

MERGER ANTITRUST LAW

LAW 1469
Georgetown University Law Center
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Tuesdays and Thursdays, 3:30-5:30 pm
Dale Collins
wdc30@georgetown.edu
www.appliedantitrust.com

READING GUIDANCE

Class 5 (September 9): Sanford Health/Mid Dakota Clinic (Unit 3)

Today is the second of three classes on the proposed acquisition by Sanford Health of Mid Dakota Clinic, P.C. In this class, we will cover the element of market definition. In the next class, we will examine theories of anticompetitive harm and defenses.

Market definition as an element of a Section 7 claim. Section 7 of the Clayton Act prohibits mergers and acquisitions “where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.”¹ By its terms, Section 7 requires the plaintiff to prove the dimensions of the “line of commerce” (*relevant product market*) and the “section of the country” (*relevant geographic market*) in which the likely anticompetitive effect of the challenged transaction is alleged to appear. These product and geographic boundaries, taken together, are called the *relevant market*. See Unit 3C slides 3-10.

Market definition is a threshold requirement in proving a Section 7 claim, reflecting both the statutory mandate and the practical reality that the competitive effects of a merger cannot be assessed in a vacuum. Determining the relevant product and geographic boundaries provides the essential analytical foundation for the entire merger antitrust inquiry, identifying the substitute products, rival firms, and potential entrants that could constrain the merged entity’s ability to exercise market power. This exercise serves a dual function: it fulfills the statute’s requirement to specify the “line of commerce” and “section of the country,” and it supplies the economic framework for evaluating whether the transaction “may substantially lessen competition.” An unduly narrow market may exaggerate the merged firm’s potential market power, while an overly broad market may mask genuine anticompetitive effects. In practice, market definition disputes are often among the hardest-fought issues in merger enforcement, and their resolution is frequently outcome-determinative.

The enforcement agencies and the courts apply related but distinct tests for product market definition and for geographic market definition. We will begin with product market definition and then turn to geographic market definition.

Product market tests. There are two complementary approaches to product market definition: (1) the *Brown Shoe* “outer boundaries” and “practical indicia” criteria, and (2) the hypothetical monopolist test. The Supreme Court developed the *Brown Shoe* test in the early 1960s,² and the 1982 DOJ Merger Guidelines introduced the hypothetical monopolist test.³ The DOJ and FTC, not surprisingly, look primarily to the hypothetical monopolist test when making prosecutorial

¹ 15 U.S.C. § 18.

² *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962).

³ U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines § 4 (rev. Aug. 19, 2010).

decisions, but if they have to prove their case in court, they will also invoke the *Brown Shoe* criteria. In writing opinions, modern courts almost always employ both tests. See Unit 3C slides 12-13.

Under *Brown Shoe*, the “outer boundaries” of the relevant product market “are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.” *Brown Shoe*, 370 U.S. at 325. The idea is that products within the relevant market must exhibit high cross-elasticity of demand and interchangeability of use with other products in the market and comparatively low cross-elasticity of demand and interchangeability of use with products outside the market. Moreover,

within this broad market, well-defined *submarkets* may exist which, in themselves, constitute product markets for antitrust purposes. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product’s peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.⁴

The original purpose of the *Brown Shoe* “practical indicia” was to enable the finding of relevant (sub)markets within larger markets defined by the “outer boundaries” test. Modern courts, however, do not view submarkets as analytically any different from markets and regard the *Brown Shoe* “practical indicia” as factors probative of reasonable interchangeability of use and high cross-elasticity of demand.

It is important to know these concepts and be able to use them in analyzing market definition. *Reasonable interchangeability of use* exists when consumers view two products as close substitutes, such that it would not take much in the way of a relative improvement in one product—whether in price, quality, service, or other competitive dimension—for consumers, in practice, to switch to it from their originally preferred product, or a deterioration in their preferred product causes them to switch to the alternative. *Cross-elasticity of demand* is closely related but focuses directly on price-driven substitution. Formally, the cross-elasticity of demand between product *i* and product *j* is the percentage change in the quantity demanded of product *j* divided by the percentage change in the price of product *i* (holding the price of *j* constant and evaluated at current prices and quantities), with positive values indicating substitutes and negative values indicating complements. The mathematical notation is easier to understand:

$$\varepsilon_{ij} = \frac{\text{Percentage change in quantity } i}{\text{Percentage change in price } j} = \frac{\% \Delta q_i}{\% \Delta p_j}$$

where ε_{ij} is the standard notation for the cross-elasticity of product *i* given a price increase in the price of product *j*, and Δ is the operator indicating a change in a variable (here, price or quantity).⁵ For example, suppose the price of Hertz rentals (*i*) increases by 10% and, holding Avis prices constant, Avis rentals (*j*) see a 6% increase in quantity demanded. The cross-elasticity of demand from Hertz to Avis is $\varepsilon_{ij}=6\%/10\%=0.6$, indicating a relatively high cross-elasticity and significant substitutability. By contrast, if a 10% increase in the price of Timex

⁴ *Id.* (internal citations and footnotes omitted; emphasis added).

⁵ Mathematicians and economists love to use Greek letters: ε (small epsilon) and Δ (capital delta) are among the favorites.

watches leads to only a 0.1% increase in the quantity demanded of Rolex watches, the cross-elasticity is 0.01, indicating very low cross-elasticity and negligible substitutability.

Note that if products substitute one-for-one (say, a red car for a blue car), then the increase in demand for product *j* in the definition is equivalent to a decrease in demand for product *i* caused by substitution to product *j*. A high cross-elasticity of product *j* with respect to the price of product *i* then implies that product *j* can significantly constrain product *i*'s price. In other words, product *j* exerts *downward-pricing pressure* on product *i*. This relationship explains why products exhibiting high cross-elasticity of demand with the products of the merging firms are generally included in the relevant market, while those with low or negligible cross-elasticity are excluded. Although cross-elasticity can sometimes be estimated quantitatively, reliable data are often unavailable. Significantly, neither the courts nor the agencies have adopted numerical thresholds for the *Brown Shoe* framework and instead rely on qualitative, fact-driven evidence of substitution in response to changes in price, availability, or quality.

With this background, read the class notes on cross-elasticity of demand (Unit 3C slides 14-28).

While the *Brown Shoe* criteria remain central in litigation and continue to guide judicial market definition analysis, their inherently qualitative nature and lack of clear quantitative thresholds have posed persistent analytical and evidentiary challenges. Specifically, the Supreme Court provided no threshold for cross-elasticity or reasonable interchangeability of use, nor did it instruct lower courts how to weigh the various practical indicia against one another. This lack of concrete guidance left courts to exercise individual judgment without meaningful standards. In the absence of a meaningful test, the lower courts generally deferred to the market definitions alleged by the antitrust enforcement agencies. This deference proved problematic because when the government defines the market, it can effectively ensure that the resulting market shares will trigger the Philadelphia National Bank structural presumption of anticompetitive effect. As Justice Potter Stewart famously observed in his *Von's Grocery*⁶ dissent: "The sole consistency that I can find is that in litigation under § 7, the Government always wins."⁷ This deferential approach ultimately resulted in considerable confusion, flawed analysis, and misguided judicial decisions.

The *hypothetical monopolist test* (HMT), originally introduced in the 1982 Merger Guidelines and now adopted in one form or another by the courts, was designed to bring economic discipline and analytical rigor to market definition. Under the HMT, a candidate product grouping constitutes a relevant market if a hypothetical monopolist controlling all products in that group could profitably impose a "small but significant and nontransitory increase in price" (SSNIP), usually taken to be 5 percent for a period of one year, over existing premerger levels. The rationale is straightforward: if a hypothetical monopolist of the products in the group could not profitably raise price by that amount, then a fortiori the merged firm—whether acting alone or in coordination with other firms—could not raise prices as a result of the merger.

For example, suppose the current price of a case of "CrystalPure" bottled water is \$10, and a hypothetical monopolist controlling all bottled water sales considers raising the price by 5% to \$10.50 for one year. If enough customers switch to substitutes—such as sports drinks, flavored

⁶ United States v. Von's Grocery Store, 384 U.S. 270 (1966) (Stewart, J., dissenting).

⁷ *Id.* at 301.

sparkling water, or filtered tap water—so that the lost sales make the price increase unprofitable, bottled water alone would not form a relevant market under the HMT. In that case, the candidate market would need to be expanded iteratively to include the next closest substitutes to bottled water until the hypothetical monopolist could profitably impose the SSNIP.

To illustrate this with numbers, assume bottled water has a variable cost of \$6 per case and current annual sales of 1,000 cases, so profit at the current price is $$(10 - 6) \times 1,000 = \$4,000$. If the price rose to \$10.50 and sales fell to 960 cases because some customers switched to substitutes, profit would be $$(10.50 - 6) \times 960 = \$4,320$ — an increase of \$320 — so the SSNIP would be profitable and bottled water would constitute a relevant market under the HMT. But if sales fell to 880 cases, profit would drop to $$(10.50 - 6) \times 880 = \$3,960$, making the SSNIP unprofitable and requiring the candidate market to be expanded to include additional close substitutes.

Important: When you encounter an HMT example in the reading guidance or the class notes, be sure you can replicate the analysis and the conclusion. This ensures you understand the underlying economic logic and can apply the test independently to new fact patterns, which you will be required to do on the graded homework assignment and the final exam.

The 2010 Merger Guidelines have modified the hypothetical monopolist test in two important ways:

1. Under the original HMT, only the smallest product grouping that satisfied the test (the *smallest market principle*) qualified as the relevant market. While the 2010 Guidelines still prefer this approach, they allow enforcement agencies and courts to adopt a larger market when necessary to reflect commercial realities.
2. The original HMT required a hypothetical monopolist to increase the prices of all products in the candidate market by the same percentage. The 2010 Guidelines permit selective pricing—allowing the hypothetical monopolist to raise the price of one or more products while leaving others unchanged. This *one-product SSNIP* test requires only that a monopolist could profitably raise the price of at least one product in the group for the group to qualify as a relevant market.

In the years following the 2010 Guidelines, courts adopted both modifications, and the 2023 Guidelines retained them. Today, it is common for courts to use the HMT to define markets that depart from the smallest market principle but better match commercial realities and to apply one-product SSNIP tests in their analyses.⁸ We will examine these changes in some detail in the H&R Block/TaxACT case study (Unit 4).

In practice, however, the role of the HMT is more nuanced. As the 2023 Merger Guidelines implicitly acknowledge, the enforcement agencies do not rely heavily on market definition in making their prosecutorial decisions. Nonetheless, market definition plays a significant role in

⁸ See, e.g., *FTC v. Sanford Health*, 926 F.3d 959, 963 (8th Cir. 2019); *FTC v. RAG-Stiftung*, 436 F. Supp. 3d 278, 293 (D.D.C. 2020); *FTC v. Wilh. Wilhelmsen Holding ASA*, 341 F. Supp. 3d 27, 46 (D.D.C. 2018); *FTC v. Tronox Ltd.*, 332 F. Supp. 3d 187, 203 (D.D.C. 2018); *United States v. Anthem, Inc.*, 236 F. Supp. 3d 171, 198 (D.D.C. 2017); *United States v. Aetna Inc.*, 240 F. Supp. 3d 1, 20 (D.D.C. 2017); *FTC v. Staples, Inc.*, 190 F. Supp. 3d 100, 121 (D.D.C. 2016); *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 33 (D.D.C. 2015); *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 51-52 (D.D.C. 2011).

agency practice. Both the DOJ and FTC recognize that if they must prove their case in court, prevailing on market definition will often be essential to success under Section 7. In litigation, courts routinely apply both the *Brown Shoe* tests and the hypothetical monopolist test. It is not always clear which framework drives the ultimate decision, but judicial opinions frequently give equal or greater attention to *Brown Shoe*'s "outer boundaries" and "practical indicia" factors than to the HMT. One reason may be that the HMT, when applied quantitatively, is more vulnerable to challenges over the reliability of the underlying data, whereas *Brown Shoe*'s factors are inherently more subjective and thus harder to attack directly.

Now read the class notes on the hypothetical monopolist test (Unit 3C slides 29-41) and the introductory note on the HMT (pp. 243-45). Then read the case excerpts on product market definition and the HMT in *Sanford Health* (pp. 206-07) and *Meta Platforms* (pp. 231-42). It is an excellent way to solidify your understanding of how courts approach product market definition using both the *Brown Shoe* factors and the HMT. Finally, read (or at least skim) the excerpts on market definition from the 2010 and 2023 Merger Guidelines (pp. 210-30).

Relevant geographic market. A relevant geographic market is also an essential element of every Section 7 violation. As with product markets, courts and enforcement agencies use two complementary tests to determine whether a geographic area qualifies as a relevant geographic market for purposes of merger antitrust analysis under Section 7: (1) the judicial "commercial realities" test developed in *Brown Shoe*, and (2) the hypothetical monopolist test (HMT) set out in the Merger Guidelines. In practice, courts often reference both approaches and may blend elements of each in their analysis. The purpose of geographic market definition is to identify the area within which the firms in the market compete for customers and to which customers could practically turn for alternative sources of supply in response to a change in competitive conditions.

Brown Shoe is the leading case on geographic market definition. The Court observed that the criteria for determining the relevant geographic market are essentially similar to those used to test the boundaries of a relevant product market,⁹ and that the submarket concept applies equally to both.¹⁰ The Court emphasized that a "pragmatic, factual approach," rather than a "formal, legalistic one," must be used and that the relevant geographic market must both "correspond to the commercial realities" of the industry and be "economically significant."¹¹ Employing a level of generality similar to its approach in describing the outer boundaries of product markets, the Court defined the relevant geographic market as "the area of effective competition . . . in which the seller operates, and to which the purchaser can practically turn for supplies."¹² The Court

⁹ See *Brown Shoe Co. v. United States*, 370 U.S. 294, 336 (1962) (citing S Rep No 1775, 81st Cong, 2d Sess 5-6 (1950)); *United States v. E. I. Du Pont de Nemours & Co.*, 353 U.S. 586, 593 (1957).

¹⁰ See *Brown Shoe*, 370 U.S. at 336; see also *White & White, Inc. v. American Hosp. Supply Corp.*, 723 F.2d 495, 501 (6th Cir. 1983) (Sherman Act).

¹¹ *Brown Shoe*, 370 U.S. at 336-37.

¹² *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 359 (1963) (emphasis removed) (quoting *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961) (Sherman Act § 2)). For applications, see, for example, *FTC v. Advocate Health Care Network*, 841 F.3d 460, 476 (7th Cir. 2016); *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd.*, 778 F.3d 775, 784 (9th Cir. 2015); *FTC v. Tenet Health Care Corp.*, 186 F.3d 1045, 1052 (8th Cir. 1999); *FTC v. Freeman Hosp.*, 69 F.3d 260, 268-69 (8th Cir. 1995); *Morgenstern v. Wilson*, 29 F.3d 1291, 1296 (8th Cir. 1994); *White & White, Inc. v. American Hosp. Supply Corp.*, 723 F.2d 495, 501 (6th Cir. 1983) (Sherman Act); *New York v. Deutsche Telekom AG*, 439 F. Supp. 3d 179, 203 (S.D.N.Y. 2020); *FTC v. RAG-Stiftung*, 436 F. Supp. 3d 278, 308 (D.D.C. 2020); *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-

also observed that an element of “fuzziness would seem inherent in any attempt to delineate the relevant geographic market”¹³ and that the market need not be defined by “metes and bounds as a surveyor would lay off a plot of ground.”¹⁴ Even so, to sustain a relevant geographic market, there must be sufficient evidence—qualitative and quantitative—to conclude that the market boundaries adequately capture the material competitive forces.

While the *Brown Shoe* criteria remain central in litigation over geographic market definition, they share the same limitations as in the product market context—most notably, their qualitative nature and lack of quantitative thresholds. These shortcomings have led courts and agencies to supplement *Brown Shoe* with the hypothetical monopolist test (HMT). The HMT for geographic markets is analytically identical to the product market version, except that the candidate grouping consists of locations rather than products. In the geographic setting, the HMT asks whether a hypothetical monopolist controlling all sellers of the relevant product within a proposed geographic area could profitably impose a small but significant nontransitory increase in price (SSNIP) on at least one product. The key question is whether enough customers would shift purchases to sellers located outside the candidate area to make the price increase unprofitable. In some markets, customers travel to the seller (as in most consumer retail markets), while in others the seller travels to the customer (as with plumbers, food distribution services, or industrial chemical deliveries). The structure of the HMT is the same in both cases, but the evidence used to evaluate substitution patterns will differ, as illustrated in the examples below.

In this first example, customers travel to the seller. Assume the candidate geographic market is the city of Fairview and its immediate suburbs. Local branches collectively serve 100,000 retail checking customers. The monthly account fee is \$10, and the variable cost per account is \$4 (processing, statements, customer service), yielding a \$6 margin per account per month. Baseline annual profit is therefore $\$6 \times 100,000 \times 12 = \7.2 million. A hypothetical monopolist controlling all branches in Fairview considers a 5% SSNIP—raising the monthly fee to \$10.50 for one year. The new per-account margin would be $\$10.50 - \$4 = \$6.50$.

- If 3% of customers switch to branches outside Fairview, the monopolist retains 97,000 accounts and earns $\$6.50 \times 97,000 \times 12 = \7.566 million. The SSNIP is profitable, so Fairview would satisfy the HMT.
- If 8% switch, the monopolist retains 92,000 accounts and earns $\$6.50 \times 92,000 \times 12 = \7.176 million—below the \$7.2 million baseline. The SSNIP is unprofitable, so the

WHO, 2014 WL 203966, at *27 (N.D. Cal. Jan. 8, 2014); *FTC v. OSF Healthcare Sys.*, 852 F. Supp. 2d 1069, 1076 (N.D. Ill. 2012); *Malaney v. UAL Corp.*, 2010 WL 3790296, at *6 (N.D. Cal. 2010) (not for publication), *aff'd*, 434 F. App'x 620 (9th Cir. 2011) (unpublished); *FTC v. Arch Coal, Inc.*, 329 F. Supp. 2d 109, 123 (D.D.C. 2004); *FTC v. Libbey, Inc.*, 211 F. Supp. 2d 34, 45 (D.D.C. 2002); *California v. Sutter Health Sys.*, 130 F. Supp. 2d 1109, 1120 (N.D. Cal. 2001); *FTC v. Cardinal Health, Inc.*, 12 F. Supp. 2d 34, 49 (D.D.C. 1998); *FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1073 (D.D.C. 1997); *United States v. Mercy Health Servs.*, 902 F. Supp. 968, 978 (N.D. Iowa 1995); *FTC v. Butterworth Health Corp.*, 946 F. Supp. 1285, 1290, (W.D. Mich. 1996); *United States v. Country Lake Foods, Inc.*, 754 F. Supp. 669, 675 (D. Minn. 1990); *see also* *FTC v. CCC Holdings, Inc.*, 605 F. Supp. 2d 26, 37 (D.D.C. 2009) (“The ‘relevant geographic market’ identifies the geographic area in which the defendants compete in marketing their products or services.”); *accord* *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 50 n.7 (D.D.C. 2011).

¹³ *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 360 n.37 (1963), *see* *United States v. Connecticut Nat'l Bank*, 418 U.S. 656, 669 (1974) (geographic markets “need not—indeed cannot—be defined with scientific precision”).

¹⁴ *United States v. Pabst Brewing Co.*, 384 U.S. 546, 549 (1966).

geographic market would need to be expanded to include nearby areas to which customers actually move their accounts.

In practice, agencies and courts would test which scenario matches reality using customer-address data from account records, FDIC branch-level deposit data, and post-closure account-opening flows to see whether enough customers really leave the area when local fees rise.

In this second example, the seller travels to the customer. Assume the candidate geographic market is the Metroville metropolitan area, where local plumbing firms collectively handle 50,000 service calls per year. The average service price is \$200, and the variable cost per job (labor, parts, fuel) is \$120, leaving an \$80 margin per call. Baseline annual profit is therefore $\$80 \times 50,000 = \4 million. A hypothetical monopolist controlling all plumbing firms in Metroville considers a 5% SSNIP, raising the price to \$210 for one year. The new per-job margin would be $\$210 - \$120 = \$90$.

- If 3% of customers turn to plumbers from outside Metroville, the monopolist retains 48,500 jobs and earns $\$90 \times 48,500 = \4.365 million—above the \$4 million baseline. The SSNIP is profitable, so Metroville would satisfy the HMT.
- If 10% of customers switch to outside plumbers, the monopolist retains 45,000 jobs and earns $\$90 \times 45,000 = \4.05 million, only slightly above the baseline. If switching exceeded this rate, the SSNIP could become unprofitable, suggesting that the geographic market should be expanded to include the areas supplying the outside plumbers.

In practice, agencies and courts would evaluate substitution by analyzing customer addresses from invoices, travel logs and job dispatch data from plumbing companies, and interviews with contractors to determine the extent to which customers would turn to plumbers based outside the candidate area in response to a price increase.

The 2010 modifications to the HMT—permitting a one-product SSNIP test and allowing markets larger than the smallest one that satisfies the test when needed to reflect commercial realities—apply equally to geographic markets. In litigation and agency practice, this means a candidate geographic market can be found relevant if a hypothetical monopolist within it could profitably raise the price of just one product, even if other products' prices remain unchanged, and that courts may adopt a larger geographic area than the strict smallest-market principle would dictate when doing so better reflects the competitive dynamics in the industry.

It is also important to note that courts and agencies often define relevant geographic markets using political or other commonly understood boundaries—such as cities, counties, metropolitan statistical areas, or ZIP code clusters—when those boundaries serve as reasonable proxies for the markets identified through the *Brown Shoe* and HMT analyses. The key is that the boundary must align with the *commercial realities* of competition: under *Brown Shoe*, buyers and sellers must primarily interact within the area, and under the HMT, a hypothetical monopolist controlling all sellers in the area must be able to impose a SSNIP profitably without losing too many sales to sellers outside it. When evidence such as customer travel patterns, shipping or service radii, or insurer network configurations shows that competitive forces are largely contained within the boundary, courts will accept it as the relevant geographic market. In these cases, the political or familiar boundary is not a substitute for economic analysis but rather the

outcome of it—serving as a shorthand for the *area of effective competition* established through *Brown Shoe's* commercial realities framework and confirmed by the HMT.

With this as background, read the class notes on geographic market definition (Unit 3C slides 41-64). Then read the *Sanford Health* excerpt on geographic market definition in the reading materials (pp. 208-09).

Own-elasticity of demand. Another key concept in market definition and market power analysis is *own-elasticity of demand*, sometimes simply called *price elasticity of demand*. The own-elasticity measures the percentage change in the quantity demanded of a product divided by the percentage change in the price of that same product. For example, if price increases by 5% and demand decreases by 10%, the own-elasticity is -2 ($-10\% \div 5\%$). Although own-elasticities are technically negative (reflecting the downward slope of the demand curve), economists often drop the negative sign and use the absolute value to indicate the degree of price sensitivity, so that higher absolute values indicate greater price sensitivity (greater percentage quantity changes for a given percentage price change).

Own-elasticities are closely related to cross-elasticities. Technically, a product's own-elasticity aggregates the cross-elasticities with all its substitutes, weighted by their market shares. The more (and closer) the substitutes, the greater the own-elasticity in absolute value. Conversely, as cross-elasticities with other products decrease, the product's demand becomes more inelastic (lower absolute value), giving the seller greater ability to raise prices without losing many sales.

Economists classify demand as *inelastic* (absolute value less than one), *unit elastic* (equal to one), and *elastic* (greater than one). Inelastic demand means that price changes lead to proportionally smaller changes in quantity demanded—characteristic of products like gasoline in the short run. Elastic demand means that price changes lead to proportionally larger changes in quantity demanded—characteristic of products like leisure air travel in the long run.

Estimates of own-elasticity vary widely across products and time horizons. For example, short-run own-elasticities are typically more inelastic because consumers have fewer immediate substitution options (e.g., short-run gasoline elasticity of -0.2 to -0.4), whereas long-run elasticities tend to be more elastic as consumers can adjust their behavior (e.g., long-run gasoline elasticity of about -0.7). Other examples include milk (-0.65), coffee (-0.25), soft drinks (-1.2), clothing (-0.9 to -1.1), and airline tickets (-0.1 short-run vs. -2.4 long-run).

Finally, own-elasticity connects directly to a firm's pricing power through the *Lerner condition*: a profit-maximizing firm will set its price so that its own-elasticity equals the reciprocal of its percentage gross margin. Thus, if a firm's gross margin is 50%, the own-elasticity of demand it faces will be 2. This relationship provides a way to infer price sensitivity from margin data when direct demand estimation is unavailable.

Now read the class notes on own-elasticity (Unit 3C slides 65-75).

If you have any questions or comments, send me an e-mail. I look forward to seeing you in class.

Dale Collins