# Modeling Cash Sweep

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| 1 | Input historical data for income statement and balance sheet |
|---|---|
| 2 | Calculate ratios and statistics |
| 3 | Decide on forecast assumptions |
| 4 | Build the forecast income statement except for interest |
| 5 | Build the forecast balance sheet except for cash, revolver and debt |
| 6 | Build the cash flow statement using the rules of cash |
| 7 | Plug cash into the balance sheet from the cash flow statement |
| 8 | Build the debt and interest calculations |
| 9 | Plug revolver and long term debt into the balance sheet |
| 10 | Link the interest into the income statement and deal with any circular reference |

# Debt Calculations

### Debt calculations

| | Operating cash flow |
|---|---|
| + | Investing cash flow |
| - | Dividends |
| = | CASHFLOW for debt service |
| + | Beginning cash and cash equivalents |
| = | CASH available for debt service |
| - | Debt repayments |
| = | Cash surplus / (revolver requirement) |

# Revolver – Detail

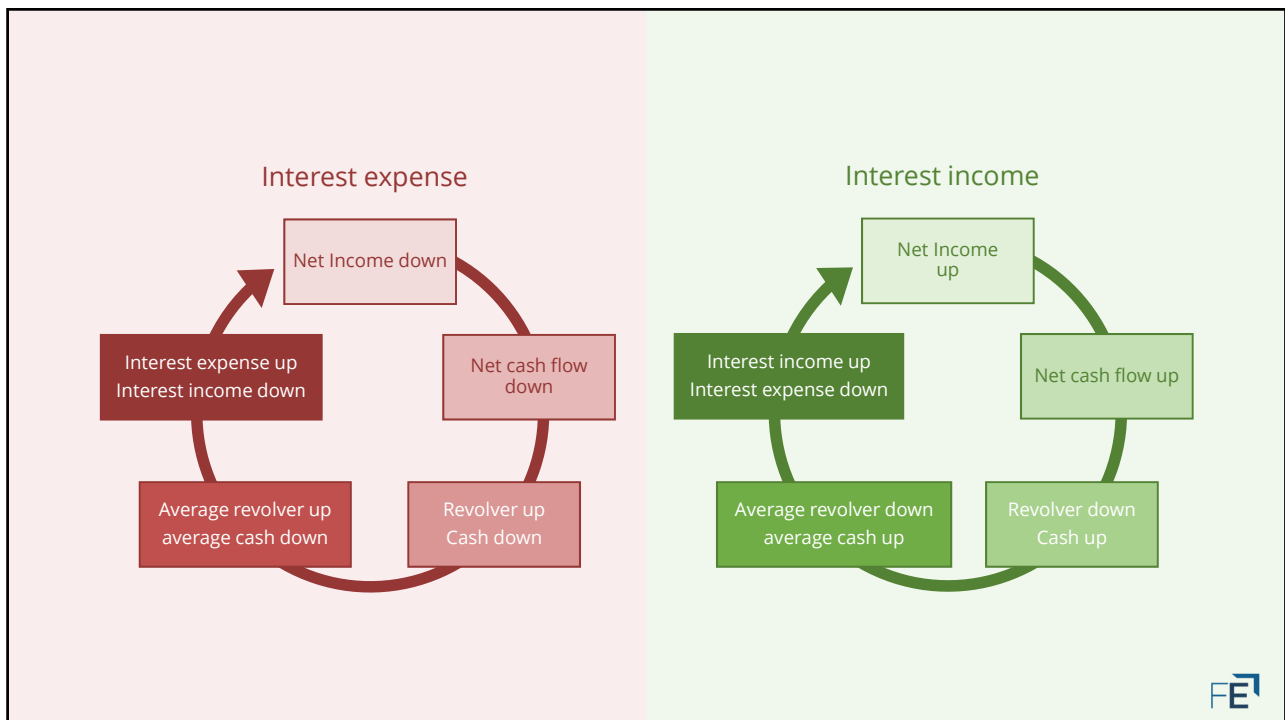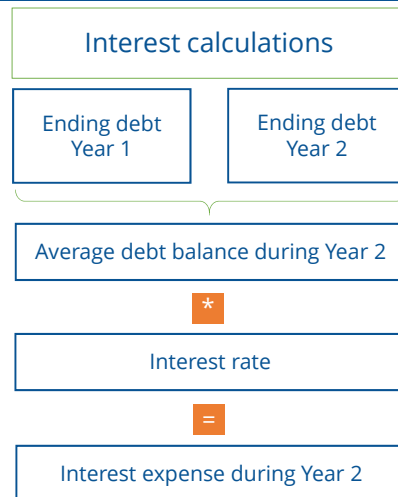| | Act. | Est. | Est. | |
|---|---|---|---|---|
| Cash available to service debt | | 2,000.0 | 1,200.0 | |
| Total mandatory debt repayments | | (1,225.0) | (1,500.0) | From debt calculations |
| Surplus cash / (revolver requirement) | | 775.0 | (300.0) | After mandatory repayments |
| | | | | |
| Beginning revolver | | 2,000.0 | 1,225.0 | From prior ending balance |
| Revolver issuance (repayment) | | (775.0) | 300.0 | Surplus cash drives a repayment up to the level of beginning balance<br>Revolver requirement drives an issuance |
| Ending revolver | 2,000.0 | 1,225.0 | 1,525.0 | |

# Cash Sweep – Mandated and Accelerated Payments

| | Act. | Est. | Est. | |
|---|---|---|---|---|
| Cash available for accelerated repayments | | 275.0 | 600.0 | After revolver issuance / (repayment) AND mandatory repayments |
| Beginning notes A | | 1,000.0 | 325.0 | From prior ending balance |
| Mandatory repayment | | (400.0) | (325.0) | Per loan documentation up to the level of beginning balance |
| Accelerated repayment | | (275.0) | 0.0 | Lesser of amount owed and cash available for accelerated repayments |
| Ending notes A | 1,000.0 | 325.0 | 0.0 | |
| Cash available for accelerated repayments | | 0.0 | 600.0 | After revolver issuance / (repayment) mandatory repayments AND accelerated repayments on A notes |
| Beginning notes B | | 850.0 | 850.0 | From prior ending balance |
| Mandatory repayment | | 0.0 | 0.0 | Per loan documentation up to the level of beginning balance |
| Accelerated repayment | | 0.0 | (600.0) | Lesser of amount owed and cash available for accelerated repayments |
| Ending notes B | 850.0 | 850.0 | 250.0 | |

# Interest Calculations

Interest calculations

Ending debt Year 1    Ending debt Year 2

Average debt balance during Year 2

\*

Interest rate

=

Interest expense during Year 2

## Interest expense

Net Income down

Net cash flow down

Revolver up
Cash down

Average revolver up
average cash down

Interest expense up
Interest income down

## Interest income

Net Income up

Net cash flow up

Revolver down
Cash up

Average revolver down
average cash up

Interest income up
Interest expense down

## Interest and Circular References

### Circular references

| Model is unstable and may "blow up" |
| :---: |

| #REF, #VALUE, #NAME error messages appear |
| :---: |

| Caused by circular formula |
| :---: |

| To fix, turn circular formula into linear one momentarily |
| :---: |

| Fix 1 – Select, delete and CTRL Z |
| :---: |

| Fix 2 - Best practice – Use a circular switch |
| :---: |
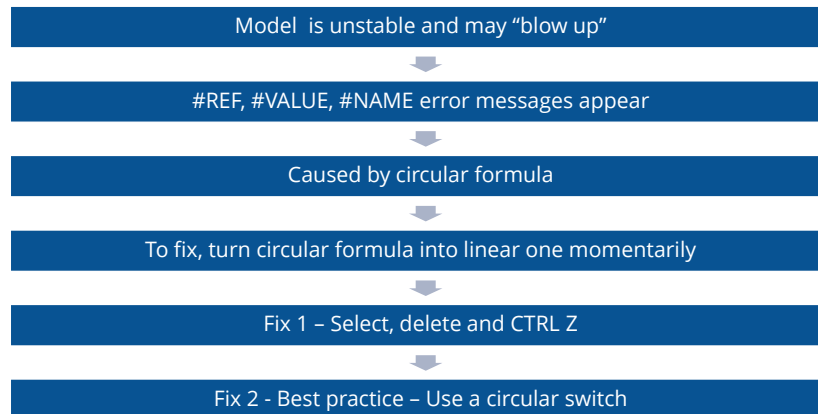
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## Prepare for Handoff

Check that the output looks reasonable based on assumptions ☑

Ensure consistency of formatting: formulas black, hard numbers blue ☑

Is the layout intuitive? ☑

Are complex calculations broken down into steps? ☑

Is the model documented where necessary? ☑

Is the circular switch ON, is iteration ON ☑

Is the model beauty saved? (Ctrl + Home on every sheet) ☑

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