

incidence of excess capacity or excess inventories, but does not reflect either relative production or relative sales. In 1958, Bristol produced 36 per cent, Lederle 33, and Pfizer 31. Sales are not available, but Bristol sold about one-third of its output to Upjohn and another third to Squibb,<sup>75</sup> so that relative sales might be: Lederle, 33 per cent; Pfizer, 31; Squibb, 13; Bristol, 12; and Upjohn, 11, unless Pfizer purchased significant quantities from Lederle, as it is entitled to do by agreement. It seems likely that, although prices fluctuated, real price competition never entered this market until foreign firms, not encumbered by restrictive patent agreements, were permitted to bid.<sup>76</sup>

#### IV. CONCLUSIONS AND POLICY RECOMMENDATIONS

Evidence has been presented to show that effective price competition among ethical drugs is seriously limited by the patent privilege. Holders of patents (or sometimes merely of patent applications) may legally exercise restrictions on output and maintain prices at levels that are extremely high relative to production costs. The resulting gross profit margins are employed in large measure to finance enormous advertising and sales promotion campaigns which contribute materially to the already grave imperfections of market information. By this means, small sellers of generic name drugs are deprived of the physician's attention, and cannot obtain any significant share of the prescription market, even though they may be selling at prices which are a small fraction of their larger rivals'. This applies not only to products protected by patents or patent applications, but to virtually all advertised drugs. Monopoly profits from the sale of patented drugs thus finance advertising campaigns which extend monopoly power into other drug markets which may not be protected by patents.

Drug firm monopoly and oligopoly could perhaps be rather readily supplanted by workable competition if two simple but radical reforms were effected in the institutional structure of the drug market: the abolition of the patent privilege as it applies to drug products, and the expansion of the powers of the Food and Drug

<sup>75</sup> Data supplied by Bristol, *ibid.*, Part 24, p. 13907.

<sup>76</sup> Admiral Knickerbocker offered some interesting testimony which may tend to illuminate the chiaroscuro pattern of competition in the bid market from a somewhat different perspective. The decision of the Military Medical Supply Agency to accept foreign bids was not reached until after a meeting with Pfizer representatives, during which, Admiral Knickerbocker testified, '... Mr. Cooney [Pfizer's sales representative], in rather an unguarded moment, made the statement that the price of tetracycline would stay where it was until Pfizer did something about it', *ibid.*, Part 24, p. 13819. Had the network of patent control been absolutely worldwide, this alleged 'unguarded moment' might not have cost Pfizer any sales.