

State-owned enterprises in China: their reform process, performance efficiency and future road

State-owned enterprises in China

201

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Abstract

Purpose – In the 40 years of reform and opening-up toward a more rational micro-economic structure, the proportion of output of state-owned enterprises shows a declining trend. Over the past decade, on one hand, the operational efficiency of state-owned enterprises has tended to be low as compared to other ownership enterprises; on the other hand, the asset–liability ratio of state-owned enterprises has risen against the trend, and still remains high under the recent national policy of “deleveraging.” The paper aims to discuss this issue. **Design/methodology/approach** – This indicates that the inefficiency of state-owned enterprises that once hindered China’s economic development has not yet been fundamentally solved, and the task of deepening state-owned enterprises reform is still arduous.

Findings – In the process of establishing China’s modern economic system, there will be some “new state-owned enterprises” growing into world-class ones. This requires more effort in enhancing the capacity for independent innovation, improving the level of organizational control, expanding international market opportunities and fulfilling enterprise social responsibilities with high standards.

Originality/value – It is more appropriate for China to have a micro-economic structure in which public ownership predominates and diverse forms of ownership enjoy common prosperity and development.

Keywords Reform, Operational efficiency, State-owned enterprises, New state-owned enterprises

Paper type Research paper

1. Process review: the reform toward a more rational micro-economic structure

What kind of micro-economic structure is China supposed to have? In the process of reform and opening-up, there found a clear answer: it is more appropriate for China to have a micro-economic structure in which public ownership predominates and diverse forms of ownership enjoy common prosperity and development. China’s micro-economic structure has shifted from a relatively single one dominated by the state-owned economy in the initial stage of the reform and opening-up under the planned economy to a more rational one. In this process, the proportion of output of state-owned economic sectors shows a declining trend, whereas that of other ownership enterprises continues to rise.

1.1 From the late 1970s to the late 1980s and early 1990s

In the beginning of our reform and opening-up of the last century, the majority of China’s industrial output was contributed by the public enterprises composed of state-owned and collectively owned enterprises. As shown in Table I, in 1978, the gross industrial output value of state-owned and collectively owned enterprises accounted, respectively, for 77.63 and 22.37 percent of China’s gross industrial output value. By the end of the 1980s, the proportion of these two types of enterprises in the gross industrial output value had slowly dropped from



Years ^a	State-owned economy	Collectively owned economy	Urban-rural individual economy	Other economies
1978	77.63	22.37		
1979	78.47	21.53		
1980	75.97	23.54	0.02	0.47
1981	74.76	24.62	0.04	0.58
1982	74.44	24.82	0.06	0.68
1983	73.36	25.74	0.12	0.78
1984	69.09	29.71	0.19	1.01
1985	64.86	32.08	1.85	1.21
1986	62.27	33.51	2.76	1.46
1987	59.73	34.62	3.64	2.02
1988	56.80	36.15	4.34	2.72
1989	56.06	35.69	4.80	3.44
1990	54.60	35.62	5.39	4.38
1991	56.16	33.00	4.83	6.01
1992	51.52	35.07	5.80	7.61
1993	46.95	34.02	7.98	11.05
1994	37.34	37.72	10.09	14.85
1995	33.97	36.59	12.86	16.58
1996	36.32	39.39	15.48	16.65
1997	31.62	38.11	17.92	18.45
1998	28.24	38.41	17.11	22.91
1999	28.21	35.37	18.18	26.14

Notes: ^aIn 1998, the National Bureau of Statistics made an adjustment to the scope of statistical caliber of industrial enterprises. In principle, the data of 1998 and later years are not completely comparable with those of previous years. However, in order to make them comparable with those of previous years, the National Bureau of Statistics adjusted some economic types and their data in 1998 and 1999 (refer to Note 3 of *China Statistical Yearbook*, 2000 “13-1 Number of industrial enterprises and gross output value of various economic types.” The data of “gross industrial output value” corresponding to the 1998 and 1999 proportions in this table are adjusted. In 1995 and previous years, the statistical caliber of the state-owned economy was that of the state-owned industrial enterprises. In 1996 and later years, the statistical caliber of state-owned economy is state-owned and state-holding enterprises. Therefore, in 1996 and the following years, the proportion of the gross industrial output value of enterprises of various economic types is more than 100 percent. Since 2000, there has been no separate data on “urban-rural individual economy”

Source: Institute of Industrial Economics of CASS (2008)

Table I.
Proportion of the gross industrial output value of various economic types (unit: percent)

100 percent at the beginning of the reform and opening-up to 90 percent. Among them, the proportion of state-owned enterprises had dropped from 78.47 to 54.60 percent, showing a declining trend as a whole, whereas the proportion of collectively owned enterprises had risen from 21.53 to 35.62 percent, showing a steady upward trend. After 1989, the output share of collectively owned enterprises declined slightly for several consecutive years, which accounted for only 33 percent of China’s gross industrial output value by 1991.

During the same period, the proportion of gross industrial output value of other ownership enterprises in China’s gross industrial output value started from zero at the beginning of reform and opening-up and reached the level of 10 percent in the early 1990s. The other ownership enterprises are classified as urban-rural individual economy and non-urban-rural individual economy with Hong Kong, Macao, Taiwan-funded economy as well as foreign-funded economy comprising the main part. From 1978 to 1984, the proportion of non-urban-rural individual economic output in China’s gross industrial output increased faster than that of urban-rural individual economy, whereas from 1985 to 1990, the proportion of urban individual economic growth increased significantly until it exceeded that of non-urban-rural individual economy.

1.2 In the 1990s

Deng Xiaoping's talks delivered during his inspection tour of southern China in 1992 and the reform targets of establishing socialist market economic system clearly put forward by the Communist Party in 1994 have affirmed the legitimacy of collective ownership from the policy level; and at the same time, these measures and policies endowed the non-public economy with the legitimacy as an important supplement to the public economy. As a result, the output proportion of collective and other ownership enterprises in the gross industrial output value has increased significantly since 1992, whereas, accordingly, that of state-owned enterprises evidently decreased.

In the 1990s, the output proportion of state-owned enterprises showed a continuous downward trend except for a small increase incurred by the adjustment of statistical caliber. In 1994, the proportion of industrial output value of state-owned enterprises dropped to 37.34 percent, which was lower than that of collectively owned enterprises for the first time. In 1995, the proportion of industrial output value of state-owned enterprises dropped to only slightly higher than one-third of the gross industrial output value. In 1996, the statistical caliber of state-owned economic departments was adjusted to "state-owned and state-holding enterprises," which made the proportion of it in gross industrial output value increase significantly compared with 1995, but still lower than that of collectively owned enterprises. The proportion of industrial output value of collectively owned enterprises peaked at nearly 40 percent of the gross industrial output value in the same year. The importance of collectively owned enterprises in the field of industrial output continued to increase until the mid and late 1990s. In 1997, the proportion of industrial output value of state-owned and state-holding enterprises dropped significantly, which was lower than that of other ownership enterprises for the first time. In 1998, the proportion of industrial output value of state-owned and state-holding enterprises in gross industrial output value dropped to below 30 percent for the first time. Subsequently, the National Bureau of Statistics made an adjustment of the statistical caliber and stopped counting the non-state-owned industrial enterprises with annual sales income less than 5m yuan, thus making the absolute value of the output ratio of state-owned and state-holding enterprises increase significantly, but the overall trend of its decline year by year is clear and unchanged.

During the same period, the proportion of the gross industrial output value of all other types of enterprises increased rapidly to 25 percent in 1994 and 40 percent in 1998. From 1993 to 1995, the proportion of non-urban-rural individual economy increased significantly faster than that of urban-rural individual economy. The proportion of urban-rural individual economy increased more significantly in 1996 and 1997, and the growth trend of non-urban-rural individual economy was much faster than that of urban-rural individual economy in 1998 and 1999. During this period, the gross industrial output value of other ownership enterprises broke through 1tn yuan in 1995 and 2tn yuan in 1997, respectively. Such types of enterprises have become an important force to promote China's industrial economic growth ever since.

1.3 Since the beginning of the twenty-first century

At the beginning of the twenty-first century, the absolute number of state-owned enterprises and the relative proportion of gross industrial output value continued to show a declining trend, but around 2005, they gradually began to show signs of relative stability. The proportion of collectively owned enterprises declined rapidly. The rapid growth of enterprises of other economic types, with joint-stock economy, private economy, Hong Kong, Macao, Taiwan-funded and foreign-funded economy being the main body, has constituted a positive force to promote the ownership structural adjustment of industrial enterprises in China since the beginning of the twenty-first century.

The National Bureau of Statistics made an adjustment of the statistical caliber of industrial enterprises in 1998 (only industrial enterprises above designated size have been counted since 1998, that is, all state-owned enterprises and non-state-owned industrial incorporated enterprises with annual main business income of 5m yuan or more), so there is no comparable consistency between the data after 2000 and those before 1998 and 1999. According to the data released by the National Bureau of Statistics, under the new caliber, in 2000, the gross industrial output value of state-owned and state-holding enterprises accounted for 47.33 percent of that of all industries above the designated size. According to the data of the first national economic census in 2004, the output ratio of state-owned and state-holding enterprises was about 31.59 percent. After an extensive discussion generated by the reforming strategy of “the privatization of state assets,” the output proportion of state-owned and state-holding enterprises tended to be relatively stable in 2005, but then it dropped to 26.18 percent by 2011[1]. After 2012, the National Bureau of Statistics stopped publishing relevant data on the gross industrial output value.

As shown in Table II, from 2005 to 2016, the proportion of assets, business income and profits of state-owned and state-holding enterprises has decreased from 48.05, 27.88, and 44.04 to 38.47, 20.62, and 17.14 percent, respectively. In terms of data changes, over the past decade or so, the decline of the profit share of state-owned enterprises was significantly greater than that of their business income and assets, which shows that the operating pressure of state-owned enterprises is increasing with the deepening of marketization reform process. In 2017, the declining trend of the main economic indicators of the state-owned economy was reversed, rising sharply to 39.19, 23.42 and 22.98 percent. Among them, the increase in profit share of state-owned enterprises is larger than that in income share, and the increase in income share is larger than that in profit share. The above changes are mainly caused by the policy factors of supply-side structural reform. Since 2018, the operation of state-owned economy has maintained a strong inertia, with its profits continue to grow in double digits, but the growth rate of assets and income is much slower than that of profits.

As shown in Table III, the proportion of assets, business income and profits of private enterprises increased significantly from 12.39, 18.43 and 14.33 percent in 2005 to 22.06, 35.39 and 35.45 percent in 2016, respectively. In 2017, the impact of policy factors of supply-side structural reform on private enterprises’ upstream product price rise was obvious, with the corresponding indicators declining in an all-round way, accounting for 21.63, 33.63 and 30.76 percent, respectively. From the trend of change in recent years, the share of private enterprise economy reached its peak around 2015 after years of continuous growth, and

Table II.
Changes in the
proportion of major
economic indicators of
state-owned and
state-holding
enterprises from 2005
to 2017 (unit: percent)

Years	Assets	Business income	Profits
2005	48.05	27.88	44.04
2006	46.41	32.34	43.51
2007	44.81	30.68	39.75
2008	43.78	29.50	29.66
2009	43.70	27.96	26.89
2010	41.79	27.85	27.78
2011	41.68	27.19	26.81
2012	40.62	26.37	24.51
2013	39.36	24.86	22.22
2014	38.81	23.73	21.29
2015	38.83	21.77	17.25
2016	38.47	20.62	17.14
2017	39.19	23.42	22.98

Source: Calculated by the author according to the data in *China Statistical Yearbook* of corresponding years

Table III.
Changes in the
proportion of major
economic indicators of
private enterprises
from 2005 to 2017
(unit: percent)

Years	Assets	Business income	Profits
2005	12.39	18.43	14.33
2006	13.91	20.67	16.36
2007	15.10	22.59	18.61
2008	17.59	26.30	27.16
2009	18.47	28.87	28.02
2010	19.71	29.79	28.47
2011	18.90	24.97	29.57
2012	19.85	30.74	32.61
2013	21.56	32.93	34.11
2014	22.27	33.62	34.55
2015	22.38	34.81	36.64
2016	22.06	35.39	35.45
2017	21.63	33.63	30.76

Source: Calculated by the author according to the data in *China Statistical Yearbook* of corresponding years

then showed signs of decline, which was very obvious in 2017. Among them, the profit share of private enterprises has fallen sharply, returning to the level of 2011.

As shown in Table IV, the proportion of assets, business income and profits of foreign-funded enterprises and Hong Kong, Macao and Taiwan-funded enterprises decreased from 26.27, 1.61 and 27.97 in 2005 to 19.25, 21.85 and 24.58 percent in 2017, respectively, and the impact of policy factors on foreign-funded enterprises was relatively small in 2017.

Generally speaking, in China's industrial field, the economic proportion of foreign-funded enterprises is tending to be relatively stable, and the revenue and profit-making efficiency of their assets are relatively strong. The economic proportions of state-owned and private enterprises are complementary to each other. State-owned enterprises account for a relatively high proportion of assets, but a lower proportion of business income and profit. On the contrary, private enterprises have a relatively low proportion of assets, but a higher proportion of business income and profits. This is the trend of the establishment and improvement of the market economy system and the joint efforts of micro-enterprises in China over the years.

Sometimes an empirical statement can be seen that "the state-owned economy accounts for about one-third of the national economy," which is inaccurate, however, because the status and contribution of state-owned enterprises are much different in terms of asset indicators and

Years	Assets	Business income	Profits
2005	26.27	31.61	27.97
2006	26.48	31.55	27.60
2007	27.30	31.40	27.72
2008	26.00	29.32	26.97
2009	25.21	27.70	29.26
2010	25.06	27.05	28.31
2011	23.97	25.69	25.24
2012	22.43	23.88	22.56
2013	21.67	23.39	23.11
2014	20.71	22.82	24.32
2015	19.67	22.14	24.03
2016	19.59	21.60	24.47
2017	19.25	21.85	24.58

Table IV.
Changes in the
proportion of major
economic indicators of
foreign-funded
enterprises from 2005
to 2017 (unit: percent)

Source: Calculated by the author according to the data in *China Statistical Yearbook* of corresponding years

in terms of business income or profit indicators. Foreign scholars also pay attention to the proportion of Chinese state-owned enterprises in the national economy. Some studies suggest that the share of state-owned enterprises in industrial output is about 40 percent, together with the state-owned parts of other ownership enterprises, it is roughly estimated that the total share may reach 50 percent. Other studies have estimated that state-owned enterprises contribute 25–30 percent of industrial output, whereas in some service sectors and social programs, the proportion of state-owned enterprises will be higher. From the experience of countries with developed market economy in the world, the proportion of state-owned economy is generally about 5–15 percent. As a socialist country, China's share of the state-owned economy will be higher than the general level. For now, further optimization of the proportion of state-owned economy may still be needed.

2. Existing problems: efficiency of state-owned enterprises to be attentively watched

What kind of micro-economic structure is China supposed to have? The core issue has been dominating the general trend of the reform of China's state-owned enterprises in the past 40 years. As to the kind of micro-economic structure China really needs, the choice in essence depends on the efficiency of the dominant enterprise system. The organizational system choice of state-owned enterprises is also influenced by the efficiency of state-owned enterprises to a large extent. From the experience at home and abroad, when the theory circle generally believes that state-owned enterprises are highly efficient, it is often in the period of expansion of the state-owned economic sector; when the viewpoint prevails in the theory circle that state-owned enterprises are inefficient, it is often in the period of contraction or acceleration of reform in the state-owned economic sector.

Since the reform and opening-up, one of the important tasks of China's economic system reform is to promote the reform of state-owned enterprises. At first, state-owned enterprises were the main form of enterprise system that occupied the dominant position. However, the performance efficiency of state-owned enterprises was far lower than that of other ownership enterprises. The essence of enterprise reform is to establish a socialist economic system with independent enterprises as the basic unit (Yiwei, 1980), and to change the inefficiency of state-owned enterprises in an all-round way. While the reform of state-owned enterprises is being planned, the relatively efficient collectively owned enterprises and individual and private economy have developed rapidly by sharing the responsibilities of promoting economic growth that state-owned enterprises are unable to undertake. The trend triggered by such reforms was blocked for two or three years in the late 1980s and early 1990s but then continued to move forward.

In the mid and late 1990s, the inefficiency of state-owned enterprises that lagged behind in reform has accumulated to a so serious extent that the reform must be conducted. In this context, the key task of the reform in the late 1990s was to "focus on major enterprises and leave minor ones to fend for themselves," which means to conduct the reform of turning large-sized state-owned enterprises into stockholding corporations and the marketization reform for inefficient state-owned small- and medium-sized enterprises. In this round of enterprise reform, the individual and private economies have also got unprecedented opportunities for development. Some private enterprises even participated in the reform of state-owned enterprises and thus realized their own development and expansion.

In just a few years after entering the twenty-first century, there has been a growing awareness of the inefficiency of state-owned enterprises. A number of studies during this period show that the efficiency of state-owned enterprises in the late 1990s will be improved along with the gradual reform of property rights. Although restructuring may bring some social costs, the restructured enterprises generally become more profitable and have less administration costs (Xiaoxuan and Liying, 2005; Ligang and Yang, 2005; Chong'en *et al.*, 2006).

Influenced by such views, state-owned enterprises, which had just overcome the difficulties at the end of the twentieth century, accelerated the reform process of transformation into marketization and efficient enterprise systems.

After 2003, SASAC of the State Council and local state-owned assets supervision institutions at various levels have been established one after another. Shortly afterward, an extensive discussion about “the privatization of state assets” triggered by the dispute between Lang Xianping and Gu Chujun aroused people’s new thinking on the nature and efficiency of the organizational system of state-owned enterprises. After the 2008 international financial crisis, the formulation of “Making State-owned Enterprises Bigger, Stronger and Better” has gradually occupied the mainstream of public opinion. Over the years, the state-owned assets supervision authorities have been releasing positive signals of the continuous expansion of the total state-owned economy. Since the end of 2016, they have focused on releasing positive signals of the growth of the total profits of state-owned enterprises.

This paper will analyze the changes in the operational efficiency and asset–liability ratio of state-owned enterprises since the beginning of the twenty-first century. The following analysis shows that over the past decade or so, compared with other ownership enterprises, the operational efficiency of state-owned enterprises has further declined. Under the recent national policy of “deleveraging,” there are obvious signs that the asset–liability ratio of state-owned enterprises has risen against the trend and still remains high. This indicates that the inefficiency of state-owned enterprises which once hindered China’s economic development has not yet been fundamentally solved, and the task of deepening the reform of state-owned enterprises is still arduous.

2.1 Relative decline of operational efficiency of state-owned enterprises

After entering the twenty-first century, compared with other ownership enterprises, the operational efficiency level of state-owned enterprises occupying assets to generate income and profits has shown an obvious trend of relative decline.

From the perspective of vertical comparison, at the beginning of the twenty-first century, state-owned and state-holding enterprises accounted for nearly one-third of the number of industrial enterprises above designated size, two-thirds of the assets, half of the main business income and more than half of the total profits; and by 2017, the proportion of state-owned and state-holding enterprises in the number of industrial enterprises above designated size has dropped to 1/20, the assets are less than 2/5 and the main business income and total profit are slightly higher than 1/5. Thus, the proportion of various economic indicators of state-owned enterprises has shown a downward trend.

From the perspective of horizontal comparison, as shown in Table V, the gap between the average operational efficiency of state-owned and state-holding enterprises and that of all industrial enterprises is becoming more and more obvious. At the beginning of the twenty-first century, one unit of assets of an industrial enterprise generated 0.67 of its main business income and 0.03 of its profit, whereas state-owned and state-holding enterprises generated 0.50 of its main business income and 0.03 of its profit. By 2017, one unit of assets of an industrial enterprise generated 1.07 of the main business income and 0.07 of the profit, whereas state-owned and state-holding enterprises can only generate 0.60 of the main business income and 0.04 of the profit.

This paper investigates in detail the changes in enterprise operational efficiency over the past 18 years. First, from 2000 to 2006, the operational efficiency of various industrial enterprises has been steadily improved. Second, around the outbreak of the international financial crisis, the operational efficiency of industrial enterprises began to show signs of fluctuation and differentiation. In 2007, the income-generating ability of assets of all industrial enterprises continued to improve, but the profit-generating level declined. However, in the same year, the operational efficiency of state-owned and state-holding enterprises maintained

Table V.
Comparison of income
generated by unit
assets between all
industrial enterprises
and state-owned and
state-holding
enterprises from
2000 to 2016

Years	All industrial enterprises	State-owned and state-holding industrial enterprises
2000	0.666753215	0.502328752
2001	0.748785613	0.505605704
2002	0.848133883	0.5370046
2003	0.923619601	0.61391535
2004	1.015359444	0.703310361
2005	1.076843492	0.589157866
2006	1.132223084	0.750293056
2007	1.159317495	0.775136109
2008	1.098906778	0.781244795
2009	1.176868465	0.703157211
2010	1.245685338	0.784387269
2011	1.209351733	0.812642401
2012	1.192831667	0.785262387
2013	1.192831667	0.753576703
2014	1.157043165	0.707476504
2015	1.084478219	0.608119503
2016	1.067349548	0.572151903
2017	1.010028434	0.603683371

Source: Calculated by the author according to the data in *China Statistical Yearbook* of corresponding years

the growth momentum. In 2008, the operational efficiency of industrial enterprises declined, whereas the income-generating capacity of state-owned and state-holding enterprises' unit assets increased slightly, but the profit-generating level decreased sharply. In 2009, the income-generating ability of unit assets of all kinds of enterprises has been improved. The profit-generating ability of unit assets of industrial enterprises has been greatly improved, but the profit-generating ability of state-owned and state-holding enterprises has continued to decline. In 2010, the operational efficiency of all kinds of enterprises improved, and the overall efficiency level of all industrial enterprises reached its peak. In 2011, the National Bureau of Statistics raised the statistical standards for the scale of large- and medium-sized enterprises. After introducing this change factor, the overall operational efficiency of industrial enterprises declined, the income-generating capacity of state-owned and state-holding enterprises' unit assets increased slightly, and the profit-generating capacity of unit assets decreased slightly. Finally, from 2012 to 2017, the operational efficiency of all kinds of industrial enterprises has shown a constant downward trend.

Compared with the situation at the beginning of the twenty-first century, the absolute value of the operational efficiency level of state-owned and state-holding enterprises has been improved slightly. The reason why the operational efficiency level of state-owned enterprises is lower than that of the whole industrial enterprises is that during the change process of the operational efficiency level of the whole industrial enterprises, the operational efficiency of other ownership industrial enterprises improved much faster than that of state-owned enterprises before 2010, and the former's operational efficiency fell after 2010 at a slower rate than that of state-owned enterprises. In short, after 18 years of fluctuating changes, the operational efficiency gap between state-owned enterprises and other ownership industrial enterprises has further widened.

Some empirical studies have confirmed the increasingly prominent problem of efficiency loss of state-owned enterprises. Sun and Li (2016) pointed out that after 2008, with the increased motivation of local governments to intervene in the economy, the problem of over-investment of state-owned enterprises became more prominent. Although the investment of state-owned enterprises may play a short-term role in alleviating the slowdown of economic growth, it has aggravated the efficiency loss of

state-owned enterprises. Tianhua and Shaohua (2016) believe that compared with non-state-owned enterprises, state-owned enterprises has taken benefits from various preferential policies in their operation, resulting in excessive allocation of capital and labor, blind expansion and ultimately resulting in overcapacity and serious loss of resource allocation efficiency.

2.2 The trend of high asset–liability ratio of state-owned enterprises

At the same time, state-owned enterprises have exposed many hidden troubles of rising operational risks. During the period of extricating from the difficult position and storming fortifications for state-owned enterprises at the end of the twentieth century, the asset–liability ratio of China’s industrial enterprises has been at a high level of more than 60 percent. In the most difficult year of 1997, the asset–liability ratio of China’s industrial enterprises was close to the alert level of 65 percent. After entering the twenty-first century, the asset–liability ratio of China’s industrial enterprises has shown a slightly downward trend. As shown in Table VI, it was at a high level of 60.81 percent in 2000, 59 percent from 2001 to 2003 and remained roughly at the level of 57–58 percent from 2004 to 2013. After 2014, with the implementation of the “deleveraging” policy by the government, the asset–liability ratio of China’s industrial enterprises has been falling year by year, but the asset–liability ratio of the state-owned and state-holding enterprises has remained at a high level in the same period. According to the economic operation data of state-owned and state-holding enterprises from January to November released by the Ministry of Finance at the end of December 2018, the asset–liability ratio of state-owned enterprises was 64.84 percent. At present, the debt of state-owned enterprises is over 100tn yuan, accounting for more than 70 percent of the total debt of all non-financial enterprises.

Among the changes of the asset–liability ratio of industrial enterprises, there is another set of contradictory trends that deserve our attention: among all large- and medium-sized enterprises, the asset–liability ratio of medium-sized industrial enterprises is in a good state of optimization, whereas the asset–liability ratio of large industrial enterprises has increased significantly, forming a sharp contrast. On the contrary, at the end of the twentieth century, the asset–liability ratio of medium-sized enterprises was high, whereas that of large industrial enterprises was relatively low. In recent years, the high asset–liability ratio of

Years	All industrial enterprises	State-owned and state-holding industrial enterprises
2000	60.81	60.99
2001	58.97	59.19
2002	58.72	59.30
2003	58.96	59.39
2004	57.97	59.35
2005	57.81	56.66
2006	57.46	56.24
2007	57.48	56.50
2008	57.71	58.99
2009	57.88	60.30
2010	57.41	60.31
2011	58.10	61.17
2012	57.96	61.31
2013	58.08	61.91
2014	57.17	61.98
2015	56.61	61.94
2016	55.87	61.58
2017	55.98	60.53

Table VI.
Asset–liability ratios of all industrial enterprises and state-owned and state-holding enterprises from 2000 to 2017 (unit: percent)

Source: Calculated by the author according to the data in *China Statistical Yearbook* of corresponding years

large enterprises and state-owned enterprises reflects, to some extent, the relatively high credit level and relatively strong financing capacity of these enterprises, but also reflects that the operational risks are likely to be gathered in these important areas and key sectors of the national economy. In 2018, at the first meeting of the Central Committee on Finance and Economics in April and the second meeting of the Central Committee for Comprehensive Deepening Reform in May, the requirements for the classification of state-owned enterprises as “deleveraging” and the strengthening of asset–liability constraints were clarified, and the average asset–liability ratio of central enterprises was required to decrease by another two percentage points by 2020.

It is to be believed that it is a difficult task to fundamentally solve the problem of the high asset–liability ratio of state-owned enterprises. The main reason lies in that the debt problem of state-owned enterprises has been intertwined with the problems of local finance and financial risks (Jing and Qunhui, 2017). Although on the surface it is a problem of enterprises, it is not only a problem of enterprises. Also, it is manifested as an economic problem, but it is not only an economic problem. The empirical study of Xiaowen (2017) shows that the credit demand of local financing platforms with soft budget constraints has surged, which has rapidly pushed up the overall leverage level of China’s non-financial sectors. Youyou *et al.* (2018) pointed out that the debt growth of central enterprises is positively correlated with the growth of central fiscal expenditure, the debt growth rate of local state-owned enterprises is positively correlated with the local fiscal expenditure and the asset–liability ratio of state-owned enterprises declines slightly in the short term, which also brings the problems of implicit liabilities and relying too much on low-cost financing to make low-quality asset expansion. Faced with problems more difficult and uncertain in reality, if we simply ask state-owned enterprises to reduce their asset–liability ratio instead of solving the deep-rooted problems that lead to the rise of their asset–liability ratio, it would be fruitless. It may cost a lot to only reduce the asset–liability ratio of state-owned enterprises by one or two percentage points. However, deep-rooted contradictions such as soft budget constraints have not been resolved, but shifted to accumulate greater risks in a more subtle way, as we have seen in recent years.

3. Prospects for the future: whether China’s state-owned enterprises can be ranked among the world-class ones

If we can stand in the future and look back on today’s state-owned enterprises in China, we are likely to have the following opinion: the current period is not only a time when the state-owned enterprises have reached unprecedented prosperity and growth, but also a time when the further reform and development of state-owned enterprises are facing a very complex situation and very arduous challenges. It is in this complex situation that the report of the Nineteenth National Congress of the Communist Party of China puts forward that the new goal for the reform and struggle of state-owned enterprises in the new era is “cultivating world-class enterprises with global competitiveness.”

From the perspective of favorable factors, under the guidance of various social ideological trends with the deepening of reform and opening-up, state-owned enterprises have experienced the market economy and greatly released the unique advantages given by the socialist system to the development of state-owned enterprises, thus reaching the peak stage of their own prosperity and growth. These achievements seem to have laid the foundation for China’s state-owned enterprises to “cultivate world-class enterprises with global competitiveness.”

From the perspective of unfavorable factors, the internal multi-objective dilemma of state-owned enterprises and the capricious conflicts and contradictions in organizational system logic have accumulated up to now, resulting in the misallocation of resources and inefficiency of state-owned enterprises that cannot be underestimated. In the second half of

the twentieth century, the UK, a great power which once grew rapidly through the system of state-owned enterprises in one or two decades after the end of the Second World War, had to resort to the policy of privatization in the late 1970s and early 1980s in order to alleviate its almost inexplicable defects of the state-owned enterprise organizational system.

Considering both favorable and unfavorable factors, are there any of China's state-owned enterprises that can grow into world-class ones in the future? In pursuit of the grand goal of developing into world-class enterprises, can China's state-owned enterprises eradicate their own maladies that remained unsolved for many years?

3.1 Trend and general direction of China's state-owned enterprises

After 40 years of reform and opening-up, China's state-owned enterprises have been in a more reasonable position in the national economy and have always played a vital role. In this process, the form of the organizational system of state-owned enterprises has undergone positive changes, forming a corporate shareholding system with Chinese characteristics and basically meeting the requirements of the market economy, thus realizing the transformation from state-owned units to independent enterprises. From the long cycle of the past 40 years, the general plan and goal of China's state-owned enterprise reform is clear.

Over the past ten years, people's understanding of state-owned enterprises has changed, and the business activities of state-owned enterprises have also undergone tremendous changes. Today's state-owned enterprises differ greatly in economic scale and business structure from those in the late twentieth century. At the same time, the whole society is more confident that state-owned enterprises can be successful in their operation. However, under this background, the problems that low efficiency and high debt remain to plague state-owned enterprises are highlighted again.

In the mid and late 1990s, China made it clear that the reform of state-owned enterprises should be the central link of economic system reform. After 20 years, there is still a lack of consensus on what direction to go and how to promote the reform of state-owned enterprises. The Third Plenary Session of the Eighteenth Central Committee put forward the requirements of deepening the reform in an all-round way, including the reform of state-owned enterprises. Over the past few years, there have been many articles on the development and reform of state-owned enterprises, but from a practical point of view, the reform of state-owned enterprises is much talks and little actions. Although the top-level design involves a large number of government departments, the subsequent pilot work has progressed slowly. The results are not remarkable, and even some new problems which violate the operation law of enterprises have appeared.

In the process of advancing the reform of China's state-owned enterprises, we need to adhere to the general direction of marketization and enterprization, make enterprise operators responsible for their decisions and let the market determine the winners and losers of enterprises. If we stick to this general direction, even if we are confused and encounter many difficulties in the short term, we will get out of the predicament through the joint efforts of many enterprises sooner or later. If we go against this general direction, no matter how hard each state-owned enterprise tries, the state-owned enterprises as a whole will still fall into a more severe situation step by step. To ensure the general direction of marketization and enterprization, on the one hand, it is behavioral requirements for state-owned enterprises and their insiders; on the other hand, it is a requirement for the whole society to create a fair and equal competitive environment for state-owned enterprises as that of private enterprises, other state-owned enterprises as well as foreign-funded enterprises. Any system "innovation" should serve the general direction of deepening reform and enterprise development. If there are any negative consequences in practice that are not conducive to promoting the healthy and sustainable development of state-owned

enterprises, it is our duty to stop in time to reflect and correct mistakes instead of doing nothing and letting their negative effects and influence expand.

3.2 General rules of the growth of world-class enterprises

We have studied the general rules of the growth of world-class enterprises (Qunhui *et al.*, 2017). From the cross-sectional point of view, compared with other enterprises, the world-class ones must be excellent enterprises with strength and competitiveness. From the vertical diachronic point of view, compared with themselves in different time periods, the world-class enterprises are constantly undergoing dynamic changes to keep up with the modern changes.

On one hand, the world-class enterprises should be in the important dominant industries, and have strong comprehensive strength, advanced system achievements and great commercial contributions that can be recorded in history. These enterprises are willing and able to make outstanding contributions to industrial development, technological innovation, national economic growth, social progress and improvement of people's well-being, etc. In addition to that, they have discourse power and influence in the international industrial system, and can intervene and influence the future market competition order, so that they may occupy a favorable competitive position in a longer period of time. This is precisely what the SASAC of the State Council now often emphasizes that central-government enterprises should strive to "occupy the dominant position in the allocation of international resources," "play a leading role in the development of the global industry" and "have discourse power and influence in the development of the global industry."

On the other hand, the world-class enterprises emerge or stand out in response to the needs of modern times, but they will not be eliminated because of the modern changes. In the twenty-first century, the vigorous development of new technology and the economy greatly affects the market environment for the survival and development of world-class enterprises, and inevitably changes their growth trajectory. First-class industrial companies, such as Kodak and Nokia, all suffered from the impact of the digital wave and declined in a very short time. In June 2018, Dow Jones Industries Average (DJIA) removed General Electric, a century-old company that had been listed in DJIA component stocks companies since its inception, whose stock has lost more than half of its value in the past year. Looking back to the history of world enterprises, we can see many similar ups and downs, which means that there is no so-called constant universal standard for world-class enterprises.

In our view, the pursuit of becoming world-class enterprises conveys a business spirit of unremitting struggle and persistent pursuit of sustainable excellence, which will be sustained in business organizations at different times and between different countries. No matter what country or type the enterprise belongs to, or how prominent the personality of the enterprise's operation and management activities is, as long as the enterprise can fully demonstrate its strong commercial spirit under the conditions of fair competition, it will be possible to grow into a world-class enterprise.

3.3 Reflections on whether China's state-owned enterprises can be ranked among the world-class ones

Returning to the two questions raised at the beginning of this paper, the answer is: on the global market stage, all enterprises are equal in front of the practical test standard of marketization and enterprization. Only by strictly abiding by the requirements of fair competition in the market and overcoming the unique organizational system defects of state-owned enterprises can China's state-owned enterprises possibly rank among the world-class ones. From foreign experience, if a state-owned enterprise can organically integrate its own "political mission" or "national interest" appeals into the value orientation of the enterprise and abide by fair competitive business norms in its daily operation level, it

is possible for such a state-owned enterprise to grow into a universally acknowledged excellent enterprise organization.

From a positive perspective, it is expected that in the future, in the process of establishing a modern economic system in China, there will probably be some “new state-owned enterprises” developing into world-class ones. At the three important development points proposed by the Nineteenth National Congress, namely, the decisive period of building a well-off society in an all-round way by 2020, the basic realization of socialist modernization by 2035 and the realization of “The Dream of Building a Powerful Country” and great renaissance of the Chinese nation by 2050, those state-owned enterprises that aspire to be world class and shoulder major responsibilities and missions will play their functions and roles more fully.

We need to be calm and restrained about the current enthusiasm of state-owned enterprises in their pursuit to be “world-class” ones. As the saying goes, a blunt knife may be sharpened on a stone. To become a world-class enterprise, enterprises should neither shout slogans empty, nor rely solely on propaganda. Instead, they should adopt a more modest attitude and make greater efforts in many aspects of business management, such as enhancing the capacity for independent innovation, improving the level of organizational control, expanding the international market opportunities and fulfilling enterprise social responsibilities with high standards.

Human beings will face unprecedented changes in technology, economy and social governance over the next decades. In the upcoming great changes, very few enterprises can really succeed in becoming world-class ones. Against this background, China’s state-owned enterprises should specifically maintain crisis awareness as if standing upon the edge of an abyss or treading on thin ice and keep the spirit of perseverance with indomitable will.

Note

1. Since 2007, according to the regulations of the National Bureau of Statistics, the statistical scope of industrial enterprises above designated size has been changed to industrial incorporated enterprises with annual main business income of 5m yuan or more. In 2011, the National Bureau of Statistics again adjusted the scope of statistical caliber of industrial enterprises. The starting point of industrial enterprises included in the scope of industrial statistics above designated size increased from 5m yuan to 20m yuan in terms of annual main business income.

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