

questperspective

By James Montier

Why Skepticism Is Rare

Psychological Experiments Offer Insights Into Investor Foibles

In the blue corner, Descartes. In the red corner, Spinoza. Two great C17th philosophers, two very different views on the human mind. Descartes thought that understanding and belief were separate acts. Spinoza argued they were one and the same. The evidence supports Spinoza. In order to understand something we seem to need to believe it. We seem to be hardwired to 'believe'!

- Why is it that we end up believing such strange ideas? For instance, supposedly smart people buy into myths such as stocks for the long run and ideas such as dividends don't matter. In order to investigate why we end up holding such beliefs we need to understand how we handle ideas in our minds.

- Daniel Gilbert, a Harvard psychologist, has explored this issue in depth. He suggests that there are two visions of the way our minds work when presented with new ideas. According to the work of Descartes, we hold the idea in a sort of mental limbo, proceed to evaluate it, and then reach a conclusion as to its veracity. This sits well with folk psychology in as much as it sounds like the way we would like to think we work.

- However, Spinoza had an alternative take on the process. He believed that our minds had to hold an idea as true in order to actually understand it. Then, if we are lucky, we might engage in an evaluative process. Once this is completed we then form a corrected belief.

- Gilbert and his co-authors have run many ingenious experiments designed to show which of these processes is the closest description of the way in which our minds work. The evidence they have uncovered strongly supports the Spinozan

view of the world. For instance, people asked to read statements on a crime. They were told some of the sentences they would read were false and written in red ink. However, when people were distracted from this task (by asking them to hunt for numbers at the same time as reading) they ended up believing the false statements to be true. This had a very material impact on the recommended jail term for the crime. When the false statements exacerbated the crime and the readers were distracted, they recommended a jail time that was 60% longer than when they weren't distracted!

- The thought that we seem to believe everything in order to understand it is more than a little disconcerting. It would seem to render us powerless to control our beliefs. However, don't despair just yet, two potential strategies are available to us. Firstly, what Gilbert calls 'unbelieving'. This effectively requires us to analytically assess our beliefs and confront them with reality. However, cognitive load, pressure and time constraints all sap our ability to follow this path. Secondly, we can follow an exclusion strategy, simply avoiding the generators of false beliefs, just as dieters may choose to avoid doughnut shops.

- A combination of these strategies is likely to be optimal. When you are really trying to assess the validity of an argument do your best to avoid distraction. Turn off your screens and blackberries, put your phones on call forward, and ignore your colleagues!

Skepticism is rare, or, Descartes vs. Spinoza
Sometime ago a client asked us to compile a list of myths that the markets seemed to hold dear. We came up with twelve potential myths ranging from stocks for the long run to dividends don't

Kathryn M. Welling
Editor and Publisher

Jean M. Galvin
Business Manager and
Webmaster

Karin-Marie Fitzpatrick
Editorial Assistant

Alexander Isley Inc.
Graphic Design

Weeden Securities Corp.
Board of Directors

Donald E. Weeden

Barry J. Small

Robert A. Cervoni

Timothy McDonald

Robert DeMichele

Daniel V. Panker

Richard Sharp

Richard Schmaltz

Craig Hetherington

Christopher Mahler

Todd Trimmer

welling@weeden, an exclusive service for clients and prospective clients of Weeden & Co. LP, is published biweekly on Friday mornings, by welling@weeden, a research division of Weeden & Co. LP. Editorial and partnership offices are located at 145 Mason Street Greenwich, CT 06830. Telephone: (203) 861-9814 Fax: (203) 618-1752 Email: welling@weeden.com jean_galvin@weeden.com First-class postage is paid at Stamford, CT

Copyright warning and notice: It is a violation of federal copyright law to reproduce all or part of this publication or its contents by any means. The Copyright Act imposes liability of up to \$100,000 per issue for such infringement. welling@weeden does not license or authorize reproduction by clients or anyone else. However, multiple copies are available to clients upon request and limited reprint arrangements are available. Copyright 2005, K.M. Welling and Weeden & Co. LP. All rights reserved.

matter via such topics as commodities for the future and bond supply matters. However, this exercise also made me wonder why it was that supposedly smart people ended up believing such strange things.

This pondering sent me (as is usually the case) to the annals of psychology. To some extent these errant beliefs seem to stem from bounded awareness/inattentive blindness and framing. We have explored such elements before (see *Global Equity Strategy*, 16 September 2004, What you see isn't what you get). However, there may well be another factor at work. We seem to be hard wired to 'believe'.

Daniel Gilbert, a professor of psychology at Harvard, has explored how we go about believing and understanding information. In a series of truly insightful papers¹ Gilbert and co-authors have explored the belief process using two alternative philosophical viewpoints.

Cartesian systems

The first view is associated with the work of Rene Descartes. When it came to belief, Descartes suggested the mind performs two separate mental acts. First it understands the idea. Secondly, the mind assesses the validity of the idea that has been presented. This two-stage process seems intuitively correct. After all, we can all imagine being presented with some novel idea, holding it in our minds and then pondering the truth or otherwise associated with the idea. The Cartesian approach fits well with folk psychology.

Descartes was educated by Jesuits and like many 17th century philosophers' generally deployed psychology and philosophy in the aid of theology. Like anyone of any sense Descartes was well aware that people were capable of believing things that weren't true. In order to protect the Church, Descartes argued that God had given man the power to assess ideas. So it clearly wasn't God's fault when people believed things that weren't true.

As Gilbert (1993, op cit) notes, Descartes approach consisted of two axioms. Firstly, the mental separation and sequencing of understanding and believing and secondly, that people have no control over how or what they understand, but are totally free to believe or disbelieve ideas as they please.

Spinozan systems

Spinoza's background and thinking could not be much more different than Descartes. Born a Jew, Baruch de Espinoza (later to become Benedict Spinoza) outraged his community and synagogue. The tensions finally resulted in

Spinoza being excommunicated, accused of abominable heresies and monstrous deeds. The order of excommunication prohibited other members of the synagogue from having any contact with Spinoza.

Freed of the need to conform to his past, Spinoza was able to explore anything he chose. One of the areas he turned his considerable mental prowess to were the faults contained in the Cartesian approach. Spinoza argued that all ideas were first represented as true and only later (with effort) evaluated for veracity. Effectively Spinoza denied the parsing that Descartes put at the heart of his two-step approach. Spinoza argued that comprehension and belief were a single step. That is to say, in order for somebody to understand something, belief is a necessary precondition. Effectively all information or ideas are first accepted as true, and then only sometimes evaluated as to their truth, once this process is completed a 'corrected belief' is constructed if necessary.

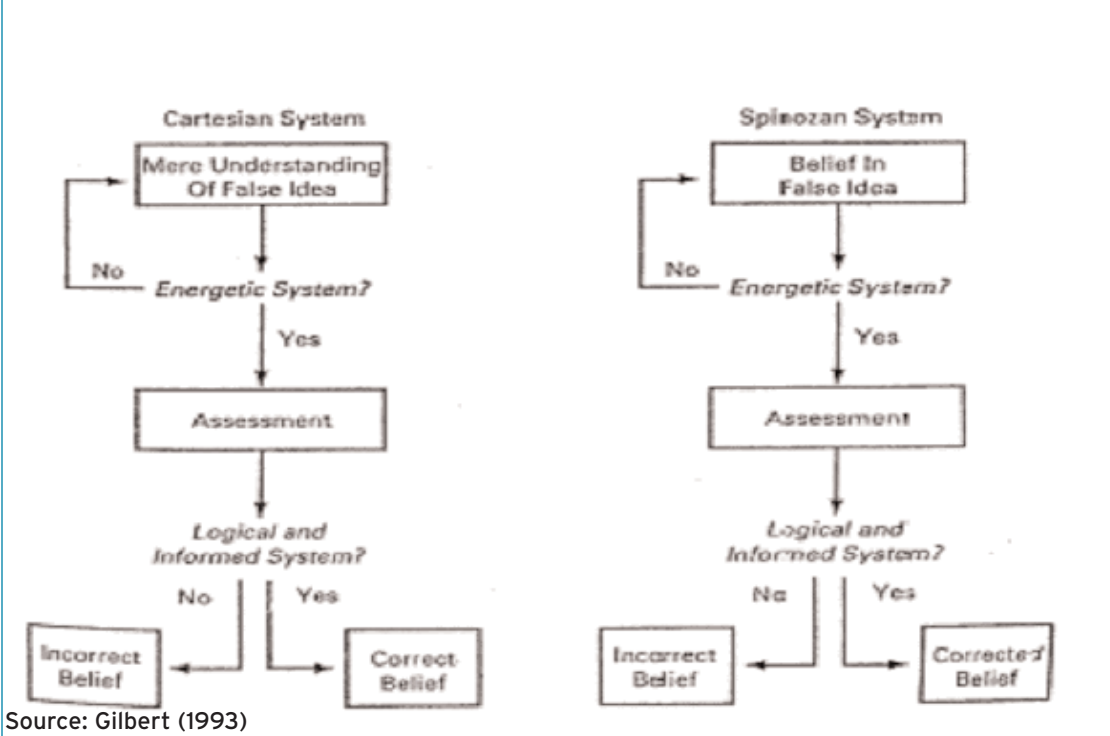
Libraries

Gilbert et al (1990, op cit) use the example of a library to draw out the differences between these two approaches. Imagine a library with several million volumes, of which only a few are works of fiction. The Cartesian approach to filing books would be to put a red tag on each volume of fiction and blue tag on each volume of non-fiction. Any new book that appeared in the library would be read, and then tagged as either fiction or nonfiction. Any book that is unread is simply present in the library until it is read.

In contrast, a Spinozan library would work in a very different fashion. Under this approach a tag would be added to each volume of fiction but the non-fiction would be left unmarked. The ease of this system should be clear; it requires a lot less effort to run this system than the Cartesian approach. However, the risk is that if a new book arrives it will be seen as non-fiction Gilbert et al note that under ideal conditions both systems produce the same outcome if allowed to run to conclusion. So if you pick up a copy of Darwin's 'The expression of emotions in man and animals' and asked the Cartesian librarian what he knew about the book, he would glance at the tag and say non-fiction. The Spinozan librarian would do pretty much the same thing, concluding the book was non-fiction because of the absence of a tag.

However, imagine sneaking a new book into the library, say the latest Patricia Cornwell thriller. If you took the book to the librarian and asked them what they knew about the book, their response would reveal a lot about the underlying

Decartes vs. Spinoza: a question of belief



ing process governing the library's approach to filing. For instance, the Cartesian librarian would say, "I don't know what sort of book that is. Come back later when it has been read and tagged appropriately". The Spinozan librarian would glance up and see the absence of a tag and say "it doesn't have a tag so it must be non-fiction" - an obviously incorrect assessment.

A testing structure

The picture below taken from Gilbert (1993) shows the essential differences between the two approaches, and also suggests a clever way of testing which of the two approaches has more empirical support.

Say an idea is presented to the brain², and then the person considering the idea is interrupted in some fashion. Under a Cartesian system, the person is left merely with an understanding of a false idea, but no belief in it. However, if people are better described by a Spinozan approach then interrupting the process should lead to a belief in the false idea. So giving people ideas or propositions and then interrupting them with another task should help to reveal whether people are Cartesian or Spinozan systems when it comes to beliefs.

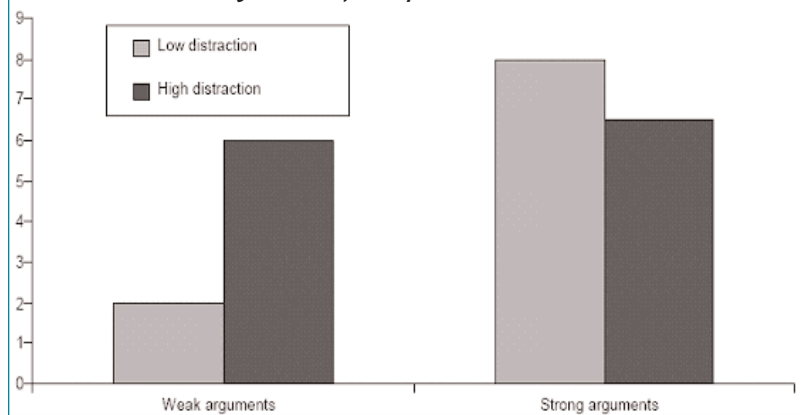
The empirical evidence

It has long been known that distracting people can impact the belief they attach to arguments. For instance, in their 1994 review Petty et al³ report an experiment from 1976 which clearly

demonstrated the impact of distraction techniques⁴.

To test the impact of distraction, students were exposed to a message arguing that tuition at their university should be cut in half. Students listened to the ideas, which were presented over headphones. Some heard strong arguments, others heard relatively weak arguments. At the same time, the students were subjected to a distraction task, which consisted of tracking the positions of Xs that were flashed on a screen in front of them. In the high distraction version of the task, the Xs flashed up at a fast pace, in the low distraction task

Post messages attitudes as a function of distraction and argument quality



the rate was reduced heavily.

The results Petty et al found are shown in the chart below. When the message was weak, people who were highly distracted showed much more agreement with the message than did the people who only suffered mild distraction. When the message was strong and distraction was high, the students showed less agreement than when the message was strong and the distraction was low. Distraction did exactly what it was meant to do... prevented people from concentrating on the important issue.

Petty et al conclude "Distraction, then, is an especially useful technique when a person's arguments are poor because even though people might be aware that some arguments were presented, they might be unaware that the arguments were not very compelling."
Something to bear in mind at your next meeting with brokers perhaps? The next time an analyst comes around and starts showing you pictures of the next generation of mobile phones, just stop and think about the quality of their investment arguments.

Is there more direct evidence of our minds housing a Spinozan system when it comes to belief? Gilbert et al (1990, op cit) decided to investigate. They asked people to help them with an experiment concerning language acquisition in a natural environment. Participants were shown ostensibly Hopi words with an explanation (such as a monishna is a bat). They had to wait until the experimenter told them whether the word they had been given was actually the correct word in Hopi or whether it was a false statement.

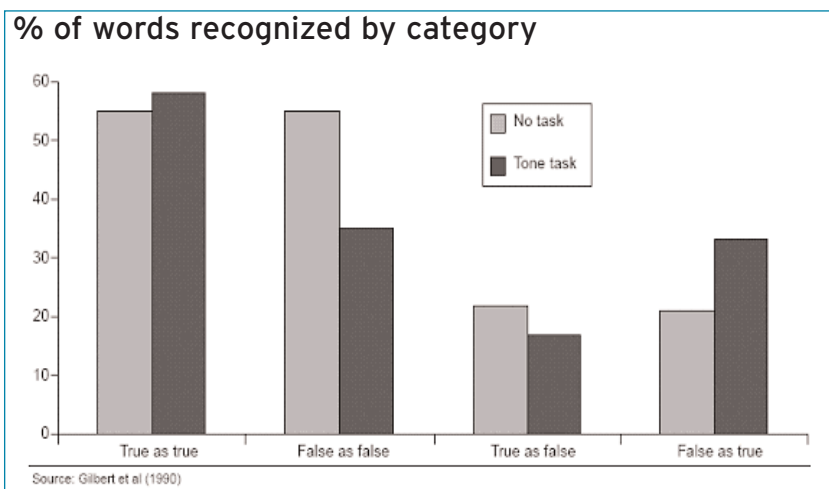
Subjects also had to listen out for a specific sound, which if they heard required them to press a button. The tone sounded very shortly after the participant had been told whether the

statement was true or false. This was aimed at interrupting the natural processing of information. Once they responded to the tone, the next Hopi word appeared preventing them from going back and reconsidering the previous item.

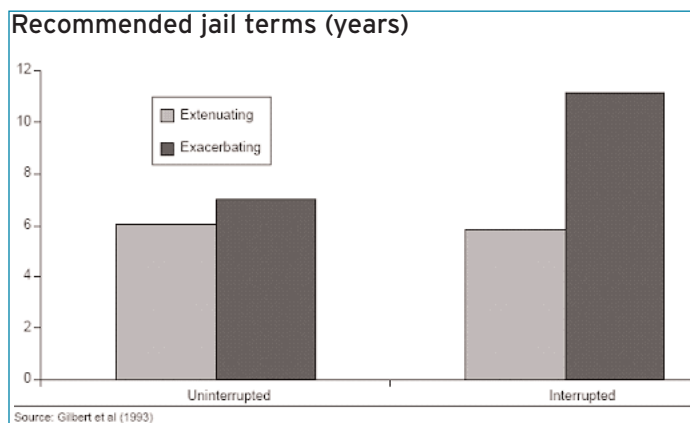
When subjects were later asked about their beliefs, if they worked in a Spinozan way then people should recall false propositions as true more often after an interrupt than the rest of the time. As the chart below shows, this is exactly what Gilbert et al uncovered. Interruption had no effect on the correction identification of a true proposition (55% when uninterrupted vs. 58% when interrupted). However, interruption did significantly reduce the correct identification of false propositions (55% when uninterrupted vs. 35% when interrupted). Similarly one could look at the number of true-false reversals (the right side of the chart above) When false propositions were uninterrupted, they were misidentified as true 21% of the time, which was roughly the same rate as true propositions were identified as false. However, when interrupted the situation changes, false propositions were identified as true some 33%, significantly higher than the number of true propositions were identified as false (17%).

In another test Gilbert et al (1993, op cit) showed that this habit of needing to believe in order to understand could have some disturbing consequences. They set up a study in which participants read crime reports with the goal of sentencing the perpetrators to prison. The subjects were told some of the statements they would read would be false and would appear on screen as red text, the true statements would be in black text. By design, the false statements in one case happened to exacerbate the crime in question; in the other case they attenuated the crimes. The statements were also shown crawling across the screen - much like the tickers and prices on bubble vision. Below the text was a second row of crawling numbers. Some of the subjects were asked to scan the second row for the number (5) and when they saw it, they were asked to press a button.

At the end of experiment, subjects were asked to state what they thought represented a fair sentence for the crimes they had read about. The chart below shows that just like the previous example, interruption significantly reduced the recognition of false statements (69% vs. 34%), and increased the recognition of false statements as being true (23% vs. 44%).



The chart below shows the average recommended sentence depending on the degree of interruption. When the false statements were attenuating and processing was interrupted there wasn't a huge difference in the recommended jail term. The interrupted sentences were around 4% lower than the uninterrupted ones. However, when the false statements were exacerbating and interruption occurred the recommended jail term was on average nearly 60% higher than in the uninterrupted case!



Strategies to counteract naïve belief

The thought that we seem to believe everything in order to understand it, is a more than a little disconcerting. It would seem to render us powerless to control our beliefs. However, the absence of direct control over our beliefs doesn't necessarily imply we are at their mercy.

Two potential strategies for countering our innate tendency to believe can be imagined. The first is what Gilbert (1993, op cit) calls 'unbelieving'. That is, we can try to carry out the required analytic work to truly assess the veracity of an idea. This certainly appeals to the empiricist in me. My own personal viewpoint is that we should accept very little at face value and use evidence to assess how likely the proposition actually is.

For example, we are often told that stock markets earnings can grow faster than nominal GDP over extended periods. Of course, in year-to-year terms there isn't a close linkage between the two. However, in the long run earnings (and dividends) have grown substantially below the rate of nominal GDP growth (on average earnings have grown 1-2% below the rate of nominal GDP; see *Global Equity Strategy*, 16 August 2002 Return of the Robber Barrons for more on this).

Growth investing is another example. I don't doubt that some growth investors are very suc-

cessful. However, the empirical evidence shows that picking winners in terms of growth is exceptionally difficult and fraught with danger (in that buying expensive stocks with high embodied expectations obviously opens up considerable downside risk if reality falls short of expectations). In contrast, buying cheap stocks offers a margin of safety against disappointment. (See *Global Equity Strategy*, 16 March 2005, Bargain Hunter for more details).

So regularly confronting beliefs with empirical reality is one way of trying to beat the Spinozan system. However, 'unbelieving' is a risky strategy since it relies on you having the cognitive wherewithal to be on your guard. Gilbert et al have shown that **cognitive load, pressure and time constraints all undermine our ability to reject false beliefs.**

The second potential belief control mechanism is called 'exposure control'. This is a far more draconian approach than 'unbelieving'. **False beliefs can be avoided by avoiding all beliefs, just as a dieter who loves doughnuts may choose to avoid shops that sell doughnuts, we can try to avoid sources of information that lead us to hold false beliefs.** This is a conservative strategy that errs on the side of exclusion, it excludes false beliefs, but it may also exclude some true beliefs. However, it doesn't suffer from the problems of overload, pressure or time constraints unlike the 'unbelieving' strategy.

All of this suggests that **a combination of these strategies is likely to be optimal.** When you are really trying to assess the validity of an argument do your best to avoid distraction. **Turn off your screens, put your phone on call forward, and try to cut yourself off from all the sources of noise.** Of course, management and colleagues may well think you have taken leave of your sense as you sit there with your screens off, but try to ignore them too. If you are likely to be distracted then either wait until later, when you can give the assessment the time and effort it requires or simply follow an exclusion strategy.

¹ Gilbert, Krull, Malone (1990) Unbelieving the unbelievable: Some problems in the rejection of false information, *Journal of Personality and Social Psychology*, 59. Gilbert (1991) How mental systems believe, *American Psychologist*, 46 Gilbert, Tafarodi, Malone (1993) You can't believe everything you read, *Journal of Personality and Social Psychology*, 65 Gilbert (1993) The Assent of Man: mental representa-

tion and the control of belief in Wegner and Pennebaker (eds) *The Handbook of Mental Control*

² This hints that we support a Spinozan view of the human mind. Descartes was famous for arguing the difference between the brain and the mind, Spinoza in contrast saw the two as impossible to separate, they are two sides of the same coin from a Spinozan viewpoint. For more on this see Antonio Damasio's first and third books, *Descartes' Error* and *Looking for Spinoza* respectively.

³ Petty, Cacioppo, Strathman and Priester (1994) *To think or not to think*, in Brock and Shavitt *The Psychology of Persuasion*

⁴ Petty, Wells and Brock (1976) *Distraction can enhance or reduce yielding to proganda*, *Journal of Personality and Social Psychology*, 34

Reprinted with permission from *DRKW*, October 26, 2005 James Montier, +44 (0) 207 475 6821, james.montier@drkw.com. Online research: www.drkwresearch.com

Welling@Weeden Staff Conflicts Avoidance Policy Disclosures

In keeping with Weeden & Co. LP's reputation for absolute integrity in its dealings with its institutional clients, welling@weeden believes that its own reputation for independence and integrity are essential to its mission. Our readers must be able to assume that we have no hidden agendas; that our facts are thoroughly researched and fairly presented and that when published our analyses reflect our best judgments, not vested pocketbook interests of our sources, colleagues or ourselves. Neither Weeden & Co. LP nor w@w engage in investment banking; w@w's mission is strictly research.

All information gathered by welling@weeden editorial staff in connection with her/his job is strictly the property of welling@weeden. It is never to be disclosed prior to publication to anyone outside of welling@weeden. Editorial staff (a group broadly defined to include Kate Welling's immediate family) will not buy or sell any security mentioned in the journal for at least one week after publication. Staff will avoid not only speculation but the appearance of speculation and may not engage in short-term trading, the short selling of securities, or the purchase or sale of options or futures. Staff may not be otherwise compensated for securities recommendations in these pages. No w@w staff will serve as an officer or director of any publicly traded company. All securities positions entered into by w@w editorial staff will be held for *at least* six months unless dispensation is received, in extraordinary situations, from Weeden & Co. LP's compliance officer. Any securities position in any company, mutual fund or partnership portfolio featured in welling@weeden that was acquired by staff in advance of the publication decision will be specifically disclosed at first mention. *And* that position will be frozen for six months from date of publication, again, absent extraordinary dispensation from compliance.

Research Disclosures

This material is based on data from sources we consider to be accurate and reliable, but it is not guaranteed as to accuracy and does not purport to be complete. Opinions and projections found in this report reflect either our opinion (or that of the named analyst interviewed) *as of the report date* and are subject to change without notice. When an unaffiliated interviewee's opinions and projections are reported, Weeden & Co. is relying on the accuracy and completeness of that individual/firm's own research disclosures and assumes no liability for same, beyond reprinting them in an adjacent box. This report is neither intended nor should it be construed as an offer to sell or solicitation or basis for any contract, for the purchase of any security or financial product. Nor has any determination been made that any particular security is suitable for any client. Nothing contained herein is intended to be, nor should it be considered, investment advice. This report does *not* provide sufficient information upon which to base an investment decision. You are advised to consult with your broker or other financial advisors or professionals as appropriate to verify pricing and other information. Weeden & Co. LP, its affiliates, directors, officers and associates do not assume any liability for losses that may result from the reliance by any person upon any such information or opinions. Past performance of securities or any financial instruments is not indicative of future performance. From time to time, this firm, its affiliates, and/or its individual officers and/or members of their families may have a position in the subject securities which may be consistent with or contrary to the recommendations contained herein; and may make purchases and/or sales of those securities in the open market or otherwise. Weeden & Co. LP makes markets in securities. Weeden & Co. LP is a member of NASD and SIPC.

W@W Interviewee Research Disclosure: Additional disclosures under other non-US regulations. The disclosures under US regulations above should be read together with these additional disclosures. In respect of any compendium report covering six or more listed companies, please refer to the following website for all relevant Italian disclosures: www.drkwresearch.com/disclosures/

This report has been prepared by Dresdner Kleinwort Wasserstein, by the specific legal entity named on the cover or inside cover page.

United Kingdom: This report is a communication made, or approved for communication in the UK, by Dresdner Kleinwort Wasserstein Securities Limited (authorized and regulated by the Financial Services Authority and a Member Firm of the London Stock Exchange). It is directed exclusively to market counterparties and intermediate customers. It is not directed at private customers and any investments or services to which the report may relate are not available to private customers. No persons other than a market counterparty or an intermediate customer should read or rely on any information in this report. Dresdner Kleinwort Wasserstein Securities Limited does not deal for, or advise or otherwise offer any investment services to private customers.

European Economic Area: Where this report has been produced by a legal entity outside of the EEA, the report has been re-issued by Dresdner Kleinwort Wasserstein Securities Limited for distribution into the EEA.

United States: Where this report has been approved for distribution in the US, such distribution is by either: (i) Dresdner Kleinwort Wasserstein Securities LLC (DrKWS LLC); or (ii) other Dresdner Kleinwort Wasserstein companies to US Institutional Investors and Major US Institutional Investors only; or (iii) if the report relates to non-US exchange traded futures, Dresdner Kleinwort Wasserstein Limited (DrKWL), DrKWS LLC, or in case (iii) DrKWL, accepts responsibility for this report in the US. Any US persons wishing to effect a transaction through Dresdner Kleinwort Wasserstein (a) in any security mentioned in this report may only do so through DrKWS LLC, telephone: (+1 212) 429 2000; or (b) in a non-US exchange traded future may only do so through DrKWL, telephone: (+1 11 44) 20 7623 8000).