

Dividends from the Spanish Stock Market is one of its main attractions, being one of the world's leading stock exchanges in return to its shareholders. Investors and managers usually have profitability expectations based on two sources of income:

- 1) dividend yield
- 2) evolution of the asset price.

Dividend futures are contracts that will help us manage the risk of changes in a company's dividends (Futures on individual stock dividends) or index (futures on IBEX 35 Impact Dividend Index).

These contracts are easy to use. For example, we sell a future on Repsol dividends December 2021 expiry, at 0,32, which is what the market expects Repsol to pay in accumulated dividends until December in all of 2021. If finally Repsol pays 0,30, the result will be: $(0,32-0,30) \times 1000 \text{ shares} = + \text{€ } 20$.

When the exposure to equities is through futures, the exposure is reverse to cash dividend, since the estimated dividends up to the expiration date are being taken into account:

- If we have a buy IBEX 35 future, we implicitly have a basket of IBEX 35® shares financed until maturity (cost) and we also have the income that comes from the estimated basket dividends that are implicit in the price of the future. If the actual dividends finally paid by the basket are greater than estimated, there will be losses for not consider those dividends paid.
- If we have a sold IBEX 35 future, we implicitly have a basket of IBEX 35® sold invested until maturity (income) but having to pay the estimated basket dividends that are implicit in the price of the future. If the actual dividends finally paid are less than estimated, there will be losses for not having paid those estimated dividends instead of the actual dividends the basket had been had.

Let's take an example with futures and baskets on IBEX 35. Suppose we have an IBEX 35 future maturing December on October 28 valued at 8,943. The IBEX 35 level is 8,985.8. The IBEX Impacto Dividendo index value is 189.7 points, that is, the shares that make up the IBEX 35 have paid dividends throughout the year equivalent to 189.70 index points. In other words, the IBEX 35 has dropped these points throughout the year as a result of the payment of dividends.

The future of IBEX Impact Dividend for the month of December 2021 is quoting: 229 (bid) -234 (ask). This means that between now and the third Friday in December of this year the IBEX 35 is expected to fall between 39.3 and 44.3 points though dividends.

By having an IBEX 35 future, our risk is that, if dividends rise, the future will fall more than expected since:

$$\text{IBEX 35 Future Price} = \text{Capitalized cash Price} - \text{Dividends in IBEX points also capitalized.}$$

For this reason, if we have IBEX 35 futures bought, we should buy IBEX Impact Dividend futures at 234.

Let's assume two situations again:

If the estimated dividends go down and 220 points are finally distributed.

If dividends go down and 220 are finally distributed, it means that between now and December expiration, only 30.3 points (220-189.7) will be distributed.

If the IBEX 35 ends at 9,200 points on the third Friday in December. Someone who had the basket of 35 values would have the following result until expiration:

$$(9,200-8,985.8) \times 10 \text{ (multiplier)} = 2,140 \text{ euros (2.38\%)} \text{ to which should be added the dividends finally paid } 30.3 \times 10 = 303 \text{ euros, for a total of 2,445 euros (a 2,72\%)}$$

However, a person with the same price exposure but who has done it through IBEX futures, would have the following result:

$$(9.200 - 8.943) \times 10 \text{ (multiplier)} = 2.570 \text{ euros (2,87\%)}$$

On the other hand, as we have bought the future Impact Dividend to close those 234 points, we will not benefit from the drop in estimated dividends.

$$(220-234) \times 10 \text{ (multiplier)} = -140 \text{ euros that we have to pay. Therefore, the total would be } 2,570 - 140 = 2,430 \text{ euros (2.72\%).}$$

If the estimated dividends rise and finally 240 points are distributed.

If dividends go up and 240 are finally distributed, it means that 50.3 points will be distributed between now and December expiration.

Similarly, if the IBEX 35 ended at 9,200 points on the third Friday in December. Someone who had the basket of 35 values would have the following result in this time until expiration:

$$(9,200-8,985.8) \times 10 \text{ (multiplier)} = 2,140 \text{ euros (2.38\%)} \text{ to which should be added the dividends finally paid } 50.3 \times 10 = 503 \text{ euros, which gives a total of 2,645 euros (a 2,94\%)}$$

However, a person with the same price exposure but who has done it through IBEX futures, would have the following result:

$$(9.200 - 8.943) \times 10 \text{ (multiplier)} = 2.570 \text{ euros (2,87\%)}$$

On the other hand, as we have bought the future Impact Dividend to close those 234 points, we will not benefit from the drop in estimated dividends.

$$(240-234) \times 10 \text{ (multiplier)} = +60 \text{ euros that we have to pay. Therefore, the total would be } 2,570 + 60 = 2,630 \text{ euros (2.94\%).}$$

On the other hand, if in a Roll Over trade of the position the traders want to close their dividend risk, it is possible to package the Future IBEX Impact Dividend contract to the roll over trade for this purpose.

For example, suppose that:

On November 17, 2021, the following market prices were available:

- Future IBEX 35 maturity 19.Nov: 9021
- Future IBEX 35 maturity 17 Dec: 8998
- IBEX Div Impact Index: 213.1
- Future IBEX Div Impact: 236

Let's suppose that, in the period 19.Nov to 17.Dec, one of the dividends considered represents 8 index points. In the market there are doubts that the exdate date of this dividend is within or not in the roll over period, and in fact it is included at 50% both in the timespread and in the Future IBEX Impact Div.

Two traders within the roll over decide to carry out the roll covering the risk of that dividend, and considering in both that the dividend will be paid 50% within the period.

Therefore, they carry out a trade where:

The buyer of the roll over:

- Buy Future IBEX 35 Due Nov to 9021
- Sell Future IBEX 35 Maturity Dec to 8998
- Sells Future IBEX Impact Div at 231

The seller of the roll makes the counterparts of the previous operation.

Therefore, let's consider the losses and profits generated based on what will finally happen with the dividend:

If the dividend actually ends up having its exdate date within the period:

- The price of the first future would still have been 9021
- However, the price of the second future should have been four points lower (since we only included half of the 8 points finally paid) with what should have been sold at 8994.

By selling it at 8998, the roll over buyer earns four points on the price he should have made (and the roll over seller lost them).

- The price of the Future IBEX Impact Div will include the 8 points paid, which will close four points above the price at which we made our trade (since we only include half of the 8 points finally paid), that is, at 235.

Buy selling it at 231, the buyer of the roll loses four points in this contract (and the seller gains them), which compensates his earnings in the price of the future IBEX of the second expiration.

- In the same way, if the dividend ends up having its exdate date outside the period, the flows will also be compensated, although in the opposite direction (the buyer of roll over will have losses in the IBEX Future second maturity, and gains in the IBEX Future Impact Div).

Definitely, having entered the Future Dividends contract within the roll over trade, and having done so at prices in line with the difference prices between the first and second maturity, both parties (buyer and seller) have closed their risk of dividend, and they are already indifferent whether or not the payment of a certain dividend occurs within the period covered by the timespread.