Analysis on the Influence of "Replacement of Business Tax by Value-added Tax" on the Cost of Highway Projects

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Abstract: The "replacement of business tax by VAT reform" (hereby refer to as "VAT reform" for short) is a newly promulgated and implemented tax policy, and its impact on various industries in China is very different, and the highway project industry is no exception. The implementation of the "VAT reform" will not only have a positive impact on the cost of highway projects, but will also have some negative impacts. For this reason, highway project construction corporates must actively respond. The author explores and analyzes the positive and negative effects of the "VAT reform" on the cost of highway projects, and proposes a reform strategy for highway project cost work under the background of the "VAT reform", in hope of helping with bringing out the intrinsic value of highway project cost management work.

Keywords: "Replacement of business tax by VAT reform"; Highway project; Cost; Influence

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With the full implementation of the "VAT reform" policy, it will have a greater impact on the implementation of highway project cost. In the increasingly competitive industry market, if highway project construction corporates want to ensure their own sustainable development, they need to meet the needs of the development of the times and carry out reasonable innovation and reforms in the cost of highway projects, so as to fully grasp the development opportunities brought by the implementation of "VAT reform" policy to highway project construction corporates, thereby promoting the further development of corporates.

1 Positive effects of "VAT reform" on highway project cost

After the implementation of the "VAT reform", higher requirements were put forward for the cost of highway projects, and it also has some positive effects on the implementation of highway project cost, as shown in Table 1.
### Table 1. Positive effects of "VAT reform" on highway project cost

| Positive Effects                          | Specific Manifestations                                                                                                                                                                                                 |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reduce the chance of multiple taxation   | After the implementation of the "VAT reform", the standards for calculating equipment costs, material costs and labor costs in highway projects have undergone major changes. Labor costs cannot be deducted by any other costs and need not be adjusted. Material costs mainly include transportation costs, material prices, storage costs, and procurement costs. The depreciation and repair and maintenance costs of machinery and equipment can also be adjusted according to relevant regulations. |
| Reform tax structure                      | After the "VAT reform", the method of calculating value-added tax has changed a lot, which can reduce the occurrence of multiple taxation and effectively alleviate the tax burden on corporates.                                               |
| Standardize VAT invoice management        | After the implementation of the "VAT reform", it is necessary to increase the control and management of highway project costs in order to better implement the new taxation strategy and meet the demand for cost of highway projects, which also makes the management of highway project value-added tax invoices more standardized. |

### 2 Adverse effects of "VAT reform" on highway project cost

The impact of "VAT reform" on highway project cost control and management are two-sided, with both positive and negative impacts. The negative impacts of "VAT reform" on highway project cost control and management are shown in Table 2.

#### Table 2. Adverse effects of "VAT reform" on highway project cost

| Adverse Effects                   | Specific Manifestations                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Increased the difficulty of calculating VAT | 1. Although the "VAT reform" can prevent corporates from multiple taxation, the calculation of value-added tax is more complicated and more difficult.  
2. The cost involved in the cost of highway projects is relatively extensive. If the accounting staff's level of business development is relatively limited, then it is easy to miscalculate, which will lead to tax evasion and financial risk.  
For remote highway projects, it is difficult to obtain value-added tax invoices. In addition, it is difficult to obtain value-added tax invoices for the use of some construction equipment and sites, and value-added tax invoices for construction materials can only deduct 3% of the tax amount, the effect of VAT deduction is very unsatisfactory.  
After the "VAT reform", corporates must use professional value-added tax invoices to make deductions. This requires the tax points paid by the corporates to obtain the invoices, which greatly increases the cost of highway projects. |
| Increased the difficulty of deducting VAT |                                                                                                                                                                                                                           |

### 3 Reform strategy of highway project cost under the background of "VAT reform"

The cost of highway project mainly consists of three parts. See Table 3 for details. In order to effectively control and manage the cost of highway projects, it is necessary to make reasonable reforms to the development of this work under the background of "VAT reform".
4 Lowering VAT rate reasonably

Through the analysis on the specific development status of the current highway project construction corporates, it was found that compared with other industries, the tax rate of the highway project construction industry on value-added tax is not very high, but as the scale of highway projects continues to expand, the value-added tax will also keep increasing correspondingly. It can be seen that the development of the transportation industry will make a great contribution to China's taxation\(^2\). In this process, we should give full play to the important role of the new taxation policy of "VAT reform" to provide new impetus for the further development of highway project construction corporates. It is necessary to make reasonable decisions based on the current actual scale and development of the corporates, reduce the value-added tax rate in order to alleviate the operating pressure of the corporates, promote the corporates to gain new vigor for development, and then promote the faster development of China's highway project industry.

5 Expanding the scope of VAT deduction reasonably

After the implementation of the "VAT reform", it is necessary to reasonably expand the scope of value-added tax deduction to reduce the taxation pressure on highway project construction corporates and control and manage the costs of highway projects more scientifically\(^3\). At this stage, the scope of input tax deduction for China's highway project construction industry is not very wide. Invoices can only play a role in the procurement of construction materials, but it is difficult to play a role in other work segments. For this reason, the scope of VAT deduction can be expanded to encourage corporates to gain more policy support under the "VAT reform". For example, highway project construction corporates can appropriately increase the labor cost and transportation cost of highway project construction to effectively control the cost of highway projects.

6 Improving corporate management standard

Under the “VAT reform”, one must design highly enforceable construction drawings, rationally deploy personnel, strictly control construction materials and progress, and ensure construction safety to scientifically and reasonably control the cost of highway projects. Not only that, highway project construction companies should also regularly organize financial staff to conduct professional project cost control and management training, and continuously improve the operation capabilities of financial staff, so as to reasonably and legally alleviate the stress of taxation on corporates\(^4\). It can be seen that under the "VAT reform", highway project construction companies must strengthen internal management and continuously improve their management capabilities, so as to achieve more ideal highway project cost control and management effects.

7 Conclusion

In summary, after the implementation of the VAT reform, it will not only have positive influences on the cost of highway projects, but also negative impacts. In recent years, the construction scale of highway projects has become larger and larger, which has also brought great challenges to the
effective implementation of project cost control and management. Under the background of the "VAT reform", companies should actively adopt effective strategies to deal with the negative impact of the "VAT reform" on the cost of highway projects, and make full use of the advantageous influence brought by the "VAT reform" to the implementation of highway project cost control and management, thereby further promoting corporate development.

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