

## Executive report of results. Indices in detail.

### Index of Efficiency

#### Calculation:

```
Profit_Total := BalanceEnd - BalanceIni

if Profit_Total >= 0 then
  IE := 100 * Profit_Total /
  Sum_of_Profit_in_Positive_Operations
else
  IE := 100 * Profit_Total /
  Sum_of_Losses_of_Negative_Operations
end if

Rank of variation: -100 to 100

if Profit_Total >= 0 then
  IE >= 0
else
  IE <= 0
end if
```

#### Meaning:

Relation between Profit and losses

IE = +100: always operations with profits  
IE = +50: more profits than losses  
IE = 0: same profits as losses  
IE = -50: more losses than profits  
IE = -100: always operations with losses

### Index of Global Security

#### Calculation:

MaxRecNeg: maximum negative global run, this is, maximum distance below the BalanceIni that our patrimonial value has reached in the operating interval, even considering open operations

```
Profit_Total := BalanceEnd - BalanceIni

if Profit_Total >= 0 then
  ISG := 100 * Profit_Total / (Profit_Total + MaxRecNeg)
else
  ISG := 100 * Profit_Total / MaxRecNeg
end if

Rank of variation: -100 to 100

if Profit_Total >= 0 then
  ISG >= 0
else
  ISG <= 0
end if
```

#### Meaning:

Relation between profits and global risk

ISG = +100: high profit, global risk zero  
ISG = +50: half profit, half global risk  
ISG = 0: zero profit, global risk zero  
ISG = -50: half profit, half global risk  
ISG = -100: high losses, high global risk

Index of Medium Security	
<p><b>Calculation:</b></p> <p>MaxRecNeg_Op: maximum negative global run, this is, maximum distance below the BalanceIni_Op that it has reached our patrimonial value of the period in which it was open this operation</p> <p><math>\text{Profit\_Op} := \text{BalanceEnd\_Op} - \text{BalanceIni\_Op}</math></p> <p>IS_Op: Index of Operation Security</p> <p>if Profit_Op &gt;= 0 then  <math>\text{IS\_Op} := 100 * \text{Profit\_Op} / (\text{Profit\_Op} + \text{MaxRecNeg\_Op})</math>  else  <math>\text{IS\_Op} := 100 * \text{Profit\_Op} / \text{MaxRecNeg\_Op}</math>  end if</p> <p>ISM := Arithmetic mean of the IS_Op of all operations</p> <p>Rank of variation: -100 to 100</p>	<p><b>Meaning:</b></p> <p>Media of the relation between profits and risk</p> <p>IS_Op = +100: operation with high profit, zero risk  IS_Op = +50: operation with half profit, half risk  IS_Op = 0: operation with zero profit, zero risk  IS_Op = -50: operation with half losses, half risk  IS_Op = -100: operation with high losses, high risk</p> <p>ISM: average of IS_Op values</p>
Index of Exploitation	
<p><b>Calculation:</b></p> <p>MaxRecPos_Op: maximum positive run of a operation, this is, maximum distance above the BalanceIni_Op that it has reached our patrimonial value of the period in which it was open this operation</p> <p><math>\text{Profit\_Op} := \text{BalanceEnd\_Op} - \text{BalanceIni\_Op}</math></p> <p>IA_Op: Index of Exploitation of an operation</p> <p>if Profit_Op &gt;= 0 then  <math>\text{IA\_Op} := 100 * \text{Profit\_Op} / \text{MaxRecPos\_Op}</math>  else  <math>\text{IA\_Op} := 100 * \text{Profit\_Op} / (\text{MaxRecNeg\_Op} - \text{Profit\_Op})</math>  end if</p> <p>ISM := Arithmetic mean of the IA_Op of all operations</p> <p>Rank of variation: -100 to 100</p>	<p><b>Meaning:</b></p> <p>The average relation between profits and opportunity</p> <p>IA_Op = +100: operation with high profit, risk zero  IA_Op = +50: operation with half profit, half opportunity  IA_Op = 0: operation with half profit, zero opportunity  IA_Op = -50: operation with half losses, half opportunity  IA_Op = -100: operation with half losses, zero opportunity</p> <p>IA: average of IA_Op values</p>
Index of Presence	
<p><b>Calculation:</b></p> <p><math>\text{IP} := 100 * \text{Number\_of\_Days\_Invested} / \text{Number\_of\_Days\_Totals}</math></p> <p>Rank of variation: 0 to 100</p>	<p><b>Meaning:</b></p> <p>Percentage of days invested</p> <p>IP = +100: always invested  IP = +50: invested half the period  IP = 0: never invested</p>

Index of Mobility	
<p><b>Calculation:</b></p> $IM; := 100 * \text{Number\_of\_Days\_Invested} / \text{Number\_of\_Days\_Totals}$ <p>Rank of variation: 0 to 100</p>	<p><b>Meaning:</b></p> <p>Degree of duration of the operations</p> <p>IM = +100: operations of one day only  IM = +50: operations of two days average  IM = +25: operations of four days average  IM = +10: operations of ten days average  IM = +5: operations of twenty days average  IM = 0: very long operations</p>
Index of Successful Days	
<p><b>Calculation:</b></p> $ID := 100 * \text{Number of days with positive increase of balance} / \text{Number of days invested}$ <p>Rank of variation: 0 to 100</p>	<p><b>Meaning:</b></p> <p>Percentage of days in which the model is able to increase the balance. Given two models with the same profitability, the one with the highest index of successful days can be used with the highest confidence by the investor.</p>
Index of Successful Operations	
<p><b>Calculation:</b></p> $IO := 100 * \text{Number\_positive\_operations} / \text{Number\_total\_operations}$ <p>Rank of variation: 0 to 100</p>	<p><b>Meaning:</b></p> <p>Percentage of successful operations. Gives the average of the prediction security of the model</p>