

The Classroom Average Analogy

We all understand how a classroom average works. All students could match the classroom average. If one or more outperform the average, it is certain that at least one student underperforms the average in an offsetting manner.

We use the classroom to explain how the market works. Consider this. The class takes a test. There is a range of results from low to high and there is an average. As long as every child did not receive the average, some outperformed the average and some underperformed the average. It is certain that if one or more outperformed the average, at least one underperformed the average. Nothing revolutionary here.

Let's divide the class into two groups such as boys and girls. Let's say there are 10 boys and 10 girls. If we know that the boys underperformed the class average by an average of 5 percentage points, we are certain that the group of girls outperformed by an average of 5 percentage points. Nothing revolutionary here either.

Let's say we don't know the number of boys and girls and we know the boys underperformed the class average by an average of 5 percentage points. We are not sure by what magnitude the group of girls outperformed the class average, but we are certain they did outperform the class average.

In both the above we don't know each individual mark. One boy may have earned 100% on the test. Same is true with each individual girl.

Now, let's say that each boy attains the class average. If each boy attains the class average, the average for the group of boys equals the class average. If we know the class average and the average to the group of boys, we can solve for the average for the group of girls. The simple rules of arithmetic dictate that the group of girls must average the class average regardless of the number of boys and girls. Some girls may outperform the average and, if so, some will underperform and it is certain the two offset. The average for the group of girls must equal the class average.

This analogous to the market. We divided all market participants into passive market participants and active market participants. A market participant is either one or the other. Each passive participant earns the market return pre-cost. This is the definition of passive management. If each passive participant earns the market return pre-cost, then the average return to the group of passive participants pre-cost must equal the market return. Just as above, it is certain that the group of active participants must average the market return pre-cost. Some active participants will outperform pre-cost. It is certain that this is offset by other active participants who must underperform pre-cost.