Journalistic Framing of the Food and Drug Administration: How Do Our Nation’s Most Respected Newspapers Report About the FDA?

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Journalistic Framing of the Food and Drug Administration: How Do Our Nation’s Most Respected Newspapers Report About the FDA?

Abstract

The Food and Drug Administration is committed to serving the public interest by approving drugs that have to be both safe and effective. Yet, the FDA is not just doing its job in a vacuum. Due to the nature of food and drug issues and their important implications for health, every FDA decision is put under intense scrutiny by the political figures in government, pharmaceutical and public interest groups, and, finally, by the consumers themselves.

This paper explores how the FDA is represented in three major newspapers across the country. The aim of the paper is to discern whether any of the newspapers show a bias towards the FDA through negative or positive reporting and, similarly, whether some discrepancies among the newspapers might be explained by liberal or conservative tendencies. The paper begins with an overview of framing within the news media, explaining just how important news reporting can be for public perception of the FDA. It then addresses research methodology and research questions. Next, it analyzes, in detail, the newspaper reporting styles and possible bias of each newspaper individually. It concludes with a comparison of the three newspapers by testing this analysis against the original hypothesis and offering possible explanations for discrepancies.
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I. Introduction

A. Media Framing

The media permeates almost every aspect of American society and serves as the arm of communication between the mass public and government action. As a result, the journalistic community occupies a powerful position of persuasion. News organizations have the opportunity to shape how the public will perceive an issue. They can do this through a variety of framing techniques and story choices. For example, whether a newspaper chooses a negative or positive quote and what part of a story it chooses to highlight in each article can influence what a reader pays attention to or remembers. Not surprisingly, much research (particularly in the field of political science) attempts to learn a little bit about how the media uses this great power. Yet, framing is not a concept that is unique to media reporting. Politicians constantly try to shape the message they send to constituents through carefully orchestrated appearances and speeches. Interest groups frame an issue differently depending on who they are trying to reach. Most framing in our society occurs deliberately, with a person or organization trying to color a particular story or create a particular impression. Contrarily, newspapers are supposed to be objective and any editor will likely claim that it is, albeit sometimes admitting that the newspaper leans in one political direction or another.

Some past studies help to emphasize the importance of framing techniques and highlight the difference between deliberate framing and unintentional framing. Much of the framing literature concentrates on how an interest group frames its own cause in the general public. Framing can be used for specific reasons: “to attract new recruits, sustain the morale and commitment of current adherent, generate media coverage, mobilize the support of various bystander publics, constrain the social control options of its opponents, and shape public
Framing can be both positive and negative and can influence the public in different, intentional ways. For example, in the civil rights movement, “[Martin Luther] King succeeded in grounding the movement in two of the ideational bedrocks of American culture [by] applying Christian themes and conventional democratic theory.” Many credit his success to his nonviolent approach that focused on the positive frames of rights and religion. On the other hand, negative frames can be used to describe the opposition position without directly naming that group. For example, “affirmative action has been framed variously as ‘remedial action’ for the continuing affects of discrimination or ‘reverse discrimination’ against whites and/or males…[and] welfare has been framed as ‘a helping hand’…and as a ‘government handout’.”

Every interest group, political figure, or government organization like the Food and Drug Administration (FDA) will naturally have its critics. This is especially true for interest groups and social movements. With two movements fighting about the same issue, interaction is inevitable and undoubtedly will influence the prospects of success. For example, the Roe v. Wade decision was the main catalyst for the emergence of a strong right to life movement in American society. Laura Woliver study on amicus briefs found that “after the Roe victory, the pro-choice movement’s agenda was partially shaped by having to respond to the burgeoning pro-life countermovement.”

Related to the FDA, a similar phenomenon is seen in politics and in reporting on government organizations or agencies where two different value-focused groups exist: liberal

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2 Doug McAdam, 347.
4 Id.
and conservatives. Therefore, framing can effect how the public perceives the government, a particular figure, or an important agency. An article that is con-FDA might positively frame the critics or, on the contrary, ignore the FDA’s position all together. This can occur even unintentionally, as when an article just reports on a negative development without considering positive implications or defenses. In fact, many critics argue that the media is consistently guilty of ignoring the positive and focusing on the negative to sell a story. For example, Britney Spears’ escapades as a “bad mother” rarely depict the times when she is serving as a positive role model for the children. Even if the story is true, there is no escaping the fact that the magazines are choosing to focus on the negative tabloid stories, even if the positive omissions are not deliberate.

Newspapers are most often studied for their framing techniques in relationship to political campaigning. Newspapers are constantly criticized for getting caught up in the “horse race” rather than taking the time to report on the important issues in the campaign. One well respected political scientist, Thomas Patterson, defines horse race coverage as “the dominant schema for the reporter is structured around the notion that politics is a strategic game.” Thomas Patterson continues that “the press does in fact communicate a lot of substance during the campaign, but the focus of news buries much of it and distorts much of the rest.” One study by Kathleen Jamieson and Paul Walden say that in “the last . . . Presidential elections . . . 71% of stories in 2000 were primarily concerned with the “horse race” as opposed to issues, compared to 48% in 1996 and 58% in both 1992 and 1988.” The overall trend in reporting is to focus on the part that will sell. In a similar way, it should be interesting to see if the newspapers also tend to focus on the negative story or only one side of the argument in general reporting on the FDA.

7 Thomas Patterson, Out Of Order 57 (1993).
8 Thomas Patterson, 60.
B. Background on Topics, Vioxx, Plan B, Ephedra

1. Vioxx

In order to understand how an article is actually depicting the FDA, it is important to give a very brief introduction to each of the topics. The first topic is the Vioxx controversy surrounding pharmaceutical giant Merck and the FDA. Vioxx became one of Merck’s largest and most successful drugs after its 1999 FDA approval and release.\(^\text{10}\) Vioxx is a Cox-2 inhibitor drug meant to relieve certain types of pain such as arthritis.\(^\text{11}\) Only 11 days after its release, it was distributed to over 30,000 pharmacies to administer to over 40 million potential arthritis patients. One commentator explains the benefits of the drug:

“Vioxx, along with other cox-2 inhibitors, work[s] by isolating and inhibiting the cox-2 enzymes in the body. Standard non-steroid anti-inflammatory drugs [a]re unable to do this without also affecting the cox-1 enzyme, which is essential to the body’s gastric health. As a result standard drugs [a]re the cause of a variety of gastric and health problems, whereas cox-2 inhibitors [a]re hailed miracle drugs...”\(^\text{12}\)

Yet, around 2004, issues started surfacing about potential serious side effects based on drug tests. Most seriously, the drug was found to significantly increase the risk of heart attacks and strokes. There was a huge public outcry over this revelation and in September 2004, Merck decided to voluntarily withdraw the drug from the market place. The FDA was pulled into the controversy when critics began arguing that the drug should never have been approved at all. Merck is and has been involved in various lawsuits, especially since internal documents reveal


that the company knew about the side effects before the drug was marketed. Thus, the Vioxx controversy represents a particularly negative story with respect to the FDA.

2. Plan B

The second research topic focuses on Plan B, a morning-after pill, and the controversy that surrounded over-the-counter approval. Pharmaceutical companies, such as Barr Pharmaceuticals, applied to the FDA to allow Plan B to be sold over-the-counter (i.e. without a prescription).\(^\text{13}\) In early 2004, the FDA’s Center for Drug Evaluation and Research rejected this application. The FDA cited “concern that not enough was known about the possible effects of the pills on the sexual activity of young girls.”\(^\text{14}\)

Yet, the staff scientists at the FDA and other outside panels recommended approval. Public criticism followed. For example, Mark McClellan, the former FDA commissioner, argued that the new acting Director, Steve Galson, was not using the same standards for Plan B that the FDA has used for other contraceptive drugs.\(^\text{15}\) Critics argued that the FDA ignored the science based decision making process in favor of a more ideological stance focused on age related restrictions.\(^\text{16}\) In fact, some interest groups, such as the Center for Reproductive Rights, filed a lawsuit against the FDA based on this approval process.\(^\text{17}\) At the same time, supporters of the FDA argued that the FDA was looking out for young women and it was better to be cautious in these matters.\(^\text{18}\) However, the FDA eventually approved Plan B for over-the-counter sales for women over age 16 in 2006.

3. Ephedra

\(^{15}\) Id.
The final research topic deals with the Ephedra controversy. This is particularly interesting given the regulatory issues surrounding the FDA’s actual power to control dietary supplements. Ephedra is the main ingredient in some popular weight loss products.\textsuperscript{19} The FDA has constantly worried about reports of adverse effects. As early as 1997, the FDA proposed a limit on the drug’s use. However, it was forced to withdraw that proposed rule after government investigators concluded that the FDA did not have a sound scientific support base.\textsuperscript{20} As a result, the FDA initially failed to find a solution.

In 2002 and early 2003, the FDA beefed up efforts to attack Ephedra. These years tend to be the focal point of most media reports. Finally, in December 2003, the FDA announced plans to ban dietary supplements containing Ephedra due to health concerns.\textsuperscript{21} Interestingly, CNN reports that this was the first time that the FDA used its powers to block sale of an over-the-counter nutritional supplement. Pre-1994 (old) dietary supplements do not have to be proven safe before going to the market, unlike drugs. However, the FDA is able to act if an old dietary supplement is later found to be unsafe.\textsuperscript{22} Even though the FDA ended up succeeding in removing the product from the market, many public figures felt that the FDA did not act quickly or fervently enough on this issue in the late 1990s. Others defended the FDA, arguing that regulatory restraints and public apathy made any potential ban difficult. The Ephedra controversy is the least critical of the FDA out of all three topics, but still represents an overall negative event.

\textsuperscript{19} http://www.supplementquality.com/news/ephedra_controversy.html
\textsuperscript{20} Id.
II. Research Question

Unlike political candidates and interest groups, the FDA is an established part of the governmental apparatus. It holds a distinguished place within the so-called fourth branch of government, the administrative state. This study asks whether the nation’s most respected newspapers focus on the negative stories or frame the FDA negatively in the news media similar to how magazines frame famous celebrities. It focuses on whether a newspaper’s reputation for being liberal or conservative comes into play in its FDA reports. Specifically, it aims to study the impression the American public gets from the news media, its main source of information, about the FDA and the job the FDA is doing in protecting the public. Does the news media feel that the FDA is accomplishing its task of protecting the public? Is it framing the FDA as being aggressive or passive in its approach to unforeseen problems? Does it exemplify certain bias that might be considered more liberal or conservative approaches to the FDA within the political ideological spectrum?

This coded research study is divided into two main parts that are designed to address four specific questions:

1) How do three of the nation’s most respected newspapers, the New York Times, the Los Angeles Times, and the Wall Street Journal, choose to report on the FDA? This section does not compare the newspapers with each other, but rather talks about each newspaper’s individual results.

a. Does the newspaper focus on more positive framing or more negative framing?

b. Does the newspaper include both sides, including the FDA's position?

c. Do the editorials tend to focus on a specific type of criticism?

d. Does the newspaper demonstrate a liberal or conservative bias?
2) When comparing the newspapers with each other, is the framing technique consistent or does one newspaper tend to:

a. Publish more negative, positive, or neutral stories overall?

b. Give a more balanced approach, allowing both sides to be heard, or focus on negative criticism?

c. Show a propensity for one type of critique (overly cautious vs. too quick to approve drugs) over a more neutral approach?
   
i. Editorial Focus.
   
ii. Liberal/Conservative Issue Focus.

III. Newspapers and Topics Chosen

The three newspapers chosen serve as the study’s examples of the print media: the *New York Times*, the *Los Angeles Times*, and the *Wall Street Journal*. These newspapers are selected for specific reasons. First, the newspapers are read by a large percentage of the American populace. If the study uses a small, local newspaper, it could not be clear whether it has enough readership to influence any public perception. Second, each newspaper serves a different subset of the American population: New York, California, and Washington D.C. Focusing on newspapers across the United States rather than in one defined geographical area recognizes that reporting techniques might differ within such a wide, diverse country. However, due to this difference, it is possible that some results might be caused by the importance of the subject matter to a particular region more than an approach towards the FDA. Finally, each newspaper has its own political reputation. While all three newspapers have an unparalleled reputation in American society and the world for quality reporting, they also have a conservative or liberal
reputation since that is a major part of this study. The *Los Angeles Times* has a very strong liberal reputation. At the other end of the spectrum is the *Wall Street Journal* with a reputation for conservative values, albeit usually seen more in the editorial section than in the regular news reporting section. The newspaper is marketed to the business community, which has a known reputation for being more conservative. The newspaper might react more positively to the FDA so as not to burn bridges with a powerful agency. Finally, the *New York Times* also has a strong liberal reputation, but perhaps slightly less liberal than the *Los Angeles Times*.

The study focuses on three major stories (Vioxx, Plan B, and Ephedra) that touch on the FDA’s role as the arbiter of the American public’s safety in relationship to the food and drug industry. Like the newspapers, these three topics are chosen for very specific, important reasons. First, all three topics are overall negative stories. It is rarer for a newspaper organization to report about the FDA for an extended period of time when it is only a positive story. To get a significant amount of articles for each topic so that the percentage breakdowns and qualitative analyses have any value, the topics need to remain in the media for a significant amount of time. Note that the topic is “negative” in the sense that the story is negative, and not necessarily that the FDA’s role in the story is negative.\(^{23}\)

Second, the topics should bring out some liberal or conservative biases within the reporting and framing used by the outlets. This is slightly harder to analyze because the coding must be based on the author’s personal judgment of liberal or conservative viewpoints from a political science background and some help from an article when it quotes a conservative group or labels a viewpoint as liberal. Since newspapers are supposed to be objective, it should be

\[^{23}\text{For example, the stories vary greatly in terms of how negative they are toward the FDA. Ephedra is actually a more positive story about the FDA as compared to Vioxx where the FDA really was placed in a position of blame. Having different degrees of negativity will allow the results to take into consideration the tone of the story so as not to confuse it with the bias of the newspaper towards the FDA.}\]
particularly interesting to see if the newspapers with a liberal or conservative reputation
demonstrate this reputation in its reporting about what is supposed to be a neutral agency, the
FDA, rather than a more clearly political topic such as an election horse race. As such, topics
that lend themselves to conservative or liberal values are crucial. Finally, for a similar control
reason, the topics all occur within the last six years, during the Bush Administration. Since a big
part of the study is the liberal or conservative tendency of a newspaper, it makes sense to keep
the time-span all within one Administration. In addition, the results should be as current as
possible. Reporting techniques from ten years ago might not be relevant to the reporting
techniques of these newspapers today.

**IV. Methodology**

The paper is divided into two main sections. The first section focuses on the individual
newspapers. Topic A studies the *New York Times* for all four research questions listed above.
Within topic A are three subsections: a section on Vioxx, Plan B, and Ephedra. Another
alternative would have been to study all the papers under Vioxx, then under Plan B, and then
under Ephedra. However, since this part is not meant to be a comparison among the newspapers,
but rather an individual study of each newspaper and the different reporting styles used within
the topics, the first arrangement makes more sense. Hence, topic B focuses on the *Los Angeles
Times*, and topic C focuses on the *Wall Street Journal*. Within each subsection, there is a
quantitative graphical study and a qualitative study of the results. The qualitative study talks
generally about the results, gives article examples, and finally discusses why certain patterns or
trends might exist. When relevant, any interesting framing techniques are highlighted. The

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24 As one will see in the analysis section, the Ephedra topic is the weakest here since there are not very clear
conservative and liberal divides on the issue whereas the Plan B topic has a more clear divide.
quantitative section looks at the actual statistical data within each newspaper’s reporting. This quantitative and qualitative approach is repeated for all four research questions within Part I: (1) the negative, positive, or neutral coverage breakdown, (2) the balanced or one-sided reporting, (3) the editorial breakdown, and (4) the liberal/conservative breakdown. The editorial section is specifically chosen because it is the only time the newspaper can choose to be subjective and so it might be the best indicator of a newspaper’s bias or values. Even when the overall results might appear to be neutral, the editorials might uncover a more negative or positive reporting style.

The second section of the study compares the three newspapers quantitatively with a qualitative analysis and discussion of the results. The same four topics from the first section are used here, but this time they are employed to compare the newspapers. The results from the first section are the underlying data for this section. Does one newspaper tend to be more negative? Even if all are negative, if one newspaper is significantly less negative than the others, it might actually represent a more positive FDA coverage than it appeared to be as an individual study.

The coding for these articles is quite subjective, based on a personal evaluation about what falls into each category. Each article is read in detail and coded for overall negativity, any positive or neutral comments, and any liberal or conservative topics. Similarly, each article is labeled as negative, negative/neutral, neutral, positive/neutral, or positive. To be consistent throughout the differing newspapers, each evaluation uses the same coding criteria per topic for each newspaper. All articles are printed and highlighted for all positive and negative quotes about the FDA in different colors. In order to notice some possible framing techniques, negative quotes from community figures are highlighted in a different color than negative sentences written by the newspaper author.
To perform the search, FDA or F.D.A or Food /2 Drug were typed in, followed by the name of the topic. For example, for Plan B the search was Plan B or morning /2 after or contraceptive AND FDA or F.D.A or Food /2 Drug. The study focuses on a period of around 2-3 years based on when the topic should be most in the news. Using this technique, all articles were printed, ranging from a maximum of 500 articles for Vioxx reporting in the New York Times to a much smaller number for Ephedra. Then each article was read, with about 50% being discarded per topic per newspaper when the article really had absolutely nothing to do with the FDA or the topic, but just happened to have all the key terms in various places. For example, many times in a three page article the only reference to Vioxx is that this particular company also made Vioxx. Accordingly, the amount of coverage that is actually coded and included in the study varied from around 15 articles to almost 100 articles depending on the topic and the newspaper.

To make the coding as unbiased as possible, a reliability test was performed using 15 volunteers to code 9 articles (all within Vioxx and three for each newspaper) chosen at random to test the compatibility between the author’s coding and the volunteers’ coding. The volunteers coded the articles based on a prepared check list with three of the research questions. The editorial question was not included in the check list since it is not relevant to reliability (as the study does not differentiate between editorials and other articles when first coding for negativity). The only difference from the check list and the research questions used is that for the liberal and conservative topic, the check list referred to “issues” rather than political bias so that the volunteers did not know that this is the aim of that question. Also, they did not know the coding topics for positive, positive/neutral, negative, negative/neutral, or negative coverage. For example, in the actual coding an article is positive whenever it blames someone other than the
FDA. The volunteers were not given this information, but only told to make their own judgment call. Although 9 articles and 15 people are small numbers, it is difficult to find more people willing to do more articles for free. However, for purposes of this paper, this should be sufficient.

Below are the results for one article. A “1” represents negative and a “2” represents negative/neutral. The actual coding of this particular article is negative, one-sided and liberal. As one can see, these results are comparable; with only a small percentage of volunteers thinking the article is neutral/negative rather than negative. This reliability test results for the other 8 articles are very similar with about 3-4 people on average choosing the next step up or down (i.e., negative/neutral to negative). However, no graphically representation is included here to avoid repetitiveness. There are a couple of occasions where a difference does occur, like with this example: some subjects found a conservative story in an article where none existed (where a “1” is liberal and a “2” is conservative topic). Yet overall, the compatibility is strong enough that the results can be meaningful for this type of small scale study. However, due to the difference, every section is broken down into two graphs: one that splits up the labels into positive, positive/neutral, neutral, negative, and negative/neutral and a second that combines negative/neutral with negatives and positive/neutral with positives (since this was most often the coding differences).

Note that the definitions used for coding of negative, negative/neutral, etc. will be explained in detail within the analysis section.
V. Hypothesis

The study focuses on two major research topics: (1) an individual study of each newspaper and (2) a comparison of the newspapers. The hypothesis for the first topic varies only slightly between two of the newspapers. For the *New York Times* and the *Los Angeles Times* it is believed that both should have predominately negative portrayals of the FDA for all three topics. In addition, both newspapers should live up to their liberal reputation and report more liberal stereotypes and engage in more one-sided negative coverage. Also, the editorials should focus more on negative stories. These results should remain the same regardless of the topic. However, it is possible that the *New York Times* might print more neutral articles.

On the other hand, the *Wall Street Journal* results should be slightly different. While it is predicted that there should be a similar negative slant for the Vioxx and Plan B stories, Ephedra might actually see more neutral reporting given that this story is more positive towards the FDA’s role overall. The *Wall Street Journal* should also demonstrate a more conservative slant as compared to a liberal slant in its articles.
The second topic mirrors the predictions for the first topic. It is predicted that there should be a sliding scale among the newspapers based on their reputation within each topic. Overall, the *Los Angeles Times* should be the most liberal, offering criticism that tends to represent liberal values. The *New York Times* should be the most neutral, with more conservative articles than the *Los Angeles Times* but more liberal articles than the *Wall Street Journal*. Finally, the *Wall Street Journal* should be the most conservative, tending to highlight conservative arguments in a much higher percentage than the other newspapers.

Similarly, the *Los Angeles Times* should be the most one-sided, failing to highlight the FDA’s position. At the same time, the *Wall Street Journal* should be more balanced in its FDA coverage than the *New York Times*. This prediction is based on the fact that the current Administration is Republican and the Republican Party is stereotypically considered to be made up of the business community. The *Wall Street Journal* arguably targets this ideological base. As a result, since the FDA might easily be seen as a part of the current government rather than a more independent agency, a more conservative *Wall Street Journal* might be more balanced within a negative story than the more liberal *New York Times* and the *Los Angeles Times*. The *Wall Street Journal* might shy away from criticizing an agency that can have destabilizing effects on many big businesses.

Yet note that these liberal and conservative labels are based mainly on reputation (as well as some studies). Thus, it is equally possible that the reputations are inaccurate and the hypothesis should fail. Also, the newspapers might not have any type of vendetta against the FDA, either intentional or not, and therefore there might be no patterns in the comparison at all and so any negative reporting on the FDA is due to the negative story rather than a particular bias
against the Administration or the FDA. It is only if there is a significant difference in the newspaper reporting styles that less than objective reporting might exist.

VI. Analysis of Individual Newspapers

The first part studies each individual newspaper and its coverage of the Vioxx, Plan B, and Ephedra controversies. The study focuses on each newspaper separately, discussing all three issues within each newspaper before moving on to the next newspaper, starting with the New York Times, then the Los Angeles Times, and finally the Wall Street Journal. The study focuses on four different research questions: (1) whether the articles are negative, positive, neutral, negative/neutral or negative/positive overall, (2) whether the articles are one-sided or balanced, (3) whether the editorials are mostly negative, positive, or neutral and (4) whether the articles demonstrate a liberal or conservative slant.

A. The New York Times

1. Vioxx

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The New York Times published 94 articles on the Vioxx controversy between October 1, 2004 and January 1, 2006. This time span was chosen because, as shown by the brief description of Vioxx, 2005 tends to be the integral point of the Vioxx controversy, when most of the news stories occur. However, October and November of 2004 are also important because that is when the significant bad press started. The New York Times has mostly negative articles about the FDA. The results are as follows: 41 articles are predominately negative, 17 articles are
negative/neutral, 18 articles are neutral, 6 articles are neutral/positive, and 12 articles are predominantly positive. This means that 44% of the articles are negative, 19% of the articles are neutral, 13% of the articles are positive, 18% of the articles are negative/neutral, and less than 6% of the articles are positive/neutral. Figures 1 and 2 below depict these findings graphically. When one combines the negative/neutrals with the negatives and the positive/neutrals with the positives, the actual percentages change to 62% negative, 19% neutral, and 19% positive. See Figure 3 below for the graphical depiction.
What are the coding criteria used to determine if an article should be labeled positive, positive/neutral, neutral, negative/neutral or negative? An article is positive when it either praises the FDA for its efforts to deal with the problem or addresses the FDA’s preventive and proactive measures to try to get Merck to work on the problem. For example, in an article entitled “For Merck, the Vioxx Paper Trail Won’t Go Away” the author refers to the FDA’s efforts to add warnings, noting further that Merck scientists’ are dismissing the FDA
recommendations from the FDA scientists as “untrustworthy.” The article implicitly is blaming Merck rather than the FDA. Another example is an article entitled “Risky Drugs: A Patient’s Choice” in which the author, in an editorial, explains that the FDA is in an impossible position and has not really done anything wrong. The editorial is meant to highlight the challenges facing the drug manufacturers and the FDA, specifically referencing the relationship to doctors. An article is positive/neutral when the overall article is discussing the negative controversy, but does not place any blame on the FDA. These articles lean towards the positive rather than the purely neutral because they imply that the FDA is moving towards a solution. For example, an article entitled, “Chief Executive Quits at Merck; Insider Steps Up” makes no mention of the FDA’s role in the Vioxx scandal, but rather, mentions that Merck is working with the FDA to decide the future of Vioxx on the market. Thus, this is not as positive as the articles that explicitly highlight or praise FDA efforts, but it is not merely neutral either because it implies that the FDA is working to fix the problem.

An article is neutral when it is not about the FDA’s role in the scandal itself, but is just reporting a fact about the FDA in relation to the Vioxx controversy. For example, an article entitled “2nd Trial for Merck on Vioxx Begins” mentions the FDA only to report that manufacturer Merck is emphasizing the FDA’s approval of Vioxx in its public and court statements. Also, an article is neutral when it has both positive and negative aspects so that it is too subjective to label it one way or the other. For example, an article entitled “Big Drug Makers See Sales Erode With Their Image” mentions how the FDA is possibly blocking more

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26 Alex Berenson, *For Merck, the Vioxx Paper Trail Won’t Go Away*, N.Y. TIMES, Aug. 21, 2005.
medications than it would have or should have because of a Vioxx backlash.\textsuperscript{30} However, the article is positive in that it places most of the blame on Merck rather than on the FDA. Finally, an article is neutral when it blames the FDA for problems, but also talks about solutions and attempts at reform. For example, one article entitled “Can Bob Dole Save Your Life? Ask Your Doctor” speaks about actions taken by the FDA to address advertising problems. However, the article does this in a negative light, stating that “widely publicized problems prompted the FDA to announce that the agency would be more aggressive in monitoring ads that make unrealistic promises with scant mention of risks.”\textsuperscript{31} Thus, even though the article is talking about what it thinks is positive change, it does so in a way that reminds the public of the negativity and bad press that the FDA has received recently.

An article is negative when it places blame on the FDA for Vioxx and only reports the negative aspects of the problem. An article is also negative when it criticizes the leadership at the FDA or highlights numerous critical quotations from public figures outside the FDA. One reoccurring storyline references acts that the FDA has done wrong. An article entitled “Evidence in Vioxx Suit Shows Intervention by Merck Officials” only mentions the FDA to point out that it never publicly disclosed its concerns about any trial information it received from Merck.\textsuperscript{32} Although this is a fact, the article implies that the FDA is deceiving the public or at least not being forthcoming. Also, many articles blame the FDA for not taking responsibility for Vioxx. In addition, frequently an article is completely unrelated to the FDA, yet randomly include some information about the FDA’s role in the Vioxx controversy. For example, an article entitled “Drug Buyer, Beware” focuses on limiting punitive damages for consumers, yet it also remarks that the “FDA should take responsibility” for problems like Vioxx. The most obvious negative

\textsuperscript{30} Alex Berenson, \textit{Big Drug Makers See Sales Erode With Their Image}, \textit{N.Y. TIMES}, Nov.14, 2005.
\textsuperscript{32} Alex Berenson, \textit{Evidence in Vioxx Suit Shows Intervention by Merck Officials}, \textit{N.Y. TIMES}, Apr. 24, 2005.
articles spend the whole time attacking the FDA, its regulations, and its infrastructure.\textsuperscript{33} For example, one article entitled “Overdosed and Oversold,” an editorial, says that the agency is in need of reform and that the FDA fails to spot the warning signs.\textsuperscript{34} The article then goes on to suggest that what is needed is an “updated regulatory system [that] can provide [the FDA] with the information [it] need[s] to come up with the right answers.”\textsuperscript{35}

Finally, an article is negative/neutral when it makes clear that the FDA is partly responsible for Vioxx, but offers some positive quotes or talks in an objective manner. It is not neutral because the positive quotes are significantly outweighed by the negative commentary. For example, one article entitled “At FDA, Strong Drug Ties and Less Monitoring” starts off criticizing the FDA for its failure in monitoring and gives specific examples of some of the FDA’s weaknesses.\textsuperscript{36} However, the article does mention that the FDA suffers from lack of resources and also offers a potential solution to the problems.\textsuperscript{37} As such, while negative, it tends to offer some escape for the FDA as well as positive future developments. Another example of this type of article is “Bush Nominee Wants States to Get Medicaid Flexibility” in which the article negatively says that “the FDA has failed time and again to ensure that unsafe drugs are kept off the market.”\textsuperscript{38} However, at the same time, it quotes industry insiders saying that new leadership in the FDA will try to restore its reputation after Vioxx.\textsuperscript{39}

It is hypothesized that the \textit{New York Times} would have predominately negative coverage, albeit with some neutral coverage and very little positive coverage. The results are close to this hypothesis except that there is a little more positive coverage than predicted. Perhaps the

\textsuperscript{34} Merrill Goozner, Editorial, \textit{Overdosed and Oversold}, N.Y. TIMES, Dec. 21, 2005.
\textsuperscript{35} Id.
\textsuperscript{36} Gardiner Harris, \textit{At FDA, Strong Drug Ties and Less Monitoring}, N.Y. TIMES, Dec. 6, 2004.
\textsuperscript{37} Id.
\textsuperscript{39} Id.
newspaper is less critical of the FDA. However, to really understand these results, one needs to compare the results here to both the later topics within the *New York Times* and with the other newspapers’ similar coverage.

**Research Question 2: More One-Sided or Balanced**

Another important framing consideration is the actual content of the articles rather than just its overall tone towards the FDA. The second research question addresses the coverage within the newspaper article: does the newspaper give the FDA a chance to defend itself or is the article one-sided? The study focuses on only predominately *negative* articles for this data. After all, the positive or neutral articles are labeled positive or neutral because they likely have some defense or positive reporting on Vioxx. In addition, since the Vioxx scandal is an overall negative story, most articles have mostly negative commentary. Thus, the most interesting question asks how negative stories about the FDA within predominately negative articles choose to balance the story. Are the articles fair to the FDA?

Note that the one-sided vs. balanced article coding tends to be the most subjective since many articles labeled negative/neutral might be negative to another coder. Recall that the reliability test indicates that this area is the weakest for coding reliability. Yet, by using only the negative articles, the only discrepancy is that some other coders might have had one or two of the negative/neutral articles in this category. This should hopefully not have such a huge impact on the results. The *New York Times* has 43 articles labeled predominately negative. Out of those 43 articles, 23 are one-sided whereas 20 are balanced. This means that 53% of the articles are one-sided and 47% of the articles are balanced. See Figure 4 below. This is a close divide and more even than hypothesized. Does this mean the newspaper is fairly reporting on the FDA, or would a reader prefer to have all balanced articles with a result of 0% one-sided and 100% balanced?
One can defend an even split, arguing it is a positive development given that running a newspaper is a business and this sometimes includes more one-sided coverage. While understandable and possibly even the inevitable reality, this does not mean that the even split is preferable over a 100% balanced style.

A qualitative study shows some interesting recurring patterns within the one-sided reporting. One customary technique of the *New York Times* is to include negative coverage, but to make it clear that the “critics” are the ones making these negative charges, not the newspaper. This allows the newspaper to publish negative stories, but also appear to be objective. For example, in an article entitled “Leader of FDA Steps Down After a Short Turbulent Tenure” the newspaper quotes numerous “critics” in the industry, saying that the FDA has a “too cozy relationship with industry” and that the agency has made a “mockery of the process of evaluating scientific evidence.” The FDA is given no chance to defend with its own quotes. This type of implicit frame that seems objective can arguably be the most dangerous if readers do not realize

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40 See the background material on framing.
the article is one-sided. Another example is when the article is neutral overall, but manages to include a small harsh remark. For example, an article entitled “Good Riddance to a Bad Drug” talks primarily about Merck and Vioxx, but then proceeds to call the FDA a “bystander.” The FDA is given no defense and the sentence almost passes unnoticed. This is possibly another framing technique since it deceptively influences the reader because the reader is only really learning one side of the controversy.

A common technique for a balanced article is when the newspaper publishes an article that appears to be stating the facts, but that is actually implying that the FDA is to blame. For example, many extremely negative articles use weak wording and tend to paint a more neutral picture of the FDA. As a result, while negative, the articles appear to be more balanced since they do not place blame on the FDA or explicitly point out its weaknesses, but are also not positive either. Another balanced article example is when the articles do not blame the FDA directly at all, but then talk about structural and reform measures that might prevent this in the future. While the implication is that the FDA failed, making this negative, the article also talks about how the problem can be fixed, a slight positive.

Research Question 3: More Negative, Neutral, or Positive Editorial Coverage

Besides an overall report on the positive or negative coverage, one common place to look for newspaper bias is the editorials or letters to the editor (collectively called “editorials” hereinafter and in footnotes). The editorials are the one time that a newspaper can deliberately choose articles that are subjective. Many scholars argue that the issues discussed here are the most indicative of an issue or value slant of a media outlet.

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43 Id.
Out of the 94 articles, 13 are editorials, or 14% of the articles. Within these 13 articles, 1 is positive, 4 are neutral, and 8 are negative. This means that 31% neutral, 8% positive, and 61% negative. See Figure 5 below. Interestingly, this is very similar to the newspaper’s overall breakdown for negative coverage depicted on Figure 3 where 62% of the articles are negative. However, the positive and neutral sections do not work out quite as well, with 8% compared to 19% being positive, and 31% compared to 19% being neutral.

The one positive editorial, mentioned above, entitled “Risky Drugs: A Patient’s Choice” defends the FDA, pointing out the tough position the agency is in and that it has not done much wrong.\footnote{Editorial, Risky Drugs: A Patient’s Choice, N.Y. TIMES, Mar. 22, 2005.} The four neutral editorials either point out both sides of the story, or more commonly, offer an excuse for the FDA. For example, one article worries that the FDA will now become overly cautious in the future and take away a consumers right to choose if that consumer wants to take Vioxx.\footnote{Editorial, Drugs That Do Harm, N.Y. TIMES, Dec. 3, 2004.} The article is not necessarily critical because it is talking about a future fear, but it is not positive either since it is expressing doubt in the FDA. Another example is when an article mentions the FDA’s role in Vioxx, but does not color the commentary at all, simply
pointing out that the FDA has been criticized for its drug approval process. Finally, an editorial is negative either for arguing that the FDA is almost completely to blame for the Vioxx scandal or that the agency is biased or subject to political whims. For example, one editorial entitled “Experts and the Drug Industry” criticizes the FDA for appointing biased experts to government advisory panels and argues that there is an undeniable link between the drug companies and the FDA researchers. An editorial is negative when it expresses outrage at the FDA for approving Vioxx, like one article which highlights that the FDA is not taking appropriate steps to resolve the problem after it learned critical information.

Research Question 4: More Liberal or Conservative Leaning

Finally, the last research question focuses on the liberal or conservative slants within the articles. A conservative criticism should express concern that the FDA is now becoming overly cautious because of Vioxx. On the other hand, a liberal criticism should express outrage or criticize the FDA for being too quick to approve drugs. This liberal/conservative divide is based on discussions with my professor in which we agreed on these categories for Vioxx and my own study of the articles. For example, some articles mention these views and quote conservative or liberal pundits or groups.

Out of 94 articles, 32 mention one of the two viewpoints. 12 of the articles complain that the backlash with Vioxx causes the FDA to be overly cautious. On the other hand, 18 of the articles complain that the FDA is too quick to approve drugs or that the regulatory regime is ineffective and needs immediate reform. Two articles mention both positions. For example, one article entitled “Looking for Adverse Drug Effects” mentions both viewpoints and points out the

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difficulty the FDA is in as a result of the differing views.\textsuperscript{48} This works out to be 56\% with a liberal criticism, 38\% with a conservative criticism and 6\% with both. See Figure 6 below. These results are similar to the hypothesis for the New York Times in which it was predicted that there would a liberal bias, but that the discrepancy between liberal and conservative coverage would not be so large.

\begin{figure}[h]
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\includegraphics[width=0.5\textwidth]{Figure6.png}
\caption{The New York Times Vioxx Liberal/Conservative Breakdown}
\end{figure}

2. Plan B

The New York Times published 62 articles on the Plan B controversy between January 1, 2004 and October 1, 2006. These dates are chosen because they represent the most reported time-period, noticeably stopping around October of 2006. Like with Vioxx, there likely should be mostly negative portrayals of the FDA in these articles due to the negative subject. However, notice that there are differences in the type of negativity between topics. Vioxx is a drug that the FDA approved which ended up injuring or killing a small percentage of people. Plan B, on the other hand, is in the news predominately in relationship to the FDA and the approval process for

over-the-counter sales. Is the *New York Times* consistent in its one-sided or balanced reporting and does it continue to have a liberal-slant for this topic as well?

**Research Question 1: More Negative, Positive, or Neutral Articles Overall**

The results are as follows: 37 articles are predominately negative, 10 articles are negative/neutral, 9 articles are neutral, 1 article is neutral/positive, and 4 articles are predominantly positive. This means that 60% of the articles are negative, 15% of the articles are neutral, 7% of the articles are positive, 16% of the articles are negative/neutral, and 2% of the articles are positive/neutral. Figures 7 and 8 below depict these findings. Like Vioxx, the combined percentages are 77% negative, 15% neutral, and 8% positive. See Figure 9 below.

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**Figure 7: The New York Times Plan B Positive/Negative Overall**

![Graph showing the distribution of article sentiments](image-url)
What is a positive, positive/neutral, neutral, negative and negative/neutral article? The criteria are slightly different than with Vioxx since there is no clear third party to place blame on like Merck. Most articles about Plan B deal in some way with the FDA’s handling of the situation. The few positive articles receive this label because they both do not criticize the FDA and they give a reason why the FDA is not necessarily wrong. For example, one article entitled “Pharmacies Balk on After Sex Pill and Widen Fight” talks about how the FDA is pressured to approve the drug for over-the-counter sales and that there are more considerations for the FDA
than just what popular opinion says. Another similar example is when an article supports the FDA’s decision not to approve the drug immediately since the FDA has a bigger picture in mind, such as focusing on important values like teenage pregnancy. One article entitled “What Do Women Want? A Pill or Much More” supports the FDA slow movement on approval since sexually transmitted diseases and promiscuity are important considerations to the Plan B approval process. The one positive/neutral article entitled “Senate Leaders Postpone Vote on FDA Chief” does not portray the FDA negatively. Rather, it makes clear that it is the liberal figures and the Democratic Party that are the real critics of the agency for being slow on approving the drug. Thus, the article implies that this is an ideological, bias attack on the FDA. It is neutral, however, because this ideological point requires the reader to take an inferential step rather than directly stating that this is an ideological debate.

Like with Vioxx, an article is predominately neutral when it reports an objective fact about the approval process or about Plan B in general rather than attacking or praising the FDA’s handling of Plan B. Furthermore, an article is neutral when it reports both sides, emphasizing equally the need to protect teenagers from easy access to the birth control and the growing desire to make the preventive drug easily available. For example, an article entitled “Nominee to Lead FDA” mentions both points and also leaves out biased quotes from political scholars.

An article is negative when it accuses the FDA of being too political, mentions that the FDA is beholden to the Bush Administration, blames the FDA for not approving Plan B quickly enough, or scolds the agency for basing decisions on “theology” and “ideology” rather than on “science.” For example, in an article entitled “Albany’s Duty on Birth Control,” the author says

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49 Monica Davey and Pam Belluck, Pharmacies Balk on After Sex Pill and Widen Fight, N.Y. TIMES, Apr. 19, 2005.
51 Anne Kornblut, Senate Leaders Postpone Vote on FDA Chief, N.Y. TIMES, Apr. 14, 2005.
52 Gardiner Harris, Nominee to Lead FDA, N.Y. TIMES, July. 19, 2005.
that the FDA is bowing to the political and religious right.\textsuperscript{53} The article states that the agency is using ideology to make decisions rather than the more appropriate scientific evidence.\textsuperscript{54} This science over ideology line is quite common throughout many articles on this topic. For example, another article entitled “Contra-Contraception” in the \textit{New York Times Magazine} exclusively reports on how the FDA is acting based on politics rather than on science.\textsuperscript{55} The article then goes on to criticize the opposing arguments, accusing the FDA of hiding behind a promiscuity rationale that makes little sense. The article says that the FDA’s response to Plan B is representative of how the current Administration entangles political science and religious beliefs.\textsuperscript{56} An article is also negative when it directly criticizes the FDA for its handling of the controversy. For example, one article entitled “FDA Approves Broader Access to Next-Day Pill” mentions how the FDA’s image overshadows its impact on public health. The article points out that there are many opinions out there, but that the FDA must realize that it is the agency in the spotlight and it has yet to master how to handle the differing views.

Finally, an article is negative/neutral when it just reports what the FDA is doing, but unlike the neutral articles, it manages to include noticeable critical quotes. For example, an article entitled “FDA Gains Accord on Wider Sales of Next Day Pill” talks objectively about the original delay and the FDA’s promise to make a decision.\textsuperscript{57} Yet, it does not stop there. The articles then points out that many critics think that political considerations are involved with the FDA’s actions.\textsuperscript{58} A similar example is when an article is more balanced in that it articulates the opposing considerations, yet this neutral reporting is overshadowed by the amount of negativity

\textsuperscript{54} Id.
\textsuperscript{56} Id.
\textsuperscript{57} Gardiner Harris, \textit{FDA Gains Accord on Wider Sales of Next Day Pill}, N.Y. TIMES, Aug. 25, 2006.
\textsuperscript{58} Id.
in the article. For example, one article entitled “FDA Shifts View on Next Day Pill” includes quotes from FDA officials explaining that Plan B approval is simply part of a decision making process.\textsuperscript{59} However, the article is also engulfed with critical quotes. Hillary Clinton is quoted as saying that the FDA is practicing “delay tactic[s]” and that it is clearly entangled with the stubborn health policy debates of the Bush Administration.\textsuperscript{60}

It was hypothesized that there would be predominately negative coverage, albeit balanced with a respectable amount of neutral articles. This is true except that there are more negative articles than predicted. As compared to Vioxx with 62\% negativity, the \textit{New York Times} is much more negative in its Plan B coverage with 77\% negativity.

\textbf{Research Question 2: More One-Sided or Balanced}

The second research question addresses balance and points out any interesting framing techniques within the articles. Like with Vioxx, this section uses only the negative articles. The \textit{New York Times} has 37 articles that are predominately negative. Out of those 37 articles, 26 are one-sided whereas 11 are balanced. Recall again that this is very subjective. For example, much of the positive support for the FDA (such as emphasizing the need to consider teen pregnancy) might actually be perceived as a negative criticism of the FDA for being too conservative. The percentage breakdown is 70\% one-sided and 30\% balanced. See Figure 10 below for the graphical depiction. For Vioxx, the split is 53/47. Thus, the \textit{New York Times} is apparently not only more apt to publish negative articles on Plan B over Vioxx, but it is also more skewed in the article contents. Why might this be the case? One possibility is that Plan B offers a more clearly recognized liberal and conservative position (which will be addressed in more detail below). In other words, the conservative values of family, abstinence, and religious respect are more

\textsuperscript{60} Id.
recognized in the general public as a conservative value than a fear that the FDA is being overly cautious. The New York Times is constantly being categorized as a “liberal” newspaper. If this categorization is correct, then it makes sense that for issues that lend themselves easily to liberal values, one might find a more one-sided reporting on that topic (if the liberal values mean negative press and the conservative values mean positive press, as is the case here).

A qualitative study shows some interesting recurring patterns within the reporting. Similar to the Vioxx example, one pattern within the one-sided coverage is to include quotes from important political figures. For example, Senator Clinton is constantly referenced in the articles, calling the Plan B decision “long overdue” and criticizing the agency for its ties to Bush.\(^{61}\) Other articles report on a new development (like when a person quits the FDA), but, at the same time, includes quotes from an involved individual that is clearly biased. For example, an article entitled “FDA Consultant Quits over Contraceptive” mentions a quitter’s quote where he says that he quit “in protest over the handling of Plan B.”\(^{62}\) The article then goes on to mention more critiques of the FDA using the speakers quotes, including the politics vs. science

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\(^{61}\) See e.g., Id.
distinction. There is no chance for the FDA to defend itself. While the *New York Times* tries to appear objective by including quotes rather than personal commentary, it also chooses which quotes to include. Not choosing positive quotes or responses from FDA officials is itself a type of framing.

Another framing technique is the choice of adjectives or words used. For example, an article entitled “New Chief for Women’s Health Office” mentions that a new person has been appointed due to a “delayed decision” on Plan B. Although it appears to be objective, the “delayed” adjective implies that the FDA should have made a decision already and has inappropriately not done so. The article colors the commentary in what might appear to be an objective manner.

Another interesting pattern is where the newspaper places the negative quotes. In the *New York Times* coverage, the stories usually begin and end with the negative quotes. If the article does not use quotations, it still tends to open with a very negative sentence or have a negative title. For example, one article is entitled “Politics as Usual, and Then Some.” Before one even reads the article, the FDA is already being accused of playing politics. The more balanced articles show a similar theme where the positive quotes tend to be closer to the middle of the articles or at the very end after a long tirade about the FDA’s failures. Thus, even the balanced articles are arguably one-sided in framing since they include the defensive quote or sentence in an easily overlooked place.

**Research Question 3: More Negative, Neutral, or Positive Editorial Coverage**

The third research question asks about the issues reported on in the editorials and whether the editorial is negative, positive, negative/neutral, positive/neutral or neutral. Recall that

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63 Id.
editorials are interesting since the newspaper can choose articles that intentionally express a particular political belief. As contrasted with Vioxx, Plan B coverage has many more editorials. Out of the 62 articles, 21 articles are editorials or 34% (as compared to 14% for Vioxx). Within these 21 articles, 2 are positive, 1 is neutral, and 18 are negative. This works out to be 5% neutral, 10% positive, and 85% negative. See Figure 11 below. Unlike Vioxx, the numbers here do not correspond as well to the overall reporting of the newspaper on this topic where only 77% of the articles are negative. The number is even lower when one includes the middle categories at only 60% negative.

![Figure 11: The New York Times Plan B Editorial Breakdown](image)

These results are particularly interesting because it might indicate a liberal bias. An article has a conservative bias when it tends to address issues of teen pregnancy/unprotected sex. On the other hand, an article has a liberal bias when it tends to address science, ideology or ties to the Administration. For example, if the article is defending the FDA for protecting teenagers, the author is expressing a conservative view. Yet, these numbers at least lead to the conclusion that the *New York Times* shows a propensity to criticize the FDA rather than praise it. Whether
this is a liberal bias against the current Administration or just a reflection of the negative story depends on the editorial contents.

When one looks at the contents, however, it does appear that many of the negative articles address the liberal viewpoint and the positive articles address the conservative viewpoint. The two positive editorials praise the FDA for its handling of the drug. For example, as mentioned above, the article entitled “What do Women Want? A Pill, or Much More?” supports the FDA for its concern for promiscuity. On the other hand, many articles reference the influence of the Bush Administration and politics on the FDA. For example, one editorial entitled “Science or Politics at the FDA?” talks about how the delay at the FDA to approve this drug is “scary” since it might represent religious and political pressure. The few negative editorials that do not address this topic just blame the FDA for the delay and complain that there is no real excuse for it. The one neutral editorial is a short letter complaining that the New York Times does not report fairly on the Plan B issue, stressing that the topic is “sensitive” and that the newspaper should give more information about the safety of the drug. The article does not really criticize the FDA.

When compared to Vioxx, this reporting again seems to be more negative overall. One possible reason is that the public who writes the letters to the editor hears the same criticism over and over again. The “ideology over science” line is so common in the articles that it is not surprising that ordinary citizens might cling to this critique as compared to Vioxx which has more positive themes for the FDA, such as third parties.

Research Question 4: More Liberal or Conservative Leaning

The editorials are not the only places where this liberal tendency is uncovered. Combining the editorials with all of the articles, out of 62 articles, 36 mention a liberal critique such as the Bush Administration, political ideology, or some type of political or religious influence on the FDA. Only 10 mention conservative values such as protection of children. Out of those 10 articles, 5 also mention the liberal side. Thus, only 5 articles focus predominately on the conservative values. This means that roughly 78% of the overall articles are supportive of a liberal agenda, 11% of the articles take a more balanced stance and included both sides of the story and 11% of the articles (40% of which are the positive editorials mentioned above) articulate a conservative view. See Figure 12 below.

Note that unlike with Vioxx, where both the liberal and conservative sides are negative for the FDA, here the conservative side is supportive of the FDA. As a result, it seems that most of the conservative articles also tend to be the positive or neutral articles. As with the other results, there is a much higher propensity for liberal reporting than with Vioxx where only 56% of the articles are liberal and 38% are conservative. Again, one explanation for this difference is the more clearly defined liberal and conservative values on this topic.

Figure 12: The New York Times Plan B Liberal/Conservative Breakdown
3. Ephedra

The *New York Times* published 35 articles on the Ephedra controversy between January 1, 2002 and January 1, 2004. Notice that this number is much smaller than the *New York Times* Vioxx and Plan B coverage. One possible reason is that the topic is less “interesting” than the other two: since not everything about Ephedra is negative, it might be considered less newsworthy. Although Ephedra is a negative story overall, many commentators do not think that the FDA necessarily handled the Ephedra problem incorrectly, especially during this time period as compared to earlier failed efforts. Given this difference, it should be interesting to see if the more liberal papers still criticize the FDA more than the more conservative papers. It was hypothesized that since the *New York Times* has liberal reputation, it might include critical articles on the FDA and the Bush Administration indirectly rather than bother to report on positive stories or viewpoints. Surprisingly, this hypothesis was incorrect.

**Research Question 1: More Negative, Positive, or Neutral Articles Overall**

The results are as follows: 6 articles are predominately negative, 2 articles are negative/neutral, 15 articles are completely neutral, 4 articles are neutral/positive, and 8 articles are predominantly positive. This means that 17% of the articles are negative, 43% of the articles are neutral, 23% of the articles are positive, 6% of the articles are negative/neutral, and 11% of the articles are positive/neutral. Figures 13 and 14 below depict these findings graphically. Like the other examples, combining the negative/neutral with negatives and the positive/neutral with positives, changes the percentages to 23% negative, 43% neutral, and 34% positive. See Figure 15 below for the graphical depiction.
Figure 13: The New York Times Ephedra Positive/Negative Overall

![Bar chart showing the distribution of positive, positive/neutral, neutral, negative/neutral, and negative mentions of Ephedra.

Figure 14: The New York Times Ephedra Positive/Negative Overall

![Pie chart showing the percentage distribution of positive, positive/neutral, neutral, negative/neutral, and negative mentions of Ephedra.]
What does a positive, positive/neutral, neutral, negative/neutral, or negative article mean in the Ephedra situation? An article is predominately positive when it praises the FDA for its decisions or when it blames a third party for any Ephedra problems. For example, an article entitled “Complaints and Support for Diet Pill at Congressional Hearing” highlights how the FDA cannot be blamed for any developments that occur when a third party lies about symptoms.  

Many articles, such as one entitled “Baseball: Officials Urges Ban of Ephedra by Baseball” takes the opportunity to point out that the FDA is just trying to do its job with Ephedra.  

There is no negative criticism or accusations against it. Other articles go even further by placing blame directly on others. For example, one article entitled “Books on Health: Sometimes, the Labels Lie” expressly places blame on the Dietary Supplement Act as the cause of the FDA’s failure to stop these type of products from getting on the market.  

The article points out that even if the FDA does everything right, the Act will still work against it. Other

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72 Id.
articles simply express how the FDA is on top of the problem and aware that it must be dealt with quickly.

The positive/neutral articles do not fit into the predominately positive criteria because they praise the FDA in a less direct, positive way. For example, an editorial entitled “Danger of an Herbal Supplement League” does not criticize the FDA, but rather articulates how the author hates the law at issue in this case. The author makes clear that he thinks the FDA needs more evidence and implies that, in the future, the FDA might be more to blame. However, future fear is not a strong critique and the article is still positive overall. Another example is where the article points out the tough situation the FDA is in like “Expert Panel Finds Flaws in Diet Pill Safety Study.” The article is not predominately positive because it is not providing a third party to blame or praising the FDA. Rather, it is blaming the FDA’s structure itself and implying that the FDA is working within its limited resources.

Many articles on the Ephedra coverage fall in the neutral category. These articles take a very objective approach, simply reporting on the FDA’s structural and legal constraints and on what it is doing to work towards getting Ephedra off the market. Like with the previous examples, an article is neutral when it has little to do with the FDA’s handling of the situation. It might point out the need for reform in an objective, uncritical way. For example, one article entitled “US to Prohibit Supplement Tied to Health Risk” highlights how citizens might have been unhappy with the amount of time Ephedra remained on the market, but that most understand the difficult regulatory position the FDA is in for situations such as this. This

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75 *Id.*
An article is negative when it tends to accuse the FDA of not doing enough on Ephedra or says that the government is simply ignoring the situation. For example, one article entitled “Pro Football Back in High School, Vick was Far From Being the Running Man” mentions that the government is simply not acting fast enough. The author wants the FDA to regulate the dietary supplement industry and blames it for the largely unregulated arena that existed in 2002. Another common negative theme is when an article speaks only of the FDA as being “weak” due to its regulatory and legal restrictions. This is negative and not neutral because the word choice paints the FDA as a powerless agency that is stuck doing what others tell it to do. This is different from the positive articles that use the weak laws as a reason to take blame away from the FDA or the neutral articles that used the weak laws as a fact. For example, an article entitled “After a Pitcher’s Death, Marketers of Dietary Supplements Try to Dodge the Taint of Ephedra” only mentions the FDA to make certain that people know the FDA is weak and “lacks power to ban them” itself. Other articles criticize the FDA for its lack of real data on the issue.

Finally, an article is negative/neutral when it expresses praise that the FDA finally entered the debate and acted on the issue, but does so in a way that makes it clear that the FDA should have acted more effectively earlier and handled the situation better. One article entitled “FDA to Put New Rules on Dietary Supplements” praises the FDA for acting, but points out that it could have imposed good manufacturing standards and that this is “long overdue and

77 Damon Hack, Pro Football Back in High School, Vick was Far From Being the Running Man, N.Y. TIMES, Nov. 24, 2002.
78 Id.
inadequate.” The article goes on to lament the absence of strong FDA enforcement. Accordingly, it is neutral because of the overall praise, but the criticisms make it more negative.

This is quite different than the results from Vioxx and Plan B. Here, the predominantly negative articles have a lower percentage than the neutral and the positive articles. Since Ephedra is arguably a more positive story overall than the other examples, the fact that the New York Times reported positively on the FDA might mean it reports objectively, based on the story topic rather than on bias or agenda. On the other hand, the real test will be to compare its Ephedra coverage with other newspapers to see if it falls in line with these newspapers coverage or whether it tends to still have less positive or neutral articles for a more positive story.

Research Question 2: More One-Sided or Balanced

The second research question addresses the balance within the articles. Do the negative articles tend to give both sides or rather focus only on the negative criticisms? The New York Times has 6 articles that are predominately negative. Out of those 6 articles, 4 are one-sided and 2 are balanced. This means that 67% are one-sided and 33% are balanced. See Figure 16 below. This falls in the middle of the Vioxx and Plan B reporting where there is a 53/47 Vioxx split and a 70/30 Plan B split. Surprisingly, these results have a wider split than Vioxx. Since the story is more positive, one might think that the negative articles would try to include more positive coverage. Perhaps this is indicative of a negativity towards the FDA. On the other hand, it might be that when the New York Times decides to publish the negative articles, it chooses to focus on the negativity to counterbalance against the more positive and neutral articles overall. Another explanation might be the small number of articles as a basis for percentage breakdowns. Due to this problem, it is difficult to see any real patterns. On a side note, there does not seem to be any particular consistency in the placement of negative or positive quotations.

Research Question 3: More Negative, Neutral, or Positive Editorial Coverage

The third research question addresses the content within editorials, specifically focusing on any liberal or conservative bias. Unfortunately, the editorial study does not work for this topic since only one article is an editorial. The article is entitled “Danger of an Herbal Supplement League” which criticizes the law, but tends to be neutral on the FDA’s role, not criticizing the FDA for not banning the drug right away without more evidence. The author implies that he supports the FDA’s decisions thus far.81

Research Question 4: More Liberal or Conservative Leaning

As with Vioxx and Plan B, editorials are not the only places to uncover value-laden reporting. Out of all 35 articles, 5 tend to have a liberal bias, 6 tend to have a conservative bias, and 1 mentions both points of view. Here a liberal and conservative bias is very hard to define. Something is liberal when it criticizes the FDA as compared to a conservative article that offers more positive support for the cautious, studied approach. The small number reflects the facts that most of the articles do not really criticize the FDA in either direction. Rather, they mostly report on the facts, such as the warning label requirements. In addition, many articles discussed

above place blame on the regulatory system or talk about the legal restrictions placed on the FDA. It is unclear whether these types of articles fit a liberal or conservative agenda and it is possible it really supports neither. Thus, based on the small number of articles, there is a 50% conservative focus, 42% liberal focus, and 8% use both viewpoints. See Figure 17 below.

These results are much more balanced when compared to the 78/11 split for Plan B and the 56/38 split for Vioxx. One reason might be the small sample and the lack of adequate frames for a liberal or conservative viewpoint. Another explanation is that this topic lends itself to more praise of the FDA than negative liberal criticism and so the newspaper should include more positive conservative viewpoints in the articles.

![Figure 17: The New York Times Ephedra Liberal/Conservative Breakdown](image)
B. The Los Angeles Times

1. Vioxx

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The second newspaper is the *Los Angeles Times*. That newspaper published 68 articles on the Vioxx controversy between October 1, 2004 and January 1, 2006. Like the *New York Times*, the *Los Angeles Times* also has more negative articles overall than positive or neutral articles. The results are as follows: 41 articles are predominately negative, 5 articles are negative/neutral, 14 articles are neutral, 0 articles are neutral/positive, and 8 articles are predominantly positive. This means that 60% of the articles are negative, 21% of the articles are neutral, 12% of the articles are positive, 7% of the articles are negative/neutral, and none of the articles are positive/neutral. Figures 18 and 19 below depict these findings graphically. When combining the negative/neutral with negatives and the positive/neutral with positives, the percentages are 67% negative, 12% neutral, and 21% positive. See Figure 20 below for the graphical depiction.

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**Figure 18: The Los Angeles Times Vioxx Positive/Negative Overall**

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As discussed in the methodology, the study uses the same coding techniques across the newspapers for consistency purposes. Thus, an article is positive when it addresses the controversy, but does not place the FDA in a blameworthy role. Also, articles that praise the FDA for any developments on Vioxx are classified as positive. Finally, articles that speak positively about the FDA’s proactive measures to work with Merck fall into this category. For example, one article entitled “Product Liability Hovers Over Pharmaceuticals” blames Merck for
the Vioxx controversy, faulting the company for failing to fully disclose its results to the FDA. Another article entitled “FDA Warns Aleve May Increase Heart Risks; Preliminary Findings Prompt Concerns on the Over the Counter Drugs and its Other Forms” talks about the positive developments at the FDA due to Vioxx and, specifically, how the FDA is now reacting well to the Aleve situation. Another article entitled “FDA, Drug Companies Deny Oversight Flaws” publishes defensive quotes of the FDA after a former employee, David Graham, accused the FDA of being “incapable” of making sure that unsafe drugs did not reach the public. The article says that the FDA “categorically reject[s] assertions that it failed to protect the public” and that Graham’s views do not align with the agency’s views of its safety record. Although this article is in defensive mode, it does provide a positive forum for the FDA to explain the Vioxx situation, something not seen very often.

Like the New York Times, an article is neutral when it reports facts in an objective matter, talks about solutions and reforms for the FDA, or offers equally positive and negative assessments of the FDA’s handling of the Vioxx situation. For example, one article entitled “Arthritis Drug Vioxx Pulled: Risk of Heart Attacks is Cited” simply tells about the 2004 developments with Vioxx and mentions the FDA’s future role. There is no implication yet that the FDA is at fault. One point of caution is that articles towards the beginning of the Vioxx problem tend to be more positive since less information was known by the public. Unfortunately, content based on timing is beyond the scope of this study. Another example is an article entitled “In the Dark About Drugs” in which the author highlights the Vioxx problem, but

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83 Ricardo Alonso-Zaldivar, FDA Warns Aleve May Increase Hear Risks; Preliminary Findings Prompt Concerns on the Over the Counter Drugs and its Other Forms, L.A. TIMES, Dec. 21, 2004.
85 Id.
blames it more on a lack of government funding than on the FDA. The article might even be positive since it is advocating for the FDA to have more powers, but since there is some direct criticism of the agency’s handling of Vioxx, neutral seems more appropriate.

An article is negative when the article blames the FDA for Vioxx, criticizes the FDA’s leadership and decision-making skills, or highlights numerous critical quotations from figures in the media. One article entitled “An Ailing, Failing FDA” implies that the scientists at the FDA do not study the drugs thoroughly and accuses the FDA of silencing FDA officials who want to warn others about the Vioxx problem. Other articles excuse the FDA of being too cozy with the drug companies. For example, one article entitled “The Drug-Approval Pendulum” talks about how the government’s defense and explanations in the Vioxx situation sound more like a “buddy relationship with Merck.” Other articles highlight the FDA’s failure to act quickly enough or, on the other hand, accuse the FDA of acting too quickly to get drugs to the market. For example, one article entitled “FDA to Institute Safety Board: The Goal is to More Quickly Identify Problems with Drugs and to Issue Alerts” talks about how the FDA is under pressure for its failure to act quickly on evidence it received about potential drug problems. The article expresses a longing for a change of a culture and points out that consumer confidence is shaken due to the FDA’s handling of Vioxx. On the other hand, other articles such as “Acting Chief is Nominated to Lead FDA” mention how in the past the FDA has been accused of being too cautious, (like with AIDS) but now it is turned in the opposite direction and is too quick to approve drugs.

91 Id.
Finally, an article is negative/neutral when it places blame on the FDA, but also offers a significant amount of positive quotes or defenses for the FDA. For example, an article entitled “It’s a Maybe for Drug Safety Unit” talks about FDA’s lax enforcement and monitoring in this situation, but then goes on to imply that change is underway and that the FDA is trying to improve. The article is still negative, but the improvement sentences provide some neutrality missing from many of the negative articles.

It was hypothesized that there would be predominately negative articles on the Vioxx controversy, or, conversely, that there would be very few positive articles. This seems to be the case. However, the more interesting results are in the balance split and the liberal/conservative bias because the topic lends itself to negative FDA coverage.

Research Question 2: More One-Sided or Balanced

The second research question studies the content of the articles, noting whether a negative article is one-sided or balanced. The Los Angeles Times has 41 articles that are predominately negative. Out of those 41 articles, 15 are one-sided whereas 26 are balanced. This means that 37% are one-sided and 63% are balanced. See Figure 21 below. This is in line with the hypothesis that a significantly higher number of articles would be one-sided rather than balanced.

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An article is one-sided when it accuses the FDA of failing with Vioxx. For example, an article entitled “FDA Chief Crawford Resigns” talks about the Vioxx problem and includes only negative quotes, saying that the agency has squandered the public’s trust and that its “reputation as the gold standard in public health” is now tarnished. On the other hand, an article is balanced when it includes a positive or neutral quote or idea, but not enough to make the article negative/neutral. For example, many negative articles talk briefly about the future. One article entitled “FDA Warns of Celebrex Heart Risk” mentions how the “public is left wondering when the next shoe will drop” but then includes a FDA defensive quotation saying that the system is improving, as Celebrex has shown.

One framing pattern is the use of adjectives and nouns to describe the FDA. For example, many articles choose quotes that refer to the FDA as a “failure” or “impotent.” One article talks about the “beleaguered agency.” Yet, the author of a wide majority of the Los Angeles Times Vioxx articles is the same person, Ricardo Alonso-Zaldivar. As a result, it is unclear whether this is a framing technique of the Los Angeles Times or whether it is a stylistic

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choice of one author. Like the *New York Times*, this newspaper also tends to include a lot of quotations. In fact, many articles repeat the same quotations from the same officials when it fits the story. Unlike the *New York Times*, the quotations are not placed as blatantly at the beginning and end. Whether this is a deliberate attempt to fairly spread out the positive and negative quotes or rather just a reflection of the organization of the story is unclear.

**Research Question 3: More Negative, Neutral, or Positive Editorial Coverage**

The third research question focuses on editorials to uncover any type of issue or liberal/conservative bias. Out of the 68 articles, 15 are editorials or 22%. Within these 15 articles, 2 are positive, 3 are neutral, and 10 are negative. This is equivalent to 20% neutral, 13% positive, and 67% negative. See Figure 22 below. Interestingly, this is almost exactly equivalent to the overall breakdown of positive, neutral and negative coverage only, depicted on Figure 20. Overall 67% of the articles are negative, the exact same amount here. The positive and neutral sections are only off by one percentage point each (12% for positive and 21% for neutral), which is statistically equivalent given the small number of articles. The numbers are quite similar when one includes the middle categories in Figure 19, with the only difference being 60% negative rather than 67% negative. As such, the *Los Angeles Times* is at least consistent overall in the type of coverage it gives to Vioxx, not showing any more bias in the editorial section than in the whole newspaper. However, this does not mean that the whole newspaper is not bias overall, which should be clearer in the newspaper comparison.
The positive editorials blame Merck and accuse the company of deliberately trying to hide things from the FDA. The neutral editorials criticize the problems surrounding the FDA rather than the FDA itself. For example, one article entitled “Letting the Dogs Out” talks about how the FDA is “ridiculously underfunded” and how it is this funding that is responsible for many of the agencies problems.  

A negative editorial is usually highly critical of the FDA, either calling it names such as the “failing FDA” or accusing the agency of suffering from communication and political problems. For example, one article accuses the FDA of failing to enforce its own rules. Other articles, such as “Murky Merck” directly state that the FDA “clearly failed in their regulatory duties.” The article then blames Congress for not giving the FDA the powers it needs.

**Research Question 4: More Liberal or Conservative Leaning**

The final question directly addresses the liberal or conservative tendencies of the newspaper throughout all the articles. An article is liberal when it mentions that the agency is too quick to approve drugs. On the other hand, an article is conservative when it complains

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98 *Id.*
about the FDA becoming too cautious. Out of the 68 articles, 4 articles support a conservative view, expressing fear that Vioxx has resulted in an overly cautious FDA. However, most of these articles only mention this briefly. For example, one article entitled “Drug to Test FDA’s Risk Tolerance After Vioxx” talks about how the FDA might become too cautious due to Vioxx and says that the industry will be watching the FDA to figure out what type of stance it is going to take on drug approval.99 On the other hand, 9 articles support a liberal view, expressing adamant disapproval of the FDA’s lax approval regime, blaming the drug company for being too quick to approve drugs or, alternatively, implying that the agency is in need of a regulatory reform or legal overhaul. Yet, unlike the New York Times, notice that only 14 articles fit either criteria. Interestingly, most negative articles deal very little with the FDA being too quick to put drugs out or being too cautious. Most of the critical articles deal with the public’s bad impression of the FDA or its lack of resources. Many articles talk about the lack of transparency and the FDA’s possible influence over scientists.

This means that roughly 64% of the articles mentioned a liberal value, 29% of the articles mentioned a conservative value, and 7% mentioned both. See Figure 23 below. This is very similar to the hypothesis that the Los Angeles Times should have a clear liberal bias, the most of any of the newspapers. Yet, a quarter of the articles do include a conservative value, so it is possible that the Los Angeles Times is more objective than its reputation suggests.

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The Los Angeles Times published 41 articles on the Plan B controversy between January 1, 2004 and October 1, 2006. Like with the New York Times, this section compares the reporting techniques within the Los Angeles Times between the three topics. The results are as follows: 23 articles are predominately negative, 8 articles are negative/neutral, 5 articles are neutral, 1 article is positive/neutral, and 4 articles are predominantly positive. This means that 56% of the articles are negative, 12% of the articles are neutral, 10% of the articles are positive, 20% of the articles are negative/neutral, and 2% of the articles are positive/neutral. Figures 24 and 25 below depict these findings graphically. Like Vioxx, combining the negative/neutral with negatives and the positive/neutral with positives, change the percentages to 71% negative, 18% neutral, and 11% positive. See Figure 26 below for the graphical depiction.

It was hypothesized that there would be predominately negative coverage. When one looks at the coverage without the negative/neutral and positive/neutral categories, the amount of negative coverage is quite high. As compared to Vioxx with 67% negativity, the Los Angeles
Times (like the New York Times) appears to be slightly more negative on Plan B with 71% negativity. Although the numbers are also close when one includes the middle neutral categories (60% for and 56% negative for Plan B), the major discrepancy between the two topics is the neutral and neutral/negative percentages. Vioxx reporting has more neutral articles rather than negative/neutral (21% and 7%) as compared to Plan B reporting (12% and 20%). However, since the negative/neutral is the most unreliable category, as demonstrated by the reliability test, this might not be as significant. This at least shows an overall tendency of the Los Angeles Times to report similarly between topics on a negative drug story affecting the FDA. Whether this is a coincidence or an actual trend would require a much more extensive study than this paper.
Like with Vioxx, this section uses the same criteria as the *New York Times* for deciding whether something is positive, positive/neutral, neutral, negative, or negative/neutral. An article is labeled positive because it does not criticize the FDA at all and places blame somewhere else. An article might also support the FDA’s actions in not rushing to approve Plan B. One article entitled “Logic is Misguided on Foolproof Drug Plan” mentions that people must understand
how easy access to plan B is not necessarily in the best interest of everyone.\textsuperscript{100} Another article entitled “Morning After Pill as a Morality Problem” acknowledges that perhaps ideology played a role, but argues that the ideological view here might be the right morals to live by.\textsuperscript{101} One important framing consideration is that all the positive articles are editorials. The one positive/neutral article entitled “Survey Finds Many are Misinformed on Access to Morning-After Pill” talks about how the FDA advisors recommended the approval.\textsuperscript{102} The article is not directly criticizing the FDA, but only mentions that the public is confused about what is accessible on the market right now. This could have easily been a neutral article only, but it tends to have a more positive tone.

An article is neutral when it simply states the facts and talks about the FDA’s role in a purely objective manner. For example, an article entitled “Questions & Answers: the Morning After Pill” published in 2006 states that the FDA has approved the drug and might soon approve it for over-the-counter.\textsuperscript{103} There is no mention of any previous FDA delay tactics. Another typically neutral article entitled “Birth Control Patch Might Raise Clotting Risk More Than a Pill” references the resignation of a worker due to delays with Plan B.\textsuperscript{104} However, the article only quotes the worker for an unrelated issue and simple reports the Plan B information to inform the reader why the worker is no longer with the agency.\textsuperscript{105} Other examples are in the articles towards the end of the controversy once the drug had been approved. One article entitled “FDA Age Restriction on Plan B is too Limiting” calls the approval “bittersweet” and expresses

\textsuperscript{100} Editorial, Logic is Misguided on Foolproof Drug Plan, L.A. TIMES, Aug. 5, 2006.
\textsuperscript{101} Editorial, Morning After Pill as a Morality Problem, L.A. TIMES, Feb. 17, 2005.
\textsuperscript{105} Id.
happiness that the decision has been made.\textsuperscript{106} However, the article implies that approval took too long and argues that much still needs to be done, specifically when dealing with age restrictions.\textsuperscript{107}

An article is negative when it accuses the FDA of placing ideology above science and for being beholden to the Bush Administration. For example, one article entitled “FDA Suggests Warnings on Condoms” includes a quick remark at the bottom of an unrelated article that the FDA is in a controversy between science and sexuality and that it has chosen to postpone an obvious decision “despite evidence showing the drug is safe.”\textsuperscript{108} Another illustrative example is entitled “Bush and the Mad Scientists” in which the article reprints oft-repeated quotes that the FDA makes a mockery of the process of evaluating scientific evidence and that this is a low point for the FDA.\textsuperscript{109} Furthermore, an article is negative if it simply accuses the FDA of making a bad decision without any mention of political influence. For example, an article entitled “A Bitter Pill” talks about how the evidence shows it should be approved, yet the FDA still has chosen to drag its feet.\textsuperscript{110}

Finally, an article is negative/neutral when it includes significant and noticeable critiques about the FDA in an article that is otherwise neutral. For example, an article entitled “Cervical Cancer Vaccine One Step From Approval” is not even about the Plan B drug, yet the article manages to throw in one sentence about how the FDA has not acted yet on this drug.\textsuperscript{111} Due to the small mention and the fact that this remark is technically true, the negative/neutral is more appropriate as compared to the negative only.

\textsuperscript{107} Id.
\textsuperscript{110} Editorial, \textit{A Bitter Pill}, L.A. TIMES, Sept. 6, 2005.
Research Question 2: More One-Sided or Balanced

The second research question asks whether the *Los Angeles Times* is more one-sided or balanced in its negative coverage. The *Los Angeles Times* has 23 articles that are negative. Out of those 23 articles, 16 of are one-sided and 7 are balanced. This means that 70% of the articles are one-sided and 30% of the articles are balanced. See Figure 27 below. When compared to Vioxx at 63/37, the *Los Angeles Times* is slightly more likely to be one-sided for Plan B. This is similar to the results in the previous paragraph where we see that the newspaper is slightly more negative overall for Plan B. As the *New York Times* analysis mentioned, one plausible reason here might also be the more clearly defined liberal and conservative positions. Like the *New York Times*, the *Los Angeles Times* has a reputation for being a liberal newspaper. As such, when there is an easier-to-define liberal viewpoint, it is not surprising that slightly more articles report only a liberal, negative, one-sided view rather than a conservative, positive view.

An article is one-sided when it only reports on negative public opinion about the FDA’s handling of the Plan B drug. Many of these articles articulated liberal values, addressing issues such as ideology and political influence. For example, an article entitled “Plan B Cleared for
Sale Over the Counter” mentions all the political controversy surrounding the decision and publishes quotes that the FDA has “caved into pressure from reproductive rights” and that the previous decisions have “nothing to do with science.”\textsuperscript{112} The more balanced articles talk about how the morale at the FDA is down and that Plan B is now a political issue that is interfering with the FDA. On the other hand, it also offers an excuse for the FDA like its place in the government and lack of funding. For example, a negative article entitled “FDA’s Actions on Pill Faulted” gives the FDA a chance to defend itself very briefly, but then quickly dismisses the arguments.\textsuperscript{113} One interesting framing technique here is the repeated use of the same line in the articles. The Los Angeles Times constantly mentions the same science over ideology line, so much so that it became prudent to label the line with its own symbol during initial coding. When a newspaper persistently uses the same line, even if it is not something it originally said, it provides a much greater opportunity for that line to stick in the public’s mind.

**Research Question 3: More Negative, Neutral, or Positive Editorial Coverage**

The third research question attempts to study the types of issues that the newspaper chooses to report on in the editorials. Specifically, editorials might bring out a liberal or conservative slant. If the article mentions support for the fast approval of the pill or mentions that the FDA is being ruled by ideology or the Bush Administration, the article is more liberal-leaning. On the other hand, if the article highlights sexuality and “morality” as important considerations and offers praise for the FDA’s thought-out approved, it is more conservative-leaning. Out of the 41 articles, 12 are editorials or 29% (as compared to 22% for Vioxx). Within these 12 articles, 3 are positive, 1 is neutral, and 8 are negative. This is 8% neutral, 25% positive, and 67% negative. See Figure 8 below. Like with Vioxx, the editorial Plan B numbers

are close to the overall Plan B coverage, albeit with a little less positive coverage overall and more neutral coverage instead. Here 67% are negative as compared to 71% negative overall (see Figure 26). However, 25% are positive and 8% are neutral here, as compared to 11% and 18% overall. When one includes the middle neutral categories, the coverage is not as close with 56% negative, 10% positive and 12% neutral (See Figure 25).

Like with the *New York Times*, it is possible that these results indicate a liberal bias. Seven of the eight negative editorials do depict some type of liberal argument. For example, one article entitled “FDA Has a Deal for Plan B Pill” mentions how the FDA is “embarrassed into approving the pill” and that the announcement comes at an “awfully convenient time.” Another example is an article entitled “Birth Control Too?” in which the author equates the FDA to the Bush Administration and uses the similar sounding morality over science line to express her point. Note that this might be indicative of a liberal bias or it might mean that the criticism of the FDA on this topic happens to represent a liberal viewpoint. It is possible this is not a bias at all, but that the newspaper is reporting the bad press presently in the public conscious.

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The positive editorials, on the other hand, talk about the importance of the morality issue. One article (mentioned previously) entitled “Morning After Pill as a Morality Problem” talks about how morals are important and should not just be dismissed so easily.\textsuperscript{116} The one neutral article (also mentioned previously) entitled “FDA Age Restriction on Plan B is too Limiting” says the decision is “bittersweet,” but then criticizes the FDA for taking so long.\textsuperscript{117}

There is an identical percentage of negative coverage here as with Vioxx. However, the positive and neutral sections are again switching off (25/8 for Plan B as compared to 13/20 for Vioxx). Vioxx editorial coverage is more neutral than positive, whereas here Plan B coverage is more positive than neutral. One possible reason for this distinction is that the conservative viewpoint for Plan B tends to be a positive article whereas for Vioxx the conservative viewpoint is also a negative critique (just a different one). Thus, it is not surprising that there are more positive articles here than in Vioxx.

\textbf{Research Question 4: More Liberal or Conservative Leaning}

Next, the study looks at all the articles for any liberal or conservative bias as defined previously. Out of the 41 articles, only 5 of the articles articulate the conservative viewpoint. 14 of the articles mention the liberal viewpoint, most pointing out that the FDA is listening to political pressure and ruling based on ideology. Many of these examples have been cited previously in earlier examples. One article mentions both viewpoints. This means that 70\% of the overall articles are liberal-leaning, 25\% of the articles are conservative-leaning, and 5\% represent both views. See Figure 29 below. This is also very similar to Vioxx where 64\% are liberal and 29\% are conservative. This discrepancy, albeit small, might be due to the reason above. Since more conservative arguments are positive and the \textit{Los Angeles Times} reported

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\begin{itemize}
\item\textsuperscript{117} Editorial, \textit{FDA Age Restriction on Plan B is too Limiting}, \textit{L.A. Times}, Aug. 28, 2006.
\end{itemize}
more negative articles overall on this topic than with Vioxx, it makes sense to find that the overall breakdown has a smaller conservative presence if there are less positive articles.

Figure 29: The Los Angeles Times Plan B Liberal/Conservative Breakdown

3. Ephedra

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The Los Angeles Times published 33 articles on the Ephedra controversy between January 1, 2002 and January 1, 2004. As with the New York Times, the amount of articles is significantly less for this topic than for Vioxx and Plan B. Also, although this is a negative event, recall that Ephedra is the most positive story with respect to the FDA’s role. Unlike Vioxx and Plan B where the FDA is directly in the middle of it, here the FDA has a more complicated role. The FDA initially did a poor job in its approach to the Ephedra controversy. However, during the time period of this study, the FDA began to approach the problem in a less hurried, more positive way and ultimately prevailed. Even though this time period represents a more positive moment in the Ephedra history, it was still predicted that the majority of articles would be negative overall due to the liberal leaning reputation of the newspaper which might be more inclined to target the FDA when the White House is held by a Republican and might be more likely to highlight the past failing rather than the current victory. Again, this was mistaken.


118 See the section on Ephedra background for a more information on the Ephedra issue.

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The results are as follows: 5 articles are predominately negative, 5 articles are negative/neutral, 16 articles are completely neutral, 1 article is positive/neutral, and 6 articles are predominantly positive. This means that 15% of the articles are negative, 49% of the articles are neutral, 18% of the articles are positive, 15% of the articles are negative/neutral, and 3% of the articles are positive/neutral. Figures 30 and 31 below depict these findings graphically. The combined results are 30% negative, 49% neutral, and 21% positive. See Figure 32 below for the graphical depiction.
An article is predominately positive when the FDA receives praise for its handling of Ephedra. For example, an article entitled “Baseball’s Mass Appeal Facing a Test” says that the baseball industry is “awaiting the FDA review” implying that it trusts the FDA.\textsuperscript{119} An article is also positive when it places blame on a third party. For example, in “Natural Defense Trapped Metabolife” the author describes Congress’s blameworthy role in the Ephedra controversy, talking about the “usual absurdities” resulting from interest group influence.\textsuperscript{120} The article basically leaves the FDA alone.

The positive/neutral article entitled “A Grieving Mother Urges Ban of Ephedra” talks about how the FDA is ultimately responsible for approval, but points out that one must consider the difficult position the FDA is in due to the law.\textsuperscript{121} The author is focusing mainly on criticizing the law, rather than on criticizing the FDA. It receives the neutral classification because it still mentions how the FDA has the responsibility. In addition, the article also implies

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\caption{The Los Angeles Times Ephedra Positive, Negative, Neutral Only}
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\begin{itemize}
\item An article entitled “Baseball’s Mass Appeal Facing a Test” says that the baseball industry is “awaiting the FDA review” implying that it trusts the FDA.\textsuperscript{119}
\item An article is also positive when it places blame on a third party. For example, in “Natural Defense Trapped Metabolife” the author describes Congress’s blameworthy role in the Ephedra controversy, talking about the “usual absurdities” resulting from interest group influence.\textsuperscript{120}
\item The article basically leaves the FDA alone.
\item The positive/neutral article entitled “A Grieving Mother Urges Ban of Ephedra” talks about how the FDA is ultimately responsible for approval, but points out that one must consider the difficult position the FDA is in due to the law.\textsuperscript{121}
\end{itemize}

\begin{footnotes}
\end{footnotes}
that the FDA might be influenced by emotions.\textsuperscript{122} However, since the overall tone of the article is positive with respect to the FDA, offers the FDA a defense, and places blame on the law rather than on the FDA, the positive/neutral label seems appropriate.

An article is neutral for a variety of reasons. First, an article that is simply reporting the facts in an objective way fits this category. For example, an article entitled “Bill Would Bar Uses of Ephedra” talks about how the FDA does not regulate the dietary supplement industry.\textsuperscript{123} The article is attempting to explain the FDA’s relationship to Ephedra and is not attempting to negatively critique the agency. Second, an article that is extremely balanced so that it is too hard to make a judgment call as to whether it is negative or positive leaning falls into the neutral category. For example, an article entitled “Many Fans of Herb Had Moved on to Newer Supplements” talks about how restrictions on Ephedra are a positive thing.\textsuperscript{124} The article says that “this is the first time that supplement law has actually been used to restrict. We are laying out a new framework here.” However, the article also touches on the negative aspects of the story, saying that health groups think this was long overdue and that the regulations in general mean that another dietary supplement can get on to the market just as easily.\textsuperscript{125} Another example is the article “US Laws Helps to Keep Ephedra on the Market,” which represents all sides to the debate.\textsuperscript{126} It talks about the regulatory problems with the law, but then gives the critics a chance to accuse the FDA of not acting quickly. However, in defense of the FDA, the article mentions that the FDA is just being cautious, implying that this is part of the job. It also goes on to say that “it is almost impossible for the government to prove that a product is safe.”\textsuperscript{127}

\textsuperscript{122} Id.
\textsuperscript{125} Id.
\textsuperscript{127} Id.
An article is predominately negative when the FDA is blamed for Ephedra or when it is accused of following ideology. For example, one article entitled “FDA Draw Fire Over Dietary Aids” targets the FDA for its “regulatory stance” and then proceeds to criticize the regulations in general.\textsuperscript{128} The article asks why it took nine years for the FDA to act and argues that the FDA should not always be playing catch up, but rather should be proactive. Another article entitled “Ephedra Under Intense Scrutiny” blames the FDA for not getting involved sooner.\textsuperscript{129} The article quotes that “if it takes this incident to do so, it is painful, tardy, and unfortunate.”\textsuperscript{130} The article is advocating for labeling rather than abandonment all together. Another article entitled “A First Step Towards Standardizing Supplements” talks about how dietary supplements are virtually an “unregulated” category, but that the FDA should at least place good management settings for the industry.\textsuperscript{131} The article accuses the FDA of only taking action against supplements when it is an “outrageous health claim” rather than on the wider variety of claims.\textsuperscript{132}

Finally, an article is negative/neutral when it states the facts, but manages to include significant negativity about the FDA. For example, one article entitled “Despite Warnings: Davis Took No Actions Against Metabolife” is not really about the FDA, but the article still includes a complaint about the FDA.\textsuperscript{133} In addition, an article is negative/neutral when it is neutral towards the FDA’s current involvement, but implies that the FDA has acted too slowly in the past. Finally, an article is negative/neutral when it implies rather than explicitly states that the FDA is controlled by the government. For example, an article entitled “Hatch’s Cozy Ties to

\textsuperscript{130} Id.
\textsuperscript{132} Id.
\textsuperscript{133} Dan Morain, Despite Warnings: Davis Took No Actions Against Metabolife, L.A. TIMES, Aug. 17, 2002.
Supplement Makers” says that Senator Hatch keeps the FDA regulators “at bay.” While the article is mainly a complaint about Hatch, it implies that the FDA is beholden to Congress.

Unlike with Vioxx and Plan B and contrary to the hypothesis, here more articles are neutral rather than negative. This might be due to the fact that the actual story is more positive and there are less clearly defined liberal or conservative critiques or praise on this topic. Like with the New York Times, this might mean that the Los Angeles Times is more objective than it appears since it appropriately has less negative coverage for a more positive debate.

Research Question 2: More One-Sided or Balanced

The second research question discusses the balance in the negative articles. Does the Los Angeles Times report only the negative or does the article tend to give both sides when reporting negatively on the FDA? The Los Angeles Times publishes only 5 articles that fit into the classification of negative. Out of those 5 articles, 4 are one-sided and 1 is balanced. This represents a very wide margin, with a whopping 80% one-sided compared to only 20% balanced. See Figure 33 below. This number is much bigger than both Vioxx at 63/37 and Plan B at 70/30.

Like with the New York Times, one has to consider the fact that these statistics are based on a sample size of 5. If one article is differently labeled, it has a huge effect on the breakdown. As a result, it is unproductive to engage in significant analysis about the discrepancy in the topics. One slight counterintuitive possibility is that the newspaper is actually trying to be more balanced. Since more articles are neutral, perhaps the Los Angeles Times feels it needs to have only a few negative articles to represent both sides. On the other hand, an objective newspaper should arguably represent both sides in all articles. After all, an article is balanced if it has something to say positively or in defense of the FDA.

Research Question 3: More Negative, Neutral, or Positive Editorial Coverage

The third research question focuses on the issues in the editorials and specifically asks whether there is any type of liberal or conservative bias. The *Los Angeles Times* published 4 editorials on this topic (or 12% as compared to 22% for Vioxx and 29% for Plan B) where 2 are negative, 1 is negative/neutral, and 1 is neutral. This works out to be 50% negative, 25% negative/neutral, and 25% neutral. See Figure 34 below. Although this seems like a big split, given the small number of articles and the fact that one is negative/neutral (which my reliability test finds to be the most suspect category), this might actually be interpreted as an even divide or, alternatively, it might mean that it is impossible to make any general observations. If one were to combine the negatives with the negative/neutral, then the results are 75/25. This is more in line with the hypothesis which predicts that there should be more negative coverage overall. However, the small number still makes this result untrustworthy. Note also that this is not very close to the overall coverage where 15% are negative, 15% are negative/neutral and 49% are neutral.

The negative editorials accuse the FDA of being influenced by Congress. The first editorial entitled “Letters to the Times: Dietary Supplements” suspects that the FDA is faking
data so that it can live up to its reputation for being the drug industry protector.\textsuperscript{135} The second negative editorial entitled “The Diet-Supplement Fiasco” blames the FDA for not acting quickly enough on the issue.\textsuperscript{136} The one negative/neutral editorial is previously mentioned about Senator Hatch. The one neutral editorial entitled “Get Ephedra Off the Shelves” blames the regulations rather than the FDA, but is not positive towards the agency either.\textsuperscript{137}

Also, these results are difficult to compare to Vioxx and Plan B since those examples have positive editorials rather than a negative/neutral editorial. Here, there are no directly positive editorials. This is interesting since the Ephedra issue is the most positive as compared to Vioxx. Recall that Vioxx has 20% neutral, 13% positive, and 67% negative and Plan B has 8% neutral, 25% positive, and 67% negative. If one combines the negatives with the negative/neutral here, the numbers are similar. 75% negative is very close to 67% negative for both Vioxx and Plan B. Also, the 25% neutral is similar to Vioxx. The only difference is the

same neutral and positive distinction discussed earlier in the *Los Angeles Times* Plan B and Vioxx comparison.

**Research Question 4: More Liberal or Conservative Leaning**

Finally, this section focuses on liberal or conservative bias throughout the entire coverage rather than just the editorials. Out of the 32 articles, only 10 articles mention a value-laden argument. 5 represent a more liberal bias and 5 represent a more conservative bias. Thus, it appears that there is a 50/50 split between conservative and liberal. See Figure 35 below. The liberal articles tend to argue that the FDA is beholden to Congress. On the other hand, the conservative articles argue that the FDA is being appropriately cautious and acting within the laws. The small numbers are similar to the *New York Times*. A similar reason might apply here for these results. Since there is no clearly defined liberal or conservative viewpoint (the least clearly defined of all the topics in fact), it is not surprising that many do not address these values.

Due to the small number of articles and the highly arbitrary conservative and liberal categories, one should not place any real emphasis on these numbers. However, below is a brief comparison of the results to the other topics. The *Los Angeles Times* Vioxx breakdown is 64% liberal, 29% conservative, and 7% both. The Plan B breakdown is 70% liberal, 25% conservative, and 5% both. Based on these results, it appears that the newspaper is much less likely to articulate liberal or conservative positions for Ephedra. Again, the more likely reason is that there is a less clearly defined split here than with Vioxx and Plan B so it is harder to even uncover any liberal or conservative bias in the reporting.
C. The Wall Street Journal

1. Vioxx

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The third newspaper is the *Wall Street Journal*. That newspaper published 82 articles on the Vioxx controversy between October 1, 2004 and January 1, 2006. Like the *New York Times* and the *Los Angeles Times*, most articles should have negative coverage of the FDA rather than positive or neutral coverage, given the negative controversy. The results are as follows: 25 articles are predominately negative, 20 articles are negative/neutral, 23 articles are neutral, 4 articles are neutral/positive, and 10 articles are predominantly positive. This means that 31% of the articles are negative, 28% of the articles are neutral, 12% of the articles are positive, 24% of the articles are negative/neutral, and 5% of the articles are positive/neutral. Figures 36 and 37 below depict these findings graphically. The combined percentages are 55% negative, 28% neutral, and 17% positive. See Figure 38 below for the graphical depiction.
Again, the same coding criteria is used here as was used for both the *New York Times* and the *Los Angeles Times* for classifying an article as positive, positive/neutral, neutral, negative, or negative/neutral. An article is positive when it places blame on a third party rather than on the FDA. For example, an article entitled “Vioxx Plaintiffs Seek Mistrial After Allegations on Merck Study” speaks negatively about Merck’s role in Vioxx and only objectively mentions the FDA.\(^\text{138}\) Also, an article is positive when it actually praises the FDA’s actions. An example entitled “Vioxx Verdict” defends the FDA, arguing that the agency has acted rationally given that the Vioxx results only cause a very small amount of heart attacks.\(^\text{139}\) Another example entitled “Tough Defense: Facing Vioxx Trials, Merck Prepares to Play Hardball” says that the FDA proceeded correctly when it advocated for warning letters.\(^\text{140}\) The article implies that the FDA is on top of the situation. Similarly, an article is positive/neutral when it mainly talks about the FDA objectively, but has a positive inference. For example, an article entitled “Merck’s


Lawyer Goes on Offensive During Closing” cites the FDA’s statement that a low-dose, short term use of Vioxx is acceptable.141 The article does not directly praise the FDA or blame someone else, but the quotation implies that the FDA is currently studying and working on the Vioxx situation.

An article is neutral when it reports objectively on the facts, offers an even divide of positive and negative statements, or talks about reform efforts since Vioxx. For example, one article entitled “FDA Seeks More Data on Diabetes Drugs” discusses how Merck’s main defense is its dependence on the FDA.142 The article, however, simply reports the defense strategy and is not meant to accuse the FDA. It is only a fact about an ongoing court case. Another example is an article entitled “With Risks of Painkillers Unclear, a Long-Term Study is Proposed” that talks about what the FDA is doing and what the panel recommended, but places no blame on the FDA at all.143

An article is negative when it accuses the FDA of being responsible for the Vioxx controversy, criticizes the FDA’s leaders or decisions, or focuses exclusively on negative quotations from important political figures. One article entitled “Common Sense: Why it is Too Risky to Own Big Positions in Drug Companies” highlights how the public thought that the FDA did a thorough vetting of drugs on the market, but that now it is clear it does not.144 Another example is an article entitled “FDA Officials Tried to Tone Down Report on Vioxx” in which the author puts in critical quotes from critics who believe that the FDA is ignoring its own experts.145

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141 Heather Won Tesoriero and Paul Davies, Merck’s Lawyer Goes on Offensive During Closing, WALL ST. J., Nov. 1, 2005.
143 Scott Hensley, With Risks of Painkillers Unclear, a Long-Term Study is Proposed, WALL ST. J., Mar. 8, 2005.
144 James B. Stewart, Common Sense: Why it is Too Risky to Own Big Positions in Drug Companies, WALL ST. J., Dec. 22, 2004.
The article says that “instead of acting as a public watchdog, FDA [is] busy challenging its own experts.”\textsuperscript{146} Many articles talk about the FDA being too cautious now due to Vioxx.

Finally, an article is negative/neutral when it brings attention to all the scrutiny of the FDA, but does it in an objective-fact reporting way. For example, an article entitled “Cardiologist Calls for Inquiry into FDA Handling of Vioxx” reports that the FDA is facing questions for allowing the product to be marketed to millions.\textsuperscript{147} The article implies that the FDA might play a big role in the deaths of the users. However, it is done in a general way, seemingly reporting on a fact. Another example is “Did FDA Staff Minimize Vioxx’s Red Flags?” where the author mentions that Congress is looking at the FDA’s role in Vioxx.\textsuperscript{148} At the same time, the article does allow the FDA to defend itself. Even so, it is not neutral because it follows this defense with a statement that the FDA is not aggressive enough. The one positive element is surrounded with more negative quotes, making this a negative/neutral article rather than just neutral canceling out.

Research Question 2: More One-Sided or Balanced

The second research question deals with the one-sided or balanced coverage within the negative articles. The \textit{Wall Street Journal} has 25 articles that are negative. Notice that this is a rather small number as compared to the \textit{New York Times} and the \textit{Los Angeles Times}. One explanation might be the fact that there are many negative/neutral articles here rather than just negative articles. (This discrepancy will be discussed later in the comparison section). Out of those 25 articles, 16 are one-sided and 9 are more balanced. In other words, 64\% are one-sided and 36\% are balanced. See Figure 39 below.

\textsuperscript{146} \textit{Id.}
\textsuperscript{147} Scott Hensley and Barbara Martinez, Cardiologist Calls for Inquiry into FDA Handling of Vioxx, WALL ST. J., Oct. 7, 2004.
\textsuperscript{148} Anna Wilde Mathews, Did FDA Staff Minimize Vioxx’s Red Flags, WALL ST. J., Nov. 10, 2004.
It was hypothesized that the *Wall Street Journal* would be the more balanced than one-sided because of its conservative reputation. This is because the *Wall Street Journal* might try to support the FDA in the negative articles since that agency has an important relationship with the business community target newspaper audience. However, this is not the case. There is a significant discrepancy in the coverage, with more being one-sided than balanced. What might be the reason for this? Unlike the other topics where the conservative view tends to correlate with *positive* FDA coverage, here the conservative view correlates with a different type of negative coverage. As such, it is not surprising to see more one-sided coverage if the conservative reputation is true. In addition, the *Wall Street Journal*’s conservative reputation is more focused on the editorial section rather than on the news reporting section.

![Figure 39: The Wall Street Journal Vioxx Criticism Breakdown](image)

An article is one-sided when it does not give the FDA a chance to defend itself after it includes criticism of the agency. For example, one article entitled “Merck Downplayed Risks of its Vioxx” mentions that the FDA sat on all the information.

The article even implies that the FDA has been working with and helping Merck. Another example is an article entitled “Side

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Effects: An FDA Reviewer Battles the Drug His Boss Approved” that gives press to one critic who accuses the FDA of fraud and who expresses his worry about future approval. The article does mention, however, that the FDA refused to comment for the article. Even so, the author still could have written in some possible explanations. Instead, the newspaper chose to take this refusal as an invitation to write a wholly one-sided article.

On the other hand, a negative article is balanced when the newspaper does try to give the FDA a chance to defend itself amidst the negative coverage, but does not include enough lines as to make the article negative/neutral. For example, an article entitled “Merck Begins its Defense in Second Vioxx Trial” includes many critical quotes, calling the FDA review problematic and saying that the public is “skeptical” of the FDA. However, the article does mention that the FDA is aware that every drug will have some side effects, which might imply that there is a possible explanation.

This one-sided/balance study also discloses some framing techniques. This newspaper, unlike the New York Times and the Los Angeles Times, reports a lot about the relationship between Merck and the FDA, including the court cases involved. This likely has to do with the newspaper’s business focus. Another framing technique is that the articles that are neutral tend to have an overall condescending tone. This causes a lot of the negative articles to seem more negative/neutral and might explain why there are more in the negative/neutral category than the other newspapers.

Research Question 3: More Negative, Neutral, or Positive Editorial Coverage

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151 Id.
The third research question addresses editorials, looking for overall negative or positive coverage and specifically focusing on any potential liberal or conservative slant. As with the *New York Times* and the *Los Angeles Times*, a liberal focused article argues that the agency is too quick to approve drugs. A more conservatively focused article argues that the agency is now going to be too cautious. Out of the 82 articles, 12 are editorials (less than 15%). Within these 12 articles, 3 are positive, 2 are neutral, 4 are negative, and 3 are negative/neutral. This works out to be 17% neutral, 25% positive, 33% negative, and 25% negative/neutral. See Figure 40 below. This is almost exactly the same as the overall breakdown coverage in the newspaper where 31% are negative (compared to 33% here), 24% are negative/neutral (compared to 25% here), 12% are positive and 5% are positive/neutral (compared to 25% here), and 17% are neutral (compared to 17% here). As has become a reoccurring pattern among the newspapers, the main difference in the coverage is the positive and neutral categories. The *Wall Street Journal* then is consistent overall in the amount of negative, positive or neutral coverage, not skewing more negative or positive in the more subjective editorial section of the newspaper. Note that as a general rule, the *Wall Street Journal’s* editorial staff tends to be more conservative than the news staff, so it would not be surprising see more liberal reporting with research question 2 and 4 as
compared to research question 3.

The positive editorials either point blame elsewhere or explicitly make clear that the FDA is not at fault. For example, one article entitled “The Painkiller Panic” argues that the public is overreacting to what is only a very small statistic.\textsuperscript{153} The article implies that the FDA has done nothing wrong and that it is possibly the wrong decision to pull Vioxx. The neutral editorials are not about the FDA exclusively and usually only mention the agency for a small fact. An editorial is negative/neutral when it mentions that the FDA is in a tough position or reports on an FDA action, but uses the opportunity to point out the negative criticism and publicity. For example, one article entitled “Merck Supports Integrity, Actions of Vioxx Witness” highlights how the FDA had all the information it needed from Merck at the time.\textsuperscript{154} The clear implication is that the FDA is too little, too late, although the article is not direct on this front. An article is negative when it blames the FDA. Interestingly, all four negative editorials criticize the FDA, but do so based on the conservative viewpoint. For example, one editorial entitled “Drug Twilight Zone” says that the FDA is now getting too cautious when deciding what drugs to


approve. It mentions the “natural hyper caution of regulators.” Another article entitled “A Vioxx Elegy” states also that the FDA has already been too cautious about drug approval and now any changes it makes as a result of Vioxx is going to make the situation even worse. As such, this is a clear indication of a conservative bias in the editorials, since most editorials are negative in the conservative direction.

Research Question 4: More Liberal or Conservative Leaning

Does the same conservative bias hold up when studying the articles overall, including the editorials? Out of the 68 articles, 30 express either a liberal or conservative viewpoint. 18 of the articles articulate the conservative criticism that the Vioxx problem will result in the FDA becoming overly and unnecessarily cautious. 6 of the articles articulate a liberal criticism, pointing out that the agency does not effectively study the information and is too quick to approve drugs. One article mentions both sides of the criticism. This works out to be 72% conservative leaning, 24% liberal leaning, and 4% neutral. See Figure 41 below.

The conservative articles select quotes expressing the typical “too-cautious” rhetoric. For example, an article entitled “Novartis Fights Eczema Drug’s Cancer Warning” shows a current case in which the FDA is being too cautious. The article points out that FDA officials want to put a serious warning on a product even though the agency does not have enough concrete evidence yet. Another example is an article entitled “Viable Vioxx” in which the author mentions that the overly-cautious attitude is the one “worrying development amid the sudden outbreak of FDA common sense.”

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156 Id.
158 Barbara Martinez, Novartis Fights Eczema Drug’s Cancer Warning, WALL ST. J., Apr. 8, 2005.
On the other hand, the liberal articles argue that the FDA is tied to Washington and that it is acting without considering all the evidence. For example, one article entitled “The Bush Budget Proposal: FDA, FCC Get Rare Boosts” mentions how the FDA recently has received an increased budget due to public skepticism. The article points out that people believe that the FDA has improperly evaluated risks in the past and needs to improve for the future. Another example is an article entitled “Medical Journal Urges an Overhaul in FDA’s Oversight” in which the author explains that the FDA has started to undertake much needed reform. The author states that this action is directly a result of criticism outside the agency that it has not handled safety problems properly and has often ignored or dismissed important issues too easily. Only one article entitled “FDA Establishes Board to Review Approved Drugs” talks about both the conservative and liberal viewpoint. It mentions that the FDA should not get too cautious, but at the same time, states that the agency will also need to be more cautious in the future.

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161 Id.
163 Id.
164 Leila Abboud and Anna Wilde Mathews, FDA Establishes Board to Review Approved Drugs, WALL ST. J., Feb. 16, 2005.
165 Id.
It was hypothesized that the conservative reputation of the newspaper comes into play and causes a more conservative-bias in reporting overall. With 72% conservative as compared to 24% liberal, this prediction has been realized here.

2. Plan B

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The *Wall Street Journal* published 34 articles on the Plan B controversy between January 1, 2004 and October 1, 2006. My results are as follows: 13 articles are predominately negative, 7 articles are negative/neutral, 10 articles are neutral, 1 article is neutral/positive, and 3 articles are predominantly positive. This means that 38% of the articles are negative, 29% of the articles are neutral, 9% of the articles are positive, 21% of the articles are negative/neutral, and 3% of the articles are positive/neutral. Figures 42 and 43 below depict these findings graphically. The combined percentages are 60% negative, 29% neutral, and 11% positive. See Figure 44 below for the graphical depiction. These results are similar to Vioxx overall coverage. For Vioxx there is 31% negative (compared to 38% here), 28% neutral (compared to 29% here), 12% positive (compared to 9% here), 21% negative/neutral (compared to 24% here), and 5% positive/neutral.
(compared to 3% here). Given the small number of articles, this is astonishingly similar results. Like the other newspapers, the *Wall Street Journal* at least appears consistent in its coverage. However, this does not mean there is not a bias one way or the other in the newspaper as a whole, only realizable through a newspaper comparison.
An article is positive when it does not blame the FDA or accuse it of acting political. A positive article might also approve of the FDA’s actions. One article entitled “GOP Games at the FDA” praises the new head of the agency and then criticizes senators for pressuring the FDA on approving the morning after pill. Another article entitled “Dr. McClellan’s Medicare Rx” offers implicit praise for the FDA. Although the article does not directly commend the FDA, the author implies that he thinks the FDA made the right decision in not approving nonprescriptive Plan B sales. The one positive/neutral article entitled “Plan B Shift Threatens Deepen Rift” offers a positive, upbeat report about the ultimate FDA approval of Plan B. However, the article also mentions the past contentious battle on the issue and explains that this approval will inevitably pressure pharmacies across the country. The small mention of consequences and criticisms makes the overall positive article a better fit for positive/neutral.

An article is neutral when it is an objective factual report. For example, an article entitled “Abortion Debate Shifts to New Ground” simply mentions that the FDA has not approved over

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169 Id.
the counter sales of Plan B yet. There is no negative inference. In addition, an article is neutral when it offers both positive and negative arguments about the FDA, making it too subjective to decide if the article leans one way or the other. For example, an article entitled “Bush to Retain FDA’s Acting Chief” mentions the politically charged battle, but does not go into detail about either sides’ point of view.

An article is negative when it accuses the FDA of practicing ideology and morality over the more proper science or it charges the FDA of being a pawn of the Administration. Many articles use the phrase “lack of decision” on Plan B. This implies that the FDA should have decided the issue already and has failed to do so. For example, an article entitled “FDA Delays Call on Contraceptive: Split Arises Over Age Rules” mentions that the decision is “again delayed” and includes quotations from important figures saying “I’m very disappointed. I thought we’d done everything that had been asked of us.” Other articles use even harsher language. For example, an editorial entitled “FDA Ombudsman Needed to Curtail Inefficiency” mentions that the FDA has failed to approve the drug. The choice of the words “inefficiency” and “failure” make clear that this author does not approve of the FDA’s action in this matter. Finally, an article is negative/neutral when it includes mostly negative quotes, but also allows some positive elements. For example, one article entitled “Bush is Set to Nominate Acting Chief as Head of FDA” references a number of political issues facing the FDA, including all the political criticisms. However, the article also puts blame on the Democratic Party for the FDA’s plight.

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174 Jennifer Corbett Dooren and Anna Wilde Mathews, Bush is Set to Nominate Acting Chief as Head of FDA, WALL ST. J., Mar. 10, 2006.
It was hypothesized that the *Wall Street Journal* would have more negative coverage than positive coverage, namely because it is a negative issue. In fact, the negative coverage is actually less than predicted with only 38%. However, when one considers the combined results with the negative/neutral the number is a more predictable 60%. Part of this discrepancy might be the subjective coding. On the other hand, it is possible that the *Wall Street Journal*, in an attempt to be more objective, or perhaps demonstrating a conservative tendency to support the FDA, actually reports more objectively within the negative coverage. Perhaps that is why it has more negative/neutrals and less negatives overall. Like the other two newspapers, the *Wall Street Journal* also appears to be slightly more negative on the Plan B issue than the Vioxx issue where only 55% are negative. This is surprising since the Vioxx conservative issues are also negative whereas here the Plan B conservative issues are positive.

**Research Question 2: More One-Sided or Balanced**

The second research question studies the negative articles for balance. The *Wall Street Journal* publishes only 13 articles that are predominately negative. Out of those 13, 7 are one-sided and 6 are balanced. This works out to be an almost even split with 46% balanced and 54% one-sided. See Figure 45 below. These results are very different than the Vioxx results where the breakdown skewed significantly towards the one-sided category with 64%. As with both the *New York Times* and the *Los Angeles Times*, one possible reason for this difference is due to the more clearly defined liberal and conservative positions for this category (science vs. promiscuity). A newspaper with a conservative reputation might be expected to include the more conservative elements in the negative articles. For Plan B, this means more positive coverage. As such, it makes sense that the *Wall Street Journal* might have a more even split here as compared to Vioxx in which even the conservative viewpoint is negative for the FDA.
The one-sided articles highlight the FDA’s handling of the controversy or point out the delay. For example, an article entitled “Probe Concludes Acting FDA Chief Didn’t Have Affair” talks about the FDA’s failure to act without any positive defenses or explanations.\textsuperscript{175} Another example is an article entitled “Senate Clears Spending Bills, Farm, Military Benefits” in which the author criticizes the agency for taking too long to decide on the issue due to political pressure. It explains that people are “deeply disappointed with the continued delays.”\textsuperscript{176}

The more balanced articles give the FDA a chance to explain its side or, alternatively, reference conservative values that tend to support the delayed decision, such as the important sexual consequences for teenagers. For example, one article entitled “Bush Faces Challenge From Scientists” reports that a liberal group is criticizing the agency.\textsuperscript{177} Although a negative article, the use of the “liberal group” term is most likely included so that the reader understands who is actually making the argument. The liberal label is placed in an obvious separate sentence so that the reader cannot overlook it. In fact, like with the \textit{New York Times}, the \textit{Wall Street

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\includegraphics[width=\textwidth]{figure45.png}
\caption{The Wall Street Journal Plan B Criticism Breakdown}
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\begin{itemize}
\item \textsuperscript{175} Associated Press, \textit{Probe Concludes Acting FDA Chief Didn’t Have Affair}, \textit{WALL ST. J.}, June 9, 2005.
\item \textsuperscript{176} David Rogers, \textit{Senate Clears Spending Bills, Farm, Military Benefits}, \textit{WALL ST. J.}, Sept. 23, 2005.
\item \textsuperscript{177} Antonio Regalado, \textit{Bush Faces Challenge From Scientists}, \textit{WALL ST. J.}, July 15, 2004.
\end{itemize}
Journal consistently used this framing technique, placing quotations rather than its own analysis to appear more objective. Yet the Wall Street Journal is still choosing which quotes to include. Another example is “FDA Restricts Morning After Pill” in which the majority of the article is critical of the decision and talks about how many believe politics are to blame. However, the article does offer a voice for the FDA by pointing out that the FDA believes that the evidence was unsupported.

Research Question 3: More Negative, Neutral, or Positive Editorial Coverage

The third research question addresses the issues through an editorial study, with a specific focus on Wall Street Journal’s liberal/conservative tendencies. Out of the 34 articles, 4 are editorials or 12% (as compared to 15% for Vioxx). Within these 4 articles, 1 is positive, 1 is negative/neutral, and 2 are negative. This works out to be 0% neutral, 25% positive, 25% negative/neutral and 50% negative. See Figure 46 below. The numbers are similar, but not exactly aligned to the overall Plan B coverage since there is a little less positive coverage, replaced with slightly more negative editorial coverage. Here 50% are negative as compared to 38% overall for Plan B coverage. Notice that here 75% combined are negative whereas overall only 60% are negative. This is a rather significant difference. The editorials on the Plan B subject tend to be more negative than the overall coverage on Plan B and throw off the consistency seen with Vioxx. This is surprising since the conservative viewpoint is positive towards the FDA and easily lends itself to editorial coverage. However, one explanation for this discrepancy might be the small number of articles so that it is unwise to make any real conservative or liberal conclusions.

179 Id.
An editorial is negative when it calls the FDA decision-making delay a failure. The one negative/neutral editorial entitled “Advise and Consign” talks about Senator Clinton and her complaints about the agency, but does not actually support her opinion. However, the introduction of her negative quotes such as the “agency is stalling” makes this more negative/neutral than neutral. The one positive editorial entitled “GOP Games at the FDA” (mentioned previously) praises the new head of the FDA and criticizes political figures for pressuring the FDA to approve the drug.

Below is a brief comparison to Vioxx (although one should keep in mind the small numbers). Plan B seems to have much more negative editorials with 50% negative as compared to 33% for Vioxx. This is especially true since the negative/neutral and the positive for both Plan B and Vioxx are equivalent. The one difference is in the neutral category, where here none are neutral as compared to Vioxx which has an extra 17% neutral.

**Research Question 4: More Liberal or Conservative Leaning**

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Lastly, the study focuses on the articles as a whole to see if there is a liberal or conservative bias. With a larger number of articles, the results should be more significant. Out of the 34 articles, only 4 articles mention the conservative viewpoint, such as the sexual implications of the drug. 9 articles mention the liberal viewpoint, most pointing out that the FDA is giving in to political pressure or delaying a decision inappropriately. One article mentions both the liberal and conservative viewpoint. This means that 64% of the articles express a liberal viewpoint, 7% of the articles express both viewpoints, and 29% of the articles express a conservative viewpoint. See Figure 47 below. Besides for previous examples, another liberal article entitled “FDA Moves Toward Approving Over the Counter Plan B Sales” allows the author to report on recent resignations at the FDA for what the quitters say is decision-making not based on science.\textsuperscript{182} The more conservative articles praise the FDA for considering all the potential family and teenage problems with approving the drug. The one article that mentions both viewpoints entitled “FDA’s Delay Over Contraceptive Prompts Resignation of Official” offers criticism by including a quote saying “I really feel like this decision was not based on science and clinical evidence.”\textsuperscript{183} However, the article also gives the FDA a chance to defend itself, articulating this is not a political decision, but based on numerous factors that must be considered when approving a drug.\textsuperscript{184}

It was hypothesized that there would be a more conservative bias over a more liberal bias. This does not appear to be the case here. This is interesting since there is a clearly defined conservative and liberal position, making it easier for a newspaper with a conservative slant to write conservative stories. However, perhaps this can be explained through comparison. The

\textsuperscript{184} \textit{Id.}
Vioxx coverage is a more conservative 72% and liberal 24% (as compared to 29/64 here). One explanation for the high percentage of liberal coverage might be the negative story. Since the liberal viewpoint is negative and the conservative viewpoint is positive, it makes sense that negative reporting lends itself to liberal arguments. This is different than Vioxx where the negative story also lends itself to conservative arguments. Another potential reason is the small number of articles, making these numbers suspect to any real analysis. Finally, of course, the liberal tendency might mean that the Wall Street Journal’s reputation for conservative reporting is untrue here. Another potential explanation is that, as a general matter, the news reporting staff tends to be more liberal than the editorial staff.

![Figure 47: The Wall Street Journal Plan B Liberal/Conservative Breakdown](image)

3. Ephedra

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The Wall Street Journal only published 14 articles on the Ephedra controversy between January 1, 2002 and January 1, 2004. This has become a reoccurring pattern among all the newspapers. Clearly, the Ephedra story is not nearly as reported on overall when compared to Vioxx or Plan B. My results are as follows: 1 article is predominately negative, 2 articles are
negative/neutral, 5 articles are completely neutral, 5 articles are neutral/positive, and 1 article is predominantly positive. This means that 7% of the articles are negative, 36% of the articles are neutral, 7% of the articles are positive, 14% of the articles are negative/neutral, and 36% of the articles are positive/neutral. Figures 48 and 49 below depict these findings graphically. The combined results are 21% negative, 36% neutral, and 43% positive. See Figure 50 below for the graphical depiction.
It was hypothesized that the Wall Street Journal would have more neutral articles on this topic rather than negative articles since the topic can be viewed more positively towards the FDA. Yet, based on Figure 50, this is slightly incorrect, but in a surprising direction. Contrary to the previous Vioxx and Plan B examples, the Wall Street Journal actually has more positive coverage overall as compared to negative and neutral coverage. This difference might be a due to the topic or perhaps it is indicative of a business community that supported the Ephedra ban since Ephedra put a damper on the entire dietary supplement industry. Thus, is it not surprising that the Wall Street Journal would praise the FDA for its more robust efforts in this time period as being in line with the interests of that industry.

The one positive article entitled “Ephedra Marketer Comes Under New Criticism” praises the FDA, stating that it is “cracking down” on Ephedra. This implies that the FDA is a strong agency that is on top of its duties. Similarly, an article is positive/neutral when it speaks positively about the FDA’s role in the Ephedra regulation, but arguably reports it in a neutral way. For example, an article entitled “FDA is Expected to Ban Ephedra, Citing Supplement’s

Health Risks” mentions that the FDA “struggled” with this issue and engaged in “years of
debate.” At the same time, the article makes clear that the FDA is doing what it can within the
laws. Another example is an article entitled “Winter Olympic 2002: The Olympics Doc Takes on a Hometown Power” in which the author mentions the ongoing debate and complains that the regulations need to be changed. The article offers no FDA criticism and even says that many will support the FDA in using its powers to deal with Ephedra.

An article is neutral when it only reports on the facts, like the FDA’s role or any future steps. For example, an article entitled “Young Athletes: Play it Safe in Sun: Laying off
Videogames, Nixing High Protein Foods Helps Prevent Heat Illness” mentions the FDA only briefly to report that the agency says that Ephedra has negative side effects. A neutral article might also have both positive and negative reporting. For example, an article entitled “FDA Seeks Side-Effects Reports on Dietary Supplements, Foods” points out that the FDA has many critics. Yet, the article is also positive, emphasizing that the FDA is seeking to provide consumers with information. The author reports that many are “applaud[ing] the FDA for moving in the direction of national mandatory reporting system.”

The predominately negative article accuses the FDA of not confronting the issue. The article entitled “Herbal Overdose” says that the FDA has “stopped short” of fulfilling its charge to assure that health products are both safe and effective.

187 Id.
189 Id.
192 Id.
just report the facts, although managing to include some negative comments. For example, an article entitled “GNC to Card for Supplements” condescendingly says that the FDA does not require warning labels or ID checks.194 It is more neutral though because the statement is included to explain why GNC is choosing to do this itself, and is not necessarily meant to criticize the FDA. The other example entitled “FDA Proposes Rules for Dietary Supplements” praises the FDA for implementing general guidelines, but the article spends a significant amount of space referencing disappointment in the agency.195 It says that the FDA has “finally” acted.196 Thus, even with the original praise, the author writes the article in an overall negative way, highlighting criticisms.

Research Question 2: More One-Sided or Balanced

The second research question discusses the balance in the negative articles. Unfortunately, this study does not work well for Ephedra since there is only 1 negative article. To get some results, one might use the 2 negative/neutral articles also. Yet, this does not really improve the results much, since it only adds 2 additional articles. Since the statistics are really valueless with such small numbers, it is unproductive to compare these results to Vioxx and Plan B coverage. Out of those 3 articles, 2 are one-sided and only 1 is balanced. The more balanced article is the last one discussed in the negative/neutral section. The GNC article above is one of the one-sided articles, although it is also slightly neutral. As such, including the GNC article when it is the most unreliable based on my reliability test might skew the results too much. Therefore, it might be wise to disregard this article in the results also. Using the two articles left, there is an even 50/50 split. See Figure 51 below.

196 Id.
Research Question 3 and 4: More Negative, Neutral, or Positive Editorial Coverage/More Liberal or Conservative Leaning

The third research question addresses the editorials to discover issue-content and any liberal and conservative bias. However, none of the 14 articles are editorials. This forces me to skip question 3 and move to question 4 which addresses overall liberal and conservative coverage. For Ephedra, the liberal/conservative positions are less clear. A liberal article criticizes the FDA for making decisions based on politics. A conservative article commends the FDA for its thought out approach or supports the FDA as a part of the Administration. After coding the articles for this subject, none of the articles clearly represent either viewpoint. As a result, there is not enough information to decide if the Wall Street Journal is liberal or conservative on the Ephedra issue. This is not surprising since the other newspapers also found weak results.
VII. Analysis Comparing the Three Newspapers

This part of the study quantitatively compares the different newspapers, organized by topic. It offers possible explanations for the results and compares the findings to the original hypothesis. It compares the newspapers based on the same four research questions, asking whether the newspapers: (1) publish more negative, positive, or neutral articles about the FDA, (2) publish more balanced or one-sided articles about the FDA, (3) publish more negative, positive, or neutral editorials and (4) publish articles that are more liberal or conservative leaning.

A. Vioxx

Research Question 1: More Negative, Positive, or Neutral Articles Overall

The New York Times percentage breakdown is 44% of the articles are negative, 19% of the articles are neutral, 13% of the articles are positive, 18% of the articles are negative/neutral, and less than 6% of the articles are positive/neutral. The combined breakdown is 62% negative, 19% neutral, and 19% positive. In comparison, the Los Angeles Times percentage breakdown is 60% of the articles are negative, 21% of the articles are neutral, 12% of the articles are positive, 7% of the articles are negative/neutral, and none of the articles are positive/neutral. The combined breakdown is 67% negative, 21% neutral, and 12% positive. On the other hand, the Wall Street Journal percentage breakdown is 31% of the articles are negative, 28% of the articles are neutral, 12% of the articles are positive, 24% of the articles are negative/neutral, and 5% of the articles are positive/neutral. The combined breakdown is 55% negative, 28% neutral, and 17% positive. See Comparison Figures 1 and 2 below for the graphical comparisons.
As these figures demonstrate, there are some clear differences among the newspapers. For example, the *Wall Street Journal* tends to have less negative articles than the other newspapers: 60% of the *Los Angeles Times* articles are negative as compared to only 44% for the *New York Times* and 31% for the *Wall Street Journal*. However, the *Wall Street Journal* makes up for this lower number in negative/neutral coverage, with the most negative/neutral coverage of all the newspapers at 24% as compared to the *Los Angeles Times* at 7% and the *New York Times* at 18%. Thus, even though the *Wall Street Journal* appears to be less negative based on
Comparison Figure 1, when one combines negative/neutral and negative, the numbers are less skewed. Yet, even there the *Wall Street Journal* is on the lower side with only 55% of the articles overall being negative as compared to 67% for the *Los Angeles Times* and 63% for the *New York Times*.

Interestingly, this does not mean that the *Wall Street Journal* publishes more positive coverage. On the other hand, the positive coverage between the papers is very close at 17%, 21%, and 19%. The bigger discrepancy is in the neutral coverage where the *Wall Street Journal* has 28% neutral as compared to the *Los Angeles Times* at 12% and the *New York Times* at 19%. Overall, the *Los Angeles Times* tends to report the most negatively about Vioxx with the *New York Times* falling closely in the middle.

It was hypothesized that the *Los Angeles Times* would have the most negative coverage, followed next by the *New York Times* and finally the *Wall Street Journal*. Based on these results, the predictions are correct. One possible reason is that the liberal tendency of the former two newspapers results in a higher degree of negative commentary over neutral commentary as compared to the more conservative newspaper. However, recall that Vioxx conservative viewpoints are also negative. Thus, this hypothesis makes less sense for the *Wall Street Journal* where one would arguably expect to still see negative coverage overall. Perhaps this explains why the *Wall Street Journal* has more negative/neutral articles rather than just negative. The newspaper is possibly struggling between wanting to support the FDA, which might be perceived as important to its core audience, and wanting to represent the conservative and liberal viewpoints.

Note also how close these numbers really are between the newspapers. There is very little difference when one combines the negatives with the negative/neutral between the
newspapers. As a result, it is equally plausible that there is really no pattern at all and that none of the newspapers demonstrate any bias or negativity towards the FDA or a particular ideological group.

**Research Question 2: More One-Sided or Balanced Overall**

The *New York Times* has a pretty even split with 53% one-sided as compared to 47% balanced. The *Los Angeles Times* has a more divergent split with 37% one-sided as compared to 63% balanced. The *Wall Street Journal* is on the opposite end of the spectrum as compared to the previous newspaper with 64% one-sided as compared to 36% balanced. See Comparison Figure 3 below.

![Comparison Figure 3: Vioxx Criticism Breakdown](image)

As one can see by this graph, there is an obvious difference between the newspapers, with a wide spectrum in each category. The *Los Angeles Times*, the newspaper with the most negative coverage overall, actually is the most balanced within the articles, followed by the *New York Times*. This is contrary to the hypothesis. It was predicted that the *Los Angeles Times*, with the strongest liberal reputation, would be more likely to include only negative coverage about the FDA and not give it a chance to defend itself or explain both sides. On the other hand, it was
also predicted that the *Wall Street Journal* would be the most objective, yet it ended up being the most subjective.

Perhaps the fact that there are conservative criticisms as well as liberal criticisms makes it easier for the *Wall Street Journal* to be one-sided in the article. Thus, any support the *Wall Street Journal* might have for the FDA has to be balanced against the negative story and the conservative groups that are upset with the FDA. Given the negative conservative viewpoints, it is not counterintuitive that the *Wall Street Journal* might be the most one-sided coverage. It should be interesting to see if this result remains in the later parts when the conservative coverage is more positive.

**Research Question 3: More Negative, Neutral, or Positive Editorial Coverage**

The *New York Times* editorial breakdown is 31% neutral, 8% positive, and 61% negative. The *Los Angeles Times* editorial breakdown is 20% neutral, 13% positive, and 67% negative. Finally, the *Wall Street Journal* editorial breakdown is 17% neutral, 25% positive, 33% negative, and 25% negative/neutral. See Comparison Figure 4 below. Editorials are an editor’s one opportunity to publish and choose subjective articles. Thus, it is one of the clearest indications of whether the newspaper tends to represent the FDA in a positive, neutral, or negative way.

It was hypothesized that the *Los Angeles Times* would be the most negative in editorial coverage, followed by the *New York Times* and the *Wall Street Journal*. This appears to be the case: the newspapers with the more liberal reputations have the most negative commentary and the newspaper with the more conservative reputation has the most positive coverage. However, again, the *Wall Street Journal* has the outlier negative/neutral category that can skew these results.
Research Question 4: More Liberal or Conservative Leaning

For Vioxx, liberal reporting focuses on the “too quick to approve” reputation of the FDA. Conservative reporting focuses on the “too cautious” rhetoric, worrying that the FDA will now not approve drugs as quickly. The New York Times liberal/conservative split is 56% liberal, 38% conservative, and 6% both. The Los Angeles Times liberal/conservative split is 64% liberal, 29% conservative, and 7% both. The Wall Street Journal liberal/conservative split is 24% liberal, 72% conservative, and 4% both. See Comparison Figure 5 below.
It was hypothesized that the overall criticism by the *Wall Street Journal* would be predominately conservative as compared to the *Los Angeles Times* which would be the most liberal. In addition, the *New York Times* should fall somewhere in the middle, but be closer to the *Los Angeles Times* because it has a similar liberal reputation. This is exactly correct. In fact, the *Wall Street Journal* had a whopping 72% conservative coverage as compared to only 24% for the liberal coverage. On the other hand, the *Los Angeles Times* comes out ahead in liberal articles, but it is followed closely behind by the *New York Times*. In fact, the *Wall Street Journal* and the *Los Angeles Times* are almost mirror images of each other. It is quite interesting that the newspaper with the more conservative reputation reports more frequently on the conservative criticism and the newspaper with the more liberal reputation reports just as frequently on the liberal criticism.

**B. Plan B**

**Research Question 1: More Negative, Positive, or Neutral Articles Overall**

The *New York Times* percentage breakdown is 60% of the articles are negative, 15% of the articles are neutral, 7% of the articles are positive, 16% of the articles are negative/neutral, and less than 2% of the articles are positive/neutral. The combined breakdown is 77% negative, 15% neutral, and 8% positive. In comparison, the *Los Angeles Times* percentage breakdown is 56% of the articles are negative, 12% of the articles are neutral, 10% of the articles are positive, 20% of the articles are negative/neutral, and 2% of the articles are positive/neutral. The combined breakdown is 71% negative, 18% neutral, and 11% positive. On the other hand, the *Wall Street Journal* percentage breakdown is 38% of the articles are negative, 29% of the articles are neutral, 9% of the articles are positive, 21% of the articles are negative/neutral, and 3% of the
articles are positive/neutral. The combined breakdown is 60% negative, 29% neutral, and 11% positive. See Comparison Figures 6 and 7 below.

Unlike with Vioxx, the papers are much closer together in Plan B coverage, although some noticeable differences exist. As Comparison Figure 6 depicts, the Wall Street Journal again has the least negative and the most neutral coverage as compared to the other two newspapers negative coverage. The Wall Street Journal has only 38% negative as compared to the New York Times at 60% in the predominately negative category and the Los Angeles Times with 56% in
that same category. Unlike with Vioxx, the negative-neutral category is more closely aligned between the newspapers. There is a similar pattern where the Wall Street Journal moves away from the other papers in the neutral coverage.

This might indicate some type of framing technique of the Wall Street Journal. After all, the newspaper is choosing to report articles in a noticeably more neutral way than its competitors. Perhaps this is due to the conservative desire to not criticize the FDA if the author unintentionally or explicitly thinks this is criticizing the Republican Party or harming the business community. However, an equally plausible reason is that the Wall Street Journal is a more objective newspaper.

Comparison Figure 7 depicts the comparison of the combination numbers. The New York Times has the most negative coverage followed by the Los Angeles Times. Consequently, the New York Times has the least neutral coverage again followed by the Los Angeles Times. The Wall Street Journal has the most neutral and least negative coverage. The Los Angeles Times has the most positive coverage rather than the Wall Street Journal, albeit it is a very close second.

Like with Vioxx, it was predicted that the Los Angeles Times would have the most negative and least positive coverage, followed by the New York Times, and then finally the Wall Street Journal. Related, the Wall Street Journal should have the most positive coverage. Based on the results, this does not appear to be the case. In fact, surprisingly, the Los Angeles Times tied the Wall Street Journal in positive coverage and is significantly higher than the New York Times (11% compared to 2%). That the New York Times has the most negative and least positive coverage is not completely shocking. Perhaps the Plan B issue is more prominent in the New York region. Also, the negative difference between the two liberal-reputed papers is small (77%
for the *New York Times* and 71% for the *Los Angeles Times*). In fact, the close results and the clear difference from the Vioxx results (specifically the *Los Angeles Times* positive coverage) might indicate that there is no real pattern. In other words, perhaps there is no liberal or conservative bias and the newspapers do not portray the FDA unfairly negatively if the story is also negative.

**Research Question 2: More One-Sided or Balanced Overall**

This section compares one-sided and balanced coverage of the three newspapers. The *New York Times* has a pretty even split with 70% one-sided as compared to 30% balanced. The *Los Angeles Times* has an identical split with 70% one-sided as compared to 30% balanced. The *Wall Street Journal* is different 54% one-sided as compared to 46% balanced. See Comparison Figure 8 below.

![Comparison Figure 8: Plan B Criticism Breakdown](image)

It was hypothesized that the *New York Times* and the *Los Angeles Times*, the newspapers with the liberal reputations, would be most likely to criticize the FDA when the government is run by the more conservative party or just generally focus on more liberal values and decline to include any positive conservative coverage or real praise for the FDA. As predicted, both
newspapers have a significantly higher amount of one-sided coverage rather than balanced coverage. Of course, this does not mean that there is necessarily a liberal bias or a vendetta against the FDA. The newspapers might have simply felt that all that is worth reporting on for most articles is the negative aspect. Given that the newspapers are reporting similarly, this might indicate more of an industry practice than a newspaper bias.

However, when one compares this to the *Wall Street Journal*, there is a discrepancy that cannot be ignored. That newspaper has an almost even split between one-sided and balanced coverage. This might indicate that the *New York Times* and the *Los Angeles Times* do paint the FDA more negatively than the more objective and fair *Wall Street Journal*. Yet, equally plausible is that the *Wall Street Journal*, the outlier newspaper here, is actually the one with the conservative bias and the other two newspapers are more objective. The article might appear to be more balanced when the conservative viewpoint is included (unlike Vioxx where this should still keep the article negative and one-sided). The *Wall Street Journal* might be more likely to praise the FDA when it is unwarranted or report the positive conservative viewpoint in an attempt to represent the conservative side and not for the sake of balance or objectivity. This might also explain the difference with Vioxx where the *Los Angeles Times* has the most balanced coverage and the *Wall Street Journal* has the most one-sided coverage.

Like with the Plan B breakdown above, one part of the hypothesis did fail here. It was predicted that the *Los Angeles Times* would have slightly higher one-sided coverage than the *New York Times*. Yet, as with Research Question 1, this is not surprising since the *New York Times* and the *Los Angeles Times* are arguably equal since both have an alleged liberal bias.

**Research Question 3: More Negative, Neutral, or Positive Editorial Coverage**
The *New York Times* editorial breakdown is 85% negative, 10% positive, and 5% neutral. The *Los Angeles Times* editorial breakdown is 67% negative, 25% positive, and 8% neutral. Finally, the *Wall Street Journal* editorial breakdown is 50% negative, 25% positive, 0% neutral and 25% negative/neutral. See Comparison Figure 9 below. These numbers show a similar pattern with the *New York Times* at the highest negative coverage and the lowest positive coverage and the *Wall Street Journal* at the highest positive coverage (tied with the *Los Angeles Times*) and the lowest negative coverage. Yet, once again, there is that same negative/neutral category that distorts the results and allows the *Wall Street Journal* to make up for the lower negative coverage. This might be an indication of a more objective newspaper who tries to represent a more neutral negative article. On the other hand, it might be a framing technique or, alternatively, it might represent a propensity to not criticize the FDA due to a respect for the current government or to please the readers.

**Comparison Figure 9: Plan B Editorial Breakdown**

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**Research Question 4: More Liberal or Conservative Leaning**

The last research question addresses the liberal or conservative tendencies of the newspapers based on my labeling of liberal/conservative values. Liberal reporting is when an
article accuses the FDA of being beholden to the Administration or governing based on ideology rather than science. Conservative reporting is when an article focuses on so-called “family” values such as the risk to children if the over-the-counter morning after pill is approved. The *New York Times* liberal/conservative split is 78% liberal, 11% conservative, and 11% both. The *Los Angeles Times* liberal/conservative split is 70% liberal, 25% conservative, and 5% both. The *Wall Street Journal* liberal/conservative split is 64% liberal, 29% conservative, and 7% both. See Comparison Figure 10 below.

![Comparison Figure 10: Plan B Liberal/Conservative Breakdown](chart)

Like with Vioxx, it was hypothesized that the *Wall Street Journal* would have more articles articulating conservative values whereas the *Los Angeles Times* and the *New York Times* would be more liberal focused. As one can see, based purely on a comparison, the *Wall Street Journal* does have the most conservative coverage. Even though it still has more liberal coverage overall, the lower numbers for the liberal coverage and the higher numbers for the conservative coverage might suggest a conservative-leaning agenda. At the same time, the breakdown between liberal and conservative coverage in the *Wall Street Journal* is much closer
together than for the other two newspapers, so perhaps it is actually more objective than the other newspapers. After all, the *New York Times* has the most liberal articles.

It is hard to explain away the differences between the *New York Times* and the *Los Angeles Times*. Perhaps the *Los Angeles Times* is more objective than the *New York Times*. On the other hand, perhaps if the study included a much higher number of articles and topics, these small differences might melt away. As such, it is also possible that these results show a similar reporting technique among all the newspapers and that there really is no pattern or any particular feeling towards the FDA.

C. Ephedra

*Research Question 1: More negative, positive, or neutral articles overall*

The *New York Times* percentage breakdown is 17% of the articles are negative, 43% of the articles are neutral, 11% of the articles are positive, 6% of the articles are negative/neutral, and less than 23% of the articles are positive/neutral. The combined breakdown is 23% negative, 43% neutral, and 34% positive. In comparison, the *Los Angeles Times* percentage breakdown is 15% of the articles are negative, 49% of the articles are neutral, 18% of the articles are positive, 15% of the articles are negative/neutral, and 3% of the articles are positive/neutral. The combined breakdown is 30% negative, 49% neutral, and 21% positive. On the other hand, the *Wall Street Journal* percentage breakdown is 7% of the articles are negative, 36% of the articles are neutral, 7% of the articles are positive, 14% of the articles are negative/neutral, and 36% of the articles are positive/neutral. The combined breakdown is 21% negative, 36% neutral, and 43% positive. See Comparison Figures 11 and 12 below.
Interestingly, the coverage breakdown here is very different than Vioxx and Plan B. All three newspapers have less negative coverage than another category. This difference is most likely due to the topic difference since Ephedra is the most positive story for the FDA out of all of the topics. For the *New York Times* and the *Los Angeles Times* the highest percentage is the neutral category. On the other hand, for the *Wall Street Journal*, the highest percentage is the positive category.
It was hypothesized that the *Los Angeles Times* is the most negative, followed by the *New York Times*, and finally the *Wall Street Journal*. Here the predictions are correct. Unlike the previous example, the *Los Angeles Times* now has the more negative coverage as compared to the *New York Times*. Since the two liberal newspapers are again switching places, this further supports the argument that over the long run these differences might even out and these two newspapers might have very similar results. This might indicate a mutual bias, or, on the other hand, an objective reporting style of both newspapers.

The more interesting results are the comparisons with the *Wall Street Journal*. Once again, there is a difference between the two newspapers with the liberal reputation as against the one newspaper with the conservative reputation. The former two newspapers are less inclined to praise the FDA and prefer to use a more objective reporting style. The more conservative newspaper has a significantly higher number of positive articles than the *Los Angeles Times* and to a lesser extent, the *New York Times*. The same pattern also reappears in which the *Wall Street Journal* makes the positive or negative articles more neutral.

Perhaps the *Wall Street Journal* is more objective overall or more likely to support the FDA as compared to the other two newspapers due to the overwhelming support in the business community for a ban on Ephedra. On the other hand, perhaps its outlier position to the other two newspapers indicates that it is actually the more biased one, trying to report positively on an issue that should receive more neutral reporting due to the time-lapse on the issue at the FDA.

**Research Question 2: More One-sided or Balanced Overall**

This section looks at the negative articles to determine one-sided or balanced coverage. The *New York Times* has a noticeable split with 67% one-sided as compared to 33% balanced. The *Los Angeles Times*, however, has a massive split with 80% one-sided as compared to 20%
balanced. On the other hand, the *Wall Street Journal* has the most even coverage thus far with an even 50/50 split. See Comparison Figure 13 below.

![Comparison Figure 13: Ephedra Criticism Breakdown](image)

This is very similar to the Plan B results, but, at the same time, it is different than the Vioxx results. The *New York Times* and the *Los Angeles Times* both have more articles that are less balanced than the *Wall Street Journal*. In fact, the *Wall Street Journal* has a perfect 50/50 split. This supports the hypothesis that the more liberal newspapers, the *Los Angeles Times* and the *New York Times*, tend to be more critical and one-sided in the negative articles whether due to an antagonism to the current government or some undiscovered reason as compared to the more conservative newspaper, the *Wall Street Journal*. Yet, recall that the 50/50 result for the *Wall Street Journal* are really unusable since it is based on only two articles. As such, the better comparison is between the two other newspapers exclusively.

It was predicted that the *Los Angeles Times* is the most biased of the two liberal newspapers. This is what has occurred here. This is different than Plan B where the *New York Times* has more negative coverage than the *Los Angeles Times*. Once again, the two newspapers
might just be so similar in reporting styles that it makes sense for them to switch off in these categories within small margins of each other.

Research Questions 3 and 4: More Negative, Positive, or Neutral Editorial Coverage/ Liberal or Conservative Leaning

The editorial section and the liberal conservative sections are combined since there are few results and they share similar patterns. Most importantly, the Wall Street Journal is not included in either comparison since there are no editorials and none of the 15 articles indicate political bias. Similarly, the New York Times cannot be included in question 3 since only one editorial is published. Thus, the editorial comparison and question 3 cannot be addressed here.

As for research question 4, the results are not perfect. Both the Los Angeles Times and the New York Times have a very small number of articles so that it is troubling to make any general conclusions or observations from these results. As such, below is the graph comparing the New York Times and the Los Angeles Times for the liberal/conservative bias study only, but this section refrains from making sweeping predictions. The New York Times liberal/conservative split is 42% liberal, 50% conservative, and 8% both. The Los Angeles Times liberal/conservative split is 50% liberal, 50% conservative, and 0% both. See Comparison Figure 14 below. These results are almost equivalent, since the only reason the New York Times has the lower liberal number is due to articles that use both, and, more importantly, not due to more conservative articles. Notice that both newspapers have a high amount of conservative articles and the New York Times even has a majority of conservative articles. Perhaps this is due to the poorly-defined liberal and conservative viewpoints for Ephedra. Furthermore, perhaps the newspapers are objective, including more positive coverage (which might be conservative here based on my coding) when the story calls for more positive reporting.
VIII. Conclusion

This study only begins to touch on the very difficult issue of newspaper framing, especially when related to neutral government agencies as opposed to interest groups and politics. It would be informative to see if these results are repeated on a larger scale with a variety of different agencies. Interestingly, within the *New York Times* and the *Los Angeles Times* coverage, the newspapers both tend to be more negative and liberal overall. On the other hand, the *Wall Street Journal* tends to have more neutral articles and a less clearly defined liberal or conservative split among the topics (as sometimes there is more liberal than conservative). However, when one compares the newspapers together, it does appear that the *Wall Street Journal* is more likely to report positively on the FDA or represent conservative values as compared to the other two newspapers. Within the *New York Times* and the *Los Angeles Times*, there is a reoccurring shift in terms of overall negativity. This might mean that they are similar and therefore actually objective. On the other hand, these results might represent a framing and reporting technique of more liberal newspapers.