



## OECD Africa Academy for Tax and Financial Crime Investigation

*Net Worth Specialty Course*



# Net Worth Analysis An Investigative Approach

OECD – Virtual Program  
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# OECD Africa Academy for Tax and Financial Crime Investigation

*Net Worth Specialty Course*



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# Agenda

PART I: Overview of Net Worth Analysis

PART II: Assets

PART III: Liabilities

PART IV: Calculation of Illicit Income

- 1) Expenses and Adjustments
- 2) Sources of Income and Adjustments
- 3) Calculation of Total Illicit Income

PART V: Presentation of Net Worth Analysis



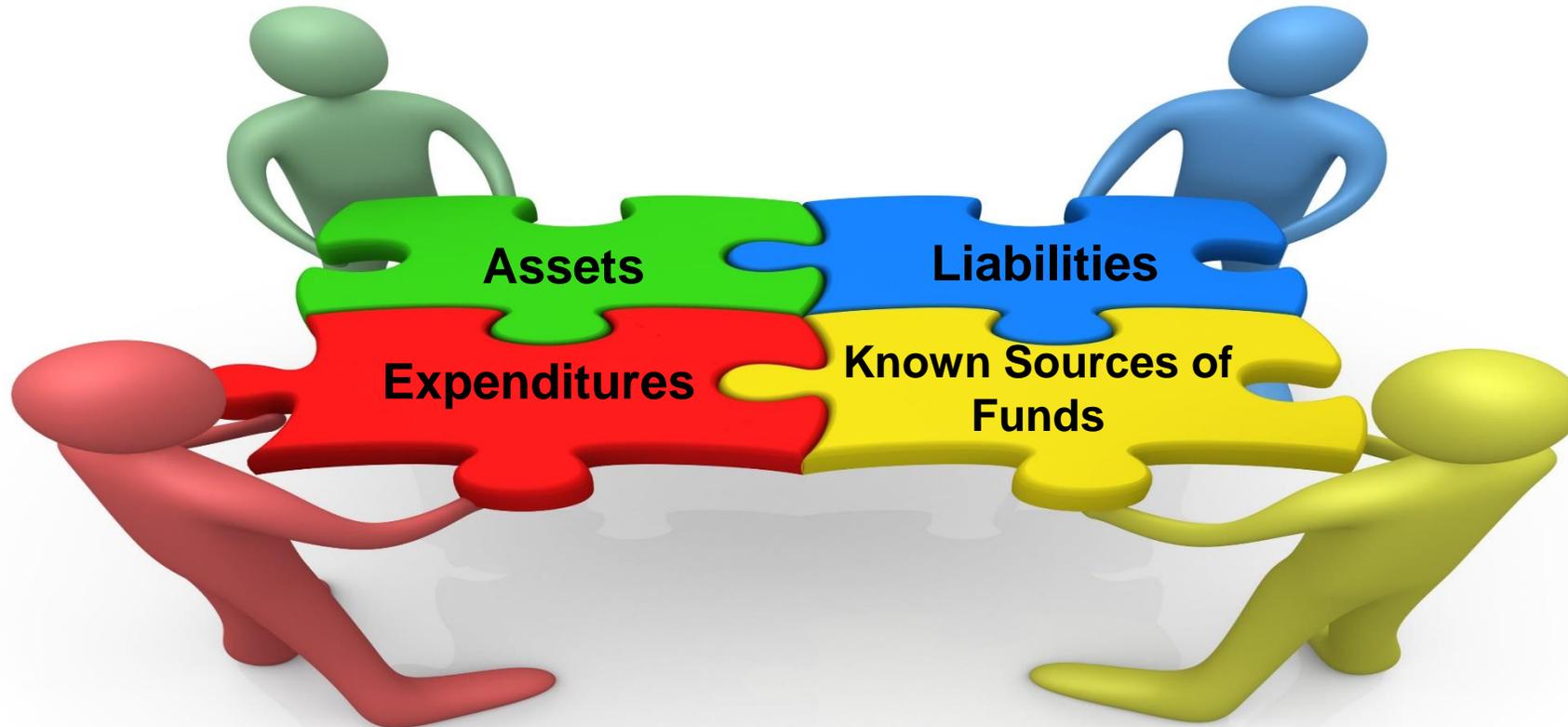
# PART I:

## Overview of Net Worth Analysis



# What is a Net Worth Analysis?

A Net Worth Analysis is an indirect method of determining an individual's income earned through illicit means. The Net Worth Analysis quantifies the illicit income by analyzing the following:



# Why Use a Net Worth Analysis?

A Net Worth Analysis can assist an investigator in quantifying the amount of illicit income earned by an individual over a specified period of time.

A Net Worth Analysis can be utilized when:

- Business or financial records are incomplete, unreliable or non-existent;
- The accused deals primarily in cash; and
- Known sources of income do not support the accused lifestyle.

# What Types of Illicit Income Can be Determined Through a Net Worth?

A Net Worth can be used to quantify income earned from both legitimate business operations as well illicit business operations. These could include, but are not limited to:

- Unreported business or personal income (Tax Evasion)
- Income earned from drug trafficking
- Income earned from bribery or corruption
- Income earned through theft or embezzlement
- Income earned through human smuggling or trafficking
- Income earned through extortion

# How Does a Net Worth Work?

A Net Worth looks at the change in assets and liabilities from one year to the next, adjusted for expenditures and known sources of funds to quantify the amount of illicit income.

The Net Worth always starts with a base year amount for assets and liabilities which is generally one day prior to the start of the investigation period.

For example, if your investigation period is from January 1, 2020 to December 31, 2023, a base year balance must be established for assets and liabilities at December 31, 2019.

# How to Calculate Illicit Income Using a Net Worth?

$$\begin{aligned} & \text{Asset} \\ & - \\ & \text{Liabilities} \\ & = \\ & \text{Net Worth} \\ & - \\ & \text{Prior Years Net Worth} \\ & = \\ & \text{Increase (Decrease) in Net Worth} \\ & + \\ & \text{Expenses and Adjustments} \\ & - \\ & \text{Known Sources of Funds and Adjustments} \\ & = \\ & \text{Total Illicit Income Earned} \end{aligned}$$

# Who Gets Included in the Net Worth Analysis?

Who gets included in the Net Worth Analysis is determined on a case by case basis. In most situations the following people are included in the Net Worth Analysis:

- Accused
- Spouse
- Dependent Children

Depending on the case, the Net Worth Analysis could be expanded to include:

- Parents of the accused or spouse
- Adult children
- Other relatives or individuals residing with the accused

# What Gets Included in a Net Worth Analysis?

- Personal and business assets of the accused, spouse and dependent family members.
- Personal and business liabilities of the accused, spouse and dependent family members.
- Personal expenditures of the accused, spouse and dependent family members.
- Known sources of funds of the accused, spouse and dependent family members.

# Net Worth Case Study Part I: Case Background

- In your breakout groups, open the file titled “Net Worth Case Study – Part 1.pdf”.
- Review the “CASE INFORMATION” section.
- Complete the “FOR YOUR ACTION” section.

**Time to Complete: 20 Minutes**



# PART II:

## Assets





# Bank Account Balances

## How Do I Obtain This Information?

- Bank statements obtained through the use of a search warrant or other judicial order

## What Amount Gets Recorded on the Net Worth?

- The balance in the account at December 31<sup>st</sup>.

# Personal Business Assets

## How Do I Obtain This Information?

- Personal Income Tax Returns
- Accounting records
- Regulatory filings
- Public databases

## What Amount Gets Recorded on the Net Worth?

- The cost of the asset. If the accused continues to own the asset throughout the investigation period, the cost of the asset recorded on the Net Worth remains the same.

# Cash on Hand

## How Do I Obtain This Information?

- Unfortunately cash on hand can not be factually determined but is often used by defense to explain a Net Worth discrepancy.

## What Amount Gets Recorded on the Net Worth?

- Since cash on hand cannot be factually determined, a number of steps can be taken to reasonably determine:
  - Was there cash on hand at the start of the investigation period?
  - How much cash was available?

# Cash on Hand Continued

## Steps for Determining Cash on Hand:

- What was the amount of cash found during the execution of search warrants or during arrest?
- Was there interest paid on bank accounts, lines of credit and credit cards during the investigation period?
- Were any NSF cheques issued during the investigation period?
- Were any assets paid for in cash during the investigation period? Was the cash used to purchase the asset withdrawn from a bank account or is its origin unknown?
- Have there been any large cash deposits during the investigation period that could have an effect on the Net Worth?
- Was there an interview of the accused, co-accused or other family or friends? If yes, what was said regarding the quantity of cash held outside of the accused bank account at any given time?
- Review the income tax filings of the accused and their spouse prior to the start of the investigation period. Did the accused have the means to accumulate a large amount of cash during that period?

# Cash on Hand Continued

- If it is determined that there was a reasonable possibility that the accused had cash on hand at the beginning of the investigation period, a determination should be made as to how much cash was available. This can be determined by looking at the following items:
  - The amount of cash used to purchase assets.
  - The amount of cash deposited into the accused bank and credit accounts that can not be attributed to a known source of income.
  - The amount of cash used to reduce outstanding liabilities.
- The benefit of the doubt should always be given to the accused when dealing with cash on hand since the amount used in the Net Worth can not be factually verified.



Remember, if the amount of cash on hand remains constant throughout the investigation period, there will be no impact on the Net Worth.

# Investments

## How Do I Obtain This Information?

- Income Tax Returns.
- Investment Statements obtained through a search warrant or other judicial order.

## What Amount Gets Recorded on the Net Worth?

- For tax sheltered investments, the cumulative amount contributed to the investment at December 31<sup>st</sup> is used.
- For all other investments, the adjusted cost base of the investment at December 31<sup>st</sup> is used.

# Investments Continued

## Example

- Accused purchases 10 shares in XYZ Corp. for \$10/share on January 15, 2022.
- Accused purchases 15 shares in XYZ Corp. for \$20/share on March 17, 2022.

## Calculation of Adjusted Cost Base (ACB)

10 shares @ \$10/share = \$100

15 shares @ \$20/share = \$300

Total Cost of shares           \$400 (Recorded as an asset at December 31, 2022)

Total Number of shares        25

ACB per share                    \$16

- On April 4, 2023 the accused sells 5 shares in XYZ Corp. for \$25/share and deposits the money into their bank account.

5 shares @ \$25/share = \$125

ACB of \$16 x 5 shares = \$80

Gain on sale of shares        \$45



# Investments Continued

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Shares in XYZ Corp.	\$ 400	\$ 320
Bank Balance	\$ -	\$ 125
<b>Total Assets</b>	<b>\$ 400</b>	<b>\$ 445</b>
<b>Liabilities</b>		
<b>Total Liabilities</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Net Worth</b>	<b>\$ 400</b>	<b>\$ 445</b>
Net Worth of Previous Year	N/A	\$ 400
Increase (Decrease) in Net Worth		\$ 45
<b>Known Sources of Funds and Adjustments</b>		
Gain on Sale of Shares		\$ (45)
Income from Illicit Activities		\$ -

# Vehicles

## How Do I Obtain This Information?

- Motor vehicle registry.
- Vehicle purchase receipts obtained through the use of a search warrant or other judicial order.
- Surveillance.
- Loan registries.

## What Amount Gets Recorded on the Net Worth?

- The purchase price of the vehicle gets recorded at December 31<sup>st</sup> in the year the vehicle is purchased.
- The purchase price of the vehicle remains on the Net Worth until the vehicle is sold or disposed of.

# Vehicles Continued

## Example 1

On December 22, 2023 the accused purchases a new personal vehicle and sells their current vehicle. Information obtained through the investigation shows the following:

### New Vehicle

Total purchase price of new vehicle - \$45,000

Down payment on new vehicle - \$10,000 (from sale of current vehicle)

Amount borrowed to purchase new vehicle - \$35,000

### Current Vehicle

Total purchase price of current vehicle - \$25,000 (purchased prior to the investigation period)

Sale price of current vehicle - \$10,000 (put toward purchase of new vehicle)



# Vehicles Continued

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Old Vehicle	\$ 25,000	\$ -
New Vehicle	\$ -	\$ 45,000
Total Assets	\$ 25,000	\$ 45,000
<b>Liabilities</b>		
Car Loan	\$ -	\$ 35,000
Total Liabilities	\$ -	\$ 35,000
Net Worth	\$ 25,000	\$ 10,000
Net Worth of Previous Year	N/A	\$ 25,000
Increase (Decrease) in Net Worth		\$ (15,000)
<b>Expenses and Adjustments</b>		
Loss on Sale of Current Vehicle		\$ 15,000
Income from Illicit Activities		\$ -

# Real Property

## How Do I Obtain This Information?

- Land ownership registry.
- Property purchase documents obtained through the use of a search warrant or other judicial order.
- Surveillance.
- Witness interviews.
- Loan registries.

## What Amount Gets Recorded on the Net Worth?

- The purchase price of the property gets recorded at December 31<sup>st</sup> in the year the property is purchased.
- The purchase price of the property remains on the Net Worth until the property is sold.

# Real Property Continued

## Example

On June 5, 2023, the accused purchases a new principal residence and sells their old principal residence. Information obtained through the investigation shows the following:

### Old House

Purchase price - \$350,000 (purchased prior to investigation period)

Sale Price - \$425,000

Outstanding Mortgage discharged at time of sale - \$125,000

### New House

Purchase price - \$525,000

Down payment - \$10,000 (from bank account)

Amount Borrowed - \$215,000 [ $\$525,000 - (\$425,000 - \$125,000) - \$10,000$ ]



# Real Property Continued

## Calculation of Gain on Sale

Sale Price	\$425,000
Purchase Price	<u>\$350,000</u>
Gain on Sale	\$75,000

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Old House	\$ 350,000	\$ -
New House		\$ 525,000
Bank Account	\$ 10,000	\$ -
Total Assets	\$ 360,000	\$ 525,000
<b>Liabilities</b>		
Mortgage Old House	\$ 125,000	\$ -
Mortgage New House	\$ -	\$ 215,000
Total Liabilities	\$ 125,000	\$ 215,000
Net Worth	\$ 235,000	\$ 310,000
Net Worth of Previous Year	N/A	\$ 235,000
Increase (Decrease) in Net Worth		\$ 75,000
<b>Known Sources of Funds and Adjustments</b>		
Gain on Sale of Old House		\$ (75,000)
Income from Illicit Activities		\$ -

# Accounts and Assets in Foreign Currency

## How Do I Obtain This Information?

- Documents obtained through the use of a search warrant or other judicial order.
- Foreign Land Registry databases.
- Mutual Legal Assistance Treaty (MLAT).
- Treaty Requests for tax information.
- Non-treaty requests.

## What Amount Gets Recorded on the Net Worth?

- If the asset was real property, a vehicle or another asset that is purchased in very few specific transactions, the value should be recorded on the Net Worth in the year it is purchased and at the daily exchange rate used for the transaction. This amount would be carried forward on the Net Worth for each subsequent year the accused owns the asset.
- For bank account and credit card account balances, an annual exchange rate can be applied.
- Both the daily and annual exchange rate information can be obtained from your country's central banking authority.

# Net Worth Case Study Part II: Assets

- In your breakout groups, open the file titled “Net Worth Case Study – Part 2.pdf”.
- Review the “CASE INFORMATION” section.
- Open the file titled “Net Worth Template.xlsx”.
- Complete the “FOR YOUR ACTION” section.



**Time to Complete: 30 Minutes**

# PART III:

## Liabilities



# Liabilities

## Types of Liabilities for Discussion

- Value Added Taxes Payable (VAT)
- Credit Cards and Lines of Credit
- Personal Loans
- Mortgages



# Value Added Taxes Payable

## How Do I Obtain This Information?

- Government tax authority records.
- Business and accounting records.

## What Amount Gets Recorded on the Net Worth?

- The amount owing to government tax authority at December 31<sup>st</sup> is recorded on the Net Worth. The formula to calculate the balance is as follows:

December 31 Net VAT Owing (Base Year)  
+  
Net VAT Owing (Receivable) for Current Year  
-  
VAT Remitted (Refunded) for Current Year  
=  
VAT Owing (Current Year End)

# Credit Cards and Lines of Credit

## How Do I Obtain This Information?

- Credit card and line of credit statements obtained through the use of a search warrant or other judicial order.

## What Amount Gets Recorded on the Net Worth?

- The balance in the account at December 31<sup>st</sup>.

## Items to Remember



- The majority of credit cards do not have their statements issued on the last day of the month.
- The amount included on the Net Worth should be the December 31 balance which could fall in between statement dates.
- Reconcile the transactions on the credit card to December 31 based on their transaction date.

# Personal Loans

## How Do I Obtain This Information?

- Loan and/or banking documents obtained through the use of a search warrant or other judicial order.
- Witness interviews.
- Loan registries.

## What Amount Gets Recorded on the Net Worth?

- The balance owing in the account at December 31<sup>st</sup>

# Mortgages

## How Do I Obtain This Information?

- Land ownership registry.
- Property purchase documents obtained through the use of a search warrant or other judicial order.
- Loan registries.

## What Amount Gets Recorded on the Net Worth?

- The balance owing on the mortgage at December 31<sup>st</sup>.

## Items to Remember

- Mortgage payments generally contain two components, the principal payment on the mortgage balance and interest on the mortgage balance. Each amount will be dealt with separately in the Net Worth.

# Mortgages Continued

## Example

On May 29, 2019, the accused purchased their principal residence for \$450,000. At December 31, 2023, the accused owed \$100,000 on a mortgage related to their personal residence. During 2024, the following payments were made related to the mortgage:

Monthly Interest	\$500
Monthly Principal	<u>\$1,000</u>
Total Monthly Payment	\$1,500

Total Interest Paid in 2024	\$6,000
Total Principal Paid in 2024	\$12,000

All mortgage payments were made from the accused bank account.



# Mortgages Continued

	<u>2023</u>	<u>2024</u>
<b>Assets</b>		
House	\$ 450,000	\$ 450,000
Bank Account	\$ 18,000	\$ -
Total Assets	\$ 468,000	\$ 450,000
<b>Liabilities</b>		
Mortgage	\$ 100,000	\$ 88,000
Total Liabilities	\$ 100,000	\$ 88,000
Net Worth	\$ 368,000	\$ 362,000
Net Worth of Previous Year	N/A	\$ 368,000
Increase (Decrease) in Net Worth		\$ (6,000)
<b>Expenses and Adjustments</b>		
Mortgage Interest		\$ 6,000
Income from Illicit Activities		\$ -

# Net Worth Case Study Part III: Liabilities

- In your breakout groups, open the file titled “Net Worth Case Study – Part 3.pdf”.
- Continue with the file titled “Net Worth Template.xlsx”.
- Review the “CASE INFORMATION” section.
- Complete the “FOR YOUR ACTION” section.

**Time to Complete: 30 Minutes**



# PART IV:

## Calculation of Illicit Income



# Expenses and Adjustments

What type of expenses and adjustments are included?

- Personal Expenses
  - Living Expenses
  - Household Expenses
  - Food
  - Travel
  - Clothing
  - Entertainment and Recreation
  - Healthcare
  - Interest on personal debt
- Adjustments
  - Amounts withheld from employment income
  - Loss on sale of assets
  - Other items specific to your country's laws and regulations



# Expenses and Adjustments Continued

## How Do I Obtain This Information?

- Transactions listed in bank and credit card statements
- Expense receipts obtained through the use of a search warrant
- Income Tax Returns
- Witness interviews
- Surveillance
- Land ownership registry
- Loan registries

## What Amount Gets Recorded on the Net Worth?

- The total expenses incurred by the accused and their household on an annual basis.

# Expenses and Adjustments Continued

## Example

An investigation found the following expenses incurred by the accused and their spouse during the year 2023:

Travel	\$85,000
Restaurants	\$40,000
Clothing	\$25,000
Household	\$30,000
Entertainment	<u>\$50,000</u>
Total	\$230,000



The accused had no known sources of income during 2023 except for income earned from their illicit activities. The accused had both a joint bank account and credit card with their spouse. The year end balances are as follows:

<u>Account</u>	<u>2022</u>	<u>2023</u>
Bank Account	\$15,000	\$22,000
Credit Card	\$2,500	\$4,200

# Expenses and Adjustments Continued

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Bank Account	\$ 15,000	\$ 22,000
Total Assets	\$ 15,000	\$ 22,000
<b>Liabilities</b>		
Credit Card	\$ 2,500	\$ 4,200
Total Liabilities	\$ 2,500	\$ 4,200
Net Worth	\$ 12,500	\$ 17,800
Net Worth of Previous Year	N/A	\$ 12,500
Increase (Decrease) in Net Worth		\$ 5,300
<b>Expenses and Adjustments</b>		
Personal Expenses		\$ 230,000
Income from Illicit Activities		\$ 235,300

# Known Sources of Funds and Adjustments

## What Sources of funds and adjustments are included?

- Different types of income
  - Employment income
  - Net business income
  - Investment income
- Gifts from family or friends
- Insurance
- Payments from Government benefit programs
- Income Tax refunds
- Inheritance
- Lottery winnings
  
- Adjustments
  - Gain on sale of assets
  - Other items specific to your country's laws and regulations



# Known Sources of Funds and Adjustments Continued

## Example

Assume the same facts from the previous example showing the accused personal expenses and bank and credit card balances.

Your investigation has now found the following sources of funds in 2023 related to the accused and their spouse:

Employment Income – Spouse	\$35,000
Inheritance – Spouse	\$10,000
Gift in cash from relative – Accused	<u>\$12,000</u>
Total Known Sources of Funds	\$57,000



# Known Sources of Funds and Adjustments Continued

## Previous Example

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Bank Account	\$ 15,000	\$ 22,000
Total Assets	\$ 15,000	\$ 22,000
<b>Liabilities</b>		
Credit Card	\$ 2,500	\$ 4,200
Total Liabilities	\$ 2,500	\$ 4,200
Net Worth	\$ 12,500	\$ 17,800
Net Worth of Previous Year	N/A	\$ 12,500
Increase (Decrease) in Net Worth		\$ 5,300
<b>Expenses and Adjustments</b>		
Personal Expenses		\$ 230,000
<b>Known Sources of Funds and Adjustments</b>		
Sources of Funds		\$ -
Income from Illicit Activities		\$ 235,300

	<u>2022</u>	<u>2023</u>
<b>Assets</b>		
Bank Account	\$ 15,000	\$ 22,000
Total Assets	\$ 15,000	\$ 22,000
<b>Liabilities</b>		
Credit Card	\$ 2,500	\$ 4,200
Total Liabilities	\$ 2,500	\$ 4,200
Net Worth	\$ 12,500	\$ 17,800
Net Worth of Previous Year	N/A	\$ 12,500
Increase (Decrease) in Net Worth		\$ 5,300
<b>Expenses and Adjustments</b>		
Personal Expenses		\$ 230,000
<b>Known Sources of Funds and Adjustments</b>		
Sources of Funds		\$ 57,000
Income from Illicit Activities		\$ 178,300

# Net Worth Case Study Part IV: Calculation of Illicit Income

- In your breakout groups, open the file titled “Net Worth Case Study – Part 4.pdf”.
- Continue with the file titled “Net Worth Template.xlsx”.
- Review the “CASE INFORMATION” section.
- Complete the “FOR YOUR ACTION” section.

**Time to Complete: 30 Minutes**



# PART V:

## Presentation of Net Worth Analysis



# Net Worth Presentation

- The Net Worth Analysis should be accompanied by a written report on your findings. The report would include items such as:
  - Information about the author
  - Scope of the work
  - Summary of findings
  - Background
  - Methodology
  - Detailed findings
  - Conclusion
  - Schedules and exhibits

# Net Worth Presentation Continued

- All amounts entered in the Net Worth should have a corresponding source document to reconcile the amount.
  - Where the source document is a large PDF, use bookmarks to help the reader find the corresponding information.
- Create an electronic folder for each Net Worth schedule (assets, liabilities, expenses and sources of funds) that will contain the source documents. This allows the referencing to stay consistent no matter where the Net Worth is moved to. This also allows for easier disclosure as all the documents pertaining to the Net Worth will be kept together.
- For a cleaner looking final product, remove any pre-populated item descriptions that were not used in your analysis.
- Assets such as bank accounts should remain as an asset regardless of whether they are in a debit or credit position.
- Liabilities such as credit cards and line of credit accounts should remain as a liability regardless of whether they are in a debit or credit position.



Questions?