Creating a Food Price Index using web scraped data

As part of Stats NZ’s initiative to explore alternative methods of collecting data for price indexes, we have been investigating web-scraped supermarket prices and transforming them into a real-time ‘Digital Food Price Index’. Stats NZ has purchased daily web-scraped on-line price data from PriceStats, the commercial counterpart of the Massachusetts Institute of Technology (MIT) Billion Prices Project. Preliminary research on measuring food price change from this data is used to illustrate our approach to using “big data”. This paper gives an over-view of Stats NZ’s progress into web scraping for price collection and highlights the opportunities and obstacles to coverage, timing and quality adjustment associated with using ‘big data’.