

The moving pieces of the Cash flows from (used in) operating activities

Pierre Hamon
May 18, 2022

Contents

1. As viewed on paper (in the HTML file)	2
2. Debits and credits.....	2
Why not making it simple?.....	3
3. The sign logic	3
4. The calculation weight	4
Alternative case.....	4
5. The general pattern of the IFRS taxonomy	5
Sign logic validated by formulas.....	5
Adjustments to reconcile profit (loss) other than changes in working capital	5
Increase (decrease) in working capital.....	7
Other cash flows.....	8
Other specific subtotals.....	8
6. ANNEX I.....	9

Target Audience

This document is primarily aimed at preparers and reviewers of Inline XBRL (iXBRL) reports complying with the requirements set out in the European Securities and Markets Authority's (ESMA) European Single Electronic Format (ESEF) regulation, to better understand the sign logic of the Cash flows from (used) in operating activities of the Statement of cash flows – indirect method.

Introduction and scope

This document describes the moving pieces of the Statement of cash flows – indirect method in the section of Cash flows from (used in) operating activities.

There are four moving pieces:

- As viewed on paper (in the HTML file),
- The balances,
- The sign logic and the validation formulas.
- The calculation weight,

1. As viewed on paper (in the HTML file)

As a general principle the Statement of cash flows discloses the Net increase (decrease) in cash and cash equivalents. As expressed in the label, increases are positive values and decreases are negative values.

	As viewed in the HTML file
Profit (loss)	100
Cash increases	50
Cash decreases	-20
Cash flows from (used in) operating activities.	130

2. Debits and credits

The first moving piece is the balance.

The general principle is that Cash and cash equivalent having a debit balance (as part of the assets), all increases in cash are added and decreases are deducted. As a general principle XBRL values should be positive, increases should have a debit balance and decreases a credit balance:

Cash increases	Debit	+
Cash decreases	Credit	-
Cash flows from (used in) operating activities.	Debit	

The problem comes from the fact that the first line of the Statement of cash flows – indirect method is the profit (loss) for year which has a credit balance but is an increase in cash.

Therefore, the statement is built as follows:

Profit (loss)	Credit	+
Cash increases	Debit	+
Cash decreases	Credit	-
Cash flows from (used in) operating activities.	None	

Why not making it simple?

An uncomplicated way of dealing with this issue would have been to create an element in the taxonomy equivalent to Profit (loss) with a debit balance. In that case, the calculation would have followed the usual pattern in XBRL. Note that this would have been possible in XBRL with a formula validating that the two values are equal.

The Cash flow statement would have been constructed as follows:

		As viewed in the HTML file	Values in the XBRL file
Cash inflow from profit (loss)	Debit	100	100
Cash increases	Debit	50	50
Cash decreases	Credit	-20	20
Cash flows from (used in) operating activities.	Debit	130	130

This also is true for all other first line in the cash flow statement which represents a Profit (loss) element (such as: Profit before tax, for example).

The calculation would have been straight forward, and the signs and weights would have followed the general rules for debits and credits.

3. The sign logic

The sign logic can be defined as the sign to be applied to the HTML “as seen” value to store the value in the XBRL report. Positive meaning that the value stored in XBRL is positive, negative meaning that the value stored in XBRL is negative.

- For example, an expense that is a negative value in the HTML document should be signed as positive so that the value in the XBRL document is positive,
- A net value in the income statement, Income or (expense), will be stored as positive if it is an income and negative if it is an expense. The sign logic is then “as reported.”

To follow the general principles, the values in the XBRL file should be positive and to do so, the sign logic should be set as follows:

	As viewed in the HTML file		Sign logic	Values in XBRL file
Profit (loss)	100	Credit	As reported	100
Cash increases	50	Debit	Positive	50
Cash decreases	-20	Credit	Positive	20
Cash flows from (used in) operating activities.	130	None	Positive	130

With these XBRL values, the calculation would not validate.

Note that the sign logic is attached to the value, therefore it can be set up cell by cell.

4. The calculation weight

The third moving piece is the calculation weight.

The weight is in general the sign used in calculating a total. For example, if a total has a debit balance, all elements that are included in this total have a weight of +1 if they are debits and a weight of -1 if they are credits.

Usually, when all elements in a calculation have a debit or credit balance, it is not allowed to modify their weight.

However, as this section of the cash flow statement the total has no balance, it is possible to tweet the calculation by changing the normal weight of debits and credits.

In the first section of the cash flow statement, the balance and the weight are set as follows:

	As viewed in the HTML file		Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Profit (loss)	100	Credit	As reported)	100	+1	100
Cash increases	50	Debit	Positive	50	+1	50
Cash decreases	-20	Credit	Positive	20	-1	-20
Cash flows from (used in) operating activities.	130	None	Positive	130		130

The calculation would use these weights to perform the calculation of the total and would validate.

Note that the weight is attached to the tag, therefore it must be set up line by line.

Alternative case

In case the Profit (loss) is negative in the comparative year, this pattern will validate for the current and previous year:

	As viewed in the HTML file		Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Profit (loss)	-100		As reported	-100	+1	-100
Cash increases	50		Positive	50	+1	50
Cash decreases	-20		Positive	20	-1	-20
Cash flows from (used in) operating activities.	-70		As reported	-70		-70

5. The general pattern of the IFRS taxonomy

The grouping of line items in this section of the Statement of cash flows have different accounting meanings as follows:

CashFlowsFromUsedInOperatingActivities	0
ProfitLoss	credit
AdjustmentsForReconcileProfitLoss	debit
AdjustmentsToReconcileProfitLossOtherThanChangesInWorkingCapital	debit
IncreaseDecreaseInWorkingCapital	credit
CashFlowsFromUsedInOperations	0

Sign logic validated by formulas

The IFRS taxonomy has an imposed sign logic for a number of lines in the Cash flow from (used in) operating activities: they should have positive values and are validated with formulas:

AdjustmentsForIncreaseInOtherProvisionsArisingFromPassageOfTime	Always positive	debit
AdjustmentsForDepreciationAndAmortisationExpense	Always positive	debit
AdjustmentsForAmortisationExpense	Always positive	debit
AdjustmentsForDepreciationExpense	Always positive	debit
AdjustmentsForImpairmentLossRecognisedInProfitOrLossGoodwill	Always positive	debit
AdjustmentsForFinanceIncome	Always positive	credit
AdjustmentsForFinanceCosts	Always positive	debit
AdjustmentsForInterestIncome	Always positive	credit
AdjustmentsForInterestExpense	Always positive	debit
AdjustmentsForDividendIncome	Always positive	credit

Adjustments to reconcile profit (loss) other than changes in working capital

One sub-section relates to adjustments to the profit and loss to add up debit balances and deduct credit balances which represent additions to cash and deductions from cash respectively.

Therefore, the Cash flow statement is constructed as follows:

	Balance	As viewed in the HTML file	Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Profit (loss)	Credit	100	As reported	100	+1	100
Adjustment for amortisation expense	Debit	50	Positive	50	+1	50
Adjustment for finance income	Credit	-20	Positive	20	-1	-20
Cash flows from (used in) operating activities.	None	130	Positive	150		130

In this section there are elements that have a "debit" balance and for which values can be positive or negative: for example:

AdjustmentsForFairValueGainsLosses	Adjustments for fair value losses (gains)	debit
AdjustmentsForUnrealisedForeignExchangeLossesGains	Adjustments for unrealised foreign exchange losses (gains)	debit
AdjustmentsForSharebasedPayments	Adjustments for share-based payments	debit

In this section there are elements that have a "credit" balance and for which values can be positive or negative: for example:

AdjustmentsForGainLossOnDisposalsPropertyPlantAndEquipment	Adjustments for gain (loss) on disposals, property, plant and equipment	credit
AdjustmentsForFinanceIncomeCost	Adjustments for finance income (cost)	credit
AdjustmentsForUndistributedProfitsOfAssociates	Adjustments for undistributed profits of associates	credit

An entity specific disclosure (specific extension) in this sub-section should follow the same logic:

	Balance	As viewed in the HTML file	Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Profit (loss)	Credit	100	As reported	100	+1	100
Adjustment for specific expense	Debit	50	Positive	50	+1	50
Adjustment for specific income	Credit	-20	Positive	20	-1	-20
Cash flows from (used in) operating activities.	None	130	Positive	150		130

In case the specific disclosure is a net expense or income, it should be labelled accordingly (in application of the IFRS style guide) and follow the same logic:

	Balance	As viewed in the HTML file	Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Profit (loss)	Credit	100	As reported	100	+1	100
Adjustment for specific expense (income) (1), net	Debit	50	Positive	50	+1	50
Adjustment for specific expense (income) (2), net	Debit	-20	Negative	-20	1	-20
Cash flows from (used in) operating activities.	None	130	Positive	150		130

Increase (decrease) in working capital

The second sub-section relates to increases and decreases in working capital.

In the sub-section, the values are net values for net increases in assets or liabilities.

Therefore, the logic is that a net increase in an asset is a decrease in cash while a net increase in liabilities is an increase in cash. And the reverse for decreases in assets and decreases in liabilities.

In this section, the elements have a “debit” balance and for which the values are positive due to their accounting definition given by the label (in English), the negative values being shown between brackets: for example:

	Positive value	Balance
IncreaseDecreaseInWorkingCapital	Increase in WC	credit
AdjustmentsForDecreaseIncreaseInInventories	Decrease in assets	debit
AdjustmentsForDecreaseIncreaseInTradeAndOtherReceivables	Decrease in assets	debit
AdjustmentsForDecreaseIncreaseInOtherAssets	Decrease in assets	debit
AdjustmentsForIncreaseDecreaseInTradeAndOtherPayables	Increase in liabilities	debit
AdjustmentsForIncreaseDecreaseInOtherLiabilities	Increase in liabilities	debit

In the IFRS taxonomy, the expected sign is shown in the label of the elements, the negative sign being in brackets, all elements having a debit balance.

Therefore, the components of increase (decrease) in working capital are set up as follows:

	As viewed in the HTML file	Balance	Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Adjustments for decrease (increase) in inventories	50	Debit	positive	50	1	50
Adjustments for decrease (increase) in trade and other receivables	-40	Debit	negative	-40	1	-40
Adjustments for increase (decrease) in trade and other payables	20	Debit	positive	20	1	20
Adjustments for increase (decrease) in other liabilities	-10	Debit	negative	-10	1	-10
Increase (decrease) in working capital	20	Credit		20		20

An entity specific disclosure (specific extensions) in this sub-section should follow the same logic and be labelled accordingly:

	As viewed in the HTML file	Balance	Sign logic	Values in XBRL file	Calculation weight	Calculation validation
Adjustments for decrease (increase) in specific asset	50	Debit	positive	50	1	50
Adjustments for decrease (increase) in specific asset	-40	Debit	negative	-40	1	-40

Adjustments for increase (decrease) in specific liability	20	Debit	positive	20	1	20
Adjustments for increase (decrease) in specific liability	-10	Debit	negative	-10	1	-10
Increase (decrease) in working capital	20	Credit		20		20

A positive value for increase in working capital, as it has a credit, will have a -1 weight and therefore is a decrease of cash.

Other cash flows

Other cash flow items should always have a positive value as validated by the formulas, they have a balance and a weight fixed by the IFRS/ESEF taxonomy, therefore follow the general pattern for calculation validation.

DividendsPaidClassifiedAsOperatingActivities	Always positive	credit
DividendsReceivedClassifiedAsOperatingActivities	Always positive	debit
InterestPaidClassifiedAsOperatingActivities	Always positive	credit
InterestReceivedClassifiedAsOperatingActivities	Always positive	debit
FinanceCostsPaidClassifiedAsOperatingActivities	Always positive	credit
FinanceIncomeReceivedClassifiedAsOperatingActivities	Always positive	debit
IncomeTaxesPaidRefundClassifiedAsOperatingActivities	.	credit
IncomeTaxesPaidClassifiedAsOperatingActivities	Always positive	credit
IncomeTaxesRefundClassifiedAsOperatingActivities	Always positive	debit

Other specific subtotals

Specific sub-totals which aggregate similar elements of cash flows should have a balance corresponding to the balance of the aggregated elements

AdjustmentsForDecreaseIncreaseInTradeAndOtherReceivables	debit
AdjustmentsForDecreaseIncreaseInOtherAssets	debit
TotalAdjustmentsForDecreaseIncreaseInCurrentAssets	debit

The balance of entity's specific sub-totals which are net values that can be positive or negative in the section Cash flows from (used in) operating activities, should be set up as "None" as the total of the section as the sub-totals in the IFRS/ESEF taxonomy

CashFlowsFromUsedInOperations	0
-------------------------------	---

6. ANNEX I

Balance and signs of elements in the CashFlowsFromUsedInOperations

Name	label (en)	positif	balance
Elements for which the values should always be positive (checked by formulas in the IFRS taxonomy)			
AdjustmentsForIncreaseInOtherProvisionsArisingFrom PassageOfTime	Adjustments for increase in other provisions arising from passage of time	Always positive	debit
AdjustmentsForDepreciationAndAmortisationExpense	Adjustments for depreciation and amortisation expense	Always positive	debit
AdjustmentsForAmortisationExpense	Adjustments for amortisation expense	Always positive	debit
AdjustmentsForDepreciationExpense	Adjustments for depreciation expense	Always positive	debit
AdjustmentsForImpairmentLossRecognisedInProfitOrLossGoodwill	Adjustments for impairment loss recognised in profit or loss, goodwill	Always positive	debit
AdjustmentsForFinanceIncome	Adjustments for finance income	Always positive	credit
AdjustmentsForFinanceCosts	Adjustments for finance costs	Always positive	debit
AdjustmentsForInterestIncome	Adjustments for interest income	Always positive	credit
AdjustmentsForInterestExpense	Adjustments for interest expense	Always positive	debit
AdjustmentsForDividendIncome	Adjustments for dividend income	Always positive	credit

Elements that are "debit" and for which values can be positive or negative

AdjustmentsForReconcileProfitLoss	Adjustments to reconcile profit (loss)		debit
AdjustmentsToReconcileProfitLossOtherThanChangesInWorkingCapital	Adjustments to reconcile profit (loss) other than changes in working capital		debit
AdjustmentsForProvisions	Adjustments for provisions		debit
AdjustmentsForDepreciationAndAmortisationExpenseAndImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLoss	Adjustments for depreciation and amortisation expense and impairment loss (reversal of impairment loss) recognised in profit or loss		debit
AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLoss	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss		debit
AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLossPropertyPlantAndEquipment	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss, property, plant and equipment		debit
AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLossTradeAndOtherReceivables	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss, trade and other receivables		debit
AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLossInventories	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss, inventories		debit
AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLossExplorationAndEvaluationAssets	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss, exploration and evaluation assets		debit

AdjustmentsForImpairmentLossReversalOfImpairmentLossRecognisedInProfitOrLossLoansAndAdvances	Adjustments for impairment loss (reversal of impairment loss) recognised in profit or loss, loans and advances	debit
AdjustmentsForLossesGainsOnDisposalOfNoncurrentAssets	Adjustments for losses (gains) on disposal of non-current assets	debit
AdjustmentsForFairValueGainsLosses	Adjustments for fair value losses (gains)	debit
AdjustmentsForUnrealisedForeignExchangeLossesGains	Adjustments for unrealised foreign exchange losses (gains)	debit
AdjustmentsForSharebasedPayments	Adjustments for share-based payments	debit
AdjustmentsForIncomeTaxExpense	Adjustments for income tax expense	debit
AdjustmentsForDeferredTaxExpense	Adjustments for deferred tax expense	debit
OtherAdjustmentsForNoncashItems	Other adjustments for non-cash items	debit
OtherAdjustmentsToReconcileProfitLoss	Other adjustments to reconcile profit (loss)	debit
OtherAdjustmentsForWhichCashEffectsAreInvestingOrFinancingCashFlow	Other adjustments for which cash effects are investing or financing cash flow	debit

Elements that are "credit" and for which values can be positive or negative

AdjustmentsForGainLossOnDisposalsPropertyPlantAndEquipment	Adjustments for gain (loss) on disposals, property, plant and equipment	credit
AdjustmentsForGainLossOnDisposalOfInvestmentsInSubsidiariesJointVenturesAndAssociates	Adjustments for gain (loss) on disposal of investments in subsidiaries, joint ventures and associates	credit
AdjustmentsForGainsLossesOnChangeInFairValueLessCostsToSellBiologicalAssets	Adjustments for gains (losses) on change in fair value less costs to sell, biological assets	credit
AdjustmentsForGainsLossesOnChangeInFairValueOfDerivatives	Adjustments for gains (losses) on change in fair value of derivatives	credit
AdjustmentsForGainsLossesOnFairValueAdjustmentInvestmentProperty	Adjustments for gains (losses) on fair value adjustment, investment property	credit
AdjustmentsForFinanceIncomeCost	Adjustments for finance income (cost)	credit
AdjustmentsForUndistributedProfitsOfAssociates	Adjustments for undistributed profits of associates	credit
AdjustmentsForUndistributedProfitsOfInvestmentsAccountedForUsingEquityMethod	Adjustments for undistributed profits of investments accounted for using equity method	credit

Elements that are "Debit" and for which the values are positive or negative due to their accounting definition

IncreaseDecreaseInWorkingCapital	Increase (decrease) in working capital	increase	credit
AdjustmentsForDecreaseIncreaseInInventories	Adjustments for decrease (increase) in inventories	decrease in assets	debit
AdjustmentsForDecreaseIncreaseInTradeAndOtherReceivables	Adjustments for decrease (increase) in trade and other receivables	decrease in assets	debit
AdjustmentsForDecreaseIncreaseInTradeAccountReceivable	Adjustments for decrease (increase) in trade accounts receivable	decrease in assets	debit
AdjustmentsForDecreaseIncreaseInOtherOperatingReceivables	Adjustments for decrease (increase) in other operating receivables	decrease in assets	debit
AdjustmentsForDecreaseIncreaseInPrepaidExpenses	Adjustments for decrease (increase) in prepaid expenses	decrease in assets	debit

Adjustments For Decrease In Accrued Income Including Contract Assets	Ajustements pour diminution (augmentation) de produits à recevoir, y compris d'actifs sur contrat	decrease in assets	debit
Adjustments For Decrease In Contract Assets	Ajustements pour diminution (augmentation) d'actifs sur contrat	decrease in assets	debit
Adjustments For Decrease In Accrued Income Other Than Contract Assets	Ajustements pour diminution (augmentation) de produits à recevoir autres que d'actifs sur contrat	decrease in assets	debit
Adjustments For Decrease In Other Assets	Adjustments for decrease (increase) in other assets	decrease in assets	debit
Adjustments For Decrease In Other Current Assets	Adjustments for decrease (increase) in other current assets	decrease in assets	debit
Adjustments For Decrease In Loans And Advances To Customers	Adjustments for decrease (increase) in loans and advances to customers	decrease in assets	debit
Adjustments For Decrease In Loans And Advances To Banks	Adjustments for decrease (increase) in loans and advances to banks	decrease in assets	debit
Adjustments For Decrease In Reverse Repurchase Agreements And Cash Collateral On Securities Borrowed	Adjustments for decrease (increase) in reverse repurchase agreements and cash collateral on securities borrowed	decrease in assets	debit
Adjustments For Decrease In Financial Assets Held For Trading	Adjustments for decrease (increase) in financial assets held for trading	decrease in assets	debit
Adjustments For Decrease In Derivative Financial Assets	Adjustments for decrease (increase) in derivative financial assets	decrease in assets	debit
Adjustments For Decrease In Biological Assets	Adjustments for decrease (increase) in biological assets	decrease in assets	debit
Adjustments For Increase In Trade And Other Payables	Adjustments for increase (decrease) in trade and other payables	increase in liabilities	debit
Adjustments For Increase In Trade Account Payable	Adjustments for increase (decrease) in trade accounts payable	increase in liabilities	debit
Adjustments For Increase In Other Operating Payables	Adjustments for increase (decrease) in other operating payables	increase in liabilities	debit
Adjustments For Increase In Deferred Income Including Contract Liabilities	Ajustements pour augmentation (diminution) de produits différés, y compris de passifs sur contrat	increase in liabilities	debit
Adjustments For Increase In Contract Liabilities	Ajustements pour augmentation (diminution) d'autres passifs sur contrat	increase in liabilities	debit
Adjustments For Increase In Deferred Income Other Than Contract Liabilities	Ajustements pour augmentation (diminution) de produits différés autres que des passifs sur contrat	increase in liabilities	debit
Adjustments For Increase In Other Liabilities	Adjustments for increase (decrease) in other liabilities	increase in liabilities	debit
Adjustments For Increase In Other Current Liabilities	Adjustments for increase (decrease) in other current liabilities	increase in liabilities	debit
Adjustments For Increase In Employee Benefit Liabilities	Adjustments for increase (decrease) in employee benefit liabilities	increase in liabilities	debit
Adjustments For Increase In Deposits From Customers	Adjustments for increase (decrease) in deposits from customers	increase in liabilities	debit
Adjustments For Increase In Deposits From Banks	Adjustments for increase (decrease) in deposits from banks	increase in liabilities	debit
Adjustments For Increase In Insurance Reinsurance And Investment Contract Liabilities	Adjustments for increase (decrease) in insurance,	increase in liabilities	debit

AdjustmentsForIncreaseDecreaseInRepurchaseAgreementsAndCashCollateralOnSecuritiesLent	reinsurance and investment contract liabilities Adjustments for increase (decrease) in repurchase agreements and cash collateral on securities lent	increase in liabilities	debit
AdjustmentsForIncreaseDecreaseInFinancialLiabilitiesHeldForTrading	Adjustments for increase (decrease) in financial liabilities held for trading	increase in liabilities	debit
AdjustmentsForIncreaseDecreaseInDerivativeFinancialLiabilities	Adjustments for increase (decrease) in derivative financial liabilities	increase in liabilities	debit

Extensions should follow the style guide and the rule of the similar elements in the taxonomy