



The Strength of Competition in the Sale of Rx Contact Lenses: An FTC Study



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Introduction and Executive Summary

On December 6, 2003, Congress passed the Fairness to Contact Lens Consumers Act (“FCLCA” or the “Act”), which became effective on February 4, 2004.¹ Congress enacted the FCLCA to enhance competition in the market for contact lenses by providing consumers with a greater ability to fill their contact lens prescriptions from sellers other than their prescribing eye care practitioner (“ECP”).²

The Act, along with the Federal Trade Commission’s (“FTC” or “Commission”) implementing regulations, impose on prescribers and sellers several requirements intended to enhance prescription portability. Among other things, ECPs must release a contact lens prescription to a patient and may not tie the prescription release to the purchase of lenses from the ECP.³ Sellers may dispense contact lenses only in accordance with a contact lens prescription that the patient or ECP presents directly to the seller, or that has been verified by the ECP.⁴ In addition to these provisions, the Act also requires the FTC to “undertake a study to examine the strength of competition in the sale of prescription contact lenses.”⁵

¹ P.L. 108-164, 1117 Stat. 2024.

² In this report, ECP refers to both independent ECPs and those who are affiliated with optical chains and retailers. *See* Chapter 1, Section III, *infra* for a discussion of the various distribution channels.

³ 15 U.S.C. § 7601; 16 C.F.R. § 315.3.

⁴ 15 U.S.C § 7603(a); 16 C.F.R. § 315.5(a). In addition, the FTC regulations require ECPs who prescribe private label lenses to include on the prescription the name of the manufacturer, the trade name of the private label brand, and, if applicable, the trade name of an equivalent brand name. 16 C.F.R. § 315.2(e)(8). Sellers may fill prescriptions for private label lenses with the same lens that is sold under a different name. 15 U.S.C. § 7603(f); 16 C.F.R. § 315.5(e).

⁵ 15 U.S.C. § 7609(a). Congress directs the Commission to address the following specific issues: “1) The incidence of exclusive relationships between prescribers or sellers and contact lens manufacturers and the impact of such relationships on competition; 2) The difference between online and offline sellers of contact lenses, including price, access and availability; 3) The incidence, if any, of contact lens prescriptions that specify brand name or custom labeled contact lenses, the reasons for the incidence, and the effect on consumers and competition; 4) The impact of the FTC eyeglasses rule on competition, the nature of enforcement of the rule, and how such enforcement has impacted competition; and 5) Any other issues that

The FTC has over three decades of experience in the optical goods market and has issued regulations for the industry. The FTC promulgated the Ophthalmic Practices Rules (“Eyeglass Rule”) in 1978.⁶ The Commission also recently issued the Contact Lens Rule to implement the FCLCA.⁷ In addition to its regulatory role, the Commission has long advocated policies for the optical goods industry that would benefit consumers and competition. The FTC has provided comments to state agencies and legislatures regarding the effects of restrictions on the sale of replacement contact lenses.⁸ The FTC also has studied the effects of state-imposed restrictions in the optical goods industry.⁹ In October 2002, the Commission held a public workshop to evaluate possible anticompetitive barriers to e-commerce,¹⁰ and in March 2004, the Commission staff issued a report analyzing potential barriers to Internet commerce in contact lenses.¹¹

To conduct this study, the FTC reviewed comments from, and met with, various interested parties.¹² In addition, the Commission conducted its own research, including a survey of contact lens prices and availability. Drawing on these resources and its experience in analyzing the optical goods industry, the Commission reached the following conclusions:

have an impact on competition in the sale of prescription contact lenses.” *Id.* at (1)-(5).

⁶ Advertising of Ophthalmic Goods and Services, Statement of Basis and Purpose and Final Trade Regulation Rule, 43 Fed. Reg. 23,992 (June 2, 1978).

⁷ 69 Fed. Reg. 40481 (July 2, 2004) (to be codified at 16 C.F.R. Part 315).

⁸ See FTC Staff Comment Before the Connecticut Board of Examiners for Opticians (Mar. 27, 2002) (“Connecticut Board Comment”), at <http://www.ftc.gov/be.v020007.htm>; Letter from Maureen K. Ohlhausen *et al.*, Acting Director, Office of Policy Planning to Arkansas State Representative Doug Matayo (Oct. 4, 2004) (“Matayo Letter”), at <http://www.ftc.gov/os/2004/10/041008matayocomment.pdf>.

⁹ THE EFFECTS OF RESTRICTIONS ON ADVERTISING AND COMMERCIAL PRACTICE IN THE PROFESSION: THE CASE OF OPTOMETRY, FTC BUREAU OF ECONOMICS STAFF PAPER REPORT (1980).

¹⁰ 67 Fed. Reg. 48,472 (2002).

¹¹ POSSIBLE BARRIERS TO E-COMMERCE: CONTACT LENSES: A REPORT FROM THE STAFF OF THE FEDERAL TRADE COMMISSION (Mar. 29, 2004) (“CONTACT LENS REPORT”), at <http://www.ftc.gov/os/2004/03/040329clreportfinal.pdf>.

¹² The FTC received 19 responses to a Federal Register Notice requesting comments for the study. 69 Fed. Reg. 21,833 (Apr. 22, 2004). The comments are available at <http://www.ftc.gov/os/comments/contactlensstudy>.

- **Overview of the industry:** The advent of standardized disposable soft contact lenses, along with the FCLCA’s prescription portability requirement, have enabled contact lens sales to be unbundled from the fitting process, allowing consumers to choose among several retail channels to purchase replacement lenses. Retail optical sales appears to be highly fragmented. Independent ECPs account for the majority of contact lens sales, followed by national optical chains and mass merchandisers.
- **Manufacturer-distributor relationships:** Exclusive relationships – in the sense of either a manufacturer agreeing to supply only one seller or prescriber, or a seller or prescriber agreeing to distribute contacts from only one manufacturer – appear to be rare in the optical goods industry. Some manufacturers, however, limit the distribution channels through which they sell their contact lenses. Further, some retail chains and independent ECPs offer so-called “private label” lenses, which may bear a brand name unique to the seller – or a subset of sellers – but are identical to lenses sold under a national brand name. The information available does not support the hypothesis that sellers are able to limit competition or harm consumers by charging supracompetitive prices for limited distribution or private label lenses.
- **Differences between online and offline sellers:** The FTC surveyed availability and prices for a six-month supply of ten popular contact lenses at 20 online and 14 offline outlets. The data indicate that most lenses are widely available through the various retail channels. Overall, independent ECPs and optical chains offer the highest prices, and wholesale clubs offer the lowest prices. Not accounting for intrachannel differences, contact lenses sold online are on average \$15 less expensive than those sold offline. There is no statistically significant difference among the prices charged by independent ECPs, optical chains, Web sites of offline retailers (“hybrids”), and mass merchandisers for specialty lenses. Mass merchandisers and hybrids do offer statistically significantly lower prices for spherical lenses, however.
- **Impact of the Eyeglass Rule:** In 1978, the Commission issued the Eyeglass Rule,¹³ which requires optometrists and ophthalmologists to provide their patients, immediately after completion of an eye examination, a free copy of their eyeglass prescription. The FTC’s Eyeglass Rule appears to have made it easier for consumers to comparison shop, leading to lower prices and more choices for consumers.

¹³

16 C.F.R. Part 456.

- **Other issues that impact competition:** State laws and regulations have the potential to limit competition in contact lenses, raise consumer costs, and harm public health. Licensing requirements may insulate in-state sellers from out-of-state competition or insulate ECPs from competing non-ECP sellers. State restrictions on truthful, non-misleading advertising are likely to inhibit the competitive process and frustrate informed consumer choice.

The remainder of this report is organized as follows. The Commission presents an overview of the contact lens industry in Chapter 1 to provide the context for addressing the specific issues Congress directed the FTC to examine. Several of these issues concern relationships between contact lens manufacturers and contact lens distributors, such as independent ECPs, retail merchandisers, optical chains, and online sellers. Accordingly, Chapter 2 examines types of manufacturer-distributor arrangements – including exclusive relationships, private labeling, and limited distribution – and analyzes their effects on competition and their potential to cause consumer harm. Another issue Congress raised is the difference between online and offline contact lens sales. Thus, in Chapter 3, the Commission presents the findings of its study comparing online and offline prices for 10 different contact lenses. In Chapter 4, the Commission addresses Congress’ questions about the impact of the Eyeglass Rule on competition. Finally, Chapter 5 covers other issues that have an impact on competition, such as state licensing requirements for contact lens sellers and advertising restrictions.

Chapter 1

Overview of the Contact Lens Industry

When contact lenses first were introduced, they were made of rigid material that required an ECP to custom fit each pair. In 1971, the FDA approved the first soft contact lenses. Still, at this early stage of development, soft lenses were manufactured in a way that did not always accurately reproduce the original prescription. These early lenses were designed to last for long periods, so consumers generally purchased them from their ECP after an exam and replaced them infrequently. Beginning in the late 1980s, manufacturers began to sell disposable lenses that were designed to be replaced on a daily, weekly, or monthly basis.¹⁴ Further, technological improvements have solved standardization problems, eliminating the need for an ECP to fit each replacement pair once the prescription has been finalized at the end of the fitting process.¹⁵ Today, the replacement lens a consumer purchases pursuant to a prescription that specifies a brand will be identical, regardless of whether the patient receives this lens from the prescribing ECP or from another seller.

The evolution in contact lens technology now allows the sale of lenses to be unbundled from the fitting exam.¹⁶ The FCLCA, moreover, prohibits ECPs from requiring that consumers

¹⁴ The majority of contact lenses are “spherical” and designed to be replaced every two weeks. Toric lenses are a relatively new product, allowing astigmatism to be corrected with a soft lens rather than a gas permeable lens. Also new are multifocal lenses, which simultaneously correct for near and far sightedness, like bifocal glasses.

¹⁵ Although not required in all states, a contact lens prescription will almost invariably include a brand name because different brands of contact lenses that have the same prescription will produce different fits. *See* American Optometric Association (“AOA”), Comment #3, at 1-2; Illinois Optometric Association (“IOA”), Comment #11, at 2; Dr. Charles Kissling (“Kissling”), Comment #13, at 2; 1-800 Contacts, Comment #1, at 24; Wal-Mart, Comment #19, at 5. Replacement lenses typically are sold in packages containing six lenses of the same prescription (“six-packs”). Thus, if a consumer wears lenses that must be replaced on a monthly basis, a year’s supply would consist of four six-packs – two six-packs for each eye.

¹⁶ The current contact lens fitting process includes an examination to determine eye health, lens power, and contact lens curvature and diameter. ECPs use a “fitting set,” or a sample pair of contact lenses, as a diagnostic tool to determine whether the prescription is correct. A follow-up appointment in 7-10 days to assure visual acuity, fit, and comfort is typical. *See* 1-800 Contacts, Comment #1, at Attach. 2, p. 10-11 (1-800 Contact’s submission in response to the

purchase their contact lenses from the prescribing ECP. Under the Act, a standard contact lens prescription typically must last one year.¹⁷ Consumers usually purchase less than a year's supply at a time – with a six months supply serving as the most popular quantity.¹⁸ Thus, most contact lens consumers will purchase replacement lenses at least twice during the length of their prescription. Although ECPs still control the prescription process, consumers now have a variety of channels to consider other than their prescribing ECP when they purchase replacement lenses. Traditional retailers, membership clubs, and optical chains all sell lenses to customers who received their prescription from a non-affiliated ECP. A number of online retailers that sell contacts offer no ECP services at all.

I. Consumer Sales

Recent data indicate that 36 million people – almost 13 percent of all Americans – wear contact lenses.¹⁹ According to Census Bureau data released in 2004, U.S. shipments of contact lenses were valued at \$1.9 billion in 2002.²⁰ This estimate is consistent with data from Jobson Optical Research, which projected U.S. sales of contact lenses in 2003 to reach \$1.92 billion, or 11.8% of total U.S. retail optical sales.²¹ Estimates place annual U.S. soft contact lens sales at

FTC's request for comments on the proposed Contact Lens Rule (Apr. 5, 2004)).

¹⁷ 15 U.S.C. § 7604(a).

¹⁸ In June 2004, surveyed ECPs reported that after the exam 64% of patients purchased a six-month supply, 20% purchased a year's supply, and 6% purchased a three-month supply. FTN Midwest Research Securities Corp., Monthly Contact Lens Industry Survey, at 10 (June 15, 2004) ("*FTN Contact Lens Survey*"). Research prepared for Johnson & Johnson (Vistakon) also suggests that consumers purchase less than a year's supply of contact lenses, showing that only 12% of consumers from a national survey purchased a year's supply at once, whereas 31% purchased lenses two times a year, and 43% purchased 3 - 4 times a year. 1-800 Contacts, Comment #1, at Attach. 2, App. 4, p.89.

¹⁹ See CONTACT LENS REPORT at 1.

²⁰ U.S. Census Bureau, *Ophthalmic Goods Manufacturing: 2002* at 6 (Aug. 2004).

²¹ The same data estimate sales of prescription lenses and frames to account for 84.2% of total U.S. retail optical retail sales in 2003, and that eye examinations generated \$3.6 billion in revenues in 2002. See *The State of The Optical Market*, 20/20 MAGAZINE (2003) (hereinafter "*State of the Optical Market*"), at http://www.2020mag.com/index.asp?page=3_190.htm; Jobson Optical Research, *The State of the Optical Market*, 2nd Quarter, 2003, at <http://optistock.com/jobson-som-2003-06.pdf>.

between \$1.4 and \$1.8 billion.²²

Contact lenses are classified in two major categories – spherical and specialty. Spherical lenses contain a single refractive power and are by far the most commonly prescribed lens. Varieties of specialty lenses include toric (to correct astigmatism), multifocal (to correct near and far-sightedness simultaneously), cosmetic tint, and extended wear. According to industry data, spherical lenses accounted for 70 percent of dispensing visits and 57 percent of total soft lens sales in 2003.²³ Within the specialty segment in 2003, toric, cosmetic tint, and multifocal lenses accounted respectively for 16 percent, 9 percent, and 5 percent of patient visits when contacts lenses were dispensed.²⁴

Most consumers wear lenses that are taken out every night and disposed of according to a replacement schedule. Lenses requiring replacement every two weeks are the most popular option, followed by lenses that are replaced on a monthly basis.²⁵

II. Contact Lens Manufacturers

There are five major contact lens manufacturers: Vistakon, CIBA Vision, Occular Sciences (“OSI”), Bausch & Lomb, and CooperVision.²⁶ Table 1 summarizes market share data

²² CooperVision reports that total U.S. sales of soft lenses are \$1.4 billion. The Cooper Companies, Inc., *2003 Annual Report* at 18, at <http://ccbn.mobular.net/ccbn/7/516/565/print/print.pdf>. The 2002 Census data lists U.S. soft contact lens sales at \$1.8 billion. See *Ophthalmic Goods Manufacturing: 2002* at 6.

²³ See 1-800 Contacts, Comment #1, at Attach. 20, p.2 (*Optistock MarketWatch* (Oct. 2003)) (“*MarketWatch*”) (clear spheric accounted for approximately 70% of patient visits where a lens was dispensed for the first three quarters of 2003); The Cooper Companies, Inc., *2003 Annual Rep.* at 21 (specialty lenses account for 43 percent of U.S. soft lens market sales). The disparity in data for sales and lenses dispensed may reflect the fact that specialty lenses typically are more expensive than spherical lenses.

²⁴ *Id.*

²⁵ See *MarketWatch* at 2 (for first three quarters of 2003, two-week and monthly replacement lenses account for 64% and 20% of new contact lens fits); *FTN Contact Lens Survey*, at 7 (June 15, 2004) (62% and 22% of ECPs surveyed responded that two-week and monthly disposables were the most common lenses prescribed, respectively).

²⁶ The information provided by commenters does not reflect CooperVision’s acquisition of OSI, which was completed on January 6, 2005. See

provided by OSI based on 2003 “patient visits” – both total and new – when soft contact lenses were dispensed.

Manufacturer	Total Patient Visits	New Patients
Vistakon	36.2%	30.9%
Ciba Vision	23.1%	19.9%
Bausch & Lomb	14.0%	17.0%
CooperVision	13.1%	18.0%
OSI	12.4%	13.2%

Source: OSI, Comment # 7, at 5. It is unclear whether these numbers reflect spherical only, or include specialty lenses, like multi and bifocal and toric.

1-800 Contacts provided market data estimating that Johnson & Johnson (Vistakon) is the market leader in spherical lenses, with a 48 percent share.²⁷ These data, however, rank the remaining companies differently; OSI has the second largest share (23 percent), followed by Bausch & Lomb and CooperVision. For toric contact lenses, 1-800 Contacts reports that CooperVision is the leader with approximately 34 percent of sales followed by CIBA Vision with about 30 percent. For multifocal contact lenses, Johnson & Johnson is the claimed leader with about 80 percent of sales, followed by CIBA Vision with about 20 percent. 1-800 Contacts reports, however, that CooperVision and Bausch & Lomb are beginning to penetrate sales of multifocal lenses.²⁸

III. Distribution Channels

Manufacturers distribute their contact lenses through a variety of channels. Sellers can be

http://www.coopervision.com/us/patient_aboutus_news.asp?id=27.

²⁷ 1-800 Contacts, Comment #1, at 13 (citing *MarketWatch* at 2).

²⁸ *Id.*

grouped into a number of different categories marked by their professional credentials, commercial focus, and mode of selling. The two principal groups are independent and commercial sellers, although there is significant variation within each.

Independent ECPs are optometrists and ophthalmologists who both prescribe and sell optical products. Most are single entities, although some have more than one outlet.²⁹ Commercial operations include local and national optical chains (e.g. LensCrafters, Pearle), mass merchandisers (e.g., Target, Wal-Mart), and wholesale clubs (e.g., Sam's, Costco, BJ's). These firms sell optical goods, and many have affiliated ECPs who conduct examinations and prescribe contact lenses, although the share of their optical revenues from examinations tend to be less than the share registered by the independents. Online and mail order retailers (e.g., 1-800 Contacts, Vision Direct) form a unique segment of the commercials, because they do not perform examinations and concentrate primarily on the sale of replacement contact lenses. As shown in Table 2, independent ECPs by far operate the largest number of outlets, followed by major chains, smaller chains, mass merchandisers, warehouse clubs, and HMOs.

Independent ECP	22.5
Major Chain	8.7
Other Chain	3.5
Mass Merchants	1.8
Warehouse Club	1.2
HMOs	.7

*Projected. Source: *The State of The Optical Market*.

Table 3 lists the ten largest commercial optical retailers for 2003, which together accounted for 24 percent of all optical sales.³⁰ The largest retailer is the Luxottica Group, which

²⁹ Jobson Optical Research is a primary provider of optical market data and typically defines independents as any entity controlled by an Optometrist or MD that operates three or fewer outlets. See *The State of The Optical Market* at 10.

³⁰ The rankings are based on data from Jobson Research in *Top 50 Companies Ranked by Domestic Net Sales for Calendar Year 2003*, 18 (no.6) VISION MONDAY (May 17,

owns the optical chains LensCrafters and Pearl Vision Centers, as well as the optical departments at Target, Sears, and BJ's Wholesale Club ("BJ's").³¹ Other important optical chains include Eye Care Centers of America with 372 outlets and 2003 sales of \$370 million, and Consolidated Vision Group, operating under the names America's Best Contacts & Eyeglasses ("America's Best"). Mass merchandisers and department stores are also significant optical retailers. Wal-Mart, for example, generated \$967.5 million in retail optical sales from 1,690 company-owned optical departments and 384 Sam's Club optical outlets.

Table 3 Largest Eyecare Retailers 2003		
Rank	Retailer (Retail Trade Names)	Sales (\$mil)
1	Luxottica Group (LensCrafters, Pearle Vision, Sears, Target, BJ's)	\$2,508
2	Wal-Mart	\$968
3	Eye Care Centers of America (EyeMasters, Visionworks, Vision World, Hour Eyes, Dr. Bizer's Vision World, Dr. Bizer's Value Vision, Doctor's ValuVision, Doctor's Visionworks, Stein Optical, Eye DrX, Binyon's)	\$370
4	Costco Wholesale	\$269
5	National Vision (The Vision Center (operated in Wal-Mart), The Optical Shoppe (in Fred Meyer), National Vision Optical)	\$242
6	U.S. Vision (J.C. Penney Optical)	\$150
7	Consolidated Vision Group (America's Best, America's Contacts and Eyeglasses)	\$126
8	D.O.C. Optics (D.O.C. Eyeworks, D.O.C. Optique, SportVision, SEE, City Eyes)	\$97
9	Emerging Vision (Sterling Optical, Site for Sore Eyes, Singer Specs)	\$92
10	Empire Vision Centers (Empire Vision Centers, Davis Vision Centers, Total Vision Care)	\$86

Source: *Vision Monday Top 50*.

2004) ("*Vision Monday Top 50*").

³¹ See *Luxottica Passes Hurdles to Win Cole*, DAILY DEAL, 2004 WL 84554816 (Sept. 27, 2004); *Italy's Luxottica Closes Cole National Acquisition on October 5, 2004*, ASNSA ENGLISH CORPORATE NEWS SERVICE, 2004 WL 86545365 (Oct. 5, 2004).

In their comments, OSI and 1-800 Contacts both provided data on the share of lenses sold, which are reproduced in Tables 4 and 5.

Table 4 Patient Visits By Channel		
Channel	Share of Patient Visits	Estimated Share of Filled Prescriptions
Independent M.D.	14.1%	12.3%
Independent O.D.	52.6%	45.8%
Independent Stores and OD Groups	12.2%	10.6%
Chain Retailers and Optical Stores	21.0%	18.4%
Mail Order/Internet	N/A	13.0%

Source: OSI, Comment #7, at 12.

Table 5 Share of Sales By Channel	
Channel	Share of Sales
Independent M.D.	4.3%
Independent O.D.	64.3%
Mass Merchandisers	13.9%
Retail Chains	9.5%
Mail Order/Internet	8.0%

Source: 1-800 Contacts, Comment #1, at 13. Shares are derived from "1-800's marketing records." It is unclear whether these shares are measured in sales or units.

OSI and 1-800 Contacts categorize channels differently. OSI groups optical chains, general retailers, and wholesale clubs together under the "chain retail" heading. 1-800 Contacts groups retailers like Target and Wal-Mart together with wholesale clubs like BJ's and Sam's Club under the heading "mass merchandiser" and places general retailers' (like Sears and JC Penney) optical

stores in the same category as optical chains like Pearle and LensCrafters.

Notwithstanding these differences in categorization, the data generally tell the same story with regard to shares by distribution channel. Manufacturers distribute the largest share of lenses through independent ECPs and the smallest through the online/mail-order channel. Independent research confirms this result. Research prepared for Johnson & Johnson (Vistakon), for example, shows 48 percent of consumers from a national survey purchased their lenses from an independent ECP, followed by 30 percent from optical chains, 9 percent from mass merchandisers, and 5 percent from mail order.³² The data also suggest that optical chains, general retailers, and wholesale clubs together account for between 21 and 24 percent of distribution.³³ Further, for 2003, Jobson Research estimated that independent ECPs and all other retailers (including optical chains, wholesale clubs, and department stores) accounted for 56.3 percent and 40.8 percent of total optical sales, respectively, and that sales of contact lenses through “alternate channels” (*i.e.*, online or mail order) would reach \$200 million, or 10.2 percent of total contact lens sales.³⁴

IV. Managed Vision Care

Managed vision care (MVC) plays an increasingly important role in the eyecare product market. According to a Jobson Optical Research survey conducted in the first quarter of 2003, 90 percent of responding independent ECPs are managed care providers, and these ECPs receive on average 50 percent of their revenue from customers and patients participating in managed care programs.³⁵ Many employers, government entities, unions, and associations offer vision benefits as part of their overall health benefits for their employees or members.³⁶

These plan sponsors contract with sellers of MVC services to provide discounted rates on eye exams, eyeglasses, and contact lenses for their members.³⁷ The MVC providers, in turn,

³² 1-800 Contacts, Comment #1, at Attach. 2, App. 4, p.71.

³³ *Id.*

³⁴ *See State of The Optical Market* at 12.

³⁵ Cathy Ciccolella, *Managed Care's New Momentum*, 17 (no. 15) VISION MONDAY 18 (Aug.18, 2003).

³⁶ *Id.* at 13 (noting that in 2002, 73% of employers surveyed by the Society for Human Resource Management offered some form of managed vision care).

³⁷ The largest MVC is Vision Service Plan (“VSP”). VSP was established over thirty years ago by independent practitioners, and its current retail network is composed of only

create a network of optical retailers who agree to participate in the network for discounted reimbursements in exchange for being able to service the covered individuals in the network. A typical MVC plan offers members a yearly eye exam, typically with a co-payment, and set dollar amounts off the retail prices of eyeglass frames, lenses, and contact lenses.

V. Conclusion

Due to advances in lens technology, a growth in the types of retail outlets, and new legal requirements, consumers now have a wider than ever choice of channels through which to purchase their replacement contact lenses. Market data indicate that ECPs distribute the greatest share of contact lenses and that Internet/mail order sellers distribute the smallest share, with optical chains, mass merchandisers, and other retailers ranked somewhere in between.

independents. In addition to stand-alone operations such as VSP, some MVC providers are part of optical chains and health insurers. For example, Cole Managed Vision, Cole National's MVC services division, offers a national retail network of approximately 18,000 retail providers, including all Pearle Vision, Sears, Target, and BJ's optical locations. *See id.* at 14-17.

Chapter 2

Manufacturer-Distributor Relationships: Exclusive Dealing, Private Label Lenses, and Limited Distribution Lenses

Congress directed the Commission to examine two issues related to relationships between lens manufacturers and lens distributors to determine their incidence and evaluate their impact on competition and consumers. The first issue is exclusive relationships between prescribers or other sellers of contact lenses and lens manufacturers. The second issue involves custom label contact lenses, which bear the prescriber or other seller's private label rather than a national brand name. The chapter also considers an additional, related issue, the limited distribution of contact lenses by some manufacturers. This chapter first evaluates the incidence of such relationships and then examines their potential to reduce competition and harm consumers.

I. Types of Arrangements Between Manufacturers and Sellers

Exclusive relationships generally fall into two broad classes: those that prohibit a retailer from carrying competing manufacturers' products and those that prohibit a manufacturer from selling to competing retailers.³⁸ Neither of these types of exclusive relationships between manufacturers and retailers appear to be common in the contact lens industry. Private labeling and limited distribution strategies, although also rare, appear to be more prevalent than exclusive relationships.

Although most contact lenses are sold under their national brand name, some manufacturers also distribute their lenses to ECPs and retailers under so-called "private labels." Private labeling occurs when an outlet sells a national name brand lens under a different name, sometimes unique to that seller. Wal-Mart, Pearle Vision, Target, and LensCrafters, for example, offer OSI's Biomedics55 lens under the names UltraFlex, Polysoft, Target55, and Versaflex, respectively.³⁹ In some instances the term private label may be a misnomer, however, because a

³⁸ See 1-800 Contacts, Comment #1, at 3-7; OSI, Comment #7, at 29; AOA, Comment #3, at 1. *But see* 1-800 Contacts, Comment #1, at Attach. 13 (a copy of an Extreme H2O contract that includes a provision where Hydrogel Vision promises "not to sell or make sales calls in retail chains that would be in direct competition with the" contracting ECP); IOA, Comment # 11, at 1 ("it is fairly common for large practices to agree to sell predominantly one manufacturer's lenses in exchange for improved wholesale pricing").

³⁹ OSI, Comment #7, at 32-33.

specific private label brand may be available at multiple outlets.⁴⁰ Thus, a private label brand may not be exclusive to a seller in the way that a generic store brand would be. OSI estimates that private label sales account for less than 8 percent of all sales of soft contact lenses.⁴¹

OSI claims to be the only manufacturer that makes private label sales its principal business strategy.⁴² OSI reports that, of the other major contact lens manufacturers, only CooperVision participates in private label lens production in any significant way, with about 10 percent of CooperVision's total contact lens sales accounted for by private label sales.⁴³ The private label sales of all of the other manufacturers are insignificant.⁴⁴

Distinct from the concept of private labeling, some contact lens manufacturers limit the retail distribution of their lenses to outlets that have some form of eye care service. OSI, for example, distributes its lenses only through retailers that "provide substantial eye care services."⁴⁵ This means that OSI's lenses are available to most optical retailers, including mass merchandisers, optical chains, and wholesale clubs. In addition, OSI permits these retailers to sell its lenses through their Web sites.⁴⁶ Only pure online retailers are unable to acquire OSI's lenses through traditional wholesale channels.⁴⁷ OSI has a more limited distribution policy for its Hydrogenics product, selling it only to ECPs with five or fewer offices.⁴⁸

⁴⁰ For example, the FTC survey discovered that the UltraFlex private label is available at Wal-Mart, BJ's, Sam's Club, and America's Best.

⁴¹ OSI, Comment #7, at 33.

⁴² *Id.*

⁴³ *Id.* at 33, n.92.

⁴⁴ *Id.*

⁴⁵ *Id.* at 29. OSI states that its agreements with sellers prohibit the sale of OSI lenses to "anyone other than the consumers for their personal use," but do not prohibit sellers from carrying competing lenses. *Id.*

⁴⁶ *Id.*

⁴⁷ According to OSI, its "flagship" product, the Biomedics lens, is available under its national brand name in 11,500 U.S. locations and an additional 8,300 U.S. locations under various private labels. *Id.*

⁴⁸ *Id.* at 28. OSI currently sells its Hydrogenics lens to approximately 5,000 outlets, and it is available to 20,000 additional outlets. *Id.* at 29. According to data provided by OSI, in

CooperVision distributes its Proclear Compatible lenses only through outlets that specialize in providing eye care. Under this policy, although unavailable through traditional wholesale channels to online sellers, CooperVision (or an authorized distributor) sells Proclear Compatibles to retailers ranging from independent ECPs, to optical chains, to some wholesale clubs and mass merchandisers.

1-800 Contacts reports that other smaller manufacturers have exclusive distribution policies that prohibit sales through online and mail order channels.⁴⁹ Although limited distribution lenses are not available to pure online sellers like 1-800 Contacts through traditional wholesale channels, these sellers can obtain supplies on the “grey” market from retailers and distributors that are willing to resell their supplies of these lenses.⁵⁰

II. Potential Consumer Harm from Private Labeling and Limited Distribution

For a consumer, the full cost of purchasing contact lenses includes the cost of the eye examination, during which a prescription is written, plus the cost of purchasing the contact lenses that the ECP prescribes. The typical consumer easily can determine the cost of the eye examination in advance. By contrast, consumers likely cannot easily determine the price of the contact lenses in advance because they lack the specialized knowledge necessary to determine which lens is appropriate for them. Thus, consumers must rely on an ECP to select a lens that safely and comfortably corrects their vision. Although advertising and other forms of information may help to educate consumers, ECPs likely possess more information concerning the relative quality of a particular lens.

Patients want their ECPs to prescribe for them a contact lens that represents their preferred combination of price and quality.⁵¹ 1-800 Contacts, however, has raised the concern

2003, the Hydrogenics lens accounted for .5 percent of the soft contact lens market, measured by patient visits. *Id.*

⁴⁹ 1-800 Contacts, Comment #1, at 5-7 (reporting that Hydrogel Vision Corp. sells its Hydrogel and Extreme H2Os lenses through “qualified independent eye care professionals,” and that Sauflon Pharmaceuticals sells its lenses direct from the manufacturer).

⁵⁰ *See Id.* at 4. Despite the pejorative name, “grey” market sales are not illegal.

⁵¹ In the context of contact lenses, quality encompasses such attributes as comfort and recommended length of wear, which in turn depend on factors such as oxygen permeability and water content. Holding fit and vision correction constant, more comfortable lenses (*e.g.*,

that an ECP may have a competing incentive to prescribe a lens that provides him or her the largest profit.⁵² Given this incentive, ECPs could take advantage of their role in selecting contact lenses for consumers in a way that thwarts the prescription portability mandate of the FCLCA.⁵³

Under this theory, the ECP evades prescription portability and locks the consumer into purchasing replacement contact lenses from him by prescribing a lens for which there are few or no alternative sellers.⁵⁴ For example, an ECP may prescribe a private label lens that is only

those with higher oxygen permeability or water content) typically are more expensive. Consumers are likely to differ with respect to their willingness to tradeoff additional comfort for a higher price.

⁵² See 1-800 Contacts, #1, at 15 (“When it comes to prescribing contact lenses, most ECPs are free to settle in their own favor, the conflict between their interests in maximizing profits, and the patient’s interest in saving money”). Without data on retailer margins on private label or limited distribution lenses in relation to those for other lenses, however, we cannot reach any conclusions as to the relative profits associated with each type of lens.

⁵³ See 1-800 Contacts, Comment #1 at 4-5 (“The ‘doctor-exclusive’ program has an insidious impact on consumers prescribed such lenses. Consumers requiring a refill of their prescription – or replacement lenses – are left with a Hobson’s choice: (1) purchase the lenses directly from the prescribing ECP – often at an inflated price, or (2) pay to be re-examined by another ECP who does not prescribe ‘doctor exclusive’ lenses.”); *id.* at 10 (“[I]f consumers learn about the limits imposed on prescription portability by [private label and limited distribution] lenses only after they have been fitted into [private label and limited distribution] lenses, then their only options are to purchase the lenses from the ECP or pay for a second eye exam by a different ECP.”); *id.* at 25 (same). 1-800 Contacts argues that historically ECPs “have done everything they could to prevent patient knowledge of prescription portability,” and notes that ECPs that prescribe private label or limited distribution lenses “are often trained to tell their patients that the lenses are special lenses, which the patient needs.” *Id.* at 9-10. In support of its contentions, 1-800 Contacts attaches several advertisements or excerpts from the trade press that describe how private label and doctor exclusive lenses may help ECPs to capture their patients’ replacement contact lens business.

⁵⁴ The lock-in theory of consumer harm rests on the following assumptions: (1) the ECP must be able to prevent the consumer from purchasing replacement lenses from competing sellers; (2) the consumer must not anticipate that the ECP is likely to write a prescription for a high-priced lens; (3) the ECP must make the choice of lenses completely independent of consumer input; (4) consumers must be unable to determine that they have been prescribed a high-priced lens, or alternatively, ECPs must either place a low value on their reputation or hold-ups must be unlikely to affect an ECP’s reputation. There is a substantial economic literature on

available from him. Alternatively, an ECP may prescribe a “limited distribution” lens, which is unavailable from online or mail order sources, or may be available only from other independent ECPs. Insulated from retail competition from lower-priced contact lens sellers, an ECP may be able to “hold-up” the patient by charging him a higher price to fill his prescription than the ECP could charge if he prescribed a lens available from multiple outlets.⁵⁵ The consumer’s only option to avoid lock-in would be obtain a new eye exam and prescription from an ECP who prescribes widely available lenses. In theory, the prescribing ECP could charge the consumer a premium for the limited availability lenses up to the cost to the consumer of escaping the lock-in by obtaining a prescription for widely available lenses from a different ECP.

There are, however, countervailing reasons why ECPs likely lack the ability and incentive⁵⁶ to take advantage of consumers in this way, and the following subsections explore these reasons in detail. This theoretical examination is buttressed by an even stronger factor: the available empirical evidence, discussed more fully below, reveals that popular private label and limited distribution lenses are widely available from various retail channels, that the prices for private label lenses are not higher than the prices for their national name-brand counterparts. The

“strategic opportunism” that addresses the predicate conditions on which such a strategy rests and the possible anticompetitive effects that can result. *See, e.g.*, OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* (1985); Oliver E. Williamson, *Transaction Cost Economics: The Government of Contractual Relations*, 22 J.L. & ECON. 233 (1979); Benjamin Klein *et al.*, *Vertical Integration, Appropriable Rents and the Competitive Contracting Process*, 21 J.L. & ECON. 297 (1978).

⁵⁵ “Hold-up” is a common term used in the literature on post-contractual opportunism, and refers to the extraction of additional surplus from a party that has made a fixed investment in a contractual relationship. *See, e.g.*, Benjamin Klein, *Market Power in Antitrust: Economic Analysis After Kodak*, 3 S. CT. ECON. REV. 43 (1996); Klein *et al.*, *supra* note 54.

⁵⁶ Importantly, not all ECPs receive income from sales of optical goods and thus lack the incentive to hold-up consumers in the first place. Some states prohibit an ECP from being directly employed by an optical retailer or from receiving compensation from sales of optical goods by an optical retailer *See, e.g.*, DEL. CODE § 2113; TENN. CODE § 63-8-113(c). Where these laws apply, ECPs who provide examinations at optical chains or retailers may charge a fee for an eye examination but may not receive compensation for contact lens sales. (The Commission’s view on these types of restrictions is set forth in Letter from the Federal Trade Commission to the Honorable Ward Crutchfield (Apr. 29, 2003), *at* <http://www.ftc.gov/be/v030009.htm>.) ECPs affiliated with national optical and retail chains also may have contracts that exclude compensation for contact lens sales. To the extent that such laws and business relationships are common, the lock-in theory may be relevant primarily for independent ECPs, who receive income directly from the sale of contact lenses.

data, moreover, do not suggest that limited distribution lenses are sold for higher prices than similar lenses that are widely available. Finally, there may be efficiencies from limited distribution and private label lenses that could lead to increased competition among sellers.

A. Competing Outlets Sell Private Label and Limited Distribution Lenses

Legal and practical factors constrain an ECP's ability to write a prescription for either a private label or a limited distribution lens that locks a consumer into purchasing replacement lenses from the prescribing ECP.

First, the FCLCA mandates prescription portability and allows competing retailers to fill private label prescriptions with either national brand-name or private label equivalents.⁵⁷ Additionally, the FTC's Contact Lens Rule states that "[i]n the case of a private label contact lens, [a contact lens prescription must contain] the name of the manufacturer, trade name of the private label brand, and, if applicable, trade name of equivalent brand name."⁵⁸ These provisions allow a customer who receives a private label prescription to take it to other competing retailers that sell the same lens under either the national brand name or equivalent private label. For example, a patient with a prescription for a VersaFlex lens from LensCrafters can have Wal-Mart fill her prescription with UltraFlex, Wal-Mart's private label of OSI's Biomedics, or go online and have it filled with Biomedics.⁵⁹

⁵⁷ 15 U.S.C. § 7609(4)(f).

⁵⁸ 16 C.F.R. § 315.2 (A)(8).

⁵⁹ There is some evidence that, prior to enactment of the FCLCA, competing sellers typically knew the national brand name associated with private label prescriptions and were willing to fill them. For example, OSI notes:

It is well known in the industry and among contact lens distributors that these products [private label lenses], although sold under a number of different brand names, are identical. It is not uncommon for distributors (including online distributors) to substitute their private label brand of the Biomedics product when presented with a Biomedics or other private label prescription.

OSI, Comment # 7, at 35. *See also* 1-800 Contacts, Comment #1, at Attach. 4 (a trade magazine noting that "Private labeling doesn't stop patients from getting their lens elsewhere, because all the 'elsewheres' know that Mediflex, Ultraflex, etc. are OSI lenses."); Kissling, Comment #13, at 2 (under Kansas law an ECP is required to include in a prescription the common name brand for a private label lens). Some comments received during the Contact Lens Rulemaking, however,

Second, even limited distribution lenses appear to be available from many competing retailers other than the prescribing ECP. For example, FTC data show that OSI's Biomedics55 lenses – or its private label equivalents – are available from all offline and nearly all online outlets sampled, including all optical chains sampled, Wal-Mart, Sam's Club, BJ's, Target, and Sears.⁶⁰ These lenses also were found on Wal-Mart's, BJ's, and America's Best's Web sites. CooperVision's Proclear Compatibles were found at 88 percent of online sellers' sites, as well as such offline stores as Target, BJ's, Sears, LensCrafters, Pearle, and HourEyes.

Because private label and limited distribution lenses are widely available from competing outlets, a prescribing ECP likely faces competition for sales of such replacement lenses. Even if a specific consumer is unaware that his prescription is portable and that alternative sellers exist, competition will constrain an ECP's pricing for contact lenses as long as a sufficient proportion of his patients know that they can purchase replacement lenses elsewhere, and the ECP cannot distinguish between informed and uninformed patients.⁶¹ While the Commission lacks data on consumers' awareness that private label and limited distribution lenses are available from retailers other than their prescribing ECP, some empirical evidence suggests that most consumers know that they can use a prescription from an ECP to purchase contact lenses elsewhere, including from mail-order companies.⁶²

suggested that not all sellers were aware of the national name brand of all private labels. *See* 69 Fed. Reg. 40481, 40488 (July 2, 2002), Comment # 974 (ACLens) and Comment # 1061 (Costco Wholesale Corp.). Additionally, prior to the Act, some state laws prohibited sellers from filling a prescription with anything but the brand listed on the prescription.

⁶⁰ In its comments, OSI notes that it provides its most popular brand to over 15,000 retailers nationwide, including Wal-Mart, Costco, and leading optical chains. OSI's least widely distributed brand is available at 5,000 ECPs nationwide. *See* OSI, Comment #7, at 28. Because local availability is most relevant to consumers, however, this data does not provide much information regarding intrabrand competition in the sale of OSI's lenses.

⁶¹ Whether equilibrium is characterized by uniform supracompetitive prices, uniform competitive prices, or some firms charging high prices and some firms charging low prices depends on such factors as the proportion of informed consumers, consumer demand functions, firms' cost curves, the number of firms, and consumer search costs. *See* DENIS W. CARLTON & JEFFERY M. PERLOFF, *MODERN INDUSTRIAL ORGANIZATION* 431-42 (3d ed. 2000); Steven Salop & Joseph Stiglitz, *Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 *REV. ECON. STUD.* 493 (1977).

⁶² 1-800 Contacts, Comment #1, at Attach. 33, App. C, p.10 (national survey of contact lens wearers used in expert report filed in *Contact Lens MDL* shows that 76% of those surveyed were aware that lenses can be purchased elsewhere and that 68% were aware that they

B. Competition for Profits from Lock-In

Competition between ECPs – both independents and those affiliated with retailers or optical chains – for contact lens fittings constrains ECPs’ ability to lock consumers into high-priced lenses. Data suggest that the market for eye examinations is highly fragmented, such that no individual ECP would possess the power to charge supracompetitive prices for examinations.⁶³ Thus, even if they are able to lock consumers into high-priced lenses, ECPs are likely to compete for the opportunity to charge supracompetitive prices for such lenses by reducing the price charged for fitting until all excess profits from the high-priced lens prices are dissipated.⁶⁴ To the extent that consumers anticipate a high-cost prescription, eye exam prices are likely to adjust accordingly so that the total cost does not exceed the competitive level.⁶⁵ Moreover, even if consumers do not anticipate being locked-in, a competitive market for contact lens fittings should lead to a fitting price sufficiently low to compensate consumers for being locked-in.

C. Informed Consumers

The lock-in theory assumes that ECPs choose a lens for a patient without regard to the patient’s preferences. Advertisements for national brands of lenses are commonplace,⁶⁶ however, and 1-800 Contacts offers information on its Web site regarding the limited distribution policies of OSI and CooperVision.⁶⁷ Thus, consumers may possess sufficient knowledge about contact

could purchase lenses from mail-order companies); Wal-Mart, Comment # 19, at 3 (due to national advertising by manufacturers, most consumers “have an expectation that they can take their prescription to other sellers to purchase contacts”).

⁶³ OSI reports that there are approximately 35,000 ECPs in the U.S., and there is significant competition between them on such variables as exam price, contact lens price, convenience, hours, and insurance accepted. OSI, Comment # 7, at 16. *See also Connecticut Board Comment* at 5 (noting that retail sources for contact lenses “advertise heavily”).

⁶⁴ *See* Carl Shapiro, *Aftermarkets and Consumer Welfare: Making Sense of Kodak*, 63 ANTITRUST L.J. 483, 493-94 (1995).

⁶⁵ *See* Klein, *supra* note 55, at 53 (noting that when consumers anticipate a high-priced tie-in, competition in the tying market will eliminate the potential for consumer harm).

⁶⁶ Wal-Mart notes that due to advertising by manufacturers, “consumers have an expectation that they can take their prescription to other sellers.” Wal-Mart, Comment #19, at 3.

⁶⁷ For example, with respect to OSI’s Biomedics 55, 1-800 Contacts provides the following information on its Web site:

lens brands to ask their prescribing ECP for a specific, widely available brand. Moreover, according to an interview in a trade journal, some ECPs are reluctant to prescribe private label lenses because consumers want national brand lenses and carrying such brands lends prestige to a practice.⁶⁸ These factors also limit an ECP's ability and incentive to lock a consumers into a private label lens.

Consumers also may be able to gain information regarding which ECPs are likely to prescribe lenses that are widely available. For example, 1-800 Contacts offers financial incentives for its customers to use affiliated ECPs – Pearle and Sears – to obtain contact prescriptions.⁶⁹ Further, 1-800 Contacts and Cole National have set up a “doctors referral network” where customers of 1-800 Contacts in need of a new prescription will be referred to a network of optometrists associated with Cole National. In return, Cole will refer patients in need of replacement contact lenses to 1-800 Contacts,⁷⁰ although patients are free to purchase lenses

If you are interested in wearing a different contact lens, one available any place you chose to shop, you might consider requesting a prescription for a different brand during your next exam. In addition, if your eye care provider will only prescribe a contact lens that he/she believes you can't buy anywhere else, you might want to go elsewhere for your eye care.

See <http://www.1800contacts.com/product.aspx?itm=001528&cv=000360> (last visited Jan. 12, 2005). According to OSI, 1-800 Contacts has spent \$20.2 million in advertising in 2003 and \$130 million “over the last several years.” OSI, #7, at 18 (citing 1-800 Contacts' 2003 10-K).

⁶⁸ In the March 15, 2002 issue of *Review of Optometry*, some ECPs noted the following with regard to private labels:

“Consumers want popular products – that’s why they’re popular,” Dr. Gerber says. . . . “TV advertising does not support private label, so there’s a disconnect with patients who get a lens they’ve never heard of.” . . . “I’ve never bought into the private-label concept,” says Glenda Secor, O.D., who has a contact lens-only practice in Huntington Beach, Calif. “I feel it gives me more credibility to have a nationally recognized contact lens armamentarium. The off-label brand is not the image I wanted to give patients.”

See 1-800 Contacts, Comment #1, at Attach. 4, p. 3.

⁶⁹ See <http://www.1800contacts.com/exam.html> (last visited Jan. 15, 2005) (advertising a \$78 contact lens exam at Pearle Vision or Sears); OSI, Comment #7, at 20 (noting that 1-800 Contacts is using promotional expenditures to transition customers to new ECPs who will prescribe lenses available from 1-800 Contacts) (citing 1-800 Contacts' “recent” 10-K).

⁷⁰ See 1-800 Contacts, Comment #1, at Attach. 52.

elsewhere. These programs may make it easier for consumers to find an ECP who will write a widely available prescription.

D. Reputation

Even if ECPs have the ability to charge supracompetitive prices for contact lenses by locking consumers into a limited availability lens, it is unclear that they have an economic incentive to do so, because such behavior may adversely affect their reputation for fair dealing.⁷¹ The greater the reputation for fair dealing, the more an ECP has at stake for behaving opportunistically.⁷²

An ECP who takes advantage of a consumer to sell him or her over-priced lenses risks losing that patient's repeat business if the patient becomes aware of the ECP's opportunistic behavior. Advertising and information disseminated from other sources (*e.g.*, friends, co-workers, online) over the life of the prescription are likely to help a consumer discover that he is paying a supracompetitive price for lenses. A patient who discovers this situation is unlikely to return to the prescribing ECP for replacement lenses or for another examination. If that patient informs other consumers, the ECP also risks losing the business of potential new patients as his reputation for opportunistic behavior spreads.⁷³

⁷¹ See Timothy J. Muris, *Opportunistic Behavior and the Law of Contracts*, 65 MINN. L. REV. 521, 527 (1981) (“[I]f good reputation has importance to the potential opportunist, the risk of a bad reputation may deter some acts of opportunism.” Reputation concerns, however, “will fail to deter opportunism in some situations. For example, reputation provides little deterrent when potential opportunists can conceal their actions from those with whom they expect to contract.”)

⁷² See Benjamin Klein & Keith Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981).

⁷³ It is not necessary that all consumers in the market know which ECPs have a reputation for behaving opportunistically for those ECPs to be driven from the market. All that is required is that a sufficient proportion of consumers can differentiate between ECPs that take advantage of consumers' lack of information and those that do not, and that ECPs cannot present different offers to informed and uninformed consumers. Whether an equilibrium without ECPs acting opportunistically obtains is also a function of such factors as consumer demand functions, information costs, and firms' costs curves. See, *e.g.*, Russell Cooper & Thomas W. Ross, *Price, Product Qualities and Asymmetric Information: The Competitive Case*, 51 REV. ECON. STUD. 197 (1984); Yuk-Shee Chan & Hayne Leland, *Prices and Qualities in Markets with Costly Information*, 49 REV. ECON. STUD. 499 (1982).

An ECP is likely to risk losing this business only if the expected gain from locking consumers into a private label or limited distribution lens is greater than the value of lost repeat business. As noted previously, we do not have data on retailer margins, so we are unable to determine the relative benefits that accrue to an ECP when prescribing private label or limited distribution lenses versus other lenses.

Importantly, ECPs caught taking advantage of consumers sacrifice future revenue not only from selling replacement lenses to such patients but also from eye examinations, which produced almost twice the revenue of contact lens sales in 2002.⁷⁴ The frequency of contact lens purchases and exams are likely to exacerbate the costs of opportunistic behavior.⁷⁵ Thus, although reputational effects do not ensure against opportunistic behavior, they do provide a market-based check on such behavior, particularly when sellers have strong economic incentives to retain repeat business.

E. Prices for Private Label and Limited Distribution Lenses

If the lock-in theory were true, one would expect outlets – both independent ECPs and other retailers – that prescribe and sell private label and limited distribution lenses to charge higher prices for these lenses than for comparable more broadly distributed lenses. The data do not appear to support the lock-in theory. Price data gathered by the FTC suggest that private label versions of Biomedics55 sell for prices similar to those of their national brand-name counterparts. Similarly, there is no substantial price difference between what retailers with an affiliated ECP charge for Proclear Compatibles lenses in relation to comparable lenses that are available to online sellers through traditional wholesale channels.

1. Biomedics55 and Private Label Equivalent

In a sample of 34 sellers, 12 sold Biomedics55 under a private label.⁷⁶ These sellers were

⁷⁴ See *State of the Optical Market* at 4 & 12 (in 2002, contact lens sales generated \$1.96 billion and eye examinations generated \$3.6 billion). An ECP also may lose eyeglass sales considering that most contact lens wearers also are likely to wear eyeglasses. Frames and eyeglass lenses together accounted for 84.5% of retail optical sales in 2003, compared with just 11.8% for contact lenses. See Jobson Optical Research, *The State of the Optical Market*, 2nd Quarter 2003, *supra* note 21, at 1.

⁷⁵ A prescription typically must last at least one year under the FCLCA. 15 U.S.C. § 7604(a).

⁷⁶ These sellers were America's Best Online, Wal-Mart Online, BJ's Online, Wal-Mart, Sam's Club, BJ's, Pearle Vision, LensCrafters, Hour Eyes, Sears, Target, and Northern

all either offline retailers with ECPs or these retailers' Web sites. Table 6 shows the price for private label and branded versions of this lens, sorted by channel.

Table 6		
Prices for Branded and Private Label Biomedics55		
	Branded Price	Private Label Price
Pure Online	\$74.65 (n=15)	-
Hybrid	-	\$77.65 (n=3)
Wholesale Club	-	\$56.40 (n=2)
Mass Merchandiser	-	\$70.94 (n=2)
Optical Chain	-	\$84.94 (n=4)
Independent ECP	\$88 (n=5)	\$88.00 (n=1)

Source: FTC Price Survey.

All but one private label seller charge less than independent ECPs charge for the branded version of Biomedics55, and wholesale clubs and mass merchandisers sell private labels less expensively than either pure online sellers or independent ECPs. The average price for a six-month supply of the private label versions of Biomedics55 was \$76.28, compared to lenses sold under the Biomedics55 brand-name, which averaged \$77.99.⁷⁷ This difference, however, is not statistically significant, so we cannot reject the hypothesis that private label lenses sell for the same price as the Biomedics55 brand.⁷⁸

The statistical equality in prices does not appear to be attributable to the identity of the channel through which the lenses are sold. Although the average private label seller prices the private label version of Biomedics55 1.3 percent below the average price of all sellers of Biomedics55, the average private label seller charges 8.7 percent above average for the rest of the

Virginia Doctors of Optometry. See Chapter 3, *infra*, for more details on the sample.

⁷⁷ Data provided by OSI also show private label lenses to be priced very similarly to their more widely available counterparts. On June 22, 2004, OSI compared its Biomedics 55 private labels from online sellers with Vistakon's Acuvue2 and CIBA Vision's focus 1-2 week, and found OSI lenses to be less expensive. OSI, Comment #7, at 34-35.

⁷⁸ A two-sample t-test assuming unequal variances does not reject the hypothesis of equal means (t = .341).

lenses it sells.⁷⁹ Thus, the data do not seem to support a lock-in theory, pursuant to which prescribing outlets charge consumers supracompetitive prices for private label versions of Biomedics55.

2. Proclear Compatibles, Acuvue Advance, and Acuvue2

It is more difficult to identify price effects of a limited distribution marketing strategy than to identify price effects of private label lenses. In the case of private label lenses, there is an identical national name brand lens, which can control for lens qualities that affect price, thus allowing the effect of distribution method to be isolated. For limited distribution lenses, however, there is no such identical product that provides this type of a control for lens qualities.

Of the lenses sampled by the FTC, commenters have identified Proclear Compatibles as a limited distribution lens sold primarily through outlets that have an ECP present. An FTC sample found these lenses to be available in 86 percent of offline outlets sampled and 88 percent of pure online outlets sampled.⁸⁰ There is no lens in the sample that is identical to Proclear Compatibles, but Acuvue Advance and Acuvue2 are two widely available lenses that have similar water content and polymers.⁸¹

Price data gathered by the FTC shows that at offline retailers with an ECP, a six-month

⁷⁹ This difference is statistically significant at the 10 percent level ($t = -1.59$). See Table A-1 in the Appendix for methodology.

⁸⁰ See Table 8, *infra*.

⁸¹ Proclear lenses are 62 percent water, compared with 58 percent for Acuvue2 and 47 percent for Acuvue Advance. A trade publication notes that Acuvue 2, Acuvue Advance, and Proclear Compatible lenses have dK values (measuring oxygen permeability) of 28, 60, and 34, respectively, which are higher than the other spherical lenses sampled. See 21 TYLER'S QUARTERLY SOFT CONTACT LENS PARAMETER GUIDE at 35 & 50 (June 2004). Further, Proclear and Acuvue Advance may be closer to each other in product space than to Acuvue2. Proclear Compatibles are made from omafilcon A, which is purported to have superior qualities with regard to preventing dry eyes. Acuvue Advance is made from galyfilcon A, which is marketed as Hydraclear and likewise is purported to be unique in its moisture retention abilities. Compare add for Proclear Compatibles on CooperVision's Web site at http://www.coopervision.com/us/patient_clensesbycat.asp?id=8 with add for Acuvue Advance on 1-800Contacts' Web site at <http://www.1800contacts.com/product.aspx?itm=001466>. In addition, in discussions with FTC staff, ECPs identified Acuvue Advance lenses as potential substitutes for Proclear Compatible lenses given each lens' level of comfort. The same ECPs also noted that Proclear Compatibles offer unique advantages with regard to dry eyes.

supply of Acuvue Advance lenses is on average \$9.82 more expensive than the same supply of Proclear Compatibles, and a six-month supply of Proclear Compatibles are on average \$8.83 more expensive than a six-month supply of Acuvue2 lenses.⁸² These data indicate that sellers are unable to charge a premium for Proclear Compatibles, the limited distribution lens, over Acuvue Advance, which is available to all retailers through traditional wholesale channels. Because Acuvue Advance is not a limited distribution lens, its higher price is likely attributable to some combination of quality, costs, and branding. As for the price difference between Acuvue2 and Proclear Compatibles, we are unable to control for other factors (such as cost, quality, or branding differences) in addition to different distribution methods that may be affecting the price differential.⁸³ The limited data, however, do not support an inference that the manufacturer's limited distribution strategy affects the pricing of Proclear Compatibles.

* * *

Price data do not seem to support the lock-in theory pursuant to which ECPs are able to charge consumers supracompetitive prices for private label and limited distribution lenses.⁸⁴ This conclusion, however, may be limited with regard to Proclear Compatibles due to the inability to isolate the price effect, if any, of limited distribution.

⁸² Both differences are statistically significant at standard levels.

⁸³ Proclear Compatibles lenses have a higher dK value and water content than Acuvue2 lenses. *See* note 81, *supra*. In addition, in discussions with FTC staff, ECPs identified Proclear Compatibles lenses as superior to Acuvue2 with regard to comfort, given its unique polymer.

⁸⁴ The limited empirical evidence submitted by commenters also does not support the lock-in theory because it is not consistent with widespread ECP use of private label or limited distribution lenses to charge supracompetitive prices to consumers. First, OSI estimates that private label sales account for less than 8 percent of all soft lens sales. OSI, Comment #7, at 33. Second, data provided by OSI show that independent ECPs distribute lenses from OSI and CooperVision – the leading manufacturers that adopt limited distribution strategies in proportions roughly equivalent to their national shares. *Id.* at 10-11. OSI also points to the fact that Vistakon's share of patients who begin wearing contacts for the first time has increased since it began distributing through 1-800 Contacts in response to its settlement in the antitrust litigation. If ECPs tended to favor limited distribution lenses, we would expect to see a decline in prescriptions from Vistakon lenses once Vistakon began wide distribution. *Id.* at 39. Of course, no conclusions can be drawn from a simple correlation that fails to control for other relevant factors. For example, it is possible that Vistakon's share was rising for unrelated reasons, and that it would have been higher but for its shift in distribution policies.

F. Effect on Manufacturer and Retail Competition

Exclusive dealing – in the sense that a retailer restricts its sales to a particular manufacturer’s lenses – in the contact lens industry appears to be rare, and neither private labeling nor limited distribution limits the ability of competing lens manufacturers to sell their lenses through retail outlets. These practices, therefore, are not likely to threaten competition at the manufacturer level.

Under some theories, a necessary – but not sufficient – condition for distribution restrictions to affect retail competition adversely is foreclosure of a substantial number of retailers from distributing a substantial share of lenses for a significant period of time.⁸⁵

The largest-selling limited distribution lenses – OSI’s Biomedics55 and CooperVision’s Proclear Compatibles – are still widely available from numerous outlets. Data gathered by the FTC found Biomedics at all offline and 94 percent of pure online outlets sampled. Proclear Compatibles are almost as widely available; at 86 percent of offline outlets sampled and 77 percent of pure online sites sampled.⁸⁶ Thus, few retailers appear to be unable to distribute the most popular limited distribution lenses. Moreover, neither of these lenses represents a substantial amount of soft contact lens sales. According to submissions, OSI has between a 12.4 and 24 percent share of spherical lenses, and CooperVision has a 13 percent share.⁸⁷ Considering that these companies sell many more lenses than Biomedics and Proclear Compatibles, the share of sales for these specific lenses are lower than the share of sales for each firm.

Although ostensibly available only from a specific seller, private label versions of

⁸⁵ See *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327-28 (1961) (a plaintiff challenging an exclusive deal must show that it “foreclose[s] competition in a substantial share of the line of commerce affected,” so that “the opportunities for other traders to enter into or remain in that market must be significantly limited”); see also *See Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1059 (8th Cir. 2000) (to assess the likely competitive effects of market foreclosure, courts examine such factors as the defendant’s market share and entry barriers, and the likelihood that rivals can find alternative means to reach the downstream market); *Roland Mach. Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 394 (7th Cir. 1984) (in addition to substantial foreclosure, a necessary condition for exclusive dealing to be unlawful is that “the probable (not certain) effect of the exclusion will be to raise prices above (and therefore reduce output below) the competitive level, or otherwise injure competition”).

⁸⁶ Since the survey was conducted, 1-800 Contacts has stopped carrying Proclear Compatibles on its Web site. See <http://www.1800contacts.com/Discontinued.aspx?itm=000735>.

⁸⁷ See Table 1 and accompanying text, *supra*.

Biomedics55 constitute a very small fraction of all soft contact lens sales. OSI estimates that private label lenses account for less than 8 percent of all soft contact lens sales. Given that numerous outlets sell private label lenses under various names, any individual private label is likely to have less than a one percent share.⁸⁸ The FCLCA, moreover, allows a customer who receives a private label prescription to take it to other competing retailers that sell the same lens under either the national brand name or equivalent private label.⁸⁹ Thus, although competing sellers technically may not distribute each other's private label lenses, they are able to compete for consumers by selling an equivalent national brand name or private label lens.

OSI notes in its submission that its Hydrogenics lens is available only from ECPs with five or fewer offices.⁹⁰ Data collected by the FTC confirm that OSI's Hydrogenics is available primarily from independent ECPs.⁹¹ As noted above, according to data OSI submitted to the FTC, Hydrogenics represents only 0.5 percent of soft contact lens sales. Further, independent ECPs are highly fragmented and are the largest retail channel for replacement contact lenses.⁹² Thus, this strategy is highly unlikely to affect retail competition.

The data indicate that there is little foreclosure of retailers from distribution of lenses. Moreover, as discussed *infra* in more detail, these practices may be associated with efficiencies. Thus, private labeling and limited distribution are unlikely to reduce competition at the retail level.

G. Efficiencies from Limited Distribution

Because a manufacturer and a retailer typically have different incentives to promote a particular product and provide services related to that product, a manufacturer may find it efficient to place restrictions on the distribution of its product. By placing limits on intrabrand

⁸⁸ See OSI, Comment #7, at 33.

⁸⁹ See 15 U.S.C. § 7609(4)(f) and 16 C.F.R. § 315.2 (A)(8).

⁹⁰ See OSI, Comment #7, at 28.

⁹¹ From the list of sellers from whom prices were surveyed in Chapter 3, only two online and three offline sources (two of which were independent ECPs) carried this lens.

⁹² Jobson Research estimates that in 2003 there were 22,500 independent ECP locations in the U.S. *The State of The Optical Market*, at 12. See also data presented on distribution channels at pages 8-12, *supra*.

competition,⁹³ a manufacturer can enhance interbrand competition with its rivals.⁹⁴ Given that ECPs can charge directly for their services, however, the role played by limited distribution and private label strategies in spurring competition between contact lens manufacturers is unclear. We explore these concepts more fully below.

1. Distribution Restrictions to Promote Interbrand Competition

Retail promotion and service are important complements to many consumer goods. To reach an optimal level of output, a manufacturer often will find it efficient to provide those consumers who are indifferent about purchasing its product with extra services to make the purchase worth their while. For instance, relatively uninformed consumers of high-end electronic equipment may require expert assistance to determine the proper product for them; without such assistance, they may choose not to purchase at all. A manufacturer also may desire a retailer to take steps to assure that a product maintains the level of quality that consumers expect from a given brand.⁹⁵

In many cases, however, retailers will have less incentive to engage in sales-generation efforts than manufacturers. For instance, when the manufacturer's profit margin for additional sales is large in relation to the retailer's (as may be the case for branded products), the retailer rationally will provide a lower level of promotion than is optimal for the manufacturer.⁹⁶ Further,

⁹³ Intrabrand competition refers to competition among different sellers of the same brand of product. For example, two department stores may compete with each other to sell the same national brand of television.

⁹⁴ Interbrand competition refers to competition among manufacturers of different brands of products. For example, JVC and RCA compete with each other to sell their brand of television.

⁹⁵ For example, a brewer may insist that a retailer store its beer in a certain way to preserve its quality. Without proper storage, total demand for the beer (*i.e.*, not merely demand at the one retail location) would be lower because consumers would be likely to associate the poor quality not with the retailer's inadequate storage, but with the manufacturer's product. *See, e.g., Adolph Coors Co. v. FTC*, 497 F.2d 1178 (10th Cir. 1974).

⁹⁶ For example, one study reports that apparel manufacturers' average gross profit margin is 46 percent compared with only 9 percent for "multiple apparel retailers." The authors note that this disparity in compensation for marginal sales "will limit the incentive of retailers to invest in developing and promoting their Web sites unless there is some form of co-op funding or restructured pricing." Robert Gertner & Robert Stillman, *Vertical Integration and Internet Strategies in the Apparel Industry*, 49 J. INDUS. ECON. 415, 427 (2002).

because retailers do not reap all of the benefit from a manufacturer's reputation, they are likely to have less of an incentive to provide the effort necessary to maintain a level of quality associated with a manufacturer's brand name.⁹⁷ Thus, a manufacturer will need to compensate the retailer for putting forth the desired effort and may enter into a contract that spells out the services that a retailer must perform. Because retail service provision can be complex and difficult to measure, however, often a manufacturer will find it impracticable to specify in a contract the exact type and level of promotional services it desires from retailers.

One solution to this problem is for a manufacturer to have distribution policies, such as exclusive territories, that insulate its retailers from intrabrand competition from other sellers of that manufacturer's product. In this way, a manufacturer can provide its retailers with sufficient compensation to create incentives to supply the desired retail service.⁹⁸

Limited distribution policies also can prevent discounters from free-riding on a full-service retailer's efforts to increase demand.⁹⁹ Under this "special services free-riding" theory, absent exclusive territories, a consumer may come to the full-service retailer to learn about the product from a knowledgeable and attentive sales staff, but purchase from a discounter that offers lower prices because it does not provide any service. Full-service retailers that are insulated from discounters can capture the full return on their service efforts, thereby helping to assure that the retailer provides the optimal level of service.¹⁰⁰

⁹⁷ This phenomenon is likely to arise in a franchise context. For example, although a restaurant franchisee using low-quality ingredients would lose repeat sales at its outlet, it may also cause fewer patrons to visit other franchisees' outlets as well. In this way, the low-quality franchisee does not internalize the full costs of actions that depreciate the brand name capital of the franchisor. See Benjamin Klein, *The Economics of Franchise Contracts*, 2 J. CORP. FIN. 9 (1995); Paul H. Rubin, *The Theory of the Firm & the Structure of the Franchise Contract*, 21 J.L. & ECON. 223 (1978).

⁹⁸ See Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265 (1988).

⁹⁹ See Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86 (1960).

¹⁰⁰ Empirical studies of online marketing strategies find that manufacturers have tended to pursue Internet retailing in a way that preserves incentives to provide retail service. For example, one study finds that high-end fragrance producers that have restrictive distribution practices in the physical world are more likely to practice similarly restrictive distribution strategies online, such as offering their product online only through their own Web site at an equal or higher price than is available elsewhere. See Judith Chevalier & Dennis Carlton, *Free*

2. Efficiencies from Limited Distribution and Private Label Lenses

The extent to which these theories apply to limited distribution and private label strategies in the contact lens industry is unclear. Given that each new lens requires substantial research and development and time-consuming regulatory approval, contact lens manufacturing appears to fit the mold of a high fixed-cost, low marginal-cost industry.¹⁰¹ Unless ECPs enjoy a substantial profit margin on lenses sold, it is likely that ECPs have less incentive to pursue incremental sales than do manufacturers. Additionally, manufacturers may be concerned with free riding by discounters. For instance, if an ECP provides services to show how one lens is superior to another, patients could take this information and order the lens from a discounter that does not provide this service. Thus, limited distribution and private label strategies may help solve these conflicts.

In its comments, OSI claims that its limited distribution and private label strategies are important ways to encourage retailers to promote its product. For example, with regard to limited distribution, OSI notes:

OSI uses very little consumer advertising and promotion. OSI primarily promotes its contacts to eye care professionals and affiliated chains, and relies on these retailers to promote its products to consumers. . . . OSI's limited distribution strategy is one of the ways it can encourage independent eye care professionals and chains to promote its products. It is well accepted that when one channel (e.g. Internet outlets) can free ride off the promotional efforts of other channels, limited distribution is an important element in encouraging other channels to invest in advertising.¹⁰²

Riding and Sales Strategies for the Internet, 49 J. INDUS. ECON. 441 (Dec. 2001); see also Robert Gertner & Robert Stillman, *Vertical Integration and Internet Strategies in the Apparel Industry*, 49 J. INDUS. ECON. 415 (2002). More generally, the empirical literature tends to show that vertical integration and restraints like resale price maintenance and exclusive dealing/exclusive territories typically tend to reduce price and/or induce demand-increasing investments. See James C. Cooper *et al.*, *Vertical Antitrust Policy as a Problem of Inference*, INT'L J. OF INDUS. ORGANIZATION (forthcoming 2005).

¹⁰¹ These are industries in which the costs of developing a product and bringing it to market are high but, once the product is on the market, the cost of producing an additional unit of the product is low. The prescription drug and software industries are other examples of high fixed-cost, low marginal-cost industries.

¹⁰² OSI, Comment #7 at 30. See also *id.* ("The branding strategies that firms choose are among the ways they compete. OSI's distribution methods are a crucial aspect of its strategy to compete with its larger and better-capitalized rivals, which include firms like Johnson &

OSI also notes that “Private label products can increase the competitiveness of OSI and benefit consumers in a number of ways [including providing] individual retailers and retail chains incentives to expend resources on promotion of these products and make consumers aware of additional non-brand name alternatives ... [and expanding sales, which] better allow OSI to capture economies of scale in production, and thus enhance[] its competitiveness and ability to offer lower prices to consumers.”¹⁰³

It is important to note, however, that ECPs are likely able to recoup at least part of the cost of promotional services as part of the contact lens fitting fees. If the examination fee provides ECPs with adequate compensation for providing promotional services, this payment may ameliorate any divergence between manufacturers’ and retailers’ incentives to provide these services. Further, even if ECPs cannot recoup the cost of providing promotion services from consumers, contact lens manufacturers may be able to compensate ECPs directly. For example, a manufacturer could supply ECPs with education on the attributes and proper fitting techniques related to a lens. Without empirical evidence on the extent to which ECPs are compensated for promotional services through exam fees or directly from the manufacturer, however, it is impossible to determine the role limited distribution or private label strategies play in determining an ECP’s promotional effort.

III. Conclusion

Our examination of these issues – exclusive relationships, private label lenses, and limited distribution lenses – suggests that such relationships are not prevalent in the market for contact lenses and are unlikely to limit competition and harm consumers. Exclusive relationships are rare; private label lenses, while more common, still represent a small portion of all sales of soft contact lenses; and limited distribution policies are not widely used. Moreover, our inquiry showed that a common, limited distribution lens, or its private label equivalent, was available from the overwhelming majority of outlets sampled. Given that the FCLCA permits sellers to fill prescriptions with equivalent national brand or private label lenses, consumers have a number of channels through which to obtain such lenses. In addition, these relationships may be an efficient way for manufacturers to provide beneficial incentives to their lens distributors, which in turn may lead to increased competition among various brands of lenses. In sum, the theory and the evidence examined do not support the conclusion that these distribution practices harm competition and consumers by allowing prescribers to lock in their patients to supracompetitively priced lenses.

Johnson (Vistakon), Novartis (CIBA Vision), and Bausch & Lomb. OSI uses its distribution strategy to help differentiate itself from these rivals, and OSI believes that its freedom to choose its distribution methods is important to its future success.”).

¹⁰³ *Id.* at 28-40.

Chapter 3

Prices and Availability in Online and Offline Retail Channels

Congress also directed the Commission to examine the difference between online and offline sellers in regard to price, access, and availability. Section I of this Chapter discusses the existing evidence on these points, which is sparse and, in some cases, out of date. Section II presents the results of the Commission's study of prices and availability, which finds that most lenses are widely available through the different types of retail channels and that ECPs have the highest prices and wholesale clubs have the lowest prices. The study also indicates that contact lenses sold online are on average \$15 less expensive than those sold offline.

I. Online Sales of Contact Lenses

The share of contact lens sales transacted over the Internet is relatively small but has grown rapidly since mid 1990s.¹⁰⁴ One estimate places online contact sales at \$200 million, or 10.2 percent of all contact lens sales in the United States, for 2003.¹⁰⁵ 1-800 Contacts is the leading online seller, with \$187 million in revenue for 2003.¹⁰⁶ Several offline commercial retailers, including BJ's, Wal-Mart, and Sears, also operate Web sites on which they sell lenses. The study refers to such sellers as hybrids, because they have both an offline and online presence.

Information on price differences between online and bricks-and-mortar sellers of replacement lenses is sparse. One nationwide survey by SRI Consulting commissioned by the state attorneys general as part of a multidistrict antitrust litigation¹⁰⁷ revealed that, in 1998, the

¹⁰⁴ See OSI, Comment #7, at 24.

¹⁰⁵ See *State of The Optical Market* at 12.

¹⁰⁶ 1-800 Contacts Inc., 10-K at 23 (Mar. 18, 2004), at http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker. Other online sellers for which revenue information could be found were Coastal Contacts, with \$28 million in revenue for 2003, and VisionDirect, with an estimated \$40 million in revenue. See Coastal Contacts, *Management Discussion and Analysis of Financial Conditions and Results of Operations* (Sept. 21, 2004), at <http://media.integratir.com/V.COA/financials/MD+ASept22.pdf>; Drugstore.com, 2003 10-K at 43 (Mar. 12, 2004), at <http://www.shareholder.com/drugstore/Edgar.cfm?Page=8>.

¹⁰⁷ *In re: Disposable Contact Lens Antitrust Litigation*, No. MDL 1030, (complaints filed M.D. Fla. 1994).

average price of a six-pack purchased via mail order was \$19.90, compared to an average of \$23.76 for lenses purchased from ophthalmologists, optometrists, and optical chains – a 19 percent difference.¹⁰⁸ The survey data also suggested, however, that consumers who purchase their lenses from traditional suppliers could achieve equivalent savings at a mass merchant discounter, such as Wal-Mart, Costco, or BJ's; the average price at such retailers was \$19.98.¹⁰⁹

In its comments, Wal-Mart suggests that current pricing patterns in the retail market are similar to those found by SRI:

[P]rices will be higher for contact lenses from a private optometrist or ophthalmologist than the prices charged by retailers and internet sellers. Furthermore, retailers and internet sellers typically will have slightly higher prices than wholesalers. Contact lens prices will be comparable among major retailers and on-line merchants.¹¹⁰

1-800 Contacts provided the results from a March 2004 survey comparing the price for a six-pack of three different lenses – Focus Toric, FreshLook Colorblends, and Acuvue 2 – across five retail channels – Mass Merchandisers, Optical Retail Chains, Independent Optometrists, Ophthalmologists, and 1-800 Contacts.¹¹¹ These results – replicated below as Table 7 – generally are consistent with the SRI survey and Wal-Mart's comments. Mass merchandisers typically have the lowest prices. 1-800 Contacts' prices are somewhat higher than those of mass

¹⁰⁸ Susan Russell, *Nationwide Survey of Contact Lens Wearers*, SRI Consulting (1999). It is not clear whether the mail-order price includes shipping and handling. Survey takers were instructed to tell respondents to omit shipping and handling charges only if the respondent asked about the issue. In addition, some mail-order and Internet firms offer free shipping and handling. OSI points out potential drawbacks to the SRI study outlined above. For example, OSI states that the survey did not account for practitioners that sell contact lenses bundled with an examination, as a means of offering a discount on the bundle. The comment also notes that price differences among different types of providers may vary by the number of contact lenses purchased.

¹⁰⁹ *Id.*

¹¹⁰ Wal-Mart, Comment # 19, at 4.

¹¹¹ See 1-800 Contacts, Comment #1, at 17-18 and Attach. 23. In the survey, the "Mass Merchandisers" sample was comprised of Wal-Mart, Target, and Costco, and the "Optical Retail Chain" sample was comprised of LensCrafters and Pearle Vision. Optometrists and ophthalmologists and the mass merchandisers and optical retail chain stores that were sampled were selected at random from 1-800 Contacts' database.

merchandisers for two of the three lenses sampled, but are lower than prices charged by national optical chains. Independent ECPs have the highest prices.

Table 7 1-800 Contacts Price Comparison			
Channel	Focus Toric	FreshLook Colorblends	Acuvue 2
Mass Merchandisers	\$53.21	\$35.40	\$18.05
Optical Retail Chains	\$66.69	\$42.09	\$22.85
Independent Optometrists	\$70.91	\$46.67	\$24.39
Ophthalmologists	\$73.18	\$46.54	\$25.74
Average of ECPs	\$67.87	\$44.43	\$23.31
1-800 Contacts	\$59.00	\$34.95	\$19.95

Source: 1-800 Contacts, Comment #1, at 17-18 and Attach. 23.

II. FTC Study

To examine more rigorously prices and availability for online and offline channels, the Commission undertook its own study of prices. During the week of November 29, 2004, FTC staff collected price information for a six-month supply of 10 different contact lenses from 20 online and 14 offline retailers.¹¹² Staff selected six spherical lenses, three toric lenses, and one multifocal lens for the study. No data exists on market share of individual lenses, but our experience suggests that the lenses sampled are among the most frequently purchased and are thus likely to represent typical consumer patterns. Of the online retailers, 16 were pure online sellers – those with no offline presence – and 4 were hybrids, meaning that they had both online and offline sales. The Commission selected the pure online sellers based on the results of a search for

¹¹² A six-month supply was chosen because this quantity appears to be the most popular quantity purchased. *See* note 18, *supra*. Data for a smaller sample of lenses and outlets also were collected the week of October 25. A comparison between these data and those collected during the week of November 29 revealed very small changes in price (average change $-\$.08$ for all channels, $-\$.18$ for online, and $-\$.04$ for offline). Given the lack of variation in prices over time, we used only data from the larger November 29 sample.

“contact lenses” at shopping.com, a price comparison search engine. Hybrid sellers were selected by determining whether well-known offline outlets also had a Web site.¹¹³

The offline retailers sampled were all located in the Northern Virginia Area fall into four broad channels:¹¹⁴ two wholesale clubs;¹¹⁵ two mass merchandisers;¹¹⁶ four optical chains;¹¹⁷ and six independent ECPs.¹¹⁸ The non-independent ECP channels sampled represent many of the largest optical retailers.¹¹⁹

A. Availability

As Table 8 shows, most lenses are widely available. Of the ten lenses surveyed, five were available in 90 percent of sampled outlets, and all were available in at least 76 percent of sampled outlets. Of the 340 attempted price observations, in only 30 cases did an outlet not carry the lens

¹¹³ This methodology is common in studies of online and offline pricing. *See, e.g.,* Karen Clay *et al.*, *Retail Strategies on the Web: Price and Non-Price Competition in the Online Book Industry*, 50 J. INDUS. ECON. 351 (2002); *A Longitudinal Price Comparison for Music CDs in the Electronic and Brick-and-Mortar Markets: Pricing Strategies in Emergent Electronic Commerce*, 19 J. BUS. STRATEGIES 55 (2002); Karen Clay *et al.*, *Prices and Price Dispersion on the Web: Evidence from the Online Book Industry*, 49 J. INDUS. ECON. 521 (2001); Erik Brynjolfsson & Michael D. Smith, *Frictionless Commerce? A Comparison of Internet and Conventional Retailers*, 49 MGM'T SCIENCE 563 (2000).

¹¹⁴ It is possible that results may differ in other localities where relative prices between online and offline channels and within the offline channel are significantly different than those found in Northern Virginia. Because, however, the ranking of prices charged by channels is similar to those found in other data submitted to the FTC, there is no indication that the data here are unrepresentative.

¹¹⁵ Sam's Club and BJ's.

¹¹⁶ Wal-Mart and Target.

¹¹⁷ Sears, Hour Eyes, Pearle Vision, and LensCrafters.

¹¹⁸ FTC staff searched for “optometrists” in the Yahoo yellow pages for the zipcode 22301 and received a list of 21 independent ECPs from Alexandria, Falls Church, and Arlington. To assure reliability, this list was cross-referenced with another list of independent ECPs from the area to arrive at 13 ECPs. From this list, 6 were chosen at random.

¹¹⁹ *See* Table 3, *supra*.

in question. Fifteen outlets, of which six were offline and nine were online, did not carry at least one lens (for some outlets, multiple lenses were unavailable).

On average, the lenses sampled were available at a larger proportion of offline outlets than online outlets (95.8% versus 88.5%). With the exception of Acuvue lenses and Softlens Toric lenses (which were available from all outlets sampled), moreover, each lens was available from a larger proportion of offline than online stores. With regard to the online channel, the lenses sampled were more likely to be available from hybrid Web sites than from pure online retailers. The largest pure online retailer (1-800 Contacts), however, carried all of the lenses in the sample.

With the exception of Acuvue, all independent ECPs sampled carried all of the sampled lenses. Likewise, with the exception of one optical chain outlet that did not carry Softlens Multifocal, all outlets sampled from this channel carried all lenses. With the exception of Proclear Compatibles, mass merchandisers and wholesale clubs in the sample carried all lenses.

Table 8
Percentage of Outlets with Lens Available by Channel

Channel		Acuvue	Acuvue2	Acuvue Advance	Biomedics55	Frequency55	Proclear Compatible	Softlens Toric	Focus Toric	Frequency55 Toric	Softlens Multifoca
Online (n = 20)		90%	95%	80%	90%	95%	70%	100%	85%	95%	85%
	Pure Online (n = 16)	88%	94%	75%	94%	94%	88%	100%	94%	94%	88%
	Hybrid (n = 4)	100%	100%	100%	75%	100%	0%	100%	50%	100%	75%
Offline (n = 14)		86%	100%	100%	100%	100%	86%	100%	93%	100%	93%
	Wholesale Club (n = 2)	100%	100%	100%	100%	100%	50%	100%	100%	100%	100%
	Mass Merchandiser (n = 2)	100%	100%	100%	100%	100%	50%	100%	100%	100%	100%
	Optical Chain (n = 4)	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%
	Independent ECP (n = 6)	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%
All Channels (n=34)		88%	97%	88%	94%	97%	76%	100%	88%	97%	88%

Source: FTC Price Survey.

B. Prices

Table 9 below shows average total prices for each lens sampled by distribution channel. Total prices include shipping and handling charges from online sellers, when applicable. Because Virginia does not charge sales tax on contact lens purchases, this number does not include sales tax for offline sellers. As shown in the last column, the sample wholesale clubs have the lowest average price for lenses, followed by pure online retailers. For all of the ten lenses, the lowest price was found at one of these channels, four at pure online and six at wholesale clubs.

Independent ECPs have the highest average price for lenses in the sample, followed by optical chains, mass merchandisers and hybrids. For all lenses except Focus Toric and Softlens Toric, the highest price was found at independent ECPs or optical chains. The price range between independent ECPs and the lowest cost channels (wholesale clubs and pure online retailers) appears to be the lowest for Acuvue lenses and the highest for Frequency55.

Table 9 Average Lens Price by Channel												
Channel	Acuvue	Acuvue2	Acuvue Advance	Biomedics55	Frequency55	Proclear Compatible	Softlens Toric	Focus Vistint Toric	Frequency55 Toric	Softlens Multifoca	All Lenses	1
Online	\$72.45	\$71.71	\$90.00	\$75.15	\$44.53	\$66.47	\$123.55	\$92.94	\$99.13	\$174.17		\$91.14
Pure Online	\$71.94	\$71.04	\$88.01	\$74.65	\$40.07	\$66.47	\$112.79	\$88.87	\$94.44	\$170.92		\$87.77
Hybrid	\$74.23	\$74.23	\$95.99	\$77.65	\$61.27	-	\$166.63	\$123.45	\$116.71	\$189.33		\$106.38
Offline	\$77.45	\$79.53	\$98.18	\$80.17	\$68.42	\$88.36	\$145.01	\$118.04	\$107.56	\$198.94		\$107.42
Wholesale Club	\$55.90	\$55.90	\$77.48	\$56.40	\$44.93	\$79.96	\$109.26	\$91.73	\$94.94	\$163.68		\$83.18
Mass Merchandiser	\$74.94	\$74.94	\$95.86	\$70.94	\$74.99	\$90.00	\$153.94	\$129.99	\$110.99	\$198.00		\$108.38
Optical Chain	\$86.94	\$86.94	\$105.97	\$84.94	\$64.25	\$91.93	\$162.94	\$116.25	\$103.50	\$206.60		\$109.20
Independent ECP	\$80.00	\$84.00	\$100.67	\$88.00	\$76.83	\$87.67	\$152.00	\$125.20	\$113.33	\$207.17		\$112.35
All Channels	\$74.45	\$75.02	\$93.82	\$77.35	\$54.67	\$76.10	\$134.15	\$103.81	\$102.71	\$184.89		\$97.80

Source: FTC Price Survey. Unit of observation is price of lens j at outlet i . Average prices for All Lenses, Online, Offline, and All Channels are weighted by observation.

A regression analysis of the price of a six-month supply of lenses on variables that control for distribution channel and lens effects reveals the same patterns illustrated in Table 8.¹²⁰ Specifically, the analysis showed that contact lenses are on average \$15.48 less expensive online than offline. Wholesale clubs, however, are the least expensive channel overall, offering prices that average around \$30 less than independent ECPs, around \$9 less than all online outlets, and about \$6 less than pure online retailers. The difference between the wholesale club price and the independent ECP price is slightly larger for toric and multifocal lenses (\$34.42) than for spherical lenses (\$26.36).

Within the online channel, there is a difference between pure online sellers and hybrids. Pure online sellers offer prices that are on average \$23.95 less expensive than independent ECPs. Further, the price difference between pure online sellers and wholesale clubs – the least expensive channel – is only around \$6 for all lenses, and less than \$2 for toric and multifocal lenses.¹²¹ The difference between pure online sellers and wholesale clubs for spherical lenses is less than \$9.¹²² For specialty lenses, there is no statistically significant difference between hybrid sites' prices and those charged by independent ECPs. Hybrids, however, do charge around \$9.62 less for spherical lenses, on average, than do independent ECPs.¹²³

There also are differences within the offline channel. As noted above, the study showed that wholesale clubs charge on average the lowest prices of any channel for both spherical and specialty lenses, whereas results suggest that independent ECPs and optical chains charge the highest prices on average for both categories of lenses. In the results for all lenses sampled, the difference between mass merchandisers' and independent ECPs' average pricing is fairly small (-\$4.38), with the difference between optical chains and independent ECPs even smaller (-\$0.90). The hypothesis that the sampled independent ECPs, optical chains, and mass merchandisers all

¹²⁰ Two six-packs (one six-pack for each eye) are a six-month supply of lenses that are replaced on a monthly basis. Four six-packs (two six-packs for each eye) are a six-month supply of lenses that are replaced on a bi-weekly basis. For full regression results *see* Appendix Table A-2.

¹²¹ The difference in prices charged by pure online sellers and wholesale clubs for all lenses sampled is statistically significant at the 7% level ($F_{1,295} = 3.32$). There difference in prices for toric and multifocal lenses is not significant at standard levels ($F_{1,118} = .08$, 22% confidence level).

¹²² This difference is statistically significant at the 1% level ($F_{1,172} = 8.10$).

¹²³ This difference is statistically significant at the 1% level.

charge the same price for the specialty lenses included in the sample cannot be rejected.¹²⁴ For spherical lenses sampled, however, the results suggest that mass merchandisers offer prices that are on average \$7.07 less than independent ECPs.¹²⁵

The analysis presented shows that for the lenses and outlets sampled, wholesale clubs and pure online retailers offer the lowest prices on average. Although independent ECPs have the highest average prices, there is no statistically significant difference between the prices offered by independent ECPs, mass merchandisers, optical chains, and online hybrids for specialty lenses. For spherical lenses, however, all channels except optical chains offer lower average prices than independent ECPs.

There are several benign explanations for why the data show independent ECPs typically charging more than other channels.¹²⁶ For example, the majority of contact lens exams are performed by independent ECPs.¹²⁷ Consumers may enjoy the convenience of one-stop shopping and may be willing to pay for this value in the form of higher prices. Similarly, the survey data may bias upwards independent ECPs' prices if they offer lower contact lens prices when bundled with exams and if most of their sales are made in this manner. Further, the relative price for independent ECPs may be biased upwards to the extent that consumers purchasing from independent ECPs tend to receive discounts due to managed vision plans in greater proportions than do consumers purchasing from other channels.

III. Conclusion

The FTC's study found that most lenses are widely available through all the retail channels, with five out of ten lenses surveyed available in 90 percent of the outlets sampled and all ten lenses available in at least three-quarters of the outlets sampled. As for the prices of lenses, the study's results indicate that ECPs and optical chains have the highest prices and wholesale clubs have the lowest prices. Without taking into account differences within the online and

¹²⁴ The estimated coefficients on mass merchandiser and optical chain in specification 4 reported in Appendix Table A-2 are statistically indistinguishable from zero. Further, a test that the coefficients of mass merchandiser and optical chain are equal cannot be rejected at standard statistical levels ($F_{1,118} = .03$, 13% confidence level).

¹²⁵ This difference is statistically significant at the 10% level.

¹²⁶ Although independent ECP prices are statistically indistinguishable from those charged by optical chains.

¹²⁷ See VISION MONDAY (Nov. 8, 2004) (noting that for the 12 months ending June 2004, 65.1% of adults who received eye examinations, received them from an independent ECP), at <http://www.visionmonday.com/articles/details.asp?ID=13820>.

offline channels, contact lenses sold online are, on average, \$15 less expensive than those sold offline. For the outlets sampled, there is no statistically significant difference in the price independent ECPs, optical chains, hybrids, and mass merchandisers charge for specialty lenses. For spherical lenses, however, the results show that mass merchandisers and hybrids offer statistically significantly lower prices vis-à-vis independent ECPs.

Chapter 4

Impact of the Eyeglass Rule on Competition

In 1978, the FTC promulgated the Eyeglass Rule, which requires an optometrist or ophthalmologist to provide a patient, at no extra cost, a copy of the patient's eyeglass prescription at the completion of an eye exam.¹²⁸ Congress directed the Commission to evaluate the impact of the Eyeglass Rule on competition, the nature of enforcement of the Rule, and the impact of such enforcement on competition. As discussed further below, the Eyeglass Rule has facilitated comparison shopping by consumers, thereby spurring competition and leading to lower prices and more choices for consumers.

I. The Eyeglass Rule

Before the Commission issued the Eyeglass Rule, many ECPs either refused to release prescriptions to their patients, even if the patient requested it, or charged an additional fee to do so.¹²⁹ Without their prescriptions, consumers were unable to purchase eyeglasses from sellers other than their ECPs and therefore were unable to comparison shop.

Prohibitions and restrictions on advertising of ophthalmic goods and services were also commonplace: ECP advertising, especially price advertising, was restricted in 48 states and the District of Columbia, either by governmental or private regulation.¹³⁰ An absence of advertising for eyeglasses also hindered the ability of consumers to comparison shop. Without such advertising, consumers generally knew little about their options in purchasing eye exams and eyeglasses, including that they had the option of purchasing them separately.¹³¹ Evidence in the rulemaking record indicated that prices for eyeglass lenses, frames and complete eyeglasses varied widely (as much as 100 to 300 percent).¹³² Comparison shopping would be expected to decrease

¹²⁸ See 16 C.F.R. § 456.2(a), (c).

¹²⁹ Advertising of Ophthalmic Goods and Services, Statement of Basis and Purpose and Final Trade Regulation Rule, 43 Fed. Reg. 23,992, 23,998 (June 2, 1978). The Commission found, for example, that in nearly every survey of practicing optometrists considered in the rulemaking record, more than 50 percent of optometrists imposed a restriction on the availability of eyeglass prescriptions to patients. *See id.*

¹³⁰ *Id.* at 23,994.

¹³¹ *Id.* at 23,993, 23,995-96.

¹³² *See id.* at 23,994.

this variance. Advertising, especially comparative price advertising, would facilitate such comparison shopping.

The Commission issued the Eyeglass Rule to make it easier for consumers to comparison shop. In addition to requiring that they provide their patients a free copy of their eyeglass prescription, the Rule also prohibits optometrists and ophthalmologists from conditioning the availability of an eye examination on a requirement that the patient agree to purchase eyeglasses or other ophthalmic goods from the practitioner.¹³³ The Rule further prohibits optometrists and ophthalmologists from making certain disclaimers and waivers of liability.¹³⁴

Since it issued the Rule in 1978, the Commission has conducted reviews of the Rule's impact. These reviews analyzed whether the Rule should be retained, eliminated, or revised in light of technological, regulatory, or other changes in the marketplace. These reviews have shown that the Rule has had a beneficial effect on competition and consumers.¹³⁵

In February 2004, the Commission concluded its most recent review of the Rule. The FTC received many comments supporting retention of the Rule, arguing that the prescription release requirement in particular continues to benefit consumers by increasing competition and providing consumers with more choices and lower prices.¹³⁶ Moreover, even those who urged that the prescription release requirement be rescinded acknowledged that the Rule had improved the ability of consumers to comparison shop and increased competition in the market for eyeglasses.¹³⁷

¹³³ 16 C.F.R. § 456.2(b).

¹³⁴ 16 C.F.R. § 456.2(d) (an ECP may not waive or disclaim “the liability or responsibility of the ophthalmologist or optometrist for the accuracy of the eye examination or the accuracy of the ophthalmic goods and services dispensed by another seller”).

¹³⁵ In 1985, for example, the agency published a notice of proposed rulemaking that invited comments on whether the rule should be modified or repealed. *See Ophthalmic Practice Rules, Proposed Trade Regulation Rule, Notice of Proposed Rulemaking*, 50 Fed. Reg. 598, 602-603 (Jan. 4, 1985). In 1989, the FTC concluded the review and decided to retain the rule, because there remained significant non-compliance with the Rule and a continued lack of consumer awareness about their ability to obtain their prescription and purchase eyeglasses separately. *See Ophthalmic Practice Rules, Final Trade Regulation Rule*, 54 Fed. Reg. 10,285, 10,303 (Mar. 13, 1989).

¹³⁶ *See Ophthalmic Practice Rules, Final Rule*, 69 Fed. Reg. 5,451-52 (Feb. 4, 2004).

¹³⁷ *See id.* at 5,452.

The Commission determined that it was in the public interest to retain the Rule without substantive modification.¹³⁸ The FTC concluded that the Rule enhances consumer choice among eyeglass sellers at a minimal compliance cost to eye care prescribers.¹³⁹ The Commission did note, however, that there was some evidence in the record suggesting that some eye care practitioners continue to refuse to release eyeglass prescriptions,¹⁴⁰ which would deprive some consumers of the benefits of the Rule.

II. Impact of the Rule on Competition

For the current study, the Commission received few comments and little empirical data in response to a request for comments on the impact of the Rule on competition. Those who did comment presented differing views on the question of whether the issuance and enforcement of the Eyeglass Rule has affected competition and prices in the market for the retail sale of prescription eyeglasses.

Wal-Mart stated that there was generally less competition in the optical industry prior to the Eyeglass Rule.¹⁴¹ Since the Rule was issued, consumers have been able to shop for eyeglasses from a variety of sellers, which has increased competition among the sellers to best meet consumers' needs.¹⁴² According to Wal-Mart, the increased competition has allowed optical shops to compete better with independent optometrists in selling prescription eyewear, thereby reducing prices for consumers.¹⁴³ In addition, Wal-Mart noted that the increased competition may have provided an incentive for some sellers to begin manufacturing their own eyeglass products, thereby further reducing prices to consumers.¹⁴⁴

¹³⁸ See *id.* at 5,454.

¹³⁹ See *id.* at 5,453.

¹⁴⁰ See *id.*

¹⁴¹ Wal-Mart, Comment #19, at 6.

¹⁴² See *id.*

¹⁴³ See *id.*

¹⁴⁴ See *id.* Wal-Mart also noted that, although the Eyeglass Rule has reduced costs to consumers, barriers to competition and market efficiencies still exist. Specifically, it pointed to some state laws that prohibit the sale of prescription eyeglasses and optical goods by any retail establishment unless the majority of the establishment's income is derived from the sale of prescription optical goods and materials. According to Wal-Mart, such laws preclude it from entering the market as a brick-and-mortar eyeglasses seller, and the removal of such barriers to entry would further reduce prices to consumers for eyeglasses. *Id.* at 7 (citing 59 OKLA. STAT.

The American Optometric Association (“AOA”) stated generally that the eye wear market currently “exhibits all of the hallmarks of a very competitive marketplace,” and that consumers now “have a broad range of choices for their vision correction needs, spectacles, contact lenses, refractive surgery; all provided by a large and varied base of sellers, at various prices.”¹⁴⁵ AOA, however, did not comment on the state of the market prior to the Rule.¹⁴⁶

By contrast, the Illinois Optometric Association (“IOA”) contended that the Rule did not cause a large change in the eyeglasses market; rather, in IOA’s view, consumer demand has had a much larger impact on prices.¹⁴⁷ For example, the IOA asserted that “[t]he state of competition in the market for the retail sales of eyeglasses was more mature in 1978 than the contact lens market is today, in that independent opticals (sellers) were very common.”¹⁴⁸ Further, the IOA observed that most prescribers released eyeglass prescriptions before the Eyeglass Rule, contending that if prescribers refused to release prescriptions and charged more for eyeglasses, consumers would seek out prescribers with lower prices.¹⁴⁹ The IOA did not provide any empirical data in support of its position, pointing generally to a “limited” but unquantified number of prescribers who have been disciplined under the Rule as evidence that prescription release was prevalent before the Rule.¹⁵⁰

In its comments, 1-800 Contacts cited a study indicating that almost 20 years after issuance of the Eyeglass Rule, almost two-thirds of consumers were unaware of their right to receive their eyeglass prescriptions. 1-800 Contacts asserted that many consumers still are not aware of their right to obtain their eyeglass prescription under the Eyeglass Rule¹⁵¹ and that some

ANN. § 596).

¹⁴⁵ AOA, Comment # 3, at 1.

¹⁴⁶ *See id.*

¹⁴⁷ IOA, Comment #2.

¹⁴⁸ *Id.* The IOA did not indicate what a “more mature market” for eyeglasses implied for the impact of the Eyeglass Rule on prices.

¹⁴⁹ *See id.* This commenter stated that the Rule has had a significant impact only on those practitioners who did not release eyeglass prescriptions prior to the Rule’s promulgation. *Id.*

¹⁵⁰ *See id.* This view appears to run counter to the Commission’s findings in promulgating the Eyeglass Rule.

¹⁵¹ *See* 1-800 Contacts, Comment #1, at 29. This comment expressly references the comment filed by 1-800 Contacts in conjunction with the Commission’s Contact Lens Rule

consumers still do not receive copies of their eyeglass prescriptions either automatically or even when they ask.¹⁵² It contends that lack of education and enforcement of the Eyeglass Rule have limited the rule's efficacy.¹⁵³

III. ____ Other Effects of the Rule

Issuance and enforcement of the Eyeglass Rule prompted some changes in state laws, rules, and policies regarding prescription eyeglasses. The Nebraska Board of Optometry ("NBO") commented that it developed "Guidelines for the Release of Spectacle or Contact Lens Prescriptions" in response to the Eyeglass Rule.¹⁵⁴ Those guidelines, which the NBO provided with its comment, set forth the Eyeglass Rule's requirement that an optometrist or ophthalmologist must provide a patient with a copy of the patient's eyeglass prescription immediately after the eye examination is completed.¹⁵⁵ According to the NBO, the guidelines were originally intended to serve as a guide for practicing optometrists, but they also have been

rulemaking. In its comment on the rulemaking, 1-800 Contacts cited to a 1997 study showing that 65.8% of consumers were not aware of their right to their eyeglass prescription. *See* Comment by 1-800 Contacts on the Proposed Contact Lens Rule, at 3 (*available at* <http://www.ftc.gov/os/comments/contactlensrule>). The FTC addressed this study during its recent regulatory review of the Eyeglass Rule. *See* 69 Fed. Reg. at 5,452.

¹⁵² *See* Comment by 1-800 Contacts on the Proposed Contact Lens Rule, at 3 (*available at* <http://www.ftc.gov/os/comments/contactlensrule>). 1-800 Contacts cited to a 1997 study showing that 29.3% of consumers surveyed did not receive their prescriptions, and that 10.1% were refused their prescriptions when they requested them. The FTC considered this study during its recent regulatory review of the Eyeglass Rule. *See* 69 Fed. Reg. at 5,452. 1-800 Contacts also cited anecdotal evidence submitted in the regulatory review claiming that the overwhelming majority of eye doctors who dispense eyewear do not automatically give patients their eyeglass prescriptions. *See id.*

¹⁵³ *See* Comment by 1-800 Contacts on the Proposed Contact Lens Rule, at 83 (*available at* <http://www.ftc.gov/os/comments/contactlensrule/>).

¹⁵⁴ NBO, Comment #17, at 2.

¹⁵⁵ *See id.* at Attach. 2. The guidelines also state that the Rule allows an optometrist or ophthalmologist to condition provision of the prescription on payment for the eye examination, but only if that optometrist or ophthalmologist would have required immediate payment from that patient had the examination revealed that no ophthalmic goods were required. *See id.*

provided to the public in response to questions regarding the release of eyeglass prescriptions.¹⁵⁶ By contrast, the IOA commented that Illinois did not change its laws in response to the Eyeglass Rule.¹⁵⁷

Wal-Mart noted that the Eyeglass Rule may have prompted an increase in protectionist legislation in some states, such as laws requiring opticians to be licensed before they can dispense eyeglasses and laws affecting advertising of eyeglasses.¹⁵⁸ Wal-Mart's comments suggested that such laws limit consumers' ability to obtain prescription eyewear at the best possible price.¹⁵⁹

IV. Conclusion

The Eyeglass Rule has improved the ability of consumers to comparison shop for eyeglasses. Its prescription release requirement, in particular, continues to benefit consumers by spurring competition and providing consumers with more choices and lower prices.

¹⁵⁶ *See id.* at 2.

¹⁵⁷ IOA, Comment #2. The IOA further stated that it was not aware of any policy changes by trade associations resulting from the Eyeglass Rule.

¹⁵⁸ Wal-Mart, Comment #19, at 7.

¹⁵⁹ *See id.*

Chapter 5

State Barriers to Competition

In addition to the specific issues discussed above, Congress also required the Commission to examine whether there are any other issues that have an impact on competition in the sale of prescription contact lenses. The FTC has expressed concern in the past that state laws and regulations may limit competition in contact lenses, raise consumer costs, and harm public health.¹⁶⁰ Scholarly studies of the eye care industry have reached similar conclusions.¹⁶¹ For example, licensing requirements may act to insulate in-state sellers from out-of-state competition, or insulate ECPs from non-ECP sellers. As noted in the Contact Lens Report, health concerns do not appear to justify the costs imposed by these requirements.¹⁶² Likewise, restrictions on advertising and regulations that limit the amount of revenue that a store may derive from sales of non-optical goods may adversely affect competition. Accordingly, in this Chapter we will examine state licensing requirements for contact lens sellers, state restrictions on advertising, and other state barriers.

I. _____ State Licensing Requirements

_____ Several states have adopted laws or regulations that require anyone who dispenses lenses

¹⁶⁰ See CONTACT LENS REPORT; Matayo Letter.

¹⁶¹ See Deborah Haas-Wilson, *The Regulation of Health Care Professionals Other than Physicians*, REGULATION (Fall 1992) (considering the impact of occupational regulation on the market for vision care services and concluding that “self-regulating professionals may have an incentive to enact business practice restrictions that increase rivals’ costs.”), at <http://www.cato.org/pubs/regulation/reg15n4d.html>; Deborah Haas-Wilson, *Strategic Regulatory Deterrence: An Empirical Test in the Ophthalmic Market*, 8 J. HEALTH ECON. 339 (1989) (econometric study of optical goods markets concluding that “form of practice” restrictions have been used to deter entry and maintain higher prices.”); Deborah Haas-Wilson, *The Effect of Commercial Practice Restrictions: The Case of Optometry*, 29 J. L. & ECON. 165 (1986); Roger Feldman and James W. Begun, *The Welfare Cost of Quality Changes Due to Professional Regulation*, 34 J. INDUS. ECON. (1985) (concluding that in the case of optometry “[p]rofessional and legal sanctions prevent would-be price cutters from expanding their share of the market.”); THE EFFECTS OF RESTRICTIONS ON ADVERTISING AND COMMERCIAL PRACTICE IN THE PROFESSIONS: THE CASE OF OPTOMETRY, FTC BUREAU OF ECONOMICS STAFF PAPER REPORT (1980).

¹⁶² CONTACT LENS REPORT at 3.

to hold a valid ECP license issued by their state, or that impose other restrictions on out-of-state sellers' ability to sell in that state.¹⁶³ For example, in some states, personalized vision products, such as prescription eyeglasses and contact lenses, may be sold only at retail by a licensed optical establishment, under the direct supervision of a licensed optician.¹⁶⁴

By contrast, other states impose a registration requirement, rather than a license requirement, on out-of-state contact lens sellers. For example, California requires a non-resident contact lens seller to be authorized by its home state, to maintain records of lenses sold into California, and to provide a toll-free numbers for patients to ask questions or make complaints and for ECPs to confirm their prescriptions.¹⁶⁵ Not all registration requirements completely supplant professional license requirements, however. Some states require out-of-state contact lens sellers to register with state boards and, as a condition of the registration, require the seller to have a professional license – such as an optometry or pharmacy license – in the seller's home state.¹⁶⁶

A. Effect on Competition

By restricting the supply of professionals that enter an occupation, state licensing tends to raise the wages of those professionals; these restrictions in turn can lead to higher prices for products and services.¹⁶⁷ State licensing restrictions on entry can also lead to higher prices by

¹⁶³ 1-800 Contacts, Comment # 1, at 29, notes several states with licensing or other restrictive requirements: North Carolina, Tennessee, Mississippi, and Washington (with similar laws pending in Alaska and Georgia). *Id.* (citing N.C. GEN. STAT. §§ 90-235, 90-236.1, 90.252; TENN. CODE §§ 63-8-102, 63-8-113; Tennessee Dispensing Opticians, § 63-14-102; MISS. CODE ANN. § 73-19-61; Mississippi State Board of Optometry Board Rule 8.1(a); Washington Consumer Access to Vision Care Act, ARWC § 18.195.020; The Dispensing Opticians Act, ARWC § 18.34.141; Alaska House Bill 502, “An Act relating to dispensing opticians and dispensing optician apprentices,” introduced Feb. 16, 2004 (legislation pending)); Georgia, S.B. 513, dated Feb. 13, 2004).

¹⁶⁴ *See, e.g.*, GA CODE ANN. § 31-12-12(h) (2003).

¹⁶⁵ CAL. BUS. & PROF. CODE § 2546.5 (2004).

¹⁶⁶ *See* ARIZ. REV. STAT. ANN. § 32-1773 (2004) (a nonresident dispenser may register with the board of optometry to dispense replacement soft contact lenses; registered dispensers shall maintain a valid pharmacy license in their state of domicile); N.H. RSA 327:31 (No person shall operate a business outside the state for the retail sale of contact lenses into the state unless the business has a permit issued by the board of pharmacy, if the business is a pharmacy, or by the board of registration in optometry, if the business is not a pharmacy).

¹⁶⁷ CONTACT LENS REPORT at 16-28.

limiting the availability of lower cost suppliers to consumers.¹⁶⁸ In its comment, Wal-Mart argues that state licensing requirements adversely affect out-of-state sellers' abilities to compete with in-state sellers, including prescribers, for the sale of prescription contact lenses.

The need to employ a state-licensed professional, such as an optometrist, an ophthalmologist, or a dispensing optician, would likely be a costly proposition for an Internet or mail-order seller of replacement lenses.¹⁶⁹ Because such firms may not sell eyeglasses or conduct contact lens fittings, they may not already have a state-licensed professional on staff.¹⁷⁰ Likewise, licensing requirements also impose costs on in-state offline sellers of replacement lenses that likely would induce such sellers to charge higher prices to consumers or – alternatively – exit sales entirely.¹⁷¹

In its comments, 1-800 Contacts noted that regulation by state bodies affects its pricing decisions.¹⁷² Similarly, Wal-Mart noted that state requirements that licensed opticians or optometrists be involved in the shipping and handling of contact lens orders restrict competition and that the burden of such restrictions may fall disproportionately on “consumers who may not have an optometrist, ophthalmologist or contact lens seller in their area, and thus no access to purchase contact lenses and have them delivered to their homes.”¹⁷³

B. Effect on Quality of Service Provided

Although there are significant health issues concerning the use and sale of contact lenses, requiring a professional license to sell replacement contact lenses is not likely substantially to increase consumer health protections.¹⁷⁴

First, the effect of licensing on quality is ambiguous. Although the restriction of supply resulting from licensing may lead to a higher average competence level for the professionals

¹⁶⁸ *Id.*

¹⁶⁹ *See* CONTACT LENS REPORT at 21.

¹⁷⁰ *See id.*

¹⁷¹ *See id.* at 23.

¹⁷² 1-800 Contacts, Comment #1, at 22.

¹⁷³ Wal-Mart, Comment # 19, at 4.

¹⁷⁴ *See* CONTACT LENS REPORT at 3, 21-22; *See also* Matayo Letter.

allowed to practice, the higher price for their services can lead to less utilization by consumers.¹⁷⁵ It is unclear, moreover, that licensing would have any impact on the quality of dispensing pre-packaged replacement contact lenses. There is little reason to believe that a licensed professional ECP would be any more competent than someone who is not licensed (*e.g.*, a store clerk) to dispense pre-packaged contact lenses pursuant to a valid prescription. Further, a license requirement may limit the market to providers who are initially more qualified, but reduced competition may allow the incumbent licensees to offer less innovative service without fear of losing their customers to new, more up-to-date entrants.¹⁷⁶

Second, by increasing the cost of purchasing replacement lenses, licensing requirements may cause consumers to wear their lenses longer than medically recommended. The primary health concern with contact lenses appears to be ensuring that contact lens wearers visit their doctors regularly for eye examinations.¹⁷⁷ To the extent that licensing increases the cost or inconvenience of obtaining disposable replacement lenses, it may induce more individuals to over-wear their replacement contact lenses or exacerbate the practice by persons already doing so.¹⁷⁸ In this manner, licensing may increase the incidence of health problems associated with contact lens use.¹⁷⁹ In particular, to the extent that contact lens wearers choose to over-wear disposable contact lenses in response to a price increase, as a way to save money, they increase the risk of severe eye damage.¹⁸⁰

Some commentators have argued that a potential benefit of requiring contact lens sellers to obtain a state license is that the license may give the state additional leverage over out-of-state sellers.¹⁸¹ If a seller fails to comply with prescription requirements, for example, then the state

¹⁷⁵ *Id.*

¹⁷⁶ *Id.* at 16-28.

¹⁷⁷ *Id.* at 8.

¹⁷⁸ *Id.* at 19-20.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*

¹⁸¹ For example, comments submitted in connection with the FTC's E-commerce workshop argued that it was difficult for state boards to reach out-of-state sellers. *See* Summary of Testimony of J. Pat Cummings, Jr. O.D., President, American Optometric Association; Summary of the Position of the National Association of Optometrists and Opticians, at <http://www.ftc.gov/os/2004/03/040329clreportfinal.pdf>.

could prompt compliance by threatening to revoke the seller's license.¹⁸² The FCLCA, which provides for federal enforcement of its requirement that contact lenses be sold pursuant to a prescription, however, obviates much of this concern about the difficulty of reaching out-of-state sellers.¹⁸³

FTC staff previously has recommended that policymakers and other officials rescind, or refrain from adopting, requirements that out-of-state sellers have a professional license to sell replacement contact lenses and instead adopt a simple registration requirement, which is likely to provide consumer protections at a lower cost.¹⁸⁴ In their comments, Wal-Mart and 1-800 Contacts expressed similar views.¹⁸⁵

Unlike licensing, a registration system would not require individuals or firms that want to sell replacement lenses to satisfy expensive and unnecessary training requirements. Rather, replacement lens sellers would merely file their names and other required contact information

¹⁸² CONTACT LENS REPORT at 19-20.

¹⁸³ *Id.* at 22.

¹⁸⁴ *See id.* at 3, 21-22; Matayo Letter; Wal-Mart, Comment #19, at 8 (“there are undoubtedly other ways to provide this protection to consumers without imposing licensing requirements for individual opticians to sell contact lenses. . . . For example, a state could simply require registration in lieu of licensing”).

¹⁸⁵ For example, Wal-Mart observes:

[T]he sale of contact lenses does not require any specialized technical expertise. Contact lenses are pre-packaged, pulled from a store's stock, and are simply matched to the prescription written by the doctor. Nonetheless, many states require a licensed optician to be involved in the process. . . . [T]he mere selling of pre-packaged replacement contact lenses to a customer is a simple transaction of matching the prescription with the product. Laws and regulations that require a licensed optician to be involved in the basic sales transaction of replacement contact lenses are unnecessary and only limit the in-state and out-of-state sellers' ability to compete with private optometrists and ophthalmologists, thereby increasing costs to consumers.

Wal-Mart, Comment #19 at 7-8. *See also* 1-800 Contacts, Comment #1, at 29-30 (“[T]here is no health justification for these state licensing requirements. . . . Given that there is no evidence that it is safer for an ECP to sell a sealed box of contact lenses than for a non-ECP to do so, these state laws have no real purpose other than to shield ECPs from competition by alternative sellers.”).

with the state. The state would then have sufficient information in the event that a particular seller engages in practices that create health risks for consumers. In addition, registration systems can provide further protection to consumers by requiring out-of-state sellers to submit to the jurisdiction of the states in which they register, and to maintain pertinent business records.¹⁸⁶

In its comment, the NBO indicates that it has such a system: “We require out-of-state sellers to register with the Board of Pharmacy. Once registered, they may compete with in-state sellers. In-state sellers are regulated through their professional licenses as optometrists, physicians, or pharmacies.”¹⁸⁷ Likewise, the COA notes that its registration requirement “does not affect the ability of out-of-state sellers to compete with in-state sellers or prescribers in the sale of prescription contact lenses.”¹⁸⁸ COA notes that out-of-state sellers of replacement lenses must meet the following requirements:

The seller must be in good standing in the state where its business is located and from which the lenses are sold; the seller must comply with requests for information made by the medical board; must maintain records of contact lenses shipped, mailed or delivered to patients in California for a period of at least three years; must provide a toll free telephone service for responding to patient questions and complaints during the applicant’s regular hours of operation . . . ; provide a notice to consumers to advise them to contact an eye care practitioner in the event of discomfort or other visual problems; [and] provide a toll free number, facsimile line and electronic mail address for the use of prescribers confirming contact lens prescriptions.¹⁸⁹

II. State Restrictions on Advertising

Advertising generally informs consumers of options available in the marketplace and encourages competition among firms seeking to meet consumer preferences. Advertising may also facilitate the entry of new competitors by making them known to consumers and helping them reach more quickly an efficient competitive size. These benefits are as true of advertising by professionals as they are of advertising by other kinds of businesses.

Research indicates that advertising for professional services tends to benefit consumers. For example, a 1996 survey of empirical economics literature on professional advertising revealed

¹⁸⁶ See California Optometric Association (“COA”), Comment #5, at 2-3.

¹⁸⁷ NBO, Comment #17, at 2.

¹⁸⁸ COA, Comment #5, at 1.

¹⁸⁹ *Id* at 1-2.

that most studies find that advertising tends to reduce the price of professionals' services without reducing quality.¹⁹⁰ The authors concluded, "[T]he overwhelming impression from the results reviewed . . . is of advertising having a downward effect on professional fees."¹⁹¹ In addition, they concluded that the empirical literature generally shows that advertising does not lead to lower quality.¹⁹²

Consumers benefit from robust competition among professionals and from the important price and quality information that advertising can provide. Not all advertising, however, is beneficial. False or misleading advertising is likely to harm both consumers and competition. Such deceptive advertising may skew consumer purchasing decisions, make it more difficult for honest sellers to compete, and undermine confidence in the industry.

Consumers benefit when state advertising regulations are narrowly tailored to prevent unfair or deceptive acts or practices.¹⁹³ Imposing overly broad state restrictions may inhibit the

¹⁹⁰ See James H. Love and Frank H. Stephen, *Advertising, Price and Quality in Self-Regulating Professions: A Survey*, 3 INTL. J. ECON. BUS. 227 (1996). See also FTC STAFF REPORT ON THE EFFECTS OF RESTRICTIONS ON ADVERTISING AND COMMERCIAL PRACTICE IN THE PROFESSIONS: THE CASE OF OPTOMETRY (1980); Lee Benham & Alexandra Benham, *Regulating Through the Professions: A Perspective on Information Control*, 18 J.L. & ECON. 421 (1975); Lee Benham, *The Effects of Advertising on the Price of Eyeglasses*, 15 J.L. & ECON. 337 (1972); Lee Benham, *Licensure and Competition in Medical Markets*, in Frech, ed., REGULATING DOCTORS' FEES (1990); John F. Cady, RESTRICTED ADVERTISING AND COMPETITION: THE CASE OF RETAIL DRUGS (1976).

Research also has confirmed that advertising may have the same effects in markets for routine legal services. See Terry Calvani, James Langenfeld & Gordon Shuford, *Attorney Advertising and Competition at the Bar*, 41 VAND. L. REV. 761 (1988); John R. Schoreter, Scott L. Smith & Steven R. Cox, *Advertising and Competition in Routine Legal Service Markets: An Empirical Investigation*, 35 J. INDUS. ECON. 49 (1987). Further research indicates that the likely effects on price and quality might be different for different kinds of services, with advertising more likely to lead to lower prices at no loss in quality for relatively routine services that could be standardized. See Timonth J. Muris & Fred McChensey, *Advertising and the Price and Quality of Legal Services: The Case for Legal Clinics*, 1979 AM. BAR. FOUND. RESEARCH J. 179 (1979).

¹⁹¹ Love & Stephen, *supra* note 190, at 236.

¹⁹² *Id.* at 239.

¹⁹³ See Letter from J. Howard Beales *et al.*, to the Alabama Supreme Court (Sept. 30, 2002), at <http://www.ftc.gov/bc/v020023.pdf>.

competitive process and frustrate informed consumer choice.¹⁹⁴ As the FTC said in *American Medical Association*, “broad bans on advertising and solicitation are inconsistent with the nation’s public policy.”¹⁹⁵ Broad bans on truthful, non-misleading advertising also raise significant First Amendment concerns.¹⁹⁶

1-800 Contacts identified Arkansas and South Dakota legislation as examples of broad prohibitions on contact lens advertising.¹⁹⁷ In contrast, the NBO emphasized that Nebraska only

¹⁹⁴ Indeed, private restrictions on professional advertising may violate the federal antitrust laws, if there is evidence of the restriction’s likely anticompetitive effects sufficient to overcome any competitive benefit of the restriction. *See generally California Dental Ass’n v. FTC*, 56 U.S. 756 (1999) (describing legal standard, although finding insufficient evidence of anticompetitive effects on the particular record established at trial). *See also* Submission of the Staff of the Federal Trade Commission to the American Bar Association at 10 (June 24, 1994) (noting that unnecessarily broad advertising bans may prohibit messages that consumers find useful in choosing a lawyer) (copy attached to Letter from J. Howard Beales *et al.*, to the Alabama Supreme Court (Sept. 30, 2002), at <http://www.ftc.gov/be/v020023.pdf>).

¹⁹⁵ 94 F.T.C. 701, 1011 (1979).

¹⁹⁶ *See Central Hudson Gas & Electric Corp. v. Public Service Commission*, 447 U.S. 557 (1980); *see also American Optometric Ass’n v. Federal Trade Commission*, 626 F.2d 896, 908-9 (D.C. Cir. 1980) (“*Bates* left little doubt that laws regulating the advertising of medical goods and services were susceptible to First Amendment scrutiny, and that total bans on such advertising would not survive such scrutiny.”).

¹⁹⁷ 1-800 Contacts, Comment #1, at 11. Specifically, the Arkansas statute makes it unlawful to “solicit the sale of spectacles, eyeglasses, lenses, contact lenses. . . by radio, window display, television, telephone directory display advertisement, newspaper advertisement, handbills, circulars, prospectuses, posters, motion pictures, stereopticon slides, or any other printed publication or medium or by other means of advertisement.” Arkansas State Code § 17-90-104(10). The same provision further prohibits the use of “any method or means of baiting, persuading, or enticing the public into buying spectacles, eyeglasses, lenses, contact lenses” and other eyecare products and services. *Id.*

The South Dakota statute defines “unprofessional conduct” to include “advertising by printed matter, radio, display, or any other means, the quotation of prices for a discount on or any specific amount of payment for . . . ophthalmic lenses. . . or the phrases ‘free examinations,’ ‘moderate prices,’ ‘low prices,’ ‘guaranteed glasses,’ ‘satisfaction guaranteed,’ or any variations thereof, or words of similar import.” S.D. CODIFIED LAWS § 36-7-25(8). The South Dakota statute further defines “unprofessional conduct” to include “seeking patronage by means of handbills, posters, circulars, newspapers, radio or periodicals, which means set forth more than

prohibits optometrists from advertising in a manner that “deceives, misleads, or defrauds the public.”¹⁹⁸ On the more specific issue of restrictions on ECP advertising about prescribing practices, neither commenter identified any state law or regulation that addresses an ECP’s willingness to advertise that he or she prescribes lenses that are commonly available.¹⁹⁹

III. Other State Barriers

In addition to licensing requirements and advertising restrictions, Wal-Mart has noted that other state regulations impede competition. For example, Wal-Mart is precluded from entering Oklahoma as a brick-and-mortar contact lens and eyeglasses seller.²⁰⁰ Oklahoma law makes it unlawful for retailers that derive less than half of their income from “the sale of such prescription optical goods and materials” to “display, dispense, sell, provide or otherwise purvey to the public, prescription eyeglasses, prescription lenses, frames or mountings for prescription lenses, within or on the premises of in any manner.”²⁰¹

IV. Conclusion

State licensing requirements, prohibitions on truthful advertising, and other state barriers may have an adverse impact on competition in the sale of prescription contact lenses. These restrictions may insulate some sellers from competition from more innovative or lower-cost contact lens sellers, leading to fewer choices and higher prices for consumers. In addition, there is no evidence that such restrictions benefit consumers by improving the quality of the services they receive.

the name, profession, title, location, phone number and office hours of the optometrist.” S.D. CODIFIED LAWS § 36-7-25(9).

¹⁹⁸ NBO, Comment #17 at 1(citing 72 NAC 120, Regulations Governing the Practice of Optometry – § 011.14 Unprofessional Conduct).

¹⁹⁹ 1-800 Contacts, Comment # 1, at 11. The NBO noted that Nebraska’s laws do not address this point either. NBO, Comment #17 at 1-2.

²⁰⁰ Wal-Mart, Comment #19, at 7.

²⁰¹ *Id.* (citing 59 OKL. ST. ANN. § 596.)

Conclusion

In this study of the strength of competition in the contact lens industry required by the FCLCA, the Commission examined the issues Congress directed it to consider. In brief, the Commission reached the following conclusions on these issues.

- **Overview of the industry:** Technological innovations in contact lens manufacturing, along with the FCLCA's prescription portability requirement, have resulted in greater consumer choice of outlets from which to purchase contact lenses.
- **Manufacturer-distributor relationships:** Exclusive relationships appear to be rare in the optical goods industry. Some manufacturers, however, limit the distribution channels through which they sell their contact lenses, and some retail chains and independent ECPs offer private label lenses. Limited distribution and private label lenses comprise a relatively small share of all contact lens sales. The information available, including the FTC's own survey of lens availability, does not support the hypothesis that sellers are able to limit competition or harm consumers by charging higher prices for limited distribution or private label lenses.
- **Differences between online and offline sellers:** The FTC's study of online and offline availability and prices for popular lenses indicates that most lenses are widely available through the various retail channels. Overall, independent ECPs and optical chains have the highest prices, and wholesale clubs have the lowest prices. Without accounting for different classes of retailers within online and offline channels, contact lenses sold online are on average \$15 less expensive than those sold offline. While mass merchandisers and hybrids offer statistically significantly lower prices than independent ECPs for spherical lenses, there is no statistically significant difference among the prices charged by these retail channels for specialty lenses.
- **Impact of the Eyeglass Rule:** The FTC's Eyeglass Rule appears to have made it easier for consumers to comparison shop, thereby making an important and positive impact on competition in the market for the retail sale of eyeglasses, leading to lower prices and more choices for consumers.
- **Other issues that impact competition:** State laws and regulations have the potential to limit competition in contact lenses, which may raise consumer costs and harm public health. FTC staff previously has recommended that policymakers and other officials rescind, or refrain from adopting, requirements that out-of-state sellers have a professional license to sell contact lenses. In addition, restrictions on truthful, non-misleading advertising are likely to frustrate the competitive process and inhibit consumer choice.

APPENDIX

1. Private Label Lenses

To control for channel effects, we compare private label prices to an outlet's overall pricing. To the extent that pricing of private labels is similar to pricing of other lenses, any difference between private label prices and brand name prices may be attributable only to the fact that private label versions of Biomedics55 are sold through certain channels.

One way to control for channel effects is to examine how an outlet's prices deviate from average prices. The deviation from the average price of lens i at outlet j ("deviation") is defined as follows:

$$Dev_{ij} = \frac{P_{ij} - \bar{P}_i}{\bar{P}_i}.$$

In table A-1, column 3 provides the average deviation for all non-private label lenses at each outlet that sells private label versions of Biomedics 55. This statistic is calculated as:

$$\overline{Dev}_j = \frac{1}{N-1} \sum_{i \neq 55} \frac{P_{ij} - \bar{P}_i}{\bar{P}_i}.$$

An outlet that tended to offer lower prices for lenses other than Biomedics55 should have a negative average deviation, and a high-price seller should tend to have a positive average deviation. For example, the data show that the only independent ECP in the sample that sells private label Biomedics55 typically sells the rest of its lenses 30 percent above average prices. Sam's Club, alternatively, on average sells its non-private label lenses 25 percent below average prices. These findings are consistent with characterizing independent ECPs and wholesale clubs as high and low-priced channels, respectively.

Column 1 of Table A-1 lists the deviation for private label versions of Biomedics55 by outlet, which is defined as

$$Dev_{PL,j} = \frac{P_{PL,j} - \bar{P}_{55}}{\bar{P}_{55}},$$

where j denotes outlet, PL denotes private label version of Biomedics55, and the subscript 55 denotes Biomedics55 lenses sold under both national name-brand and private labels. If sellers are able to command a premium for private label lenses by locking consumers into purchasing from them, one would expect to see the deviation for private label Biomedics55 greater than the

average deviation for other lenses sold. The difference between the deviation for private label and other lenses is shown in column 4 of Table A-1. A number close to zero indicates that an outlet is pricing its private label version of Biomedics55 consistent with how it prices its other lenses relative to other outlets. A positive number would indicate a premium on private label lenses relative to other lenses, whereas a negative number indicates that an outlet is pricing its private label lens lower (relative to other outlets' prices) than it prices other lenses.

Table A-1			
Deviation from Average Lens Prices for Private Label Sellers			
Outlet	Deviation for Private Label Biomedics55	Average Deviation for non-Private Label Lenses	Difference
America's Best Online	34.4%	19.8%	14.6%
BJ's	-26.3%	-7.1%	-19.2%
BJ's Online	-18.7%	-1.0%	-17.7%
Hour Eyes	-7.2%	19.6%	-26.8%
LensCrafters	13.8%	4.7%	9.1%
Northern Virginia Doctors of Optometry	13.8%	29.6%	-15.8%
Pearle Vision	3.4%	15.7%	-12.3%
Sam's Club	-27.9%	-25.1%	-2.8%
Sears	29.2%	17.5%	11.7%
Target	-7.0%	9.6%	-16.6%
Wal-Mart	-9.6%	15.2%	-24.8%
Wal-Mart Online	-14.5%	0.9%	-15.4%
Average	-1.3%	8.7%	-9.7%

Source: FTC Price Survey.

Private label sellers charge on average 8.7 percent more than the average price for non-private label lenses, but 1.3 percent less for private label versions of Biomedics55 than the average price of all sellers of Biomedics55. This difference is statistically significant at the ten percent level ($t = -1.59$). Seven of the twelve private label sellers, moreover, price the private label lens lower relative to other outlets than they did for any other lens.

The largest difference in deviation was found at Hour Eyes; its non-private label lenses are priced 20 percent above average, but its private label Biomedics55 sells at a price 7 percent

less than the average price for Biomedics55. Three sellers – America’s Best Online, LensCrafters, and Sears – have higher deviations for private label lenses than for non-private label lenses. Five sellers – America’s Best Online, LensCrafters, Northern Virginia Doctors of Optometry, Pearle Vision, and Sears – list higher-than-average prices for private label Biomedics55.

2. Price Regressions

A regression of the price of lens j at outlet i on dummy variables that control for distribution channel and lens fixed-effects was run. Formally, the following equation was estimated:

$$P_{ij} = c + \alpha_i + \mathbf{B}\mathbf{D}_k + e_{ij} \quad ,$$

where \mathbf{B} is a vector of coefficients and \mathbf{D}_k is a matrix of dummy variables that are equal to 1 if firm i is in channel k , and zero otherwise, α_i is a lens-specific constant, and e_{ij} are error terms.

Specifications (1) - (3) were estimated using price data for all lenses, specification (4) was estimated using price data for only spherical lenses, and specification (5) was estimated using price data for only specialty lenses. For specification (1), the constant represents the average price for Acuvue lenses across all offline channels, and in specifications (2) - (4), the constant represents the average price for Acuvue lenses at an independent ECP. For specification (5), the constant represents the average price for Focus Vistint Toric. Estimated channel coefficients represent the change in average price from purchasing a six-month supply of contacts lenses at channel k versus an independent ECP. Results are reported in Table A-2.

Table A-2 Price Regression					
Independent Variables	Specification				
	(1)	(2)	(3)	(4)	(5)
Constant	83.74*** (2.48)	89.24*** (3.69)	88.72*** (3.78)	86.30*** (2.41)	122.81*** (9.08)
Online	-15.48*** (2.46)	-20.64*** (3.97)	-	-	-
Pure Online	-	-	-23.95*** (3.93)	-17.90*** (2.36)	-32.69*** (9.04)
Hybrid	-	-	-5.36 (5.81)	-9.62*** (3.58)	.565 (12.87)
Wholesale Club	-	-29.68*** (4.74)	-29.58*** (4.72)	-26.36*** (3.63)	-34.42*** (10.33)
Mass Merchandiser	-	-4.48 (5.08)	-4.38 (5.01)	-7.07** (3.83)	-1.10 (10.54)
Optical Chain	-	-0.95 (4.42)	-0.90 (4.42)	.11 (3.00)	-2.40 (10.12)
R ²	.760	.786	.802	.703	.664
F	65.40***	69.42***	67.21***	53.35***	30.68***
Obs.	310	310	310	183	127

Notes: Dependent variable is price of lens j at outlet i . Robust standard errors in parentheses. *** denotes significance at the 1% level; ** denotes significance at the 10% level. Lens fixed-effects used in all specifications not reported.

Most parameter estimates are significant at standard levels, and measured by R^2 and F-statistics, the equations tend to explain variation in the data fairly well. Controlling for specific offline channels improves the fit of the model substantially, and controlling additionally for specific online channels provides a marginal improvement in fit. In all specifications, wholesale clubs are estimated to offer the lowest prices and optical chains offer prices that are statistically indistinguishable from those offered by independent ECPs.

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