Internet Appendix to

"Media Sentiment and Currency Reversals"

Appendix A: Net Excess Returns

We calculate currency excess returns that take into consideration transaction costs that are based on bid-ask quotes of spot and forward rates.²⁸ In particular, the net excess return for holding foreign currency for a month is expressed as $rx_{t+1}^l = f_t^b - s_{t+1}^a$, where we denote the long position with l and a and b represent the ask and bid quotes respectively. In other words, the long position translates to selling the dollar forward at the bid price at time t while buying at the ask price in the spot market at maturity (t + 1). The previous expression takes into consideration the full round-trip transaction cost that corresponds to the time period from t to t + 1. However, if an investor purchases the currency at time t and keeps the same position the following period, then the net excess returns take the form of $rx_{t+1}^l = f_t^b - s_{t+1}$. Likewise, a closing position at time t + 1 in the foreign currency of an already existing currency in the portfolio the previous period

The net excess returns for holding the dollar (e.g., the domestic currency) for a month is calculated as $rx_{t+1}^s = -(f_t^a - s_{t+1}^b)$ where we denote the short position with s and aand b represent the ask and bid quotes respectively. In other words, the short position translates to buying the dollar forward at the ask price at time t while selling at the bid price in the spot market at maturity (t + 1). However, if an investor purchases the domestic currency at time t and the position is rolled over the following period, then the net excess returns take the form of $rx_{t+1}^s = -(f_t^a - s_{t+1}^b)$. Likewise, if the domestic currency exits the portfolio at time t + 1 and it was present in the portfolio at time t,

²⁸We eliminate observations with large deviations from the CIP condition as they usually correspond to rather illiquid and less tradable time-currency observations. Thus, we do not eliminate any observations from the sample of "Developed Countries" and we remove the following observations from the universe of the remaining countries: Egypt from November 2011 to August 2013; Indonesia from December 1997 to July 1998, and from February 2001 to May 2005; Malaysia from May 1998 to June 2005; South Africa for August 1985, and from January 2002 to May 2005; Russia from December 2008 to January 2009. Note that the elimination of these observations do not affect our results. In facts our results are improved before filtering our data. However, we choose to exclude these observations from our sample because they are less tradable.

the net excess return is expressed as $rx_{t+1}^s = -(f_t - s_{t+1}^b)$. Thus, adjustment for full round-trip transaction costs takes place in the beginning and end of our sample period.

Appendix B: Examples of Sentiment Calculation

2.1 Sentence-level Sentiment

Our main measure of sentiment is a sentence-level sentiment where we compute the sentiment of sentences that include the term US dollar or USD and the foreign currency.

First Example. Our first example is based on the article below:

By Douglas Lytle 12 May 1998 Dow Jones International News 287 Words

PRAGUE (Dow Jones)– <u>Supported by a favorable inflation report for the month of</u> <u>April, the Czech koruna (CZK) is stronger against the dollar and the Deutsche mark in</u> early morning dealing Tuesday.

At 0815 GMT, traders quoted the dollar at CZK32.382-.413, down from CZK32.500-.510 near the end of dealing in Prague on Monday. They quoted the mark at CZK18.270-.290, down from about CZK18.300-.310 near the close of dealing on Monday in Prague.

Dealers said the koruna should be stable in a range of CZK18.230-.300 for the rest of the day as high interest rates and lack of negative news keep upward pressure on the koruna. As reported earlier, the Czech consumer price index rose 0.3% in April from March and 13.1% from April 1997, according to the Czech Statistics Office (CSU).

Adjusted or "net" inflation fell to 7.6% year on year in April from 7.9% year on year in March. All of the data were within consensus forecasts gathered from analysts Monday by Dow Jones Newswires.

The "net" or adjusted inflation measures the rise in prices of all items in the consumer basket that aren't subject to some kind of price regulation.

The central bank hopes to reduce adjusted inflation to at least 6.5% by the end of 1998 and further to below 4% by the year 2000.

One-month koruna deposits were quoted at 14.90% to 15%, a tighter range than Monday's 14.90% to 15.20%.

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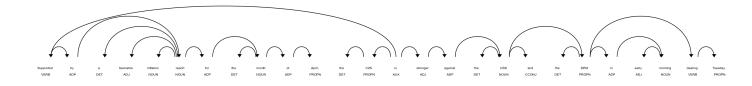
Sentiment Calculation. We calculate the sentiment of the article following the steps below:

1. Find the sentences that mention at least one currency and USD.

"Supported by a favorable inflation report for the month of April, the Czech koruna (CZK) is stronger against the dollar and the Deutsche mark in early morning dealing Tuesday."

2. Apply *Regular Expression* to replace currency names with currency codes.

"Supported by a favorable inflation report for the month of April, the CZK is stronger against the USD and the DEM in early morning dealing Tuesday." 3. Apply *Dependency Parser* to get the dependency tree of the sentence.



4. Find the shortest path between currencies.

 $\begin{array}{l} {\rm CZK-USD:\ czk \rightarrow be \rightarrow strong \rightarrow against \rightarrow usd.} \\ {\rm CZK-DEM:\ czk \rightarrow be \rightarrow strong \rightarrow against \rightarrow usd \rightarrow dem.} \\ {\rm DEM-USD:\ dem \rightarrow usd.} \end{array}$

5. Calculate the sentiment with *Bag of Words* model:

CZK-USD: czk \rightarrow be \rightarrow strong \rightarrow against \rightarrow usd.

 $Sent_{CZK-USD} = 1/3 = 0.33$

CZK-DEM: czk \rightarrow be \rightarrow strong \rightarrow against \rightarrow usd \rightarrow dem.

$$Sent_{CZK-DEM} = 1/4 = 0.25$$

DEM-USD: dem \rightarrow usd.

$$Sent_{DEM-USD} = 0/2 = 0$$

(the denominator is the number of words in the path after excluding stop words)

Second Example. Another example of sentence-level sentiment is based on the article below:

By John Follain 4 May 1998 Dow Jones International News 277 Words

ROME (Dow Jones)–The Italian lira was mostly steady against the Deutsche mark in early trading Monday, with the weekend compromise over the presidency of the European Central Bank unnerving traders only slightly.

"The presidency deal at the launch of the single currency was a political solution to a political problem. It's had little effect on the lira," one Milan-based foreign exchange trader said.

At 0835 GMT, the mark fetched ITL986.65, compared with ITL987.26 late Thursday, before the May 1 holiday.

"The lira is due to join the single currency at ITL990 against the mark and we're very close," another trader noted.

The U.S. dollar was fetching ITL1,762.45, compared with ITL1,772.25 late Thursday. "There is room for the dollar to appreciate,' another trader said. 'The European Central Bank question has been resolved, but it's not the best of solutions."

"Nobody in the market thought that the four-year compromise would be adopted," he said. European Union leaders agreed that Wim Duisenberg, head of the European Monetary Institute, would be the first ECB president, and step down after four years to make way for a French national, most likely Bank of France governor Jean-Claude Trichet. The dollar lost some ground against the Japanese yen and Deutsche mark Thursday in Europe as concerns over a near-term rise in German interest rates continued to support the mark and speculation of a Bank of Japan intervention boosted the yen.

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Sentiment Calculation. We calculate the sentiment of the article following the steps below:

5. Steps 1-4 are the same as before.

As paths are from USD to currencies and the sentiment should be multiplied by -1:

USD-JPY: usd \rightarrow lose \rightarrow against \rightarrow jpy.

$$Sent_{JPY-USD} = -Sent_{USD-JPY} = -(-1/3) = 0.33$$

USD-DEM: usd $\rightarrow \text{lose} \rightarrow \text{against} \rightarrow \text{jpy} \rightarrow \text{dem}.$

$$Sent_{DEM-USD} = -Sent_{USD-DEM} = -(-1/4) = 0.25$$

(the denominator is the number of words in the path after excluding stop words)

2.2 Article-level Sentiment

The article-level sentiment computes the sentiment of the whole article. Figure A1 displays the process by which we eliminate stop words and calculate the sentiment measure of an article that is included in our sample. In particular, we offer an article in May 1983 that was published in Financial Times and discusses movements of Hong Kong dollar. We have erased the stop words and highlight with a dashed line *negative* words such as "weakened", "breaching", "worst", "decline" and *positive* words such as "strengthen".²⁹ At the bottom of the article, we present the sentiment measure as well as the total number of words and the set of the remaining words after eliminating the stop words from the corpus.

 $^{^{29}}$ In this simple example, we have not tokenized the corpus so as to preserve the content of the article but we have tokenized the corpus in our main analysis.

Figure A1. Example of Article-level Sentiment Calculations

By Robert Cottrell 19 May 1983 Financial Times, Page 4

THE Hong Kong dollar weakened yesterday to touch HKDollars 7 to the US dollar shortly before the close of local trading, setting a record low for the currency and breaching an important psychological barrier.

The currency also registered a record low of 74.9 on its trade-weighted index. In London the currency finished above its worst at HKDollars 6.9945.

Dealers in Hong Kong said trading was relatively thin, with little sign of government intervention.

The steady decline of the Hong Kong dollar over the past year is partially attributable to political worries over the future of the colony. Britain's lease over much of Hong Kong expires in 1997, and China has declared its intention to resume sovereignty.

The dollar's weakness also reflects leads-and-lages in Hong Kong's trade. Manufacturers are seeing order books lengthen as Hong Kong pulls out of recession, and they are buying foreign currency to finance raw material imports.

Some analysts expect the Hong Kong dollar to strengthen in coming months as these raw material imports are translated into export receipts.

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Total Words	167	Non-Stopwords	109
Positive Words	1	Negative Words	7
Sentiment	-5.50%	Negativity	-6.42%

The figure displays one example of an FX article and the way that sentiment is calculated. The article appeared in Financial Times in May 1983.

Appendix C: Volatility and Illiquidity Measures

Here we analyse variables that capture different dimensions of currency premia and are built based on currency returns. In particular, we examine currency volatility, illiquidity and idiosyncratic volatility.

Idiosyncratic Risk. We build daily DOL and HML_{FX} factors constructed from daily currency excess returns (rx_{t+1}) allocated into portfolios based on forward discounts of 48 currencies. Our analysis considers currencies with at least 20 non-missing values. Every month, we regress daily currency excess returns on a constant, a DOL and an HML_{FX} factor so as to obtain monthly error terms:

(8)
$$rx_{t,d+1}^{i} = \alpha^{i} + \beta_{1,t}^{i} DOL_{t,d+1} + \beta_{2,t}^{i} HML_{FXt,d+1} + \varepsilon_{t,d+1}^{i},$$

where d denotes daily observations each month, t is the number of monthly observations and i represents the number of currencies. To this end, we define currency i's idiosyncratic volatility in month t $(IV_{i,t}^{FX})$, as the standard deviation of the daily error terms each month. Thus, the measure takes the following form:

(9)
$$IV_{i,t}^{FX} = \sqrt{\frac{1}{T_{i,t}} \sum_{d=1}^{T_{i,t}} \varepsilon_{i,d}^2}$$

where $T_{i,t}$ denotes the number of daily observations each month t for each currency i subtracted by one for idiosyncratic volatility, so as to account for the appropriate degrees of freedom.

Global FX Volatility and Illiquidity. Here we examine the behaviour of political risk in currency momentum when we control for volatility or liquidity in the foreign exchange market. We follow Menkhoff, Sarno, Schmeling, and Schrimpf (2012a) and measure FX volatility and liquidity based on the cross-sectional average of individual daily absolute exchange rate returns that are averages in each month. Particularly, we measure global FX volatility (σ_t^{FX}) and FX liquidity (ξ_t^{FX}) as:

(10)
$$\sigma_t^{FX} = \frac{1}{T_t} \sum_{d \in T_t} \left[\sum_{k \in K_d} \left(\frac{|\Delta s_d|}{K_d} \right) \right], \quad \xi_t^{FX} = \frac{1}{T_t} \sum_{d \in T_t} \left[\sum_{k \in K_d} \left(\frac{BAS_d^k}{K_d} \right) \right].$$

where $|\Delta s_d|$ represents the absolute change in the log spot exchange rate of currency k on day d. In the same vein, BAS_d^k is the bid-ask spread in percentage points of currency k on day d. T_t is the total number of days in month t and K_d is the total number of currencies on day d. Thus, an increase of this measure is associated with higher levels of illiquidity. In order to control for the high persistence of these measures, we replace them with innovations of an AR(1) model as we did for the political risk measure and we denote them as V_t and I_t respectively.

Appendix D: Additional Robustness and Other Specification Tests

Double Sorts. In order to better understand the strong cross-sectional predictive ability of media sentiment for currency returns, we double-sort currencies into terciles based on different determinants of currency premia. Table A10 presents currency excess returns that are sorted into three portfolios based on country risk (CS) (*Panel A*) or volatility (V) (*Panel B*) or illiquidity (I) (*Panel C*) or current month return (CR) (*Panel D*) or past month return (PR) (*Panel E*) or idiosyncratic volatility (IV) (*Panel F*). Then, within each portfolio, we allocate currencies into terciles based on the average sentiment of news per currency over a formation period of one month and a holding period of one month. In particular, we construct a strategy that goes long *low*-sentiment portfolios while short selling *high*-sentiment currency portfolios.

We find that the profitability of the currency reversal strategy is concentrated among currencies with high idiosyncratic volatility and high current month return while volatility and country size and illiquidity do not seem to play an important role for this strategy. We also observe more pronounced results for currencies with low past month return, which is expected for a reversal strategy.

[TABLE A10 ABOUT HERE.]

Time-Variation in the Profitability of Currency Reversals. In this sub-section, we examine the stability of currency reversals over time. Figure A5 of the Internet Appendix displays mean currency excess returns to the three spread currency reversal portfolios – REV(1,1), REV(6,1), and REV(12,1), estimated based on a rolling window of 36 months. The left panel presents returns before transaction costs and the right panel displays net excess returns that consider the implementation cost of strategies. We find that the profitability of currency reversals exhibits time-variation and that currency excess returns tend to be higher over the most recent period. These results are present for both adjusted and unadjusted currency excess returns. For example, currency reversals for all three formation periods demonstrate very high returns between 2014 and 2018, offering monthly net excess returns of about 3% per month.

Another important aspect of Figure A5 is that currency reversals are not constant even over intermediate horizons, and therefore, this strategy may be more appealing to investors with longer investment horizons. This is particularly important for professional market participants and proprietary traders who are more involved in currency speculation and whose performance is usually evaluated based on short-term horizons (e.g., Lyons et al., 2001).

Local and Global Sentiment. In this section, we examine the source of predictability of media sentiment. Specifically, we decompose the media sentiment measure into local and global sentiment. We contemporaneously regress the sentiment on VIX or the Economic Policy Uncertainty (EPU) index. We define as global sentiment the prediction of this regression and the local sentiment is the innovation of the regression. Table A11 of the Internet Appendix shows the average currency returns of portfolios sorted based on the local and global sentiment based on VIX. We find that our results are driven by local than global sentiment. Table A12 shows the Sharpe ratios of the strategy. We find similar results for Developed countries. Table A13 shows the Sharpe ratios of the portfolios. Table A13 and Table A14 show the average currency returns and Sharpe ratios of local and global sentiment based on EPU. We find similar results.³⁰

Topic Modelling. Our primary analysis is based on a dictionary-based measure of tone following the methodology of Loughran and McDonald (2011), among others. Another approach would be to focus on topic modeling methods. However, such approaches suffer from hindsight bias as the estimation is based on the full sample.

One potential shortcoming of our approach might be that tone changes could proxy for specific topics discussed in the news. For example, if tone changes reflect negative information for a particular topic such as trade wars and positive information for another topic such as monetary policy, then such changes would proxy for specific topics rather than independent information.

To guard against this issue, we employ the Latent Dirichlet Allocation (LDA) method of Blei, Ng, and Jordan (2003) to estimate the topics of our corpus. This approach has been implemented in the macro literature in an attempt to examine the effects of information released by central banks on the market and key economic variables (e.g., Hansen, McMahon, and Prat, 2017; Hansen and McMahon, 2016; Schmeling and Wagner, 2019). In the foreign exchange literature, Filippou et al. (2020) apply dictionary-based and probabilistic topic modeling methods such as LDA in order to construct a textual measure that captures U.S. populist rhetoric, which is found to be a strong predictor of the cross-section of currency returns.³¹

 $^{^{30}}$ We would like to thank the referee for the suggestion.

³¹The LDA method allocates words into groups based on the co-existence of such words across articles. Each article is a mixture of topics that are determined by the LDA. The labeling of the topics involves subjective judgment. In our setting, we do not label the topics because we test whether the FX tone measure reflects general information over and above the one contained in the topics.

We fit an LDA model with five topics.³² Following Schmeling and Wagner (2019), we estimate the likelihood of each topic for each article and construct dummy variables for each topic. Specifically, we construct a dummy variable per topic that takes a value of one on news months that the LDA indicates that this topic dominates the article and zero otherwise. We augment the panel regression of equation 4 with the topic dummies $2, \ldots, 5$ (we eliminate the dummy variable of topic one because of collinearity). In particular, we run a panel regression of currency excess returns and exchange rate changes on sentiment measures, our set of control variables, and the topic dummies. This finding implies that it is unlikely that the sentiment measure is proxy for specific topics. Table A14 of the Internet Appendix displays coefficient estimates of the sentiment measure after controlling for the topic dummies. *Panel A* of Table A15 shows results for currency excess returns, and *Panel B* displays results for spot exchange rate changes. We find that the sentiment measure's slope coefficients are highly statistically and economically significant in all specifications. This finding implies that it is unlikely that the sentiment measure is proxy for specific topics.

Article-level Sentiment. Our main analysis focuses on sentence-level sentiment. One shortcoming of this approach might be that it ignores sentences that do not mention the US dollar. These sentences could include important information about the sentiment, or they could reflect noise. To this end, we also construct an article-level sentiment measure. We offer an example of the calculation of this measure in Section B of the Internet Appendix. Table A16 displays average currency excess returns of currency portfolios sorted on the article-level sentiment. Table A17 shows the Sharpe ratios of these portfolios and Table A18 reports cross-sectional regressions. Figure A6 displays cumulative returns of these portfolios. Our results are similar.

 $^{^{32}}$ In the LDA algorithm, the researcher can define the number of topics. As it is highlighted by Hansen et al. (2017), in probabilistic topic modeling, researchers face a trade-off between the interpretability of the topics and the goodness-of-fit of the model. The authors emphasize that it is easier to interpret a smaller number of topics.

Table A1. Currency Reversal Portfolios: Emerging Economies

This table shows average currency excess returns (rx) and exchange rate changes $(-\Delta s)$ of spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports excess returns and spot rate changes (Sharpe ratios) Emerging Countries. All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

			Р	anel A: S	forts base	d on FX	K Media Se	entiment					
		Currenc	y Excess	Returns		Exchange Rate Changes							
		Hol	ding Peri	od h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	7.26^{***}	5.48^{***}	3.84^{**}	4.02**	3.41^{*}	1	8.62***	6.86^{***}	4.42***	4.09***	3.46^{***}		
	[5.12]	[3.63]	[2.54]	[2.16]	[1.96]		[6.05]	[4.89]	[3.86]	[2.77]	[2.68]		
3	3.65^{**}	2.06	1.81	1.88	2.15	3	5.50^{***}	3.17^{**}	2.63**	2.71**	2.53**		
	[2.52]	[1.17]	[1.26]	[1.24]	[1.47]		[5.04]	[2.22]	[2.34]	[2.48]	[2.23]		
6	1.36	0.85	-0.47	0.21	0.99	6	3.88^{***}	3.04	2.02	2.30^{*}	1.79		
	[0.73]	[0.32]	[-0.22]	[0.10]	[0.60]		[2.89]	[1.48]	[1.59]	[1.73]	[1.45]		
9	2.07	1.44	-0.48	-0.12	0.35	9	4.07***	3.25	1.53	1.7	1.18		
	[1.31]	[0.56]	[-0.22]	[-0.06]	[0.21]		[3.31]	[1.58]	[0.97]	[1.11]	[0.89]		
12	-0.48	-0.89	-1.84	-0.7	-0.24	12	1.82	0.36	-0.1	0.42	-0.34		
	[-0.22]	[-0.30]	[-0.79]	[-0.33]	[-0.14]		[1.14]	[0.14]	[-0.05]	[0.23]	[-0.21]		
					Panel B	: Sharpe	e Ratio						
		Currenc	y Excess	Returns				Exchange	e Rate Cha	inges			
		Hol	ding Peri	od h				Holdi	ng Period	h			
f	1	3	6	9	12	f	1	3	6	9	12		
1	1.10^{***}	0.58^{***}	0.32^{**}	0.26^{*}	0.21	1	1.33^{***}	0.77^{***}	0.44^{***}	0.30^{**}	0.27^{**}		
	[4.96]	[3.49]	[2.55]	[1.81]	[1.64]		[5.28]	[4.72]	[3.84]	[2.54]	[2.49]		
3	0.54^{**}	0.20	0.16	0.15	0.16	3	0.91^{***}	0.36^{***}	0.28***	0.26**	0.23**		
	[2.44]	[1.58]	[1.49]	[0.88]	[1.28]		[4.63]	[2.72]	[2.63]	[2.40]	[2.25]		
6	0.18	0.06	-0.03	0.01	0.07	6	0.54***	0.22	0.19^{**}	0.18^{**}	0.15^{**}		
	[0.58]	[0.33]	[-0.03]	[0.20]	[0.60]		[2.83]	[1.58]	[2.06]	[2.24]	[1.99]		
9	0.29	0.10	-0.03	-0.01	0.02	9	0.64***	0.24^{*}	0.13^{*}	0.12	0.10		
	[1.12]	[0.75]	[0.25]	[0.27]	[0.50]		[3.36]	[1.76]	[1.70]	[1.56]	[1.50]		
12	-0.06	-0.05	-0.12	-0.04	-0.02	12	0.24	0.02	-0.01	0.03	-0.03		
	[-0.08]	[0.09]	[-0.21]	[0.12]	[0.35]		[1.38]	[0.65]	[0.56]	[0.66]	[0.32]		

Table A2. Time-Series Currency Reversals: Emerging Economies

This table shows average currency excess returns of equally-weighted portfolios of time-series currency reversal strategies based on different formation and holding periods. In particular, we construct a strategy that goes long *negative* sentiment currencies and short *positive* sentiment based on a formation period f months and a holding period of h months. We compute the excess return of each currency and then construct an equally-weighted portfolio. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. We report results for Emerging Countries. We express currency excess returns in percentage per annum. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

	Cu	urrency Ex	cess Retu	ırns									
	Holding Period h												
f	1	3	6	9	12								
1	4.58^{***}	3.59^{***}	1.52	0.41	0.14								
	[2.90]	[2.92]	[1.54]	[0.50]	[0.18]								
3	2.97***	1.42*	1.13	0.47	0.73								
	[2.92]	[1.80]	[1.58]	[0.67]	[1.25]								
6	2.68^{**}	2.73***	2.16**	1.27^{*}	0.55								
	[2.03]	[2.73]	[2.48]	[1.75]	[0.92]								
9	2.32**	1.84*	1.09	1.09	0.63								
	[2.08]	[1.88]	[1.20]	[1.49]	[1.02]								
12	3.36***	2.28**	1.45	1.03	0.79								
	[3.24]	[2.51]	[1.60]	[1.34]	[1.42]								

Table A3. Portfolio Turnover: Sentiment

This table shows the frequency of each currency for long and short portfolios that are sorted based on media sentiment. We focus on the universe of *All Countries* and consider a formation period of one month and a holding period of one month. We also report the *net* effect that shows the difference in the frequencies between long and short portfolios for each currency. Our data contain monthly series that span the period of October 1983 to April 2019.

	All Co	untries								
Long Short Net										
AUD	0.124	0.166	-0.041							
ATS	0.000	0.100 0.002	-0.041 -0.002							
BEF	0.000 0.021	0.002 0.025	-0.002 -0.005							
BGN										
BRL	0.041	0.014	0.028							
	0.126	0.159	-0.032							
CAD	0.170	0.154	0.016							
CHF	0.140	0.159	-0.018							
CYP	0.000	0.002	-0.002							
CZK	0.055	0.062	-0.007							
DEM	0.069	0.092	-0.023							
DKK	0.014	0.014	0.000							
EGP	0.000	0.011	-0.011							
ESP	0.009	0.014	-0.005							
EUR	0.087	0.193	-0.106							
FIM	0.016	0.016	0.000							
\mathbf{FRF}	0.067	0.064	0.002							
GBP	0.214	0.159	0.055							
GRD	0.002	0.002	0.000							
HKD	0.103	0.106	-0.002							
HRK	0.005	0.000	0.005							
HUF	0.069	0.060	0.009							
IDR	0.000 0.120	0.200	-0.080							
IEP	0.000	0.000	0.000							
ILI	0.000	0.000	0.000							
INR	$0.005 \\ 0.218$	0.002 0.154	0.062 0.064							
ISK	0.218 0.018	$0.134 \\ 0.011$	$0.004 \\ 0.007$							
ITL	0.018 0.048	0.011 0.028								
JPY			0.021							
	0.122	0.170	-0.048							
KRW	0.179	0.172	0.007							
KWD	0.051	0.018	0.032							
MXN	0.216	0.156	0.060							
MYR	0.110	0.159	-0.048							
NLG	0.009	0.021	-0.011							
NOK	0.034	0.064	-0.030							
NZD	0.074	0.182	-0.108							
PHP	0.223	0.182	0.041							
PLN	0.064	0.074	-0.009							
PTE	0.002	0.005	-0.002							
RUB	0.057	0.041	0.016							
SAR	0.106	0.041	0.064							
SEK	0.028	0.057	-0.030							
SGD	0.292	0.149	0.143							
SIT	0.034	0.044	-0.009							
SKK	0.023	0.034	-0.011							
THB	0.267	0.163	0.103							
TWD	0.124	0.131	-0.007							
UAH	0.009	0.005	0.005							
ZAR	0.005 0.115	$0.005 \\ 0.138$	-0.023							
2 1110	0.110	0.100	0.020							

Table A4. Currency Reversal Portfolios: Different Scaling of the Sentiment Measure

This table shows average currency excess returns (rx) and exchange rate changes $(-\Delta s)$ of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for All countries (Developed countries). All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

					Panel A	: All Co	untries						
		Currenc	y Excess	Returns		Exchange Rate Changes							
		Hole	ding Peri	od h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	5.19^{***}	3.75^{***}	1.92^{**}	1.20^{*}	1.02^{*}	1	6.52^{***}	4.67^{***}	2.13^{***}	1.33^{**}	1.11^{**}		
	[3.60]	[3.33]	[2.23]	[1.79]	[1.82]		[4.97]	[4.82]	[2.75]	[2.13]	[2.05]		
3	4.19^{***}	1.72^{*}	0.52	0.52	0.73	3	4.92***	2.64^{***}	1.61^{*}	1.42^{**}	1.39^{**}		
	[2.98]	[1.66]	[0.51]	[0.54]	[0.89]		[4.14]	[2.93]	[1.75]	[1.98]	[2.01]		
6	0.54	-0.67	-1.33	-1.01	-0.82	6	2.37^{*}	1.57	0.81	0.70	0.72		
	[0.29]	[-0.37]	[-0.82]	[-0.69]	[-0.76]		[1.79]	[1.44]	[0.84]	[0.87]	[0.91]		
9	-0.54	-1.78	-2.80	-1.88	-1.31	9	1.97	0.80	-0.40	-0.23	0.08		
	[-0.24]	[-0.77]	[-1.41]	[-1.16]	[-1.08]		[1.30]	[0.48]	[-0.28]	[-0.19]	[0.07]		
12	-2.46	-2.70	-3.10	-1.99	-1.17	12	0.45	0.21	-0.78	-0.34	-0.13		
	[-1.05]	[-1.24]	[-1.64]	[-1.27]	[-0.96]		[0.27]	[0.15]	[-0.53]	[-0.25]	[-0.10]		
				Par	nel B: Det	eveloped	Countries	5					
		Currenc	y Excess	Returns				Exchange	Rate Cha	nges			
		Hole	ding Peri	od h				Holdin	g Period l	ı			
f	1	3	6	9	12	f	1	3	6	9	12		
1	5.41^{***}	3.27^{***}	1.70^{*}	1.36^{*}	1.06^{*}	1	5.74^{***}	3.58^{***}	2.01^{**}	1.67^{***}	1.32^{**}		
	[2.92]	[2.83]	[1.83]	[1.91]	[1.75]		[3.18]	[3.31]	[2.38]	[2.62]	[2.43]		
3	3.53^{***}	1.73	0.44	0.57	0.77	3	3.84^{***}	1.95^{*}	0.68	0.76	0.95^{*}		
	[2.86]	[1.59]	[0.54]	[0.91]	[1.28]		[3.19]	[1.93]	[0.86]	[1.30]	[1.78]		
6	1.52	-0.47	-0.37	0.09	0.31	6	1.49	-0.55	-0.50	-0.07	0.15		
	[1.14]	[-0.44]	[-0.45]	[0.12]	[0.45]		[1.11]	[-0.54]	[-0.63]	[-0.10]	[0.25]		
9	1.64	0.71	0.67	0.53	0.18	9	1.55	0.59	0.49	0.38	0.07		
	[1.31]	[0.75]	[0.74]	[0.64]	[0.23]		[1.32]	[0.67]	[0.62]	[0.56]	[0.10]		
12	2.81^{***}	1.04	0.19	0.14	0.00	12	2.47^{**}	0.57	-0.26	-0.26	-0.35		
	[2.63]	[1.07]	[0.22]	[0.18]	[0.00]		[2.50]	[0.68]	[-0.36]	[-0.40]	[-0.53]		

Table A5. Sharpe Ratios of Currency Reversal Portfolios:Different Scaling of theSentiment

This table shows Sharpe ratios that are based on currency excess returns (rx) and exchange rate changes $(-\Delta s)$ of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we construct a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for All countries (Developed countries). Sharpe ratios are annualized. We report *t*-statistics in squared brackets that are based on a moving block-bootstrap. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

					Panel A	: All Cou	intries						
		Currenc	y Excess	Returns			Exchange Rate Changes						
		Hol	ding Peri	od h		_		Holdin	ng Period I	'n			
f	1	3	6	9	12	f	1	3	6	9	12		
1	0.85^{***}	0.48^{***}	0.24^{**}	0.16^{*}	0.14^{**}	1	1.06^{***}	0.61^{***}	0.25^{***}	0.16^{**}	0.14^{**}		
	[3.48]	[3.43]	[2.33]	[1.78]	[2.31]		[4.73]	[5.02]	[2.69]	[2.11]	[2.09]		
3	0.62^{***}	0.25^{*}	0.06	0.05	0.07	3	0.79^{***}	0.42^{***}	0.18^{*}	0.15^{**}	0.15^{**}		
	[3.13]	[1.70]	[0.64]	[0.62]	[1.00]		[4.83]	[3.08]	[1.69]	[2.08]	[2.04]		
6	0.07	-0.07	-0.12	-0.09	-0.07	6	0.38^{*}	0.21^{*}	0.10	0.09	0.08		
	[0.21]	[-0.09]	[-0.45]	[-0.33]	[-0.37]		[1.69]	[1.83]	[1.37]	[1.59]	[1.55]		
9	-0.07	-0.15	-0.23	-0.15	-0.12	9	0.31	0.08	-0.04	-0.02	0.01		
	[0.19]	[-0.31]	[-0.74]	[-0.55]	[-0.38]		[1.55]	[0.83]	[0.32]	[0.41]	[0.86]		
12	-0.29	-0.26	-0.26	-0.16	-0.10	12	0.06	0.03	-0.08	-0.03	-0.01		
	[-0.64]	[-0.80]	[-1.14]	[-0.78]	[-0.50]		[1.10]	[0.17]	[0.03]	[0.28]	[0.50]		
				Par	nel B: De	eveloped	Countries						
		Currenc	y Excess	Returns				Exchange	Rate Cha	nges			
		Hol	ding Peri	od h				Holdin	ng Period I	'n			
f	1	3	6	9	12	f	1	3	6	9	12		
1	0.66^{***}	0.37^{***}	0.18^{*}	0.15^{*}	0.12^{*}	1	0.70***	0.41^{***}	0.21^{**}	0.18^{***}	0.15^{**}		
	[2.74]	[3.02]	[1.70]	[1.91]	[1.89]		[3.08]	[3.25]	[2.36]	[2.84]	[2.50]		
3	0.43^{***}	0.22	0.06	0.07	0.09	3	0.47***	0.25^{*}	0.09	0.10	0.12^{*}		
	[3.32]	[1.56]	[0.53]	[0.89]	[1.21]		[3.83]	[1.89]	[0.78]	[1.33]	[1.69]		
6	0.22	-0.06	-0.05	0.01	0.04	6	0.21	-0.08	-0.08	-0.01	0.02		
	[1.23]	[-0.22]	[-0.19]	[0.28]	[0.52]		[1.20]	[-0.33]	[-0.40]	[0.09]	[0.39]		
9	0.23	0.11	0.09	0.07	0.02	9	0.22	0.09	0.07	0.05	0.01		
	[1.36]	[0.93]	[0.84]	[0.72]	[0.41]		[1.35]	[0.77]	[0.72]	[0.66]	[0.27]		
12	0.43^{***}	0.16	0.03	0.02	0.00	12	0.39***	0.09	-0.04	-0.04	-0.05		
	[2.58]	[1.19]	[0.39]	[0.40]	[0.09]		[2.59]	[0.78]	[-0.15]	[-0.10]	[-0.13]		

Table A6. Time-Series Currency Reversals: Sentiment Changes

This table shows average currency excess returns of equally-weighted portfolios of time-series currency reversal strategies based on different formation and holding periods. We construct a strategy that goes long negative sentiment currencies and short *positive* sentiment based on a formation period f months and a holding period of h months. In particular, we define our time-series currency reversal strategy as:

(11)
$$rx_{i,t+1}^{REV} = \begin{cases} -rx_{i,t+1} & \text{if } \Delta Sent_{i,t} > 0, \\ rx_{i,t+1} & \text{if } \Delta Sent_{i,t} \le 0. \end{cases}$$

where $rx_{i,t+1}$ is the currency excess return of currency *i* at time *t*. $\Delta Sent_t$ represents changes in sentiment at time *t*. We compute the excess return of each currency and then construct an equally-weighted portfolio. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for All countries (Developed countries). We express currency excess returns in percentage per annum. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

	Panel A: All Countries												
		Hol	ding Perio	od h									
f	1	3	6	9	12								
1	4.37***	2.79^{***}	1.36^{***}	0.94^{***}	0.77^{***}								
	[5.48]	[6.24]	[4.09]	[3.59]	[2.77]								
3	5.43^{***}	2.37^{***}	1.50^{***}	0.95^{***}	0.74^{***}								
	[7.27]	[4.58]	[3.68]	[2.86]	[2.65]								
6	3.72^{***}	1.83^{***}	1.12^{**}	0.72^{**}	0.57^{*}								
	[4.48]	[4.02]	[2.53]	[1.96]	[1.87]								
9	2.01^{***}	1.21^{**}	0.89^{*}	0.73^{*}	0.37								
	[2.66]	[2.25]	[1.96]	[1.92]	[1.09]								
12	4.31***	2.39^{***}	1.39^{***}	0.70^{*}	0.58								
	[5.02]	[3.79]	[2.75]	[1.65]	[1.63]								
	Pa	anel B : De	veloped C	ountries									
		Hol	ding Perio	od h									
f	1	3	6	9	12								
1	4.25^{***}	2.84^{***}	1.35^{***}	1.05^{***}	0.68^{**}								
	[3.24]	[5.83]	[3.25]	[3.50]	[2.20]								
3	6.31^{***}	2.49^{***}	1.11**	0.64^{*}	0.62^{**}								
	[6.47]	[3.90]	[2.40]	[1.85]	[2.14]								
6	3.76^{***}	1.48^{***}	0.11	-0.13	0.05								
	[3.70]	[2.84]	[0.25]	[-0.33]	[0.15]								
9	2.46^{***}	0.93	0.65	0.44	0.26								
	[2.85]	[1.56]	[1.40]	[1.10]	[0.69]								
12	3.53***	1.66^{***}	0.54	0.03	0.02								
	[3.92]	[2.69]	[1.08]	[0.08]	[0.05]								

Table A7. FX Media Sentiment and Currency Volume: VAR Estimates

This table presents coefficient estimates of predictive panel VAR with time (e.g., τ_t) and currency (e.g., α_i) fixed effects of currency volume on FX media sentiment as well as a number of control variables. The model takes the form below:

$$Vol_{i,t} = \alpha_i + \tau_t + \sum_{k=1}^{5} \beta_k Sent_{i,t-k} + \gamma \boldsymbol{z}_{i,t-1} + \varepsilon_{i,t},$$

where $Vol_{i,t}$ represents the volume of currency *i* at time *t* and $Sent_{i,t-k}$ denotes the sentiment measure (see Section 3 for the construction of the measure) of each currency pair at time t - k for k = 1, ..., 5. We also control for other determinants of currency returns such as currency volatility and illiquidity that are included in the vector $z_{i,t-1}$. We show results for monthly volume. We report *t*-statistics in squared brackets that are based on robust standard errors. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain series that span the period of January 2012 to April 2019.

FX Volume									
	Vol_t								
$Sentiment_{t-1}$	5.155^{**} [2.21]								
$Sentiment_{t-2}$	-5.260^{*} (-2.08)								
$Sentiment_{t-3}$	1.402 [0.56]								
$Sentiment_{t-4}$	2.028								
$Sentiment_{t-5}$	[0.72] -5.547** [-2.30]								
Constant	0.302^{***} [16.40]								
$\chi^2(5)[Joint]$ p-value	$\begin{array}{c} 3.080\\ 0.04 \end{array}$								
Sum 2 to 5 $\chi^2(1)[Reversal]$ <i>p</i> -value	-7.377 2.900 0.06								
Control Time FE Currency FE Cluster	Yes Yes Yes Currency								
Observations R-squared	$601 \\ 0.952$								

Table A8. Robustness: FX Media Sentiment and Currency Portfolios: Net ExcessReturns

This table shows average *net excess returns* (rx) and net spot rate changes $(-\Delta s)$ of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for quoted spreads (effective spreads). All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

					Panel A:	Quot	ed Spreads						
		Net	Excess Re	eturns			Net Spot Rate Changes						
		He	olding Peri	iod h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	6.33^{***}	4.13***	2.02^{***}	1.62^{**}	1.50^{**}	1	4.60^{***}	2.82^{***}	-0.07	-0.69	-0.80		
	[5.40]	[4.61]	[2.77]	[2.17]	[2.01]		[4.19]	[3.19]	[-0.09]	[-0.90]	[-1.13]		
3	2.87^{***}	0.97	0.03	-0.18	-0.03	3	1.18	-0.78	-2.36^{***}	-2.58^{***}	-2.47^{***}		
	[3.13]	[1.14]	[0.03]	[-0.22]	[-0.03]		[1.40]	[-0.93]	[-3.11]	[-3.61]	[-3.43]		
6	0.66	-0.90	-1.77	-1.74	-1.69	6	-1.21	-2.72^{***}	-3.80***	-3.93***	-4.03***		
	[0.60]	[-0.77]	[-1.47]	[-1.44]	[-1.42]		[-1.25]	[-2.65]	[-3.83]	[-4.07]	[-4.22]		
9	0.71	-1.45	-2.08	-2.08	-1.88	9	-1.26	-3.19^{**}	-4.28***	-4.45***	-4.33***		
	[0.53]	[-1.03]	[-1.56]	[-1.63]	[-1.57]		[-0.99]	[-2.42]	[-3.45]	[-3.86]	[-4.01]		
12	0.02	-2.26	-2.37^{*}	-2.12	-2.13^{*}	12	2 -1.87	-4.27***	-4.76***	-4.61***	-4.82***		
	[0.01]	[-1.51]	[-1.70]	[-1.60]	[-1.65]		[-1.27]	[-2.93]	[-3.56]	[-3.74]	[-3.88]		
			Pa	<i>nel B</i> : Eff	ective Sp	reads	and Net exc	ess Returns	3				
		Effect	ive Spread	of 75%				Effective	e Spread of	50%			
		He	olding Peri	iod h				Hold	ing Period	h			
f	1	3	6	9	12	f	1	3	6	9	12		
1	6.92^{***}	4.58***	2.45^{***}	2.04^{***}	1.92^{**}	1		5.03^{***}	2.87^{***}	2.45^{***}	2.33^{***}		
	[5.93]	[5.11]	[3.33]	[2.70]	[2.54]		[6.46]	[5.60]	[3.88]	[3.22]	[3.04]		
3	3.42^{***}	1.45^{*}	0.48	0.27	0.43	3	3.98^{***}	1.92^{**}	0.94	0.73	0.88		
	[3.76]	[1.69]	[0.59]	[0.33]	[0.51]		[4.38]	[2.24]	[1.14]	[0.88]	[1.06]		
6	1.24	-0.37	-1.27	-1.25	-1.20	6		0.16	-0.78	-0.76	-0.70		
	[1.12]	[-0.32]	[-1.06]	[-1.04]	[-1.01]		[1.65]	[0.14]	[-0.65]	[-0.63]	[-0.60]		
9	1.29	-0.93	-1.58	-1.58	-1.38	9		-0.42	-1.08	-1.08	-0.87		
	[0.96]	[-0.67]	[-1.19]	[-1.24]	[-1.15]		[1.39]	[-0.30]	[-0.81]	[-0.85]	[-0.73]		
12	0.59	-1.76	-1.87	-1.61	-1.61	12		-1.26	-1.37	-1.10	-1.09		
	[0.38]	[-1.17]	[-1.35]	[-1.22]	[-1.26]		[0.75]	[-0.84]	[-0.99]	[-0.84]	[-0.86]		

Table A9. FX Media Sentiment and Currency Returns: Other Sentiment Measure

This table presents coefficient estimates of predictive panel regressions with time (e.g., τ_t) and currency (e.g., α_i) fixed effects of currency excess returns or exchange rate changes on FX media sentiment as well as a number of control variables. The model takes the form below:

$$R_{i,t} = \alpha_i + \tau_t + \beta Sent_{i,t-1} + \gamma z_{i,t-1} + \varepsilon_{i,t}$$
, for $\mathbf{R} = rx$ or $-\Delta s$

where $rx_{i,t}$ $(-\Delta s_{i,t})$ represents the currency excess return (exchange rate change) of currency *i* at time *t* and $Sent_{i,t-1}$ denotes the sentiment measure (see Section 3 for the construction of the measure) of each currency pair at time t-1. We also control for other determinants of currency returns such as currency volatility and illiquidity that are included in the vector $z_{i,t-1}$. We also control for the sentiment measure of Yu (2013) (YSentiment). Columns (1) and (2) show results for currency excess returns and columns (3) and (4) show estimates for exchange rate changes. We have multiplied the exchange rate change (ΔS) by minus one so that higher values correspond to an appreciation of the foreign currency against the US dollar. We report *t*-statistics in squared brackets that are based on double-clustered standard errors across time and currency pairs. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of March 1984 to July 2012.

Par	nel A: Senter	nce-level FX	Sentiment	
	(1)	(2)	(3)	(4)
	rx_t	rx_t	$-\Delta s_t$	$-\Delta s_t$
$Sentiment_{t-1}$	-0.796*	-0.756**	-0.848*	-0.805*
	[-1.95]	[-2.02]	[-1.84]	[-1.89]
$YSentiment_{t-1}$	0.006**	0.006**	0.007**	0.007***
	[2.29]	[2.28]	[2.53]	[2.58]
Constant	-0.000	0.001***	-0.001	0.001***
	[-0.29]	[40.51]	[-0.53]	[18.63]
Controls	Yes	No	Yes	No
Time FE	Yes	Yes	Yes	Yes
Currency FE	Yes	Yes	Yes	Yes
Cluster	Currency	Currency	Currency	Currency
Observations	1,425	1,425	1,425	1,425
R-squared	0.620	0.619	0.618	0.617
Pa	nel B: Artic	le-level FX S	Sentiment	
	(1)	(2)	(3)	(4)
	rx_t	rx_t	$-\Delta s_t$	$-\Delta s_t$
$Sentiment_{t-1}$	-0.271***	-0.268***	-0.262***	-0.256***
	[-4.24]	[-4.18]	[-3.91]	[-3.72]
$YSentiment_{t-1}$	0.004	0.005	0.004	0.005
	[1.02]	[1.10]	[1.15]	[1.31]
Constant	-0.001	-0.002	-0.000	-0.003*
	[-0.35]	[-1.71]	[-0.22]	[-2.15]
Controls	Yes	No	Yes	No
Time FE	Yes	Yes	Yes	Yes
Currency FE	Yes	Yes	Yes	Yes
Cluster	Currency	Currency	Currency	Currency
Observations	1,570	1,570	1,570	1,570

Table A10. Double Sorts

This table shows currency excess returns that are sorted into three portfolios based on country risk (CS) (*Panel A*) or volatility (V) (*Panel B*) or illiquidity (I) (*Panel C*) or current month return (CR) (*Panel D*) or past month return (PR) (*Panel E*) or idiosyncratic volatility (IV) (*Panel F*). Then within each portfolio we allocate currencies into terciles based on the average sentiment of news per currency over a formation period of one month and a holding period of one month. In particular, we construct a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios. Currency excess returns are annualized and expressed in percentages. We report *t*-statistics that are based on Newey and West (1987) standard errors with one lag. *, **, **** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

	Panel A: Country Size												
	Low	2	High	LMH	t-stat								
CS1	0.95	-4.05	-6.65	7.60**	2.05								
CS2	6.51	0.62	-2.28	8.78***	7.36								
CS3	6.12	-2.45	-0.3	6.42**	2.01								
		Panel I	B: Volati	lity									
	Low	2	High	LMH	<i>t</i> -stat								
V1	7.02	4.87	4.93	2.09	0.95								
V2	4.67	0.70	-0.89	5.56^{***}	4.92								
V3	4.97	-9.48	-6.61	11.57***	4.53								
Panel C: Illiquidity													
	Low	2	High	LMH	<i>t</i> -stat								
I1	4.49	-4.72	-6.23	10.72**	2.43								
I2	5.92	1.00	-1.88	7.80***	6.63								
I3	8.18	3.45	1.65	6.52^{**}	2.46								
	Panel	D: Curi	rent Mon	th Return									
	Low	2	High	LMH	<i>t</i> -stat								
CR1	-27.75	-40.3	-30.34	2.59	1.41								
CR2	3.44	2.11	1.70	1.75^{***}	2.61								
CR3	32.76	37.2	30.45	2.31**	2.03								
	Pan	el E: Pa	st Montl	n Return									
	Low	2	High	LMH	<i>t</i> -stat								
PR1	2.33	-3.41	-6.67	8.99***	3.44								
PR2	4.84	1.08	-1.61	6.45^{***}	6.17								
PR3	6.30	3.63	3.57	2.73	0.97								
	Panel	F: Idios	syncratic	Volatility									
	Low	2	High	LMH	<i>t</i> -stat								
IV1	1.21	0.87	-0.01	1.22	0.90								
IV2	5.91	1.97	-0.35	6.25^{***}	5.41								
IV3	5.70	-4.07	-6.56	12.26***	4.48								

Table A11. Currency Reversal Portfolios: Decomposition of Sentiment into Local and Global (VIX)

This table shows average currency excess returns (rx) of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. We show results for local and global sentiment. We regress the sentiment measure of each country on VIX and define the innovation of the regression local sentiment and the predicted value as global sentiment. We run the regression below:

(12)
$$Sent_{i,t} = \alpha + \beta VIX_t + \varepsilon_{i,t}$$

where $\varepsilon_{i,t}$ denotes the local sentiment and the prediction of the regression is the global sentiment for currency *i* at time *t*. Panel A (Panel B) reports results for All countries (Developed countries). All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

				Pa	nel A: All G	Countrie	es						
		L	ocal Senti	ment			Global Sentiment						
		Н	olding Per	riod h				Holdin	g Period	h			
f	1	3	6	9	12	f	1	3	6	9	12		
1	8.59***	5.90^{***}	3.86^{***}	3.40^{***}	3.28^{***}	1	-1.33	0.03	-0.99	-1.22	-0.60		
	[7.78]	[6.72]	[4.47]	[3.55]	[3.41]		[-0.66]	[0.02]	[-0.92]	[-1.17]	[-0.61]		
3	5.23^{***}	2.98^{***}	2.20**	1.93^{**}	2.19**	3	0.12	-0.37	0.60	0.61	-0.66		
	[5.09]	[3.04]	[2.36]	[2.07]	[2.44]		[0.04]	[-0.14]	[0.32]	[0.34]	[-0.75]		
6	3.10**	1.70	0.86	1.01	1.38	6	-2.82*	-1.83*	-0.41	-0.55	-1.08		
	[2.40]	[1.24]	[0.65]	[0.75]	[1.19]		[-1.72]	[-1.68]	[-0.46]	[-0.48]	[-0.87]		
9	2.87^{**}	1.38	0.77	0.82	1.08	9	2.94	0.85	0.60	0.98	1.22		
	[2.35]	[0.98]	[0.60]	[0.62]	[0.94]		[1.57]	[0.53]	[0.66]	[1.06]	[1.35]		
12	2.56^{*}	0.35	0.18	0.73	1.25	12	1.71	1.11	0.52	0.44	-0.08		
	[1.96]	[0.26]	[0.13]	[0.55]	[1.12]		[1.22]	[0.90]	[0.47]	[0.47]	[-0.11]		
				Panel	B: Develop	ed Cou	ntries						
		L	ocal Senti	ment				Global	Sentime	nt			
		Н	olding Per	riod h				Holdin	g Period	h			
f	1	3	6	9	12	f	1	3	6	9	12		
1	5.85^{***}	3.38^{***}	2.02***	1.30^{**}	1.37^{**}	1	0.89	1.67	-0.24	-0.01	-0.53		
	[3.72]	[3.29]	[2.64]	[2.01]	[2.50]		[0.20]	[0.57]	[-0.13]	[-0.01]	[-0.37]		
3	4.27***	1.61	0.83	0.52	0.61	3	-0.70	-1.20	-0.55	-1.35	-1.02		
	[3.26]	[1.62]	[1.05]	[0.74]	[0.95]		[-0.24]	[-0.49]	[-0.34]	[-1.35]	[-1.08]		
6	2.06^{*}	1.12	0.59	0.44	0.63	6	-2.94	-1.20	-1.86	-1.57	-0.11		
	[1.78]	[1.13]	[0.72]	[0.57]	[0.87]		[-0.55]	[-0.53]	[-1.24]	[-1.07]	[-0.09]		
9	2.42*	0.89	0.30	0.20	0.54	9	-2.07	-1.48	-1.98	-0.90	-0.38		
	[1.73]	[0.95]	[0.33]	[0.23]	[0.67]		[-0.58]	[-0.59]	[-1.41]	[-0.82]	[-0.37]		
12	3.37***	0.77	0.16	0.57	1.11	12	0.40	-0.41	-0.21	0.56	0.07		
	[2.64]	[0.69]	[0.14]	[0.59]	[1.29]		[0.07]	[-0.12]	[-0.09]	[0.31]	[0.04]		

Table A12. Sharpe Ratios of Currency Reversal Portfolios: Decomposition of Sentiment into Local and Global (VIX)

This table shows Sharpe ratios that are based on currency excess returns (rx) of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we construct a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. We show results for local and global sentiment. We regress the sentiment measure of each country on VIX and define the innovation of the regression local sentiment and the predicted value as global sentiment. We run the regression below:

(13)
$$Sent_{i,t} = \alpha + \beta VIX_t + \varepsilon_{i,t}$$

where $\varepsilon_{i,t}$ denotes the local sentiment and the prediction of the regression is the global sentiment for currency *i* at time *t*. Panel A (Panel B) reports results for All countries (Developed countries). Sharpe ratios are annualized. We report *t*-statistics in squared brackets that are based on a moving block-bootstrap. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

				P	Panel A: All	Count	ries							
		L	ocal Senti	ment			Global Sentiment							
		Holding Period h						Hold	ing Perio	od h				
f	1	3	6	9	12	f	1	3	6	9	12			
1	1.56^{***}	0.83^{***}	0.42^{***}	0.32^{***}	0.28^{***}	1	-0.18	0.00	-0.09	-0.10	-0.04			
	[8.21]	[6.89]	[4.48]	[2.87]	[2.60]		[-0.69]	[0.02]	[-0.91]	[-1.27]	[-0.88]			
3	1.00***	0.47^{***}	0.27^{**}	0.21	0.22^{*}	3	0.01	-0.03	0.03	0.03	-0.05			
	[5.16]	[2.98]	[2.35]	[1.61]	[1.82]		[-0.00]	[-0.18]	[0.29]	[0.27]	[-0.98]			
6	0.54^{**}	0.22	0.09	0.09	0.13	6	-0.40*	-0.21	-0.04	-0.04	-0.05			
	[2.43]	[1.21]	[0.57]	[0.62]	[0.93]		[-1.83]	[-1.48]	[-0.40]	[-0.49]	[-1.13]			
9	0.52**	0.15	0.08	0.08	0.10	9	0.34^{*}	0.07	0.04	0.06	0.08			
	[2.41]	[1.03]	[0.50]	[0.48]	[0.73]		[1.66]	[0.28]	[0.55]	[0.89]	[1.25]			
12	0.45^{*}	0.05	0.02	0.07	0.12	12	0.24^{*}	0.12	0.05	0.04	-0.01			
	[1.71]	[0.18]	[0.12]	[0.44]	[0.81]		[1.70]	[0.74]	[0.48]	[0.42]	[0.13]			
				Pane	<i>l B</i> : Develop	ped Co	ountries							
		L	ocal Senti	ment				Glob	al Sentin	nent				
		Н	olding Per	iod h		Holding Period h								
f	1	3	6	9	12	f	1	3	6	9	12			
1	0.79^{***}	0.46^{***}	0.25^{***}	0.16^{*}	0.18^{*}	1	0.09	0.16	-0.02	-0.00	-0.05			
	[3.49]	[2.79]	[2.62]	[1.84]	[1.89]		[0.24]	[0.65]	[-0.14]	[-0.01]	[-0.39]			
3	0.62^{***}	0.23	0.12	0.07	0.08	3	-0.09	-0.13	-0.06	-0.15***	-0.12			
	[3.22]	[1.59]	[1.12]	[0.76]	[0.70]		[-0.41]	[-0.55]	[-0.36]	[-2.88]	[-1.02]			
6	0.31^{*}	0.16	0.09	0.06	0.09	6	-0.25	-0.13	-0.21	-0.18	-0.01			
	[1.68]	[1.26]	[0.83]	[0.61]	[0.78]		[-0.59]	[-0.55]	[-1.21]	[-0.94]	[-0.09]			
9	0.34^{*}	0.12	0.04	0.03	0.07	9	-0.25	-0.16	-0.24	-0.10	-0.04**			
	[1.71]	[0.91]	[0.28]	[0.13]	[0.53]		[-0.58]	[-0.65]	[-1.53]	[-0.99]	[-2.16]			
12	0.47^{**}	0.10	0.02	0.07	0.14	12	0.04	-0.04	-0.02	0.06	0.01			
	[2.49]	[0.71]	[0.10]	[0.47]	[1.02]		[0.06]	[-0.13]	[0.09]	[0.64]	[0.37]			

Table A13. Currency Reversal Portfolios: Decomposition of Sentiment into Local and Global (EPU)

This table shows average currency excess returns (rx) of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. We show results for local and global sentiment. We regress the sentiment measure of each country on the Economic Policy Uncertainty Index (EPU) of Baker, Bloom, and Davis (2016) and define the innovation of the regression local sentiment and the predicted value as global sentiment. We run the regression below:

(14)
$$Sent_{i,t} = \alpha + \beta EPU_t + \varepsilon_{i,t}$$

where $\varepsilon_{i,t}$ denotes the local sentiment and the prediction of the regression is the global sentiment for currency *i* at time *t*. Panel A (Panel B) reports results for All countries (Developed countries). All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

				Pa	anel A: All	Countri	les							
		L	ocal Sentii	ment			Global Sentiment							
		Holding Period h						Holdi	ng Period	l h				
f	1	3	6	9	12	f	1	3	6	9	12			
1	9.08^{***}	6.57^{***}	4.17***	3.72^{***}	3.58^{***}	1	-1.57	-1.97^{*}	-1.29	-1.50	-0.49			
	[7.79]	[7.02]	[4.96]	[4.05]	[3.88]		[-0.95]	[-1.72]	[-1.32]	[-1.61]	[-0.49]			
3	5.71^{***}	3.56^{***}	2.41***	2.12**	2.27***	3	0.71	0.84	1.54	1.75	1.85			
	[5.83]	[3.80]	[2.73]	[2.44]	[2.75]		[0.28]	[0.36]	[1.07]	[1.15]	[1.20]			
6	3.55^{***}	1.95	1.06	1.17	1.44	6	-2.17	-0.80	-0.41	0.14	-0.02			
	[2.95]	[1.54]	[0.87]	[0.97]	[1.37]		[-1.30]	[-0.78]	[-0.44]	[0.15]	[-0.02]			
9	3.75^{***}	1.82	1.04	0.98	1.12	9	0.30	-0.70	-0.33	-0.19	-1.83			
	[3.06]	[1.41]	[0.88]	[0.82]	[1.07]		[0.21]	[-0.46]	[-0.20]	[-0.14]	[-1.25]			
12	3.17^{**}	1.16	0.90	1.14	1.43	12	-1.89	-1.03	-0.59	-0.12	-0.31			
	[2.33]	[0.87]	[0.70]	[0.93]	[1.40]		[-1.28]	[-0.77]	[-0.65]	[-0.15]	[-0.41]			
				Panel	B: Develop	oed Cou	intries							
		L	ocal Sentii	ment			Global Sentiment							
		Н	olding Per	iod h			Holding Period h							
f	1	3	6	9	12	f	1	3	6	9	12			
1	7.05^{***}	4.74***	2.90^{***}	2.17^{***}	2.17^{***}	1	0.49	-0.36	1.03	0.37	1.34			
	[4.38]	[4.06]	[3.53]	[3.00]	[3.58]		[0.16]	[-0.16]	[0.63]	[0.25]	[1.44]			
3	4.77***	2.16^{**}	1.11	0.84	0.92	3	3.89	2.99	1.96	0.55	0.57			
	[3.84]	[2.25]	[1.47]	[1.24]	[1.47]		[0.70]	[1.07]	[1.32]	[0.60]	[0.65]			
6	2.21^{*}	1.16	0.64	0.61	0.73	6	-0.68	-1.47	0.50	0.93	0.72			
	[1.81]	[1.18]	[0.81]	[0.83]	[1.05]		[-0.17]	[-0.72]	[0.33]	[0.72]	[0.57]			
9	2.85**	1.29	0.68	0.54	0.79	9	-3.76	-2.73*	-1.25	-2.05	-2.13**			
	[2.19]	[1.42]	[0.79]	[0.66]	[1.04]		[-1.49]	[-1.69]	[-0.78]	[-1.63]	[-2.07]			
12	3.59^{***}	1.17	0.51	0.85	1.25	12	-4.29	-0.66	0.13	0.96	-0.12			
	[3.05]	[1.10]	[0.50]	[0.97]	[1.58]		[-1.31]	[-0.31]	[0.09]	[0.57]	[-0.08]			

Table A14. Sharpe Ratios of Currency Reversal Portfolios: Decomposition of Sentiment into Local and Global (EPU)

This table shows Sharpe ratios that are based on currency excess returns (rx) of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we construct a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. We show results for local and global sentiment. We regress the sentiment measure of each country on the Economic Policy Uncertainty Index (EPU) of Baker et al. (2016) and define the innovation of the regression local sentiment and the predicted value as global sentiment. We run the regression below:

(15)
$$Sent_{i,t} = \alpha + \beta EPU_t + \varepsilon_{i,t}$$

where $\varepsilon_{i,t}$ denotes the local sentiment and the prediction of the regression is the global sentiment for currency *i* at time *t*. Panel A (Panel B) reports results for All countries (Developed countries). Sharpe ratios are annualized. We report *t*-statistics in squared brackets that are based on a moving block-bootstrap. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

				P	Panel A: All	Count	ries						
		L	ocal Sentii	ment		Global Sentiment							
		Н	olding Per	iod h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	1.59^{***}	0.87^{***}	0.44^{***}	0.35^{***}	0.30^{***}	1	-0.23	-0.25^{*}	-0.14	-0.13**	-0.03		
	[8.73]	[7.32]	[4.98]	[3.56]	[2.90]		[-1.29]	[-1.82]	[-1.41]	[-1.97]	[-0.60]		
3	1.01^{***}	0.52^{***}	0.29^{***}	0.24^{*}	0.24^{**}	3	0.07	0.06	0.09	0.08	0.08		
	[5.66]	[3.74]	[2.64]	[1.90]	[2.11]		[0.36]	[0.55]	[1.41]	[1.31]	[1.28]		
6	0.58^{***}	0.24	0.12	0.11	0.14	6	-0.28	-0.08	-0.04	0.01	-0.00		
	[2.96]	[1.46]	[0.72]	[0.82]	[1.10]		[-1.12]	[-0.52]	[-0.33]	[0.17]	[0.26]		
9	0.64^{***}	0.21	0.11	0.10	0.11	9	0.04	-0.06	-0.02	-0.01	-0.08		
	[3.06]	[1.51]	[0.80]	[0.68]	[0.87]		[0.33]	[-0.36]	[-0.24]	[-0.20]	[-1.13]		
12	0.53^{**}	0.15	0.10	0.12	0.14	12	-0.30	-0.11	-0.06	-0.01	-0.03		
	[2.56]	[0.80]	[0.58]	[0.76]	[1.10]		[-1.18]	[-0.76]	[-0.83]	[-0.01]	[-0.27]		
				Pane	<i>l B</i> : Develo	ped Co	untries						
		L	ocal Sentii	ment		Global Sentiment							
		Н	olding Per	iod h		Holding Period h							
f	1	3	6	9	12	f	1	3	6	9	12		
1	0.94^{***}	0.60^{***}	0.34^{***}	0.24^{**}	0.25^{**}	1	0.06	-0.04	0.10	0.04	0.15		
	[4.23]	[2.64]	[3.24]	[2.15]	[2.28]		[0.26]	[-0.21]	[0.63]	[0.02]	[1.13]		
3	0.64^{***}	0.29^{**}	0.15	0.11	0.12	3	0.29	0.28	0.21	0.06	0.06		
	[3.84]	[2.20]	[1.43]	[1.27]	[1.17]		[0.70]	[1.08]	[1.36]	[0.46]	[0.53]		
6	0.32^{*}	0.16	0.09	0.08	0.10	6	-0.07	-0.16	0.05	0.10	0.07		
	[1.82]	[1.24]	[0.88]	[0.81]	[0.94]		[-0.23]	[-0.76]	[0.25]	[0.68]	[0.64]		
9	0.38^{**}	0.17	0.09	0.07	0.10	9	-0.49	-0.32***	-0.12	-0.20	-0.22^{*}		
	[2.10]	[1.45]	[0.80]	[0.57]	[0.92]		[-1.32]	[-2.89]	[-1.04]	[-1.59]	[-1.88]		
12	0.51***	0.15	0.06	0.11	0.16	12	-0.52	-0.07	0.01	0.09	-0.01		
	[3.06]	[1.24]	[0.52]	[0.90]	[1.48]		[-1.31]	[-0.44]	[0.12]	[0.66]	[-0.10]		

Table A15. FX Media Sentiment and Currency Returns: Topic Modeling

This table presents coefficient estimates of predictive panel regressions with time (e.g., τ_t) and currency (e.g., α_i) fixed effects of currency excess returns or exchange rate changes on FX media sentiment as well as a number of control variables. The model takes the form below:

$$R_{i,t+1} = \alpha_i + \tau_t + \beta_t S_{i,t} + \gamma Topic_{i,t} + \delta z_{i,t} + \varepsilon_{i,t+1}$$
, for $R = rx$ or Δs and $S = Sent$ or Neg

where $rx_{i,t+1}$ ($\Delta s_{i,t+1}$) represents the currency excess return (exchange rate change) of currency *i* at time t + 1 and $S_{i,t}$ denotes the sentiment measure (see Section 3 for the construction of the measures) of each currency pair at time *t*. **Topic** denotes the topic dummies 2, 3, 4 and 5 that are estimated based on an LDA model (e.g., Blei et al., 2003). We also control for other determinants of currency returns such as currency volatility and illiquidity that are included in the vector $z_{i,t}$. Panel A shows results for currency excess returns and Panel B displays results for exchange rate changes. We have multiplied the exchange rate change by minus one so that higher values correspond to an appreciation of the foreign currency against the US dollar. We report t-statistics in squared brackets that are based on robust standard errors. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

rx_{t+1} rx_{t	$ \begin{array}{c} (4) \\ x_{t+1} \\ 78^{***} \\ 2.73] \\ .001 \end{array} $										
Sentiment _t -0.181^{***} -0.181^{***} -0.181^{***} -0.181^{***} -0.1 $[-2.79]$ $[-2.80]$ $[-2.80]$ $[-2.79]$ $[-2.80]$ $[-2.80]$ Topic _{2,t} -0.001 -0.001 -0.000 -0	78*** 2.73]										
$ \begin{array}{cccc} [-2.79] & [-2.80] & [-2.80] & [-2.80] \\ \text{Topic}_{2,t} & -0.001 & -0.001 & -0.000 & -0 \end{array} $	2.73]										
$ \begin{array}{cccc} [-2.79] & [-2.80] & [-2.80] & [-2.80] \\ \text{Topic}_{2,t} & -0.001 & -0.001 & -0.000 & -0 \end{array} $	2.73]										
- //	.001										
[-0.81] [-0.72] [-0.53] [-1											
	L.06]										
Topic _{3,t} 0.003 0.003 0.003	.002										
	.09]										
1 -)-	.000										
).09]										
2 0,0	.001										
).58]										
	.001										
[0.55] $[0.51]$ $[0.45]$ $[0]$.76]										
Time FE Yes Yes Yes Yes	Yes										
	res Yes										
	rency										
Cluster Currency Currency Currency Cu	Tency										
Observations 4,644 4,644 4,644 4,	644										
	479										
Panel B: Exchange Rate Changes											
(1) (2) (3)	(4)										
	Δs_{t+1}										
	04***										
	3.01]										
	.001										
,-	0.48]										
Topic _{3,t} 0.003 0.002 0.002	.002										
[1.27] [1.15] [1	.13]										
Topic _{4,t} -0.000 -0	.001										
[-0.42] [-0).49]										
$\operatorname{Topic}_{5,t}$ -0	.000										
	0.16]										
	.001										
[0.50] $[0.46]$ $[0.50]$ $[0$.56]										
	7										
	Yes Yes										
Cluster Currency Currency Currency Cur	rency										
Observations 4,644 4,644 4,644 4.	644										
	488										

Table A16. Currency Reversal Portfolios: Article-level Sentiment

This table shows average currency excess returns (rx) and exchange rate changes $(-\Delta s)$ of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we report the average return of a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for All countries (Developed countries). All returns are annualized and expressed in percentage. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

				Р	anel A: A	ll Coun	tries						
		Curren	cy Excess	Returns			Exchange Rate Changes						
	Holding Period h						Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	9.06^{***}	6.57^{***}	4.88^{***}	3.92^{**}	3.25^{*}	1	5.37^{***}	2.37^{**}	1.06	0.19	-0.28		
	[4.95]	[3.62]	[2.77]	[2.23]	[1.90]		[4.41]	[2.27]	[1.22]	[0.22]	[-0.34]		
3	8.42***	5.85^{***}	4.27^{**}	3.06^{*}	2.55	3	4.02***	1.59	0.39	-0.43	-0.81		
	[4.05]	[2.82]	[2.30]	[1.68]	[1.55]		[3.00]	[1.39]	[0.41]	[-0.47]	[-0.86]		
6	7.78***	5.69^{***}	4.05^{**}	2.51	2.00	6	3.22**	1.57	0.26	-0.78	-1.01		
	[3.54]	[2.66]	[2.15]	[1.43]	[1.26]		[2.19]	[1.27]	[0.27]	[-0.78]	[-1.00]		
9	6.93^{***}	4.88^{**}	3.46^{*}	2.37	1.68	9	2.29^{*}	0.77	-0.04	-0.68	-0.84		
	[3.32]	[2.40]	[1.93]	[1.40]	[1.12]		[1.89]	[0.79]	[-0.04]	[-0.67]	[-0.85]		
12	6.45***	4.30**	3.27^{*}	2.14	1.23	12	2.56^{**}	0.84	0.19	-0.45	-0.65		
	[3.40]	[2.23]	[1.92]	[1.35]	[0.86]		[2.23]	[0.74]	[0.21]	[-0.45]	[-0.67]		
	Panel B: Developed Countries												
		Curren	cy Excess	Returns			Exchange Rate Changes						
		Но	lding Peri	od h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	8.33***	3.86^{***}	2.04^{***}	1.15^{**}	1.16^{**}	1	8.24***	3.73^{***}	1.92^{**}	1.04^{*}	1.08^{**}		
	[5.02]	[3.69]	[2.76]	[2.00]	[2.19]		[4.93]	[3.53]	[2.44]	[1.74]	[2.02]		
3	5.91^{***}	3.21***	1.69^{**}	1.04	0.97^{*}	3	5.66^{***}	2.97^{**}	1.49^{*}	0.89	0.87		
	[3.61]	[2.72]	[2.05]	[1.58]	[1.69]		[3.40]	[2.38]	[1.70]	[1.32]	[1.53]		
6	4.05^{***}	2.43**	1.72^{**}	1.07	0.94	6	3.76^{***}	2.19^{*}	1.51^{*}	0.89	0.80		
	[2.89]	[2.28]	[2.02]	[1.52]	[1.49]		[2.59]	[1.94]	[1.73]	[1.27]	[1.32]		
9	2.84^{**}	1.55	0.49	0.23	0.32	9	2.50^{*}	1.20	0.17	-0.05	0.09		
	[2.31]	[1.52]	[0.57]	[0.29]	[0.44]		[1.95]	[1.10]	[0.18]	[-0.06]	[0.12]		
12	2.68^{**}	1.25	0.55	0.31	0.28	12	2.43*	0.94	0.29	0.08	0.10		
	[2.07]	[1.25]	[0.62]	[0.37]	[0.37]		[1.82]	[0.89]	[0.31]	[0.10]	[0.13]		

Table A17. Sharpe Ratios of Currency Reversal Portfolios: Article-level Sentiment

This table shows Sharpe ratios that are based on currency excess returns (rx) and exchange rate changes $(-\Delta s)$ of low minus high (LMH) spread portfolios sorted based on the average sentiment of news per currency over the formation period. In particular, we construct a strategy that goes long *low* sentiment portfolios while short selling *high* sentiment currency portfolios based on a formation period f months and a holding period of h months. We consider formation (holding) periods of 1, 3, 6, 9 and 12 months. *Panel A* (*Panel B*) reports results for All countries (Developed countries). Sharpe ratios are annualized. We report *t*-statistics in squared brackets that are based on a moving block-bootstrap. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

	Panel A: All Countries												
		Currer	ncy Excess	Returns			Exchange Rate Changes						
		He	olding Peri	iod h			Holding Period h						
f	1	3	6	9	12	f	1	3	6	9	12		
1	1.35^{***}	0.77^{***}	0.48^{*}	0.33	0.25	1	0.99^{***}	0.36^{**}	0.15	0.03	-0.03		
	[4.08]	[2.74]	[1.96]	[1.57]	[1.41]		[4.50]	[2.22]	[0.84]	[-0.02]	[-0.40]		
3	1.25^{***}	0.62^{**}	0.39^{*}	0.24	0.19	3	0.73^{***}	0.23	0.05	-0.05	-0.09		
	[2.94]	[2.09]	[1.68]	[1.25]	[1.18]		[3.08]	[1.48]	[0.48]	[-0.42]	[-0.80]		
6	1.12^{***}	0.60^{*}	0.37	0.20	0.15	6	0.56^{**}	0.23	0.04	-0.10	-0.12		
	[2.68]	[1.92]	[1.55]	[1.15]	[1.02]		[2.36]	[1.26]	[0.25]	[-0.74]	[-0.94]		
9	0.97^{**}	0.55^{*}	0.33	0.19	0.13	9	0.38^{*}	0.14	-0.01	-0.09	-0.10		
	[2.35]	[1.70]	[1.43]	[1.06]	[0.86]		[1.94]	[0.51]	[-0.43]	[-0.86]	[-0.97]		
12	0.98^{***}	0.48^{**}	0.32^{**}	0.19	0.10	12	0.47^{**}	0.14	0.03	-0.06	-0.08		
	[2.61]	[1.97]	[2.07]	[1.03]	[0.63]		[2.00]	[0.44]	[-0.18]	[-0.62]	[-0.82]		
	Panel B: Developed Countries												
		Currer	ncy Excess	Returns		Exchange Rate Changes							
		He	olding Peri	iod h		Holding Period h							
f	1	3	6	9	12	f	1	3	6	9	12		
1	1.02^{***}	0.54^{***}	0.29^{***}	0.17^{***}	0.18^{**}	1	1.03^{***}	0.53^{***}	0.27^{**}	0.16^{*}	0.18^{*}		
	[4.97]	[3.67]	[3.68]	[2.69]	[2.23]		[4.95]	[3.45]	[2.34]	[1.78]	[1.81]		
3	0.83^{***}	0.41^{***}	0.23**	0.15^{*}	0.15^{*}	3	0.80***	0.38^{**}	0.20^{*}	0.13	0.14		
	[3.37]	[2.68]	[2.35]	[1.67]	[1.66]		[3.04]	[2.23]	[1.65]	[1.32]	[1.42]		
6	0.57^{***}	0.33**	0.24**	0.16	0.14	6	0.52**	0.29^{*}	0.21**	0.14	0.12		
	[2.86]	[2.20]	[1.99]	[1.53]	[1.48]		[2.46]	[1.85]	[2.04]	[1.22]	[1.26]		
9	0.40**	0.22	0.07	0.03	0.04	9	0.35**	0.17	0.02	-0.01	0.01		
	[2.33]	[1.42]	[0.56]	[0.40]	[0.55]		[2.05]	[1.07]	[0.18]	[0.05]	[0.25]		
12	0.37^{**}	0.18	0.08	0.04	0.04	12	0.33^{*}	0.14	0.04	0.01	0.01		
	[2.06]	[1.12]	[0.53]	[0.40]	[0.41]		[1.81]	[0.80]	[0.23]	[0.16]	[0.23]		

Table A18. Cross-Sectional Regressions: Article-level Sentiment

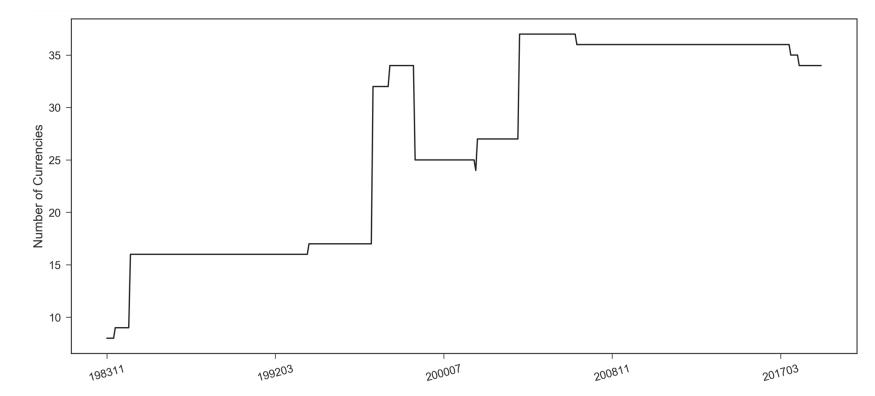
This table displays time-series averages of slope coefficients from the regressions of currency excess returns and exchange rate changes at time t + 1 on the media sentiment measure at time t with and without controls. In the spirit of the Fama and MacBeth (1973) regression, we examine which independent variables demonstrate premium that is different from zero, on average. To this end, we run cross-sectional regression on a monthly basis of the model - and nested specifications - below:

$$R_{i,t+1} = \lambda_{0,t} + \lambda_{1,t} Sent_{i,t} + \lambda_{2,t} R_{i,t} + \lambda_{3,t} f d_{i,t} + \varepsilon_{i,t+1}, \text{ for } \mathbf{R} = rx \text{ or } \Delta s$$

where $Sent_{i,t}$ denotes the average media sentiment, $rx_{i,t}(\Delta s_{i,t})$ is the currency excess return (exchange rate change) and $fd_{i,t}$ is the forward discount of currency *i* at time *t*. Panel A (Panel B) reports results for All countries (Developed countries). We have multiplied the exchange rate change by minus one so that higher values correspond to an appreciation of the foreign currency against the US dollar. We report *t*-statistics in squared brackets that are based on Newey and West (1987) standard errors with one lag. *, **, *** indicate significance levels of 1%, 5% and 10% respectively. Our data contain monthly series that span the period of October 1983 to April 2019.

Panel A: All Countries										
	$(1) \\ rx_{t+1}$	$(2) \\ rx_{t+1}$	$(3) \\ rx_{t+1}$	$(4) \\ rx_{t+1}$	$(5) \\ -\Delta s_{t+1}$	$\begin{pmatrix} 6 \\ -\Delta s_{t+1} \end{pmatrix}$	$(7) \\ -\Delta s_{t+1}$	$(8) \\ -\Delta s_{t+1}$		
$Sent_{i,t}$	-0.076*** [-3.31]	-0.099*** [-3.97]	-0.101*** [-4.54]	-0.112^{***} [-4.53]	-0.068*** [-2.97]	-0.080*** [-3.25]	-0.094*** [-4.20]	-0.081*** [-3.54]		
$rx_{i,t}$	0.071^{**} [2.33]	0.127^{***} [4.34]	L J			0.049^{-1} [1.78]	LJ			
$fd_{i,t}$	0.523^{***} [4.23]		0.665^{***} [4.89]		-0.366*** [-3.12]		-0.294** [-2.17]			
$\Delta s_{i,t}$				0.079^{***} [2.64]	0.067^{**} [2.22]			0.064^{**} [2.23]		
Constant	-0.001 [-1.15]	-0.001 [-0.76]	-0.001 [-1.36]	-0.001 [-0.81]	-0.001 [-1.00]	-0.001* [-1.66]	-0.001 [-1.25]	-0.001* [-1.66]		
Observations R-squared	$10,355 \\ 0.360$	$10,355 \\ 0.242$	$10,355 \\ 0.219$	$10,355 \\ 0.214$	$10,355 \\ 0.299$	$10,355 \\ 0.212$	$10,355 \\ 0.152$	$10,355 \\ 0.214$		
it squared	0.000	0.212		Developed C		0.212	0.102	0.211		
	$(1) \\ rx_{t+1}$	$(2) \\ rx_{t+1}$	$(3) \\ rx_{t+1}$	$(4) \\ rx_{t+1}$	$(5) \\ -\Delta s_{t+1}$	$(6) \\ -\Delta s_{t+1}$	$(7) \\ -\Delta s_{t+1}$	$(8) \\ -\Delta s_{t+1}$		
$Sent_{i,t}$	-0.194** [-2.55]	-0.196*** [-2.70]	-0.300*** [-4.12]	-0.193*** [-2.68]	-0.194** [-2.57]	-0.201*** [-2.82]	-0.296*** [-4.12]	-0.202*** [-2.85]		
$rx_{i,t}$	0.041 [1.22]	$0.051 \\ [1.54]$				$0.028 \\ [0.85]$				
$fd_{i,t}$	0.905^{**} [1.97]		0.910^{**} [2.33]	0.0411	0.060 [0.13]		$0.000 \\ [0.00]$	0.021		
$\Delta s_{i,t}$				0.0411 [1.23]	0.038 [1.13]			0.031 [0.92]		
Constant	-0.003 [-1.63]	-0.002 [-0.90]	-0.005** [-2.44]	-0.002 [-0.88]	-0.003 [-1.64]	-0.003 [-1.24]	-0.005^{**} [-2.44]	-0.003 [-1.27]		
Observations R-squared	$4,272 \\ 0.507$	$4,272 \\ 0.322$	$4,272 \\ 0.337$	$4,272 \\ 0.320$	$4,272 \\ 0.498$	$4,272 \\ 0.323$	$4,272 \\ 0.324$	$4,272 \\ 0.321$		





The figure displays the number of currencies in our sample. The data contain monthly series from October 1983 to April 2019.

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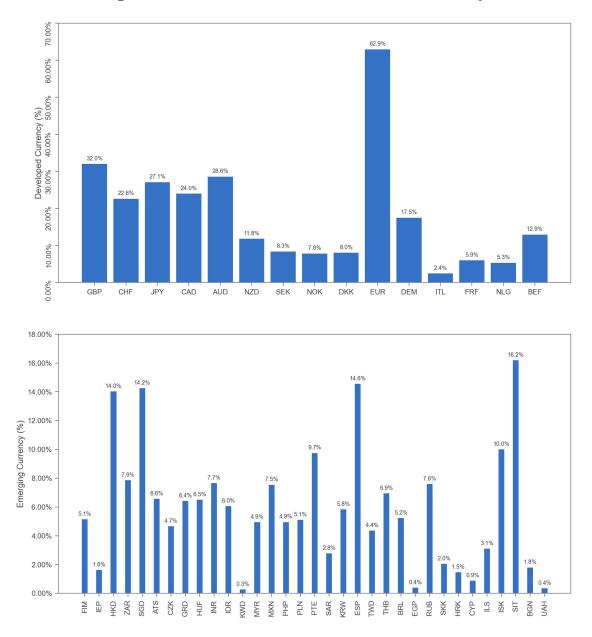
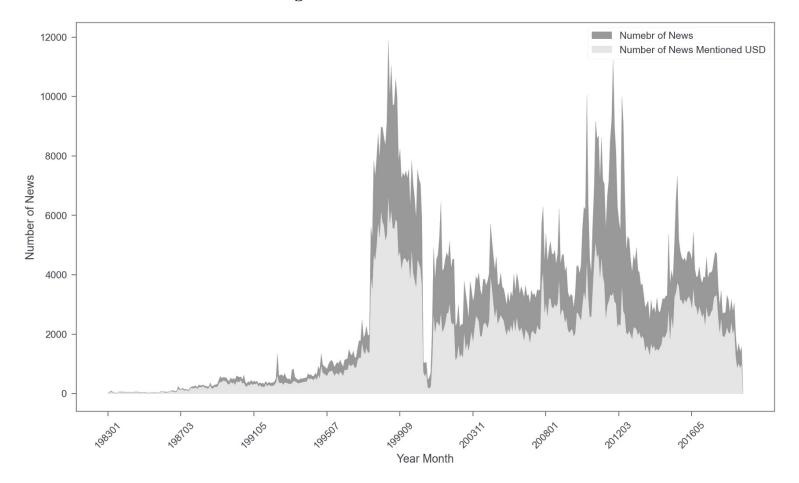


Figure A3. Distribution of Articles Per Currency

The figure displays the percentage of articles per currency in our sample. The data contain monthly series from October 1983 to April 2019.

Figure A4. Number of Articles



The figure displays the total number of articles over time and the number of articles that mention USD in our sample. The data contain monthly series from October 1983 to April 2019.

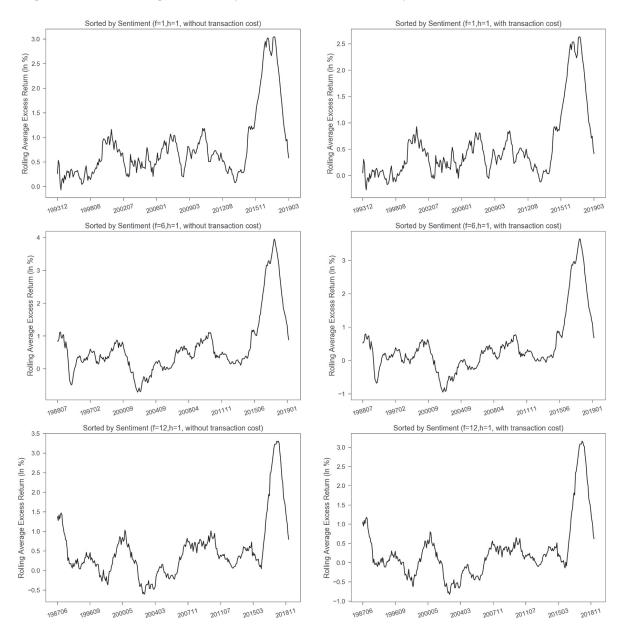


Figure A5. Rolling Currency Returns of Currency Reversal Portfolios

The figure displays average currency excess returns of FX news reversal portfolios based on a 36-month rolling window. We consider formation periods (f) of 1, 6, and 12 months and a holding period (h) of 1 month. The left part of the figure shows results for unadjusted currency excess returns and the right part of the figure shows net excess returns that include transaction costs. Shaded areas represent NBER recessions. The data contain monthly series from October 1983 to April 2019.

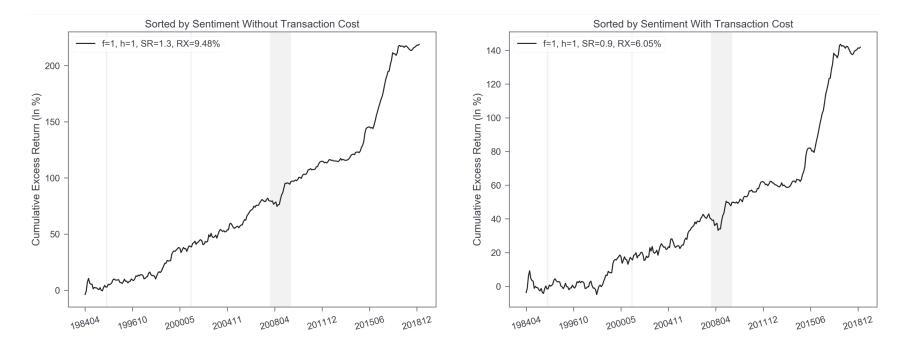


Figure A6. Cumulative Returns: Article-level Sentiment

The figure displays cumulative returns of currency reversal portfolios. The left part shows results for unadjusted excess returns and the right part exhibits results for net excess returns with transaction costs. Shaded areas represent NBER recessions. The data contain monthly series from October 1983 to April 2019.