: Summary Statistics of Ownership Size when Government is the largest and non-largest Blockholder

	N	Mean	Median	Std Dev	Min	Max
All Government Blockholders	518	35.7%	30.0%	24.5%	5.0%	99.4%
Including: Government is the Largest Owner	371	44.2%	42.9%	23.4%	5.6%	99.4%
Including: Government is Non-Largest Owner	147	14.0%	11.8%	8.9%	3.0%	49.4%

Table 3 shows that 371 firms have government as the largest shareholder, i.e., there are 371 government blockholders as the largest owners. This number accounts for 71.6% ($=371/518$) of all government blockholders. It shows that most of the government blockholders choose to be largest rather than the second or third. It also shows a huge difference between the ownership size when the government is the largest blockholder and non-largest. In average, 44.2% of shares are held by government when the government is the largest blockholder. However, this fraction is only 14% when government is non-largest blockholder. The question is whether this feature is unique for government ownership or it is also common for other types of ownership especially of family ownership. The below Table 4 shows the average family ownership in listed firms around the world. It may be argued that it might be better if more recent studies are reviewed, compared, and presented here. Considering that the government ownership data items are from 2004 and 2005, it will be better for family ownership data items from same or close dates. A more recent review on family ownership can be found from Cheng (2014).

Table 4: Family Ownership in Listed Firms

Definitions	Average Family Ownership	Data Items	Studies
Founding families (or descendants) are shareholders and/or founding family members (or descendants) sit on the board of directors.	17.9%	141 firms from Fortune 500	Anderson and Reeb (2003)
family has any shares	16.0%	1,039 firm-year obs from 2,808 Fortune 500 firm-year obs	Villalonga and Amit (2006)
family is the largest vote holder, has at least 20% of the votes, has family officers and family directors, and is in second or later generation	28.0%	197 firm-year obs from 2,808 Fortune 500 firm-year obs	
the controlling (with 10% cutoff) shareholder is a family or an unlisted firm	37.6%	1672 non-financial Western European firms	Maury (2006)
identified controlling family is the CEO, Honorary Chairman, Chairman, or Vice Chairman	39.6%		
controlling shareholder is classified as family but does not have managerial ties	36.6%		
controlling shareholder is not classified as family and not widely held at the 10% cut-	23.4%		

off level			
Widely held, the firm has no shareholder with at least 10% of the votes	2.3%		
A family owns at least 5% control rights	24%	688 firms from eight Asian countries	Peng and Jiang (2006)

Table 4 shows a huge difference in ownership patterns between government blockholder ownership and family ownership.

Compared with family ownership, when family is the controlling shareholder, its average size of ownership is from 28% (with 20% cutoff, Villalonga and Amit 2005) to from 36.6% to 39.6% (with 10% cutoff, Maury 2006). These figures are all below 44.2%, the average government ownership (with 5% being cutoff) when government is the largest owner. If adopting the same criterion of 10% or 20% cutoff, the difference is even bigger (see Note 3 for detailed figures). When considering the cases of non-largest shareholdings, the average family ownership is 23.4% (Maury 2006), which is far higher than the average non-largest government ownership 14%. If considering both largest and non-largest family owner, the average family ownership is 24% (Peng and Jiang 2006, who also adopted the same 5% cutoff criterion as this study). This figure is far below the average government ownership of 35.7%. It shows that compared with family ownership, largest government blockholders are more dominant than non-largest government blockholders and the size of the largest government ownership is much larger than that of the non-largest government ownership.

Compared with family ownership, the above analysis show that government owners like to be the largest blockholder and if it is the largest blockholder, the size of its ownership is also quite big. There might be reasons for this difference. For example, Anderson and Reeb (2003) found that the positive effect associated with family ownership starts to taper off at around 30% ownership. If family ownership is too high when family is the largest shareholder, family ownership will play a negative role in firm valuation. Government ownership maybe presents a different feature from family ownership.

The empirical evidence shows that government owners like to be the largest shareholder; if government is the largest blockholder, the size of its ownership is also quite big. This finding has significant implications especially on the relation between government ownership and firm value. It is likely that the relation between government ownership and firm performance will be different from that between family ownership and firm performance. This topic will be a future area for further study.

4. Industry Distribution of Government Blockholding Ownership

In this part, how the government ownership is distributed among different industries is explored. Table 5 shows the industry distribution of government ownership when: (A) all government blockholders are included; and (B) only largest government

blockholders are considered. The Standard Industrial Classification (SIC) Codes (1987) is adopted.

Table 5: Industry Distribution of Government Ownership

Industry	Panel A: All government blockholders		Panel B: Largest Government Blockholders	
	Frequency	%	Frequency	%
Agriculture, Forestry and Fishing	7	1.35	5	1.35
Construction	5	0.97	2	0.54
Finance, Insurance and Real Estate	247	47.68	178	47.98
Manufacturing	81	15.64	57	15.36
Mining	13	2.51	8	2.16
Public Administration	1	0.19	1	0.27
Services	23	4.44	17	4.58
Transportation, Communications, Electric, Gas and Sanitary Services	132	25.48	96	25.88
Wholesale Trade	9	1.74	7	1.89
Total	518	100	371	100

Table 5 sets out the distribution of all 518 government blockholders across all industries and the distribution of 371 largest government blockholders across all industries. Panel A shows that in the total 518 government shareholders, nearly half (47.68%) of them are in the Financial Industry. 25.48% are in the industry of Transportation, Communications, Electric, Gas and Sanitary Service, followed by the Manufacturing Industry with 15.64%. In other industries, government ownership is very rare. Panel B only considers the largest government blockholders. Largest government blockholders are distributed in Financial Industry (47.98%), industry of Transportation, Communications, Electric, Gas and Sanitary Service (25.88%), and Manufacturing (15.36%). Comparing the results from Table 4 Panel A and B, we can find that whether the government is largest shareholder or not, government ownership distribution across industries are very similar. Government ownership is mostly distributed in the industries of Finance, Insurance and Real Estate, and Transportation, Communications, Electric, Gas and Sanitary Service.

Since government ownership is mainly in these two industries, the next Table 6 show a further analysis on the distribution of government ownership in sub-industries.

Table 6: Sub-industries Distribution of Government Ownership

Panel A: Finance, Insurance, and Real Estate						
	All government blockholders			Largest Government Blockholders		
Sub-industry	Frequency	%(/247)	%(/518)	Frequency	%(/178)	%(/371)
Depository Institutions	164	66.4	31.66	121	67.98	32.61
Non-depository Credit Institutions	38	15.38	7.34	30	16.85	8.09
Security and Commodity Brokers, Dealers, Exchanges and Services	1	0.4	0.19	1	0.56	0.27
Insurance Carriers	10	4.05	1.93	4	2.25	1.08
Insurance Agents, Brokers and Services	1	0.4	0.19	0	0	0
Real estate	14	5.67	2.7	10	5.62	2.7
Holding and Other Investment Offices	19	7.69	3.67	12	6.74	3.23
Total	247	100	47.68	178	100	47.98
Panel B: Transportation, Communications, Electric, Gas and Sanitary Service						
	All government blockholders			Largest Government Blockholders		
Sub-industry	Frequency	%(/132)	%(/518)	Frequency	%(/96)	%(/371)
Railroad Transportation	6	4.55	1.16	3	3.13	0.81
Postal Service	2	1.52	0.39	1	1.04	0.27
Water Transportation	9	6.82	1.74	5	5.21	1.34
Transportation By Air	24	18.18	4.63	15	15.63	4.03
Pipelines, Except Natural Gas	2	1.52	0.39	2	2.08	0.54
Transportation Services	5	3.79	0.97	5	5.21	1.34
Communications	33	25.00	6.37	25	26.04	6.72
Electric, Gas and Sanitary Services	51	38.64	9.85	40	41.67	10.75
Total	132	100	25.48	96	100	25.88

In Table 6, the government ownership distribution in the industries of Finance and of Transportation, Communications, Electric, Gas and Sanitary Service is further explored. Table 6 Panel A demonstrates that, in the Finance Industry, if considering all

government blockholders, 66.4% (or 31.66% in terms of the total 518 government shareholders) of the government shareholders are in Depository Institutions. If Non-Depository Credit Institutions are added, then this fraction will increase to 81.78% (or 39% compared with the total 518 government shareholders). If only largest government blockholders are included, these fractions are very similar.

As to the government ownership distribution in Transportation, Communications, Electric, Gas and Sanitary Service industry, Table 5 Panel B shows that, if considering all government blockholders, government ownership is most likely in companies of Electric, Gas and Sanitary Services (38.64%, or 9.85% compared with the total 518 government shareholders), Communications (25%, or 6.37% compared with the total 518 government shareholders), and Transportation By Air (18.18%, 4.63% compared with the total 518 government shareholders). If only largest government blockholders are included, these fractions are very similar too.

Overall, no matter whether government blockholder is the largest shareholder or not, government ownership are mostly distributed in Finance Industries especially of banks and in Transportation, Communications, Electric, Gas and Sanitary Service Industry especially of public utility companies (Electric, Gas and Sanitary Services), telecommunications companies and airline companies, and Manufacturing Industry.

In theory, government ownership has been motivated to resolve the market failure problems including naturally monopolies and production externality such as pollutions. In addition, when there are informational asymmetries between the public and the producers, it is hard to write the complete contract and government ownership is then expected to address this problem (Megginson 2005). Concerned about the monopoly power, Lewis (1949) suggested nationalizing land, mineral deposits, telephone service and insurance. Concerned about the market failures during the Great Depression, Simons (1948) advocated "the state should face the necessity of actually taking over, owning, and managing directly, both the railroads and the utilities..." so Megginson and Netter (2001) stated that "Until Margaret Thatcher's conservative government came to power in Great Britain in 1979, the answer to this debate in the United Kingdom and elsewhere was that the government should at least own the telecommunications and postal services, electric and gas utilities, and most forms of non-road transportation (especially airlines and railroads). Many politicians also believed the government should control certain 'strategic' manufacturing industries, such as steel and defence production." The empirical evidence in this part supports the above theoretical arguments.

In terms of the dominance of government ownership in banks, one main view is development viewpoint (La Porta et al. 2002), which is associated with the necessary of banking in economic development. Megginson (2005) proposed three reasons including: "perceived lack of private capital with sufficient risk tolerance to finance growth; inadequate funding to sectors and groups with low financial but high social returns; and a desire to maintain domestic control over a nation's financial system". Gerschenkron (1962) regarded the government ownership in banks in Russia as being successful in industrializing the whole economy. This viewpoint was also

shared by many countries around the world. Again, the empirical evidence in this part supports the above theoretical arguments.

The empirical evidence showing that government ownership is mostly distributed in banks, infrastructure, public utility, and manufacturing firms has theoretical supports from various studies. This finding has significant implications especially on the relation between government ownership and firm value, and the endogeneity issue of government ownership. Previous studies on ownership structure generally conclude that ownership is endogenous (Loderer and Martin 1997; Villalonga and Amit 2006, Wang and Shailer 2013). This statement may not be true for government ownership. This topic will be another future area for further study.

5. Conclusions

Government ownership in corporations exists throughout the history. However, the size and scale of government ownership in corporations vary in history. For example, because of the concerns over the market failures during the 1930's, there was a great wave of nationalization across the west world. There was also a nationalization wave in the new independent countries since the 1950's. After many years of debate on the role of government ownership, roughly starting from 1980's, privatization gained worldwide momentum. Things change rapidly. During the Global Financial Crisis starting from subprime mortgage crisis in 2007, concerned about market failures again, many western governments again nationalized many big firms. When the financial markets become stabilized, these nationalized firms went through the privatization process again. Nevertheless, academic literature shows that government ownership still widely exists across the world in both developed and developing countries. Furthermore, state owned enterprises from both emerging economies and advanced economies have even extended their global reach recently.

Previous studies on government ownership mainly focus on the comparison of corporate performance before and after privatization and economic development function of government ownership, but the role of government ownership from the viewpoint of corporate governance is rarely explored. This study focuses on listed firms which each has at least one government blockholder, and take the first step to examine the important corporate governance issues of these firms.

Based on first-ever large-scale research on worldwide government ownership from 47 countries, 469 firms which each has at least a government blockholder are combined and analyzed. Few previous studies have explored such a large number of listed firms with government ownership.

Compared with family ownership, government owners like to be the largest shareholder and if government is the largest shareholder, the size of its ownership is also quite big. This finding has significant implications especially on the relation between government ownership and firm value. It is likely that the relation between government ownership and firm performance will be different from that between family ownership and firm performance. This topic will be a future area for further study.

This paper's another original finding is about the industry distribution of government ownership. In theory, government ownership has been motivated to resolve the market failure problems. This paper provides the first ever empirical evidence showing that government ownership is mostly distributed in banks, infrastructure and public utility companies, and some strategic manufacturing firms across the world. The implication is that the main objective of government ownership is not to maximize the accounting profit or firm valuation. It means that controlling government ownership may not be endogenous. This issue will be another future area for further study.

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