PASS

CHALLENGE EXAM COURSE

2015

TECHNICAL BINDER

INTRODUCTION TO PASS TECHNICAL BINDER

2015 CHALLENGE EXAMS

The PASS Technical Binder is an integral part of the PASS Challenge Exam course. For each competency, it provides a summary of the technical matter for which students are responsible, as well as simulated multiple choice and other objective format questions. The binder is intended to be used in conjunction with the technical lectures offered by PASS.

This binder does not include cases, material for case take-ups or material for the Tax and Assurance Technique sessions. This material is included in a separate case binder.

Content of Technical Binder

The binder includes material which covers all of the 6 competencies listed in the CPA Competency Map. These include:

I Strategy and Governance
II Financial Reporting
III Audit and Assurance
IV Finance
V Management Accounting
VI Taxation

The technical summaries primarily cover those areas that are taught in the lectures. The lectures include most of the material for which students are responsible, with a focus on the more difficult subject areas.

Areas in financial reporting not covered in the lectures include:

1) Technical topics that are covered by CPA Canada through videos

For these topics (listed on the next page) that are covered by CPA Canada, although no lecture will be provided, technical notes along with objective format questions are included in the binder for most of these topics.

2) Topics that students can learn on their own

Due to time limitations it is not possible to cover all of the significant financial reporting topics in class. Therefore for Earnings per Share (EPS) and Employer Future Benefits, detailed notes are provided, but these topics will not be covered in class.

3) Minor financial reporting topics that are easy for students to learn on their own

For minor topics (listed on the 3rd page of the binder), simulated multiple choice questions are provided in the last tab of the binder. As these questions are not reviewed in class, detailed solutions to each question are also provided. After reviewing each of these subject areas, students can use these questions to test their knowledge of the minor accounting topics.

Core 1 and 2 versus Electives

This binder includes all of the technical material necessary for the core 1 and core 2 modules as well as for the electives for both Assurance and Taxation. The material necessary for the electives is not generally broken out separately from that required for the core exams, as there is a lot of overlap between the two sets of exams and in many cases the same topic is required for both sets of exams, with the only difference being that the topic is examinable at a higher level for the elective exam. For all of these "overlap" topics the material is covered at the level required for the elective exams.

Please note that Information and Information Technology (IT) is not a separate competency in the CPA Competency Map. Rather IT topics are incorporated into the various competencies listed above. The IT session for this course will cover the IT elements of the various competencies which include an IT component.

Topics Not Covered in Challenge Exam Lectures

TOPICS COVERED BY CPA CANADA

Financial Accounting

- Business combinations
  - Investments subject to significant influence
  - Consolidations
  - Joint ventures
- Financial instruments
- Financial accounting for not-for-profit organizations
- Foreign currency translation

Taxation

- Capital cost allowance topics
  - Replacement property rules
  - Class 10.1 vehicles
  - Disposition of buildings and land
  - Consideration (Fair Market Value rules)
- Taxes payable by a corporation
  - Components and calculation of corporate taxes payable

Management Accounting

- Management planning and evaluation
- Strategic cost management
- Quality control and quality improvement
- Pricing decisions

Strategy and Governance

- Roles of governance
- Environmental scanning and industry analysis
- Creating, implementing and evaluating strategy

MINOR TOPICS

ASPE

Generally Accepted Accounting Principals (Section 1100)
Unincorporated businesses (Section 1800)
Contractual obligations (Section 3280)
Investment tax credits (Section 3805)
Economic dependence (Section 3841)
Public sector accounting*

IFRS

Operating segments – IFRS 8
Interim financial statements – IAS 34

**Based upon the Competency Map this topic only required at level "C" proficiency.*

HOW TO USE THE CHALLENGE EXAM TECHNICAL BINDER

The lectures will revolve around the binder material. It is therefore important that for the respective topics being covered on a particular day, the lecture material, objective format questions and answers be brought to class. For the case of Miscellaneous Topics (tab 2), Finance (tab 8) and Taxation (tab 10) the same material will be used for more than one session. Please bring all of the Miscellaneous Topics, Finance and Taxation material to each of the sessions.

Please note that on some days there will be Technique Sessions or Case Take-ups instead of a review of technical topics. On those days, please make sure to bring the appropriate material from the Case Binder.

Students may wish to review the material for each topic area before class and given that there is a lot of material to cover, the material will be covered at a fairly brisk pace.

INTRODUCTION TO PASS CHALLENGE EXAM TECHNICAL BINDER

TABLE OF CONTENTS

PASS

CHALLENGE EXAM COURSE

2015

IMPAIRMENT OF ASSETS, DISCONTINUED OPERATIONS & NON-MONETARY TRANSACTIONS

ACCOUNTING TOPICS

1) IMPAIRMENT OF LONG LIVED ASSETS

Under ASPE this topic is covered under Section 3063 *Impairment of Long Lived Assets.* The following summary is based on HB Section 3063.

This topic is covered under international standards under IAS 36 *Impairment of Assets*

As ASPE and IFRS are not identical in this area, any differences between the two GAAPs are noted below.

Scope

ASPE applies primarily to PPE and intangibles with finite lives

Scope broader under IFRS – would also apply to intangibles with indefinite lives, goodwill and investments and even current assets where impairment not dealt with in other standards

Further detail on scope in Appendix I

Recognition and Measurement

Mechanics different under ASPE and IFRS

ASPE

Impairment loss may be present if carrying value is not recoverable

Carrying amount is not recoverable if it exceeds the sum of the undiscounted cash flow expected to result from its use and eventual disposition.

In the event that carrying value is not recoverable, an impairment loss should be measured as the amount by which the carrying amount exceeds the fair value

Estimates of future cash flows used to test recoverability of a long lived asset that is complete or substantially complete are based upon the existing service potential (e.g. output capacity, remaining useful life etc.) at the date of the test.

Estimates of future cash flows used to test recoverability of a long lived asset that is under development are based upon expected service potential when development is substantially complete.

Depending upon the type of asset, fair value can be determined based upon quoted market price (if available), prices for similar items and the results of valuation techniques (e.g. present value technique).

Example:

A company owns a piece of equipment, it uses to manufacture widgets**.** The company plans to use the equipment for 5 years and to sell the equipment at the end of 5 years for $15,000. The equipment is expected to generate annual net cash flows of $18,000.

Carrying value of equipment:	$100,000
FMV of equipment:	90,000

Required: Determine whether an impairment loss should be recognized

Solution

Recoverable amount is equal to ($18,000 X 5) + 15,000 = $105,000

Therefore it is not necessary to recognize an impairment loss.

Differences between IFRS and ASPE

Under IFRS recoverable amount is defined as the higher of:

(a) ***Fair value of asset less costs to sell (i.e. direct, incremental costs), or***
(b) ***Value in use of asset***

Value in use is based upon the present value of the cash flows that will be generated from the continued use of the asset and the ultimate disposal of asset (after deducting disposal costs).

If only possible to determine value in use or fair value, the one that can be determined more reliably would be used as the recoverable amount.

The way in which impairment loss is recognized is also different under IFRS:

If the recoverable amount is below the carrying value, the carrying value would be written down to the recoverable amount (i.e. unlike ASPE not FV).

The discount rate (rates) used to discount back cash flows should reflect the risk of the asset

When to Test for Recoverability

Under ASPE assets would be tested for impairment only when factors indicate that there may be an impairment

Examples:

- Significant change in the extent or manner in which it is being used or its physical condition
- Significant change in legal factors or business climate
- Current period operating or cash flow loss combined with history of operating or cash flow losses
- Projection or forecast that demonstrates continuing losses

Frequency of Testing for Impairment Under IFRS

Assets should be tested for indications of impairment at the end of each reporting period. (note more active ongoing consideration of indicators of impairment, than under ASPE)

Assets would be tested for impairment only when factors indicate that there may be an impairment.

IAS 36 indicates various external and internal indicators of impairment including:

External	***Internal***
Observable indications that value has declined during period more than would be expected as a result of the passage of time or normal use	***Evidence of obsolescence or physical damage of asset.***
Entity's net assets exceed its market capitalization.	***Significant changes in use of asset have taken place or will take place and have adverse effects.***
Significant change in technological, market, economic or legal environment has affected or may adversely affect the entity.	***Internal reports indicate that its performance is or will be worse than expected.***
Increase in market rate of return which has negatively affected the asset's value and recoverable amount.	

Exception to IFRS Rules re frequency of Testing

Intangibles with indefinite lives, intangibles not yet ready for use and goodwill acquired in a business combination, must be tested annually for impairment, even if there are no indications

of impairment. This impairment test may be performed at any time during an annual period, provided it is performed at the same time every year.

An intangible asset with an indefinite life (or not ready for use) that was initially recognized during the current annual period, must be tested for impairment before the end of the current annual period.

Note that ASPE does not require annual testing of intangibles with indefinite lives or goodwill.

Grouping Assets and Liabilities - ASPE

For purposes of recognition and measurement of impairment loss, long lived asset should be grouped with other assets and liabilities to form an asset group, at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.

Asset group may include assets not covered by this section. E.g. inventory, accounts receivable, etc. Carrying amounts of such assets would be evaluated in accordance with their respective handbook sections, prior to testing the asset group for recoverability.

Goodwill is included in the carrying amount of an asset group to be tested for impairment only if the asset group is or includes a reporting unit (see GOODWILL AND INTANGIBLE ASSETS, Section 3064). Goodwill is not included in the carrying amount of a lower-level asset group that includes only part of a reporting unit.

Impairment loss for the group would only be allocated to the long lived assets held for use and not any of the other assets or liabilities in the asset group.

Loss is allocated on a pro rata basis using the relative carrying amounts of the long lived assets.

However, the loss allocated to an individual asset should not reduce the carrying amount of the asset below fair value (whenever the fair value is determinable without undue cost and effort).

Grouping under IFRS

When it is not possible to calculate the recoverable amount for an individual asset (which is often the case), the recoverable amount is calculated for the Cash-Generating unit (CGU) to which it belongs. The CGU would be the smallest identifiable group of assets that generates independent cash inflows (and not outflows)

It would not include CV of liabilities unless the recoverable amount of the cash generating unit can not be determined without consideration of this liability- Note difference with ASPE

e.g. A company sells a mine and there is liability for restoration costs. If the mine is sold the

liability will be transferred to the buyer along with the mine; therefore would take into account the liability not only in calculating the fair value less cost to sell but also in calculating the value in use (i.e. would include in calculation the outflow to settle the liability)

Cash-generating units should be identified consistently from period to period for the same asset or types of assets, unless a change is justified

Allocation of Goodwill to Cash –Generating Units:

For the purpose of impairment testing, unlike ASPE* goodwill acquired in a business combination is allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination

Each unit or group of units to which the goodwill is so allocated would:

(a) Represent the lowest level within the entity at which the goodwill is monitored for internal management purposes; and

(b) Not be larger than an operating segment determined in accordance with IFRS 8 Operating Segments.

(An operating segment is a component of an entity that engages in business activities whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.)

Goodwill sometimes cannot be allocated on a non-arbitrary basis to individual cash-generating units, but only to groups of cash-generating units.

**Note that in contrast to IFRS, under ASPE goodwill which is tested under Section 3064 (rather than the HB section dealing with asset impairment), is allocated to the "reporting units", which are usually a higher level of aggregation than the asset group used to test for impairment – goodwill is only allocated to asset group for impairment testing, if asset group constitutes a reporting unit*

Frequency of Testing CGU when CGU includes Goodwill

A cash-generating unit to which goodwill has been allocated must be tested for impairment annually, and whenever there is an indication that the unit may be impaired (i.e. the rule for testing goodwill at least annually applies to the whole reporting unit to which it has been allocated).

However, the most recent calculation made in a preceding period of the recoverable may be used in the impairment test of that unit in the current period provided all of the following criteria are met:

(a) The assets and liabilities making up the unit have not changed significantly since the most recent recoverable amount calculation;

(b) The most recent recoverable amount calculation resulted in an amount that exceeded the carrying amount of the unit by a substantial margin; and

(c) Based on an analysis of events and circumstances that have changed since the most recent recoverable amount calculation, the likelihood that a current recoverable amount determination would be less than the current carrying amount of the unit is remote

The annual impairment test for a cash-generating unit to which goodwill has been allocated, may be performed at any time during an annual period, provided the test is performed at the same time every year.

However if some or all of the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit must be tested for impairment before the end of the current annual period.

Different cash-generating units may be tested for impairment at different times.

Allocation of Impairment Loss to CGU

Assuming that there is an impairment loss, it is assigned to the CGU as follows:

A. The goodwill assigned to the CGU is reduced (if necessary to 0)
B. Any remaining amount is allocated to each asset of the group of units in the basis of relative carrying amount – similar to ASPE

Example:

A company has the following assets:

Building: CV of $200,000
Equipment: CV of $50,000
Goodwill: CV of 25,000
There is an impairment loss of $50,000.

Goodwill would be written off completely. The remaining $25,000 of the impairment loss would be allocated as follows:

Breakdown of building vs equipment based on carrying value is 80%/20%

Therefore $20,000 (i.e. 80% of $25,000) would be allocated to the building and $5,000 (i.e.

20% of $25,000) would be allocated to the equipment.

Restrictions

No individual asset is however written down below its recoverable amount if determinable (i.e. higher of fair value less cost to sell and value in use) . Also no individual asset is written down below 0)

The amount of the impairment loss that would otherwise have been allocated to the asset in the absence of the above restrictions, shall be allocated pro rata to the other assets of the unit (group of units)

Examples of Allocation of Impairment Loss which would be applicable under IFRS and ASPE

Example 1

Need to allocate impairment loss of $100,000 to the following asset group (which does not include goodwill):

Asset Group	Carrying amount	Pro rata allocation factor	Allocation of impairment loss	Adjusted carrying amount
Building:	$600,000	60%	$(60,000)	$540,000
Equipment	300,000	30%	(30,000)	270,000
Furniture	100,000	10%	(10,000)	90,000
Total	$1,000,000	100%	$(100,000)	$900,000

Please note that in this example there was no goodwill; had there been goodwill, under IFRS the impairment loss would have first been applied to goodwill before any other assets.

Example 2

Same facts as example 1, except that for the building the fair value is determined to be $550,000 (and the value in use is not determinable). There are no incremental costs required to sell the building. For the other assets it is not possible to determine the fair value or value in use. The allocation would be as follows:

Asset Group	Carrying amount	Pro rata allocation factor	Allocation of impairment loss	Adjusted carrying amount
Building:	$600,000	60%	$(50,000)	$550,000
Equipment	300,000	30%	(37,500)	262,500
Furniture	100,000	10%	(12,500)	87,500
Total	$1,000,000	100%	$(100,000)	$900,000

Note that the building was not written down below its fair value; therefore $50,000 rather than $60,000 of the loss was allocated to the building and the remaining 10K was allocated to the equipment and furniture on a pro-rata basis based on CV.

(i.e. The allocation of the impairment loss to the equipment was increased by $7,500 from $30,000 to $37,500 and the allocation to the furniture was increased by $2,500 from $10,000 to $12,500)

Reversal of Impairment Losses

Under ASPE, an impairment loss is not reversed if the fair value subsequently increases.

Reversal of impairment loss under IFRS

Under IFRS at each reporting date the original indicators of impairment are re-assessed to determine whether a previously recognized impairment still exists.

Indications of a potential decrease in an impairment loss mainly mirror the indications of a potential impairment loss (discussed earlier in this document).

If based upon new estimates the recoverable amount has changed, an impairment loss can be reversed.

Recoverable amount may change whether it is based on fair value less costs to sell or value in use);
- if recoverable amount was based on value in use, could change due to a change in the amount or timing of estimated future cash flows or in the discount rate; or
- if recoverable amount was based on fair value less costs to sell, could change due to a change in estimate of the components of fair value less costs to sell.

An asset's value in use may become greater than the asset's carrying amount simply because the present value of future cash inflows increases as they become closer (similar concept to accretion). However, the service potential of the asset has not increased.

An impairment loss is not reversed just because of the passage of time, even if the recoverable amount of the asset becomes higher than its carrying amount, as a reversal of an impairment loss should reflect an increase in the estimated service potential of an asset (which would not be the case here).

For a cash generating unit (CGU), reversals are allocated on a pro rata basis to the assets of the unit based upon carrying amount.

The one exception where reversal of the impairment loss is not allowed, is goodwill.

A reversal of an impairment loss for a cash-generating unit which includes goodwill would be allocated to the assets of the unit, except for goodwill on a pro rata with the carrying amounts of those assets.

For the case of an asset for which the cost model is applied, the maximum reversal (which would be credited to profit and loss) would be equal to the cumulative impairment losses recognized in the past for the asset.

That is, the carrying value would not be increased above the carrying amount that would have been determined if no impairment loss had ever been realized

Disclosure

The following should be disclosed in the period in which an impairment loss is recognized:

1. Description of the impaired long lives asset and the facts/circumstances leading to its impairment;

2. The amount of the loss and the caption on the income statement that includes the loss, if it is not a separate line item

3. The recoverable amount of the asset (cash-generating unit) and whether the recoverable amount of the asset (cash-generating unit) is its fair value less costs of disposal or its value in use

Far more detailed disclosure is required under IFRS

IMPAIRMENT OF LONG LIVED ASSETS – APPENDIX I

Scope of Standard under ASPE

A long lived assets is defined as an asset that does not meet the definition of a current asset.

The section applies to non-monetary long lived assets, including:

- Property, plant and equipment
- Intangible assets with finite useful lives
- Long term pre-paid assets

Examples of areas where this section does not apply include:

- Goodwill and Intangibles with indefinite useful lives
- Long term Investments
- Accrued benefit asset
- Future income taxes

The rules related to valuing these assets are covered in their respective sections.

Scope of Standard under IFRS

IAS 36 has a broader scope and applies to all assets (even some current assets) except for specific assets that are excluded and covered by their own handbook sections.

Exclusions include: inventories, assets arising from construction contracts, employee benefits, deferred tax assets, financial assets covered by IAS 39 "Financial Instruments", non-current assets or disposal group classified as held for sale, investment property and biological assets that are valued based on fair value less cost to sell.

Major difference in Scope between IAS 36 and HB Section 3063

Under IFRS, goodwill and intangible assets with indefinite lives as well as subsidiaries, joint ventures, equity accounted investments and even current assets not classified elsewhere (except inventory) would also be covered under IAS 36 even though they are excluded from HB Section 3063

2. NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

INTRODUCTION

Under ASPE topic is covered under Handbook section 3475 *Disposal of Long Lived Assets and Discontinued Operations*

Topic is covered under international standards under IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*

Presentation is based on IFRS with any significant differences between IFRS and ASPE highlighted

SCOPE

IFRS 5 applies to all recognized non-current assets and disposal groups of an entity except for deferred tax assets, assets arising from employee benefits, financial instruments, biological assets and investment properties accounted for at fair value

Comparison with ASPE

Scope under ASPE is narrower

Section 3475 applies to the disposal of non-monetary long-lived assets, including property, plant and equipment, intangible assets with finite useful lives and long-term prepaid assets and specifically excludes investments and disposal of goodwill

TYPES OF SITUATIONS COVERED BY IFRS 5

IFRS 5 covers 2 situations:

1) Assets held for sale –

   Includes non – current assets or disposal groups* held for sale to third parties

2) Assets held for distribution to owners –

   Includes non-current asset or disposal group* held for distribution to owners acting in their capacity as owners

*Disposal group is a group of assets to be disposed of by sale or otherwise, together or as a group in a single transaction and liabilities directly associated with those assets that will be transferred

in the transaction.

Impact of Classification

Whether item is classified as held for sale or held for distribution impacts 3 issues:

1) Measurement
2) Classification and presentation
3) Disclosure

Comparison with ASPE

ASPE only has the first category – Held for sale

Assets held for distribution to owners would continue to be classified as "held" until they are disposed of

For assets held for sale under ASPE the same 3 issues would be impacted

CONDITIONS FOR CLASSIFICATION AS HELD FOR SALE

Asset/disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets/disposal groups and its sale must be highly probable

Highly probable means more likely than probable, where probable is more likely than not

Conditions for sale to be considered "highly probable"

1. Appropriate level of management must be committed to a plan to sell

2. Active program to locate a buyer and complete the plan must have been initiated

3. Must be actively marketed for sale at price that is reasonable in relation to its current fair value

4. Sale expected to qualify for recognition as a completed sale within one year from the date of classification, except where delay is caused by events or circumstances beyond the control of the entity and the entity is still committed to its plan to sell and

5. Unlikely that significant changes to plan will be made or plan will be withdrawn

The probability of shareholders' approval (if required in the jurisdiction) should be considered as part of the assessment of whether the sale is highly probable

Comparison with ASPE

Similar conditions need to be fulfilled

CONDITIONS FOR CLASSIFICATION AS HELD FOR DISTRIBUTION TO OWNERS

Conditions similar to conditions for held for sale, with modification to take into account distribution to owners rather than sale

Asset/disposal group must be available for immediate distribution in their present condition and the distribution must be highly probable

For the distribution to be highly probable, actions to complete the distribution

1) Must have been initiated and should be expected to be completed within one year from the date of classification; and
2) Should indicate that it is unlikely that significant changes to the distribution will be made or that the distribution will be withdrawn.

The probability of shareholders' approval (if required in the jurisdiction) should be considered as part of the assessment of whether the sale is highly probable, similar to the case of assets held for sale

Comparison with ASPE

N/A as this classification does not exist under ASPE

MEASUREMENT

IFRS requires that an entity measure a non-current asset (or disposal group) held for sale at the lower of:

1. Carrying value
2. Fair value less cost to sell

Depreciation would no longer be taken

Cost to sell are the incremental direct costs to transact a sale (e.g. broker commissions, legal and title transfer fees and closing costs etc.) but excludes finance costs and income taxes

Same rules for measurement under ASPE

Under IFRS same measurement rules would apply for assets held for distribution to owners

Would measure at lower of its carrying amount and fair value less incremental costs to distribute (i.e. incremental costs attributable to distribution excluding finance costs and income taxes)

GAINS AND LOSSES

When an asset/disposal group is written down to fair value less cost to sell, loss would be recognized

Same under ASPE

If fair value less cost to sell subsequently increases, would write up asset and recognize gain; however the gain cannot exceed the cumulative impairment loss recognized under this IFRS (i.e. IFRS 5) since asset was classified as "Held for Sale" plus the impairment loss taken under IAS 36 "Impairment of Assets" while the asset was still classified as held (if relevant)

Example

E.g. At the end of the first quarter of the year, carrying value of land is $1,000,000 and land was classified as Held (as opposed to held for sale).

Company uses the cost model to value the land

Asset was not recoverable, so it was written down under IFRS 36 *Impairment of Assets* to recoverable amount of $950,000 and impairment loss of $50,000 was recognized in the first quarter

At end of the second quarter land was reclassified as held for sale and fair value less cost to sell was $875,000. Land therefore written down under IFRS 5 to $875,000 and a loss of $75,000 was recognized in the second quarter

By the end of the third quarter fair value (less costs to sell) of land had increased to $1,050,000

Gain of $125,000 would be recognized during the third quarter, and as at the end of the third quarter, land would be valued at $1,000,000

Comparison with ASPE

Under ASPE also possible to recognize gain when fair value less cost to sell subsequently increases; however maximum increase would be based on the cumulative impairment loss taken under HB Section 3475 (which deals with assets held for sale) only

No reversal of impairments under HB section 3063 "Impairment of Long Lived assets" (the equivalent to IAS 36 under IFRS)

In above example, gain recognized in third quarter would be $75,000 (i.e. a reversal of the loss recognized once the asset was classified as held for sale)

NON-CURRENT ASSETS THAT ARE TO BE ABANDONED

Entity would **not** classify as held for sale a non-current asset (or disposal group) that is to be abandoned as carrying amount will be recovered principally through continuing use

ASPE provides similar guidance

- ***Under ASPE a long lived asset (or disposal group) to be disposed of other than by sale should continue to be classified as held until they are disposed of (i.e. it is not re-classified)***
- ***ASPE specifically notes that it may be necessary to revise depreciation if asset will be abandoned before the end of its previously estimated useful life***

CHANGES TO PLAN OF SALE

When an asset or disposal group no longer meets the conditions to be re-classified as held for would be removed from the held for sale category and re-measured at lower of:

A) Carrying value had asset not been classified as held for sale (adjusted for amortization or revaluations that would have been recognized had the asset not been classified as held for sale) and

B) Recoverable amount (i.e. higher of fair value less cost to sell and value in use) at the date of decision not to sell

ASPE is similar to IFRS except that under condition B, fair value rather than recoverable amount is used

SUBSIDIARY

Under IFRS, entity committed to a sale plan involving loss of control of a subsidiary would classify all the assets and liabilities of that subsidiary as held for sale when the criteria for reclassification as held for sale (discussed below) are met, regardless of whether the entity will retain a non-controlling interest in its former subsidiary after the sale

CLASSIFICATION OF NON-CURRRENT ASSET OR DISPOSAL GROUP IN FINANCIAL STATEMENTS

Would present a non-current asset/disposal group/liabilities classified as held for sale separately from other assets/liabilities in the statement of financial position

Assets and liabilities of a disposal group can not be offset and presented as a single amount

The major classes of assets and liabilities classified as held for sale must be separately disclosed either in the statement of financial position or in the notes

Similar to *ASPE except for point re: disclosure of separate classes of assets and liabilities – which is not required under ASPE*

Must present separately any cumulative income or expense recognized in OCI relating to an asset classified as held for sale (only relevant under IFRS as OCI does not exist under ASPE)

Under IFRS, no mention of whether to classify asset (disposal group) classified as held for sale as current versus non current

Comparison with ASPE

Under ASPE, Long-lived assets classified as held for sale reclassified as current assets if entity has sold assets prior to date of completion of the financial statements and proceeds of sale will be realized within a year of the date of the balance sheet, or within the normal operating cycle if longer

If the assets classified as current, any liabilities to be assumed by the purchaser or required to be discharged on disposal of the assets also classified as current

ASSETS (DISPOSAL GROUP) ACQUIRED WITH A VIEW TO SUBSEQUENT DISPOSAL

Would classify as held for sale at the acquisition date only if the one-year requirement (discussed above) is met and highly probable that any of the other criteria for classification as held for sale (discussed earlier) that are not met at the acquisition date will be met within a short period

following the acquisition (usually within three months)

Similar rule under ASPE

Measurement at date of acquisition would be at the lower of carrying value had asset not been classified as held for sale (e.g. cost) and fair value less cost to sell

Under ASPE would always measure at date of acquisition based on fair value less costs to sell

DISCLOSURE RE: NON-CURRRENT ASSET OR DISPOSAL GROUP IN FINANCIAL STATEMENTS

Required to disclose the following information in the notes in the period in which a non-current asset (or disposal group) has been either classified as held for sale or sold:

(a) a description of the non-current asset (or disposal group);
(b) a description of the facts and circumstances of the sale, or leading to the expected disposal, and the expected manner and timing of that disposal;
(c) the loss recognized when asset written down to fair value less cost to sell or the gain for any subsequent increase in fair value less costs to sell
(d) if applicable, the reportable segment in which the non-current asset (or disposal group) is presented in accordance with IFRS **8** *Operating Segments*.

Comparison with ASPE

Would disclose the following information in the period in which a long-lived asset (or disposal group) either has been sold or is classified as held for sale:

(a) a description of the facts and circumstances leading to the disposal or expected disposal;
(b) the loss recognized when asset written down to fair value less cost to sell or the gain for any subsequent increase in fair value less costs to sell

NOTE THAT THERE IS LESS DISCLOSURE UNDER ASPE

PRESENTATION OF DISCONTINUED OPERATIONS

Conditions for Treatment as Discontinued Operation

Results of operations should be reported in discontinued operations if:

1. They relate to a "component" of an enterprise

   Component comprises operations and cash flows that can be clearly distinguished operationally and for financial-reporting purposes from the rest of the enterprise

Would have been a cash-generating unit or a group of cash-generating units while being held for use

2. The operation has either been disposed of or is classified as "held for sale"

And

One of the following conditions is met for the component:

(a) Represents a separate major line of business or geographical area of operations

(b) Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations or

(c) Is a subsidiary acquired exclusively with a view to resale

Comparison with ASPE

Under ASPE the definition of discontinued operation is now the same as under IFRS

ALLOCATION OF CORPORATE OVERHEAD

Would only include in income/loss from discontinued operations costs that are clearly identifiable as costs of the component being disposed of and that will not be recognized on an ongoing basis

ASPE provides similar guidance; it states explicitly that corporate overhead may not be allocated to a discontinued operation

PRESENTATION AND DISCLOSURE

Under IFRS there is significant disclosure required including:

(a) a single amount in the statement of comprehensive income comprising the total of:
   (i) the post-tax profit or loss of discontinued operations and
   (ii) the post-tax gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation.

(b) an analysis of the single amount in (a) into:
   (i) the revenue, expenses and pre-tax profit or loss of discontinued operations;
   (ii) the related income tax expense;

(iii) the gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and

The analysis may be presented in the notes or in the statement of comprehensive income.

(c) the net cash flows attributable to the operating, investing and financing activities of discontinued operations. (may be presented either in the notes or in the financial statements)

(d) the amount of income from continuing operations and from discontinued operations attributable to owners of the parent. (would be applicable with consolidated financial statements of non 100% owned subsidiary - may be presented either in the notes or in the statement of comprehensive income)

If an entity presents the components of profit or loss in a separate income statement (which is not required under IAS 1), a section identified as relating to discontinued operations is presented in that separate statement

Would be required re-present the above disclosures for prior periods presented in the financial statements

Comparison with ASPE

Less disclosure under ASPE

Disclosure is as follows:

The results of discontinued operations, less applicable income taxes, must be reported as a separate element of income for both current and prior periods

Would also need to disclose amounts of revenue and pretax profit or loss reported in discontinued operations

Similar to IFRS, any loss on write down to fair value (or gain due to subsequent increase in fair value) would be included in the results of discontinued operations.

No need to provide all of the detail outlined above for IFRS; for example no need to disclose cash flows from discontinued operations

3) NON-MONETARY TRANSACTIONS

Introduction

Under ASPE, non-monetary transactions is covered under Section 3831 *Non- Monetary Transactions*

Under IFRS there is no specific standard on non-monetary transactions; it however comes up in a number of standards including

IAS 16 *Property, Plant and Equipment*

IAS 18 *Revenue.*

IAS 40 *Investment Properties*

IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance,*

IAS 38 *Intangibles and in SIC 31 which deals with barter transactions involving advertising*.

The summary below is based on section 3831; any differences between 3831 and IFRS are highlighted

DEFINITIONS*

Monetary assets and liabilities.

Money or claims to future cash flows, that are fixed or determinable in amounts and timing by contract or other arrangement.

Non-Monetary Assets and Liabilities

Assets and liabilities that are not monetary.

Non-Monetary Transactions

Includes:

Non -Monetary Exchanges
Exchange of Non-Monetary items for other Non-Monetary items with little or no monetary consideration involved.
i.e. Some amount of cash involved in transaction does not necessarily indicate monetary transaction.

Non-Monetary Non-Reciprocal Transfers
Transfers of Non-Monetary items without consideration

Would include for example:
- Donations of non -monetary asset or service
- Payment of dividend in kind
- Stock dividend (when the shareholder has option of receiving cash or shares)
- Distribution of assets to owners in liquidation of all or part of business

* The above definitions are based on section 3831

Non-Monetary Transactions - General Rules

If both the item given up and received can be reliably determined, the fair value of the item given up should be used to measure the asset received.

If the value of the asset given up can not be reliably measured and the value of the asset received can be reliably measured, the exchange should be measured based upon the value of the asset received.

Under IFRS the rule is generally the same except under IAS 18 Revenue; under this IAS revenue is measured at the fair value of the goods or services received, when both the goods given up and received can be measured equally reliably

***In all other IFRS standards in which non-monetary transactions is dealt with, similar to ASPE if both the value of the asset given up and received* can be measured equally reliably, the fair value of the asset given up is used**

Example of Accounting for Non Monetary Transaction Using Fair Value

Company A provides 10 computers to Company B in exchange for 10 desks. The fair values of the computers and desks can be reliably determined. The carrying values and fair values of the assets are as follows:

	Carrying Value	Fair value
Computers	$6,000	$9,800
Desks	$5,000	$10,000

The entries are as follows:

Company A

Dr. Desks	$9,800	
Cr. Computers		$6,000
Cr. Gain		$3,800

Company B

Dr. Computers	$10,000	
Cr. Desks		$5,000
Cr. Gain		$5,000

IFRS

Under IAS 18, the fair value of the item received would be used to value the transaction. Therefore the entries would be as follows:

Company A

Dr. Desks	**$10,000**	
Cr. Computers		**$6,000**
Cr. Gain		**$4,000**

Company B

Dr. Computers	**$9,800**	
Cr. Desks		**$5,000**
Cr. Gain		**$4,800**

For non-monetary transactions involving the acquisition of property, plant and equipment, investment properties (i.e. properties purchased for rental income or capital appreciation) and intangibles, the rules would be similar to ASPE and if it is possible to measure reliably the fair value of the asset given up and received, the fair value of the asset given would be used.

Exceptions to use of Fair Value

(a) The transaction lacks commercial substance (see definition below); or

(b) The transaction is an exchange of a product or property held for sale in the ordinary course of business for a product or property to be sold in the same line of business to facilitate sales to customers other than the parties to the exchange; or

Example: Company A and Company B sell widgets. Company A has an offer for 10 red widgets, but only has blue widgets in stock. Company A therefore exchanges 10 blue widgets for 10 red widgets.

(c) Neither the fair value of the asset received nor the fair value of the asset given up is reliably measurable; or

(d) The transaction is a non-monetary non-reciprocal transfer that represents a spin off or other form of restructuring or liquidation.

Under IFRS, similar to ASPE, fair value would not be used in conditions (a) and (c).

While condition (b) is not mentioned under IFRS, in IAS 18 (the standard on revenue)

there is a similar condition under which revenue (and hence profit) is not recognized, which would lead to a similar result to condition (b).

The IAS states that when goods or services are exchanged or swapped for goods or services which are of a <u>similar nature and value</u>, the exchange is not regarded as a transaction which generates revenue.

This is often the case with commodities like oil or milk where suppliers exchange or swap inventories in various locations to fulfill demand on a timely basis in a particular location.

<u>Commercial Substance</u>

A transaction has commercial substance if it causes an identifiable and measurable change in the economic circumstances of the entity.

More specifically, commercial substance exists when the entity's future cash flows are expected to change significantly as a result of a transaction.

This will occur when:

(A) The risk, timing **or** amount of the cash flows, of the asset received (referred to as the "configuration"), differs significantly from the configuration of the cash flows of the asset given up

Example: A company exchanges computer equipment for trucks

or

(B) The present value of the cash flows from the continuing use and disposal at the end of its life (referred to as the "entity specific value") differs from the entity specific value of the asset given up and the difference is significant relative to the fair value of the assets exchanged

Example: A company owns an apartment building in Toronto. They exchange that building for an apartment building in Montreal that is next store to an apartment building the company already owns. The company's plan following the exchange is to use the same management and maintenance staff for both buildings in Montreal leading to synergistic cost savings. Condition B above, would be met if the present value of the cost savings is significant relative to the fair value of the buildings exchanged.

Under IFRS the concept of "entity specific value" also comes up and is defined in a similar way to ASPE; however IFRS explicitly states that the cash flows must be <u>after tax</u>

Accounting Treatment when Fair value is not Used (i.e Exception a - d above):

1. No Partial Monetary Consideration

   Assuming no monetary consideration, exchange is recorded at carrying value of assets or service given up and no gain or loss is normally recognized.

2. Partial Monetary Consideration

   A. Entity Paying Consideration

      Records Non-Monetary item received at carrying value of item given up plus monetary consideration paid. No gain is normally recognized.

   B. Entity Receiving Consideration

      Records Non-Monetary item received at carrying value of asset given up less monetary consideration received, unless monetary consideration exceed carrying value in which case gain is recorded for excess.

Examples of Accounting Treatment when Fair Value is Not Used

Scenario 1: No Monetary Consideration

Company A provides 10 computers to Company B in exchange for 10 desks. The desks and computers are very old and their fair values can not be reliably determined. The carrying values are as follows:

	Carrying value
Computers	$6,000
Desks	$5,000

The entries are as follows:

Company A

Dr. Desks $6,000
  Cr. Computers $6,000

(Note: no gain is recognized)

Company B

Dr. Computers $5,000
  Cr. Desks $5,000

(Note: no gain is recognized)

Scenario 2: Partial Monetary Consideration

Company A gives Company B 10 computers plus $200 cash in exchange for 10 desks. The desks and computers are very old and their fair values can not be reliably determined. The carrying values are as follows (same as last example):

	Carrying value
Computers	$6,000
Desks	$5,000

The entries are as follows:

Company A

Dr. Desks $6,200 ($6,000 + $200)
  Cr. Computers $6,000
  Cr. Cash $200
(Note: no gain is recognized)

Company B

Dr. Computers $4,800 ($5,000 - $200)
Dr. Cash $200
  Cr. Desks $5,000
(Note: no gain is recognized)

Treatment is similar under IFRS

Restructuring or Liquidation

Non-Monetary Non-Reciprocal transfer to owners that represents spin-off or other form of restructuring or liquidation should be recorded at carrying value of items transferred.

e.g. - Entity distributes operating division to owners.
- Parent company distributes shares of subsidiary directly to shareholders.

Under IFRS there is an Interpretation IFRIC 17 which deals with the distribution of non-cash assets to owners. See summary of IFRIC in Appendix 1

Government Grants

A government grant may take the form of a transfer of a **non-monetary** asset, such as land or other resources, for the use of the entity.

The CICA Handbook Section on Governance assistance (Section 3800) does not address this situation; it is however assumed that the grant and the asset would be valued at fair value

IFRS 20 *Accounting for Government Grants and Disclosure* does address this issue and offers two alternatives:

(1) Record both asset and grant at fair value
(2) Record both asset and grant at a nominal amount

Presentation and Disclosure

Section 3831 requires the following disclosure relating to non-monetary transactions:

(i) nature
(ii) basis of measurement
(iii) amount and
(iv) related gains and losses.

IFRS - SIC INTERPRETATION 31

REVENUE—BARTER TRANSACTIONS INVOLVING ADVERTISING SERVICES

An entity (Seller) may enter into a barter transaction to provide advertising services in exchange for receiving dissimilar advertising services from its customer (Customer)

In some cases, no cash or other consideration is exchanged between the entities. In some other cases, equal or approximately equal amounts of cash or other consideration are also exchanged

Under IAS 18 ("Revenue Recognition"), a seller that provides advertising services in the course of its ordinary activities recognizes revenue from a barter transaction involving dissimilar services only if revenue can be measured reliably

ISSUE

Under what circumstances can a seller reliably measure revenue at the fair value of advertising services received or provided in a barter transaction?

CONSENSUS

Revenue from a barter transaction involving advertising cannot be measured reliably at the fair value of advertising services received (contrary to the normal measurement of barter transactions)

A seller can however reliably measure revenue at the fair value of the advertising services it provides in a barter transaction, by reference only **to non-barter transactions** that:

(a) involve advertising similar to the advertising in the barter transaction;
(b) occur frequently;
(c) represent a predominant number of transactions and amount when compared to all transactions to provide advertising that is similar to the advertising in the barter transaction;
(d) involve cash and/or another form of consideration (e.g. marketable securities, non-monetary assets, and other services) that has a reliably measurable fair value; and
(e) do not involve the same counterparty as in the barter transaction.

There is no specific guidance in Canada, with regard to barter transaction to provide advertising services in exchange for receiving dissimilar advertising services from the customer

APPENDIX 1

IFRIC INTERPRETATION 17

DISTRIBUTION OF NON-CASH ASSETS TO OWNERS

This Interpretation applies to the following types of non-reciprocal distributions of assets by an entity to its owners acting in their capacity as owners:

(a) Distributions of non-cash assets e.g. items of property, plant and equipment, or ownership interests in another entity or disposal groups (as defined in IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*); and

(b) Distributions that give owners a choice of receiving either non-cash assets or a cash alternative.

Issues

When an entity declares a distribution and has an obligation to distribute the assets concerned to its owners, it must recognise a liability for the dividend payable

This Interpretation addresses the following issues:

I When should the entity recognise the dividend payable?

II How should an entity measure the dividend payable?

III When an entity settles the dividend payable, how should it account for any difference between the carrying amount of the assets distributed and the carrying amount of the dividend payable?

Consensus

I The liability to pay a dividend shall be recognised when the dividend is appropriately authorised and is no longer at the discretion of the entity, which is the date:

(a) When declaration of the dividend, e.g. by management or the board of directors, is approved by the relevant authority, e.g. the shareholders, if the jurisdiction requires such approval, or
(b) When the dividend is declared, e.g. by management or the board of directors, if the jurisdiction does not require further approval

II An entity would measure the liability to pay dividends at the fair value of the assets to be distributed

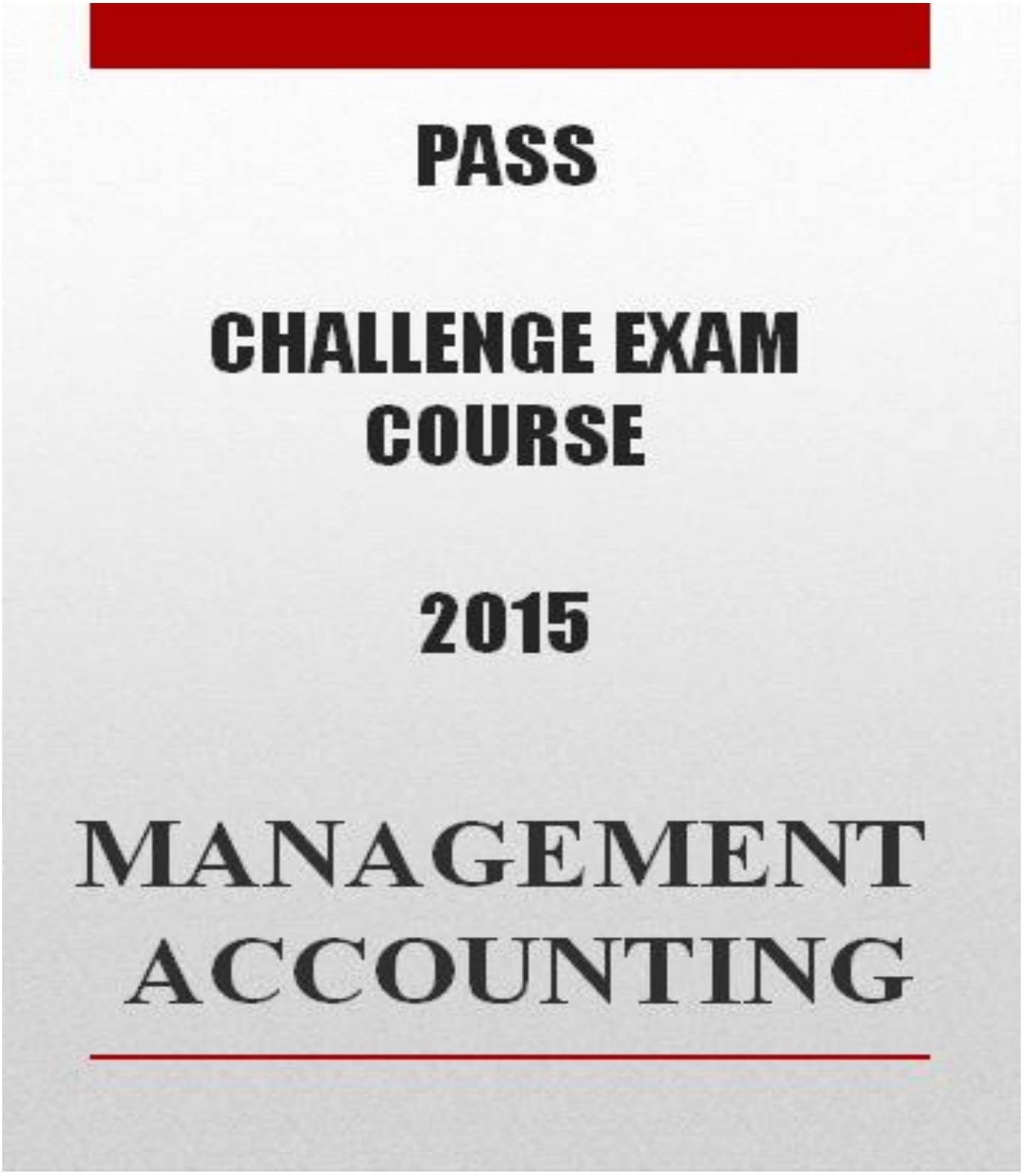
If an entity gives its owners a choice of receiving either a non-cash asset or a cash alternative, the entity would estimate the dividend payable by considering both the fair value of each alternative and the associated probability of owners selecting each alternative

At the end of each reporting period and at the date of settlement, the entity must review and adjust the carrying amount of the dividend payable, with any changes in the carrying amount of the dividend payable recognised in equity as adjustments to the amount of the distribution

III When an entity settles the dividend payable, it would recognise the difference, if any, between the carrying amounts of the assets distributed and the carrying amount of the dividend payable in profit or loss

It should be noted that under ASPE, dividends paid in kind would generally be measured at carrying value and therefore if the fair value exceeds the carrying value, no gain would be recognized in income as under IFRS

If a company spins off assets to the owners and the fair value is below the carrying value, an impairment loss would be recognized


PASS
CHALLENGE EXAM
COURSE
2015
MANAGEMENT
ACCOUNTING

MANAGEMENT ACCOUNTING AND NON-FINANCIAL INFORMATION

TOPICS COVERED IN THIS SESSION INCLUDE:

1. BUDGETS
2. STANDARD COSTING AND VARIANCES
3. MANAGEMENT CONTROL SYSTEMS
4. TRANSFER PRICING
5. COST MANAGEMENT
6. MEASURING NON-FINANCIAL PERFORMANCE
7. JOB ORDER, PROCESS COSTING AND OTHER COSTING METHODS
8. ACTIVITY BASED COSTING SYSTEMS
9. ALLOCATION OF SUPPORT DEPARTMENT COSTS
10. VARIABLE VERSUS ABSORPTION COSTING
11. CONTRIBUTION MARGIN ANALYSIS
12. QUALITY MANAGEMENT TOOLS
13. SUPPLY CHAIN MANAGEMENT

NOTE

THE INFORMATION AND INFORMATION TECHNOLOGY COMPONENT OF THIS COMPTETENCY IS COVERED IN THE INFORMATION AND INFORMATION TECHNOLOGY SECTION OF THE BINDER.

6. MEASURING NON FINANCIAL PERFORMANCE

Making corporate decisions and managing an entity based solely on financial indicators is not effective as:

1. Not every aspect of corporate activity can be expressed in terms of money.

2. If managers strive for excellence in their own aspects of the business, which may not be financial (e.g. manager of engineering), the bottom line will take care of itself.

3. Financial measures do not drive value; such non financial variables like customer and employee satisfaction, innovation and quality etc. drive value. Financial data can not capture these intangible "assets".

4. There is often a closer link between non financial measures and long term strategic objectives than between financial data and long term strategic objective

   e.g. measuring a division's performance based on annual ROI may hinder achievement of a strategic objective such as being superior to other companies in the industry in terms of technological development.

5. Non financial indicators may be better indicators of future financial performance.
   i.e. current financial measures may not capture long term benefits from decisions made now.
   For example, money is invested to improve customer satisfaction by improving the quality of the customer service department.

6. Non financial measures tend to be less susceptible to changes in performance measures that are beyond the control of the manager or organization (e.g. a change in economy etc.)

Disadvantage of non financial measures include:

1. Time and cost to track non financial indicators can be great - must be considered relative to benefits

2. There is no common denominator with regard to non financial indicators; therefore, difficult to aggregate them to measure overall performance.
   (Therefore some companies will rate different measures based on strategic importance and then evaluate overall performance based on a weighted average measure)

3. Non financial measures may lack statistical reliability (e.g. measuring customer satisfaction based on survey with few questions and few respondents)

Non financial indicators relate to items such as:

1. Manufacturing and Production

   Examples of indicators:
   - Indicators deriving from time and motion studies
   - Production line repair record
   - Ability to change the manufacturing schedule when marketing plans change
   - Measurement of scrap
   - Actual failure rates versus target failure rates/failure rates as a % of units shipped
   - % of total requests supplied in time
   - Etc.

2. Sales Delivery and Service

   Examples of indicators:
   - Shipments versus first request dates
   - Average number of days shipments late
   - Response time between enquiry and first visit

· Sales and marketing

   Examples of indicators:
   - complaints re: e.g. manuals, packaging
   - Customers satisfaction analysis
   - Check on unsuccessful visit reports
   - Monitoring of enquiries versus orders (i.e. "Strike rate")
   - Matching sales orders against sales shipments - trend from mismatch
   - Backlog of orders analysis
   - Share of market against competitors
   - Time to turn around repairs
   - Delays in delivering to customers
   - New product/service launch

3. Human resources

   Examples of indicators:
   - head count control
   - Workload activity analysis
   - Labour turnover vs. economy or industry
   - Staff morale
   - Cost of recruitment
   - Number of applicants per advertisement

4. Research and developments

Examples of indicators:

Evaluation of R & D versus objectives, strategic objectives and project objectives
R & D technical milestones
Failure rates of prototypes
Manufacturing releases
Development of patents

Selection of performance measures which are appropriate for a given company should be made in light of the company's strategic intentions.

Example: If technical leadership and product innovation are a key source of a manufacturing company' competitive edge, performance should be measured in this area relative to competitors.

A service company which wishes to differentiate itself relative to competitors based on quality of service, then one important area to measure will be level of quality achieved.

These strategic intentions should in turn be consistent with what drives the company's value.

Development of non-financial measures should continually be reassessed as strategies and competitive environments evolve.

Balanced Score Cards

Balanced score card provides senior management with a comprehensive framework which translates a company's vision and strategy into action through a coherent set of objectives and performance measures.

Balanced score card ties each question that represents a corporate objective to an outcome measurement that provides the data to monitor the achievement of the desired objective.

In turn each outcome measurement is associated with a measurement of a supporting process, a "driver" that enables the achievement of the corporate objective.

i.e. there is a cause and effect relationship of outcomes and drivers.

Example for a medical facility:

Objective: Achieve profitable growth by reducing costs.
One way to reduce costs is to reduce length of stay (LOS) rates in a responsible way.

Need to associate the LOS outcome measurement with a performance driver measurement that indicates how the LOS outcome is to be achieved. e.g. performance driver measure may be percentage of admissions to medical facility in compliance with the facility's policies.

The objectives and performance measures are organized into four different perspectives:

1. Financial: Need to set goals e.g. emphasize revenue and market growth, profitability or cash flow generation etc. Profitability would be measured by operating income, ROI economic value added, generation of cash flows etc.

   Financial measures indicate whether a company's strategy, implementation, and execution are contributing to bottom line improvement.

2. Customer: Need to be explicit re: customer and market segment in which company will compete and to devise measures of the of the business unit's performance in the targeted segments

   Should include:

   Core-outcome measures - e.g. customer satisfaction, customer retention, new customer acquisition, account share in targeted segments include; and

   Drivers of core customer outcomes, which represents those factors that are critical for customers to switch or remain loyal to their supplier. e.g. short lead times, on-time delivery, constant stream of innovative products etc.

   Customer perspective enables managers to articulate the customer and market based strategy that will deliver superior financial returns.

3. Internal business process: Consider processes that are most critical for achieving breakthrough performance for customers and delivering excellent financial returns to shareholders.

   May lead to new internal processes rather than simply improving on existing processes.
   e.g. Company may realize that it must develop a process to anticipate customer needs or deliver new services that target customer values.

4. Learning and growth: Financial , customer and internal business process objectives may reveal large gaps between the existing capabilities of people, systems and procedures and what is required fro breakthrough performance.

To close the gap, may be necessary to invest in re-skilling employees in information technology and systems and in enhanced organizational procedures and routines.

Employee based measures would include mixture of generic outcome measures (e.g. employee satisfaction, skills etc) and specific drivers of the generic measures, such as detailed specific indexes of the particular skills required for the new competitive environment.

The above perspectives interact as follows:

- Enterprise first establishes financial and customer objectives.
- It then identifies the objective and measure for its internal business process (e.g. our lead time will be so long).
- Final linkage to learning and growth objectives, reveals the rationale for significant investment in re-skilling employees, in information technology and systems, and in enhanced organizational procedure.

Measures on scorecard are used to articulate the strategy of the business, communicate the strategy and help align individual, organizational and cross departmental initiatives to achieve a common goal.

The scorecard is not a controlling system intended to keep individuals and organizational units in compliance with a pre-established plan; it should be used as a communication, informing and learning system.

The balanced score card retains financial measurement as a critical summary of performance but highlights a more general and integrated set of measurements that link current customer, internal processes and employee and system performance to long term financial success.

Balanced scorecard is not simply a measurement system but a central organizing framework for a management process.

Scorecard retains financial measurement as critical summary of managerial performance.

7. JOB ORDER, PROCESS COSTING AND OTHER COSTING METHODS

Job Order

- Used in manufacturing process that produces a variety of products, one product at a time, in batches
- When one batch is completed, another product is produced in a different batch and the process moves from batch to batch (The batch is the focus of the system)
- Examples of organizations: Construction, furniture manufacturing, printing, service organizations
- Objective - To determine the manufacturing cost per unit of finished product
- A company can use both job order and process costing for different product lines
- The nature of the business usually determines if it makes more sense to use job order costing vs. process costing

How it Works

- A job order cost sheet accumulates the manufacturing costs associated with a particular job
- The manufacturing costs flow through the manufacturing accounts, i.e. a separate inventory is maintained for raw materials, direct materials and direct labour are accumulated in the work-in-process account etc.
- Each individual job is assigned a production cost
- The job order cost sheet accumulates the costs associated with that particular job
- In accumulating the costs, the raw materials are transferred from the raw materials inventory account to the work-in-process inventory. Labour and factor overhead are also allocated to work-in-process
- Manufacturing overhead would be accumulated and then assigned to WIP using a pre-determined overhead rate
- Manufacturing overhead would include the various costs of operating the plant other than direct materials and labour

Example of Assignment of Manufacturing Overhead:

Say for the coming year estimated overhead is $100,000 and overhead is being applied based on machine hours which are estimated to be 10,000 hours. Pre-determined overhead per machine hour is $10.

Therefore if a particular job requires 1,500 machine hours, $15,000 of overhead would be applied to that job.

At year end any under or over applied overhead would either:

(i) Be closed out to cost of sales
(ii) Allocated between WIP, Finished goods and cost of goods sold(in proportion to the overhead applied during the current period in ending balances for any of these accounts)
(iii) Carried forward to next period

· The total of materials, labour and overhead are totaled and combined to come up with the total job cost

· At the completion of the job, the finished output is transferred from WIP to finished goods

i.e. Dr. Finished Goods and Cr. WIP

Note to students:

The above was a high level summary of how to accumulate costs when using job order costing and will be a sufficient review for students who are very familiar with this topic. If students do not feel completely comfortable they may wish to consult a management accounting text book to see a detailed numerical example, as this topic could be tested numerically.

Process Costing

· Process costing is a method for averaging costs over a number of homogeneous or similar units

· Industries are characterized by the continuous mass production of similar finished units Examples of organizations - oil, canning, steel, rubber, chemical, textile, glass, cement, paint, shoes, electronics, food processing etc.

· Each unit of output receives the same unit of input of materials, labour and overhead, as any other unit

Characteristics of Process Costing and How it Works

- In job order costing, the manufacturing costs identified with specific units of production. In process costing, this is not realistic because of the large number of units involved

- Instead, each product typically passes through a series of production steps called "processes" or "departments"

- The first phase is to assign costs to these processes or departments

- Next, the total cost assigned is divided by a measure of the total productive effort expended in that process or department. This results in an average per unit cost of production, which is applied to inventory quantities to derive total inventory costs

- Major difference between job order costing and process costing:

  – In job order costing, manufacturing costs are identified with one or a few units comprising a "job", but with process costing, manufacturing costs are first identified with a process or department and then averaged over the total productive effort of that process or department and then averaged over the total productive effort of that process or department. Using these averages, costs are then assigned to inventory

- Accounting focus is centred on processes or departments

- In a process costing system, all product flows must be identified, because inventory cost flows, track the product flows

5 basic steps in process costing – weighted average method

1) Account for the physical flow of units processed during the period, and determine the percentage completion of work-in -process inventory at the end of the period

2) Determine the total costs for which an accounting must be made

3) Compute the work effort of the department for the period in terms of equivalent units of production

4) Compute costs per equivalent unit of production

5) Compute total costs for (a) work completed and transferred out of the department during the period and (b) work-in-process inventory at the end of the period

Applying the 5 steps:

1) Trace the physical flow of production
Opening goods + started units = finished units + closing goods in the process

2) Convert the physical flow of goods into equivalent units of production

3) Summarize total costs to be accounted for

4) Divide total costs (step 3) by equivalent units of production (step 2) = unit cost

5) Apply the unit cost (step 4) to inventories and completed goods

There are 2 methods of process costing: weighted average method and FIFO method

Weighted average method blends to together the work done in prior periods with work accomplished in current period i.e. focus is on equivalent units in ending inventory and equivalent units transferred out

In FIFO method, the units and costs of prior periods are separated from units and costs of current period; therefore one must focus on both equivalent units in both beginning and ending inventory and for beginning WIP, it is necessary to consider the costs to complete the WIP (see example).

Example

Colours-R-Us manufactures outdoor, low maintenance paint. The following information details the company's production for the year:

Units in Beginning Work in Process (BWIP)	2,000
Costs in BWIP:	
Materials cost	$5,500
Conversion cost	2,600
Total cost of BWIP	$8,100

Units Started in current period	100,000
Costs incurred in current period	
Materials cost	$263,040
Conversion cost	139,678
Total cost incurred in current period	$402,718
Units in ending work in process	5,000

Beginning work in process is 40% complete with respect to materials and 70% complete with respect to conversion

Ending work in process is 100 percent complete with respect to materials and 60 percent complete with respect to conversion.

What is the total cost of units transferred out?
What is the cost assigned to units in ending inventory?

Part 1: Perform calculation based on weighted average method

Part 2: Perform calculation based on FIFO

Solution Based on Weighted Average

Step 1: Summary of physical units

Units to account for:		Units accounted for:	
Units in BWIP	2,000	Completed (and Transferred to next department):	97,000
Units started	100,000	Units in EWIP	5,000
Total Units	102,000		102,000

Step 2: Calculation of Equivalent Number of Units Produced

	Materials	Conversion
Units completed	97,000	97,000
Units in EWIP		
5,000 x 100%	5,000	
5,000 x 60%		3,000
Equivalent Units	102,000	100,000

Step 3: Calculation of Costs to Account For

	BWIP	Current Period	Total
Material Costs	$5,500	$263,040	$ 268,540
Conversion Costs	2,600	139,678	142,278
Total Costs	$8,100	$402,718	$ 410,818

Step 4: Calculation of Costs pre Equivalent Unit

Unit Materials Cost	($268,540 / 102,000)	$ 2.633
Unit Conversion Costs	($142,278 / 100,000)	1.423
Total Unit Cost		$ 4.056

Step 5: Application of Costs

Cost of Goods Being Transferred Out:	
97,000 x $4.056	$ 393,432
EWIP:	
(5,000 x 2.633) + (3,000 x 1.423)	17,434

Total Costs Accounted For	$ 410,866

(Total for step 3 and 5 different due to a small rounding difference)

Solution Based on FIFO

Step 1: Summary of physical units

Units to account for:		Units accounted for:	
Units in BWIP	2,000	Completed (and Transferred to next department):	
		From beginning inventory	2000
Units started	100,000	Started and completed	95,000
Total Units	102,000	Units in EWIP	5,000
			102,000

Step 2: Calculation of Equivalent Number of Units Produced

	Materials	Conversion
Units in BWIP completed during period		
2,000 X 60%*	1,200	
2,000 X 30%*		600
Units started and completed in current period	95,000	95,000
Units in EWIP		
5,000 x 100%	5,000	
5,000 x 60%		3,000
Equivalent Units	101,200	98,600

* The BWIP was 40% complete re materials so another 60% required to complete and 70% re conversion so another 30% required to complete

Step 3: Calculation of Costs to Account For

	Current Period*
Material Costs	$263,040
Conversion Costs	139,678
Total Costs	$402,718

* Note that under FIFO we only use costs incurred during the current period

Step 4: Calculation of Costs per Equivalent Unit

Unit Materials Cost	($263,040/ 101,200)	$ 2.599
Unit Conversion Costs	($139,678 / 98,600)	1.417
Total Unit Cost		$ 4.016

Step 5: Application of Costs

Cost of Goods Completed and Transferred Out:	
Costs in BWIP:	$8,100
Costs to complete BWIP:	
(1,200 x 2.599) + (600 x 1.417)	3,969
Units started and completed in current period:	
95,000 x $4.016	381,520
Total costs of units completed and transferred out	393,589
Costs in EWIP	
(5,000 x 2.599) + (3,000 x 1.417)	17,426
Total Costs Accounted For	$ 410,835

Spoilage

Spoilage – relates to units which may be complete or in WIP that do not meet the specifications required by customers; such goods may need to be discarded (or sold for lower prices)

A certain amount of spoilage can be expected even when running an efficient operation; such spoilage is referred to as "normal spoilage"

Costs of normal spoilage would be included in costs of goods sold as they are effectively a necessary part of the production process i.e. impossible to produce goods with zero spoilage

Abnormal spoilage is not a necessary part of the production process and should not occur when production is efficient

Such spoilage costs are not included in cost of goods sold but would be segregated in a separate account "Loss from Abnormal Spoilage"

Usually the normal spoilage is based on a particular rate of production e.g. X% of good output

This percentage is usually expressed as a percentage of units that pass an inspection point (that typically takes place at some stage in the production process e.g. when the units are X% complete)

The abnormal spoilage would simply be the difference between the total spoiled units and the number that would be expected to be spoiled based upon the normal rate of spoilage

All spoiled units would be accounted for in determining equivalent units

See multiple choice question for numerical example relating to spoilage, as spoilage could certainly come up in an objective format question

Joint Product Costing

In some industries multiple products are produced from one process or one set of inputs

e.g. Certain minerals such as copper and gold may come from the same ore; the ore would however have to be mined and crushed before the 2 products are separated

The point at which the 2 products are separated is referred to as the "split-off point"

Products may be sold at split-off point or processed further depending on whether it is more profitable to process the item further (see below)

Term "joint product costs" is used to describe those costs that are incurred in processing the product up to the split-off point

In determining the value of inventory, one must allocate the costs between the joint products that are produced by the same process

There are a number of different methods that can be used:

Physical units method

Allocate costs based on physical units e.g. weight, volume etc.

Market value approaches

There are various commonly used market based approaches:

1. Sales-value-at-split-off method

   Would allocate costs based on proportionate sales value of each product at the split-off point i.e. before any item is processed further

2. Net realizable value method

Would allocate based on proportional sales value of each of the joint products based on sales price after further processing (post-split off) less further processing costs

3. Constant gross margin percentage method

Would allocate in such a way that the gross margin percentage is the same for each product.

Method assumes that the further processing will produce an identical profit percentage across all products.

Involves the following calculation:

A. Calculate gross margin percentage for all products combined = $\frac{\text{(Total revenue – Total costs)}}{\text{Total revenue}}$

B. For each product calculate the gross margin based on sales value of product × gross margin for all products combined

C. Joint cost allocated to product = sales value after further processing – Gross margin – Separate costs

Simple example:

Company has 2 products: XBL and ABL

Selling price for XBL is $10 per unit after further processing (post-split-off) and sales volume is 100,000 units so total sales of XBL is $1,000,000

Selling price for ABL is $5 per unit after further processing (post-split-off) and sales volume is 300,000 units so total sales of ABL is $1,500,000

Joint processing costs are: $950,000

Separate processing costs are $300,000 and $450,000 for XBL and ABL respectively

Solution:

Step 1: Calculate the combined gross margin for both products:

Total sales:	$2,500,000
Total costs:	
Joint Costs:	950,000
Total separate costs	750,000 (i.e. $300,000 + $450,000)
Gross margin	$800,000
Gross margin %:	32%

Step 2: calculate gross margin for each product and then allocate joint cost of $950,000 to product based on sales value after further processing – Gross margin – Separate costs

	XBL	ABL
Sales	$1,000,000	$1,500,000
Gross margin (32%)	(320,000)	(480,000)
Separate costs of further processing	(300,000)	(450,000)
Joint costs allocated	**$380,000**	**$570,000**

4. Sales-to-production-ratio method

Would allocate based on a weighting factor that compares the percentage of sales with the percentage of production

i.e. products that sell the most are allocated a larger share of the joint cost of current production

Involves 4 steps:

A. Compute the percentage of total sales based on the joint product units sold.
B. Compute the percentage of total production based on the joint product units produced.
C. Compute the sales-to-production ratio of the joint product.

$$\textbf{Sales-to-production ratio} = \frac{\textbf{Percentage of total sales}}{\textbf{Percentage of production}}$$

D. Use the sales-to-production ratio to allocate joint cost.

Decision Whether to Process Further

After joint processing complete (i.e. after the split-off point), joint product costs should be ignored in making the decision with regard to whether the joint product should undergo further processing

Joint product costs are sunk costs; what matters is whether incremental revenue will exceed incremental further processing costs for that product

Numerical examples of some of the above approaches are provided in the multiple choice questions.

For more detailed guidance in this area with more numerical examples,
there is an excellent source on the internet:

http://www.csun.edu/~hcbus012/acct380/guides/chapter07.doc

Other Costing Methods

1) Hybrid Costing (Operations Costing)

Hybrid Costing (also referred to as operations costing) is a mix of job costing and process costing. It occurs when part of the production process is common to a group of products and part of the production process involves product specific procedures. In other words, some costs of production are measured and allocated based on batches and other costs are measured and allocated at the individual unit level.

For example, a laptop manufacturing process is the same in the initial phases of production (process costing phase) and product specific when different screens, processors and other features are added to different models (job costing phase).

2) Kaizen Costing

Kaizen costing involves constant improvements to the organization's processes and products. Improvements to processes and products can be made by eliminating non-value added activities, reducing time and resources required for a production activity or increasing the efficiency of a production activity.

3) Product Life Cycle Costing

The objective of product life cycle costing is to maximize the profits of a product over its lifecycle. Each product can be expected to go through four product life cycle stages: introduction, growth, maturity and decline. Cost reduction is an important component in all phases of the life-cycle but most important in the early stages (e.g., production introduction). Cost reduction should be considered in all areas of pre-production including manufacturing costs and logistical costs.