

**The study on the application of scanner data  
in the compilation of price index**

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In nowadays, the technology of scanning bar code is widely used in retail terminals. The scanner data which stems from bar code scanning contains the information of price, sales volume, product code, when and where the product has been sold. This kind of data provides effective foundation for the improvement of compilation of basic component index in price index, by changing the situation that the basic component compilation now cannot use sales volume for weighing but can only make use of price collected by investigators. However, there are still a few technical issues on the application of scanner data. The first issue is how to calculate the unit value to aggregate UPCs across different shops or different weeks to reflect the substitution effect to avoid the overestimation of price index. The second issue is how to update data and meanwhile improve comparability when new products are bought in. In the end, this paper discusses the possible measures can be taken in the future to improve the application of scanner data.

Key Words: Unit value, substitution effect, chain index