

## **Statement of Support for the Application of Cantor Fitzgerald For a Futures Exchange on Movie Revenues**

My name is Don M. Chance and I am Professor of Finance and holder of the James C. Flores Endowed Chair of MBA Studies at Louisiana State University. I have been asked by Cantor Fitzgerald to provide a statement and document to the United States Congress that would support its request for approval of a new futures exchange in which contracts would be based on the box office revenues of movies. While I am being compensated for my service, I had independently established this opinion as evidenced by my co-authorship of two articles over the last two years on a similar financial instrument. In the spirit of full disclosure, I provide the caveat that these remarks are my own and do not necessarily represent the views of my employer, Louisiana State University.

### **Qualifications**

I hold a Ph.D. in finance from Louisiana State University and am a CFA (Chartered Financial Analyst) charterholder. I have been an internationally recognized scholar and consultant in the area of financial derivatives for nearly 30 years. I formerly taught at Virginia Tech, and I have authored three books on financial derivatives, including one widely-used textbook currently in the 8<sup>th</sup> edition, and another that is the required reading for the CFA examination program, which is taken by over 120,000 candidates worldwide each year. I have authored nearly 100 published articles, most of which deal with derivative instruments. I have conducted training programs for UBS, Thomson Financial, The German Society of Financial Analysts, the International Federation of Banking of Luxembourg, Goldman Sachs, and the World Bank. I am an advisor to IndexIQ, a New York-based creator of exchange-traded funds, and to The Governance Fund, a Minnesota-based investment advisor. Prior to my academic career, I spent four years in commercial banking.

My specific qualifications for this matter derive from two articles I co-authored. The first, "Pricing an Option on Revenue from an Innovation: An Application to Movie Box Office Revenue," was published in 2008 in *Management Science* (Vol. 54, No. 5, pp. 1015-1028), a prestigious interdisciplinary scholarly journal with extremely high publication standards. The second paper, which extended some of the work in the first paper and was targeted more toward practitioners, appeared in *Risk* magazine (Vol. 22, May, 2009, pp. 80-86) and was entitled "Pricing Options on Film Revenue." Both of these articles were co-authored

with Professors Eric Hillebrand of Louisiana State University and Jimmy Hilliard of Auburn University.

These two papers emanated from a long-term interest I have had on how the entertainment industry has pursued means of hedging the significant risk it faces in the music and films it produces. I will provide a brief review of this subject in this document. The papers demonstrate how to capture the statistical properties of revenues from a movie and how to use that knowledge to create options that would pay off based on how a movie performs. Although the instruments being proposed by the new exchange are futures contracts, the essential characteristics of options and futures are sufficiently similar such that any differences in the context of this matter are trivial.<sup>1</sup>

This statement will be followed by a white paper at a later date.

### **Futures Markets and Contracts as Regulated Risk Management Tools**

Futures markets have operated successfully in the United States since the middle of the 19<sup>th</sup> century. They provide a facility for the trading of standardized contracts to buy and sell a specified underlying asset at a fixed price at a future date. Commonly traded assets are stocks, bonds, currencies, metals, energy, and commodities. The market is used extensively by various parties to transfer risk and adjust their wealth exposures to levels that are suitable for their risk tolerances. Futures markets provide an absolute credit guarantee that is enabled by the existence of a clearinghouse that stands between each party to a futures contract and guarantees payment to the party that profits that it will pay if the party that loses defaults. Clearinghouses have existed since around the 1920s, and no party has ever suffered a credit loss from failure of a clearinghouse. In my opinion futures markets have performed exceptionally well during periods of market stress. In particular, during the crash of October 19, 1987, on which U. S. stocks lost nearly a fourth of their value in a single day, U. S. futures markets led the rally that stopped the carnage.

Futures markets exist alongside other markets for similar instruments, some of which trade in standardized regulated markets and some of which trade exclusively in the

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<sup>1</sup>By way of clarification, an option enables a party to claim the value of an asset or the payoff of an asset by paying a fixed amount of money at a certain date. For this right, the buyer pays a fixed sum of money, the option price, at the start to the counterparty or seller. The counterparty/seller receives the up-front payment from the buyer and must be willing to provide the payment or asset demanded by the buyer, if the buyer so chooses. A futures is an agreement in which one party commits to claiming the value of an asset or the payoff of an asset by paying a fixed price at a certain date. The counterparty, or seller, in a mirror image, agrees to deliver the asset or pay the value of the asset to the buyer on the given date. Whereas an option is a *right* held by the buyer and granted by the seller, a futures is an *obligation* on the part of both buyer and seller.

largely unregulated over-the-counter market. Options, for example, which can often be used with or in place of futures, exist in both exchange-traded markets and over-the-counter markets. Swaps and forwards, which are even more closely related to futures, trade only in over-the-counter markets. These instruments are part of the larger family of instruments called derivatives. As noted, they are often substitutable and their existence and use is nearly always for similar purposes.

Futures markets are regulated by the United States Commodity Futures Trading Commission (CFTC). In its history, the Commission has approved over 700 futures contracts. The CFTC has tended to take the view that futures contracts should be allowed to be offered and succeed or fail on their merits. Futures exchanges are highly competitive and aggressively compete by offering similar products. A sign of a healthy market is a low success rate and indeed U. S. futures markets are healthy. My research has shown that only about one in four new contracts is successful.

#### **A Market for Futures Contracts on Movie Revenues**

Cantor Fitzgerald has proposed a new type of futures contract, one in which traders would enter into agreements to pay a fixed sum of money for the right to receive a variable sum of money that would be determined by the financial performance of a movie. These “movie futures” are, in my view, long overdue and should be permitted. There is a long history of discussion about this type of instrument and indeed, the film industry itself has a track record of attempting to create similar instruments. Regardless of what views have been conveyed by the entertainment industry on the matter of this new proposed exchange, it is apparent that this industry is interested in means of shedding some of its risk.

Based on my research, I believe the first such effort was the issuance of a \$400 million, seven-year bond by the Walt Disney Company in 1992. This bond specified that the interest would be determined by the revenues from a package of 13 movies to be released in Europe. Hence, Disney was laying off some of the risk of the performance of these movies to the investors who bought the bond. In 1997, Pullman LLC offered what came to be known as the famous “Bowie Bonds,” a \$55 million issue purchased by Prudential in which the interest payments were determined by David Bowie album sales. Similar bonds have since been offered based on royalties generated by James Brown, the Isley Brothers, the songwriting teams of Ashford and Simpson as well as Holland, Dozier, and Holland, and by revenues from movies of Dreamworks SKG. Many of these instruments are created through a process known as securitization, whereby investors can obtain equity returns as well as

interest payments. Thus, the entertainment industry has clearly indicated a desire to eliminate some of its risk.

There appears to be considerable demand on the part of investors for opportunities to trade derivative instruments based on film revenues. This interest is fueled by two factors. One is that professional investors are constantly looking for new opportunities in asset classes that have little to no correlation to the more conventional asset classes, such as stocks, bonds, and real estate. This lack of correlation improves the efficiency of investment portfolios, leading to higher expected returns for a given level of risk. Movie revenues are indeed the very type of asset class that appeals to such investors. As my research shows, movie revenues have virtually no correlation with the stock market.

The second factor is the sheer interest in movies. One of the important characteristics for the success of a futures contract is that there must be a significant interest in the asset or value on which the contract is based. Movies are not only appealing for their entertainment value, but the financial performance of a movie is a much-watched statistic to many Americans. Each week, a news story discusses how new releases did over the weekend. There are several successful web sites that track the performance of movies and the revenue generated by stars. While the performance of a movie is probably not as widely followed as sports scores and the stock market, it does, nonetheless, garner considerable attention, which passes the litmus test of a successful futures market – there must interest.

Discussions of the creation of exchanges for standardized trading of financial instruments based on entertainment revenues have a long history but little success to date. There has been far more talk than action, and none appear to have been structured within the regulated environment of futures markets. The Cantor proposal, set up within the U. S. regulatory structure, is the first one I believe that has a reasonable chance of success. And if it is not successful, movie revenue futures will go the way of the 75% of other futures contracts that were launched and failed. That is the American way.

I understand that the film industry objects to the Cantor proposal. I believe it has expressed the view that it is not likely to use these contracts to hedge. I respectfully disagree, based on my observations that the entertainment industry has for many years sought means of laying off this kind of risk. It may well take some time, but I believe the industry will warm up to this product. In particular, the independent film makers who do not have access to the tremendous resources of the major studios could make substantial

use of this contract. Providing these small companies with such opportunities would help them be more competitive with the larger studios. This could also have the effect of stimulating more independent film production, which can only be good for the American public. If the industry ultimately does fail to use it, however, it is unlikely that this new exchange will be successful. The losers will be only Cantor Fitzgerald. In my view, Cantor should be allowed to try and if it cannot make a success, it should fail. That is how we do it in this country and indeed that is what makes America great.

The industry has also opined that no one is likely to buy these contracts, inasmuch as it sees no party that would be harmed by outstanding performance of a movie. It seems to me, however, that parties that negotiate DVD and television rights, the rights to manufacture and market other products with tie-ins to movies and characters, and international distribution rights would be buyers. Better performing movies are far more expensive to these parties, and they could greatly benefit from the use of these futures to keep their costs more predictable, which is the main benefit of hedging.

The industry has also argued that the data on which payoffs are made is subject to manipulation. I find this a rather strange response for two reasons. It is as if a company objects to the trading of derivatives on its stock because the company could manipulate the financial information it releases. Moreover, if the industry would manipulate its own data, it sounds like an admission that the industry would use the contract. But in any case, financial regulations permit trading of derivatives on the company's stock, whether the company objects or not. If the data are subject to manipulation, it is almost surely no more than the manipulation that is possible by corporations operating within Generally Accepted Accounting Principles. This leads to my last reason for wanting to see this contract.

I suspect the industry does not want financial analysts and professional investors studying the finances and accounting for movies. I believe, however, that the financial industry can serve a valuable public purpose in bringing more transparency to the film industry. Perhaps the data are already being manipulated. Manipulation will be harder if financial analysts and professional investors are watching over the industry, as they will if these futures contracts are allowed to trade. Thus, this new market can help improve the quality of the information that originates from this industry.

## **Conclusions**

I urge the United States Congress to grant the petition of Cantor Fitzgerald to create this new futures market. Your concern should be what is good for the public and in that

regard, I see no real risk to the public. Cantor Fitzgerald is not large enough to present a systemic threat, and this project is not large enough that its failure would destroy the firm. Therefore, if this exchange fails, the only losers are the owners of Cantor Fitzgerald.

There is yet another reason why this Congress should approve this proposal. I suspect that if we do not allow this kind of market in the regulated U. S. futures environment, it will create itself either within the unregulated over-the-counter market, as it has done on a small scale already, or it will be created and succeed overseas. With almost all of the successful movies being produced in this country, it would be quite a shame if movie futures markets exist only in foreign countries.