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9. Is the state ownership of enterprises gaining in importance in a modern economy?

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Despite the ongoing privatization, state-owned enterprises (SOEs) still play an important role in many countries. Moreover, some scholars argue that today we are dealing with a possible of return of state-owned enterprises in the global economy. This paper reviews available data on SOEs in the context of the above mentioned thesis. First we review data on the current scope, structure and importance of the state-owned enterprise sector in a modern economy. It can be concluded that the SOEs play a significant role in a modern economy. Primarily this statement can be applied to developing countries. However, in developed countries SOEs constitute an important part of the economy as well. Next we review data on changing importance of SOEs. For this purpose we examine the Fortune Global 500 list, Product Market Regulation (PMR) indicator data and the list of the largest Polish companies. Subsequently we try to explain those ongoing trends. We could say that SOEs play a significant role in a modern economy and there is some evidence that they are gaining in importance. Among the factors responsible for this possible increase of the importance of SOEs in the world economy are:

- *The changes in the balance of power in the global economy, especially due to the rise of China and other BRIC countries, where government ownership plays a relatively large role in comparison with OECD countries.*
- *Issues related to the control over natural resources.*
- *The increase in government activity in many areas of the economy as a result of the financial crisis.*

However this process is not leading to a return to the number of SOEs that we saw in the 20th century, but what we see is a change in the way in which SOEs are used by the state owner. Governments are attempting to maintain the control and simultaneously to improve the efficiency of SOEs through better governance and greater reliance on market mechanisms.

Keywords: state-owned enterprise, BRIC, OECD, government activity

1. Introduction

Despite the ongoing privatization, state-owned enterprises (SOEs) still play an important role in many countries. Moreover, some scholars argue that today we are dealing with some kind of return of state-owned enterprises in the global economy (Flores-Macias−Musacchio 2009, Bremmer 2010, The Economist 2012, Florio 2014). This paper reviews available data on SOEs in the context of the above mentioned thesis. However, some difficulties due to incomplete or incompatible data available should be noticed. These problems arise from the nature of the category of the state-owned enterprise because this can include a wide range of items. They can differ in the legal basis (joint-stock companies or statutory companies), by the level of the state's share in ownership (some reports only include enterprises where the ownership is higher than 50%, but many enterprises are effectively controlled by governments with a much lower stake) and by the level of state (central government, federal or local).

2. How important are SOEs in a modern economy?

These objections, though important, should not prevent the estimation of the current status of state ownership. First, we examine the OECD report entitled *The Size and Composition of the SOEs Sector in OECD Countries*, which includes 27 of the 34 OECD countries. The data contained in the report is from the years 2008−2009. The aggregate results indicate that state-owned enterprises in OECD countries (defined as one hundred percent or majority state shareholding) employ a total of over 6 million people, and its value is close to 2 trillion dollars. If these figures were to take into account the companies in which the state has a minority stake, but sufficient to exercise effective control, these numbers should be increased by about 3 million people and 1 trillion dollars. The study has also examined the structure of SOEs by sector. Half of them can be classified into network industries (mainly transport and energy) and a large part (one quarter) are financial institutions. It is worth noting that these sectors are very important to other parts of the economy. To describe the importance of state-owned enterprises only two indicators – due to incomplete data – have been used: the value of assets held by state-owned enterprises in relation to the GDP of the country and employment in state-owned enterprises in relation to the overall level of employment in the economy. For the first indicator the leader is Mexico[1], where the ratio exceeds 100%, next are countries such as the Czech Re-

[1] Mostly due to hydrocarbons company PEMEX.

public, Poland, Finland and Norway, where the result are between 20 and 30%. The average for all countries surveyed is 15%. In the case of employment the report indicates Norway as the country with the highest proportion of people employed in SOEs. Closer examination of the report shows there are certain problems that indicate data and conclusions contained in the report should be used with considerable caution. As the authors themselves admit, the quality of supplied data by individual countries is quite varied, in some economies the data is not complete (e.g. Poland) and state-owned enterprise definitions vary from country to country. The report also lacks statistics from important economies such as the U.S. or Japan (Christiansen 2011, pp. 3-5.).

Another recent report based on an analysis of companies in the Forbes Global 2000 list, estimates that state-owned enterprises account for about 10% of the featured corporations (Kowalski et al. 2013, p. 6.). Florio (2014, p. 14.) used this data to conclude that SOEs would represent between 11% and 16% of total sale, profits, assets, market value of the Forbes Global 2000 aggregate.

In terms of geographical distribution it is worth noting the following facts:

- of the 1,500 companies from OECD countries 41 are considered as SOEs, which gives 3%. For the BRIC countries – this ratio is 116 to 234 (i.e. almost 50%);
- among the OECD countries, a relatively large number of SOEs on the list come from Poland (6), Switzerland (6), France (5) and South Korea (4);
- 3 companies are from the USA;
- from non-OECD countries the largest number of corporations are from China (70), India (30), Russia (9), Brazil (7) and Indonesia (6).

Sectors where the share of SOEs is high include coal mining, land transport, transport via pipelines, oil extraction, electricity and gas, telecommunications, financial institutions, engineering, warehousing, manufacturing and air transport (Kowalski et al. 2013, pp. 6-7.). However, care must be taken when analyzing the Forbes list because it contains only companies listed on the stock exchange.

According to the data contained in the Robinett (2006, p. 1) report, the importance of state-owned enterprises in emerging economies is conditioned by their presence in key sectors of the economy. They are particularly present in industries such as rail and air transport, electricity, water and gas, utilities, mining of natural resources, telecommunications, banking and insurance. The share of the state-owned enterprises in the economies of these countries is varied. According to Lazzarini and Musacchio (2012) contribution to GDP (excluding the financial sector) ranges from approximately 30% (China, Brazil, Vietnam) through to around 13% (Singapore, India, Turkey) and to 2–3% (Indonesia and Mexico).

Summarizing the above presented data it can be concluded that the SOEs play a significant role in a modern economy. Primarily this statement can be applied to developing countries. However, in developed countries they constitute an important part of the economy as well.

3. Are state-owned enterprises really gaining in importance?

Flores-Macias and Musacchio (2009) put the thesis that today we are dealing with some kind of return of state-owned enterprises in the global economy. According to these researchers the importance of SOEs in recent years has grown and will continue to grow in the future. A similar statement appears in (Bremmer 2010) and (Florio 2014).

One of the measures of the importance of SOEs in the modern economy could be their share in the list of the largest companies in the world.[2] For this purpose an analysis of the Fortune Global 500 list for the years 2005 to 2012 was conducted. The number of state-owned enterprises over the examined period continued to grow. In 2005, the list included 49 SOEs, and in 2012 there were 95 of them. Share by quantity grew from 10% to 19%. When looking at employment in companies on the Fortune Global 500 list, in 2005 18.4% were employed by SOEs and this figure grew to almost 30% in 2012. Revenues of SOEs on the list in 2005 reached a value of $1.3 trillion (8% of the total), while in 2012 it was $5.8 trillion (19.6% of the total).

Table 1. Shares of SOEs on Fortune Global 500 list according to various criteria, %

Year	Share by quantity	Share by employment	Share by revenues	Share by profits	Share by assets	Share by total shareholders' equity
2005	9,8	18,4	8	8,2	8,9	9,2
2006	10,8	19,9	8,8	9,9	9,2	11,3
2007	11	19,7	9,2	10,4	8,8	12,3
2008	11,4	19,9	10,3	12	9,1	13,8
2009	13,8	23,6	14,5	11,9	15,7	16,5
2010	15	24,8	15,3	9,3	18,8	17,7
2011	17,2	27,7	17,8	16,9	22,2	19,2
2012	19	29,8	19,6	22,2	19,3	21,1

Source: Own calculations based on data from the Fortune Global 500 list (2013)

[2] This part draws from Augustynowicz and Kwiatkowski (2013).

To explain the cause of the increase of the share of state-owned enterprises on the Fortune Global 500 list we should analyze it by the country of origin. The largest number of SOEs is in China. The share of Chinese state-owned enterprises as a proportion of the total number of SOEs increased from about 28% in 2005 to 65% in 2012 (there were 61 Chinese SOEs on the list at the end of 2012).

Table 2. Areas of activity of SOEs

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Number of SOEs on the list								
Public utilities	21	19	18	17	18	18	20	22
Natural resources	14	16	19	19	23	24	31	33
Financial institutions	10	11	10	11	15	18	15	16
Other	4	8	8	10	13	15	20	24

Source: Own calculations based on data from the Fortune Global 500 list (2013)

As illustrated in Table 2 the largest number of state-owned enterprises operates in the natural resource sector. Moreover, the number of these companies increased from 14 to 33. The number of enterprises providing public services ranged between 17 to 22, although the share of this group increased slightly (from 26.3 to 31%). The number of financial institutions has also increased from 10 to 16 companies.

The role of state-owned enterprises in the natural resources sector can be illustrated by the fact that they control about ¾ of the world's oil reserves (Bremmer 2010, p. 9). It is worth noting that they mostly come from countries that aren't OECD members. The current situation is the result of a progressive process of nationalization of natural resources in the twentieth century, starting in Mexico in the 30s, continuing in the Middle East in the 70s and now taking place in countries such as Venezuela and Russia.

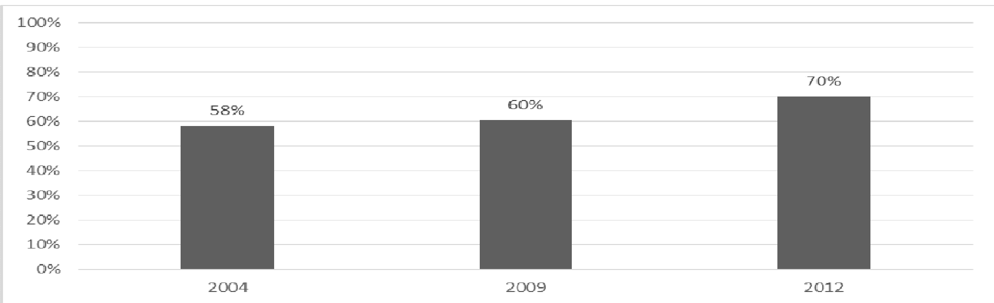
Additional information is provided in the *Product Market Regulation (PMR)* indicator developed by the OECD. It is a complex indicator that takes into account certain qualitative and quantitative aspects of interference in market competition. Currently, the number for the years 1998, 2003, 2008 and 2013 are available. Important in the context of this article part of the indicator determines the level of the share of state ownership in the economy based on four components (Product Market Regulation 2013):

1. Scope of public enterprises;
2. Government involvement in network sectors;
3. Direct control over business enterprises;
4. Governance of state-owned enterprises.

This last component lacks data prior to 2008 so a comparison of indicators over time must be taken into account to change the methodology of calculating the indicator. After this adjustment, it turns out that for most of the countries surveyed value of the index is decreasing. For the years 1998 and 2003 complete data is available for 22 countries and only for three of them (Australia, Canada and New Zealand) the indicator increased (which should be interpreted as an increase in the importance of state ownership). For the years 2003 and 2008 we have data from 23 countries − in those years, the index rose only for five countries (Australia, Belgium, New Zealand, Sweden and the United Kingdom). For the year 2008 and 2013 the data is available for 26 OECD countries and we see increases for 7 economies (Denmark, Estonia, Iceland, Ireland, New Zealand, Slovakia and Switzerland). It is not surprising that the score in non-OECD countries on average are higher than in OECD countries.

An interesting conclusion comes from the analysis of the largest companies in certain countries. For example if we examine the 1300 largest Polish companies for the presence of SOEs, it turns out that the share of SOEs decreases in time. In 2004 the state-owned enterprises constituted 12.5% of the companies, earned almost 25% of revenue and had 40% of employment. Five years later these shares had decreased significantly: the number of enterprises by around 50%, revenues to less than 15% and employment to less than 30%. However, if we focus only on the top 20 companies we could check every company ownership structure to take into account those companies in which the state has a share of less than 50% (but sufficient to exercise effective control of ownership).

Figure 1. Total share of revenues of companies controlled by the state in the group of largest 20 companies



Source: Own calculations based on data from the list of Polish largest companies (published by Rzeczpospolita).

The graph shows the share of revenues of companies controlled by the state in the total revenues. The paradox is that although in the discussed period of time the privatization processes continued, the analyzed category increased. Minority stakes of companies such as PGE, Lotos, KGHM, JSW or Tauron were sold, but in every case the government kept the controlling stake. This phenomenon can be analyzed by framework presented by Musacchio and Lazzarini (2012). They distinguish two general types of modern state capitalism due to the state's share in the ownership of enterprises: the first in which the state holds majority stakes in many companies (Leviathan as a majority investor) and the second that relies on minority shares in companies held by development banks, pension funds, sovereign wealth funds, and the government itself (Leviathan as a minority investor). The state control over enterprises with formal minority ownership shares can be implemented at least in three ways:

1. the use of “golden share”;
2. special rules in the articles of association of a joint-stock company;
3. reaching the position of a dominant shareholder.

Comparison of the two models leads to the conclusion that the transition to Leviathan as a minority investor model can reduce agency problems (i.e. different objectives of managers and owners) and lessen threat of using SOEs to obtain non-economic goals. On the other side this happens at the cost of losing some degree of influence on the activities of these companies, and so using SOEs to implement the economic policies by the state.

Another important factor influencing the importance of state ownership is the global financial crisis. Governments in many countries decided to take active measures to mitigate the effects of the financial crisis. Among these measures was the nationalization of enterprises (SNS Bank − the Netherlands, Anglo Irish Bank − Ireland, BNP − Portugal, Royal Bank of Scotland − United Kingdom, AIG and General Motors – USA). Although in many cases, nationalization was temporary − nationalized companies were later reprivatized, the question arises whether these actions are the exception to the rules of the economic policy or a permanent change of the ownership function of the state. It seems to be too early to assess the long-term effects of the crisis. Also there are some reports on re-municipalization (Florio 2014, p. 6.), which means that municipal or public services are again not only financed but also provided by the state.

4. Conclusions and final remarks

Concluding on above presented data we could say that SOEs play a significant role in a modern economy and there is some evidence that they are gaining in importance. Among the factors responsible for this possible increase of the importance of SOEs in the world economy are:

1. the changes in the balance of power in the global economy, especially due to the rise of China and other BRIC countries, where government ownership plays a relatively larger role in comparison with OECD countries;
2. issues related to the control over natural resources;
3. the increase in government activity in many areas of the economy as a result of the financial crisis.

However this process is not leading to a return to the number of SOEs that we saw in the 20th century (as shown in the analysis of *Product Market Regulation* data), but what we see is the change of ways in which SOEs are used by governments. To gain in importance SOEs have to operate more efficiently than in the past. Traditional theoretical approaches to explaining the inefficiency of state enterprises can be divided into two general groups: the first refers to the environment (limited or lack of competition) and the second explains it as a problem of inherent features of state ownership, referring mainly to the theory of property rights (Bartel–Harrison pp. 1-4.). These include issues such as: agency problem, soft budget constraint, multiple goals (vaguely defined social goals), direct influence of politicians, bureaucracy, restrictions on remuneration, as well as hiring and firing of workers, strong influence of unions, low ability to reduce costs and to innovate.

Modern methods of management and supervision to some extent limit the negative effects of the those "classical" causes of the inefficiency of state-owned enterprises. Flores-Macias and Musacchio (2009) list the five characteristics of modern state-owned enterprises, which significantly improve the way they operate. These are:

1. emission of shares in stock exchanges, with the dual purpose of raising capital and subjecting management to the daily evaluation of the stock prices;
2. independent auditors and members of the Board of Directors;
3. credible restrictions on the transfer of subsidies from the government;
4. recruitment of more highly qualified executives;
5. incentive schemes for managerial pay.

Many of these changes − especially in developed countries − took place as a result of the problems caused by the earlier, often very inefficient operation of state-owned enterprises. Given the fiscal problems of many countries in the 1980s and 1990s many state-owned enterprises subsequently had to look for opportunities to raise capital in the financial markets. As a result, they were partially privatized. Others had to raise capital through the issue of bonds or taking loans from financial institutions. In any case it was related, at least to some extent, to the necessity of meeting the standards of reporting, the evaluation of rating agencies and the high cost of hiring external auditors etc. This meant SOEs had to operate in a similar way to private sector enterprises.

More coherent government policy towards state-owned enterprises will result in increased efficiency. These policies should include clearly defined social objectives, as well as clear criteria for the creation and management of such entities. Criteria can also include a requirement for periodic inspection, evaluation and justification for the company remaining in the domain of the state. Another improvement might be to create special agencies supervising the whole or part of the SOEs sector. In addition, the process of privatization in the last thirty years has led to a reduction of the number of SOEs, which makes it easier to control and to evaluate them. This does not mean, however, that all state-owned enterprises are as efficient as their best-functioning private counterparts. However, there are many examples (Statoil, Petrobras or Indian Railways) which show that it is possible to significantly improve the efficiency of the state-owned enterprises.

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