# OCW "Companies Accounting" 

## LECTURE MATERIAL: Topic IV

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OCW

## TOPIC IV

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## TOPIC IV

## Purpose of the Topic:

- Understand the meaning of bonds and obligations
- Learn the differences between bonds \& obligations and stocks
- Learn the different type of bonds \& obligations
- Use the accounting standards (Standard Number 9th Spanish Accounting Plan) to interpret and record the bonds issuing.

Title XI. Bonds. Corporate Enterprises Act.

## 1. ISSUING BONDS AND OBLIGATIONS

Companies can finance their expansion through different sources:

- Retained earnings
- Issuing additional capital
- Borrowing funds from third parties

When borrowing funds, large loans may be difficult to obtain in a short period of time which makes it difficult for a company to achieve a great investment at a particular moment. Large amounts of funds can be obtained through a bond \& obligation`s issuing, through which companies borrow funds from an extended public.

These financial instruments are written promises to pay the investor or lender at least:

- An interest at different fixed periods based on the bond's stated interest rate
- The principal or face amount on the bond's maturity date.

Only big companies in the form of joint stock companies as well as governments are allowed to issue bonds \& obligations which will be paid out of future earnings accumulated over several years. Limited Liability Companies may not issue these financial instruments.

The issuance of bonds is conditioned to the creation of a bondholder syndicate in charge of defending the bond`s investors interests in the decision making of the Company. Bonds mature between 2 and 5 years, whereas obligations have a longer life.

Companies usually use the services of underwriters, security dealers who help in the launching of the Issuing Public Offer (IPO) that takes place once the transaction has been approved by the Securities Exchange Commission.

Bond issues` characteristics shall be registered in a public document in the Mercantile Registry.

## 2. DIFFERENCES BETWEEN BONDS AND STOCKS

Before studying about the characteristics, measurement and recording in accounting of bond and obligations, it is fundamental to understand the differences between these instruments and the shares we have been working with during the previous topics.

- When issuing bonds, the investor turns into creditor of the company (bonds are a liability), while the investor of shares is owner of the company (stocks are equity for the Company)
- The shareholder participates in the management of the company through his vote in the general meeting having the right to look at a company's records. Bondholders do not participate in the companys management but are represented through a bondholder`s syndicate that guarantees their rights.
- Stocks have unlimited life, although they can be redeemed. Bonds have a limited life, being paid back in cash or converted into shares.
- Stockholders receive dividends if the corporation declares to pay it when distributing profits. Bondholders receive a fixed interest and do not depend on the net income of the Company.
- If the company liquidates, bondholders` investments receive priority over shareholders'.

|  | PARTICIPATION <br> IN COMPANY | MANAGEMENT | LIFE | RETRIBUTION | LIQUIDATION |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SHARES | Investor = owner | Shareholders participate in <br> the management of the <br> company through his vote <br> in the general meeting | Unlimited | Through <br> dividends if <br> declared | After <br> bondholders |
| BONDS | Investor =creditor | Bondholders do not <br> participate in the <br> companys management. <br> They are represented <br> through a bondholder`s <br> syndicate that guarantees <br> their rights. | Limited. | Through a <br> fixed interest. | Priority over <br> stockholders |

## 3. LEGAL REQUIREMENTS

There are formal requirements to be followed and costs that must be paid, such as attorneys, Registry, taxes related to the issuing of financial instruments and brokerages to security instruments dealers. These costs are called Bond Issuing Costs and affect the company when considering the financial cost of the issuing.

The law establishes the limit companies shall follow when determining the amount issued.
"The total amount issued may not exceed the amount of paid up share capital plus reserves appearing in the last approved balance sheet" (art.405.1 "Corporate Enterprises Act").

Guaranteed bonds issued do not need to follow this requirement (art.405.2) nor listed joint stock Companies.

Ex: KANO Inc. wants to issue bonds. Its Equity is formed by :

- Share Capital 1,000,000
- Uncalled Capital $(125,000)$
- Reserves 310,000
- Prior Period`s Losses $(60,000)$

How many bonds may KANO issue, considering the following:
Par Value 10 €/each; Issuing Value 9. 5€/each and Redeeming Value 11€/each?
Standard number 9th "Recognition and Measurement Standards" about "Financial instruments" (Spanish Accounting Plan) considers obligations and other marketable securities issued as financial instruments and more specific, financial liabilities that must follow the next measurement requirements when reported.

| MEASUREMENT |  | Money received-attributable <br> transaction costs |
| :--- | :--- | :--- |
| Initial Measurement | Fair Value accrued |  |
| Subsequent Measurement | Amortized Cost | Initial Value + <br> interests*-reimbursements |

*Accrued interests = Effective interest** x Amortized cost.
**Effective interest: or annual equivalent rate that matches the present value of the bonds payable with the cash outflows (repayments of principal and stated interest's payments) during the life of the bonds:

$$
\text { Present Value }=\frac{\text { Cash Outflow } 1}{(1+\mathrm{i}) . . . . . . . .}+\frac{\text { Cash Outflow 2 } 2}{(1+\mathrm{i})^{2}}+\frac{\text { Cash Outflow 3 }}{(1+\mathrm{i})^{3}}+\ldots \ldots . .
$$

## 4. TYPES OF BONDS \& OBLIGATIONS

According to different criteria, bonds can be classified as follows:

- Considering the issuer, they can be issued by private companies or the government and public institutions.
- Considering the issuing price of the bond, it can be issued at $100 \%$, that is, at par or less than its face value (at a discount).
- Considering the redemption price of the bond, it can be redeemed at $100 \%$ this is at par, or over its face value.
- Considering the interest rate a bondholder will receive for his investment, this can be fixed or variable.
- Considering the maturity of the bond, they can all mature on the same date, which are called term bonds, or on different dates called serial bonds.
- The guaranty they offer: secured bonds are those guaranteed with assets of the issuer. Unsecured bonds only have the guaranty offered by the credit situation of the borrower.
- The convertibility: Convertible bonds can be exchanged into newly issued common stock at the bondholder's option or exchanged into treasury stocks of the issuing company. They are called compound financial instruments.
"Companies may issue convertible bonds, provided the general meeting determines conversion conditions and ratios and adopts a decision to increase the capital by the required amount." (art. 414)

In such case, "the directors must draft a report explaining conversion conditions and ratios, to be submitted together with a report drafted by an auditor other than the company's own auditor, appointed for this purpose by the Mercantile Registry."

However, as the Corporation`s Act observes:

- "Convertible bonds may not be issued for an amount under their par value.
- Convertible bonds may not be convertible into shares when their par value is below the share par value". (art. 415)
"Company shareholders shall have a pre-emptive right to subscribe convertible bonds "(art.416).


## 5. ACCOUNTING WITH BONDS\&OBLIGATIONS

Before recording the accounting concerning the Issuing of Bonds, it is really helpful to prepare a timeline. It visualizes the cash payments that the corporation promises to pay its bondholders, the accrued interests at a particular moment, and the situation of the debt.


### 5.1. Steps to be followed when accounting:

- Issuing of Bonds. Date of issue.
(Issuing Price x number of bonds issued)-Bonds Issuing Costs
- Interests Expenses
- Effective interest

It's the interest that gives the issuer information about the real cost of the money borrowed that takes into account the effects of compounding. Formed by the addition of:

- Stated interest or nominal interest

It's the interest established in the contract that will be paid periodically in a percentage on the face value of the outstanding bonds (issued - redeemed) at the date of payment. The interest on a bond will be accruing daily, and therefore the company will have a liability for the interest it has incurred but has not yet paid.

- Implicit Interests
- Amortization of the principal

The bonds can either be converted into ordinary shares or redeemed at a fixed date if they all mature on the same date (term bonds) or on different dates (serial bonds).

Amortization of bonds \& obligations can take different forms:

- They can be converted into ordinary shares
- Exchanged for treasury stock of the issuing company
- Redeemed at a fixed date, all on the same date (term bonds) or on different dates (serial bonds)
- Bought back by the Company at the Stock Exchange and redeemed

Summarize in the following figure:

${ }^{*}$ Not in convertible bonds \& obligations. Issuing Price must be $\geq$ Par Value

Before posting the transactions in the journal, we must prepare the financial table shown below:

| Date | Initial Value | (1)Effective Interest = | (2)Explicit Interests | $\begin{aligned} & \text { + (3)Implicit } \\ & \text { Interests } \end{aligned}$ | (4)Payme nts | (5)Amortized Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Issuing Date | $\begin{aligned} & \hline \text { (Issuing Price } \mathrm{x} \\ & \text { number of bonds issued)- } \\ & \text { Bonds Issuing Costs } \\ & \hline \end{aligned}$ | (1) x (Initial Value) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | $\begin{aligned} & \hline \text { (2) + } \\ & \text { Redeemed } \\ & \text { bonds } \\ & \hline \end{aligned}$ | Initial Value + (1)-(4) |
| Years of life of the bonds | (5) | (Effective interest rate) x (5) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | (2) Redeemed bonds | Previous amortized $\operatorname{cost}(5)+(1)-(4)$ |
|  | (5) | (Effective interest rate) x (5) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | $\begin{aligned} & \text { (2) + } \\ & \text { Redeemed } \\ & \text { bonds } \end{aligned}$ | Previous amortized $\operatorname{cost}(5)+(1)-(4)$ |
|  | (5) | (Effective interest rate) x (5) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | (2) + <br> Redeemed bonds | $\begin{aligned} & \text { Previous amortized } \\ & \operatorname{cost}(5)+(1)-(4) \end{aligned}$ |
|  | (5) | (Effective interest rate) x (5) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | $\begin{aligned} & \hline(2) \\ & \text { Redeemed } \\ & \text { bonds } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Previous amortized } \\ & \operatorname{cost}(5)+(1)-(4) \end{aligned}$ |
| Maturity Date | (5) | (Effective interest rate) x (5) | (Stated interest $x$ Face value x outstanding bonds) | Effective InterestExplicit Interest | (2) <br> Redeemed outstandin g bonds bonds/Con version...... |  |

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Ex: GASA, Inc. has issued on the 1st January 2007, the following debt through bonds:

- Number of bonds: 10,000.
- Par Value: 50 €.
- Issuing Value: Par Value
- Redemption Value: $110 \%$.
- Nominal Interest Rate: 5\%/year payable every year in arrears
- Issuing costs: $10,000 €$.
- Redemption of bonds: end of 5 years.
- Effective interest rate: 7.217\%.

| Date | Initial Value | $\begin{aligned} & \text { (1) Effective } \\ & \text { Interest } \\ & (7.217 \%)= \end{aligned}$ | (2)Explicit Interests (5\%) | (3)Implicit Interests | (4)Payments | (5)Amortized Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01/01/07 | $\begin{aligned} & \hline(10,000 \mathrm{x} \\ & 50)- \\ & 10,000= \\ & 490,000 \end{aligned}$ | $\begin{array}{ll} 7.217 \% & x \\ 490,000 & = \\ 35,367 & \end{array}$ | $\begin{aligned} & 5 \% \quad x \\ & 10,000 \times 50 \\ & =25,000 \end{aligned}$ | $\begin{array}{ll} 35,367 & - \\ 25,000 & = \\ 10,367 \end{array}$ | 25,000 | 490,000 <br> $35,3567-$ <br> 25,000 <br> 500,367$\quad+$ |
| 01/01/08 | $\begin{array}{\|l\|} \hline 490,000 \\ + \\ 35,3567- \\ 25,000= \\ 500,367 \\ \hline \end{array}$ | $\begin{array}{ll} \hline 7.217 \% & x \\ 500,367= & \\ 36,116 & \end{array}$ | 25,000 | $\begin{array}{ll} \hline 36,116 & - \\ 25,000 & = \\ 11,116 & \end{array}$ | 25,000 | $\begin{aligned} & 500,367 \quad+ \\ & 36,116-25,000 \\ & =511,483 \end{aligned}$ |
| 01/01/09 | $\begin{aligned} & 500,367 \\ & +\quad 36,116 \\ & -25,000= \\ & 511,483 \\ & \hline \end{aligned}$ | $\begin{array}{ll} \hline 7.217 \% & x \\ 511,483= & \\ 36,918 & \end{array}$ | 25,000 | $\begin{array}{ll} \hline 36,918 & - \\ 25,000 & \\ =11,918 \end{array}$ | 25,000 | 511,483 + <br> 36,918 - <br> $25,000=$  <br> 523,401  |
| 01/01/10 | $\begin{aligned} & 511,483 \\ & +\quad 36,918 \\ & -25,000= \\ & 523,401 \\ & \hline \end{aligned}$ | $\begin{array}{ll} \hline 7.217 \% & \mathrm{x} \\ 523,401= & \\ 37,778 & \end{array}$ | 25,000 | $\begin{array}{ll} \hline 37,778 & - \\ 25,000 & = \\ 12,778 & \end{array}$ | 25,000 | 523,401 + <br> 37,778 - <br> 25,000 $=$ <br> 536,179  |
| 01/01/11 | $\begin{aligned} & \hline 523,401 \\ & +\quad 37,778 \\ & -\quad 25,000 \\ & = \\ & 536,179 \\ & \hline \end{aligned}$ | $\begin{array}{ll} \hline 7.217 \% & \mathrm{x} \\ 536,179= & \\ 38,789 & \end{array}$ | 25,000 | $\begin{array}{ll} \hline 38,789 & - \\ 25,000= \\ 13,789 \end{array}$ | 25,000 + <br> 550,000 $=$ <br> 575,000  | 536,179 38,789 $575,000=32^{* *}$ (rounding errors) |
|  |  |  |  |  |  |  |

Accounting
Accounts

- (177) Non-Current Bonds Payable
- (500)Current Bonds payable
- (661)Interest bonds
- (506)Current interest on debentures and similar issues
- (5090) Redeemed bonds \& obligations


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- (XXX) Own bonds ${ }^{1}$
- (675). Losses on transactions with own bonds
- (775) Gains on transactions with own bonds
- (178) Convertible bonds and obligations
- (501) Current convertible bonds and obligations
- (1110) Equity from issue of compound financial instruments


### 5.2. Accounting for ordinary bonds \& obligations

Issuing of ordinary bonds \& obligations.

| Amount | Debit | Date |  | Credit |
| :--- | :--- | :--- | :--- | :--- | Amount

Accrued interests and Payment

| Amount | Debit | Date | Credit |
| :--- | :--- | :--- | :--- |$\quad$ Amount


| Amount | Debit | Date |  | Credit | Amount |
| :--- | :--- | :--- | :--- | :--- | ---: |
| (506)Current interest on <br> debentures and similar <br> issues |  | (572) Banks |  |  |  |
|  |  |  |  |  |  |

## Reclassification of the loan

| Amount | Debit | Date |  | Credit |
| :--- | :--- | :--- | :--- | ---: |
|  | Amount |  |  |  |
|  | Payable |  | (500)Current Bonds |  |
|  |  | payable |  |  |
|  |  |  |  |  |

[^0]
## OCW "Companies Accounting"

## Amortization

a)Repayments (term bonds or serial bonds)
$\left.\begin{array}{llllll}\hline \text { Amount } & \text { Debit } & \text { Date } & & \text { Credit } & \text { Amount } \\ \hline & \text { (500) Current Bonds } & & \begin{array}{l}\text { (5090) Redeemed bonds } \\ \text { payable obligations } \\ \text { (mature bonds \& } \\ \text { obligations) }\end{array} & & \text { (redemption } \\ & & & & \\ \hline & & \text { Dalue) }\end{array}\right]$
b) Purchase by the Company in Stock Exchange and redeemed

| Amount | Debit | Date |  | Credit |
| :--- | :--- | :--- | :--- | :--- |
|  | (XXX) Own bonds |  |  |  |
|  | (661) Interest bonds* |  |  |  |
|  |  | (572) Banks | (Purchasing <br> value) |  |

*Accrued interests until purchase date
Reclassification of the loan

| Amount | Debit | Date | Credit | Amount |
| :---: | :---: | :---: | :---: | :---: |
|  | (177) Non-Current Bonds |  | (500)Current Bonds |  |
|  | Payable |  | \&Obligations payable |  |

Redeemed


## OCW "Companies Accounting"

Ex: On the 31st March 2011, OBLI Inc., , issues a loan through ordinary bonds \& obligations with the following characteristics:

- 15,000 bonds
- $100 €$ /bond par value issued at face value
- Redemption at par value.
- Stated interest rate 3.00 \% payable once a year, at the end of the year
- Bond issuing cost: 20,000 €.
- Amortization: equal parts on the end of year 3, 4 and 5.
- Effective interest rate of a $3.36 \%$.
- Record the transactions described

Ex: On the 1st January 2011, BONDI Inc., , issues a loan through ordinary bonds \& obligations with the following characteristics:

- 10,000 bonds
- $20 € / b o n d$ par value issued at face value
- Redemption at $22 € / b o n d$.
- Stated interest rate 3.00 \% payable once a year, at the end of the year
- Bond issuing cost: 3,000 €.
- Amortization: equal parts during 2 years.
- Effective interest rate of a 10.7 \%.
- Post in the books the buy-back of 5,000 own bonds for $112,500 €$ to be redeemed on March the $3^{\text {rd, }} 2012$.


### 1.1. Accounting for convertible bonds \& obligations

Compound financial instruments are regulated in the Measurement Standard Number 9 th 5.2. They are defined as an instrument that "simultaneously includes liability and equity components". In terms of measurement, the initial carrying amount shall be allocated using the criteria described below:

- The liability component shall be measured at the fair value of a similar instrument that does not have an associated equity component.
- The equity component shall be measured as the difference between the initial amount and the value assigned to the liability component.
- Transaction costs shall be allocated proportionately.

Issuing convertible bonds\&obligations

| Amount | Debit | Date |  |
| :--- | :--- | :--- | :--- |
|  | (572) Banks (1) |  | Credit |
|  | (178) Convertible bonds |  |  |
|  | issuing amount-Bond |  | and obligations |
|  |  | (1110) Equity from issue <br> of compound financial <br> instruments |  |
|  |  |  |  |

## OCW "Companies Accounting"

Accrued interests and Payment

| Amount | Debit | Date | Credit | Amount |
| :--- | :--- | :--- | :--- | :--- |
|  | (661)Interest bonds |  | (178) Convertible bonds |  |
|  |  |  |  |  |
|  |  | and obligations |  |  |
|  |  | (506)Current interest on |  |  |
|  |  | debentures and similar | (payable in the |  |
| issues |  | short term) |  |  |


| Amount | Debit | Date |  | Credit | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (506)Current interest on <br> debentures and similar <br> issues |  | (572) Banks |  |  |
|  |  |  |  |  |  |

Reclassification of the loan


## Conversion

Issuing of new shares and increasing capital

| Amount | Debit | Date | Credit | Amount |
| :--- | :--- | :--- | :--- | :--- |
|  | (190) Shares Issued |  | (100) Share Capital |  |
|  |  |  | (110) Share Premium |  |

Bonds\&obligations that accept the conversion


*Differences in value between bonds and shares
If the bonds \& obligations are exchanged for own shares of the company, there is no increase in Capital and this last entry would take the following form:

| Amount | Debit | Date | Credit | Amount |
| :--- | :--- | :--- | :--- | :--- |
|  | (5091) Redeemed <br>  <br> obligations (b\&o that accept <br> the exchange) |  |  |  |
|  |  | (108) Own Shares |  |  |

> Ex: On March the 31st, 2011, BON Inc. presents, among its liabilities, convertible bonds \& obligations for a total amount of $50,000 €$ divided into 1,000 obligations, $50 € /$ each Par Value. They can be exchanged in the proportion of 1 sh. of BON Inc. of $50 € /$ sh. Par Value issued in a $200 \%$, for every 2 outstanding obligations. On this date, the $80 \%$ of the bondholders take up the offer.

## - Record the transaction


[^0]:    ${ }^{1}$ (XXX) Own bonds ${ }^{1}$ (not contemplated in the Spanish Accounting Plan)

