

SECTION A – CASE QUESTIONS (Total: 50 marks)

To : Ms. Linda HO, Director of GRL
From : John Chan, Accounting Manager
Date : dd/mm/yyyy
Subject : Investment in subsidiaries and consolidated financial statements of GRL as at 1 April 2011 after the transactions

I refer to your message regarding your queries about the investment in subsidiaries and the draft consolidated financial statements of GRL as at 1 April 2011 after the transactions.

Answer 1(a)

Investment in AMR

The issue of shares by AMR to SFL has reduced GRL's interest in AMR to 40%, i.e. less than 50%. Also, GRL is entitled to appoint only three out of the total seven seats in the board of directors. Therefore, GRL has lost control of AMR.

Since GRL holds 20% or more of the voting power of AMR, there is a presumption that GRL has significant influence over AMR and hence AMR should be accounted for as an associate.

In this case, GRL should stop consolidating AMR from the date that control was lost, i.e. 1 April 2011.

Paragraph 25 of HKFRS 10 *Consolidated Financial Statements* states that if a parent loses control of a subsidiary, the parent should derecognise the assets and liabilities of the former subsidiary from the consolidated statement of financial position and recognise any investment retained in the former subsidiary at its fair value when control is lost.

A partial disposal of the investment in AMR, as a subsidiary, but retaining an interest as an associate creates the recognition of a gain or loss on the entire interest.

Since the loss of control of a subsidiary is a significant economic event, the retained interest, i.e. the new investor-investee relationship, is recognised and measured at fair value at the date when control is lost.

A gain or loss should be recognised on the part that has been disposed of and a further holding gain or loss is recognised on the investment retained, being the difference between the fair value of the investment and the carrying amount of the investment.

On 1 April 2011, the carrying amounts of AMR that should be derecognised =

100% of the net identifiable assets of AMR = \$12 million
+ goodwill (\$7.5 million + 40% x (\$1 million + \$9 million) - \$10 million = \$1.5 million)
= \$13.5 million

GRL should derecognise the carrying amount of any non-controlling interests (NCI) in AMR (the former subsidiary) at the date when control is lost (including any components of other comprehensive income attributable to them).

On 1 April 2011, non-controlling interest, measured at its proportionate share of the AMR's net identifiable assets, should be $40\% \times \$12 \text{ million} = \4.8 million .

GRL should also recognise the fair value of the consideration received from the transaction. However, in this case, GRL has not received any consideration from the transaction.

Any investment retained in AMR (the former subsidiary) should be recognised at its fair value at the date when control is lost. Thus GRL should recognise its investment in AMR at its fair value on 1 April 2011, i.e. \$9.6 million.

GRL should also reclassify to profit or loss, or transfer directly to retained earnings if there is any gain or loss previously recognised in other comprehensive income. However, for the assets of AMR, no gain or loss has been previously recognised in other comprehensive income.

The resulting difference, i.e.

| | | | |
|---|--------------------------------|---|----------------------|
| | Investment in AMR | = | \$9.6 million |
| + | Non-controlling interest | = | \$4.8 million |
| - | Net identifiable assets of AMR | = | \$12 million |
| - | Goodwill | = | <u>\$1.5 million</u> |
| | | = | <u>\$0.9 million</u> |

should be recognised as a gain or loss in profit or loss attributable to the parent.

The corresponding consolidation journal entry is summarised as below:

| | | | |
|-----------|---------------------------------|-----------------------------------|----------------------|
| <i>Dr</i> | <i>Investment in AMR</i> | | <i>\$9.6 million</i> |
| <i>Dr</i> | <i>Non-controlling interest</i> | | <i>\$4.8 million</i> |
| <i>Dr</i> | <i>Debenture of AMR</i> | | <i>\$2 million</i> |
| <i>Dr</i> | <i>Accounts payable of AMR</i> | | <i>\$1 million</i> |
| | <i>Cr</i> | <i>PPE of AMR</i> | <i>\$9 million</i> |
| | <i>Cr</i> | <i>Inventory of AMR</i> | <i>\$3 million</i> |
| | <i>Cr</i> | <i>Accounts receivable of AMR</i> | <i>\$2 million</i> |
| | <i>Cr</i> | <i>Cash of AMR</i> | <i>\$1 million</i> |
| | <i>Cr</i> | <i>Goodwill</i> | <i>\$1.5 million</i> |
| | <i>Cr</i> | <i>Gain on disposal</i> | <i>\$0.9 million</i> |

Alternatively, candidates may suggest to exclude AMR from the consolidation and prepare a terminal entry:

| | | | |
|----|-------------------|------------------------------------|---------------|
| Dr | Investment in AMR | \$9.6 million | |
| | Cr | Investment in AMR | \$7.5 million |
| | Cr | Retained earnings (11m – 9m) x 60% | \$1.2 million |
| | Cr | Gain on disposal | \$0.9 million |

Answer 1(b)

Investment in CDS

The issue of shares by CDS to MSL has reduced GRL's interest in CDS from 66% to 60%. Since GRL holds more than 50% of the voting power of CDS, there is a presumption that GRL has retained control of CDS and hence CDS should remain as a subsidiary.

Paragraph 23 of HKFRS 10 *Consolidated Financial Statements* states that "changes in a parent's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions (i.e. transactions with owners in their capacity as owners).

This means that no gain or loss from these changes should be recognised in profit or loss. It also means that no change in the carrying amounts of the subsidiary's assets (including goodwill) or liabilities should be recognised as a result of such transactions.

This adopted approach is consistent with the fact that non-controlling interests are treated as a separate component of equity.

In such circumstances, the carrying amounts of the controlling and non-controlling interests shall be adjusted to reflect the changes in their relative interests in the subsidiary.

Previously, the carrying amount of NCI = 34% of \$12.9 million = \$4,386,000

After the transaction, NCI = 40% of (\$12.9 + \$5.5) million = \$7,360,000

Thus, NCI increases by \$7,360,000 - \$4,386,000 = \$2,974,000

Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received shall be recognised directly in equity and attributed to the owners of the parent.

Thus the difference between the consideration received (\$5,500,000) and the amount that NCI is adjusted (\$2,974,000), amounting to \$2,526,000, should be recognised directly in equity attributable to the owners of the parent.

The corresponding consolidation journal entry is summarised as below:

| | | | |
|----|------|---|-------------|
| Dr | Cash | \$5,500,000 | |
| | Cr | Non-controlling interest | \$2,974,000 |
| | Cr | Equity attributable to owners of the parent | \$2,526,000 |

Alternatively:

| | | | |
|----|--------------------------|---|-------------|
| Dr | Cash | \$5,500,000 | |
| Dr | Non-controlling interest | \$4,386,000 | |
| | Cr | Non-controlling interest | \$7,360,000 |
| | Cr | Equity attributable to owners of the parent | \$2,526,000 |

I hope the above explanation has answered your questions. For the details, please refer to the annex. Please feel free to contact me if you have further queries.

Best regards,
John Chan

Answer 1(c)**GRL - Consolidated Statement of Financial Position as at 1 April 2011**

| | GRL \$'000 | AMR \$'000 | CDS \$'000 | Adjustment | | | | Group \$'000 |
|-------------------------------|---------------|---------------|---------------|------------|--------------|--------------|-----|-----------------|
| | | | | ref | Dr \$'000 | Cr \$'000 | ref | |
| ASSETS | | | | | | | | |
| <i>Non-current assets</i> | | | | | | | | |
| Property, plant and equipment | 18,400 | 9,000 | 10,400 | w3 | 100 | 500 | w3 | 28,400 |
| | | | | | | 9,000 | (a) | |
| Goodwill | | | | w1 | 5,400 | 1,500 | (a) | 5,400 |
| | | | | w5 | 1,500 | | | |
| Investments in CDS | 12,000 | - | - | | | 12,000 | w1 | - |
| Investment in AMR | 7,500 | - | - | | | 7,500 | w5 | - |
| Investment in associate | | | | (a) | 9,600 | | | 9,600 |
| <i>Current assets</i> | | | | | | | | |
| Inventory | 5,900 | 3,000 | 4,200 | w2 | 500 | 500 | w1 | 10,100 |
| | | | | | | 3,000 | (a) | |
| Accounts receivable | 2,200 | 2,000 | 1,500 | | | 2,000 | (a) | 3,700 |
| Cash | 1,000 | 1,000 | 2,000 | (b) | 5,500 | 1,000 | (a) | 8,500 |
| | <u>47,000</u> | <u>15,000</u> | <u>18,100</u> | | | | | <u>65,700</u> |
| EQUITY AND LIABILITIES | | | | | | | | |
| Share capital of \$1 each | 19,000 | 1,000 | 4,000 | w1 | 4,000 | | | 19,000 |
| | | | | w5 | 1,000 | | | |
| Retained earnings | 24,000 | 11,000 | 8,900 | w1 | 6,500 | 500 | w2 | 27,614 |
| | | | | w3 | 500 | 100 | w3 | |
| | | | | w4 | 986 | 900 | (a) | |
| | | | | w5 | 9,000 | | | |
| | | | | w6 | 800 | | | |
| Other components of equity | - | - | - | | | 2,526 | (b) | 2,526 |
| | <u>43,000</u> | <u>12,000</u> | <u>12,900</u> | | | | | <u>49,140</u> |
| Non-controlling interests | - | - | - | (a) | 4,800 | 3,400 | w1 | 7,360 |
| | | | | | | 986 | w4 | |
| | | | | | | 2,974 | (b) | |
| | | | | | | 4,000 | w5 | |
| | | | | | | 800 | w6 | |
| <i>Non-current liability</i> | | | | | | | | |
| Debenture | - | 2,000 | 1,000 | (a) | 2,000 | | | 1,000 |
| <i>Current liability</i> | | | | | | | | |
| Accounts payable | 4,000 | 1,000 | 4,200 | (a) | 1,000 | | | 8,200 |
| | <u>47,000</u> | <u>15,000</u> | <u>18,100</u> | | | | | <u>65,700</u> |

Answer 1(c) – Alternative

GRL - Consolidated Statement of Financial Position as at 1 April 2011

| | GRL \$'000 | CDS \$'000 | Adjustment | | | | Group \$'000 |
|-------------------------------|---------------|---------------|------------|--------------|--------------|-----|-----------------|
| | | | ref | Dr \$'000 | Cr \$'000 | ref | |
| ASSETS | | | | | | | |
| <i>Non-current assets</i> | | | | | | | |
| Property, plant and equipment | 18,400 | 10,400 | w3 | 100 | 500 | w3 | 28,400 |
| Goodwill | | | w1 | 5,400 | | | 5,400 |
| Investment in AMR | 7,500 | - | | | 7,500 | (a) | - |
| Investments in CDS | 12,000 | - | | | 12,000 | w1 | - |
| Investment in associate | | | (a) | 9,600 | | | 9,600 |
| <i>Current assets</i> | | | | | | | |
| Inventory | 5,900 | 4,200 | w2 | 500 | 500 | w1 | 10,100 |
| Accounts receivable | 2,200 | 1,500 | | | | | 3,700 |
| Cash | 1,000 | 2,000 | (b) | 5,500 | | | 8,500 |
| | <u>47,000</u> | <u>18,100</u> | | | | | <u>65,700</u> |
| Share capital of \$1 each | 19,000 | 4,000 | w1 | 4,000 | | | 19,000 |
| Retained earnings | 24,000 | 8,900 | w1 | 6,500 | 500 | w2 | 27,614 |
| | | | w3 | 500 | 100 | w3 | |
| | | | w4 | 986 | 1,200 | (a) | |
| | | | | | 900 | (a) | |
| Other components of equity | - | - | | | 2,526 | (b) | 2,526 |
| | <u>43,000</u> | <u>12,900</u> | | | | | <u>49,140</u> |
| Non-controlling interests | - | - | | | 3,400 | w1 | 7,360 |
| | | | | | 986 | w4 | |
| | | | | | 2,974 | (b) | |
| <i>Non-current liability</i> | | | | | | | |
| Debenture | - | 1,000 | | | | | 1,000 |
| <i>Current liability</i> | | | | | | | |
| Accounts payable | 4,000 | 4,200 | | | | | 8,200 |
| | <u>47,000</u> | <u>18,100</u> | | | | | <u>65,700</u> |

Goodwill calculations (not required by the question)

| | | Investment in AMR <u>\$'000</u> | | Investment in CDS <u>\$'000</u> |
|--|-------------|---------------------------------------|--------------------|---------------------------------------|
| Purchase consideration | | 7,500 | | 12,000 |
| NCI | (10m x 40%) | <u>4,000</u> | (10m x 34%) | <u>3,400</u> |
| | | 11,500 | | 15,400 |
| Fair value of net identifiable assets | (1m + 9m) | <u>10,000</u> | (4m + 6.5m - 0.5m) | <u>10,000</u> |
| Goodwill | | <u>1,500</u> | | <u>5,400</u> |

Journal entries are not required by the question
(All figures in \$'000)

w1. Elimination of investment in CDS

| | | | |
|----|------------------------------------|--------|--------------------------------|
| Dr | Share capital | 4,000 | |
| Dr | Retained earnings | 6,500 | |
| Dr | Goodwill | 5,400 | |
| | Cr Inventory | 500 | |
| | Cr Investment in CDS | 12,000 | |
| | Cr Non-controlling interests (NCI) | 3,400 | (4,000 + 6,500 - 500) x 34% |

w2. Impairment of inventory (fair value realisation)

| | | | |
|----|----------------------|-----|-----|
| Dr | Inventory | 500 | |
| | Cr Retained earnings | | 500 |

w3. Adjustment of 2010 unrealised profit in plant (downstream)

| | | | |
|----|----------------------|-----|-----------------|
| Dr | Retained earnings | 500 | (2,500 – 2,000) |
| | Cr Plant | | 500 |
| Dr | Acc. Depreciation | 100 | (500 / 5 years) |
| | Cr Retained earnings | | 100 |

w4. Allocation of post-acquisition profit to NCI of CDS

| | | | |
|----|-------------------|-----|----------------------------------|
| Dr | Retained earnings | 986 | (2,400 + inventory 500) x 34% |
| | Cr NCI | | 986 |

If AMR is included in the consolidation worksheet:

w5. Elimination of investment in AMR

| | | | |
|----|----------------------|-------|--------------------------|
| Dr | Share Capital | 1,000 | |
| Dr | Retained earnings | 9,000 | |
| Dr | Goodwill | 1,500 | |
| | Cr Investment in AMR | 7,500 | |
| | Cr NCI | 4,000 | (1,000 + 9,000) X 40% |

w6. Allocation of post-acquisition profit to NCI of AMR

| | | | |
|----|-------------------|-----|---------------------------|
| Dr | Retained earnings | 800 | (11,000 – 9,000) X 40% |
| | Cr NCI | | 800 |

* * * END OF SECTION A * * *

SECTION B – ESSAY / SHORT QUESTIONS (Total: 50 marks)

Answer 2(a)

The lease with UMC is considered as an operating lease for PBL as:

there is no transfer of ownership of those two printing machines nor option to purchase the machines by PBL.

the lease term of four years is not for the major part of the economic life of the machines, i.e. ten years.

the total gross rental over the lease term is $[(\$200,000 \times 12) + (\$210,000 \times 12) + (\$220,000 \times 12) + (\$230,000 \times 12)] = \$10,320,000$. The present value of the above minimum lease payment amounts is not substantively all of the fair value of the leased assets, i.e. $\$24,000,000 [\$12,000,000 \times 2]$.

Alternative:

the total gross rental over the lease term is $[(\$200,000 \times 12) + (\$210,000 \times 12) + (\$220,000 \times 12) + (\$230,000 \times 12)] = \$10,320,000$. Assuming a discount rate of 8 per cent is used, the present value of the above minimum lease payment amounts (calculated based on yearly basis at accrual) is approximately $\$8,507,000$ which is not substantively all of the fair value of the leased assets, i.e. $\$24,000,000 [\$12,000,000 \times 2]$.

Accordingly, risks and rewards incidental to ownership of the machines are not transferred.

The lease payments shall be recognised as an expense on a straight-line basis over the lease term.

Monthly expense recognised = $\$10,320,000 / 48 = \$215,000$.

Answer 2(b)(i)

The statement of chief operating officer of PBL is incorrect.

In assessing whether an item meets the definition of an asset, attention needs to be given to its underlying substance and economic reality and not merely its legal form.

The remaining estimated useful life for the assets is 6 years while the lease term is 5 years, which can be interpreted as the major part of the economic life of the asset.

PBL has an option to buy the machines from EFL at $\$50,000$ at the end of the lease term. With the fair value of the machines having 6-year useful life at $\$18,000,000$ while the estimated remaining useful life after the lease term of 1 year, it is reasonable to consider that the option to purchase the asset is at a price that is expected to be sufficiently lower than fair value at the date the option becomes exercisable and the option will be exercised by PBL.

Together with the lease payment over 5 years, the total gross payment of PBL is \$22,550,000. The present value of this minimum lease payment amount (approximately \$18,010,000 at a discount rate of 8 per cent) is considered substantial of all of the fair value of the leased assets.

The substance and economic reality are that the lessee has not transferred substantially all the risks and rewards incidental to ownership of an asset to the lessor.

The transaction is a means whereby the lessor provides finance to the lessee, with the asset as security and is considered as a sales and leaseback result in a finance lease.

Accordingly, PBL should not de-recognise the assets on the statement of financial position, i.e. should continue to state the carrying amount of property, plant and equipment at \$15,000,000.

Any apparent profit or loss (that is, the difference between the sale price of \$17,000,000 and the previous carrying amount of \$15,000,000) should be deferred and amortised over the lease term, without making any entries.

Alternative:

Accordingly, this is accounted for as a disposal of the original asset with carrying amount of \$15,000,000 and the acquisition of an asset under a finance lease for \$17,000,000.

Any apparent profit or loss (that is, the difference between the sale price of \$17,000,000 and the previous carrying amount of \$15,000,000) should be deferred and amortised over the lease term.

The proceeds received are accounted for as finance lease obligation, i.e. \$17,000,000. The annual lease payment shall be apportioned between the finance charge and the reduction of the outstanding liability. The finance charge shall be allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Answer 2(b)(ii)

If the lease term is shortened to 3 years with an annual future lease payment of \$4,000,000 and without PBL's option to buy the machines from EFL:

The total lease payment would be \$12,000,000, the present value of which would not represent substantial all of the fair value of the leased assets (i.e. \$18,000,000) nor the proceeds received (i.e. \$17,000,000).

PBL will not be able to retain the ownership of the machines nor have an option to purchase the machines at the end of the lease term.

The transaction is considered as a sale and leaseback result in an operating lease and recognised \$4,000,000 rental expense per annum.

As the sale price of \$17,000,000 is below fair value of \$18,000,000, the profit or loss, calculated as the difference between \$17,000,000 and \$15,000,000, shall be recognised immediately in the profit or loss.

Answer 3

YM shall assess at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, SM shall estimate the recoverable amount of the asset.

The closure of the production plant and return of the leasehold land to the government is considered as an indicator of possible impairment of assets for YM, i.e. a significant change with an adverse effect on the entity has taken place in the period or is expected to in the near future with the result that the asset's expected use or useful life will change.

An impairment test of asset, other than inventories in this case, involves comparing the carrying amount of the asset with its recoverable amount.

HKAS 36.2a specified that impairment test of an asset shall not be applied to inventories.

HKAS 2 requires inventories to be measured at the lower of cost and net realisable value. And net realisable value is the estimated selling price of an item of inventory less estimated costs to complete and sell it.

Building and Infrastructure:

Presented as property, plant and equipment as it is to be abandoned, instead of for sale.

Recoverable amount at 31 May 2011 –

Fair value less costs to sell = nil or negative; and

Value in use = the present value of the future cash flows expected to be derived from the operation from June to end of August 2011.

Impairment loss recognised – excess of \$23.8 million over the estimated value in use.

Provision for dismantling – to adjust so that the balance will be accreted to \$3 million by September 2011 (assuming time value of money for the four months from June to September 2011 is ignored, an additional \$1.5 million is recognised).

Production equipment:

Presented as property, plant and equipment as it is not to be disposed by YM

Recoverable amount at 31 May 2011 - \$48 million.

No impairment is recognised as YM can continue to use them in another manufacturing plant.

No provision for relocation and installation cost is recognised as there was not a present obligation at 31 May 2011.

Electricity generator:

Presented as a property, plant and equipment, as YM would continue manufacturing until the end of August 2011 and it is expected that the electricity generator would not be available for immediate sale as at 31 May 2011, and measured at the lower of carrying amount and recoverable amount.

Fair value less costs to sell = \$4 million; and

Value in use = the present value of the future cash flows expected to be derived from the operation from June to end of August 2011.

Assuming the value in use is less than the fair value less costs to sell of \$4 million, the Impairment loss recognised - \$1.2 million (\$5.2 million - \$4 million).

Land under operating lease:

Presented as prepaid lease payment as YM would continue manufacturing and use the land until the end of August 2011 and it is expected that the land would not be available for immediate sale as at 31 May 2011 and measured at the lower of carrying amount and recoverable amount.

Fair value less costs to sell = not less than \$35 million (assuming the costs to sell is minimal); and

Value in use = the present value of the future cash flows expected to be derived from the operation from June to end of August 2011.

No impairment is recognised as the recoverable amount is expected to be greater than the carrying amount of \$13 million.

Inventories – raw material:

Measure at \$8.4 million at 31 May 2011.

As it is expected that all the raw materials will be consumed for the production of tiles and sales at a profit, i.e. the net realisable value is higher than the cost.

Inventories – Finished products:

Measured at \$4.48 million (\$3.2 million + \$1.28 million) at 31 May 2011.

Net realizable value write down - \$1.92 million [\$6.4 million x 50% x 60%].

Answer 4(a)

The financial position of MG as at 31 December 2011

Option 1

The Rights Issue is an equity transaction and will increase MG's net assets by \$1,000 million.

Option 2

The Convertible Bond is a compound financial instrument which contains both a liability and an equity component.

Liability component:

PV of 8 semi-annual interest payments of \$20 million and redemption of \$1,000 million at 31 December 2015 (market interest rate 2.5% per semi-annual) = \$964.15 million.

Shown as non-current liability

Equity component:

\$35.85 million [\$1,000 – 964.15 million] (ignoring the tax effect).

Answer 4(b)

The earnings per share of MG for the year ending 31 December 2012, assuming the estimated profit is \$800 million.

With the Rights Issue, the number of shares of MG used for the computation of EPS will increase to 1,200 million.

The EPS calculated based on an estimated profit of \$800 million will decrease from \$0.8 (\$800/1000) to \$0.67 (\$800/1200) per share.

The CB will not affect the number of shares for the basic EPS calculation, but will decrease the profit for the year 2012 by \$48.31 million [$(\$964.15 \times 2.5\%) + \{(\$964.15 \times 1.025 - \$20) \times 2.5\%$] (ignoring the tax effect).

The basic EPS calculated based on an estimated profit of \$800 million less \$48.31 million incremental interest expenses will decrease from \$0.8 (\$800 / 1000) to \$0.752 $(\$800 - 48.31) / 1000$ per share.

For the diluted EPS calculation, the dilution effect is as if conversion of the CB is considered, i.e. \$48.31 million / incremental 125 million shares = \$0.386.

Answer 4(c)

The disclosure of financial risk under HKFRS 7

HKFRS 7.33 requires MG to disclose the financial instruments'

- (a) exposure to risk and how they arise,
- (b) its objectives, policies and processes for managing the risk and the methods used to measure the risk and
- (c) any changes of (a) and (b) from the previous period.

The CB is at a fixed rate and subject to fair value interest rate risk, an increase / decrease of the market interest rate will increase/decrease the fair value of the CB.

HKFRS 7.39(a) requires the preparation of a maturity analysis for CB that shows the remaining contractual maturities, analysis by time bands showing the contractual undiscounted cash payments and allocated to the earliest period in which MG can be required to pay.

HKFRS 7.39(c) requires MG to describe in the financial statements how the management of MG manages the liquidity risk inherent in the items disclosed in the maturity analysis.

* * * END OF EXAMINATION PAPER * * *