

Lecture 4 Revenue Recognition

Revenue Recognition Approaches

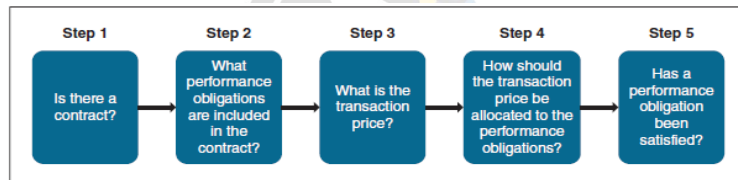
- a. ASPE-earnings based approach
- b. IFRS - **contract-based approach** (also known as asset-liability approach)

Earnings Based Approach ASPE

The criteria for recognizing revenue are:

- a. the *performance* must be achieved (service provided or product delivered) 完成自己的义务
- b. the revenue amount can be *measured* 能够衡量钱数
- c. *Collection* of the revenue is reasonable assured 能够确定收到钱

The Five Step Model of Revenue Recognition IFRS



STEP 1

A *contract* exists when all five of the following are met:

- i. There is a legally enforceable agreement between the parties 双方达成一致
- ii. It has been approved and the parties are committed to their obligations 双方责任明确
- iii. Each party's rights to receive goods and services or payment for those goods and services can be identified 双方权利明确
- iv. The contract has *commercial substance* meaning that the risk, timing, or amount of the company's future cash flow is expected to change as a result of the contract 商业价值
- v. Collection is consider probable 能收到钱

The contract does not exist if both of the following criteria meet

- 1 each party can unilaterally terminate the contract without compensate the other party
- 2 the contract is wholly unperformed

Step 2: Identify the separate performance obligations in the contract

- Each performance obligation is a separate promise to transfer to the customer either a distinct good(s), a distinct service(s), a bundle of distinct goods or services, or a series of distinct goods or services
- A good or service is distinct if both of the following criteria are met:
 - a customer can benefit from its use on its own or with readily available resources (i.e., the goods or services are capable of being distinct)
 - an entity's promise to transfer the goods or services to the customer is separately identifiable from other promises in the contract (i.e., the goods or services are distinct in the context of the contract)

Factors to consider

Step 2 26

Factors to consider in determining whether the promise to transfer good or service is distinct in the context of the contract include:

- the entity **does not provide significant integration** of the good or service with other goods or services promised in the contract
- the good or service **does not significantly modify or customize** another good or service promised in the contract
- the good or service is **not highly dependent on or highly interrelated with** other goods or services promised in the contract

Step 3

Transaction price shall include...

- **fixed consideration**
- **variable consideration** (e.g., discounts, rebates, refunds, credits, price concessions, penalties, bonuses, or contingencies) when it is **highly probable the amount will not be subsequently revised and reversed**; the amount is estimated using a probability-weighted value or the most likely amount

Expected value: Probability-weighted amount in a range of possible consideration amounts.

Most likely amount: The single most likely of possible consideration outcomes.

- Contract to build a warehouse for \$100,000, with a performance bonus of \$50,000 based on the timing of completion
- Performance bonus decreases by 10% per week for every week beyond the agreed-upon completion date
- Probability the contract will be completed:
 - 60% by the agreed-upon completion date
 - 30%, one week late
 - 10%, two weeks late

Expected Value: Probability-weighted amount	Most Likely Amount
The transaction price would be:	This is a better method to use if the bonus is "all or nothing"—it will be paid only if the performance is completed on time. The transaction price in this case would be \$150,000 (with 60% probability—which is the most likely outcome).
60% x (\$100,000 + \$50,000) = \$ 90,000	
30% x (\$100,000 + (\$50,000 x 0.90)) = 43,500	
10% x (\$100,000 + (\$50,000 x 0.80)) = 14,000	
<u>\$ 147,500</u>	

assignment

Determine a suitable approach to estimate the stand-alone selling price if the stand-alone selling price is not directly observable. Examples of possible approaches include:

- **adjusted market assessment approach** 1st part of Q15
- **expected cost plus a margin approach** 2nd part of Q15
- **residual approach (only permissible in limited circumstances)**

bundled sales arrangement

Allocation of a discount

- A customer receives a **discount** for purchasing a bundle of goods or services if the sum of the stand-alone selling prices of those promised goods or services in the contract exceeds the promised consideration in a contract
- **Except when** an entity **has observable evidence in accordance with paragraph 82 ...**, the entity shall **allocate a discount proportionately to all performance obligations in the contract ... on the basis of the relative stand-alone selling prices** of the underlying distinct goods or services

If there is no observable evidence per para.82

→ allocate discount proportionately **to all** performance obligations (goods and services in the bundle), per para. 81

If there is observable evidence per para.82

→ allocate discount **to one or more, but not all**, performance obligations (goods and services in the bundle), per para. 82

and ...
the discount in para.82(b)
= the discount in para.82(a)

Step 5: Recognize revenue when (or as) a performance obligation is satisfied

- a performance obligation is satisfied when **control** of the good or service is transferred to the customer, this may be either at a single point in time or over time
- if an entity does not satisfy its performance obligation over time, it satisfies the performance obligation at a point in time

Akepa Limited (A)

On February 1, 20X1, Akepa Limited (Akepa) signs a cancellable contract with Bayberry Company (Bayberry) to formalize a purchase agreement between the two companies. Akepa will sell merchandise costing \$1,200,000 to Bayberry for \$2,000,000. The terms of the agreement require Bayberry to pay Akepa \$2,000,000 in advance on March 1, 20X1.

Bayberry pays Akepa the \$2,000,000 on April 1, 20X1. Akepa ships the merchandise to Bayberry on May 1, 20X1.

Akepa is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

Required:

Prepare any necessary journal entries you should make for Akepa Limited on February 1, March 1, April 1, and May 1, 20X1.

AKEPA (A)	AKEPA (B)
FEB. 1 NO JOURNAL ENTRY	FEB. 1 NO JOURNAL ENTRY
MAR. 1 NO JOURNAL ENTRY	MAR. 1 RECORDING REQUIRED
	DR RECEIVABLE (Bk) 2,000,000 CR CONTRACT LIABILITY (Bk) 2,000,000
APR. 1 RECORDING REQUIRED	APR. 1 RECORDING REQUIRED
DR CASH (Bk) 2,000,000 CR CONTRACT LIABILITY (Bk) 2,000,000	DR CASH (Bk) 2,000,000 CR RECEIVABLE (Bk) 2,000,000
MAY 1 RECORDING REQUIRED	MAY 1 RECORDING REQUIRED
DR CONTRACT LIABILITY (Bk) 2,000,000 CR SALES REVENUE (1/5) 2,000,000 DR COGS (3/5) 1,200,000 CR INVENTORY (Bk) 1,200,000	DR CONTRACT LIABILITY (Bk) 2,000,000 CR SALES REVENUE (1/5) 2,000,000 DR COGS (3/5) 1,200,000 CR INVENTORY (Bk) 1,200,000

Warranties 保修

- a. **Assurance warranty**- not separate performance obligation i.e. the warranty you get when you purchase a new car. 买东西附赠的保修
- b. **Service warranty**- separate performance obligation. i.e. the extended warranty coverage you can buy on a TV from Best Buy. 单卖的保修

Blackbird Limited (A)

On June 1, 20X1, Blackbird Limited (Blackbird) sold machinery inventory costing \$200,000 to Cassia Company for \$380,000.

Blackbird sells all its products with the company's standard one-year warranty providing assurance to all customers that the delivered product complies with the agreed-upon specifications and will operate as promised during the warranty period. This type of warranty is commonly known as "assurance-type warranty".

The cost of the one-year warranty for the machinery is estimated at \$10,000.

Blackbird is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

Required:

Prepare any necessary journal entries you should make for Blackbird Limited on June 1, 20X1.

TYPE OF WARRANTY	DISTINCT FROM SALE OF PRODUCT?
BLACKBIRD (A) ASSURANCE-TYPE WARRANTY	No, because...
BLACKBIRD (B) SERVICE-TYPE WARRANTY	YES, because...

BLACKBIRD (A)	BLACKBIRD (B)
JUN. 1 DR CASH (B/S) 380,000 CR SALES REVENUE (1/5) 380,000 DR COGS (3/5) 200,000 CR INVENTORY (B/S) 200,000 DR WARRANTY EXPENSE (1/5) 10,000 CR WARRANTY LIABILITY (B/S) 10,000	JUN. 1 DR CASH (B/S) 80,000 CR UNREPAIRED WARRANTY REVENUE (B/S) 80,000
JUN. 1 DR CASH (B/S) 300,000 CR SALES REVENUE (1/5) 300,000 DR COGS (3/5) 200,000 CR INVENTORY (B/S) 200,000 DR WARRANTY EXPENSE (1/5) 10,000 CR WARRANTY LIABILITY (B/S) 10,000	JUN. 1 DR CASH (B/S) 300,000 CR SALES REVENUE (1/5) 300,000 DR COGS (3/5) 200,000 CR INVENTORY (B/S) 200,000 DR WARRANTY EXPENSE (1/5) 10,000 CR WARRANTY LIABILITY (B/S) 10,000

IFRS 15
Step 4 here

Volume Sale Discount

Crane Limited (A)

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Crane Limited (Crane) enters into a contract with Dogwood Company (Dogwood) on January 1, 20X1 to sell a product at \$50 per unit. If Dogwood purchases more than 1,000 units of the product in a calendar year, the contract specifies that the price per unit is retrospectively reduced to \$40 per unit.

Crane estimates that Dogwood's annual purchases will exceed the 1,000-unit threshold required for the volume discount. In the first calendar quarter ended March 31, 20X1, total purchase made by Dogwood amounts to 200 units.

Crane is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

What is the estimate of the transaction price based on the best information available on March 31, 20X1?

\$50 or \$40?

Required:

Determine the amount of revenue that Crane Limited should recognize on its sales to Dogwood Company for the first calendar quarter of 20X1.

Crane Limited (B)

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The same scenario as in Crane Limited (A) with the following additional information.

During the second calendar quarter of 20X1 (i.e., April 1 to June 30, 20X1), Dogwood substantially increases its operations and purchases an additional 600 units of the product from Crane. With the new information available at the end of the second calendar quarter, Crane estimates that Dogwood's annual purchases will exceed the 1,000-unit threshold required for the volume discount.

Required:

Determine the amounts of revenue that Crane Limited should recognize on its sales to Dogwood Company for the second calendar quarter of 20X1.

What is the estimate of the transaction price based on the best information available on June 30, 20X1?

\$50 or \$40?

Crossbill Ltd. (A)

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Crossbill Ltd. (Crossbill) enters into a contract with Dogwood Company (Dogwood) on January 1, 20X1 to sell a product at \$50 per unit. If Dogwood purchases more than 1,000 units of the product in a calendar year, the contract specifies that the price per unit is retrospectively reduced to \$40 per unit.

Crossbill estimates that Dogwood's annual purchases will not exceed the 1,000-unit threshold required for the volume discount. In the first calendar quarter ended March 31, 20X1, total purchase made by Dogwood amounts to 200 units.

Crossbill is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

Required:

Determine the amount of revenue that Crossbill Ltd. should recognize on its sales to Dogwood Company for the first calendar quarter of 20X1.

What is the estimate of the transaction price based on the best information available on March 31, 20X1?

\$50 or \$40?

Crossbill Ltd. (B)

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The same scenario as in Crossbill Ltd. (A) with the following additional information.

During the second calendar quarter of 20X1 (i.e., April 1 to June 30, 20X1), Dogwood substantially increases its operations and purchases an additional 600 units of the product from Crossbill. With the new information available at the end of the second calendar quarter, Crossbill estimates that Dogwood's annual purchases will exceed the 1,000-unit threshold required for the volume discount.

Required:

Determine the amounts of revenue that Crossbill Ltd. should recognize on its sales to Dogwood Company for the second calendar quarter of 20X1.

What is the estimate of the transaction price based on the best information available on June 30, 20X1?

\$50 or \$40?

<p>CRANE (A)</p> <p>1ST CALENDAR QUARTER (JAN.1 - MAR.31, 20X1)</p> <p>REVENUE = $\\$40 \times 200$ = \$8,000</p> <p>DR CASH (B/s) $(\\$50 \times 200)$ 10,000 CR SALES REVENUE (I/s) 8,000 CR DISCOUNT LIABILITY (B/s) 2,000</p> <p>CRANE (B)</p> <p>2ND CALENDAR QUARTER (APR.1 - JUN.30, 20X1)</p> <p>REVENUE = $\\$40 \times 600$ = \$24,000</p> <p>DR CASH (B/s) $(\\$50 \times 600)$ 30,000 CR SALES REVENUE (I/s) 24,000 CR DISCOUNT LIABILITY (B/s) 6,000</p>	<p>CROSSBILL (A)</p> <p>1ST CALENDAR QUARTER (JAN.1 - MAR.31, 20X1)</p> <p>REVENUE = $\\$50 \times 200$ = \$10,000</p> <p>DR CASH (B/s) 10,000 CR SALES REVENUE (I/s) 10,000</p> <p>CROSSBILL (B) <small>with a change in accounting estimate</small></p> <p>2ND CALENDAR QUARTER (APR.1 - JUN.30, 20X1)</p> <p>REVENUE = $\\$40 \times 600$ - $(\\$50 - \\$40) \times 200$ = \$24,000 - \$2,000 = \$22,000</p> <p>DR CASH (B/s) $(\\$50 \times 600)$ 30,000 CR SALES REVENUE (I/s) 22,000 CR DISCOUNT LIABILITY (B/s) 8,000</p>
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further assume that the fiscal year end is March 31, 20X1, same for both companies

Return

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Dove Limited

Dove Limited (Dove) enters into a contract to sell merchandise inventory to Evergreen Company (Evergreen) for \$500,000 with a 60-day credit period. Evergreen is a longtime customer of Dove and Evergreen is well-known in the industry for its strong credit history.

Dove's records show that the cost of the merchandise is \$300,000. The terms of the contract give Evergreen full rights to return any inventory item within a 30-day period after the date of delivery.

Dove delivers the full shipment of the merchandise to Evergreen on **December 1, 20X1**. Dove uses the expected value method and estimates the amount of return to be 10% of the delivered merchandise.

On **December 15, 20X1**, Evergreen returns 10% of the original shipment to Dove and the returned items are received by Dove on the same day. On **January 29, 20X2**, Evergreen wires a cash payment of \$450,000 to Dove to settle the outstanding balance of the purchase.

Dove is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

Required:

Prepare any necessary journal entries you should make for Dove Limited on

1. December 1, 20X1
2. December 15, 20X1
3. December 31, 20X1
4. January 29, 20X2

DOVE

DEC.1 20X1
 DR A/R (B/s) 500,000
 CR REVENUE (I/s) 450,000
 CR REFUND LIABILITY (B/s) 50,000
 DR COGS (I/s) 270,000
 DR ESTIMATED INVENTORY RETURNS (B/s) 30,000
 CR INVENTORY (B/s) 300,000

DEC.15 20X1
 DR REFUND LIABILITY (B/s) 50,000
 CR A/R (B/s) 50,000
 DR RETURNED INVENTORY (B/s) 30,000
 CR ESTIMATED INVENTORY RETURNS (B/s) 30,000

DEC.31 20X1
 NO ENTRIES UNLESS MANAGEMENT OF DOVE DECIDES THAT RETURNED INVENTORY SHOULD BE WRITTEN DOWN

JAN.29 20X2
 DR CASH (B/s) 450,000
 CR A/R (B/s) 450,000

Bundle sale discount

Finch Limited (A)

Finch Limited (Finch) regularly sells three products individually at the stand-alone prices of \$50, \$60 and \$70 for X, Y, and Z respectively.

On June 1, 20X1, Finch enters into a contract with a customer, Foxglove Company, to sell products X, Y, and Z at a bundle price of \$150. The performance obligations for each of the products will be satisfied by Finch at different points in time.

Finch is required to follow the requirements of IFRS 15: *Revenue from Contracts with Customer*.

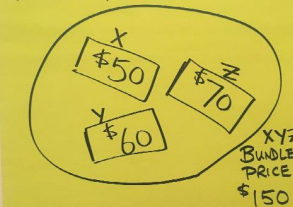
Discount = \$?

Required:

Determine the transaction price that Finch Limited should allocate to each of the three products X, Y, and Z in its bundle sales to Foxglove Company on June 1, 20X1.

FINCH (A)

OFFERS ONLY BUNDLE XYZ TO CUSTOMERS



ALLOCATE THE PRICE

X $\frac{50}{50+60+70} \times 150 = \42
 Y $\frac{60}{50+60+70} \times 150 = \50
 Z $\frac{70}{50+60+70} \times 150 = \58
 \$150

OR
 ALLOCATE THE DISCOUNT

X $\frac{50}{30} \times 50 = \8
 Y $\frac{60}{30} \times 50 = \10
 Z $\frac{70}{30} \times 50 = \12
 THEN DEDUCT DISCOUNT FROM PRICE

Finch Limited (B)

The same scenario as in Finch Limited (A) with the following additional information:

- Finch regularly also sells Products Y and Z together at a bundle price of \$100 to other customers.

Required:

Determine the transaction price that Finch Limited should allocate to each of the three products X, Y, and Z in its bundle sales to Foxglove Company on June 1, 20X1.

ALLOCATE THE PRICE

X	\$50	=	\$50
Y	$100 \times \frac{60}{60+70}$	=	\$46
Z	$100 \times \frac{70}{60+70}$	=	\$54
			<u>\$150</u>

OR

ALLOCATE THE DISCOUNT

X	\$0	=	\$0
Y	$30 \times \frac{60}{60+70}$	=	\$14
Z	$30 \times \frac{70}{60+70}$	=	\$16

THEN DEDUCT DISCOUNT FROM PRICE

Gift card and breakage

Goose Limited

For many years, Goose Limited (Goose) has been selling gift cards (with no fees and no expiration dates) that customers can use to redeem for company products. Breakage is stable and management of the company is highly confident that a 4% estimated breakage is reliable. The company uses the proportional approach (as known as the redemption recognition approach) for the recognition of breakage revenue.

estimated breakage = 4%

Customers of Goose redeemed a total of \$188,160 worth of gift cards in exchange for company products during the month of January 20X1.

gift cards redeemed in Jan. 20X1 = \$188,160

Required:

- Calculate the amount of breakage revenue that Goose Limited should recognize for the month of January 20X1.
- Calculate the total amount of revenue, including breakage revenue, that Goose Limited should recognize for the month of January 20X1.