# Pivot Points

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We often hear market analysts or experienced traders talking about an equity price nearing a certain support or resistance level, each of which is important because it represents a point at which a major price movement is expected to occur. But how do these analysts and professional traders come up with these so-called levels? One of the most common methods is using pivot points, and here we take a look at how to calculate and interpret these technical tools.

What are the most common tricks/techniques to use in Pivot point trading?
Pivot points are sometimes associated with difficulties for traders, especially for beginners.
Ever wondered why price stops and turns at some exact points?
There are many answers and causes for that such as Fibonacci levels, trend lines support/resistance areas etc, but many of such stops-turns are quite often caused by Pivot point levels

Pivot point trading is a study that traders either going to know and use to their benefit OR allow additional unnecessary risks to be a part of everyday trading

## What is Pivot point trading?

Pivot point trading is a technique widely used among traders, that allows to determine important support/resistance levels for the day which derived from the previous day's trading range.

Pivot points — the key levels or certain price values for a current day — are points around which traders base their entries and exits. There are 5 major and several additional pivot levels, we are going to learn about them later.

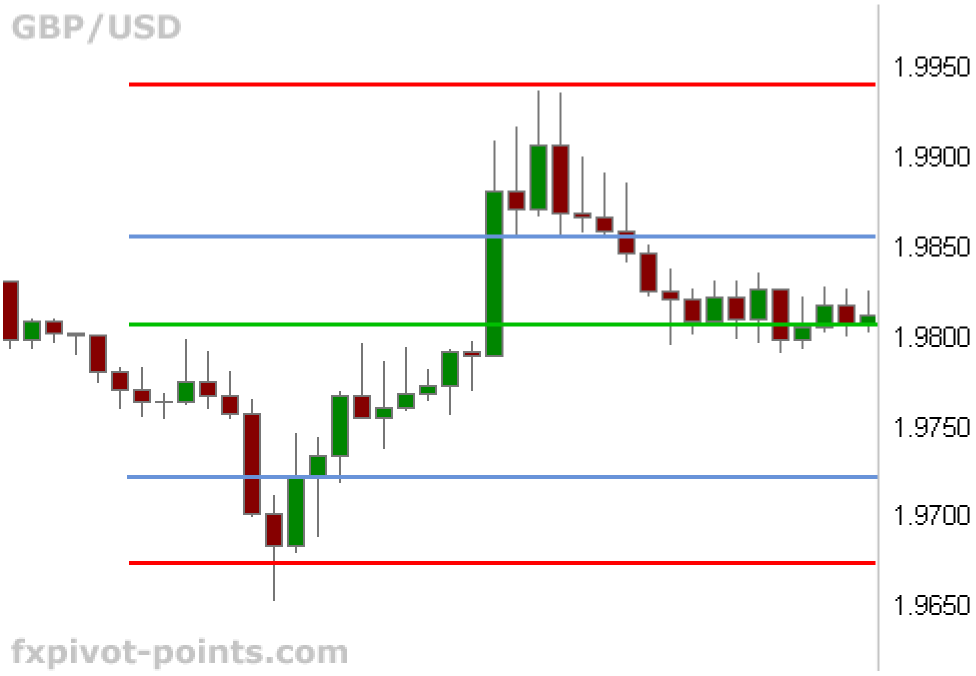
In simple words, it is similar to knowing where the price is going to stop and reverse and how far it will go next time: The knowledge of such support/resistance levels is priceless as it allows to get in / out of the trade, set stop and profit orders with maximum advantage to traders.

In fact, if you have troubles seeing where the market is going, Pivot points can give you a clue! It is like having a map on your charts!

Compare the two charts below.

<u>That's the way traders would see a chart without Pivot points</u>


<u>That's the chart with a Pivot "map" on it:</u>



Obviously, the second chart had a great advantage over the first one. As we can see, for the whole trading day a trader was able to accurately predict price's turning points.
Pivot points are calculated daily, weekly and monthly.

The most common are daily Pivot points.
But important are all three: - daily, weekly and monthly pivots.
So, make it a habit once a week to set weekly pivots on a chart, once a month — refresh monthly pivot points.
For intraday trading traders calculate daily Pivots and then use them on the charts they prefer to trade with: hourly charts, 30 minutes, 15 minutes etc.

We will learn how to trade with daily Pivot points on 15 minute charts.
As a rule all calculations are done by charting software, but Pivots can also be calculated manually.

## Pivot point Terminology

Before we speak about how to calculate and use Pivot point levels, let's define a few terms we will be using here

- **PIVOT POINT** is the point where the market reverses. It is a turning point. If the market is trading above Pivot Point it is considered to be a *bull market* (buyers are dominant), once it goes below the Pivot Point— it becomes a *bear market* (sellers are dominant).
- **RESISTANCE** is a *high point* in the market where buyers meet strong opposition of sellers. A rising market reaching resistance has big potential of falling back down
- **SUPPORT** is a *low point* in the market where sellers meet strong opposition of buyers. A falling price reaching support has a big chance of climbing back up.

Support and resistance levels are difficult to break through, but they do fail, otherwise the price would be all the time going in one direction only..

There is a rule that once a support or resistance level is broken it becomes the opposite force: a broken support will become a resistance, and a broken resistance serves as a future support.


Pivot point trading emphasizes on the importance of such support and resistance levels and its theory is based solely around those levels.

## How to calculate Pivot points?

Pivot levels are derived from previous day High, Low and Close price values. Thus, every new day Pivot points must be reset using the newest data.
As a rule traders take the time range from midnight to midnight, e.g. from midnight price bar to midnight bar
Later we will introduce some traders' tricks about the timing

Pivot points study provides traders with 5 major levels:

R2 — Second Resistance
R1 — First Resistance
PP — Pivot Point
S1 — First Support
S2 — Second Support

There are also additional levels, such as R3, S3 — third resistance and support, as well as Mid-points — middle levels between the major levels.

There are no limits on how many Pivot levels to use, however, one should remember that making complex charts makes trading complicated as well.

We would suggest sticking to 5 major Pivot point levels, around which most of the price action takes place.

**The formula for calculating Pivot points is next:**

Major 5 levels:
R2 = Pivot + (High — Low)          (same as R2 = Pivot + (R1 — S1))
R1 = 2 * Pivot — Low
Pivot = (High + Close + Low) / 3
S1 = 2 * Pivot — High
S2 = Pivot — (High — Low)     (same as S2 = Pivot — (R1 — S1))

Additional levels:

R3 = High + 2 * (Pivot — Low)
S3 = Low — 2 * (High — Pivot)
Midpoint between R1 and R2 = R1 + (R2 — R1) / 2
Midpoint between Pivot Point and R1 = Pivot + (R1 — Pivot) / 2

Another pivot point system was developed by *Tom DeMark*, a famous technical analyst and president of Market Studies, Inc. This system uses the following rules:
Read more: http://www.investopedia.com/articles/technical/04/041404.asp#ixzz2IPgzUWFX

| Condition | Calculation | Tomorrow's Projections |
|---|---|---|
| Today's Close < Today's Open | Today's high + today's low + today's close + today's low = X | High = X/2 – today's low<br>Low = X/2 – today's high |
| Today's Close > Today's Open | Today's high + today's low + today's close + today's high = X | High = X/2 – today's low<br>Low = X/2 – today's high |
| Today's Close = Today's Open | Today's high + today's low + today's close + today's close = X | High = X/2 – today's low<br>Low = X/2 – today's high |

As you can see, there are many different pivot-point systems available. Some popular ones include as many as nine different price levels; meanwhile, others predict only one pivot point, and no additional levels of support or resistance

## How to use Pivot points in trading?

## The strategy.

Ok now let's start trading.
We are going to show you the way we trade using Pivot points
We calculate Pivot points on daily basis using daily charts and then use those Pivot levels on 15 minute charts — our main charts — where we will look for entries, stops and exits. We use 15 minute time frame because it allows catching the best entry and exit opportunities. With hourly charts, for example, when the signal is there it is quite often already too late to react / enter.

We know we have to calculate Pivot points every single day, so that each morning we start with new fresh daily Pivot points, calculated from midnight to midnight EST.

Let's look at the current chart to see how Pivot points were found.


Aug 30
03:00
06:00
09:00
12:00
15:00
18:00
21:00
Aug 31
GBP/USD
15 min
R2
2.0250
R1
High
2.0200
Close
2.0150
PP
2.0100
S1
2.0050
Low
2.0000
S2
fxpivot-points.com

As you can see we use only 5 major Pivot point levels: R2, R1, PP, S1 and S2.

After Pivots are in place traders should start taking notes:

First, - they should note where the market has opened today in relation to the Pivot Point (PP): above the Pivot Point or below it. The answer to this question provides the first clue about traders' biases for the day, e.g. if the market has opened above Pivot Point, traders will be bias towards taking long positions, on the contrary, opening below the Pivot Point would suggests shorting for the day.

Second, - traders should look at how far the price opened from the Pivot (PP), and make extra notes when it opened below S1 or above R1 level which is considered to be a quite distant open.

With some small distance away from the Pivot Point it is considered to be a good morning for trading.
It is very much suggested to wait for a pull back towards the Pivot line before taking a position. - 15 minute charts in this case help to catch the right moment for entry.

With the second — distant opening (below S1 or above R1) — we have very high expectations that the price will try to correct such "distant irregularity" and thus instead of progressing further away from Pivot Point it will try to move back towards the Pivot — the gold-middle point of the day. As a result, we will typically see a ranging market which does not produce much of the trading opportunities. The expectations are that the price will revolve around Pivot Point for the rest of the day — nothing to do for us, we stay out

## Why do Pivot Points work?

The whole Pivot point trading technique is based on two main market concepts: - existence of support and resistance.

These two tendencies form the core of the market moves and therefore receive full attention from the vast majority of professional traders who trade on behalf of all kinds of large, medium, small financial institutions, funds as well as for themselves

Because Pivot points are easy to calculate, millions of automated trading systems in the world automatically execute buy / sell orders analyzing the market moves in relation to the Pivot points.

Also, there are very little variations that can take place when calculating Pivot points (those are only timing factors, but even then pivot points can quite often suggest the same data).

These precision in targets and mutual "agreement" among traders on certain key levels for the day cause the market to really shift, turn and move as huge percentage of traders pull in the same direction using basic Pivot points trading rules.

With EMAs crossing, for example, every trader can set different indicators and thus timing and reaction will not be so well coordinated.

Also take Fibonacci, where for each time frame traders pull their own Fibonacci levels, same for trend lines — there are as many opinions out there as traders trading.

But when it comes to Pivot points, no matter what chart you use, your Pivots will be the same, assuming that even with different time zones traders are able to find pretty close and quite often exact the same pivot point levels = levels of support and resistance, where everyone hits the same button at the same time.

## Tricks/Techniques in Pivot point trading

Now, knowing the basics we can move onto tricks and tips we prepared for you to enhance your trading success with Pivots.

**Pivot Trick 1** — early bird gets all worms.
Early hours are where all support/resistance levels are tested. Later the market usually makes adjustments only. Early hours start from the first minutes of the new day!
Sleep in and you've missed it!

**Pivot Trick 2** — in case you prefer quick entries close to Pivot levels and like to use limit orders for that, keep in mind that setting positions too close to any Pivot level may put you in the situation when the order is triggered but the price eventually closes on the other side and moves against you.
That's why we don't use any preset orders; we wait for the bounce-off or break-through to happen and then manually open new trade at current market price.

**Pivot Trick 3** — when Pivot Point is passed / crossed, price will in 95% of the cases hit first Support or Resistance level, what does it mean?
Sure fire profits.
If you choose to take your profits at R1 or S1 level you will be winning it day after day!

On the other hand, you may often see that during some other days you were exiting too early as the price moved further in your direction after you exited. It's up to you: opting for predictable profits or going for bigger dreams.

**Pivot Trick 4** — mid-lines can be used for setting stop loss orders.
Going Long at Pivot Point, set your stop loss order not right below the Pivot Point but below the mid-point between the Pivot Point and S1.
This will give you a better chance to survive if Pivot Point gets "poked".

**Pivot Trick 5** — Use additional studies: technical indicators that show trend direction, **trend lines**, **Fibonacci levels**, **MACD indicator**, other studies that you are comfortable with to confirm your entries and exits.

**Pivot Trick 6** — if during the day you spot congestion around one of the Pivot levels, use it to your advantage: - set entry order on the break out of this congestion and just over the Pivot level which price is trying to concur.

**Pivot Tip 7** — if the market tried, but wasn't strong enough to reach R1 / S1 level and is already attacking Pivot Point to pull through on to the other side, be ready for trend change. Give the price chance to confirm its intentions by actually closing on the other side of the Pivot Point and shoot for the profits again setting the target at the first support/resistance level.

**Pivot Tip 8** — we keep on saying that entering near the Pivot Point and then setting targets and the first support/resistance level is the easiest and the safest way to get sure profits.
What can help you to pick much better trades is looking at the amount of pips you can earn in each trade.
Simply by analyzing the distance from the point you plan to enter to the next S1/R1 level you can tell if the trade worth attempting.
If the amount of pips is very small it is probably not worth trading.
This way you save yourself from taking unnecessary risks of losing money on a little-to-nothing promising trades.

**Pivot Tip 9** — by the time price reaches R2, R3 or S2, S3 the market will already be overbought or oversold and these levels should be used for exits rather than entries.

**Pivot Tip 10** — How to calculate pivot points for Monday?
To calculate Pivot points for Monday we use time from midnight EST on Friday to midnight EST on Sunday.

## The Bottom Line

Pivot points are yet another useful tool that can be added to any trader's toolbox. It enables anyone to quickly calculate levels that are likely to cause price movement. The success of a pivot-point system, however, lies squarely on the shoulders of the trader, and on his or her ability to effectively use the pivot-point systems in conjunction with other forms of technical analysis. These other technical indicators can be anything from MACD crossovers to candlestick patterns - the greater the number of positive indications, the greater the chances for success.

We hope you enjoyed studying Pivot points
We wish you all the best in your trading career!


**References:**
http://www.investopedia.com
http://www.forextrendline.com/
Forex Pivot Points Book. - By Jeff Boyd