Ranking

An important final step in making sense of the cyclic information is to establish a measurement for the strength of a cycle. Once ranking and sorting for detected cycles is completed, we have cycles that are dominant (based on their amplitude) and genuine (considering their driving force in the financial market). For trading purposes, this does not suffice. The price influence of a cycle per bar on the trading chart is the most crucial information.

Let me give you some examples by comparing two cycles. One cycle has a wavelength of 110 bars and an amplitude of 300. The other cycle has a wavelength of 60 bars and an amplitude of only 200.

So, if we apply the "standard" method for determining the dominant cycle, namely selecting the cycle with the highest amplitude, we would select the cycle with the wavelength of 110 and the amplitude of 300.

But let us look at the following information - the force of the cycle per bar:

- Length 110 / Amplitude 300   = Strength per bar: 300 / 110   = 2.7
- Length 60 / Amplitude 200   = Strength per bar: 200 / 60   = 3.3

For trading, it is more important to know which cycle has the biggest influence to drive the price per bar, and not only which cycle has the highest amplitude!

That is the reason I am introducing the measurement value "**Cycle Strength**." The Cycle Scanner automatically calculates this value.

That said, to build a ranking based on the cycles left, we recommend sorting these cycles based on their "influence" per bar. As we are looking for the most dominant cycles, these are the cycles that influence the movement of the data-series the most per single bar.

Sort the outcome according to the calculated cycle strength score. Now we have a top-to-bottom list of cycles having the highest influence on price movements per bar.

What is the dominant cycle?

After the cycle scanner engine has completed all steps (detrend, detect, validate, rank), the cycle at the top of the list (with the highest cycle strength score) will provide us the information on the *dominant cycle*. In fact, the wavelength of this cycle is the dominant market vibration, which is very useful for cycle prediction and forecasting.

However, not only is the result limited to the cycle length (we not only have the dominant cycle length) but we also know—and this is very important—the current phase status of this cycle (Important: not the averaged phase over the full data set). This allows us to provide more valid

cycle projections on the "right" side of the chart for trading instead of using the normally used "averaged" phase status over the full data set for this cycle.