

# Analysis of Difficult Problems in the Application of Revenue Standards

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**Abstract:** The new revenue standard makes substantial changes to the rules of recognition, measurement, recording and reporting of income, but there are many difficult problems to be solved in the implementation process. Combined with relevant provisions, this paper deeply analyzes several problems in the process of implementing new revenue standards.

## 1. Introduction

The *No. 14 Accounting Standards for Enterprises: Revenue* (Accounting Document [2017] No. 22) (hereinafter referred to as “new revenue standards”) not only greatly expanded the length of the book, but also substantially revised rules for the recognition, measurement, recording and reporting of revenue. Compared with original revenue standards, new standards make major changes in three perspectives. Firstly, it takes the control right transfer instead of risk and reward transfer as the standard of determining the revenue recognition time-point, breaks the boundary between goods and services, and requires enterprises to recognize revenue when they fulfill the contract performance obligations, that is, when customers obtain the control of relevant goods (or services). Therefore, it can reflect the revenue recognition process of enterprises more scientifically and reasonably.[1] Secondly, it provides more clear guidance for the accounting treatment of contracts with multiple transaction arrangements. It requires enterprises to evaluate the contracts on the contract start date, and identify performance obligations contained in the contract. According to the relative individual selling price of the commodity (or service) promised by each performance obligation, the transaction price is divided into different performance obligations; corresponding income is recognized when performing each performance obligation. Third, it provides specified regulations on the revenue recognition and measurement of some specific transactions (or events), like sales with sales return terms, sales with quality assurance terms, sales with additional purchase options of customers, licensing of intellectual property rights to customers, after-sales repurchase, initial fees without refund, and so on. Combined with above provisions, this paper deeply analyzes several difficult problems in the process of implementing new revenue standards.

## 2. How to Distinguish Two Different Major Financing Components

Article 17 of *Accounting Standards for Enterprises: Revenue* (Accounting Document [2017] No. 22) stipulates that if there is a significant financing component in the contract, the enterprise shall determine the transaction price according to the amount payable that should be paid in cash when the customer obtains the control right of the commodity. The difference between the transaction price and the contract consideration shall be amortized by the effective interest rate method during the contract period. On the contract start date, if the customer pay within one year after he acquires the commodity control right, the significant financing components may not be considered in the contract. From the analysis it can be seen that if there are significant financing elements in the contract, the transaction price shall be determined according to the amount payable at the time of transferring the control right no matter when the control right is transferred. If the transaction price is greater than the contract consideration, it is the financing cost paid to obtain the time value of capital. If the transaction price is less than the contract consideration, it is the financing income obtained due to the loss of the time value of capital (compensation). The exemption condition for

major financing components is that the interval between the transfer of control right and the payment of price shall not exceed one year. [2]

## 2.1 Case One

Enterprise A and company B sign a sales contract for goods. The contract stipulates that enterprise A shall deliver goods to company B after 2 years. If the payment is made after 2 years, 100 million yuan shall be paid. If payment is made at the time of signing the contract, only 89 million yuan should be paid. Company B chooses to pay at the time of signing the contract. Suppose that enterprise A transfers the control right of goods at the delivery time point two years later and assuming that the embedded interest rate is  $I$ , there will be the equation  $10000 * (P / F, I, 2) = 8900$ ,  $(P / F, I, 2) = 0.8900$ , and  $I = 6\%$  after calculation.

Assuming that the interval between collection time and delivery time is more than one year, and considering current interest rate in the market and other factors, it can be regarded that this contract contains significant financing components. Enterprise A has paid 11 million yuan of interest (6% compound annual interest) cost in order to obtain 89 million yuan of principal now. According to above analysis, the contract transaction price with significant financing components should be adjusted as follows. Firstly, it is assumed that the transaction price is determined by the payable amount of cash payment when the customer obtains the commodity control right. Two years later, enterprise A transfers the control right, and the payable amount in cash is RMB 100 million, so RMB 100 million is the transaction price. That is, the amount is included in the income. Secondly, the difference between the transaction price and the contract consideration shall be amortized by the effective interest method during the contract period. The transaction price is 100 million yuan; the contract consideration is 89 million yuan; the difference is 11 million yuan. The actual interest rate method shall be used for amortization during two years.

(1) When receiving payment for goods:

Debit: bank deposit 8900, unconfirmed financing fee 1100

Credit: contract liability 10000

(2) Confirmed the impact of financing expenses:

Debit: financial expenses 534, Credit: unrecognized financing expenses 534

(3) When the product is delivered 2 years later:

Debit: financial expense 566, Credit: unrecognized financing expense 566

Debit: contract liability 10000, Credit: main business income 10000

## 2.2 Case Two

Enterprise A and company B sign the equipment sales contract. The contract stipulates that the equipment shall be delivered on the date of signing the contract. The contract stipulates that the transaction amount is 20 million yuan. Company B shall pay 4 million yuan at the end of each year. The market price of the equipment is 16 million yuan. Assuming that the control right is transferred when the equipment is delivered and the implied interest rate is  $I$ , we can get  $400 * (P / A, I, 5) = 1600$ ,  $(P / A, I, 5) = 1600 / 400 = 4$ . The interpolation method is used to calculate the formula  $(8\% - 7\%) / (8\% - I) = (3.9927 - 4.1002) / (3.9927 - 4)$ , and  $I = 7.932\%$

Considering that the interval between the time of collection and the time of goods delivery exceeds one year, as well as current market interest rate and other factors, it can be regarded that this contract contains a significant financing component. Enterprise A lends out 16 million yuan of principal (in the form of goods) and receives 20 million yuan of equal amount in five years. It obtains an interest income of 4 million yuan. According to the analysis, the contract transaction price with significant financing components should be adjusted. The adjustment rules are as follows. Firstly, assume that the customer determines the transaction price by the amount payable in cash when he obtains the commodity control right; on the date of signing the contract, enterprise A transfers the control right, and the payable amount of cash payment should be 16 million yuan. Therefore, the transaction price of 16 million yuan is included in the income. Secondly, the difference between the transaction price and the contract consideration shall be amortized by the effective interest rate method during the contract period: the transaction price is 16 million yuan, the

contract consideration is 20 million yuan, and the difference is 4 million yuan. The actual interest rate method shall be used for amortization during five years.

(1) Transfer equipment on the date of contract signing:

Debit: long term receivable 2260, Credit: main business income 1600,  
tax payable - tax to be transferred 260, unrealized financing income 400

(2) Payment received at the end of the year:

Debit: bank deposit 452, Credit: long term receivable 452

Debit: tax payable - output tax to be transferred 52, tax payable - VAT payable (output tax) 52

Debit: unrealized financing income 126.91, Credit: financial expenses 126.91

The accounting for each year shall be processed in accordance with entry (2), and the amount of unrealized financing income shall be amortized according to the effective interest rate method in accordance with the above table.

### 3. How to Carry out Accounting Treatment for Rent Reduction

After the outbreak of the novel coronavirus epidemic, many enterprises' income declined and they were unable to pay the rent. They negotiated with the leaser to reach an agreement on rent reduction. The Ministry of Finance has specifically issued the *Notice on Accounting Treatment for Rent Reduction during the CoVID-19 Epidemic* (Finance and Accounting Document, [2020] No. 10) and stipulates that, if the rent reduction leads to the reduction of the lease consideration and the delay of the payment time point, including the reduction and increase of the rent for the subsequent lease period while the rent of a certain period is reduced, or the lease period is extended for a period not exceeds the reduction period and the reduced rent is collected, the situations shall be regarded as the combination of rent deduction and deferred payment in accounting treatment.

For example, on January 1, 2020, company A and company B, which both implement the *No. 21 Accounting Standards for Enterprises: Leasing* (Accounting [2006] No. 3), signed a real estate leasing contract and paid the rent at the end of each month. After the outbreak of the covid-19 epidemic, both parties agreed that company A, the lessor, would halve the rent of company B from April 1, 2020 to December 31, 2020. That is, the original monthly rent (including tax) 109000 yuan is reduced to 54500 yuan. At the same time, the lease term will be extended for half a year to June 30, 2021. Accounting treatment of company A in June is as follows.

(1) On June 1, the rental income is recognized:

Debit: accounts receivable 109 000; Credit: lease income 100 000

tax payable - VAT payable (output tax) 9000 [= 109 000 × (1 + 9%) × 9%]

(2) Rent reduction

Debit: other business income 50 000, tax payable - VAT payable (output tax deduction) 4500 [= 54 500 × (1 + 9%) × 9%]

Credit: accounts receivable 54500

(3) On June 30, the rent is actually received

Debit: bank deposit 54 500, Credit: accounts receivable 54 500

Other months from March to December 2020 should be treated as reference.

### 4. How to Share the Income of Free Maintenance Service

When selling large-scale products, enterprises often provide free maintenance services for a certain period of time. After applying new revenue standards, how to deal with this business is a very complicated problem. For example, enterprise A is a general taxpayer and signs a sales equipment contract with customers. The contract stipulates, after selling the equipment, A company is responsible for installation at the same time, and promises to provide 3-year free maintenance service to customers after providing 1-year warranty. The price of equipment is 10 million yuan (excluding value-added tax, the same below); the price of installation service is 1 million yuan. The 1-year free warranty and 3-year free maintenance services (outside the warranty period) are provided. According to the price list of enterprise A, the price of 1-year warranty is 20000 yuan,

and the amount of maintenance service for three years is 100000 yuan. Company A sells this equipment through the package transaction. Meanwhile, it often sells the same equipment to agents separately. The sales price is generally 90% of the amount of the equipment (9 million yuan).

After analyzing the above contract it can be found that above business includes four commitments: sales of equipment, installation services, 1-year warranty service and 3-year maintenance service. The one-year warranty service provided by enterprise A is to ensure that the equipment meets the established standards, so it does not constitute a single performance obligation; the three-year free maintenance service after the warranty period is a separate service provided to ensure that the equipment sold meets established standards, which can be clearly distinguished from the equipment and should be regarded as a single performance obligation. At the same time, above commitments do not constitute major integrated services, major modifications and customization or highly related business, so they can be clearly distinguished in the contract. Therefore, under the contract, company A's performance obligations include, selling equipment, providing installation services, and providing 3-year maintenance services. For the warranty services provided to ensure the standards of equipment, accounting treatment shall be carried out in accordance with *No. 13 Accounting Standards for Enterprises - Contingencies*.

In this case, enterprise A discounts to agents based on the requirements of sustainable sales model, and part of the profit is enjoyed by agents. If the equipment is sold directly to final customers, considering the cost and gross profit of the enterprise, the equipment price should be 10 million yuan (the price varies with different customers and under different market conditions). At the same time, according to the basic principle of apportionment of transaction price, the apportioned transaction price can reflect the expected amount of consideration that it is entitled to receive due to the transfer of promised related goods to customers, and it can be considered that RMB 10 million can reflect the expected amount of consideration to be charged due to the transfer of equipment to customers. Therefore, it is appropriate to determine that the separate price of the equipment is 10 million yuan through the market adjustment method. Enterprise A has never provided separate installation services to customers, so the separate price of installation services cannot be determined directly. When using the market adjustment method, according to the price of similar installation services in the market, and considering the cost and gross profit of enterprise A, it is appropriate to confirm that RMB 1 million should be the separate price of installation services. Based on the historical experience and the use of the equipment, the amount to be confirmed after adding the estimated cost and reasonable gross profit is calculated. It is appropriate to confirm that the separate price of the 3-year maintenance service is 100000 yuan.

In conclusion, the separate selling price of each individual performance obligation is as follows. The separate price of selling equipment is 10 million yuan (market adjustment method); the separate price of providing installation service is 1 million yuan (market adjustment method); the separate price of providing 3-year maintenance service is 100000 yuan (cost plus method).

If the sum of prices of each individual commodity in a group of goods is higher than the contract transaction price, it indicates that the customer has obtained the contract discount for purchasing the group of goods. Contract discount means, the sum of individual prices of the goods promised by each individual performance obligation in the contract is higher than the contract transaction price. The enterprise shall apportion the contract discount in proportion among individual performance obligations. If there is conclusive evidence that the contract discount is only related to one or more (but not all) performance obligations in the contract, the enterprise shall allocate the contract discount to one or more relevant performance obligations. In this case, the sum of individual prices of each single commodity in the package deal is RMB 11.1 million ( $1000 + 100 + 100$ ), which is higher than the contract transaction price of RMB 11 million, indicating that the customer has obtained the contract discount. When the following three conditions are met at the same time, the enterprise shall allocate all contract discounts to one or more (but not all) performance obligations in the contract. First, the enterprise often sells the goods which can be clearly distinguished in the contract separately or in combination; second, the enterprise often distributes some of the clearly distinguishable commodities into discount price lists in combination. Third, the discount of each

combination of goods in the second condition is basically the same as the discount in the contract, and the analysis of the goods in each combination provides observable evidence for attributing the overall discount of the contract to one or more performance obligations.

In this case, enterprise A has never sold the combination (installation + quality assurance + maintenance) separately at discount price; therefore, the above conditions cannot be met, and the contract discount should be apportioned to all performance obligations identified in the contract. The relevant accounting treatment is as follows.

Debit: accounts receivable 1233, Credit: main business income - sales equipment 990.99 ( $1100 * 1000 / 1110$ ), main business income - sales and installation services 99.1 ( $1100 * 100 / 1110$ ), contract liabilities - maintenance services 9.91 ( $1100 * 10 / 1110$ ), taxes payable - VAT payable (output tax) 130, taxes payable - simple tax 3

Debit: sales expenses 2, Credit: estimated liabilities - product quality assurance 2

Maintenance service occurred within one year warranty period:

Debit: estimated liabilities - product quality guarantee, Credit: employee compensation or raw materials payable

Maintenance service after the one year warranty period:

Debit: contract performance cost, Credit: employee compensation or raw materials payable

Debit: contract liability, Credit: main business income

## 5. Conclusion

This paper deeply analyzes several problems in the process of implementing new revenue standards, including how to distinguish two different major financing components, how to carry out accounting treatment for rent reduction, and how to share the income of free maintenance service, hoping to provide references for the accounting treatment for similar situations.

## References

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