**Use of Big Data in modern markets coexisting with traditional markets data**

Authors: Jorge Alberto Moreno and Rafael Posse

Abstract

In countries that do not have a highly developed market where the supply and prices of products and services may change according to the type of market, challenges are present on the products for extracting prices and describing them when using methods of modern collection. The handling of these data (prices, quantities and descriptions) have great potential but also limitations and challenges.

The modern market can offer multiple products and services that are still in the basket of the country and probably cover between 80 and 90 percent of the market, such as equipment and technological, electrical and electronic equipment or services in the cloud (internet). However, the traditional market can cover 80% of the market for fresh and processed foods, as well as some services. For this reason the use of collection methods such as Web Scraping or Scanner Data will have to focus on specializing by type of market and products. The price index of the country must coexist with two worlds where the data are generated.

A great challenge is represented by the handling of the samples, the integration of data, as well as the calculation of the price indexes, as it will not necessarily have to be calculated with Laspeyres when using a new collection method that attracts the universe of products or services offered in the modern market. Using scanned data presents the possibility of managing a sample of specific products or services or all. With Web Scraping the same case is presented, it is feasible to attract all or part of the product offer.

The article discusses the restrictions, the potential of the tools and the method of calculation for this type of markets and the method of data extraction used, the coexistence of different samples generate challenges in the calculation of price variations and their indices. It concludes with the difficulty and potential of the tools, techniques and methodologies that can be applied.

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Topic 1. New data sources to compile price indices