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Keywords: Media negativity, International asset allocation, International mutual Fund, Fund flows
JEL Classification: G11, G12, G14, G30, G32, G34

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Media Negativity on Foreign Countries and International Asset Allocation

Ever since the development of modern portfolio theory, financial economists have emphasized the benefits of international diversification.¹ However, an extant body of literature has shown that domestic investors possess few foreign assets.² One of the primary explanation for this “home bias” puzzle derives from the fact that domestic investors face high information costs when it comes to foreign investments. Despite the important role of mass media in disseminating information, it has surprisingly received little academic attention regarding its influence on investors’ reluctance to engage in international diversification.

Presumably, for domestic investors, mass media serve as a primary source of information on foreign affairs. Presumably, if domestic news coverage on foreign countries exclusively provides accurate and objective reporting of fundamental information, it can effectively reduce information costs and promote international diversification. However, substantial research in media suggests that news coverage is predominantly negative, with negative tone being a defining feature of news (Soroka, Fournier, and Nir 2019). As suggested in Gentzkow and Shapiro (2008), competition among media sources can give rise to media slanting representing demand-driven bias. Such distortion in news including media slanting manifested in the tendency to produce news in line with consumers’ negativity bias.³ This “media negativity bias” is particularly evident in domestic news coverage of foreign affairs (e.g., Giffard and Rivenburgh 2000; Halton 2001; Friebel and Heinz 2014; Kim 2018; Golez and Karapandza 2022; Sacerdote, Sehgal, and Cook 2022). As a result, investors may react to country-specific media negativity that is irrelevant to the countries’

¹ Earlier work that highlights the importance of international diversification includes Grubel (1968), Levy and Sarnat (1970), Grauer and Hakansson (1987), DeSantis and Gerard (1997), among others.

² For a detailed review of the literature, please refer to Lewis (1999), Karolyi and Stulz (2003), and Cooper, Sercu and Vanpée (2012).

³ Negative information typically has a greater psychological impact on human beings than positive information, leading audiences to have a stronger preference for negative news. (e.g., Soroka 2006; Van der Meer, Hameleers, and Kroon 2020).

asset fundamentals and thereby make suboptimal asset allocation decisions.

In this study, we investigate whether domestic investors are influenced by country-specific media negativity when making their international asset allocation decisions. Further, we examine if they are so, to what extent these reactions are driven by negative media slanting, which could lead to suboptimal asset allocation decisions. We address these questions in the context of country-specific international mutual funds in the US (henceforth, country funds). In particular, we examine whether flows to a country fund are correlated with the variation in the media negativity and the media attention that the country receives from US media outlets.

The setting of country funds provides an attractive research design for several reasons. First, country funds offer domestic investors an effective mean of diversifying into foreign markets that may not be easily accessible otherwise. Moreover, country fund flows can provide insights into investors' aggregate decision-making processes concerning international diversification. Second, unlike trading individual stocks, shares in mutual funds are issued and redeemed at a fixed price, regardless of the quantity supplied. Therefore, unlike ADRs or country-specific close-end funds where the equilibrium of supply and demand determines the quantity, mutual fund flows represent purely demand-driven quantity. This unique opportunity to study one side of the market rarely exists elsewhere (Christoffersen, Musto, and Wermers 2014).

We conjecture that the monthly flows to a country fund are negatively correlated with the media negativity in combination with the media attention given to the country in US news coverage in the given month (henceforth, negative media coverage). To investigate this hypothesis, we analyze news articles covering 46 countries in the *Wall Street Journal*, the *New York Time*, the *Washington Post*, and *USA Today* during the period from 1991 to 2021. We focus on these 46 countries because mutual fund data from the *CRSP* during our sample period covers 488 country

funds targeting these countries. We measure monthly media negativity of a country as the fraction of negative words, as defined in Loughran and McDonald (2011), to total words in news articles covering a country in a given month and standardize it following Tetlock (2008). To quantify monthly media attention given to a country, we count the number of news articles published in the aforementioned media outlets. We consider the media negativity in combination with the media attention given to the country because, as noted in Liu and McConnell (2013), “bad news goes unnoticed is no worse than good news that goes equally unnoticed.”

To begin, we find that the monthly media negativity of a country is negatively correlated with the monthly flows to country funds that target the country. Specifically, a one standard deviation increase in monthly media negativity is associated with a 11.5% decrease in flows to the country funds. Moreover, we find that the negative correlation is only pronounced when we take into consideration the level of media attention given to the country. To put this finding into perspective, a one standard deviation increase in monthly media negativity together with a one standard deviation increase in the media attention given to the country is associated with a 22.1% decrease in the flows to the country funds. These findings support the idea that slanted media negativity on foreign countries significantly influences investors’ asset allocation to country funds.

A crucial concern with the interpretation of the aforementioned findings is that the media negativity on a country may include both the slanted media negativity that is value-irrelevant and the information on the country’s deteriorating economic fundamentals that are value-relevant to the assets included in the country funds. One could argue that country fund investors are simply reacting to the fundamental information embedded in the negative media coverage on foreign countries. In order to examine whether country fund investors are indeed not only responsive to the fundamental information embedded but also sensitive to the slanted media negativity on

foreign countries, we conduct the following three analyses.

First, we use the acquisition of the *Wall Street Journal* (henceforth, WSJ) by News Corp, a Rupert Murdoch firm, to examine whether the abnormal media negativity together with the abnormal media attention given by WSJ to a country post the acquisition of Murdoch has a differential effect on the flows to the corresponding country funds. Our analysis is motivated by a 2011 Pew Research Center study, which found that after the Murdoch acquisition, WSJ experienced a 39% abnormal increase in reporting of foreign news and a more than one-third abnormal drop in business coverage between 2007 and 2011, compared to other mainstream newspapers like the *New York Times*.⁴ Thus, after Murdoch's purchase of WSJ, in comparison with other newspapers, WSJ experiences an abnormal decrease in value-relevant information on country-specific fundamentals, which is inherited in its media negativity on foreign countries, along with an abnormal increase in media attention given to foreign news coverage.

To identify whether slanted media negativity on foreign countries is responsible, at least partially, for the variation in country fund flows, we use the abnormal shift in the WSJ's negative coverage of foreign countries before and after the Murdoch acquisition as an exogenous shock. We conduct a triple-difference analysis for this purpose and find that the abnormal media negativity together with the abnormal media attention of WSJ given to a country is associated with a relative decrease in fund flows to the corresponding country fund. These findings corroborate with the notion that slanted media negativity on foreign countries contributes, at least partially if not entirely, to investors' decisions to readjust their portfolio allocation to country funds.

Second, to further attribute the relation of negative media coverage and country fund flows to

⁴ <https://www.pewresearch.org/journalism/2011/07/20/wall-street-journal-under-rupert-murdoch/>. Prior academic studies also suggest a shift in news coverage and tone of WSJ after the Murdoch acquisition (e.g., Wagner and Collins 2014; Archer and Clinton 2018; Guest 2021; Kedia and Kim 2021; and Ahern and Peress 2022).

the slanted media negativity on a country, we analyze the variations among investor clienteles. We examine whether retail investors, who are more susceptible to the sentiment embedded in news coverage, are more affected by negative media coverage on foreign countries than institutional investors. Our analysis indicates that this is indeed the case. These findings lend further support to the idea that it is the slanted media negativity that significantly influences the investment decisions of country fund investors.

Third, we examine the relationship between country fund performance and the projected country fund flows resulting from negative media coverage given to the country. If the projected flows to country funds due to negative media coverage on foreign countries are driven by embedded fundamental information, the flows then represent “smart money”, which predicts enhanced country fund performance. In contrast, if the projected flows are driven by slanted media negativity on foreign countries, the flows then predict deteriorated fund performance. We find that the projected country fund flows are negatively correlated with the subsequent performance of the country funds. Our findings suggest that a decrease (increase) in fund flows, resulting from negative media coverage of a country, is associated with enhanced (deteriorated) fund performance. This indicates that investors retreat from (influx to) a fund due to negative media coverage on the country is not “smart money” and is inconsistent with the argument that the negative media coverage of a country is a pure reflection of the country’s asset or economic fundamental.

Next, we examine whether the correlation between flows to a country fund and negative media coverage of the country is stronger when the coverage has a wider reach. Our results indicate that the correlation between flows to a country fund and the abnormal negative media coverage of the WSJ on the country is more pronounced after the launch of the WSJ mobile app in May 2015.

We also investigate whether the negative media coverage of a country has a contagious effect

on flows to international mutual funds targeting a region (henceforth, region funds) that includes the country. We find that the average media negativity of countries included in the targeted of a region fund is negatively correlated with flows to the fund, particularly when the media attention given to these countries is high. The results indicate that there exists a contagious effect of negative media coverage of foreign countries in the international mutual fund market.

Finally, we conduct a host of robustness tests. In particular, we find statistically and economically significant correlations between flows to a country fund and negative media coverage of the country in equity funds only, non-ETF funds, and country funds not targeting China. Furthermore, we confirm the robustness of our findings by controlling for country popularity, as measured by the Gallup Country Rating (Hwang 2011).⁵ Lastly, we find no statistically significant differences in our baseline results when examining subsamples of Republican and Democratic presidencies. This result suggests that the media negativity on foreign countries are unlikely to be a reflection of internalized government's foreign policies.

Our study relates to several lines of research. First, it contributes to the literature on investors' home bias. French and Poterba (1991) identified a "home bias" puzzle, where investors appear to invest only in their home country, overlooking foreign opportunities. Academics have offered various explanations for this puzzle, including barriers to foreign investment, country-specific risks, information asymmetry, and cultural and behavioral factors (Lewis 1999; Karolyi and Stulz 2003; and Cooper, Sercu and Vanp é 2012). We shed new light on the resolution of the home bias puzzle by providing a previously undocumented explanation. To wit: our findings indicate that the slanted negative coverage of domestic media on foreign affairs can amplify investors' home country bias, thereby hindering their international diversification in asset allocation.

⁵ We do not include the country popularity as a control variable in our main specification because the availability of the Gallup Country Rating shrinks our sample by about 44%.

Second, our study extends the literature that connects media and financial decisions. The recent decade has witnessed the emergence of a set of studies in financial economics that examines the role of media, treated as a homogeneous set, in influencing security prices and corporate financial decisions.⁶ More recent studies recognize the heterogeneity in media reporting and how media slant stemming from such heterogeneity affects financial decisions. For example, Baloria and Heese (2018) and Knill et al. (2022) examine the ways in which corporate managers' decisions are influenced by heterogeneity in the tone of media coverage. Most, if not all, of this new line of research employs media slant derived from media partisanship (e.g., the introduction of Fox News Channel). Our study expands this area of research by examining how investors' decisions can be influenced by another essential source of media slant, namely, media negativity bias.

Last but not least, this study connects to the literature on mutual fund flows. Previous studies in this area have focused on the relationship between fund flows and past performance (e.g., Chevalier and Ellison 1997; Sirri and Tufano 1998; and Huang, Wei, and Yan 2007). Aside from performance, more recent studies explore how behavioral biases affect investment decisions of fund investors using the settings of domestic mutual funds. These studies suggest that (at least some) mutual fund investors are subject to limited attention and may be naïve in processing financial information. Consequently, fund flows may be the result of investors' irrational behavior and preferences, rather than rational learning (e.g., Agarwal et al. 2020; Akbas and Genc 2020; Choi and Robertson 2020; Cooper, Gulen, and Rau 2005; Kumar, Ruenzi, and Spalt 2015; and Solomon, Soltes, and Sosyura 2014). Using the setting of international mutual funds, we add to

⁶ This set of studies reports evidence that the media, treated as a homogeneous set, influence the aggregate stock market performance (Tetlock 2007), specific stock returns (Tetlock, Saar-Tsechansky and Macskassy 2008), mutual fund allocations (Fang, Peress, and Zheng 2014), investor trading behavior (Engelberg and Parsons 2011), trading volume and intraday stock price volatility (Peress 2014), executive compensation Core, Guay, and Larcker (2008) and Kuhnen and Niessen (2012)), corporate governance (Dyck, Volchkova, and Zingales 2008; Joe, Louis, and Robinson 2009), capital allocation (Liu and McConnell 2013), the detection of corporate fraud (Miller 2006), and the prevention of insider trading (Dai, Parwada, and Zhang 2015).

this more recent strand of literature by demonstrating a previously undocumented factor, namely media slant, that influences fund flows and thereby investors' global asset allocation decisions.

II. Data and Variable Construction

In this section, we provide details of our data collection and variable construction process.

A. Data

Data on international mutual funds come from the CRSP Survivor-Bias-Free U.S. Mutual Funds database, which covers a comprehensive list of U.S. open-end mutual funds and provides information on fund names, inception dates, fund returns, assets under management (AUM), expense ratios, turnover ratios, investment objectives, fund family names, and other fund characteristics. Our sample period starts in 1991 when information on monthly AUM became available and ends in 2021. For funds with multiple share classes, we compute fund-level variables by aggregating across the different share classes. Specifically, we calculate fund size as the sum of assets across all share classes and compute the value-weighted average of other fund characteristics across share classes.

We use both the CRSP Style Codes and Lipper Objective Codes in the CRSP mutual funds database to identify an initial sample of international mutual funds. We then, based on fund names, screen out those country funds that concentrate their investment in the financial assets of one single country. Since our paper focuses on the behavior of investor flows for which investor awareness is a key driver, we identify a country fund as one with a clearly specified country in its fund name. We then confirm with the fund's prospectus that the fund predominantly or exclusively invests in securities of a single country suggested by its name. In total, we identified 485 unique country funds that target 46 countries in our dataset.

We obtain domestic news articles on foreign countries using the Factiva database. To begin,

we search each of the 46 countries' name for all news articles published in the *Wall Street Journal*, *New York Times*, *USA Today*, and *Washington Post* during the period of 1991 to 2021. To be included, the news article must mention the country's name within the first 15 words and at least twice throughout the article. We also require that the article is at least 50 words in length. We then process each news article through a Python program that output the date of article, the news sources, the number of total words, the number of negative words, the number of unique negative words, the number of positive words, and the number of unique positive words based on the Loughran and McDonald (2011)'s dictionary of words. Following Tetlock (2008), we excluded articles from our sample if the combined number of unique positive and negative words was less than three.

B. Variable Construction

Our key independent variables of interest are the level of domestic media coverage given to a foreign country (*Media Attention*) in combination with the negativity of that coverage (*Media Neg*). We refer to this interaction term as *Negative Media Coverage*. We measure *Media Attention* by counting the number of country-specific news articles published in domestic news outlets in a given month. To capture the negativity of these news articles, we first calculate the fraction of negative words in each news article. We then construct *Neg* as the average of the fraction for each country in a given month. Following Tetlock (2008), we measure *Media Neg* on a foreign country i in a given month t as:

$$Media\ Neg_{i,t} = \frac{Neg_{i,t} - \mu Neg_{i,T}}{\sigma Neg_{i,T}}, \quad (1)$$

where $\mu Neg_{i,T}$ is the mean and $\sigma Neg_{i,T}$ is the standard deviation of *Neg* for country i over the previous calendar year T . The standardization is to remove any potential non-stationary behaviors in the distribution of words in news stories (Tetlock 2008).

Our dependent variable of interest is *Fund Flows*. Following the majority of the previous

literature (i.e., Sirri and Tufano 1998), we calculate *Fund Flows* as the net growth rate in fund assets beyond that due to capital gains and reinvested dividends. Specifically, for each fund i in month t in our sample, we construct *Fund Flows* by the following formula:

$$Fund\ Flows_{i,t} = \frac{TNA_{i,t} - TNA_{i,t-1} \times (1 + R_{i,t})}{TNA_{i,t-1}}, \quad (2)$$

where TNA is the total net assets and R is the net return of the fund.

We use two measures for fund performance. Although there is lack of consensus on the appropriate benchmark in international asset pricing models, a recent study by Fang and Ruan (2021) use a revealed preference approach to find that Capital Asset Pricing Model (CAPM) with U.S. equity factor best explains flows into and out of US-domiciled international funds. We therefore estimate a fund's risk-adjusted return (i.e., alpha) accordingly. In particular, for each fund-month observation, we estimate the factor loadings using the previous 24 months of return data (we require a minimum of 24 months of return data) by the following regression:

$$R_{i,t} = \alpha_i + \beta_i MKT_{i,t} + \varepsilon_{i,t}. \quad (3)$$

Here, $R_{i,t}$ is the net-of-fee return of fund i in month t minus the risk-free rate, $MKT_{i,t}$ is the excess return in market return. Using the estimated factor loadings, we subtract the expected return from the realized return to obtain the fund's out-of-sample *alpha* in each month.

We include a set of additional variables to control for fund- and country-specific characteristics. The variable *Fund Size* is the sum of assets under management across all share classes. We aggregate the fund sizes in the family to obtain *Family Size*. *Fund Age* is the number of months that the oldest share class has been traded. *Expense Ratio* is determined by dividing the fund's operating expenses by the average dollar value of its assets under management; *Turnover Ratio* is defined as the minimum of sales or purchases divided by the TNA of the fund; *% Inst. Assets* is the fraction of a fund's assets sold through institutional share classes. Following Massa et al. (2022), we use the gross enrollment rate for

primary, secondary, and tertiary schools combined from the World Development Indicators (WDI) to measure a country's education level, which we refer to as *Education*. To capture the degree of internet penetration, we obtain the number of internet users per 100 people in the country from WDI, and refer to this variable as *Information*. To control for the country's size and the level of financial development, we obtain gross domestic product (*GDP*) and the ratio of market capitalization to GDP (*MktCap*) from WDI. Following Hwang (2011), we measure each country's *Popularity* among Americans using Gallup surveys. Finally, to measure a country's overall stock market performance, we calculate the average of the monthly returns of all market indices available in DataStream and refer to this variable as *Country Stock Return*.

C. Descriptive Statistics

Our sample consists of 485 unique country funds offered by 135 fund families, covering 42,253 fund-month observations from 1991 to 2021. As shown in Panel A of Table I, there is an clear increasing trend in the number of country funds available in the market, rising from 16 funds in 1991 to 207 in 2021, peaked around 2018 with 242 funds. The total assets managed by all country funds also demonstrate similar patterns. Panel B of Table I provides the empirical distribution of the sample by the targeted country. China has the highest number of unique funds in our sample with 141 funds concentrating their investment in Chinese securities.

Table II presents the descriptive statistics of all the key variables used in the empirical analysis. The magnitude of these variables is consistent with earlier literature. Specifically, a typical fund in our sample has about \$1.25 billion in AUM, an average alpha of -0.22%, an expense ratio of 1%, a turnover rate of 76%, and 2% of monthly net flows.

III. Media Negativity on Foreign Countries and Country Fund Flows

In this section, we examine whether flows to a country fund are influenced by the negative media coverage given to the country.

A. *Baseline Regressions*

Our main hypothesis is that negative media coverage given to a country affect the investment decisions of country fund investors. More specifically, domestic investors may choose to divert their capital away from funds targeting a foreign country with more negative media coverage (i.e., more media negativity in combination with a greater level of media attention). To test this hypothesis, we begin by examining the relationship between negative media coverage and fund flows. Specifically, we estimate the following ordinary least squares regression:

$$\begin{aligned} FundFlows_{i,t} = & \alpha_i + \beta_1 \times MediaNeg_{i,t} + \beta_2 \times MediaAtt_{i,t} \\ & + \beta_3 MediaNeg \times MediaAtt_{i,t} + \gamma' X_{i,t-1} + \delta_t + \varepsilon_{i,t}. \end{aligned} \quad (4)$$

In the above regression, i indexes a fund, t indexes a month, α represents fund or country fixed effects depending on the specification, δ denotes year-month fixed effects, and ε is the error term. The dependent variable is *Fund Flows*, defined as in Equation (2). Our key variable of interest is the interaction term between *Media Neg* and *Media Attention*. Our primary set of control variables includes fund performance in the previous year and its square term which capture the non-linear return-performance relationship, the logarithm of fund size and family size, fund age, expense ratio, turnover ratio, and fraction of a fund's assets sold through institutional shares, all measured as of the previous month-end. In addition, we control for a set of target country characteristics that could also affect fund flows to a country fund. We cluster the standard errors at the fund, country and year-month level.

We present the estimation results in Table III. To begin, in Column (1), we include only the variable *Media Neg* in the regression. We find the coefficient estimate on *Media Neg* is negative and statistically significant at the 1% level. In Column (2), we specify our regression model by including *Media Neg*, *Media Attention*, and their interaction. We find that neither the coefficient

of *Media Neg* nor the coefficient of *Media Attention* alone is statistically significant. However, the coefficient of the interaction term between *Media Neg* and *Media Attention* is negative and statistically significant (t-stat. = -3.83). This finding is consistent with the proposition that the negative media coverage given to a country significantly influences the investment decisions of country fund investors. Specifically, US investors delegate less capital to a foreign country fund when the country receives more media negativity of domestic media coverage in combination with a greater level of media attention. In Column (3), we include a set of fund characteristics and further include fund- and year-month fixed effects to control for potential time trends in fund flows and time-invariant unobservable fund characteristics. We find that the coefficient estimate on the interaction between the *Media Neg* and *Media Attention* remains essentially unchanged. We also note that the control variables, including fund size, fund age, family size, and past performance are generally consistent with prior studies using US domestic equity funds.

The negative correlation between the negative media coverage given to a country and fund flows to the country funds can be interpreted as the influence of either fundamental information on a country embedded in the negative media coverage or the slanted media negativity on the country. Presumably, country-specific fundamental information such as economic prospects and financial development could be correlated with both country fund flows and media coverage on the country. Thereby, the negative coefficient on the interaction term between *Media Neg* and *Media Attention* is likely to capture the influence of both the fundamental country information and slanted media negativity. As a first step to isolate the effect of media slanting, in Column (4), we include a set of country-specific characteristics to proxy for various country's fundamentals including gross domestic product (GDP), market capitalization, internet penetration, and education level of the country in the regression. More importantly, we include the contemporaneous stock

market performance of the country which presumably captures most of the fundamental information available in the market. We also control for country fixed effect to incorporate time-invariant unobservable country characteristics. As shown in Column (4) of Table III, we continue to find a negative and statistically significant interaction effect (coefficient = -0.013; t-stat. = -3.83). To gauge the economic significance of the coefficient estimate, a one standard deviation increase in monthly media slant together with a one standard deviation increase in the media attention given to the country is associated with a 22.1% decrease in fund flows to the country fund.

The specification in Column (4) takes into considerations of both time-variant observable characteristics and time-invariant unobservable characteristics of the country funds and the target countries. The fact that our findings remain largely unaffected by the presence of these additional control variables seem to suggest that it is unlikely that we are merely picking up the influence of country-specific fundamental information on country fund flows. That being said, one could argue that time-variant unobservable fundamental information on a country is correlated with the negative media coverage and flows to country funds. We address this concern in the following sections.

B. Murdoch Acquisition of WSJ: A Triple-differences Analysis

First, we employ the acquisition of WSJ by News Corp., a corporation owned by Rupert Murdoch, as a natural experiment to conduct a triple-differences analysis to further examine the influence of slanted media negativity on the flows to country funds. In particular, as suggested by a Pew Research Center study in 2011, after the Murdoch acquisition, WSJ experienced a 39% abnormal increase in reporting of foreign news and more than a one-third abnormal drop in business coverage between 2007 and 2011 compared to other mainstream newspapers like the *New York Times*. The abnormal increase in foreign news and the drop in business news together serves

as an exogenous shock to the *Media Attention* and the amount of fundamental information carried forth in *Media Neg* of WSJ's media coverage on foreign countries. Therefore, we investigate whether the abnormal media negativity in combination with the abnormal attention of WSJ given to foreign countries relative to other newspapers has a differential impact on country fund flows post the Murdoch acquisition.

We conjecture that WSJ's abnormal increase in foreign news in combination with the abnormal drop in business coverage post the Murdoch acquisition represents an exogenous increase in slanted media negativity and decrease in fundamental information of WSJ on foreign news coverage relative to other newspapers. If the negative correlation between flows to a country fund and the negative media coverage of the country is primarily driven by the fundamental information of a country carried forth in the negative media coverage, we expect fund flows to be less sensitive to the abnormal negative media coverage of WSJ post the Murdoch acquisition. In contrast, if the negative correlation is primarily driven by the negative slanting in news reporting of foreign countries carried forth in the negative media coverage, we expect fund flows to be more sensitive to the abnormal media slant and abnormal attention of WSJ post the acquisition.

To examine this conjecture, we conduct a triple-differences analysis by estimating the following regression:

$$\begin{aligned}
FundFlows_{i,t} = & \alpha_i + \beta_1 \times Abnormal\ WSJ\ Neg_{i,t} + \beta_2 \times Abnormal\ WSJ\ Attention_{i,t} \\
& + \beta_3 Post_t + \beta_3 Abnormal\ WSJ\ Neg_{i,t} \times Abnormal\ WSJ\ Attention_{i,t} \\
& + \beta_4 Abnormal\ WSJ\ Neg_{i,t} \times Post_t + \beta_5 Abnormal\ WSJ\ Attention_{i,t} \times Post_t \\
& + \beta_6 Abnormal\ WSJ\ Neg_{i,t} \times Abnormal\ WSJ\ Attention_{i,t} \times Post_t + \gamma' X_{i,t-1} + \delta_t \\
& + \varepsilon_{i,t}.
\end{aligned} \tag{5}$$

We measure *Abnormal WSJ Attention* as the difference in the number of country-specific news articles between WSJ and *Media Attention* in a given month. We calculate *WSJ Neg* in the same way as in equation (1), except using news articles published in WSJ only. We then measure *Abnormal WSJ Neg* as the difference between *WSJ Neg* and *Media Neg* in a given month. The other variables are defined in the same manner as in equation (4). The key independent variable in our triple-difference analysis is the triple interaction of *Abnormal WSJ Neg* \times *Abnormal WSJ Attention* \times *Post*, where *Post* is a binary variable set to 1 if a fund-month observation occurs after June 2007 and 0 otherwise. We include fund-month observations during the period of six years prior to six years after the Murdoch acquisition of WSJ in June 2007 (i.e., 2001 to 2013). The coefficient estimates of the triple interaction term, β_6 , can be interpreted as the differential sensitivity of country fund flows to the abnormal WSJ coverage on foreign countries from before to after the Murdoch acquisition of WSJ.

Column 1 of Table IV reports the estimated coefficient of *Abnormal WSJ Neg* \times *Abnormal WSJ Attention* \times *Post* as -0.089 with a t-stat. of -2.41, indicating that country fund flows are more sensitive to the abnormal negative coverage of WSJ on foreign countries post the Murdoch acquisition of WSJ in June 2007. Column 2 of Table IV reports the estimated coefficient of *Abnormal WSJ Neg* \times *Abnormal WSJ Attention* \times *Post* as -0.073 with a t-stat. of -2.30, suggesting that the coefficient estimate is robust to the inclusion of control variables of fund- and country characteristics. This evidence supports the notion that the negative correlation between the flows to a country fund and the negative media coverage on the country is at least partially, if not all, driven by slanted media negativity on foreign countries.

C. Retail vs. Institutional Country Fund Flows

To further attribute the relation of negative media coverage and country fund flows to slanted

media negativity on a country, we explore the heterogeneity among investor clienteles and investigate whether retail investors are more influenced by the negative media coverage on foreign countries than institutional investors. To wit: if the negative correlation between the negative media coverage and country fund flows represents investors' reactions to slanted media negativity on a country, retail investors, who have greater information costs and are more susceptible to the sentiment embedded in news coverage than their institutional counterparts (Baker and Wurgler 2007), are more affected by the negative media coverage on a country. In contrast, if the correlation is mainly driven by investors' reactions to changes in country's fundamental information, there should be no significant difference between retail and institutional investors' flows to country funds in response to the news coverage on foreign countries.

To examine which pattern is observed in the data, we decompose fund flows into institutional flows and retail flows. Specifically, we define institutional flows and retail flows as flows from institutional share classes and retail share classes, respectively. We then re-estimate the baseline model of Equation (4) using month retail flows and institutional flows to country funds as the dependent variable, respectively.

The results are reported in Table V. Column (1) shows that the observed correlation between negative media coverage and country fund flows remains unchanged when we use retail flows as the dependent variable. The coefficient estimate on the interaction term between *Media Neg* and *Media Attention* is -0.020 with a t-stat. of -2.04. In contrast, when we use institutional flows as the dependent variable, we find statistically insignificant coefficient on the interaction term between *Media Neg* and *Media Attention*, where the coefficient is -0.007 with a t-stat. of -0.87.

This evidence suggests that while retail investors redeem their investment to a foreign country fund when the country receive more negativity of domestic media coverage in combination with a

greater level of media attention, institutional investors are insensitive to the same media coverage on foreign countries. The finding that our baseline results are only present for less sophisticated retail investors lends further support to the idea that it is the slanted media negativity, rather than the fundamental information of a country, that significantly influences the investment decisions of country fund investors.

D. Smart Money or Not?

Thus far, the evidence suggests that the slanted media negativity by domestic media on a foreign country have an adverse effect on investors' international asset allocation decisions. To examine the reasonableness of our interpretation of the results, we examine the correlation between country fund performance and country fund flows resulting from negative media coverage on foreign countries. Specifically, we want to determine whether the projected country fund flows resulting from negative media coverage on foreign countries represent "smart money." If the projected flows to country funds due to the negative media coverage on foreign countries are driven by fundamental information, they represent "smart money" that predicts improved country fund performance. Conversely, if these projected flows are driven by slanted media negativity on foreign countries, they predict diminished country fund performance.

We first calculate the projected flows to country funds resulting from negative media coverage on foreign countries. To do so, we use the estimated coefficients from Equation (4) and apply them to calculate the projected fund flows. The outcomes of the calculations are projected country fund flows conditional on the variations in the media negativity and the media attention given to the country.

We then examine the relationship between projected country fund flows and subsequent country fund performance. Our measures of fund performance include both market-adjusted

returns and alphas, as defined in Equation (3). The results are reported in Table VI. Column (1) is identical to Column (1) in Table III. Column (2) and (3) show that the projected fund flows are negatively correlated with fund market-adjusted return and alpha where the coefficient estimates are -0.243 (t-stat. = -1.70) and -0.349 (t-stat. = -2.38), respectively. Column (4) and (5) further reveal that the projected fund flows are negatively correlated with risk-adjusted fund performance particularly for the subsample that contains only actively managed funds, where the coefficient estimates are -0.425 (t-stat. = -2.84) and -0.496 (t-stat. = -2.64), respectively. We focus on the subsample of active funds because in passive funds, particularly ETFs, the flows represent not only the demand of fund investors but also the arbitrage trading of authorized participants who seek to minimize tracking error between ETFs and their underlying index.

Our findings suggest that a decrease (increase) in fund flows induced by the negative media coverage on foreign countries is associated with an enhanced (deteriorated) fund performance, indicating that redemption (purchase) decisions due to the negative media coverage of a country are unlikely to represent “smart” money motivated by fundamental information. The lack of evidence for a smart money effect of media-coverage induced fund flows contradicts the argument that negative media coverage on foreign countries is purely reflective of the country's economic fundamentals.

IV. Further Analysis of Media Negativity on Foreign Countries and Country Fund Flows

In this section, we conduct additional analyses to examine the reasonableness of our interpretation of the results in Section III.

A. The Launch of Wall Street Journal's Mobile App

To begin, we examine whether an increase in the audience reached by negative media coverage on foreign countries has an impact on the country fund flows. In particular, we employ the launch

of WSJ's mobile app in May 2015 as an exogenous shock to the audience reached by WSJ. According to Statista, WSJ's circulation increased from 2.6 million in 2018 to 3.7 million in 2022, primarily due to a surge in digital subscription (i.e., from 1.6 million in 2018 to 3.1 million in 2022).

We hypothesize that after the launch of WSJ's mobile app in May 2015, country fund flows are more responsive to the abnormal negative media coverage of WSJ on foreign countries. To test this hypothesis, we re-estimate equation (5) but redefine *Post* as a binary variable set to 1 if a fund-month observation occurs after May 2015 and 0 otherwise. We include fund-month observations during the period of six years before to six years after the launch of WSJ's mobile app in May 2015 (i.e., 2009 to 2021). Column 1 of Table VII reports the estimated coefficient of *Abnormal WSJ Neg* \times *Abnormal WSJ Attention* \times *Post* as -0.075 with a t-stat. of -2.05, indicating that country fund flows are more sensitive to the abnormal WSJ coverage on foreign countries post the launch of WSJ's mobile app in May 2015. Column 2 of Table VII reports the estimated coefficient of *Abnormal WSJ Neg* \times *Abnormal WSJ Attention* \times *Post* as -0.087 with a t-stat. of -2.76, suggesting that the coefficient estimate is robust to the inclusion of control variables of fund- and country characteristics. This evidence supports the notion that when more investors are exposed to the negative media coverage on foreign countries, the negative correlation between the flows to a country fund and the negative media coverage on the country becomes more pronounced.

B. Contagious Effect

We further examine whether the negative media coverage on a country has a contagious effect to international mutual funds that target on a region (i.e., region funds) that includes the country. We conjecture that the negative media coverage on a country is negatively correlated with the flows to region funds. For example, negative media coverage on Japan could potentially have an

adverse impact on flows to Asian funds that include assets in Japan.

To examine the conjecture, we measure *Region Attention* by summing up the *Media Attention* of all countries included by a region fund in a given month. We measure *Region Neg* by calculating the average *Media Neg* of all countries included by a region fund in a given month. We then re-estimate equation (4) by replacing *Media Attention* with *Region Attention* and by replacing *Media Neg* with *Region Neg* and in a sample of fund-month observations of all region funds during the period of 1991 to 2021.

Column 1 of Table VIII reports the estimated coefficient of *Region Neg* \times *Region Attention* as -0.083 with a t-stat. of -3.20, indicating that region fund flows are sensitive to the negative media coverage of countries included in the fund. Column 2 of Table VIII reports the estimated coefficient of *Region Neg* \times *Region Attention* as -0.066 with a t-stat. of -2.15, suggesting that the coefficient estimate is robust to the inclusion of control variables of fund- and country characteristics. This evidence supports the notion that the negative media coverage on a country has a contagious effect to the flows to region funds that include the country.

V. Robustness

In this section, we discuss the robustness of the results in Section III. Specifically, we re-estimate the baseline results of equation (4) using several different specifications. First, we include only the equity country funds and exclude bond and money market funds from the sample. Second, we exclude ETFs from our sample because the flows to ETFs not only represents investors' demand but also the arbitrage trading of authorized participants to minimize the tracking error of ETFs. Third, we exclude country funds where the targeted country is China to examine whether the correlation between country fund flows and the negative media coverage on the country is only pronounced in country funds targeting China. Fourth, we include the country popularity score

provided by Gallup as controls to examine whether our measures of negative media coverage on foreign countries are merely a reflection of the country's popularity in the eyes of Americans (see, for example, Hwang 2011). Finally, we separate the sample by whether the presidency is republican or democratic to examine whether our results are sensitive to domestic political ideology. As reported in Table IX, we find qualitatively similar results in terms of statistical and economic significance in all these specifications.

VI. Conclusion

In this study, we find that the flows to country funds are influenced by the media negativity in combination with the media attention given to foreign countries in US news outlets. To demonstrate that this correlation is driven by slanted media negativity rather than fundamental economic prospects and value-relevant asset information, we employed several analyses, including the Murdoch Acquisition of WSJ, a comparison between retail and institutional fund flows, and an investigation of the relationship between projected country fund flows and subsequent country fund performance. These analyses support the notion that slanted media negativity influences investors' international asset allocation.

This study contributes to the resolution of the home bias puzzle. Our findings indicate that the media negativity in country-specific media coverage can amplify investors' home country bias, thereby hindering their international diversification in portfolio allocation.

This study also illustrates the pervasive influence of media on financial and economic decisions. First, while prior studies have shown that domestic news coverage on domestic firms influences domestic investors' decision-making process and, in turn, domestic asset prices, we are among the first to show that domestic news coverage on foreign nations influences domestic investors' portfolio allocation to foreign assets. Second, prior studies related to the influence of

media slant on financial decision-making focuses almost exclusively on slanted media reporting due to media partisanship. We are, perhaps, the first study that investigates a different source of media slant derived from media negativity bias.

Appendix: Variable Definitions

Variable Name	Definition
Media Neg	The fraction of negative words, as defined in Loughran and McDonald (2011), to total words in news articles covering the country in a given month. We standardize it by subtracting its previous year's mean and dividing by its previous year's standard deviation (Tetlock 2008).
Media Attention	Number of country-specific news articles published in Wall Street Journal, New York Times, USA Today, and Washington Post in a given month.
Fund Flows (%)	Net growth rate in fund assets beyond that due to capital gains and reinvested dividends (Sirri and Tufano 1998).
Retail and Inst. Flows (%)	Fund flows from retail and institutional share classes, respectively.
Fund Size (in \$ millions)	Sum of assets under management across all share classes.
Fund Age (in months)	Number of months that the oldest share class has been traded.
Expense Ratio	Ratio of the fund's annual operating expenses to the average dollar value of its assets under management.
Turnover Ratio	The lesser of purchases or sales divided by average net assets.
Fund Family Size (in \$ millions)	Sum of assets under management across all funds in the family.
Inst. Assets (%)	The fraction of a fund's assets sold through institutional share classes.
Fund Market-adjusted Return (%)	Monthly fund net-of-fee returns minus the market return of the same month.
Fund Alpha (%)	We first estimate Capital Asset Pricing Model to get estimated factor loadings, and then subtract the expected return from the realized return to obtain the fund's out-of-sample alpha in each month.
Country Stock Return (%)	The average of the monthly returns of all market indices available in DataStream.
Market Capitalization	Total market capitalization of listed companies divided by GDP per country. Data Source: World Development Indicators.
Ln (GDP)	The natural logarithm of GDP, ln (GDP), in billions of U.S. dollars per country. Data Source: World Development Indicators.
Information	Internet users per 100 people in a country; rescaled as an index ranging from 0 to 1 (a higher score indicates higher Internet penetration). Data Source: World Development Indicators.
Education	Gross enrollment rate for primary, secondary and tertiary schools combined in the country from the World Development Indicators.
Popularity	Country popularity score in Hwang (2011) based on the Gallup Poll survey question "Is your overall opinion of...very favorable, mostly favorable, mostly unfavorable, or very unfavorable?" The score is calculated by multiplying the percentage of survey participants who respond very favorably by 4, mostly favorably by 3, mostly unfavorably by 2, and very unfavorably by 1 and adding these four numbers into one cumulative score.

References

- Agarwal, V., Jiang, L., and Wen, Q., 2020, Why Do Mutual Funds Hold Lottery Stocks? *Journal of Financial and Quantitative Analysis* 57,1–47.
- Ahern, K., and Peress, J., 2022, The Role of Media in Financial Decision–Making. Handbook of Financial Decision Making, Eds. by Hilary, D. and McLean, D., Forthcoming.
- Akbas, F., and Genc, E., 2020, Do Mutual Fund Investors Overweight the Probability of Extreme Payoffs in The Return Distribution? *Journal of Financial and Quantitative Analysis* 55, 223–261.
- Archer A., and Clinton, J., 2018, Changing Owners, Changing Content: Does Who Owns the News Matter for The News? *Political Communication* 35, 353–370.
- Baker, M., and Wurgler, J., 2007, Investor Sentiment in the Stock Market, *Journal of Economic Perspectives*, 21, 129–151.
- Baloria, V., and Heese, J., 2018, The Effects of Media Slant on Firm Behavior, *Journal of Financial Economics* 129, 184–202.
- Chevalier, J., and Ellison, G., 1997, Risk Taking by Mutual Funds as A Response to Incentives, *Journal of Political Economy* 105, 1167–1200.
- Choi, J., and Robertson, A., 2020, What Matters to Individual Investors? Evidence From the Horse’s Mouth, *Journal of Finance* 75, 1965–2020.
- Christoffersen, S., Musto D., and Wermers R., 2014, Investor Flows to Asset Managers: Causes and Consequences, *Annual Review of Financial Economics* 6, 289–310.
- Cooper, M., Gulen, H., and Rau, R., 2005, Changing Names with Style: Mutual Fund Name Changes and Their Effects on Fund Flows, *Journal of Finance* 60, 2825–2858.
- Cooper, I.A., Sercu, P., and Vanpée, R., 2012, The Equity Home Bias Puzzle: A Survey, *Foundations and Trends in Finance* 7, 289–416.
- Core, J., Guay, W., and Larcker, D., 2008, The Power of The Pen and Executive Compensation, *Journal of Financial Economics* 88, 1–25.
- Dai, L., Parada, J., and Zhang, B., 2015, The Governance Effect Of The Media's News Dissemination Role: Evidence From Insider Trading, *Journal of Accounting Research* 53, 331–366.
- DeSantis, G., and Gerard B., 1997, International Asset Pricing and Portfolio Diversification with Time–Varying Risk, *Journal of Finance* 52, 1881–1912.

- Dyck, A., Volchkova, N., and Zingales, L., 2008, The Corporate Governance Role of the Media: Evidence from Russia, *Journal of Finance* 63, 1093–1135.
- Engelberg, J., and Parsons, C., 2011, The Causal Impact of Media in Financial Markets, *Journal of Finance* 66, 67-97.
- Fang, L., Peress, J. and Zheng, L., 2014, Does Media Coverage of Stocks Affect Mutual Funds' Trading And Performance? *Review of Financial Studies* 27, 3441–3466.
- French, K., and Poterba., J., 1991, Investor Diversification and International Equity Markets. *American Economic Review* 81, 222–26.
- Friebel, G. and Heinz M., 2014, Media Slant Against Foreign Owners: Downsizing, *Journal of Public Economics* 120, 97–106.
- Gentzkow, M., and Shapiro, J., 2008, Competition and Truth in the Market for News, *Journal of Economic Perspectives* 22, 133–154.
- Giffard, C. A., and Rivenburgh, N. K., 2000, News Agencies, National Images, And Global Media Events, *Journalism & Mass Communication* 77, 8–21.
- Golez, B., and Karapandza, R., 2022, Home–Country Media Slant and Equity Prices. Working paper.
- Grauer, R., and Hakansson N., 1987, Gains from International Diversification: 1968–85 Returns on Portfolios of Stocks and Bonds, *Journal of Finance* 42, 721–739.
- Grubel, H., 1968, Internationally Diversified Portfolios, *American Economic Review* 58, 1299–1314.
- Guest, N., 2021, The Information Role of The Media in Earnings News, *Journal of Accounting Research* 59, 1021–1076.
- Halton, D., 2001, International News in the North American Media, *International Journal* 56, 499–515.
- Huang, J., Wei, K., and Yan, H., 2007, Participation Costs and The Sensitivity of Fund Flows to Past Performance, *Journal of Finance* 62, 1273–1311.
- Hwang, B., 2011, Country–specific Sentiment and Security Prices, *Journal of Financial Economics* 100, 382–401.
- Joe, J., Louis, H., and Robinson, D., 2009, Managers' and Investors' Responses to Media Exposure of Board Ineffectiveness, *Journal of Financial and Quantitative Analysis* 44, 579–605.

- Karolyi, A., and Stulz R., 2003, Are Financial Assets Priced Locally or Globally? in George Constantinides, Milton Harris, and Rene M. Stulz, eds.: *The Handbook of the Economics and Finance* (North–Holland, NY).
- Kedia, S., and Kim, G., 2021, Impact of Media Ownership on News Coverage. Working paper.
- Kim, S., 2018, Media Bias against Foreign Firms as a Veiled Trade Barrier: Evidence from Chinese Newspapers, *American Political Science Review* 112, 954–970.
- Knill, A., Liu, B., and McConnell, J., 2022, Media Partisanship and Fundamental Corporate Decisions, *Journal of Financial and Quantitative Analysis* 57, 572–598.
- Kuhnen, C., and Niessen, A., 2012, Public Opinion and Executive Compensation, *Management Science* 58, 1249–1272.
- Kumar, A., Ruenzi, N., and Spalt, O., 2015, What Is in A Name? Mutual Fund Flows When Managers Have Foreign–Sounding Names, *Review of Financial Studies* 28, 2281–2321.
- Levy, H., and Sarnat M., 1970, International Diversification of Investment Portfolios, *American Economic Review* 60, 668–675.
- Lewis, K., 1999, Explaining Home Bias in Equities and Consumption, *Journal of Economic Literature* 37, 571–608.
- Liu, B., and McConnell, J., 2013, The Role of The Media in Corporate Governance: Do the Media Influence Managers' Capital Allocation Decisions? *Journal of Financial Economics* 110, 1–17.
- Loughran, T., and McDonald, B., 2011, When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10–Ks, *Journal of Finance* 66, 35–65.
- Massa, M., Wang, C., Zhang, H., & Zhang, J., 2022, Investing in Lowtrust Countries: On the Role of Social Trust in The Global Mutual Fund Industry, *Journal of Financial and Quantitative Analysis* 57, 240–290.
- Miller, G., 2006. The Press as a Watchdog for Accounting Fraud, *Journal of Accounting Research* 44, 1001–1033.
- Peress, J., 2014, The Media and the Diffusion of Information in Financial Markets: Evidence from Newspaper Strikes, *Journal of Finance* 69, 2007–2043.
- Sacerdote, B., Sehgal, R., and Cook, M., 2022, Why Is All COVID–19 News Bad News? NBER Working Paper 28110.

- Sirri, E., and Tufano, P., 1998, Costly Search and Mutual Fund Flows, *Journal of Finance* 53, 1589–1622.
- Solomon, D., Soltes, E., and Sosyura, D., 2014, Winners in the Spotlight: Media Coverage of Fund Holdings as a Driver of Flows, *Journal of Financial and Quantitative Analysis* 113, 53–72.
- Soroka, S., 2006, Good News and Bad News: Asymmetric Responses to Economic Information, *Journal of Politics* 68, 372–385.
- Soroka, S., Fournier, P., and Nir, L., 2019, Cross–National Evidence of a Negativity Bias in Psychophysiological Reactions to News, *Proceedings of the National Academy of Sciences* 116, 18888–18892.
- Tetlock, P., 2007, Giving Content to Investor Sentiment: The Role of Media in The Stock Market, *Journal of Finance* 62, 1139–1168.
- Tetlock, P., Saar–Tsechansky, M., and Macskassy, S., 2008, More Than Words: Quantifying Language to Measure Firm's Fundamentals, *Journal of Finance* 63, 1437–1467.
- Van der Meer T., Hameleers M., and Kroon A., 2020, The Effects of Confirmation, Source, and Negativity Bias on Selective Attendance to Online News, *Mass Communication and Society* 23, 937–967.
- Wagner, M., and Collins, T., 2014, Does Ownership Matter? The Case of Rupert Murdoch's Purchase of the Wall Street Journal, *Journalism Practice* 8, 758–771.

Table I. Sample Distribution

This table presents the number of unique country funds and the total assets under management (AUM) by year in Panel A, and by targeted countries in Panel B, for the period of 1991 to 2021.

Panel A. Sample Distribution by Year

Year	# Unique Country Funds	Total AUM (in \$Millions)
1991	16	9,699
1992	20	11,172
1993	26	21,163
1994	38	36,826
1995	47	36,237
1996	50	48,666
1997	83	67,907
1998	91	61,992
1999	81	100,680
2000	78	94,564
2001	71	53,236
2002	67	58,869
2003	69	84,018
2004	67	178,694
2005	67	279,957
2006	78	577,126
2007	96	834,759
2008	123	757,030
2009	138	696,580
2010	148	944,991
2011	174	1,039,545
2012	194	872,130
2013	204	1,167,009
2014	225	1,311,213
2015	241	1,440,040
2016	233	1,129,872
2017	238	1,319,660
2018	242	1,532,501
2019	240	1,294,776
2020	229	1,180,006
2021	207	1,190,417

Panel B. Sample Distribution by Targeted Country

Country	# Unique Country Funds	Total AUM (in \$Millions)
China	141	4,365,805
Japan	101	5,253,865
India	38	1,258,375
Germany	21	732,152
Canada	19	1,383,894
UK	18	463,708
Korea	17	779,560
Brazil	14	1,314,703
Australia	14	377,581
Mexico	9	275,478
Israel	9	46,471
Russia	9	403,921
Italy	8	124,567
Switzerland	6	183,969
Spain	6	146,434
Indonesia	4	89,086
France	4	105,820
South Africa	4	89,562
Poland	4	57,909
Ireland	3	14,010
New Zealand	3	23,477
Netherlands	3	39,096
Singapore	3	210,528
Colombia	3	18,292
Norway	2	14,074
Vietnam	2	54,260
Argentina	2	8,049
Saudi Arabi	2	24,231
Portugal	2	3,422
Belgium	2	22,236
Greece	1	25,276
Pakistan	1	2,449
Chile	1	68,531
Nigeria	1	3,424
Austria	1	33,534
Malaysia	1	127,420
Finland	1	3,126
Kuwait	1	186
Turkey	1	65,656
Egypt	1	6,770
Thailand	1	69,883
Denmark	1	6,710
Sweden	1	65,746
Qatar	1	5,002
Philippines	1	27,755
Peru	1	35,329

Table II. Descriptive Statistics

This table presents the descriptive statistics for the main variables in the empirical analysis. All variables are defined in the Appendix. The sample period spans from 1991 to 2021. We report the number of observations (N), mean, standard deviation (SD), the first percentile (P1), median (P50), and the 99th percentile (P99) for fund and country-specific characteristics, respectively.

Variables	N	Mean	SD	P1	P50	P99
<i>Media Neg</i>	40,369	-0.02	0.61	-1.68	-0.05	1.82
<i>Media Attention</i>	40,369	59.76	57.56	1.00	37.00	201.00
<i>Fund Flows (%)</i>	41,272	2.22	16.33	-34.60	-0.05	99.60
<i>Retail Flows (%)</i>	41,272	1.31	43.13	-14.54	0.00	36.40
<i>Inst. Flows (%)</i>	41,272	1.68	13.62	-33.30	0.00	85.32
<i>Fund Size (in \$ millions)</i>	41,768	1.25	0.52	0.24	1.33	2.40
<i>Fund Age (in months)</i>	42,253	91.52	88.21	1.00	65.00	392.00
<i>Expense Ratio</i>	40,155	0.01	0.00	0.01	0.01	0.02
<i>Turnover Ratio</i>	39,986	0.76	0.18	0.54	0.70	1.22
<i>Fund Family Size (in \$ millions)</i>	41,768	241.28	166.73	27.44	201.57	720.78
<i>Inst. Assets (%)</i>	40,909	68.53	44.39	0.00	100.00	100.00
<i>Fund Market-adjusted Return (%)</i>	37,129	-0.46	5.01	-14.44	-0.49	13.99
<i>Fund Alpha (%)</i>	36,413	-0.22	5.13	-14.75	-0.17	14.72
<i>Country Stock Return (%)</i>	41,982	0.21	1.40	-3.84	0.28	4.03
<i>Market Capitalization</i>	40,433	74.47	37.19	16.69	66.58	234.06
<i>Ln (GDP)</i>	42,253	8.03	0.58	6.95	8.05	9.17
<i>Information</i>	40,433	47.16	30.94	0.07	48.44	96.36
<i>Education</i>	40,433	5.45	0.14	5.13	5.43	5.85
<i>Popularity</i>	27,421	2.60	0.38	1.83	2.62	3.42

Table III. Country-specific Media Negativity and Country Fund Flows

This table presents results of the panel regression analysis of country fund flows against country-specific negative media coverage and various control variables for fund-year-month observations over the period of 1991 through 2021. All variables are defined in the Appendix. Regressions in Column 3 control for fund- and year-month fixed effects and the one in Column 4 controls for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>			
	(1)	(2)	(3)	(4)
<i>Media Neg</i>	-0.419*** (-3.09)	-0.089 (-0.55)	0.018 (0.11)	0.011 (0.06)
<i>Media Attention</i>		0.001 (0.83)	0.014 (1.19)	0.014 (1.24)
<i>Media Neg</i> × <i>Media Attention</i>		-0.014*** (-3.83)	-0.013*** (-2.99)	-0.013*** (-2.84)
<i>Fund Size</i>			-3.398*** (-3.36)	-3.468*** (-3.43)
<i>Fund Age</i>			-3.774*** (-5.07)	-3.798*** (-5.21)
<i>Expense Ratio</i>			-9.407 (-1.00)	-9.628 (-0.99)
<i>Turnover Ratio</i>			-0.407 (-0.73)	-0.385 (-0.66)
<i>Fund Family Size</i>			4.061*** (3.06)	4.186*** (3.13)
<i>Inst. Assets</i>			0.039 (1.21)	0.039 (1.16)
<i>Fund Market-adjusted Return</i>			0.352*** (7.17)	0.309*** (4.93)
<i>Fund Market-adjusted Return</i> ²			0.018*** (5.44)	0.018*** (5.32)
<i>Country Stock Return</i>				0.271* (1.79)
<i>Market Capitalization</i>				-0.005 (-0.49)
<i>Ln (GDP)</i>				-0.210 (-0.67)
<i>Information</i>				0.016*** (2.64)
<i>Education</i>				2.365 (1.19)
Year-month Fixed Effects	No	No	Yes	Yes
Fund Fixed Effects	No	No	Yes	Yes
Country Fixed Effects	No	No	No	Yes
Nobs	39,396	39,396	34,232	33,980
Adjusted R ²	0.031	0.031	0.099	0.097

Table IV. The Acquisition of Wall Street Journal by News Corp

This table presents results of the difference-in-differences analysis of country fund flows against country-specific abnormal negative media coverage by the *Wall Street Journal* and various control variables for fund-year-month observations over the period of 2001 through 2013. All variables are defined in the Appendix. All regressions control for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>	
	(1)	(2)
<i>Abnormal WSJ Neg</i>	-0.069*** (-2.69)	-0.042* (-1.87)
<i>Abnormal WSJ Attention</i>	1.068 (1.48)	1.109 (1.48)
<i>Abnormal WSJ Neg × Post</i>	-2.124** (-2.23)	-1.491 (-1.44)
<i>Abnormal WSJ Attention × Post</i>	0.029** (2.04)	0.001 (0.08)
<i>Abnormal WSJ Neg × Abnormal WSJ Attention</i>	0.034 (0.95)	0.013 (0.44)
<i>Abnormal WSJ Neg × Abnormal WSJ Attention × Post</i>	-0.089** (-2.41)	-0.073** (-2.30)
Controls	No	Yes
Year-month Fixed Effects	Yes	Yes
Fund Fixed Effects	Yes	Yes
Country Fixed Effects	Yes	Yes
Nobs	13,791	11,914
Adjusted R ²	0.092	0.116

Table V. Country-specific Media Negativity and Retail vs. Institutional Country Fund Flows

This table presents results of the panel regression analysis of retail and institutional country fund flows against country-specific negative media coverage and various control variables for fund-year-month observations over the period of 1991 through 2021. All variables are defined in Appendix. All regressions control for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Retail Flows</i>	<i>Institutional Flows</i>
	(1)	(2)
<i>Media Neg</i>	-0.252 (-1.20)	-0.097 (-0.50)
<i>Media Attention</i>	0.003 (0.76)	0.013 (1.24)
<i>Media Neg</i> × <i>Media Attention</i>	-0.020** (-2.04)	-0.007 (-0.87)
Controls	Yes	Yes
Year-month Fixed Effects	Yes	Yes
Fund Fixed Effects	Yes	Yes
Country Fixed Effects	Yes	Yes
Nobs	34,544	34,544
Adjusted R ²	0.007	0.028

Table VI. Country-specific Media Negativity, Projected Country Fund Flows, and Fund Performance

This table presents results of the analysis of country-specific negative media coverage, projected country fund flows, and fund performance for fund-year-month observations over the period of 1991 through 2021. All variables are defined in the Appendix. All regressions control for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>	<i>Fund Market-adjusted Return</i>	<i>Fund Alpha</i>	<i>Fund Market-adjusted Return</i>	<i>Fund Alpha</i>
	(1) 1st-Stage	(2) 2nd-Stage: All Funds	(3) 2nd-Stage: All Funds	(4) 2nd-Stage: Active Only	(5) 2nd-Stage: Active Only
<i>Media Neg</i>	0.071 (0.35)				
<i>Media Attention</i>	0.018 (1.43)				
<i>Media Neg</i> × <i>Media Attention</i>	-0.015*** (-2.56)				
<i>Projected Country Fund Flows</i>		-0.243* (-1.70)	-0.349** (-2.38)	-0.425*** (-2.84)	-0.496** (-2.64)
Controls	Yes	Yes	Yes	Yes	Yes
Year-month Fixed Effects	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes
Nobs	37,924	38,047	33,380	14,534	14,577
Adjusted R ²	0.108	0.313	0.316	0.336	0.318

Table VII. The Launch of Wall Street Journal's Mobile App

This table presents results of the difference-in-differences analysis of country fund flows against country-specific abnormal negative media coverage by the *Wall Street Journal* and various control variables for fund-year-month observations over the period of 2009 through 2021. *Post* is a binary variable set to 1 if a fund-month observation occurs after May 2015 and 0 otherwise. All variables are defined in the Appendix. All regressions control for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>	
	(1)	(2)
<i>Abnormal WSJ Neg</i>	0.119 (0.25)	0.105 (0.33)
<i>Abnormal WSJ Attention</i>	-0.022 (-1.26)	-0.015 (-1.01)
<i>Abnormal WSJ Neg</i> × <i>Post</i>	-1.424* (-1.92)	-0.874 (-1.48)
<i>Abnormal WSJ Attention</i> × <i>Post</i>	-0.003 (-0.27)	-0.024 (-1.49)
<i>Abnormal WSJ Neg</i> × <i>Abnormal WSJ Attention</i>	0.009 (0.55)	0.018 (1.46)
<i>Abnormal WSJ Neg</i> × <i>Abnormal WSJ Attention</i> × <i>Post</i>	-0.075** (-2.05)	-0.087*** (-2.76)
Controls	No	Yes
Year-month Fixed Effects	Yes	Yes
Fund Fixed Effects	Yes	Yes
Country Fixed Effects	Yes	Yes
Nobs	25,073	22,083
Adjusted R ²	0.058	0.061

Table VIII. Country-specific Media Negativity and Region Fund Flows

This table presents results of the panel regression analysis of region fund flows against country-specific negative media coverage and various control variables for fund-year-month observations over the period of 1991 through 2021. All variables are defined in the Appendix. All regressions control for fund-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>	
	(1)	(2)
<i>Region Neg</i>	-0.019 (-0.90)	0.001 (0.06)
<i>Region Attention</i>	0.962** (2.38)	1.008** (2.34)
<i>Region Neg</i> × <i>Region Attention</i>	-0.083*** (-3.20)	-0.066** (-2.15)
<i>Fund Size</i>		0.855** (2.18)
<i>Fund Age</i>		-5.118*** (-9.25)
<i>Expense Ratio</i>		-0.899** (-2.29)
<i>Turnover Ratio</i>		-0.558*** (-3.02)
<i>Fund Family Size</i>		-0.864** (-2.50)
<i>Inst. Assets</i>		-0.017*** (-4.99)
<i>Fund Market-adjusted Return</i>		0.323*** (8.13)
<i>Fund Market-adjusted Return</i> ²		-0.001 (-0.39)
Controls	No	Yes
Year-month Fixed Effects	Yes	Yes
Fund Fixed Effects	Yes	Yes
Nobs	119,518	116,539
Adjusted R ²	0.087	0.120

Table IX. Country-specific Media Negativity and Country Fund Flows: Robustness Test

This table presents estimates of robustness tests on the baseline results using alternative samples or additional control variables. In Column (1), only equity funds are included, and bond and money market funds are excluded from the sample. In Column (2), ETFs are excluded from the sample. In Column (3), all China funds are excluded. In the last column, we include the country popularity score provided by Gallup as an additional control variable. All variables are defined in the Appendix. All regressions control for fund-, country-, and year-month-fixed effects. All standard errors are clustered at the fund, country, and year-month level. The coefficients of the constant are omitted for brevity. The t-statistics are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Dependent Variable	<i>Fund Flows</i>					
	(1) Equity Funds	(2) Non-ETF Funds	(3) Non-China Funds	(4) Popularity Crtl.	(5) Republican Presidency	(6) Democratic Presidency
<i>Media Neg</i>	-0.013 (-0.08)	0.837 (1.62)	0.037 (0.22)	-0.457 (-1.12)	-0.238 (-1.28)	0.228 (0.65)
<i>Media Attention</i>	0.015 (1.41)	0.012** (2.45)	0.005 (0.96)	0.017 (1.03)	0.003 (0.52)	0.022 (1.69)
<i>Media Neg × Media Attention</i>	-0.013*** (-2.79)	-0.024*** (-3.31)	-0.010* (-1.91)	-0.015*** (-2.83)	-0.013*** (-3.05)	-0.014** (-1.93)
<i>Country Popularity</i>				1.136 (0.73)		
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year-month Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Nobs	33,276	14,750	26,116	22,536	15,837	18,138
Adjusted R ²	0.061	0.166	0.090	0.071	0.074	0.126