

at \$8.40, 5 per cent above its competitors. In May 1950 Lederle and Parke, Davis reduced prices to \$6.00, but Pfizer did not meet the cut until November. On September 27th, 1951, Pfizer lowered prices to \$5.10, and by November 1st Lederle and Parke, Davis had met the price cut. Tetracycline and demethylchlortetracycline came later, and were also priced at \$5.10. Prices were then stable and rigid for almost 9 years, when Pfizer in August 1960 again assumed the role of price leader by announcing a 15 per cent 'trade discount' adjustment which eventually became a 15 per cent price cut, to \$4.34.⁶⁷ (This price cut was initiated only 1 month before the Senate Hearings on antibiotics were scheduled to take place.) From 1948 to 1949, broad spectrum prices dropped by 33 per cent; from 1949 to 1951, by 49 per cent, and from 1951 to August 1960 not at all. It is reasonable to suppose that since 1951 the costs of producing broad spectrum antibiotics have declined by approximately as much as the cost of producing penicillin, the production methods employed being largely identical.⁶⁸ A comparison of the decline of 90 per cent since November 1951 in penicillin prices, with the 15 per cent decline for broad spectrum antibiotics measures the effect of restriction of entry in broad spectrum antibiotics.

The Senate Subcommittee staff made production cost estimates for tetracycline and chloramphenicol, and in 1961, during the House of Representatives hearings, Senator Kefauver made public Bristol's actual production costs. Bristol incurred production costs of \$1.67 per bottle of one hundred 250-milligram capsules (in comparison with \$2.88 as estimated by the Senate Subcommittee staff in the Senate hearings). The price of such a bottle to the druggist is \$30.60; to the consumer, \$51.00. Bristol's production cost is 5.5 per cent of the price to the druggist; the addition of royalties to Lederle and Pfizer of \$2.15 paid per bottle brings the cost up to 12.5 per cent. (Bristol actually received an average of \$25.27 per bottle for such sales in 1958; hence its production costs and royalties totalled 15.1 per cent of its average price received.) Production costs are about 28.7 per cent of the wholesale price for Upjohn, which purchases bulk tetracycline from Bristol; its total production costs and royalties are \$9.30, or 30.4 per cent of the price to the druggist. For Pfizer,

⁶⁷ Mr. Duncan, the manager of Lederle, construed Pfizer's action as vigorous and aggressive price competition. He testified that Pfizer had cut its prices on a Saturday in order to 'steal a march on the industry'. This explanation apparently surprised the Subcommittee chairman:

Senator Kefauver: 'You mean after ten years they would suddenly steal a march on you?'

Mr. Duncan: 'Yes, senator. These things happen very rapidly. If you can get any kind of advantage on your competitors, you try to do so', *ibid.*, Part 24, p. 13728.

⁶⁸ *Report*, *op. cit.*, p. 82. Chloramphenicol costs have probably declined by still more since Parke, Davis discovered a way of making this drug synthetically.