cannot tell us whether prices are too high or too low, or whether more or less expensive products are in use today than yesterday. An index also does not reflect quality changes introduced in the new drugs. If only half as much of the new drug at twice the unit price does as much or more for the patient this cannot be determined from the price index. A price index answers only one question: for products on the market and included in the index, have prices

risen, fallen, or remained stationary and by how much?

An index of retail prices should not be used as a gauge of wholesale prices nor should wholesale price indexes be construed as measuring retail price movements. Time lag is one important variable. Also, additional elements determining retail prices may be and usually are different from the factors which affect wholesale prices. We find, for example, that consumer prices have a larger element of wage costs, often in the form of services rendered the purchaser at the retail level. These are more likely to be personal, such as waiting on a customer, filling his prescription, delivering it to his home, providing credit, and so forth. These kinds of services are not readily amenable to automation or mechanization, so that rising wage costs cannot be offset by higher productivity in the same degree as may be the case at the manufacturing level. This may be a principal reason for the greater rise in consumer prices than in wholesale prices during the past twenty years. Thus, since 1957–59 all wholesale prices have risen 6 percent while consumer prices have risen 15 percent.

Average prescription prices

A very simple statistic that has been used at times to measure what has happened to drug prices, is the average prescription price. This, if not properly interpreted, can be a very misleading yardstick.

In an independent analysis of average prescription prices, Professor Robert V. Evanson. Head of the Department of Pharmacy Administration, School of Pharmacal Sciences, Purdue University, has arrived at conclusions essentially similar to those presented in my discussion. Mr. Chairman, I would like to call the Committee's attention to Dr. Evanson's paper as published in the September 1967 issue of *Tile and Till*, pp. 58-63, and I respectfully request that this paper

be made a part of the record of these hearings.

In contrast with a price index, an average prescription price has a number of variables other than the price of the drug. No account is taken of the fact that the mix of prescriptions written and filled in a given period of time may vary from the mix found at some other time. Since prices for pharmaceuticals differ from item to item, we would expect the average prescription price to vary as the mix greater or lesser emphasis on higher priced drugs. Thus the average prescription price can rise or fall even if the prices of each of the drugs included in the average have not changed by one cent. This usually occurs seasonally, as the incidence of respiratory ailments changes, for example, but can also occur in an irregular fashion with the incidence of epidemics, or even as a result of new approaches in drug prescription for various ailments as the medical art progresses.

More and more, the pharmaceutical industry is introducing sustained action capsules, so that one dosage now does the work of two or more of the former dosages. We can expect these new capsules to be more expensive than the former single dosage, but often the cost for a given amount of medication is less. A single prescription of this new drug may therefore cost more than a single prescription of the older drug, but at the same time may require fewer refills. Thus the total drug cost during the course of an illness may be lower with the

new drug even though the single prescription price is higher.

The pharmaceutical industry has been developing combinations of drugs for physicians who wish to prescribe two or three drugs to be taken simultaneously by a patient. The combination naturally may be expected to cost more than any one of its components alone, but it will probably cost less than the total of the components purchased separately. Certainly at the retail level, there would be only one pharmacist markup for filling the prescription for the combination rather than the usual two or three for filling two or three separate prescriptions. An average prescription price would not reflect this saving. On the contrary it would show the higher price for the new single prescription.

Also, with advances in medical science, there tends to be an increase in the number of cases of chronic ailments (persons with chronic heart ailments, diabetes and arthritis, for example). Doctors in such cases are prone to prescribe