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Executive Summary

Thoroughbred Racetrack Economics: Emerging Issues in Competition, Regulation, and Wagering

Louis Guth, Editor

How Markets Work[SM]

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Table of Contents

Preface

Over the last fifteen years, the business of producing Thoroughbred racing—a business for which the dominant revenue source, directly or indirectly, is wagering, and the dominant cost is purses paid to "in the money" horses—has undergone profound change. As with so many other businesses, that change is the direct result of developments in information technology. These include, first, capacity for simulcasting of races to other tracks and off-track sites hosting players whose wagers could then be commingled into a single pool with those players betting at the host racetrack. Whereas, entering the Nineties, wagering "live" at a host track accounted for over sixty percent of all wagering on Thoroughbred races in the U.S., in little more than ten years that number has fallen to less than fifteen percent. The balance of wagering takes place off-track at other facilities, including off-track betting offices.

Moreover, off-track wagering also takes place as account wagering via the telephone and the Internet. Indeed, this is the fasting growing sector of wagering on Thoroughbred races in this decade. It reflects the effect on the business of developments in information technology, namely the ability to distribute and manage wagering at a retail level that may be independent of the racetrack industries' own operations.

The ways in which information technology are changing the core economic structure and behavior of the Thoroughbred racing business is of particular interest to economists because Thoroughbred racing stands uniquely at the intersection of direct economic regulation, emerging competition, and the operations of financial markets. Direct economic regulation at the state level continues to play a role in the core economic decisions: How much product will be produced, when, and by whom? What kinds of wagering will take place and at what prices? And so forth. But the ability to distribute racing for commingled parimutuel wagering nationwide and even worldwide has opened the door for economic competition in ways that may not have been fully anticipated by the regulators. Moreover, a $2 bet on JMKeynes in the seventh is a form of option: that's why options are referred to as being "in/out of the money." As racetracks have developed more "exotic" compound bets—Exactas, Trifectas, Pick Sixes and the like—sophisticated players, again using the tools made possible through developments in information technology, are employing derivative pricing techniques in deciding on their wagers. The result is a potential shift in the balance of winning in this game toward themselves and away from recreational players. Racetracks therefore are now increasingly challenged to find the right formula for increasing participation of *both* types of bettors.

During the past five years, the National Thoroughbred Racing Association ("NTRA") has twice called on NERA to study the economics of the thoroughbred racing business. Our first report in 2000, "Time to Deregulate: The Case for Thoroughbred Racing," was written by Louis A. Guth, NERA Senior Vice President, and by our outside consultant, Michael D. Shagan. It addresses how the shift to off-track simulcasting supports increasing economic deregulation of Thoroughbred racing at the state level. And our second report, "Handle Up, Revenue (and Purses) Down: An Economic Analysis of Current Trends in the Thoroughbred Racing Industry," was written by Lou Guth and NERA Senior Analyst Thomas Joscelyn. In this report we present the facts behind the flagging rate of growth in industry revenues and purses paid out relative to wagering activity, which we conclude is the result of how changing economic structure and economic behavior within the industry affect the amount of wagering activity level and composition of wagering by distribution sources and type of pool.

The present volume puts those two reports together in one package. It is a package that highlights economic practice and policy, and not other key issues facing the industry, including importantly marketing. Although the result is far from a comprehensive economic review of the business of producing Thoroughbred racing, we think the emerging issues highlighted here continue to be those at the forefront of industry economic concerns. The text is changed only in minor ways, largely to accommodate those areas where the two reports' areas of interest are overlapping. We have updated some of the data and other information contained in exhibits to the first report.

We are of course very grateful to the NTRA for sponsorship and tremendous support for our work, as well as many in the industry—track personnel, horse owners and trainers, and players—who, through their participation in NTRA sponsored task forces, gave us good counsel. In particular, we wish to thank Greg Avioli, current president of NTRA for focus, support and curiosity, and to Tim Smith, former NTRA chairman, who, in a very real way made all of this work possible.

PART ONE
Time to Deregulate: The Case for Thoroughbred Racing

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and

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Legal and Regulatory Aspects of
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Introduction and Summary

In his standard reference work on *The Economics of Regulation,* Alfred E. Kahn identified the general points that distinguish markets driven by economic competition from those driven by economic regulation. He noted that, in economic competition:

"…the government does not… decide

- what should be produced;
- how many or by whom;
- it does not fix prices itself;
- nor does it control investment or entry on the basis of its own calculations of how much would be economically desirable;
- the government does not control who should be permitted to do what jobs;
- nor does it specify the permissible dimensions and characteristics of the product."

Of course, these are precisely the things State governments do with exquisite detail in Thoroughbred horseracing.

Yet, while Kahn's *Economics of Regulation* discusses numerous industries:

Agriculture	Gasoline Retailing	Railroads
Air freight	Health Care	Satellite Communications
Air passenger	Insurance	Shipping
Aluminum	Liquor Retailing	Stock Brokerage
Cable TV	Natural Gas	Stock Exchanges
Cigarette Advertising	Nuclear Fuel	Taxi
Coal	Oil	Trucking
Common Carriers	Pay TV	TV Broadcasting
Computer Industry	Pipelines	Water Service
Defense Industry	Post Office	
Electricity	Radio Broadcasting	

nowhere in the *Economics of Regulation* do we find mention of Thoroughbred horseracing or other competitions with pari-mutuel betting—racing other breeds of horses and Greyhounds, and Jai-Alai.

The objectives of this paper may be summarized as filling in that omission.[1] We will review briefly the rationale for economic regulation,[2] pointing out how the marketplace within which Thoroughbred racing competes today has changed since that regulation was put into place. We then identify the principal aspects of economic regulation of Thoroughbred horseracing[3] in twelve key states,[4] and we point out how these vary across states in light of competition and other factors. Finally we address where and how regulation

[1] Of course, much of state regulation of Thoroughbred racing is motivated not by the economics of inducing competitive behavior from markets where this would otherwise be unlikely. Rather it reflects society's ambiguous feelings about gambling. In particular, state regulation traditionally has almost certainly included amongst its objectives limiting the amount of pari-mutuel betting that would otherwise take place in less regulated markets. We recognize this fact; however our task is to look at improving the economic aspects of regulation, while recognizing that policy-makers may decide on other grounds to depart from improved performance in order to limit gambling.

[2] Traditionally the scope of regulation includes two dimensions. The first dimension is regulation that is intended to help make competitive markets work. Safety regulation and rules dealing with integrity of markets are the chief elements of this type of regulation; and the Securities and Exchange Commission is a good example of a regulator whose chief concern is making sure that financial markets work very well and are highly efficient. The second dimension is regulation that directly affects the price and output of markets. Traditional state regulatory supervision of electricity, gas distribution, and telephone services are examples. We will use the term "economic regulation" generally to refer to this direct regulation of market output and price, unless otherwise noted.

[3] Our principal focus is on the sector directly affected by economic regulation, which is the market to provide Thoroughbred horseracing and related pari-mutuel betting services to consumers. Thus we will not focus on sectors where direct economic regulation does not apply such as breeding, training, and other aspects of the market for providing Thoroughbreds capable of racing, except as they bear directly on the provision of horseracing to consumers, principally through the role of purses.

[4] The states, in alphabetic order, are California, Delaware, Florida, Illinois, Kentucky, Maryland, New Jersey, New York, Ohio, Pennsylvania, Texas, and West Virginia.

might be relaxed with regard to several key areas: licensing requirements, output restrictions and competition, pricing restrictions, inter-track wagering and related distribution issues, and tax policy.[5]

Our country's preference for free markets, wherever possible, is well rooted in both economic principle and in practical experience. We conclude that the economics of Thoroughbred racing have changed significantly, such that economic policy should now have as its guiding principal this objective: **Preserve and enhance live Thoroughbred racing, but as much as possible in a free-market environment.**

To that end, we recommend the following:

- Enable the Thoroughbred industry to market its product by ending price regulation of track takeouts, and by eliminating excessive regulation of inter-track wagering [ITW], off-track betting [OTB], and account wagering.[6]
- When these first objectives are largely accomplished, permit entry and exit by new and by existing Thoroughbred racing licensees, subject only to safety and integrity considerations.
- Let consumer preferences drive the results of inter-breed competition by eliminating rules and regulations that distort consumer preferences amongst the breeds. Stimulate the ability of competing pari-mutuel interests across breeds to negotiate solutions that direct resources to their highest value users.
- Modify state excise tax policies so that they are consistent with policies toward typical competitive businesses. In particular, any excise taxes should be linked to track gross revenues—that is, takeout, and not betting handle.
- Eliminate economic regulation of ancillary matters such as admissions, concessions, and simulcast export fees.
- Support safety and integrity regulation, but improve efficiency through a nationwide licensing program.

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[5] As with *The Economics of Regulation,* our study is an overview of the issues. The NTRA Task Force recognizes that detailed analysis is required of key aspects of economic regulation before deciding when and how to turn increasingly to free markets.

[6] ITW usually refers to wagers being placed on simulcast races received at one track but raced at another facility. While it is a subset of off-track betting, the term OTB is generally regarded as referring to simulcast facilities where no live racing takes place. When referring to simulcast wagering distribution systems including ITW, OTB as well as telephone or computer-based account wagering systems, we will often use the term ITW or inter-track wagering, as it is the most prevalent form today of these distribution systems.

PART TWO
Handle Up, Revenue (and Purses) Down: An Economic Analysis of Current Trends in the Thoroughbred Industry*

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and

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* Prepared for National Thoroughbred Racing Association's Wagering System Task Force

Introduction and Summary of Conclusions

"Handle Up, Purses Down" has been widely used by many participants in the Thoroughbred racing industry to describe the *increase* in handle (+0.8%) and the *decrease* in purses (–1.7%) in 2003 as compared to 2002.[1] Building on our 2000 study *Time to Deregulate: The Case for Thoroughbred Racing,* NERA was hired by the NTRA to assemble data relevant to this issue. We were also asked to provide to the NTRA our analysis of the underlying economic conditions in the Thoroughbred industry that may have lead to this circumstance. We have participated in several NTRA Wagering Systems Task Force Meetings, had numerous conversations with many industry participants (including track executives, players, industry analysts and consultants), and analyzed extensive amounts of public and private economic data. This report contains information from all of these sources. Our findings, in brief, are as follows:

- "Handle Up, Purses Down" is not a new occurrence specific to 2003.[2] In general, purses have not grown as fast as handle for more than a decade. For example, from 1995 to 2003 total Thoroughbred handle grew by 45% while total purses paid to horsemen grew by only 38%.[3] This trend becomes even clearer when purse payments are adjusted for estimates of the contribution of slot revenues. Purses, less the contribution of slot revenues, have grown by only 23% over this time

1 See, for example the data contained in The Jockey Club's 2004 Fact Book at: http://www.jockeyclub.com/factbook.asp.

2 This trend evidently continued through the first quarter of 2004. For example, see http://www.equibase.com/news/releases/041204release.cfm.

3 See Exhibits 2 and 4.

period. With only a small, nominal increase in handle in 2003, it is not a surprise that purses declined.

- A more fundamental relationship is "Handle Up, Revenue (and Purses) Down."[4] That is, purses are mostly determined by the pari-mutuel revenues generated by tracks from wagering. Our analysis of the track revenues generated from over half of the U.S. Thoroughbred industry's total handle illustrates that *both* revenue and purses decreased in 2003.

- The lag in purse growth relative to handle growth can be explained by changes in the revenue model and resulting handle distribution used by Thoroughbred tracks for generating wagers. The most significant change in this distribution model is from *on-track wagering to interstate export wagering*. The effect of this change explains both why handle has generally grown faster than revenue—and therefore purses—since 1990 and why, more recently, the small increase in 2003 handle resulted in a decline in purses.[5]

- But, the decline in adjusted purses per dollar of handle between 2002 and 2003 is also the result of a second phenomenon. Within the interstate simulcast distribution channel there have been significant changes over the last three years. Interstate export handle has been increasingly generated through new distribution systems that are not necessarily directly affiliated with a Thoroughbred track or horsemen's group through ownership, or through state law and/or regulatory policy. For example, these include telephone or Internet-based account wagering systems and related international and domestic entities. Unless there are other controlling contractual issues, these "retail" distributors of Thoroughbred racing signals contribute materially less of their handle to Thoroughbred revenue and purses than more traditional interstate simulcast relationships.[6]

- From an economic standpoint, the growth in interstate simulcasting increases economic competition—that is, effective deregulation—within the Thoroughbred racing market. That this increase in economic competition currently focuses principally on the margin, that is, for high-volume bettors, is not surprising. Indeed, it is the very same

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[4] The focus on "Handle up, Purse Down" is understandable, however, since handle-generated track revenue data are not as easily available as handle and purse data.

[5] Perhaps it goes without saying that handle growing more rapidly than purses is not necessarily a bad thing. To our knowledge, there was no equivalent outcry during the '90s about "Handle Up, Purses Up Not As Much." As we shall see in the evidence presented below, industry concern is really responsive to *declining* purses absent significant growth in handle.

[6] We recognize, of course, that there are corresponding actual or potential cost savings for Thoroughbred tracks associated with this form of retail distribution.

pattern observed in virtually every other industry that has gone through deregulation. And, again as with all of these other industries, economic competition creates issues concerning the traditional price and cost structures of the Thoroughbred racing business. These issues all bear on future prospects for growth in handle and the extent of corresponding growth in track revenue and in purses. They include:

A. Overall price level, that is, the nominal takeout rates on wagers by type of pool;

B. Price structure, in particular the relative level of track revenues (used for purses and to cover operating costs) realized by type of distribution channel; and,

C. The effect of current information technology in wagering systems on the effective takeout rates of typical racetrack patrons.

- There have been only minor changes to nominal takeout rates around the United States since 1998. A number of members of the task force have expressed views on how moderating nominal takeout rates generally, or takeout rates on specific pools, might stimulate overall handle as well as overall revenue for purses. The evidence in support of these views, however, is inconclusive. And pricing in the form of nominal takeout rates is a subject for individual track strategic thinking and policy. We do, however, hold to our central conclusion in *Time to Deregulate:*

  "States should get out of regulating takeout rates, perhaps setting only floors and ceilings in transition. Designing strategic pricing strategies to appeal to all types of bettors is the essence of competition in free markets. It is the most certain outgrowth of deregulation, while being the least predictable in specifics. For similar reasons, states should routinely permit new wager types—with disclosure to bettors—using experimental acceptance procedures in the transition to competition."

- There has emerged, however, a major gap within the retail distribution of Thoroughbred racing in the portion of handle going to *purses and other track expenses associated with putting on live racing.* On average, purses ($1 billion) are 6.7% of aggregate U.S. handle ($15 billion). Under the current pricing structure, however, a rapidly growing distribution channel, unaffiliated retail entities, contribute materially **less** than this amount—from 3-5% of their handle—to tracks for purses and other track expenses associated with putting on live racing. All other distribution channels contribute materially **more** than this amount when one combines revenues going to host tracks, to guest tracks and/or to in-state hosts—at least 8%, and more typically 10-13%. So the gap is at least 3% but more typically 6%.

There are two principal effects of interest. First, the distinct gap in overall support of live racing is a key component—and probably the key component—of rebates made available by the advantaged entities to high volume bettors. Second, the growing (and resulting) shift in handle toward these entities necessarily reduces track revenues and purses relative to aggregate handle.

- Increasing competition in the distribution of Thoroughbred wagering opportunities requires that the industry be afforded the opportunity to meet the pricing demands of its customers. In doing so, tracks need to consider—in addition to customer demand—the actual costs incurred doing each of the things they do: (a) in producing live racing, (b) in providing wagering opportunities for live patrons; (c) in otherwise hosting live patrons, and so forth. That is, pricing must be determined by the interplay of supply and demand. Therefore, we provide an illustrative analysis of the cost structure for eight Thoroughbred tracks..

- Finally, the evidence made available to us strongly indicates that a certain category of high volume bettors, using current information technology not only to handicap races but also to place wagers, are able to achieve persistent high payoff rates across tracks.[7] These payoff rates exceed what we understand are expected payoff rates for superior handicappers (before rebates) of 90–95%. We consider the current role of information technology supporting these high payoff rates and include an analysis of their impact on effective takeout rates for all other bettors.[8]

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7 We define payoff rates as the ratio of aggregate winning payouts to total handle wagered.

8 In the remainder of this report we will make reference to *nominal takeout rates* and *effective takeout rates*. By nominal takeout rates we mean the (blend of) takeout rates established by racetracks pursuant to state law and/or regulatory policy. By effective takeout rates for a bettor or group of bettors we mean the complement of payoff rate, that is, for example, 10% if the payoff rate is 90%. In pari-mutuel wagering, by construction, the weighted average effective payoff rate overall equals the nominal payoff rate.

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