# **Revenue Recognition**

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Abstract: The primary issue in accounting for revenue is determining when to recognize revenue. Revenue is recognized when it is probable that future economic benefits will flow to the enterprise and these benefits can be measured reliably. Revenue recognition of sales of goods, a frequently confused term in accounting literature, has been tried to be revealed and annotated examples and solutions of general methods of the revenue recognition of sales have been analyzed in this study.

Keywords: Revenue, Revenue Recognition, Sales of Goods.

## Gelir Tahakkuku

Özet: Muhasebede gelir için ilk mesele, gelirin ne zaman tahakkuk edileceğinin belirlenmesidir. Gelir, gelecek iktisadi faydaların işletmeye akacağı ve bu faydaların güvenilir bir şekilde ölçülebileceği en uygun zamanda tahakkuk edilir. Bu çalışmada muhasebe alanında sıklıkla karıştırılan malların satışının gelir tahakkuku konusu açıklanmaya çalışılmıştır.Çalışma satışların gelir tahakkukunun genel yöntemlerinin açıklamalı örnekler ve çözümleri irdelenmiştir.

Anahtar Kelimeler: Gelir, Gelir Tahakkuku, Malların Satışı.

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### Introduction

Revenue is the gross inflow of economic benefits during the period arising in the ordinary course of the ordinary activities of an enterprise when those inflows result in increases in equity, other than increases relating to contributions from equity participants (IASCF, 2007, 1000-1).

Revenue and gain should not be confused with each other. Gains, as with revenues, increase assets or decrease liabilities, yet they arise from activities that are not central to a firm's major operations. For example, a gain would result from selling land for more than its carrying (book) value. Revenue is realizable when assets received are convertible into a known amount of cash (Kieso, Weygandt, and Warfield, 2007, 67). This study will examine revenue recognition from the sales of goods.

## 1. Revenue from the Sales of Goods

Revenue from the sales of goods should be recognized when all the following conditions have been satisfied (IASCF, 2007: 1003):

- a) Enterprise transferred to the buyer the significant risks and rewards of ownership of the goods. If the enterprise retains significant risks of ownership, the transaction is not a sale and revenue is not recognized.
- b) Enterprise retains neither continuing managerial involvement associated with ownership nor effective control over the goods sold. An enterprise may retain a significant risk of ownership in a number of ways, for example when the enterprise retains an obligation for unsatisfactory performance not covered by normal warranty provisions, when the receipt of the revenue from a particular sale is contingent on the derivation of revenue by the buyer from its sale of goods, when the goods are shipped subject to installation and the installation is a significant part of the contract which has not yet been completed by the enterprise; and when the buyer has the right to rescind the purchase for a reason specified in the sales contract and the enterprise is uncertain about the probability of return.
- c) The amount of revenue can be measured reliably.
- d) It is probable that the economic benefits associated with the transaction will flow to the enterprise. For example, it may be uncertain that a foreign governmental authority will grant permission to remit the consideration from a sale in a foreign country. When the permission is granted, the uncertainty is removed and revenue is recognized.
- e) The costs incurred or to be incurred related with transaction can be measured reliably. Revenue and expenses that relate to same transaction are recognized simultaneously. This refers to as matching revenues and expenses. Expenses including warranties and other costs can normally be measured reliably. However, revenue cannot be recognized when the expenses cannot be measured reliably.

## 2. General Methods of Sales Revenue Recognition

There are a number of rules regarding exactly when revenue can be recognized, but the key concept is that revenue occurs at the point when substantially all services and deliveries related to the sale transaction have been completed. Within this broad requirement, here are a number of more precise rules regarding revenue recognition (See Appendix).

#### 2.1 Title Transfer

Date of agreement, transfer of title or delivery date, and payment date are the revenue recognition points. When seller transferred the risks and benefit, and seller has relinquished managerial involvement, revenue is recognized on transfer of goods.

## **Example:**

Entity A and entity B enter into a sale agreement in which title to a piece of equipment passes to B on delivery. Payment is due thirty days after delivery. Entity A is not responsible for any post-delivery services other than those imposed by the terms of the equipment's warranty. The circumstances under which B could not accept the equipment are limited to those in which the equipment does not perform to publish specifications.

### **Solution:**

Revenue should be recognized when title to the equipment passes to entity B. The transfer of title coincides with the transfer of risks and rewards of ownership. Entity A has not retained significant risks of ownership, and has no further obligations to perform at that point beyond those specified in the warranty agreement. Entity A should recognize a liability for returns based on previous experience and other relevant factors.

# 2.2 Agency Arrangements

Revenue from sales to intermediate parties, such as distributors, dealers orothers, for resale is generally recognized when the risks and rewards of ownership have passed (http://www.pwc.com/extweb/service.nsf/docid/E86D380A7F97C1668025714D0036A C58#one, 2 December 2009). However, when the buying is acting as an agent, the sale is treated as consignment sale.

#### **Example:**

B firm produces textile goods and gets one main distributor. B firm delivers textile goods to its distributor to sell to third parties. Distributor holds the goods in its warehouse. When the distributor bought the goods, all the legal rights pass to him. Distributor does not have any obligation to make payment to B firm unless distributor does not take collection from the third parties. If the goods do not be sold within 3 months, distributor can return the goods, or make payment and get all the rights.

- When does B firm records revenue? B firm will record revenue when distributor took the collection from third parties or at the end of the 3 months. Therefore, revenue is

recognized by the firm, when the goods are sold by the distributor to third party. Although legal title of ownership has transferred from entity A to entity B, the risks and rewards of ownership have not passed from A to B for the following reasons(IASCF, 2007, Section 18-17):

- Entity B has the right to return the clothes and entity A is uncertain about the probability of return; and
- Entity B only has to pay entity A once the clothes are sold to third parties or after 3 months if entity B does not return the clothes.
- How does distributor record the goods at the date of balance sheet? It is recorded as consignment inventory.
- How does B firm record the goods at the date of balance sheet? It is recorded as "Goods in Transit".

### 2.3 Credit Risk

The retention of credit risk should not prevent the recognition of revenue. Credit risk is not a risk of ownership of goods, but a risk of the collection of an amount due. The effect of credit risk should be reflected in the initial measurement of the receivable at fair value.

## **Example:**

Entity A operates in a country where it is commonplace to retain title to goods sold as protection against non-payment by a buyer. The retention of the title will enable entity A to recover the goods if the buyer defaults on payment. Subsequent to the delivery of the goods to the buyer (entity B), entity A does not have any control over the goods. Entity B makes payments in accordance with the normal credit terms provided by A. Product liability is assumed by B. Settlement is due 14 days after delivery. Does revenue be recognized even though there is credit risk?

## **Solution:**

Entity A has sold the goods to entity B. The buyer controls the goods following the delivery and is free to use or dispose of them as it wishes. The most significant risk of ownership, *the product risk*, has been transferred to B. A's retention of legal title does not affect the substance of the transaction, which is the sale of goods from A to B. Entity A should therefore derecognize the inventory and recognize the revenue from the sale. The retention of credit risk should not prevent the recognition of revenue.

## 2.4 Lay-Away Sales

Lay-away sales under which the goods are delivered only when the buyer makes final payment in a series of installments. Revenue may be recognized when a significant deposits is received provided the goods are on hand, identified and ready for delivery to the buyer (IASCF, 2007: 1009).

## **Example:**

Y firm made an agreement for 10 televisions set selling with its client. Firm splits the goods in its warehouse and collects 2.000 to advance from its client. Client has to end the purchase within 4 months. Therefore, client cannot be taken advance back. Televisions do not be delivered to the client unless all the payments had not been made. If products get damage, firm has to pay advance back, or new products should be provided. When does revenue recognized?

When televisions are delivered to the client, amount has to be recognized as revenue and recorded in accounting. The amount of a cash deposit should be recognized as a liability up to that point.

## 2.5 Bill and Hold Sale

Revenue from bill and hold sales is recognized when the buyer takes title provided certain conditions are met. Revenue is not recognized when there is simply an intention to acquire or manufacture the goods in time for delivery (http://www.pwc.com/extweb/service.nsf/docid/E86D380A7F97C1668025714D0036AC58#one, 2 December 2009).

"Bill and hold" sales, in which delivery is delayed at the buyer's request but the buyer takes title and accepts billing (IASCF, 2007: 1008). Though there are a limited number of situations where this treatment is legitimate (perhaps the customer has no storage space available), there have also been a number of cases where bill and hold transactions have been subsequently proven to be a fraudulent method for recognizing revenue. Consequently, revenue is recognized when the buyer takes the title provided(Bragg, Steven M., GAAP Implementation Guide, 2004: 77):

- The product being stored under the agreement must be ready for shipment. This means that the seller cannot have production staff in the storage area, making changes to the product subsequent to the billing date. (completion)
- The products cannot be stored indefinitely. Instead, there must be a schedule in place for the eventual delivery of the goods to the customer. (delivery schedule)
- The buyer must have signed a document in advance clearly stating that it is buying the products being stored by the seller. (documentation)
- The buyer must have taken on all risks of ownership, so the seller is now simply the provider of storage space. (ownership)
- The products involved in the transaction must have been split away from all other inventory and stored separately. They must also not be made available for the filling of orders from other customers. (segregation)

## **Example:**

Wholesaler made a contract with its client and gave an assurance to deliver in a later time. At the time of contract signed, client made a partial payment. While contract

includes 100.000 refrigerator sales, wholesaler has 20.000 refrigerators in his inventory as of balance sheet date. 20.000 refrigerators are ready to delivery as of balance sheet date. Contract also includes delivery time, place to delivery and other relevant orders. Also, client pays deposit fee for 20.000 refrigerators and payment conditions set in the contract are valid. Here, wholesaler records income accrual for 20.000 refrigerators, not 100.000 refrigerators.

## 2.6 Installation and Inspection

Revenue is normally recognized when the buyer accepts delivery, and installation and inspection are complete(Kieso, Weygandt, and Warfield, 2007: 71).

- This method emphasizes income recognition in periods of collection rather than at point of sale.
- Title does not pass to the buyer until all cash payments have been made to the seller.
- Both sales and cost of sales are deferred to the periods of collection.
- Other expenses, selling and administrative, are not deferred.

## **Example:**

Entity C manufactures and installs cable TV satellite dishes at customers' premises on behalf of cable TV operator B. Entity B placed an order with entity C to manufacture and install 100 dishes at its customers' premises on 1 August 2007. Entity C has the dishes on stock and expects to install them by the 14 September 2007. Payment is due 14 days after installation of the dishes. Entity C expects to complete most of the installations successfully in one visit.

#### **Solution:**

Entity C should recognize revenue when the installation is complete. The installation is critical to customer acceptance and payment from entity B. The sale of goods is often made subject to satisfactory installation, and the installation is rarely perfunctory or incidental, as it is usually essential to the functionality of the delivered goods(http://www.pwc.com/extweb/service.nsf/docid/E86D380A7F97C1668025714D0036AC58#one, 2 December 2009).

# 2.7 Sales of Goods with a Long Warranty

Entity A sells and fits prefabricated replacement windows for houses. The standard sale includes a 15-year warranty. Entity A will repair the window during the warranty period if there is a defect in the product or the installation. The warranty does not cover damage caused by other causes, for example if there was a fire in the property.

Entity A does not sell the windows without the warranty and does not sell warranties for other manufacturers' products. Each window sells for 1,000  $\rlap{t}$  and entity A typically

repairs 2% of windows under the warranty. The average cost of a warranty repair is 350 **b**. How should management recognize the sales revenue and the warranty cost?

### **Solution:**

Management should recognize revenue of 1,000 when the window is installed and recognize a provision for warranty costs at the same time. The value of the warranty provision recognized should be based on the costs management expects to incur under the warranty (2% x 350 = 7) and discounted according to the expected pattern of cash flows over the 15-year warranty period.

The cost of the warranty provision should be charged to cost of sales on initial recognition. Accretion of discount on the provision should be charged to interest expense. Adjustments to the provision as a result of changes in management's best estimate of the warranty costs should be charged / credited to cost of sales.

# 2.8 Sale subject to share of future benefits

Entity A owns a hotel resort located in the Bahamas. The resort includes a casino that is housed in a separate building that is part of the premises of the entire hotel resort. The casino's patrons are largely tourists and non-resident visitors. Entity A operates the hotel and other facilities on the hotel resort, including the casino. During the year, the casino was sold to entity B.

Two firms agree about which A will operate the casino for its remaining useful life. Entity A will receive 85% of the net profit of the casino as operator fees, and the remaining 15% will be paid to entity B. A has also provided a guarantee to B that the casino will have net profits of at least 10 million.

## **Solution:**

Entity A should not recognize the arrangement as a sale of the casino, as it continues to enjoy substantially all of its risks and rewards and has a continuing involvement in its management. The transaction is in substance a financing arrangement and the proceeds should be recognized as a borrowing(http://www.pwc.com/extweb/service.nsf/docid/E86 D380A7F97C1668025714D0036AC58#one, 2 December 2009).

## 2.9 Sale with repurchase rights/obligations

A sale and repurchase agreement is in substance a financing arrangement and does not give rise to revenue when the seller has retained the risks and rewards of ownership, even though legal title has been transferred. This is a financing arrangement (IASCF, 2007: 1009).

### **Example:**

The management of entity A is considering the following two alternative transactions:

- a) Sale of inventory to a bank for 500,000 with an obligation to repurchase the inventory at a later stage; or
- b) Sale of inventory to a bank for 500,000 with an option to repurchase the inventory any time up to 12 months from the date of sale.

The repurchase price in both alternatives is 500,000 plus an imputed financing cost. The bank is required to provide substantially the same quality and quantity of inventory as was sold to it (that is, the bank is not required to return precisely the same physical inventory as was originally sold to it). The fair value of the inventory sold to the bank is 1,000,000.

#### **Solution:**

Management should recognize the transactions as follows:

- a) Sale with repurchase obligation: management should not recognize revenue on the transfer of the inventory to the bank. The inventory should remain on entity A's balance sheet and the proceeds from the bank should be recognized as a collateralized borrowing. Even though the inventory repurchased from the bank is not the inventory sold, it is in substance the same asset. The substance of the transaction is that the sale and repurchase are linked transactions, and entity A does not transfer the risks and rewards associated with the inventory to the bank.
- **b**) Sale with repurchase option: management should not recognize revenue unless and until the option is allowed to lapse. The inventory should remain on entity A's balance sheet and the proceeds recognized as a collateralized borrowing until A's right to repurchase the inventory lapses.

### 2.10 One Buy One Free Sales

The goods that are given as free are generally recorded as cost of goods sales.

## **Example:**

X firm produces sugar. Firm makes promotion for getting new customers. Therefore, firm gives one extra free sugar if one sugar is bought. One sugar sale price is  $5 \, t$ , and cost of goods sale is  $2 \, t$ . How does X firm record that sale?

Cash	5も	
Sales Revenue		5七
COGS	 4 <b>も</b>	
Inventory		4も

## Conclusion

Revenues are inflows of assets (or reductions in liabilities) in exchange for providing goods and services to customers. Revenue is earned when the earnings process is substantially complete. Revenue is realized when goods and services are exchanged for cash or claims to cash.

#### References

Bragg, Steven M. (2004). GAAP Implementation Guide. John Wiley&Sons, Inc., NJ, USA.

Stickney Clyde P. and Weil Roman L. (2006). An Introduction to Concepts, Methods, and Uses. 11th Edition. Thomson, South-Western.

IASCF, International Financial Reporting Standards, Revenue IAS 18, 2007.

Kieso, Donald E., Weygandt Jerry J., and Warfield Terry. Intermediate Accounting. 13.ed, 2010, Wiley, USA.

Leland, Thomas W. (1998). "Revenue, Expense, and Income". The Accounting Review. 23(1), pp. 16-23.

http://www.pwc.com/extweb/service.nsf/docid/E86D380A7F97C1668025714D0036AC58#one, 2 December 2009

	Seller has transferred risks & rewards	Seller has relinquished managerial involvement	Point at which revenue should be recognized
Title transferred with delivery of goods in an unconditional sale arrangement	YES	YES	On transfer of goods
Title transferred with delivery of goods, in an agency arrangement	NO	NO	When agent's right to return goods is relinquished and/or agent has generated third party revenue
Goods are transferred, but seller retains title for credit protection purposes	YES	YES	On transfer of goods. Credit risk is not a significant risk of ownership
Goods transferred, sale is unconditional; however, sale price is not fixed until buyer takes delivery of goods	YES	YES	On transfer of goods
Buyer and seller enter in a layaway sales arrangement.	NO	NO	When buyer takes delivery of goods
Buyer and seller enter into a bill and hold sale arrangement	YES	YES	When the buyer takes title provided the conditions for a bill and hold sale are met.
Buyer takes delivery of goods, payment to be made subject to satisfactory installation	NO	NO	When installation and inspection is complete
Buyer takes delivery of goods, seller guarantees product performance outside of normal warranty provisions	Will depend on facts and circumstances	Will depend on facts and circumstances	When seller is no longer exposed to significant risk and has no further performance obligation
Buyer takes delivery of goods, seller guarantees product performance within normal warranty provisions	YES	YES	When buyer takes delivery of goods
Buyer takes delivery of goods; seller continues to share in certain benefits.	Will depend on facts and circumstances	Will depend on facts and circumstances	When seller has relinquished right to significant benefits
Seller transfers goods to the buyer, seller has an obligation to repurchase goods	NO	NO	No sale is recognized, as substantially all the risks and rewards are retained
Seller transfers goods to the buyer, seller has an option to repurchase goods at an amount below their fair value	NO	NO	When seller relinquishes purchase option

**Source:** Clyde P. Stickney and Roman L. Weil, *An Introduction to Concepts*, Methods, and Uses 12th Edition

Appendix: General Methods of Sales Revenue Recognition