Net Capital Expenditure (CapEx)

Net Capital Expenditure (CapEx) is the cash spent buying (or upgrading) assets less the cash received from selling assets. The assets are supposed to be non-current assets like land, buildings, trucks, equipment, patents and so on. Note that a positive change is an increase and would correspond to a net buying of assets.

Remember that CapEx is supposed to be a cash flow, so depreciation (Depr) must be ignored. There are two ways to calculate CapEx:

 $CapEx = GFA_{now} - GFA_{before}$ $CapEx = NFA_{now} - NFA_{before} + Depr$

GFA is Gross Fixed Assets, usually just Gross PPE (Property, Plant and Equipment), and

NFA is Net Fixed Assets, usually just the carrying amount of PPE, also called NetPPE. So:

NFA = GFA - Accumulated Depreciation

CapEx and Asset Sales

Capital expenditure (CapEx) is:

- Positive when money is spent on non-current assets (NCA's);
- Negative when NCA's are sold.

Subtracting a negative capital expenditure is the same as adding a positive capital revenue:

 $FFCF = NI + Depr - CapEx - \Delta NOWC + IntExp$

 $FFCF = NI + Depr + CapRevenue - \Delta NOWC + IntExp$

Asset Sales and Capital Gains Tax (CGT)

Asset sales which cause negative CapEx (or positive Capital Revenues) should have capital gains tax (CGT) deducted.

 $CapEx = -1 \times CapitalRevenue$

 $= -(P_{mkt} - CGT)$

 $= -(P_{mkt} - CapitalGain.t_c)$

 $= -(P_{mkt} - (P_{mkt} - P_{book}).t_c)$

Where:

 P_{mkt} is the sale price;

P_{book} is the depreciated (net) asset book value on the balance sheet;

t_c is the corporate tax rate;

Calculation Example: CapEx on Asset Sale

Question: You just sold a truck for \$70k. It was bought 3 years ago for \$250k. Note that k stands for kilo or thousands.

- The government tax office state that trucks are depreciable straight line to zero over 5 years.
- Your accountant and engineer say the truck actually lasts for 10 years and should be straight line depreciated over that time to zero.
- You're trying to find the CapEx for your firm this year.
- How does the truck sale affect CapEx?

Answer: The depreciation stipulated by the government tax office is the important one since depreciation and book values are only interesting to finance professionals for tax reasons. Ignore what the accountant and engineer say.

Depreciation expense would 50k/year (=250k/5).

The truck asset's book value would now be:

 $P_{book} = GrossPPE - AccumulatedDepr = NetPPE$

 $= 250k - 50k \times 3 = 100k$

The market price that we just sold the truck for was \$70k: $P_{mkt} = 70k$

Now we can find the CapEx from the truck sale.

 $CapEx = -1 \times CapitalRevenue$ = -(P_{mkt} - CGT) = -(P_{mkt} - CapitalGain.t_c) = -(P_{mkt} - (P_{mkt} - P_{book}).t_c) = -(70 - (70 - 100) × 0.3) = -79k

This is the after-tax sale price of the truck, a positive capital **revenue** and a negative CapEx.

Note that we made a capital loss of 30k (=70-100) on the truck since we sold it for 70k which was less than its book value of 100k.

Under the Australian tax system, this 30k capital loss can be deducted from capital gains on other assets that we sold, this year or in future years.

Assuming that there are other assets that we sold for a capital gain this year, the loss on disposal of the truck leads to a \$9k $(=-(70 - 100) \times 0.3)$ capital gains tax benefit this year. This is an actual cash flow, not an accrual. So we include it.

The \$79k capital revenue includes the \$70k market sale price plus the \$9k capital gains tax benefit.

We can add the 79k CapitalRevenue to FFCF, or subtract the -79k CapEx. Both will have the same effect of increasing FFCF by 79k.

 $FFCF = NI + Depr - -79k - \Delta NOWC + IntExp$

 $= NI + Depr + 79k - \Delta NOWC + IntExp$