

# IFRS accounting for *Financial Instruments*

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Addis Ababa



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## Aims

Deepen your understanding of IAS 32 Judgements

Deepen your understanding of IFRS 9 Judgements:

Classification of assets

Measurement of assets

Classification of liabilities

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Some important definitions

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## Introduction

- » IAS 32 *Financial Instruments: Presentation* sets out the principles for the presentation and classification of financial instruments
- » The recognition and measurement of financial instruments are the subjects of
  - » IFRS 9 *Financial Instruments* and
  - » IAS 39 *Financial Instruments: Recognition and Measurement* (certain hedging relationships)
- » IFRS 7 *Financial Instruments: Disclosures* sets out disclosures of financial instruments

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## IAS 32 Scope and Objective

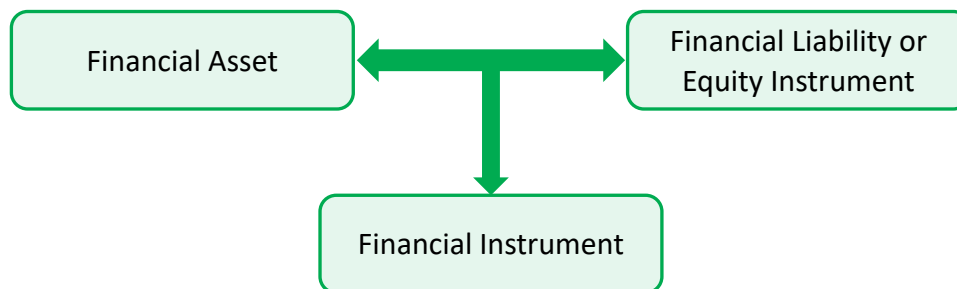
- » Principles for the classification of financial instruments
  - » Liability vs. equity classification
  - » Instruments with both a liability and an equity component
- » Guidance on presentation
  - » Deals with all types of financial instruments
  - » Contract to buy or sell a non-financial item that can be settled net

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## Definitions

- » A financial instrument is a **contract** that gives rise to
  - » a financial asset of one entity and
  - » a financial liability or equity instrument of another



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## Definitions

### *Financial asset*

A financial asset is any asset that is:

- » Cash,
- » Equity in another entity
- » Right to receive cash or another financial asset,
- » Right to exchange instruments under potentially favourable terms or
- » Certain contracts that may be settled in entity's own equity

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## Definitions

### *Financial asset*

- » Cash,
- » Equity in another entity
- » Right to receive cash or another financial asset,
- » Right to exchange instruments under potentially favourable terms or
- » A contract that may be settled in entity's own equity
  - » Non derivative where entity will or may receive variable number of its own equity instruments, or
  - » A derivative that may be settled other than by exchanging a fixed amount of cash for a fixed number of the entity's own equity instruments

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## Example

### *South West Coffee Limited (SWC)*

- SWC Ltd operates in Ethiopia, trading globally in coffee beans.
- » It buys and sells beans on cash and credit, in Birr and in US Dollars.
  - » It enters into forward purchases and sales of coffee beans.
  - » To limit volatility, it has permission to hold US Dollars for expenses.
  - » Excess cash is invested in Ethiopian government treasuries.
  - » It also holds a small stock of gold coins as protection against devaluation of the Birr.
  - » It lends money to suppliers to secure and expand supplies.

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## Example Financial assets

SWC Ltd has the following assets - which are financial assets?

Assets at 7 July 20x3 (year end)	Financial asset?
1. Birr currency held on the premises	
2. USD bank balances	
3. Trade receivable	
4. Coffee beans	
5. Investment in government treasury bills	
6. Gold coins	
7. Staff loans	

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## Example Financial assets

SWC Ltd has the following assets - which are financial assets?

Assets at 7 July 20x3 (year end)	Financial asset?
1. Birr currency held on the premises	Yes
2. USD bank balances	Yes
3. Trade receivable	Yes
4. Coffee beans	No
5. Investment in government treasury bills	Yes
6. Gold coins	No
7. Staff loans	Yes

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## Examples

### *Financial assets*

1. Bank balances
2. Bank deposits
3. Loans to staff
4. Loans to holding company or fellow subsidiaries
5. Trade debtors
6. Lease assets
7. Corporate and government bonds

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## Definitions

### *Financial liabilities*

- » Obligation to deliver cash or another financial asset,
- » Obligation to exchange instruments under potentially unfavourable terms or
- » Certain contracts that may be settled in entity's own equity

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## Definitions

### *Financial liability*

- » Obligation to deliver cash or another financial asset,
- » Obligation to exchange FIs under potentially unfavourable terms or
- » a contract that will or may be settled in entity' s own equities
  - » Non derivatives
    - » That the entity is or may be obliged to deliver a variable number of its own equity instruments, or
  - » Derivatives
    - » That will or may be settled other than by exchanging a fixed amount of cash for a fixed number of the entity' s own equity instruments

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## Example

### *Financial Liabilities*

SWC has the following liabilities – which are financial liabilities?

Liabilities at 7 July 20x3 (year end)	Financial liability?
1. Birr bank overdraft	
2. Trade Payable	
3. Outstanding account to pay for gold coins purchased	
4. Fair value liability of forward sales	
5. Liability for severance pay	
6. Provision for litigation expenses	

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## Example *Financial Liabilities*

SWC has the following liabilities – which are financial liabilities?

Liabilities at 7 July 20x3 (year end)	Financial liability?
1. Birr bank overdraft	Yes
2. Trade Payable	Yes
3. Outstanding account to pay for gold coins purchased	Yes
4. Fair value liability of forward sales	Yes, but
5. Liability for severance pay	Yes, maybe, but
6. Provision for litigation expenses	No

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## Examples *Financial liabilities*

1. Bank overdrafts
2. Some loans from shareholders
3. Loans from holding companies or fellow subsidiaries
4. Loans from government
5. Trade creditors
6. Lease liabilities
7. Corporate bonds issued

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## Definitions

### Equity Instrument

- » Residual interest in assets of an entity after deducting its liabilities
- » Excludes any instrument with an obligation to:
  - » pay cash or another financial asset or
  - » exchange financial assets and financial liabilities under potentially unfavourable conditions.
- » If settled in issuer's own equity, then contract **must be fixed-for-fixed**
- » An obligation to issue a fixed number of equity shares is not a liability because it **cannot result in a loss** to the entity

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## Example

### Equity Instrument

SWC has issued a number of financial instruments as long term funding:

- » Ordinary shares of 1 Birr
  - » At a non-redeemable premium of 5 Birr per share
- » Non-redeemable, non-cumulative preference share
- » Non-cumulative preference share redeemable at the option of the issuer
- » Non-cumulative preference share redeemable at the option of the holder
- » A **deeply subordinated bond** (ranks behind the preference shares)

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## Example Equity Instrument

SWC has issued financial instruments as long term funding:

Equity at 7 July 20x3 (year end)	Equity instrument
1. Ordinary shares of 1 Birr	
2. Non-redeemable, non-cumulative pref shares	
3. Non-cumulative pref share redeemable at the option of the <u>issuer</u>	
4. Non-cumulative pref share redeemable at the option of the <u>holder</u>	
5. Subordinated bond (ranks behind pref shares)	

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## Example Equity Instrument

SWC has issued financial instruments as long term funding:

Equity at 7 July 20x3 (year end)	Equity instrument
1. Ordinary shares of 1 Birr	Yes
2. Non-redeemable, non-cumulative pref shares	Yes
3. Non-cumulative pref share redeemable at the option of the <u>issuer</u>	Yes
4. Non-cumulative pref share redeemable at the option of the <u>holder</u>	No
5. Subordinated bond (ranks behind pref shares)	No

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## Example *Equity Instrument*

Are the following equity instruments?

- » An ordinary share
- » A non-redeemable, non-cumulative preference share
- » A non-cumulative preference share redeemable at the option of the issuer
- » A non-cumulative preference share redeemable at the option of the holder

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## Definitions *Equity Instrument* continued

- » A puttable instrument is equity if:
  - » It entitles the holder to a pro rata share of net assets (liquidation)
  - » The instrument is the most subordinate.
  - » No other obligation to deliver cash or another financial asset.
- » The expected cash flows are based substantially on profit or loss, the change in net assets, or the change in fair value of the entity.

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## Definitions

### *Equity Instrument* continued

#### Convertible debt

- » Has both the characteristics of debt and equity
- » IAS 32 requires that instrument be split and recorded as two separate components
  - » Liability : Measured by reference to the fair value of the liability
  - » Equity : Difference between issue value and fair value of the liability
- » Determination made on day 1
- » No gain or loss recognised on day 1

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## Definitions

### *Equity Instrument* continued

#### Treasury Shares

- » Equity instruments that an entity or group hold(s) in itself
- » Treasury shares are deducted from equity
- » Gain or loss on purchase/sale of treasury shares recognised directly in equity

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## IFRS 9 *Financial Instruments*

### *Derivative assets and liabilities*

- » A financial instrument with **all three** of the following:
  - » its **value changes in response** to changes in a specified (underlying) variable
  - » it requires **no or a relatively small initial net investment** and
  - » it is **settled at a future date**.
- » In most circumstances, measured at **fair value**

Changes in fair value are recognised in profit or loss

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## Example

- » What is typically profit or loss from a financial instrument?

Source of income	Yes/No
1. Dividends	
2. Fee income	
3. Fair value profits or losses	
4. Revenue from customers	
5. Interest income	
6. Interest expense	
7. Depreciation	

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## Example

» What is typically profit or loss from a financial instrument?

Source of income	Yes/No
1. Dividends	Yes
2. Fee income	No
3. Fair value profits or losses	Yes
4. Revenue from customers	No, but
5. Interest income	Yes
6. Interest expense	Yes
7. Depreciation	No

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## Comprehensive Income

- » Interest, dividends, losses, and gains on a financial **liability** are **expense** or income.
- » Distributions on **equity** instruments are debited directly to **equity**

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# Classification and measurement of financial instruments

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**Financial Assets**  
*Classification process*

Test

Cash flow characteristics

Solely principal and interest

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## Financial Assets

### *Cash flow characteristics assessment*

- » If cash flows solely Principal and Interest (SPPI), measurement depends on the business model
- » Interest is consideration received for time value of money and credit risk
- » Principal is value of the contract at inception
- » Standard provides guidance on application of the principle when:
  - » Interest rate is leveraged,
  - » There is an 'interest rate mismatch',
  - » Regulated rates
  - » Compensation for prepayment (breakages)

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## Sources of information

- » Terms and conditions of the financial instrument
- » Context of instrument (bespoke or 'off the shelf')
- » Legal and customary framework within which the contract is concluded
- » Side agreements, umbrella agreements and other contextual arrangements

**Consider:** reviewing wording of contracts before conclusion

**Beware:** Intercompany agreements

**Note:** comparable – independent SOEs should get same outcome

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## Example

### *Solely payments of Interest and principle test (SPPI)*

SWC invests excess money in Ethiopian 364 day treasure bills

- » Auctioned on 25 Jan 2023
- » Treasuries issued at auction at 91.473 per 100
- » There are no interest coupons
- » Implied rate is 9.437%
- » Full nominal amount paid out on 24 Jan

Do the treasury bills meet the SPPI test?

*Paragraph B4.1.13 of IFRS 9*

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## Example

### *Contractual cash flow characteristics*

- » The contractual cash flows are SPPI
- » Although there are no interest payments, the day 1 discount represents interest
- » The implied interest rate reflects 'real' interest
- » The interest rate is not linked to any index or other factor, and doesn't reset after auction

*Paragraph B4.1.13 of IFRS 9*

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## Example

### *Contractual cash flow characteristics*

SWC holds USD in 12 month bank deposits.

- » The deposits pay a 12-month USD market rate.
  - » However, the entity can withdraw funds with 30 day notice.
  - » If notice is served, the interest rate is retrospectively corrected to reflect actual period of deposit
  - » The negative adjustment to interest is deducted from amount due
- Does this meet the SPPI test?

*Paragraph B4.1.13 of IFRS 9*

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## Example

### *Contractual cash flow characteristics*

- » The contractual cash flows are SPPI
  - » The fact that interest is reset does not in itself disqualify the instrument
  - » However, if borrower can for example choose:
    - » a 1-month interest rate reset every 3 months, or
    - » a rate based on a term that exceeds instrument's remaining life
- Entity should assess cash flows against an instrument identical in all respects (except for odd clause) to determine if cash flows are SPPI

*Paragraph B4.1.13 of IFRS 9*

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## Example Contractual cash flows

- » SWC makes loans to its staff
- » Market interest rate is 10%, staff loans are advanced to eligible staff at 5%
- » Loans are repayable in 60 equal monthly instalments
- » There is no penalty for early repayment
- » Loan repayments are deducted directly from staff salary

Does this meet the SPPI test?

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## Example Contractual cash flows

- » SWC makes loans to its staff
- » Market interest rate is 10%, staff loans are advanced to eligible staff at 5%

Does this meet the SPPI test?

Yes it does. Even though the interest rate is abnormally low, the interest rate is fixed and the repayments are none-the-less only interest and principle.

However, the lower interest rate may be considered in measurement.

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## Example Contractual cash flows

- » SWC sells equipment on credit for repayment over 5 years
- » The debtor Interest is charged market related interest rates
- » If debtors misses two payments, the equipment is repossessed
- » Repossessed equipment is valued and sold at SWCs' second hand equipment store
- » Debt is reduced by the value of the repossessed equipment\
- » SWC usually forgives any remaining debt

Does this meet the SPPI test?

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## Example Contractual cash flows

- » SWC sells equipment on credit for repayment over 5 years
- » Debt is reduced by the value of the repossessed equipment\
- » SWC usually forgives any remaining debt

Does this meet the SPPI test?

Yes, even though SWC will repossesses the asset, that is normal practice in lieu of receiving payment, The value of the repossessed item represents payment of principal and interest *in kind*

The forgiveness of the loan is not contractual element, but a economic decision made by SWC (assessment is based on contract)

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## Example Contractual cash flows

- » SWC makes loans to its suppliers (farmers)
  - » Market interest rate is 10%, and loans are advanced at 10%
  - » Loans are repayable at end of harvest season
  - » Loans are repayable in a fixed quantity of harvested coffee beans
- Does this meet the SPPI test?

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## Example Contractual cash flows

- » SWC makes loans to its suppliers (farmers)
  - » Loans are repayable in a fixed quantity of harvested coffee beans
- Does this meet the SPPI test?

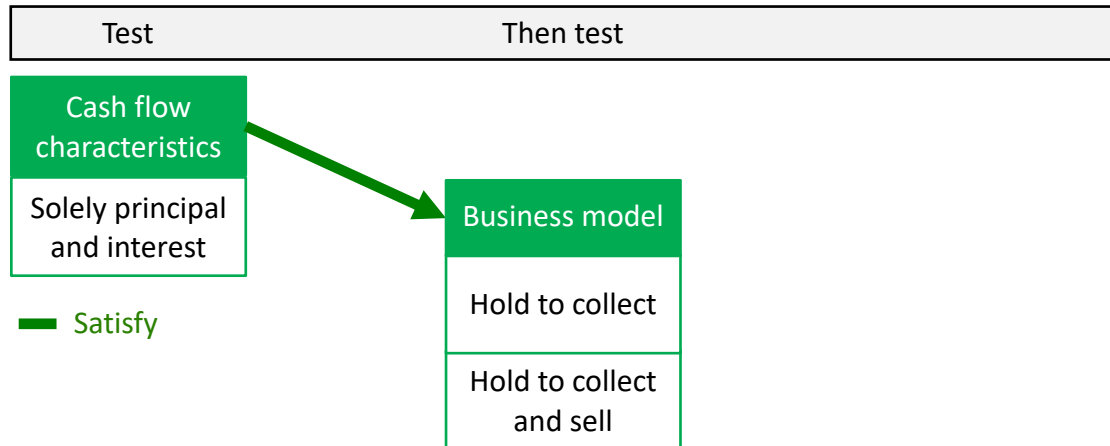
No. This is in essence a forward purchase of coffee beans. It might not even be a financial asset. If the coffee bean price goes up, SWC will have received coffee beans at a bargain price (loan +10%), if the coffee bean price goes down, SWC will have paid too much for the beans. The repayment includes principle, interest and variation of coffee bean price

Either accounted for as a forward purchase or as a loan at fair value

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## Financial Assets Classification process



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## Business model test

- » Hold to collect
  - » Objective of holding instruments is to collect contractual cash flows rather than to sell
- » Hold to collect and sell
  - » Objective of holding instruments is to:
    - » collect contractual cash flows; and
    - » Sell financial assets
- » Not an instrument by instrument approach

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## Sources of information

### » Internal documentation

- » Reporting performance internally
- » Risk management documentation and limits
- » Compensation determinants for management, and
- » Other indicators, such as budgets and past practice

**Consider:** do your documented processes represent practice

**Beware:** incremental or event driven deviations from process

**Note:** not comparable – dependent on entity objectives

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## Example *Business model test*

- » SWC makes loans to its staff
- » SWC considers that these loans improve staff morale and retention
- » It collects the loans over the contractual period of the loans, unless the staff member resigns
- » If the staff member resigns, the loan is either:
  - » repaid immediately, or
  - » taken over by a local bank (the loan has a clause allowing the bank to reset the interest rate to market)

What is the business model?

1) Hold to collect, 2) hold to collect and sell, 3) other

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## Example *Business model test*

- » SWC makes loans to its staff
- » SWC considers that these loans improve staff morale and retention
- » It collects the loans over the contractual period of the loans, unless the staff member resigns

### What is the business model?

The business model is likely hold to collect. Even though SWC occasionally transfer the loans to the local bank, this is an exception and only when the original purpose of the loan has failed

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## Example *Business model test*

- » SWC holds treasury bills to collect contractual cash flows
- » It has risk management activities for credit and liquidity
  - » sales have typically occurred when assets' credit risk has increased (credit criteria no longer met)
  - » Some sales occur for unanticipated funding needs
- » Reports to key management focus on contractual return.
- » SWC monitors fair values of assets among other information

### What is the business model?

1) Hold to collect, 2) hold to collect and sell, 3) other

Example 1, Paragraph B4.1.4 of IFRS 9

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## Example Business model test

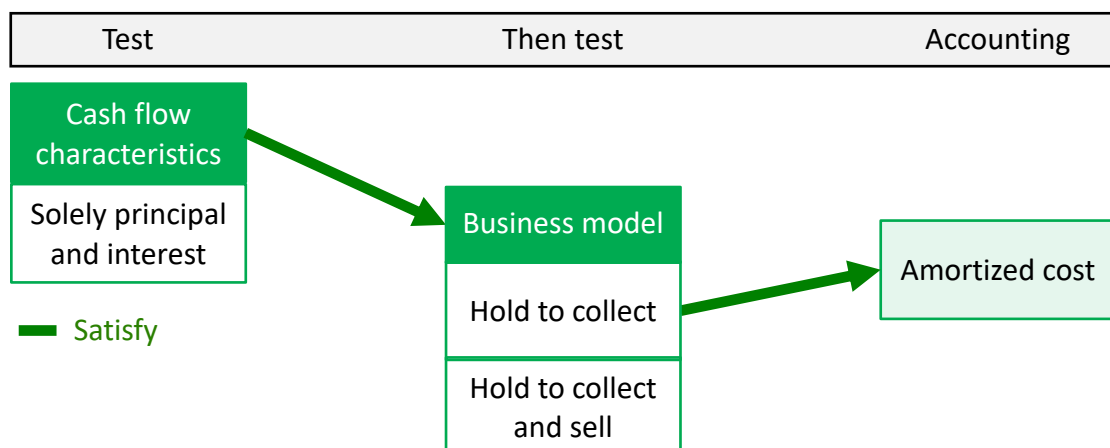
- » The business model is Hold to Collect
- » Although entity considers fair values for liquidity, objective is to hold to collect
- » Sales don't contradict that objective if they respond to credit risk
- » Infrequent sales resulting for unanticipated funding needs (eg in a stress case scenario) also do not contradict even if significant in value

Example 1, Paragraph B4.1.4 of IFRS 9

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## Financial Assets Classification process



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## Amortised cost measurement

- » Initial measurement is at **fair value plus or minus directly attributable transaction costs**
  - » However, if an entity originates a loan at an off market rate, and receives an upfront fee as compensation, then that fee is part of interest
- » Measurement is **based on the effective interest rate method**
- » **Allocation of interest over time** is also based on the effective interest method
- » An **asset is impaired** applying IFRS 9 impairment

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## Example Staff loan

- » SWC makes a Br100 000 **loan to a member of staff**
  - » **Market interest rate is 10%, staff loans** are advanced to eligible staff at 5%
  - » Loans are **repayable in 60 equal monthly** instalments of Br1 887
- Applying amortised cost, what is the day one value of the loan?
1. Br100 000 (the amount advanced to the staff member)
  2. Br88 818 (the present value of repayments discounted at 10%)
  3. Br113 227 (the sum of 60 payments of Br1 887)

60

60

## Example staff loan

- » SWC makes a Br100 000 loan to a member of staff
  - » Market interest rate is 10%, staff loans are advanced to eligible staff at 5%
  - » Loans are repayable in 60 equal monthly instalments of Br1 887
- Applying amortised cost, what is the day one value of the loan?

1. Br100 000 (the amount advanced to the staff member)
2. Br88 818 (the present value of repayments discounted at 10%)
3. Br113 227 (the sum of 60 payments of Br1 887)

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## Example staff loan Calculating the loan amount

	A (description)	B (cash flows)
1	Monthly payments	1 887
2	Interest rate	10%
3	Monthly interest rate	0.8333%
4	# of Installments	60
5		88 818

Using Excel to  
calculate Present  
Value

Cell B5  
contains:  
`=PV(B3,B4,B1)`

62

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## Example staff loan

- » SWC makes a Br100 000 loan to a member of staff
- » Market interest rate is 10%, staff loans are advanced to eligible staff at 5%
- » Loans are repayable in 60 equal monthly instalments of Br1 887

What is the initial journal entry for the loan?

	Debit	Credit
Dr Loan to staff	88 818	
?		
Cr Cash balance		100 000

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## Example staff loan

- » SWC makes a Br100 000 loan to a member of staff
- » Market interest rate is 10%, staff loans are advanced to eligible staff at 5%
- » Loans are repayable in 60 equal monthly instalments of Br1 887

What is the initial journal entry for the loan?

	Debit	Credit
Dr Loan to staff	88 818	
Dr Staff expense	11 182	
Cr Cash balance		100 000

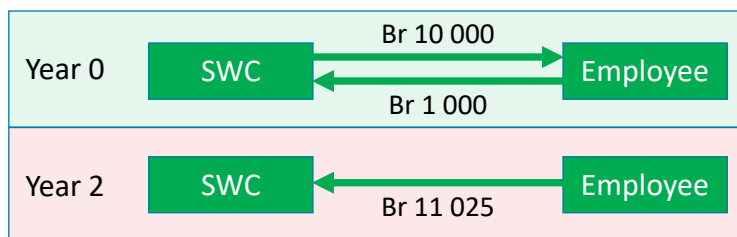
64

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## Example Amortised cost

SWC grants a loan to a member of staff:

- » Loan amount is Br10 000
- » Loan bears interest at 5% per year
- » Staff member pays Br1 000 as an origination fee, on loan grant
- » Loan repayable in single instalment of Br11 025 in 2 years time

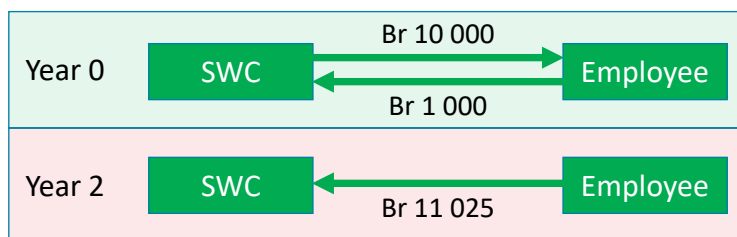


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## Example Amortised cost

» What is the effective rate of interest:

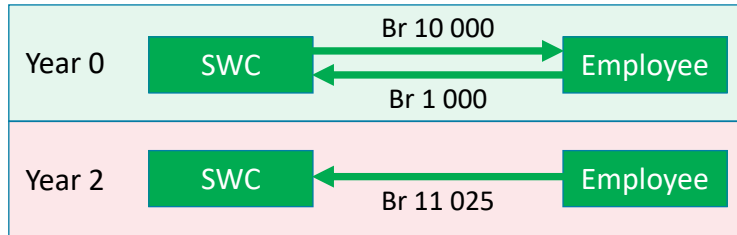


	1	2	3
Loan (day 0)	10 000	9 000	10 000
Repayment (24 months)	11 025	11 025	12 025
Effective interest rate	5.0%	10.7%	9.7%

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## Example Amortised cost

» What is the effective rate of interest:



	1	2	3
Loan (day 0)	10 000	9 000	10 000
Repayment (24 months)	11 025	11 025	12 025
Effective interest rate	5.0%	10.7%	9.7%

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## Example Calculating Internal rate of return with excel

	A (description)	B (cash flows)
1	Begin year 1	(9 000)
2	End year 1	0
3	End year 2	11 025
4		10.7%

Using Excel to  
calculate internal  
rate of return

Cell B4  
contains:  
=IRR(B1:B3)

68

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## Example Amortised cost – journal entries

Initial	Debit	Credit
Dr Loan to staff	9 000	
Dr Cash balance (receipt from staff)	1 000	
Cr Cash balance (payment to staff)		10 000
Dr Loan to staff	964	
Cr Interest received (year 1)		964
Dr Loan to staff	1 061	
Cr Interest received (year 2)		1 061

Loan of Br9 000 + interest of Br964 and Br1061 = closing balance Br11 025

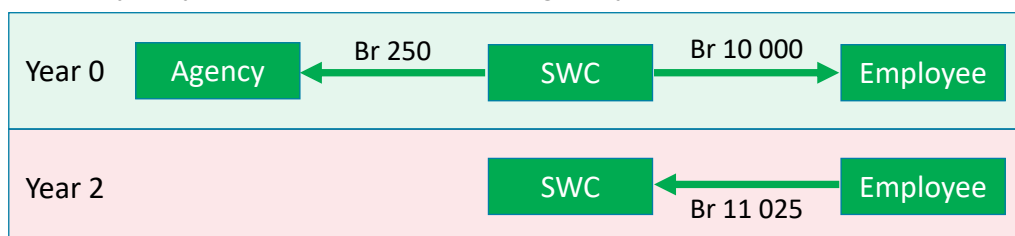
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## Example Amortised cost

SWC grants a loan to a member of staff:

- » Loan amount is Br10 000
- » Loan bears interest at 5% per year, market rate is 5%
- » Loan repayable in single instalment of Br11 025 in 2 years time
- » Entity pays Br250 fee to credit agency, not recovered from staff



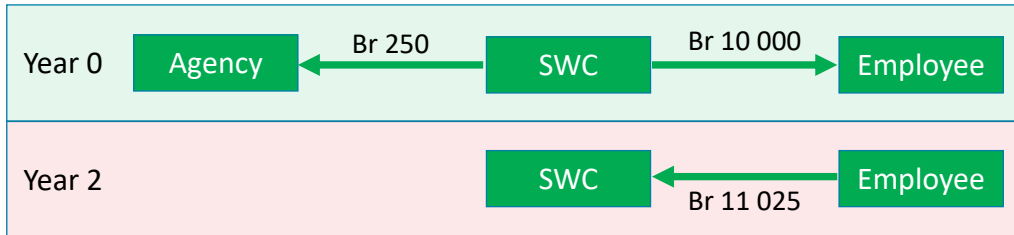
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## Example Amortised cost

» What is the effective rate of interest:

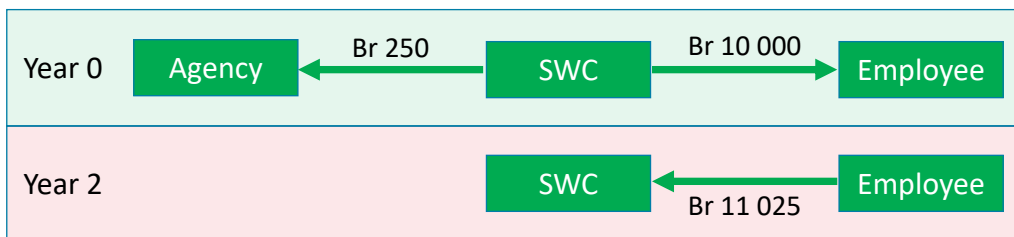


	1	2	3
Loan (day 0)	10 000	10 250	10 000
Repayment (24 months)	11 025	11 025	10 775
IRR	5.0%	3.7%	3.8%

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## Example Amortised cost

» What is the effective rate of interest:



	1	2	3
Loan (day 0)	10 000	10 250	10 000
Repayment (24 months)	11 025	11 025	10 775
IRR	5.0%	3.7%	3.8%

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## Example

### Calculating Internal rate of return with excel

	A (description)	B (cash flows)
1	Begin year 1	(10 250)
2	End year 1	0
3	End year 2	11 025
4		3.7%

Using Excel to  
calculate internal  
rate of return

Cell B4  
contains:  
=IRR(B1:B3)

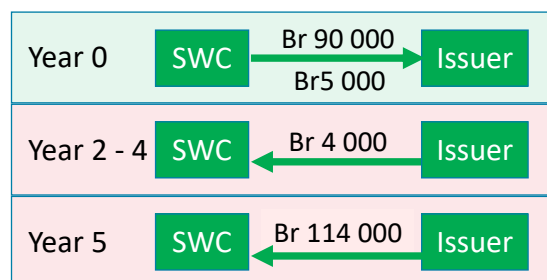
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## Example

### Amortised cost

- » SWC buys a Br100 000 treasury bond on issue,
  - » cost is Br90 000,
  - » directly attributable transaction costs Br5 000.
  - » bond is redeemable at Br110 000, in 5 years, and
  - » Pays Br4 000 interest annually (4%)



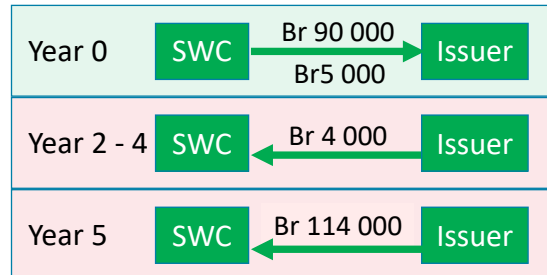
74

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## Example Amortised cost

» What is the initial balance of the the bond instrument?

- 1) 90 000
- 2) 95 000
- 3) 100 000
- 4) 114 000?



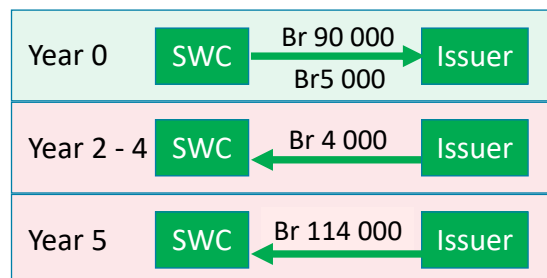
75

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## Example Amortised cost

» What is the initial balance of the the bond instrument?

- 1) 90 000
- 2) 95 000
- 3) 100 000
- 4) 114 000?



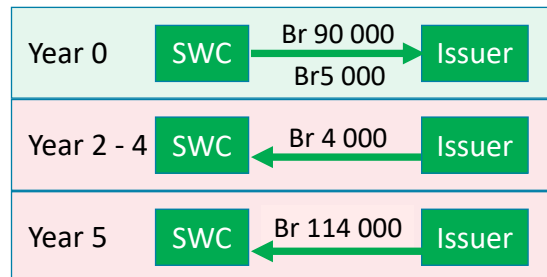
76

76

## Example Amortised cost

» What is the effective interest rate on the bond?

- 1) 4% (4 000 over 100 000)
- 2) 4.2% (4 000 over 95 000)
- 3) 6% (20 000 + 10 000 over 100 000) for 5 years
- 4) Something else



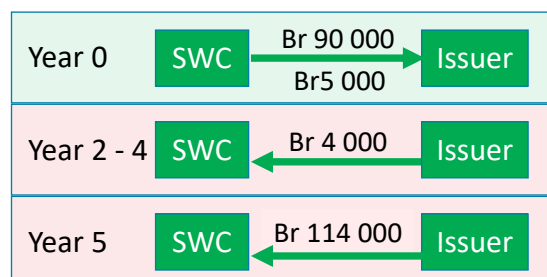
77

77

## Example Amortised cost

» What is the effective interest rate on the bond?

- 1) 4% (4 000 over 100 000)
- 2) 4.2% (4 000 over 95 000)
- 3) 6% (20 000 + 10 000 over 100 000) for 5 years
- 4) Something else

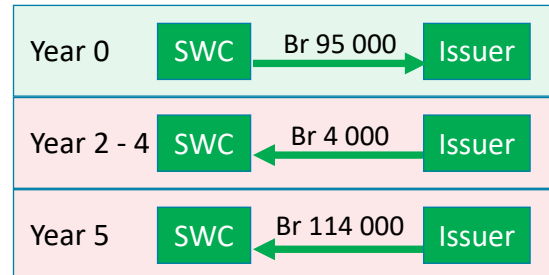


78

78

## Example Calculating Internal rate of return

	A (description)	B (cash flows)
1	Begin year 1	(95 000)
2	End year 1	4 000
3	End year 2	4 000
4	End year 3	4 000
5	End year 4	4 000
6	End year 5	114 000
7		6.958%



Cell B7  
contains:  
=IRR(B1:B6)

79

79

## Example Calculating annual interest

Yr	Opening balance
X1	95 000

Initial recognition	Debit	Credit
Dr Treasury bond asset	95 000	
Cr Cash balance (expenses)		5 000
Cr Cash balance (price at auction)		90 000

80

80

**Example**  
*Calculating annual interest*

Yr	Opening balance	Interest @ 6.958%*	Sub-balance
X1	95 000	6 611	101 611

Journal at end of year 1		Debit	Credit
Dr Treasury bond asset		6 611	
Cr Interest income received			6 611

\* Internal rate of return = effective interest rate

81

81

**Example**  
*Calculating annual interest*

Yr	Opening balance	Interest @ 6.958%*	Sub-balance	Cash inflow	Closing balance
X1	95 000	6 611	101 611	(4 000)	97 611

Journal at end of year 1		Debit	Credit
Dr Cash balance (interest coupon received)		4 000	
Cr Treasury bond asset			4 000

\* Internal rate of return = effective interest rate

82

82

## Example Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Sub-balance	Cash inflow	Closing balance
X1	95 000	6 611	101 611	(4 000)	97 611
X2	97 611	6 792	104 403	(4 000)	100 403
X3	100 403	6 986	107 389	(4 000)	103 389
X4	103 389	7 194	110 583	(4 000)	106 583
X5	106 583	7 417	114 000	(114 000)	0

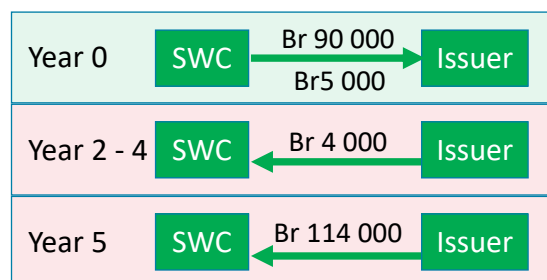
\* Internal rate of return = effective interest rate

83

83

## Example Amortised cost

- » SWC buys a treasury bond on issue,
- » cost is Br90 000,
- » directly attributable transaction costs Br5 000.
- » bond is redeemable at Br110 000, in 5 years, and
- » Pays Br4 000 interest annually (4%)



» At end of 3<sup>rd</sup> year, drop in interest rates causes fair value of the asset to change to Br106 000

84

84

## Example

### Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Sub-total	Cash inflow	Closing balance
X1	95 000	6 611	101 611	(4 000)	97 611
X2	97 611	6 792	104 403	(4 000)	100 403
X3	100 403	6 986	107 389	(4 000)	103 389

Fair value is Br106 000 at end of year 3

\* Internal rate of return = effective interest rate

85

85

## Example

### Amortised cost

» At end of year 3, the calculated closing balance is Br103 389

» The fair value is Br106 000

What adjustment do you make under the amortised cost approach?

- 1) Increase closing balance to Br106 000
- 2) Decrease closing balance to Br103 389
- 3) No change

86

86



## Example Amortised cost

» At end of year 3, the calculated closing balance is Br103 389

» The fair value is Br106 000

What adjustment do you make under the amortised cost approach?

- 1) Increase closing balance to Br106 000
- 2) Decrease closing balance to Br103 389
- 3) No change

87

87

## Example Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Sub-total	Cash inflow	Closing balance
X1	95 000	6 611	101 611	(4 000)	97 611
X2	97 611	6 792	104 403	(4 000)	100 403
X3	100 403	6 986	107 389	(4 000)	103 389
X4	103 389	7 194	110 583	(4 000)	106 583
X5	106 583	7 417	114 000	(114 000)	0

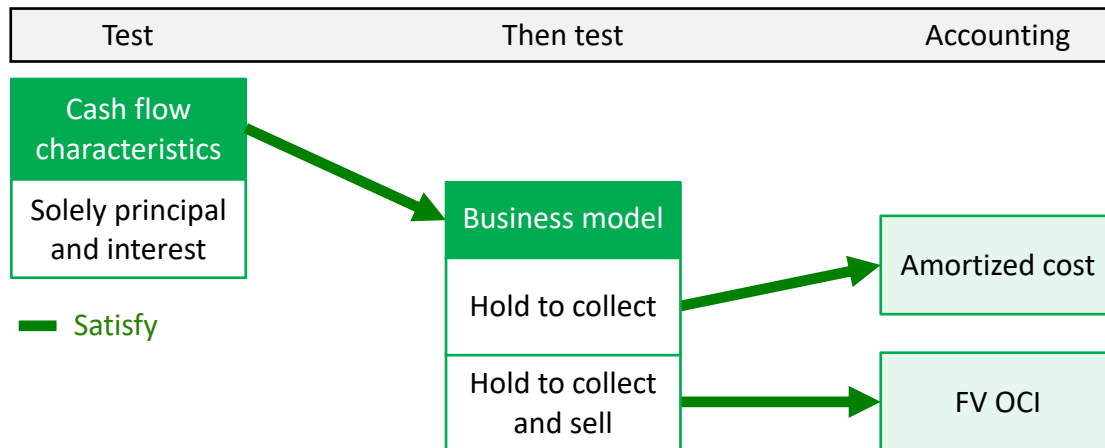
\* Internal rate of return = effective interest rate

Amortised cost, therefore increase in fair value is not accounted for

88

88

## Financial Assets Classification process



89

89

## Fair value OCI

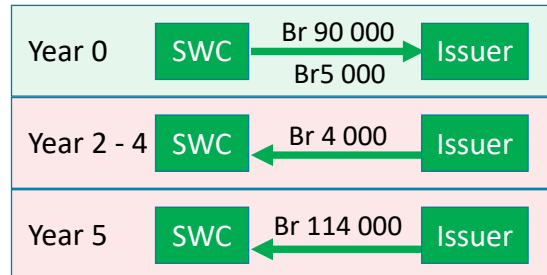
- » Initial recognition is the same as amortised cost
- » Subsequent balance sheet measurement is at fair value
- » Income statement measurement based on the effective interest rate method (same as for amortised cost)
- » Difference in value methodologies is taken to OCI

90

90

## Example Fair value through OCI

- » SWC buys a treasury bond on issue,
  - » cost is Br90 000,
  - » directly attributable transaction costs Br5 000.
  - » bond is redeemable at Br110 000, in 5 years, and
  - » Pays Br4 000 interest annually (4%)



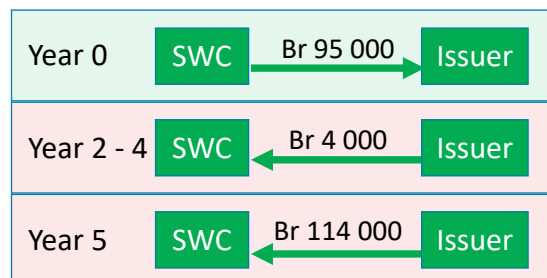
» At end of 3<sup>rd</sup> year, drop in interest rates causes fair value of the asset to change to Br106 000

91

91

## Example Calculating Internal rate of return

	A (description)	B (cash flows)
1	Begin year 1	(95 000)
2	End year 1	4 000
3	End year 2	4 000
4	End year 3	4 000
5	End year 4	4 000
6	End year 5	114 000
7		6.958%



Cell B7  
contains:  
=IRR(B1:B6)

92

92

## Example

### Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Cash inflow	OCI	Closing balance
X1	95 000	6 611	(4 000)		97 611
X2	97 611	6 792	(4 000)		100 403
X3	100 403	6 986	(4 000)		103 389
X3	Fair value changes to:				106 000

\* Internal rate of return = effective interest rate

93

93

## Example

### Amortised cost

» At end of year 3, the calculated closing balance is Br103 389

» The fair value is Br106 000

What adjustment do you make under the FVOCI approach?

- 1) Increase closing balance to Br106 000
- 2) Decrease closing balance to Br103 389
- 3) No change

94

94

## Example Amortised cost

» At end of year 3, the calculated closing balance is Br103 389

» The fair value is Br106 000

What adjustment do you make under the FVOCI approach?

- 1) Increase closing balance to Br106 000
- 2) Decrease closing balance to Br103 389
- 3) No change

95

95

## Example Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Cash inflow	OCI	Closing balance
X1	95 000	6 611	(4 000)		97 611
X2	97 611	6 792	(4 000)		100 403
X3	100 403	6 986	(4 000)		103 389
X3	Fair value changes to:			+2 611	106 000

\* Internal rate of return = effective interest rate

$$106\,000 - 103\,389 = 2\,611$$

96

96

## Example Calculating annual interest

Yr	Opening balance	Interest @ 6.958%*	Cash inflow	OCI	Closing balance
X1	95 000	6 611	(4 000)	-	97 611
X2	97 611	6 792	(4 000)	-	100 403
X3	100 403	6 986	(4 000)	2 611	106 000

\* Internal rate of return = effective interest rate

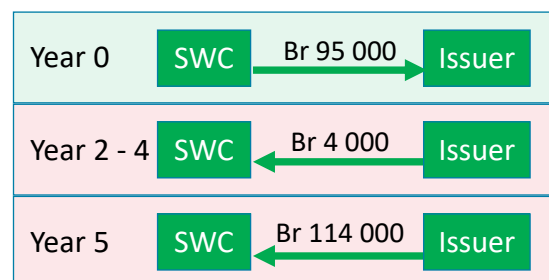
$$106\ 000 - 103\ 389 = 2\ 611$$

97

97

## Example Calculating Internal rate of return

	A (description)	B (cash flows)
1	End year 3	(106 000)
2	End year 4	4 000
3	End year 5	114 000
4		5.609%



Cell B4  
contains:  
=IRR(B1:B3)

98

98

## Example Calculating annual interest

Yr	Opening balance	Interest @ 5.609%	Cash inflow	OCI	Closing balance
X1	95 000	6 611	(4 000)	-	97 611
X2	97 611	6 792	(4 000)	-	100 403
X3	100 403	6 986	(4 000)	2 611	106 000
X4	106 000	7 194	(4 000)	(1 249)	107 945

\* Internal rate of return = effective interest rate

$$106\,000 \times 5.609\% = 5\,945$$

$$5\,945 - 7\,194$$

99

99

## Example Calculating annual interest

Yr	Opening balance	Interest @ 6.958%	Cash inflow	OCI	Closing balance
X1	95 000	6 611	(4 000)	-	97 611
X2	97 611	6 792	(4 000)	-	100 403
X3	100 403	6 986	(4 000)	2 611	106 000
X4	106 000	7 194	(4 000)	(1 249)	107 945
X5	107 945	7 416	(114 000)	(1 362)	-

\* Internal rate of return = effective interest rate

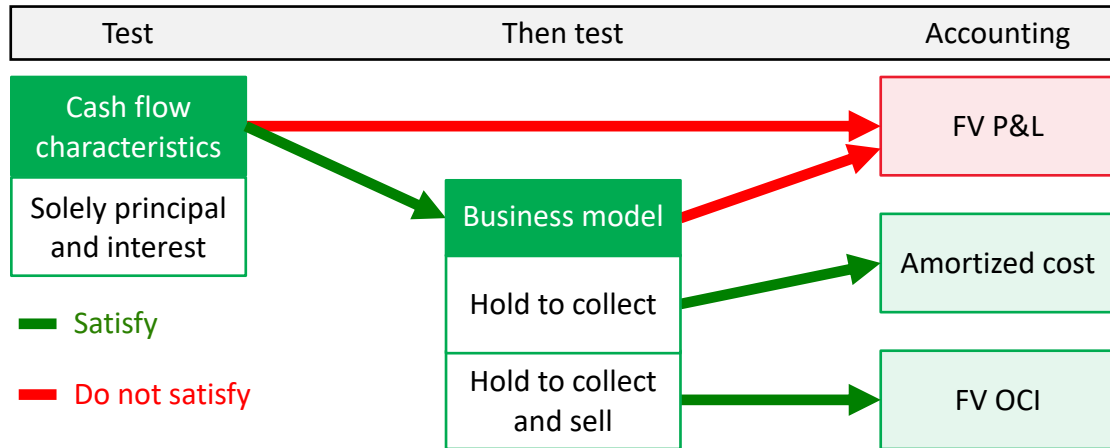
$$107\,945 \times 5.609\% = 6\,054$$

$$6\,054 - 7\,416$$

100

100

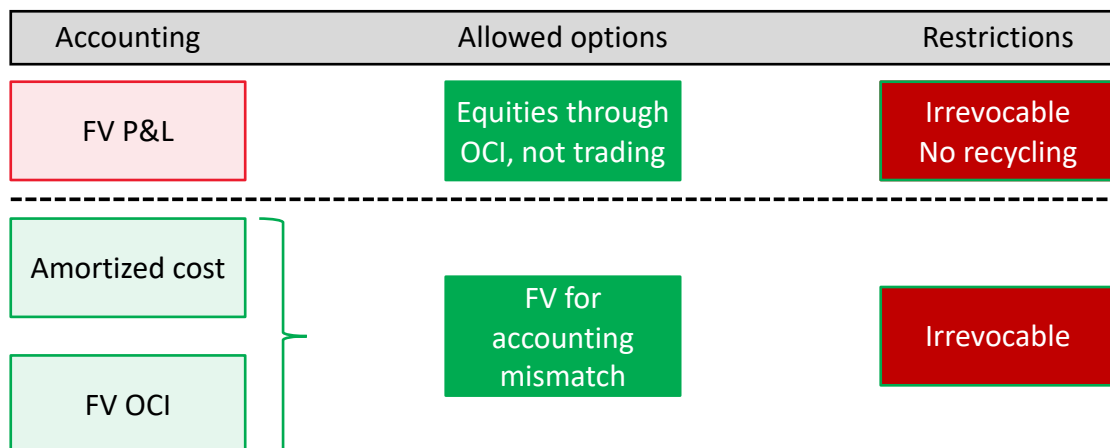
## Financial Assets Classification process



101

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## Financial Assets Classification process - options

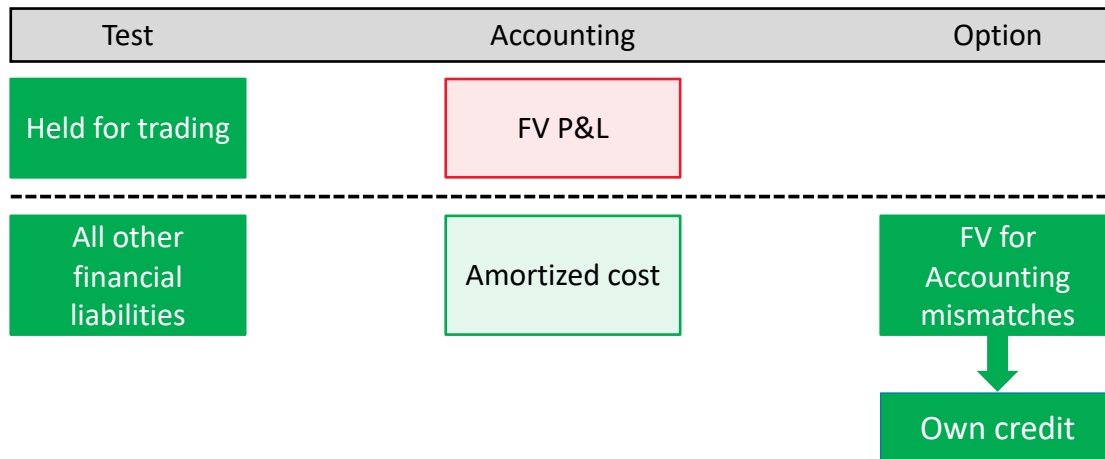


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## Financial Liabilities Classification process



104

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## Financial Liabilities Own credit

» P&L gain when 'own credit' deteriorates, loss when it improves

Balance Sheet	Comprehensive Income
Fair value liability: All changes including own credit	P&L: all changes except own credit OCI: changes in own credit

» Required by IFRS 9 for liabilities under the FVO

» Corrects for counter-intuitive effect

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## Financial Liabilities

### *Own credit*

- » SWC issues Br100m debt on a traded capital market
- » SWC is rated AAA - debts trades at nominal value (Br100m)
- » Mgt uses Br70m to speculate but makes unrealised losses of Br35m
- » Ability to repay debt is compromised - fair value of debt is Br60m
- » If the debt is carried at fair value, the Journal entries are:

Dr/(cr)	Journal	Opening balance	Journal effect	closing balance
Dr FV Liability	40.	(100)	40	(60)
Cr Comprehensive income	(40)			

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Questions

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