CHASING THE MARKET

NOVEMBER 2022

CHASING THE MARKET

Imagine you have been given an order to buy 200 million USDJPY. You look at a chart of the USDJPY price over the last hour and observe that it has trended higher.

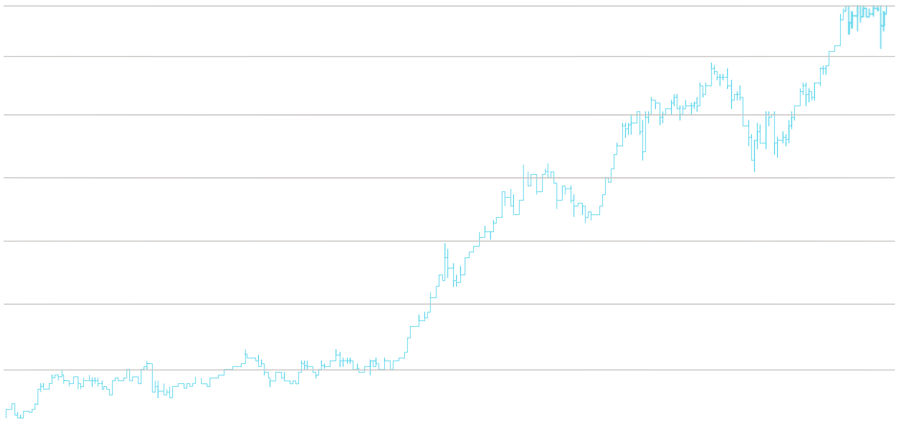


CHART IS PURELY ILLUSTRATIVE AND NOT BASED ON REAL DATA.

Based on this trend would you:

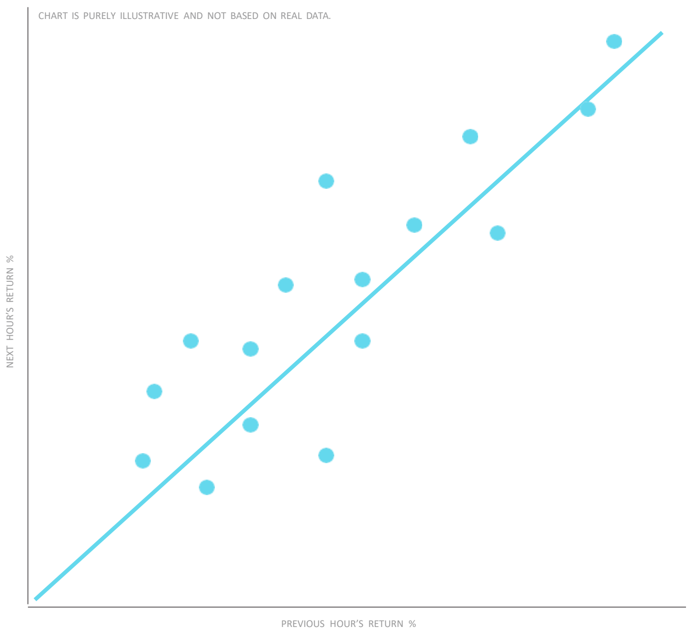
- Trade aggressively to ensure you complete the order quickly before the market can move further against you?
- Trade patiently, aiming to capture some mean-reversion?
- Ignore the trend entirely when deciding how fast to trade?

Different traders may have different instinctive reactions when thinking about that situation. Let us now look at some data.

ANALYSIS

We took 12 months of data from primary market venues (EBS and Refinitiv). For each currency pair we split the data into one-hour buckets i.e., 24 buckets per day for each currency pair. We calculated the directional trend (as a %) of each hour by comparing the mid-price at the start of the hour to the mid-price at the end of the hour. We then plotted the correlation of consecutive hours' directional trends.

If the previous hour's trend is helpful in predicting the next hour's trend, we would expect to see some positive correlation and the results would resemble the illustrative chart below.



Here is how that correlation looked in USDJPY in reality:

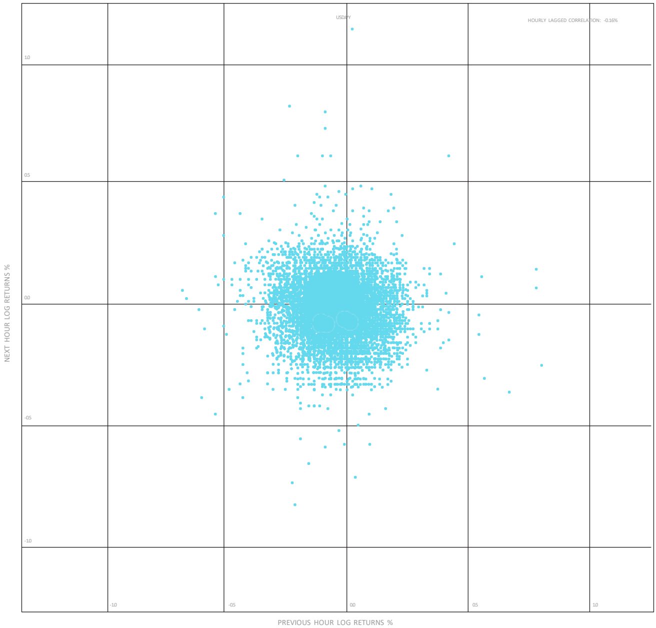
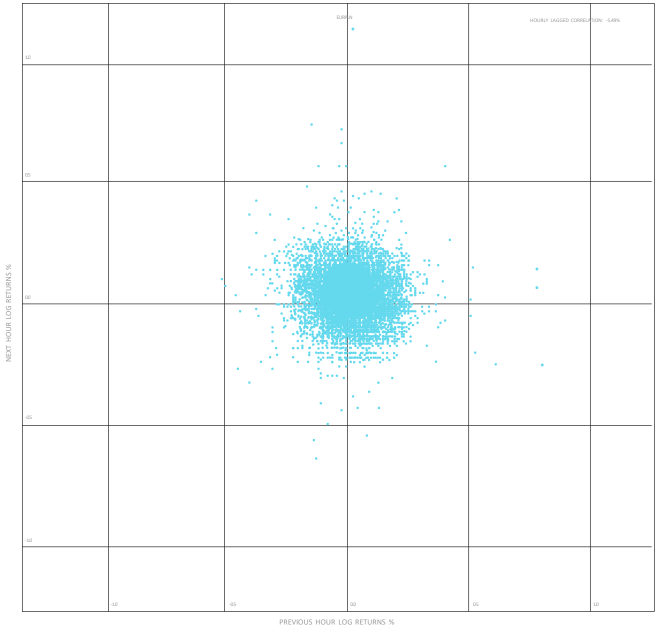


CHART WAS PRODUCED BY XTX USING THE METHODOLOGY OUTLINED IN THE BODY TEXT.

This is a totally random walk. The correlation is so close to zero (-0.16%) as to be a rounding error. The charts in other pairs are almost identical. Here for example is an emerging market pair, EURPLN.



Whilst it would be impractical to list results for all possible FX currency pairings, we did not find meaningful correlation in a single currency pair. Below are the results for a representative sample of 10 pairs, spanning from highly liquid (EURUSD, USDJPY) to illiquid (EURPLN, USDZAR).

EURPLN	-5.49%	USDMXN	1.36%
EURHUF	0.24%	EURCHF	-2.79%
EURCZK	-7.91%	AUDUSD	-2.74%
USDSG	-7.33%	EURUSD	-1.76%
USDZAR	-3.06%	USDJPY	-0.16%

Certain portfolio managers may believe that they are the exception to the rule, i.e. that they have short-term alpha so need to trade quickly. For corporates hedging currency exposures arising through their business or asset managers implementing strategies that hold positions for weeks or months, this is of course unlikely because neither makes an attempt to focus on the next hour's returns. However, there is a clean way to evaluate whether this applies to you or not, as we explained in our note on the 'half speed metric': See article here.

DISCUSSION

The lack of correlation implies that the appropriate choice would be option C. Traders should ignore the trend (going into an order) when making decisions on how fast to trade. This will perhaps be surprising to many traders.

Evidence for a momentum factor is well documented[1] at considerably longer timescales such as months and years. It may not be intuitive that the same effect does not exist at shorter horizons, such as hours.

There is also a reflexive effect to consider. Traders who have historically chased the market[2] may have experienced continued momentum, unlike we saw in our data. However, this can be explained by the impact of their own behaviour. One reason the market may continue to move up is because they chose to buy aggressively. Their aggressive execution itself influences the market price. If this is the case, it would be visible by looking to see if the market reliably reverts lower after the (buy) order has completed.

What is particularly interesting is that any execution 'alpha' relating to this topic is not 'alpha' because it is technically inaccessible (many firms could run this kind of data experiment), rather it is behaviourally challenging to implement in practice.
It is psychologically hard to patiently execute when the market is trending against you, heading into the order. When by sheer chance the price continues to go up, the trader may risk embarrassment for seemingly not having reacted or paid attention to the market. That requires intellectual courage.

There are many traders whose general philosophy is that they are willing to trade patiently because they believe doing so is cheaper on average than trading aggressively. This data argues that they should continue to trade patiently, regardless of whether the market is trending up, down, or sideways when they receive an order.

[1] See for example https://www.aqr.com/-/media/AQR/Documents/Insights/White-Papers/The-Case-for-Momentum-Investing.pdf

[2] By 'chasing the market' we mean buying more aggressively if the market was trending higher prior to receiving the order; or conversely selling more aggressively if the market was trending lower prior to receiving the order.

IMPORTANT

This Document is issued by XTX Markets Limited (“XTX”), which is authorised and regulated by the Financial Conduct Authority of the United Kingdom (the “FCA”), with FCA FRN: 711945. XTX is a private limited company incorporated in England & Wales, with company number 09415174. XTX’s registered office and principal place of business is R7, 14-18 Handyside Street, London, N1C 4DN, United Kingdom.

This Document is issued by XTX only to and/or is directed only at persons who are eligible counterparties or professional cleints for the purposes of the FCA Rules. This Document must not be relied or acted upon by any other persons (including, without limitation, persons who are retail clients for the purposes of the FCA Rules). The distribution of this Document may be further restricted by law. No action has been or will be taken by XTX to permit the possession or distribution of the Document in any jurisdiction where action for that purpose may be required. Accordingly, the Document may not be used in any jurisdiction except under circumstances that will result in compliance with any applicable laws and regulations. Persons to whom the Document is communicated should inform themselves about and observe any such restrictions.

This Document is for information purposes only. The Document does not constitute an offer to transact in, or the solicitation of an offer to transact in, securities, derivatives, FX transactions, or other financial instruments, in any jurisdiction.

Although the information in this Document is believed to be materially correct, no representation or warranty is given as to the accuracy of any of the information provided. Certain information included in this Document is based on information obtained from sources considered to be reliable. However, any projections or analysis provided to assist the recipient of this Document in evaluating the matters described herein may be based on subjective assessments and assumptions and may use one among alternative methodologies that produce different results. Accordingly, any projections or analysis should not be viewed as factual and should not be relied upon as an accurate prediction of future results. Furthermore, to the extent permitted by law, neither XTX nor its employees, directors, officers, shareholders or service providers assumes any liability or responsibility nor owes any duty of care for any consequences of any person acting or refraining to act in reliance on the information contained in this Document or for any decision based on it. Past performance cannot be relied on as a guide to future performance.

Any reference in this Document to a counterparty trading with XTX (or XTX trading with counterparties) is a reference to XTX providing liquidity quotes through certain specific platforms, and all trades will be settled or cleared with or through XTX’s prime broker(s) or CCPs, and not with XTX directly.