TO CARRY, OR NOT TO CARRY, THAT IS THE QUESTION

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Abstract

We use unique and proprietary information on industry stop-loss rules to evaluate the feasibility of currency carry trades considered by academic researchers. We find that these rules cause reported carry trade profitability to largely disappear, with most trades having to be closed out early. The much-vaunted profitability of the carry trade appears to depend on staying the course, contrary to standard risk management policies. This calls into question much of the literature that seeks to explain reported carry trade returns.

JEL classification: F31; G11; G15

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1 Introduction

Currency carry trades borrow in low interest rate currencies and reinvest the proceeds in high interest rate currencies. Several studies document the profitability of such a strategy — for example, using different currencies over different time periods, Brunnermeier et al. (2009), Burnside (2012), Dobrynskaya (2014), Jylhä and Suominen (2011), Lustig et al. (2014), and Menkhoff et al. (2012) report annual excess returns ranging from 3.0% to 16.6%. Returns of this magnitude are puzzling insofar as traditional (risk-neutral) theory suggests that any positive interest rate differential is exactly offset by an expected currency depreciation, resulting in an average excess return of zero. Instead, positive interest rate differentials in the flexible exchange rate era have, on average, been associated with an appreciation of the investment currency.[1] Carry trade investors have thus been able to enjoy both the interest rate premium and a currency gain.

Most researchers have attempted to explain carry trade excess returns as compensation for risk. For example, Lustig and Verdelhan (2007) report evidence that carry trades are exposed to domestic consumption growth risk and thus merit a significant risk premium. Others claim support for different risk factors: Christiansen et al. (2011), Lustig et al. (2011) and Menkhoff et al. (2012) all find that carry trade returns are systematically related to equity and foreign exchange (FX) market volatility; Dobrynskaya (2014) and Lettau et al. (2014) show that carry trade returns are consistent with a downside-risk CAPM; and Burnside et al. (2010) argue that the high carry trade returns are the result of a peso problem. However, none of these explanations has met with universal acceptance: Burnside et al. find no evidence that carry trade returns are related to standard asset pricing risk factors; Daniel et al. (2016) reject the downside-risk CAPM view; while Jurek (2014) shows that peso problems can account for only a small portion of carry trade returns.

In this paper, we take a different tack, and ask if the high returns claimed for the carry trade are actually attainable in practice. Studies of carry trade returns typically assume that positions are continuously maintained, but this ignores modern risk manage-

[1] This is the famous forward premium puzzle — see, for example, Fama (1984), Engel (1996) and Froot and Thaler (1990).

ment practices. In particular, it overlooks the empirical reality that financial institutions impose so-called stop-loss rules on their traders. Such rules cause temporary or permanent suspension of carry trades after losses reach a certain level. This raises the possibility that attainable carry trade returns could be substantially different to those reported in academic studies to date. In principle, any such difference could be positive or negative. On the one hand, to the extent that returns are positively autocorrelated, stop-loss rules may eliminate periods where losses would have been incurred and thus enhance overall returns. On the other hand, to the extent that the rules result in trades being permanently closed (and traders sacked), profit-making periods are eliminated as well, thereby reducing overall returns.

To analyze this issue, we make use of unique information on eight stop-loss rules actually used in the finance industry. This information was provided to us, on a non-attributable basis, by traders and partners at hedge funds and banks where we have personal contacts. Like other authors, we find excess returns of over 5% for carry trades implemented during the 1976–2012 period. However, when the eight stop-loss rules are imposed on these trades, the excess returns largely disappear: for six of the rules, the return falls by 2/3 or more. Sharpe ratios are also much lower. This performance reduction is largely due to most trades being permanently stopped out: of the 16 portfolios subject to stop-loss rules, only one sees its trades consistently survive in the manner assumed by academic researchers.

We emphasize that our objective is not to obtain a better, or more precise, estimate of actual carry trade returns. Rather, it is a simple quantitative exercise designed to check whether the carry trade return estimates obtained by academic researchers are sensitive to the friction created by standard risk management practices. Our conclusion is that the sensitivity is substantial, and that the carry trade strategies previously considered by researchers are often not feasible in practice. This calls into question the value of attempts to explain the returns generated by such strategies.

In the next section, we provide more details on our data and return calculation methods, and on industry stop-loss rules. Section 3 contains our results, while section 4 offers some concluding remarks.

2 Data, Returns and Stop-Loss Policies

2.1 Carry trade returns

We follow the convention of institutional investors who typically implement currency carry trades using FX forwards and swaps due to the high liquidity of these markets (BIS, 2010). To illustrate, let S_{it} (F_{it}) denote the date t USD spot (forward) price of foreign currency i.[2] When $F_{it} < (>) S_{it}$, a carry trade can be implemented by buying (selling) foreign currency i in the forward market. If q_{it} is the USD quantity of currency i traded in this way, then the payoff is $R^b_{it+1} \equiv q_{it}(S_{it+1} - F_{it})$ in the former case and $R^s_{it+1} \equiv q_{it}(F_{it} - S_{it+1})$ in the latter.

As in Brunnermeier et al. (2009), Christiansen et al. (2011), and Jylhä and Suominen (2011), we form kxk carry trade portfolios based on currency forward premia. Let

$$D_{it} \equiv \frac{F_{it} - S_{it}}{F_{it}}$$

denote the date t percentage difference between the currency i forward and spot rates; if $D_{it} > (<)\ 0$, then currency i is trading at a forward premium (discount). At the start of each month t, all the non-USD currencies i are ranked by D_{it}. For $k = 1, 2$, we then buy 1 USD ($q_{it} = 1/F_{it}$) of each of the k biggest forward discount currencies and sell 1 USD ($q_{it} = 1/F_{it}$) of each of the k highest forward premium currencies. At the end of each month, the portfolio returns are calculated and the process is repeated. Currencies remaining in the portfolio are rolled for 1 month using an FX swap; currencies coming out of the portfolio are closed out in the FX spot market.

The monthly return R_{pt+1} for each kxk portfolios is:

$$R_{pt+1} = \frac{1}{k}\sum_{i=1}^{k} R^b_{it+1} + \frac{1}{k}\sum_{i=1}^{k} R^s_{it+1} \tag{1}$$

Any month in which a trade is stopped out, the portfolio earns a return of zero. At the end of the trading period, mean monthly returns, standard deviations, skewness and kurtosis are calculated and annualized in the usual way.

[2]This convention anticipates our use of the USD as the base currency for the formation of carry trade portfolios.

2.2 Data

For calculating equation (1), we use monthly data on spot exchange rates and 1 month forward exchange rates versus the USD for the G10 currencies – Australia (AUD), Canada (CAD), Switzerland (CHF), Europe (EUR), United Kingdom (GBP), Japan (JPY), Norway (NOK), New Zealand (NZD), Sweden (SEK). According to BIS (2010, Table 3), this group of currencies is involved in approximately 90% of total global FX turnover.

Our sample period covers the period January 1976 to December 2012. Prior to the introduction of the EUR in January 1999, we include the currencies of Germany (DEM), France (FRF), and Italy (ITL) instead of the EUR. Data sources are as follows:

1. From December 1996 onwards, spot and forward USD quotes for all currencies come from WM/Reuters (via Datastream).

2. Between January 1976 and September 1996 (except for Japan, Australia and New Zealand), spot and forward GBP quotes come from WM/Reuters (via Datastream). We convert these to USD quotes using the corresponding USD/GBP rates.

3. For JPY, between June 1978 and September 1996, spot and forward GBP quotes come from WM/Reuters (via Datastream). We convert these to USD quotes using the corresponding USD/GBP rates.

4. For AUD and NZD between January 1985 and September 1996, we obtain USD quotes from Barclays Bank.

2.3 Stop-loss rules

Stop-loss rules are a standard risk management practice in the professional trading community. The behaviour of individual traders at hedge funds and bank proprietary trading desks is tightly constrained by such rules, with the details often playing a central role in contract negotiations. Despite their widespread use, there is surprisingly little research on stop loss rules. A notable exception is Kaminski and Lo (2014) who theoretically and empirically examine the effects of a class of stop-loss rules on an equity portfolio. They conclude that, for certain return-generating processes, stop-loss rules can increase average returns and lower volatility. Gollier (1997), Lei and Lu (2009), James and Yang (2010), and Klement (2013) undertake broadly similar exercises.

Our approach to the modelling and analysis of stop-loss rules differs from these studies in two ways. First, rather than considering hypothetical stop-loss rules, we focus on rules that are actually used by banks and hedge funds. This is potentially important, because the hypothetical rules considered by the above authors do not allow for permanent trade suspension. In practice, however, significant losses can and do see a cessation of trader employment and a closing of the carry trade position. Second, rather than trying to determine whether or not stop-loss rules can be justified, we take their existence as a stylized fact and ask if their effects can shed light on a market puzzle: the excess carry trade returns documented by academic researchers.[3]

We obtain information on stop-loss rules used in practice by interviewing traders and partners at several banks and hedge funds based in London, New York and Sydney, which together have approximately $80 billion of assets under management. The eight rules thus obtained are summarized in the appendix. These actual rules differ from the hypothetical rules considered by Kaminski and Lo (2014) and others in several ways. First, all result in employment being terminated and positions *permanently* closed when drawdowns are sufficiently great. Second, all allow for temporary and/or permanent trade closure for drawdowns from previously-attained *maximum* profit. Third, following a temporary suspension, all specify a maximum period of non-trading (typically a month) rather than allowing for re-entry only when the monthly return exceeds some threshold value.

The eight rules themselves have many similar aspects, but differ in potentially important ways. Five of the eight rules (B, C, D, E, H) relate to trader profit-and-loss (P&L) in the current financial year; the remaining three are based on lifetime (at the firm) P&L. Five rules (A, B, E, G, H) terminate employment when the drawdown from zero limit reaches 10%; the other three have maximum drawdowns ranging from 7% (rule F) to 20% (rule C). Four rules (A, C, G, H) specify one-month suspensions when the drawdown from zero limit reaches a threshold ranging from 5% to 7%. Four rules (A, E, G, H) terminate employment when the drawdown from peak limit reaches a threshold of at least 10%.

[3] Viewed in this way, stop-loss rules are an example of a Shleifer and Vishny (1997) “limit of arbitrage”.

3 Results

Academic researchers typically assess carry trade performance by estimating various parameters of the return distribution over the period covered by their data, assuming the trade is maintained throughout the period. We replicate such a ‘Naive’ strategy for 1x1 and 2x2 portfolios over the 1976–2012 period and report the results in Table 1. Consistent with the findings of other authors, this strategy generates high excess returns (approximately 7% per annum), high Sharpe ratios, negative skewness, and positive excess kurtosis.

However, this attractive picture changes when we impose stop-loss rules A–H on the same carry trade. For the 1x1 portfolios, six of the eight rules yield negative mean returns while the remaining two offer little more than 2%. For the 2x2 portfolios, the outcomes are somewhat better: six of the eight rules yield positive mean returns, although only two of these (rules C and G) are remotely close to the naive return. Overall, of the 16 trades subject to stop-loss rules, none achieves a higher mean return than the naive trade, and only one (the 2x2 portfolio subject to rule C) has a better Sharpe ratio. Over the same 16 trades, the average mean return is only 1.5%, 5.5 percentage points less than that for the naive trade.

The reason for this difference in performance between the naive and constrained trades is simple: survival. Most of the trades subject to stop-loss rules are permanently stopped out long before December 2012. For six of the eight 1x1 constrained portfolios, this happens after only three months (where the monthly return is -9%). Unsurprisingly, the two remaining portfolios (rules C and D) are those that allow greater drawdowns before terminating trader employment. The greater diversification of the 2x2 constrained portfolios enables more of them to survive longer and achieve higher returns, but their overall performance is still well below that of the naive case.

Table 1 has two obvious implications. First, at least for the strategies considered here, carry trade returns estimated in the usual way for the 1976–2012 period are not robust to the imposition of stop-loss rules used in the finance industry. Second, however, this conclusion is based on what is essentially one observation: a currency carry trade beginning in January 1976. As noted above, this doomed many constrained trades, as they had no time to build up a buffer before a particularly bad month in April 1976 saw them

Table 1: Carry Trade Returns and Stop-Loss Rules: 1976–2012

This table compares the annualised returns from an unconstrained (Naive) currency carry trade, beginning in January 1976 and terminating in December 2012 (443 months), with the returns over the same period from eight trades subject to the stop-loss rules described in the Appendix. Months Survived is the percentage of months the trade exists before being permanently stopped-out. Trades are based on kxk portfolios, which are constructed monthly by buying equal USD amounts of the k highest forward discount currencies and selling equal USD amounts of the k lowest forward discount currencies where $k = 1, 2$. Currencies remaining in the portfolio are rolled for 1 month using an FX swap; currencies coming out of the portfolio are closed out in the FX spot market.

		Stop-Loss Rule							
	Naive	A	B	C	D	E	F	G	H
					1x1				
Mean Return	0.070	-0.003	-0.003	0.021	0.022	-0.003	-0.003	-0.003	-0.003
Standard Deviation	0.142	0.015	0.015	0.060	0.059	0.015	0.015	0.015	0.015
Sharpe Ratio	0.493	-0.191	-0.191	0.349	0.379	-0.191	-0.191	-0.191	-0.191
Skewness	-0.338	-5.896	-5.896	-0.268	-0.236	-5.896	-5.896	-5.896	-5.896
Excess Kurtosis	0.282	35.328	35.328	1.510	1.571	35.328	35.328	35.328	35.328
Months Survived	100%	1%	1%	28%	27%	1%	1%	1%	1%
					2x2				
Mean Return	0.069	-0.002	0.021	0.065	0.038	0.022	-0.002	0.055	0.019
Standard Deviation	0.105	0.023	0.046	0.095	0.072	0.052	0.012	0.095	0.043
Sharpe Ratio	0.659	-0.086	0.444	0.681	0.530	0.415	-0.168	0.578	0.434
Skewness	-0.200	-1.152	-0.111	-0.153	-0.198	-0.252	-6.073	-0.218	-0.106
Excess Kurtosis	0.167	5.258	0.912	0.182	0.471	0.948	36.893	0.261	1.046
Months Survived	100%	6%	28%	100%	52%	29%	1%	100%	29%

permanently stopped out. However, constrained trades begun in, for example, May 1976 may have survived much longer and performed much closer to the corresponding naive trade.

To address the second issue, we instigate carry trades on a monthly basis, the first beginning in January 1976 (as in Table 1) and the last in January 2008. So the first naive trade runs from January 1976 to December 2012, the second from February 1976 to December 2012, and the last (the 384th) from January 2008 to December 2012. A similar process is followed for each stop-loss rule: we implement a carry trade beginning in each successive month and continue it until December 2012 or until it is permanently stopped-out, whichever comes first.

Table 2 summarizes the results of this exercise. The average (across the 384 series) annual return on the naive strategy is 5.3% (1x1 portfolio) or 5.7% (2x2). None of the portfolios subject to stop-loss rules match these returns and all but two of the rules yield average returns that are at least four percentage points lower. Nor is this reduction in return compensated for by a corresponding fall in volatility: of the 16 trades subject to stop-loss rules, only one (the 2x2 portfolio subject to rule C) has a higher average Sharpe ratio; most have average Sharpe ratios that are 50% or more lower. The stop loss rules are also associated with greater negative skewness and excess kurtosis.

As in Table 1, a principal source of these differences lies in survival rates. Six (five) of the eight 1x1 (2x2) constrained portfolios never survive until December 2012, and thus miss many profitable months. Temporary suspensions also play a significant role: only portfolios operating under rules C and F are actually "live" (i.e., not stopped out) more than 50% of the time that is available. Most rules also result in lower terminal value than the naive strategy. For example, the 1x1 portfolio subject to rule A is worth less than the corresponding naive portfolio at the end of December 2012 in 76% of the 384 trades; its 2x2 counterpart under-performs in all 384 trades. Other rules generate similar outcomes, with only rules C (1x1 portfolio only) and F (both 1x1 and 2x2) under-performing less than 50% of the time.

Why are the effects of rules C and F relatively muted? In the case of C, employment is terminated, and the trade permanently closed, only when the drawdown reaches 20%, almost double what is allowed under the next most generous policy. In the case of F, the crucial distinction is that drawdown thresholds are based on *lifetime* P&L: trades that get off to a good start are able to ride out bad months in subsequent years. By contrast, rules based on financial year P&L constraints see allowed drawdowns reset each year, so a bad month is more likely to result in permanent closure.[4]

To summarize, the strongly adverse impact of industry stop-loss rules on carry trade

[4]Other rules based on lifetime P&L (A and G) have other more onerous restrictions that result in fewer "active" months, e.g., permanent closure based on drawdowns from peak limits, and temporary suspension thresholds.

Table 2: Carry Trade Returns and Stop-Loss Rules: Multiple Starting Dates

This table compares the annualised returns from 384 unconstrained (Naive) currency carry trades with the returns from the corresponding trades subject to the eight stop-loss rules described in the Appendix. The first trade begins in January 1976, the second in February 1976, and the last in January 2008; all terminate (if not previously stopped-out), in December 2012, with returns calculated monthly on a USD basis. The sample moments (mean, standard deviation, skewness, excess kurtosis) are all averages across the 384 series. The additional parameters (maximum, minimum, median) are based on the 384 series. Survival Success is the percentage of series that are not permanently stopped-out. Trade is "Live" is the average percentage of months where the trade is not temporarily or permanently stopped out. Under-Perform is the percentage of series where the stop-loss trade has a strictly lower terminal value than the Naive trade. Other details appear in Table 1.

		Stop-Loss Rule							
	Naive	A	B	C	D	E	F	G	H
					1x1				
Mean Return	0.053	0.016	0.009	0.035	0.016	0.012	0.045	0.013	0.019
Standard Deviation	0.147	0.046	0.060	0.090	0.063	0.047	0.091	0.062	0.055
Sharpe Ratio	0.367	0.207	0.095	0.354	0.180	0.175	0.294	0.085	0.257
Skewness	-0.377	-1.141	-1.242	-0.574	-0.941	-1.162	-1.253	-1.422	-1.144
Excess Kurtosis	0.316	6.419	5.270	2.193	4.192	5.696	4.583	5.756	5.376
Minimum	-0.041	-0.025	-0.067	-0.068	-0.055	-0.027	-0.045	-0.045	-0.034
Median	0.058	0.007	0.007	0.040	0.014	0.008	0.072	0.004	0.014
Maximum	0.082	0.089	0.069	0.079	0.080	0.069	0.109	0.093	0.088
Survival Success	100%	0%	0%	0%	0%	0%	60%	9%	0%
Trade is "Live"	100%	16%	20%	48%	23%	15%	56%	24%	20%
Under-Perform	0%	76%	99%	45%	74%	94%	37%	91%	72%
					2x2				
Return	0.057	0.013	0.016	0.050	0.019	0.010	0.044	0.013	0.013
Standard Deviation	0.113	0.038	0.054	0.097	0.062	0.052	0.083	0.052	0.044
Sharpe Ratio	0.515	0.236	0.276	0.522	0.251	0.154	0.402	0.125	0.202
Skewness	-0.153	-0.772	-0.494	-0.133	-0.466	-0.789	-0.622	-0.912	-0.583
Excess Kurtosis	0.161	4.022	2.043	0.120	1.341	2.935	2.256	3.344	2.849
Minimum	0.004	-0.042	-0.042	-0.010	-0.045	-0.051	-0.034	-0.030	-0.036
Median	0.060	0.007	0.019	0.052	0.024	0.007	0.057	0.004	0.009
Maximum	0.076	0.061	0.048	0.073	0.048	0.048	0.080	0.064	0.051
Survival Success	100%	0%	0%	100%	0%	0%	75%	14%	0%
Trade is "Live"	100%	18%	31%	93%	40%	25%	70%	33%	25%
Under-Perform	0%	100%	100%	98%	100%	100%	40%	100%	100%

returns estimated by academic researchers, as documented in Table 1, does not appear to be due to a timing quirk. Regardless of when such carry trades are implemented between 1976 and 2008, the stop-loss rules result in lower returns and weaker performance. Although stop-loss rules do occasionally generate a better outcome than that offered by a naive trade begun on the same date, such occurrences are rare. For most rules, the excess returns claimed by researchers effectively disappear.

4 Concluding Remarks

When financial industry stop-loss rules are imposed on the currency carry trades considered by academic researchers, the excess returns reported by those researchers are substantially reduced. Retail investors are, of course, not subject to formal stop-loss rules, so they could, in principle, be able to achieve the high returns documented in the literature. However, industry seminars aimed at prospective carry trade retail investors typically emphasize the importance of stop-loss rules. Moreover, even in the absence of such formal rules, retail investors seem unlikely to stay the course; as Darvas (2009) points out, such investors are likely to find it psychologically difficult to stick to a single strategy in the face of large losses. Overall then, the excess carry trade returns reported by academic researchers seem likely to be significantly over-stated for retail as well as institutional investors, so attempts to "explain" these returns, whether as a risk premium or otherwise, may be engaged in a wild goose chase.

One might object to this conclusion on the grounds that we have not assessed all carry trade strategies considered by researchers. However, all unhedged carry trades are subject to sizeable drawdowns on occasions, and so will often be subject to permanent closure when subject to the stop-loss rules considered here. We therefore see no reason to suspect that our results would be different for alternative carry trade strategies.

Our conclusion, that the carry trade returns observed by academic researchers do not survive institutional realities, does not necessarily conflict with the continuing popularity of the carry trade amongst hedge funds.[5] In common with the rest of the academic literature, our analysis implicitly assumes that 100% of risk capital is allocated to any carry trade

[5] Banks, of course, are currently prohibited from engaging in this kind of trading by the so-called Volker Rule.

positions. In practice, almost all traders adopt a more conservative, diversified, strategy in which a carry trade exposure plays only a relatively small part. Moreover, traders are likely to adopt more nuanced and complex carry strategies than we consider by, for example, being more selective about when to enter and exit trades than is simply specified by the stop-loss rules. The point of our analysis is to demonstrate that the carry trade returns documented by academic researchers are not achievable in practice — and thus do not represent a puzzle to be explained — not that the carry trade is necessarily unprofitable.

References

BIS, 2010. Triennial Central Bank Survey. Available at http://www.bis.org/publ/rpfxf10t.pdf

Brunnermeier, M., S. Nagel, and L. Pedersen, 2008. Carry trades and currency crashes. NBER Macroeconomics Annual 23, 313–347

Burnside, C., 2012. Carry trades and risk. Handbook of Exchange Rates (eds J. James, I. W. Marsh and L. Sarno), ch 10, John Wiley & Sons, Inc., Hoboken, NJ, USA. doi: 10.1002/9781118445785

Christainsen, C., A. Ranaldo, and P. Söderlind, 2011. The time-varying systematic risk of carry trade strategies. Journal of Financial and Quantitative Analysis 46, 1107–1125.

Dobrynskaya, V., 2014. Downside market risk of carry trades. Review of Finance 18, 1885–1913

Engel, C., 1996. The forward discount anomaly and the risk premium : A survey of recent evidence. Journal of Empirical Finance 3, 123–192

Fama, E., 1984. Forward and spot exchange rates. Journal of Monetary Economics 14, 319–338

Froot, K. and R. Thaler, 1990. Anomalies: foreign exchange. Journal of Economic Perspectives 4, 179–192

Gollier, C., 1997. On the inefficiency of bang-bang and stop-loss portfolio strategies. Journal of Risk and Uncertainty 14, 143–154

James, J. and L. Yang, 2010. Stop-losses, maximum drawdown-at-risk and replicating financial time series with the stationary bootstrap. Quantitative Finance 10, 1–12

Jylhä, P. and M. Suominen, 2011. Speculative capital and currency carry trades. Journal of Financial Economics 99, 60–75

Klement, J., 2013. Assessing stop-loss and re-entry strategies. Journal of Trading 8, 44–53.

Lei, A. and H. Li, 2009. The value of stop loss strategies. Financial Services Review 18, 23-51

Lustig, H., N. Roussanov, and A. Verdelhan, 2011. Common risk factors in currency markets. Review of Financial Studies 24, 3731–3777.

Lustig, H., N. Roussanov, and A. Verdelhan, 2014. Countercyclical currency risk premia. Journal of Financial Economics 111, 527–553.

Menkhoff, L., L. Sarno, M. Schmeling, and A. Schrimpf, 2012. Carry trades and global foreign exchange volatility. Journal of Finance 67, 681–718

Shleifer, A. and R. Vishny, 1997. The limits of arbitrage. Journal of Finance 52, 35–55.

Appendix: Financial Industry Indicative Stop-Loss Rules

Rule	P&L Period	Drawdown from zero limits	Drawdown from peak limits
A	Lifetime	5% - 1 month off when triggered. 1% per month after 5% triggered. 5% reinstated when P&L > 0. 10% - employment ceases.	5% - 1 month off when triggered. 1% per month after 5% triggered. 5% reinstated when P&L > previous peak. 10% - employment ceases.
B	Financial year	10% - employment ceases.	Monthly limit: 30% of live equity (10% + YTD P&L) - 1 month off when triggered.
C	Financial year	5% - 1 month off when triggered. 10% - 1 month off when triggered, risk reduced by 1/3 when resume. 15% - 1 month off when triggered, risk reduced by another 1/3 (of original) when resume. 20% - employment ceases.	5% - 1 month off when triggered. 5% from 'new' start level - 1 month off when triggered.
D	Financial Year	12% - employment ceases.	Monthly limit of 4% - 1 month off when triggered.
E	Financial Year	10% - employment ceases.	10% + 50% of max YTD P&L - employment ceases.
F	Lifetime	7% - employment ceases.	Monthly limit of 3% - 1 month off when triggered.
G	Lifetime	7% - 1 month off when triggered. Risk capital halved when trading resumes. Original risk reinstated when P&L > 0. 10% - employment ceases.	10% + 30% of max life to date P&L - employment ceases. Rolling 3 month limit of 5% - 1 month off when triggered
H	Financial year	5% - 1 month off when triggered. Risk capital halved when trading resumes. Original risk reinstated when P&L > -2.5% for 3 months. 7.5% - 1 month off when triggered. Risk capital 1/4 of original when trading resumes. Original risk reinstated when P&L > -2.5% for 3 months. 10% - employment ceases.	10% - 1 month off when triggered. Risk capital halved when trading resumes. Original risk reinstated when drawdown < 7.5 % for 3 months. 12.5% - 1 month off when triggered. Risk 1/4 of original when trading resumes. Original risk reinstated when drawdown < 7.5 % for 3 months 15% - employment ceases.