AS 20: Earnings Per Share material

Question on timing of inclusion of shares in EPS calculation

1) X Ltd. has 50,000 equity shares at the beginning of the financial year 2017-18. The company had a liability to pay 2,00,000 to Mr. P from 2017-18. As per the understanding between the parties, on 30-06-2018, X Ltd. issued equity shares @ 25 each (face value is 10) for settlement of the liability. For the FY 2011-12, X Ltd. earned a profit of ₹4,00,000. Compute basic EPS.

Answer

As per AS 20, if shares are issued for settlement of a liability, issued shares are included in calculation of weighted average number of shares from the date of settlement. So the relevant date is 30-06-2018. Number of shares issued = 2,00,000/25= 8,000 shares

Weighted average number of shares (50,000 12/12) + (8,000 × 9/12)=56,000 shares

Basic EPS = 4,00,000/56,000 = 7.14 per share

Question on weighted average shares calculation

2) X Ltd. has the following two classes of shares at the beginning of the financial year and there are no other transactions in share capital. Profit earned by the company during the period is ₹2,10,000.

Date	Particulars	No. of shares issued	Nominal value of shares	Amount paid
1st Jan 2017	Opening balance	1,800	10	10
1st Jan 2017	Issue of shares	600	5	5

Find out basic EPS for both the class of shares.

Answer

In general, different classes of shares are entitled to participate in the dividend to the extent of amount paid. For computation of basic EPS, convert all the shares into equivalent shares of 10 each.

Weighted average equivalent shares 1,800+ (600 x 5/10) = 2,100 shares

Basic EPS per equivalent share = 2,10,000/2,100 = 100

For shares of nominal value 10 = 100 per share

For shares of nominal value 5 = 100/2 = 50 per share

3) X Ltd
    1 January: 1,000,000 shares in issue
    28 February: Issued 200,000 shares at fair value
    31 August: Bonus issue 1 share for 3 shares held
    30 November: Issued 250,000 shares at fair value

    Calculate the number of shares which would be used in the basic EPS calculation.
    Consider reporting date as December end.

Answer

Period	Calculations	Weighted average number of shares
1 January - 28 February	1,000,000 × 2 / 12 × 4 / 3	222,222
1 March - 31 August	1,200,000 × 6 / 12 × 4 / 3	800,000
1 September - 30 November	1,600,000 × 3 / 12	400,000
1 December - 31 December	1,850,000 × 1 / 12	154,167
		1,576,389

**As you know, in case of bonus shares - we assume that these bonus shares are issued at the beginning of previous year, BUT in case of shares issued during the period we cannot assume like that, the simple reason is when shares are issued in the CY, how can we assume bonus for these are issued from the beginning of PY.

Question on calculation of basic EPS

4) As at 1st April, 2016 a company had 6,00,000 equity shares of 10 each (5 paid up by all shareholders). On 1st September, 2016 the remaining 5 was called up and paid by all shareholders except one shareholder having 60,000 equity shares. The net profit for the year ended 31st March, 2017 was 21,96,000 after considering dividend on preference shares and dividend distribution tax on such dividend totaling to 3,40,000.
Compute Basic EPS for the year ended 31st March, 2017 as per Accounting Standard 20 "Earnings Per Share".

Answer

Basic Earnings per share (EPS) =

$$\frac{\text{Net profit attributable to equity shareholders}}{\text{Weighted average number of equity shares outstanding during the year}}$$

$$= \frac{21,96,000}{4,57,500 \text{ Shares (as per working note)}} = ₹ 4.80 \text{ per share}$$

Working Note:

Calculation of weighted average number of equity shares

As per AS 20 'Earnings Per Share', partly paid equity shares are treated as a fraction of equity share to the extent that they were entitled to participate in dividend relative to a fully paid equity share during the reporting period. Assuming that the partly paid shares are entitled to participate in the dividend to the extent of amount paid, weighted average number of shares will be calculated as follows:

Date	No. of equity shares	Amount paid per share	Weighted average no. of equity shares
	₹	₹	₹
1.4.2016	6,00,000	5	6,00,000 x 5/10 x 5/12 = 1,25,000
1.9.2016	5,40,000	10	5,40,000 x 7/12 = 3,15,000
1.9.2016	60,000	5	60,000 x 5/10 x 7/12 = 17,500
Total weighted average equity shares			4,57,500

Question on earnings for Diluted EPS

5) Entity A has in issue 25,000 4% debentures with a nominal value of Re 1. The debentures are convertible to equity shares at a rate of 1:1 at any time until 20X9. The entity's management receives a bonus based on 1% of profit before tax.

   Entity A's results for 20X2 showed a profit before tax of 80,000 and a profit after tax of 64,000 (for simplicity, a tax rate of 20% is assumed in this question).

   Calculate Earnings for the purpose of diluted EPS.

Answer

For the purpose of calculating diluted EPS, the earnings should be adjusted for the reduction in the interest charge that would occur if the debentures were converted, and for the increase in the management bonus payment that would arise from the increased profit.

	Amount
Profit after tax	64,000
Add: Reduction in interest cost (25,000 × 4%) (Refer Note)	1,000
Less: Tax expense (1,000 × 20%)	(200)
Less: Increase in management bonus (1,000 × 1%)	(10)
Add: Tax benefit (10 × 20%)	2
Earnings for the purpose of diluted EPS	**64,792**

Conceptual questions on potential equity shares (Diluted EPS)

6) Say Potential equity shares are lapsed or cancelled on 31st Dec.? How will it be dealt with in calculating weighted average number of shares for diluted EPS?

Answer

Those potential equity shares should be included in the calculation of diluted earnings per share only for the portion of the period during which they are outstanding i.e. for 9 months.

7) Say Potential equity shares are converted into equity shares on 31st Dec. How will it be dealt in calculating weighted average number of shares for diluted EPS?

Answer

Consider these in diluted EPS for 9 months and from the date of conversion - consider for basic EPS and Diluted EPS i.e. for 3 months. Even though it says consider for both- as you know, if considered in basic EPS, it will not be diluting any more - hence it should be ignored.

8) Assume there is more than one basis to compute the number of shares to be converted - which basis will be considered for weighted average number of shares for diluted EPS purpose?
   Let me put it like this - Say if employees satisfy 1st condition - profit reaches 100 crore - they get 3,00,000 shares; If 1st and 2nd condition satisfy i.e. share value reaches 500 - they get 4,00,000 shares. How many number of shares to be considered for diluted EPS purpose?

Answer

As per AS 20, the calculation assumes the most advantageous conversion rate or exercise price from the standpoint of the holder of the potential ordinary shares. In the given case, 4,00,000 shares should be considered for diluted EPS.

9) How to deal with share Application money received pending allotment?

Answer

Share application money pending allotment or any advance share application money at balance sheet date can be utilised in the business of the entity, it is treated in the same manner as dilutive potential equity shares for the purpose of calculation of diluted earnings per share.

Question on EPS and amalgamation (to be discussed in last class)

10) X Ltd. acquired Y Ltd. as on 30-09-2017 and the acquisition is treated as 'amalgamation in the nature of purchase as per AS 14. Before amalgamation X & Y had 50,000 and 80,000 shares respectively. As per the agreement, X Ltd. issued one equity share for every four shares of Y Ltd. (i.e. 1:4). X Ltd. profit for the period is 10,00,000. Find out basic EPS. Will your answer change, if the amalgamation is in the nature of merger?

Answer

If the amalgamation is in the nature of purchase:

As per AS 20, if the amalgamation is in the nature of purchase, the shares issued should be included from the date of acquisition hence the relevant date is 30-09-2017.

No. of shares to be issued = 80,000 x 1/4 = 20,000 shares

Weighted average number of shares (50,000 12/12)+(20,000 x 6/12) = 60,000 shares.

Basic EPS 10,00,000/60,000= 16.67 per share

If the amalgamation is in the nature of merger:

As per AS 20, if the amalgamation is in the nature of merger, the shares issued should be included from the beginning of the period as if the combined entity had existed from the beginning of the reporting period, hence the relevant date is 01-04-2017.

Weighted average number of shares (50,000+ 20,000) x 12/12 = 70,000 shares

Basic EPS 10,00,000/70,000 = 14.29 per share