

## CHAPTER ONE SOLUTIONS

---

### [Solution to Assignment Problem One - 1](#)

---

Note To Instructor If you are assigning this problem, note that only the first two answers can be found in Chapter 1 of the text.

The circumstances under which a general provision of the *Income Tax Act* can be overridden are as follows:

1. In those situations where there is a conflict between the provisions of an international tax treaty and the *Income Tax Act*, the terms of the international tax treaty will prevail.
2. While court decisions cannot be used to change the actual tax law, court decisions may call into question the reasonableness of interpretations of the ITA made by either the CRA or tax practitioners.
3. In some cases, a more specific provision of the *Act* will contain an exception to a general rule. For example, while ITA 18(1)(b) does not allow the deduction of capital expenditures in computing business income, ITA 20(1)(aa) contains a provision that allows the deduction of landscaping costs.

## Solution to Assignment Problem One - 2

---

Some of the possible examples of conflicts between objectives would be as follows:

1. **Revenue Generation And International Competitiveness** The need to lower rates of taxation in order to be competitive on an international basis is in conflict with the need to generate revenues.
2. **Fairness And Simplicity** In order to make a tax system simple, a single or small number of tax rates must be applied to a well established concept of income with only a limited number of deductions or exceptions available. This is in conflict with the goal of tailoring the system to be fair to specific types of individuals, such as the disabled.
3. **Revenue Generation And Social Goals** The desire to provide funds to certain types of individuals (Old Age Security) or to provide certain types of services (health care) may be in conflict with the need to generate tax revenues.
4. **Flexibility And Certainty** To make a tax system flexible in changing economic, political, and social circumstances, there must be some uncertainty.

## Solution to Assignment Problem One - 3

---

- A. Diamonds, South Africa In a monopoly, the tax will probably be entirely shifted to employees and/or consumers. The incidence shift will depend on competition in world markets and employment levels. If the international diamond market is price sensitive and there is high unemployment in South Africa, then the tax will be shifted almost entirely to employees.

The shifting assumptions affect evaluation of the tax using the characteristics of a “good” tax system. A tax that is entirely shifted to employees is similar to one on wages and is non-neutral, as it affects the decisions of employees to continue working. Some employees will work less and thus increase the excess burden resulting from imposition of the tax.

- B. Diamonds, Sierra Leone The taxing authorities will find it difficult to enforce the tax, due to their inability to track diamond movements. Records maintained by the mine will likely be inaccessible, and those presented will be incomplete. The tax will not be effective and the tax revenue will be uncertain and inadequate.
- C. Principal Residences, Canada This exemption is non-neutral because investment decisions are affected by the tax preference. Given the choice of investing in real estate to hold for resale or a principal residence, both of which are likely to appreciate, a taxpayer will invest in a principal residence so that the gain on disposition is tax exempt.

It is also vertically inequitable because it benefits high-income families who can invest in more expensive residences which have the potential of earning greater returns.

This tax expenditure is spread among all taxpayers, and general tax revenue must be larger to compensate for the revenue foregone.

- D. Business Meals, Canada This restriction adds complexity to accounting for deductible expenses, as all business meals have to be accounted for and accumulated separately from other promotion expenses. The tax could be shifted to consumers, employees and/or shareholders. If it is shifted to consumers, it could be more advantageous to raise personal taxes so that incidence is more certain. If it is shifted to shareholders or employees, then it would be non-neutral as it could affect investment decision making and willingness to work.
- E. Head Tax A head tax is neutral as it does not affect economic choices. However, it is vertically inequitable, based on the ability to pay concept of equity, as all taxpayers, regardless of their income levels are taxed the same. The head tax is very inelastic. This tax serves the objectives of certainty, simplicity and ease of compliance. It could promote stability in the economy.

## Solution to Assignment Problem One - 4

---

There are a large number of possible responses to a question such as this. Some possibilities would include the following:

- **Simplicity And Ease Of Compliance** A very good feature of this tax is that it is very simple and presents the taxpayer with no compliance problems. Anyone with a head is taxed and no provisions have been made for any modifications in applicability or amounts to be paid.
- **Fairness And Equity** In one sense this is a fair tax in that it applies to every Canadian resident and the amount to be collected from each individual is the same. This could be described as horizontal equity. However, the tax could also be considered unfair in that it gives no consideration to the individual's ability to pay the tax, either in terms of accumulated wealth or income.
- **Regressiveness** Related to fairness is the fact that the tax is regressive. That is, the tax will take a higher percentage of income from low income individuals than it will from high income individuals.
- **Flexibility And Elasticity** Being a very simple tax, it will be very easy to change the rate at which it is assessed. However, as it is a flat tax based simply on the existence of the individual, it will not respond to changing economic conditions.
- **Enforcement And Dependability Of Revenues** Given the presence of a physically visible audit trail (the HAT), there should be no enforcement problems. Further, demographic statistics are reasonably predictable, making it relatively easy for the government to anticipate the expected levels of revenue.
- **Neutrality** Other than decisions related to whether to remain a Canadian resident, the tax appears to be neutral with respect to economic conditions.
- **International Competitiveness** It seems unlikely that a \$200 tax would be sufficient to influence a decision to either leave Canada or move to Canada. Therefore, the tax could be thought of as being internationally competitive.
- **Balance Between Sectors** The tax might be criticized as an additional burden on Canadian individuals as opposed to Canadian businesses.

There are, of course, other factors that could be considered.

## Solution to Assignment Problem One - 5

---

The term Net Income For Tax Purposes is commonly used to refer to income as determined under Part I, Division B of the *Income Tax Act*. While Division B does not contain a definition of this income figure, ITA 3 contains a formula for the determination of this amount. In general terms, Net Income For Tax Purposes would include:

- Net income from employment (Subdivision a).
- Net income from business or property (Subdivision b).
- Taxable capital gains net of allowable capital losses (Subdivision c).
- Other sources of income and other deductions (Subdivisions d and e).

Losses from employment, business, property, and allowable business investment losses can be deducted as long as the total Net Income For Tax Purposes does not go below zero.

In somewhat simplified terms, Taxable Income is simply Net Income For Tax Purposes, less certain deductions that are specified in Division C of the *Income Tax Act*. As will be explained in subsequent Chapters, these deductions include loss carry overs from other years, a portion of stock option income, the northern residents deduction, and home relocation loan amounts.

## Solution to Assignment Problem One - 6

---

### *Accountant's View*

---

The accountant's definition uses historical cost accounting following GAAP. Under GAAP, revenue is generally recognized when goods are sold or services delivered. Expenses are then matched against these revenues, with the resulting difference referred to as accounting Net Income.

### *Economist's View*

---

The economist's definition of income includes all gains, whether realized or unrealized, as increases in net economic power.

### *Income Tax Act View*

---

Conceptually, the ITA view is very similar to the accountant's view. However, there are many differences which result from the application of complex rules in the ITA. For example, a portion of capital gains is not considered to be Taxable Income under the ITA view. In contrast, both accountants and economists would include 100 percent of such gains in income. Note, however, the timing would be different as economists would tend to recognize such gains prior to the realization. Accountants generally do not recognize capital gains until they are realized through a disposition of the relevant asset.

## Solution to Assignment Problem One - 7

---

### Case A

---

The Case A solution would be calculated as follows:

|   |                  |                 |
|---|------------------|-----------------|
| Income Under ITA 3(a):                          |                  |                 |
| Employment Income                               | \$46,200         |                 |
| Business Income                                 | <u>13,500</u>    | \$59,700        |
| Income Under ITA 3(b):                          |                  |                 |
| Taxable Capital Gains                           | \$14,320         |                 |
| Allowable Capital Losses                        | <u>( 23,460)</u> | Nil             |
| Balance From ITA 3(a) And (b)                   |                  | \$59,700        |
| Spousal Support Payments                        |                  | <u>( 4,800)</u> |
| Balance From ITA 3(c)                           |                  | \$54,900        |
| Deduction Under ITA 3(d):                       |                  |                 |
| Net Rental Loss                                 |                  | <u>( 2,350)</u> |
| Net Income For Tax Purposes (Division B Income) |                  | <u>\$52,550</u> |

In this Case, Christina has an unused allowable capital loss carry over of \$9,140 (\$14,320 - \$23,460). The roulette winnings would not be included in income and the related expenses would not be deductible.

### Case B

---

The Case B solution would be calculated as follows:

|   |                  |                  |
|---|------------------|------------------|
| Income Under ITA 3(a):                          |                  |                  |
| Employment Income                               | \$64,000         |                  |
| Interest Income                                 | 2,600            |                  |
| Net Rental Income                               | <u>4,560</u>     | \$71,160         |
| Income Under ITA 3(b):                          |                  |                  |
| Taxable Capital Gains                           | \$32,420         |                  |
| Allowable Capital Losses                        | <u>( 29,375)</u> | 3,045            |
| Balance From ITA 3(a) And (b)                   |                  | \$74,205         |
| Deductible RRSP Contribution                    |                  | <u>( 12,480)</u> |
| Balance From ITA 3(c)                           |                  | \$61,725         |
| Deduction Under ITA 3(d):                       |                  |                  |
| Partnership Business Loss [(50%)( \$144,940)]   |                  | <u>( 72,470)</u> |
| Net Income For Tax Purposes (Division B Income) |                  | <u>Nil</u>       |

In this Case, Christina has an unused business loss carry over of \$10,745 (\$72,470 - \$61,725).

## Solution to Assignment Problem One - 8

---

### Case A

---

The Case A solution would be calculated as follows:

|   |              |           |
|---|--------------|-----------|
| Income Under ITA 3(a):                          |              |           |
| Employment Income                               | \$78,400     |           |
| Rental Income                                   | <u>8,400</u> | \$ 86,800 |
| Income Under ITA 3(b):                          |              |           |
| Taxable Capital Gains                           | \$42,500     |           |
| Allowable Capital Losses                        | ( 16,300)    | 26,200    |
| Balance From ITA 3(a) And (b)                   |              | \$113,000 |
| Subdivision e Deductions                        |              | ( 8,100)  |
| Balance From ITA 3(c)                           |              | \$104,900 |
| Deduction Under ITA 3(d):                       |              |           |
| Business Loss                                   |              | ( 12,300) |
| Net Income For Tax Purposes (Division B Income) |              | \$ 92,600 |

In this Case, Ms. DeBoo has no loss carry overs at the end of the year.

### Case B

---

The Case B solution would be calculated as follows:

|   |               |          |
|---|---------------|----------|
| Income Under ITA 3(a):                          |               |          |
| Employment Income                               | \$23,600      |          |
| Rental Income                                   | <u>16,000</u> | \$39,600 |
| Income Under ITA 3(b):                          |               |          |
| Taxable Capital Gains                           | \$12,500      |          |
| Allowable Capital Losses                        | ( 18,600)     | Nil      |
| Balance From ITA 3(a) And (b)                   |               | \$39,600 |
| Subdivision e Deductions                        |               | ( 3,200) |
| Balance From ITA 3(c)                           |               | \$36,400 |
| Deduction Under ITA 3(d):                       |               |          |
| Business Loss                                   |               | ( 4,500) |
| Net Income For Tax Purposes (Division B Income) |               | \$31,900 |

In this Case, Ms. DeBoo has a carry over of \$6,100 (\$12,500 - \$18,600) in unused allowable capital losses.



**Case C**


---

The Case C solution would be calculated as follows:

|   |              |            |
|---|--------------|------------|
| Income Under ITA 3(a):                          |              |            |
| Employment Income                               | \$33,400     |            |
| Rental Income                                   | <u>3,400</u> | \$36,800   |
| Income Under ITA 3(b):                          |              |            |
| Taxable Capital Gains                           | \$21,400     |            |
| Allowable Capital Losses                        | ( 20,700)    | 700        |
| Balance From ITA 3(a) and (b)                   |              | \$37,500   |
| Subdivision e Deductions                        |              | ( 12,400)  |
| Balance From ITA 3(c)                           |              | \$25,100   |
| Deduction Under ITA 3(d):                       |              |            |
| Business Loss                                   |              | ( 42,300)  |
| Net Income For Tax Purposes (Division B Income) |              | <u>Nil</u> |

In this Case, Ms. DeBoo would have a business loss carry over in the amount of \$17,200 (\$25,100 - \$42,300).

**Case D**


---

The Case D solution would be calculated as follows:

|   |           |            |
|---|-----------|------------|
| Income Under ITA 3(a):                          |           |            |
| Employment Income                               |           | \$46,200   |
| Income Under ITA 3(b):                          |           |            |
| Taxable Capital Gains                           | \$41,200  |            |
| Allowable Capital Losses                        | ( 43,400) | Nil        |
| Balance From ITA 3(a) And (b)                   |           | \$46,200   |
| Subdivision e Deductions                        |           | ( 9,300)   |
| Balance From ITA 3(c)                           |           | \$36,900   |
| Deduction Under ITA 3(d):                       |           |            |
| Business Loss                                   |           | ( 22,300)  |
| Rental Loss                                     |           | ( 32,400)  |
| Net Income For Tax Purposes (Division B Income) |           | <u>Nil</u> |

Ms. DeBoo would have a carry over of unused non-capital losses in the amount of \$17,800 (\$36,900 - \$22,300 - \$32,400) and of unused allowable capital losses in the amount of \$2,200 (\$41,200 - \$43,400).