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//|          TzPivotsD.mq4             |
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By Traderathome

TzPivotsD:

My gratitude and profound appreciation I wish to express to Domas4 for recoding the time zone shift core code of Shimodax. The Shimodax code is present in all versions of the SDX\_TzPivot indicator, which is the predecessor to TzPivotsD. TzPivotsD is the first time zone shift indy to bring a much needed update to this core code, an update that fixes the errant pivots that were produced on H4 and Day charts. Domas4's work on the code also facilitated the inclusion of the color background boxes for the Yesterday and the Today trading sessions. Also, Domas4 corrected the Camarilla formula.

This first release of TzPivotsD comes with some improvements and additions compared to the SDX-TzPivots indicator. Some highlights are:

- 1) The Indicator Window's sequence of external input has been cleaned up and reorganized in an attempt to simplify it.
- 2) When full screen lines are shown, label placement is affected when zooming in and out on the charts. Now, with the next data tic, proper label placement is restored.
- 3) Upgraded coding for the Period Separator labels lets you display either a simple "Yesterday" and "Today", or a more detailed display, showing the actual name of the day and the correct timezone shift from GMT, as selected by the user. And now you can choose to display either one, or both, or neither of the Separators.
- 4) Added a third line placement choice that keeps the main pivot lines to the right of the current candle for a really clean looking chart.
- 5) Added and a third label placement choice that keeps labels to the right of the current candle. This choice is automatic for the new third line placement, but can also be used as an override choice for label placement with the other line placement choices.

- 6) The Camarilla line labels and the yHigh/yLow line labels now have additional separate SHIFT control inputs. This enables the labels to be shifted to the left of the other pivot line labels when lines are so close that labels overlap. When this shift option is used, different chart zoom settings will require different shift settings. Please note that when line placement #2 is used, yL and yH labels automatically appear to right of the Yesterday Separator. When this moves off the chart, then the labels remain at the left of the chart. That is unless there is a value specified in the SHIFT. A SHIFT value other than "0" will cause these labels to appear to the left of the Today Separator, at a distance from the Separator that increases with Increasing SHIFT values.
- 7) The formula for Camarilla lines is corrected and the core time shift code is greatly improved....thanks again to Domas4 for both fixes!
- 8) The Yesterday and the Today sessions can be boxed in colors. These boxes are positioned to coincide with any selected TZ shift of pivots.
- 9) A large single Day Candle can be displayed to the right of the current candle, on any TF chart. This Day Candle also has a Price Label and a Pointer. All can be shifted to the right individually.
- 10) Domas4 also expanded the code for yH/yL lines. Now you can use one style for these lines thru yesterdays zone, and use another style thru the current day, the "Today zone."
- 11) Labels can be subordinated so they lay beneath chart items.
- 12) With past versions, if the chart was scrolled left too far, then the labels would cease to appear. Chart scroll compensation has been added. Now, as you scroll charts left beyond the point where labels will last appear, with continued scrolling the labels will appear at the left margin of the chart. Inputting a higher number will cause this function to initiate later, as you scroll into past time. Inputting a lower number will cause this function to initiate sooner, as you scroll into past time. When you scroll back into the current day, normal label placement will be restored.
- 13) The "Comments" section is revamped with new displayed information. Also, a colored background box has been added to hide chart items beneath, keeping the comments legible. The background color is user selectable. Many thanks go out to Cobra for this nice background box feature!

You can read more about time zone input settings and the other external

inputs for this indicator in the sections following.

As with the creation of TzPivotsMW, Domas4 is greatly appreciated for his work on this indicator.

- Traderathome

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#### Introduction - Time Zone Inputs:

"HrsServerTzFromGMT" input:

This is your software server's local timezone expressed in relation to GMT. For example, some MetaQuotes MT4 servers (live and demo) reside at a location 2 hours ahead of GMT, hence GMT+2, and so the input here is "+2" (or just "2" for a positive relationship). If, for example, your software server is in London, England which is normally GMT+0, and is GMT+1 during Daylight Savings Time (DST), you would normally enter "0", but change it to "1" during DST. If your MT4 server is at GMT, then enter "0".

"HrsChoiceTzFromGMT" input:

This is the timezone you desire to base the pivot calculations on. It must be expressed in relation to GMT. If you desire the same timezone as your server, enter in the same # you entered for the server. If you desire London time, it would be "+1" during DST and "0" otherwise. If you desire GMT time, then enter "0". If you desire NY time (GMT-5) then enter "-5", etc.

An example:

If your software server is located in the Eastern Standard Time zone (GMT-5) and want the pivot levels to be based upon the London trading session (GMT+1 during DST, otherwise GMT+0), then enter "-5" for the "HrsServerTzFromGMT" timezone, and for the "HrsChoiceTzFromGMT" timezone enter "1" during DST, otherwise enter "0".

Final note:

Please understand that the "HrsServerTzFromGMT" timezone setting depends on the time displayed on your MetaTrader charts. Determine from that what Tz the server is in (hence, the Tz shift from GMT Tz), no matter what the clock on your wall says. To get normal, non-time shifted pivot calculations, simply use "0" for both timezone inputs, or use the "HrsServerTzFromGMT" for both inputs.

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#### Comments regarding some of the many Indicator Window inputs:

Indicator\_On?:

Use "true" to turn this indicator "ON", and "false" to turn "OFF". This way you do not have to delete the indicator from the chart's list of indicators when you do not want it displayed.

#### HrsServerTZFromGMT:

Enter the number of hours difference between GMT and the time zone your platform server is in. Your server time is evident in the time scale below the charts. You can go to World Clock.com (<http://www.timeanddate.com/worldclock/>) to determine the hours the server time zone is from GMT (and in which direction). If the server is east of GMT the number entry is positive, if the server is west of GMT the number entry is negative.

#### HrsChoiceTzfromGMT:

Enter the number of hours difference between GMT and the timezone selected as the basis for pivots calculations. For example, if you wish to have the day start at NY time, then enter "-5". If you wish to have the day start at Zurich time, then enter "1". For normal, non-time shifted pivot calculations, simply enter the same number as you did in the previous input, or enter "0" for both.

#### Show\_1Daily\_2FibonacciPivots:

Either formula can be used to produce the pivot lines.

#### A Note on Yesterday and Today Background Boxes:

These inputs allow you to highlight yesterday and today with background colors. To show these background "boxes" select "true" and select a color for each.

#### A Note on the DayCandle and It's PriceLabel:

The inputs allow you to select to show a Day candle on the chart, and to show it's price label. You can select different colors for when the price moves up/down/or is static, and for the price label pointer. Individual selections are provided to shift the candle, the price label, and the pointer to the right a little bit. You also have a choice of font size for the price label. The colors for the candle are in the "Colors" tab of the Indicator Window.

#### Enter\_LinePlacement\_Number:

Using "1" will produce pivot lines across the full screen. Using "2" will start the pivot lines at the day demarcation lines. In time, on the lowest timeframe charts, the lines will progress across the full screen. Using "3" will start the lines right of the current candle. They will always remain between the current candle and the right margin of the chart. This is also referred to as the MaxRight placement, for which there are certain

overrides elsewhere in these external inputs.

**Limit\_Lines\_To\_Current\_Candle:**

This option works with LinePlacement 1 and 2, and causes those lines to end at the current candle instead of at the right margin. Fullscreen lines (LinePlacement 1) will cease to have right margin price labels displayed (if that option is selected) since the lines no longer are full screen wide.

**PivotColor:**

Enter a color for the pivot line.

**PivotLinesStyle:**

Enter the number for the desired line style (0=solid, 1=dash, 2=dot, 3=dashdot, 4=dashdashdot).

**PivotSolidLineThickness:**

Enter the number (1+) for the desired thickness of the solid line.

**A Note on Yesterday High and Low lines:**

Two sets of style and thickness are provided. This is to allow for one set to be used for the lines thru the Yesterday Zone, and the other set to be used for the lines thru the Today Zone, should the user wish to highlight the different zones accordingly.

**Ignore\_MaxRight\_LinePlacement:**

When LinePlacement 3 is selected above, the yH and yL lines remain right of the current candle. But if the background color box has been selected for Yesterday, you might still want the yH/yL lines to start at the start of Yesterday. This option allows you to do that by overriding the MaxRight\_LinePlacement.

**ShowYesterdayHighLow:**

**PivotLabelsColor:**

Enter a color for the pivot lines labels.

**Input\_PivotLabelsFontStyle:**

Enter the name of the font style you want. Arial, Batang and Verdana are good for plain type. Arial Bold and Verdana Bold produce good "medium thickness" type. Arial Black produces good "bold thickness" type. The default is Verdana, as it tends to be very legible thru a wide range of font sizes.

**PivotLabelsFontSize:**

Enter number for size of font desired (usually 8 - 12).

#### Subordinate\_PivotLabels:

You can subordinate the labels so they lay beneath chart lines and other chart items by setting to "true".

#### Show\_Price\_in\_LineLabels:

The pivot line labels have IDs, but selecting "true" will add the price anytime you have these labels on the chart.

#### Fullscreen\_MarginLabels:

"true" displays prices in the right margin for full screen lines.

"false" does not display prices in the right margin for full screen lines.

#### Fullscreen\_Shift\_LineLabels\_LR :

Increase number to move line labels to the right on the chart.

Decrease number to move line labels to the left on the chart.

This feature is enabled only for fullscreen lines, either as originally selected, or once lines become fullscreen on the lowest timeframes over time (i. e., the Relabeler code has taken over and is producing fullscreen lines).

#### Labels\_MaxRightOverride:

"true" puts current day pivot labels to the right of the current candle regardless of the line placement selection. "false" turns this tool off so that it does not interfere with the normal label placements that go with the various line placements. So, in a sense, this is a 'label placement' override mode that keeps the labels for the current day pivots to the right of the most recent candle.

#### Shift\_yH\_yL\_labels\_left:

No matter where labels are to be placed (even using the override to max right) this allows these labels to be moved to the left according to the number input. This feature helps when labels might become stacked and congested,

#### Shift\_CamarillaLabels\_left:

Same as for yH/yL labels (see above).

#### Scroll\_Compensator:

When "true" you can scroll back in time out of the current Day to the point where all labels would eventually cease to be displayed. Continued scrolling will place the labels at the left margin of the chart. When you scroll back into the current day, normal label placement will be restored.

#### Scroll\_Left\_Adjustment:

Inputting a higher number will cause this function to initiate later, as you scroll into past time. Inputting a lower number will cause this function to initiate sooner, as you scroll into past time.

#### Relabeler\_Adjustment:

This number is used in the `FullScreenLinesMarginPrices = "false"` mode to trigger when the re-labeler puts labels on the screen. It works under the assumption that the Today Period Separator is soon to go off-screen, taking the labels with it. The ideal number would trigger the re-labeler when the first labels are about to move off the left of the chart. Lowering the number triggers sooner and raising it delays triggering. The number is the number of candles between the Today Separator and the chart left border. For example, a value of "10" will trigger the re-labeler when the Today Period Separator is 10 candles from the chart left border. A value of "0" triggers when the Today Period Separator hits the left border. This feature allows for fine tuning charts of different scales and timeframes. In most cases either of the example values is sufficient. If the chart timeframe and scale is such that full sessions are displayed without the Today Separator ever disappearing, then re-labeling and this adjustment to it, will not be required. It only comes into play when the scale is such that the Today Period Separator will move off the left of the screen, taking the labels with it, before the next session Separators can come on-screen. Scaling down to make larger candles causes more timeframes to need this feature. The coding takes this into account and use of this adjustment is really only for fine tuning whenever the user desires to do so.

#### PeriodSeparatorLinesColor:

Enter a color for each type of line.

#### SeparatorLineStyle\_01234:

Your number entry selects the line style for the lines.  
0=solid, 1=dash, 2=dashdot, 3=dashdot, and 4=dashdotdot.

#### SeparatorLinesThickness:

Your number entry selects the width of solid lines. 0 and 1 = single width and 2, 3, 4 graduate the thickness. Coding assures that no matter what number this is set at, non-solid line styles selected will still display without having to change this entry back to 0, or 1.

ShowTodaySeparatorLine:

Enter "true" to display, "false" to not display.

ShowYesterdaySeparatorLine

Enter "true" to display, "false" to not display.

PeriodSeparatorsLabelsColor:

Enter a color for the Period Separators labels.

Input\_SeparatorFontStyle:

As for the pivots labels, Enter the name of a font style.

SeparatorLabelFontSize:

Enter a number for font size (usually 8 - 12).

Subordinate\_SeparatorLabels:

You can subordinate the labels so they lay beneath chart lines and other chart items by setting to "true".

PlaceAt\_TopBot\_12\_OfChart:

"1" will place the Period Separator labels "Yesterday" and "Today" at the top of the screen. "2" will place them at the bottom.

If the screen is enlarged, downsized, or scrolled, these labels will move. But the next data tick will restore their position.

Label\_Simple\_or\_Detailed\_12:

"1" will display simple Separator labels showing just "Yesterday" and "Today". "2" will display details in the labels, showing the day name and the selected time zone shift hours from GMT that you have selected.

Show\_Relabeler\_Comment:

If "true" then Relabeler related data appears in chart upper left.

It serves to help a new user better understand the Relabeler.

Show\_Data\_Comment:

If "true" then key prior/current day pip data appears in the upper left area of the chart.

CommentBox\_BackgroundColor:

This option allows the Comments section to appear within a background colored box. This box will hide all chart features beneath it, so the comments text remains legible. The only exception is the MT4 candles when "Chart on foreground" is checked in Chart Properties. To hide these candles beneath the background box, uncheck this item.