# A mixed mode survey on book prices among booksellers 

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## 1 Introduction

In Switzerland German Books have been subject to retail price maintenance (RPM) before May 2007, when Swiss Government abolished RPM for books. Curiously French books had no RPM before that date. There was a heated debate and strong resistance by booksellers against the abolishment of RPM. Arguments for the RPM were that fixed prices helped to cross-subsidize low budget books from the sales of bestsellers, that without RPM many small booksellers would go out of business due to the strong competition by large chains of bookshops and, in general, that books are a cultural good and should not be subject to market conditions. The hopes of many consumers and organisations was that bookprices would drop after abolishing the RPM. Actually already before May 2007 there was a tight control of the import prices by the office of the Swiss Price Controller to avoid abusive prices for imported books. Note that most of the books in Switzerland are actually imported.

In 2007 State Secretariat for Economic Affairs (SECO), on behalf of the parliamentary commission dealing with a new law on RPM of books, gave a mandate to FHNW to study the impact of the abolishment of RPM of books on the book prices from the point of view of the consumer (Hulliger et al., 2009). This article is a synthesis of the methods used for this study by FHNW. The study showed that within a year there was a moderate increase of the list prices of books and a slight decrease of selling prices. The price change overall was not significant. Today a new law on the reintroduction of RPM for books has been passed by the parliament. Its application is pending from a popular vote since the new law was challenged through a referendum.

FHNW carried out several surveys in spring 2008 (reference date 1 March 2008) to investigate the change of prices since spring 2007 (reference data 1 March 2007, the date where the last offical prices were fixed before the abolishment of RPM). The surveys were carried out in the German and French speaking part of Switzerland but not in the Italian speaking part. In order to calculate a price index that reflects the point of view of the customer, the sales volume of the different goods must be taken into account. Therefore, the questionnaire contained two crucial questions for each title: Quantity sold since 1 January 2008 and selling price on 1 March 2008.

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## 2 Samples

### 2.1 Title samples

The booksellers in the German speaking part of Switzerland were asked about the book prices of German books and booksellers in the French speaking part about French books. The objective was to observe selling prices and volumes of a title. In both languages there exist more than a million books on sale. The probability to actually observe the sale of a randomly chosen title within 2 months, say, is nearly zero. Therefore the lists of delivered books from two main delivery companies were taken as the sampling frame for the titles. These lists comprised roughly 10 ' 000 titles each. The titles were classified according to type and form. A combination of type and form was considered as a good, which should have stable qualitites such that a price could be observed over time. A stratified sample of 144 titles taking into account the number of delivered books was planned for the two sampling frames. The objective was to have a random sample of titles and at the same time to guarantee a certain number of observed sales. The sample size was chosen to obtain a specified level of precision at the levels of goods. However, the number of titles for which a bookseller would give prices and sold quantities was determined as 30 at most. Thus it was not possible to ask a bookseller the full sample of 144 titles. And worse, for the sample in the French speaking part of Switzerland, due to the lower number of booksellers, the sample was halved to 72 , in order to keep the response burden at the level of the German speaking part.

### 2.2 Main samples of booksellers

The sampling frame of the booksellers in the German speaking part of Switzerland was provided by the Swiss Association of Booksellers and Editors (SBVV) and prepared for sampling by FHNW. The sampling frame of the booksellers in the French speaking part was established by FHNW with the help of the Swiss Society of Editors and Booksellers (ASDEL). Data from the Swiss Establishment Census of the Swiss Federal Statistical Office gave an order of magnitude for the number of bookshops in Switzerland. However, it was very difficult to rely on enterprise level or establishment level data, since the concentration process in the Swiss bookmarket had been quite intensive in the years before the survey. In addition, major retail companies had ventured into bookselling relatively recently and were not classified with main activity bookselling in the Swiss Establishment Census. Also kiosks and fuel station shops sell books and are not classified as booksellers. It was expected that these establishments with secondary activity bookselling had a very different range of titles, i.e. mostly fiction and bestsellers, compared with book shops. Therefore an effort should be made to include them in the survey. After cleaning and updating the sampling frames contained $N_{D}=423$ booksellers in the German speaking part and $N_{F}=122$ in the French speaking part of Switzerland (Hulliger et al., 2009, p.43).

The largest booksellers, which own chains of bookshops, received the full list of 144 or 72 titles. All other booksellers received a random sample of 24 book titles only since the maximual burden an individual bookseller should carry was determined to be 30 titles. To draw random sub-sample of titles, the full lists were randomly divided into partial lists of 24 titles. This procedure resulted in 6 partial lists of German titles and 3 partial lists of French titles, which together covered the full list. Thus from the point of view of a bookseller the survey was exhaustive but from the point of view of a title the survey was a random sample with sampling rate $1 / 6$ or $1 / 3$.

### 2.3 Control sample of booksellers

A second survey among booksellers should be carried out to enhance the response rate and coverage and to study possible differences compared with the main survey. The second survey was carried out with the same core questionnaire but this time through a shop visit. A team of students of FHNW was recruited to interview shop assistants, or in case this was not possible, to look for the titles in the shop and to note price and order date. Usually on the price shield the data of order is noted and this information can be used to impute quantitities sold.

The sample of booksellers for the second survey was selected by a stratified random sample from the original sampling frame. The stratas were the large cities (Bern, Basel, Zurich, Lausanne, Geneva) and the rest of the booksellers in the two language regions ( $\mathrm{CH}-\mathrm{D}$ and $\mathrm{CH}-\mathrm{F}$ ). Certain booksellers in very remote locations were excluded from the control sample. The sample size per stratum was adapted to the response rate in order to obtain as good a coverage as possible. Within these strata an implicit stratification according to the partial title-lists was applied to ensure coverage of all partial lists. The total gross sample size was 43 in the German speaking part of Switzerland and 33 in the French speaking part.

## 3 Surveys

The main survey among bookseller was carried out with an online tool (EFS Globalpark). Three types of respondents were considered: The large chains with the full list, the companies with secondary activity bookselling (kiosks, department stores, fuel station shops), and all other bookshops. Taking into account the two languages, 6 different questionnaires were sent out. In addition to the online mode also paper questionnaires were sent to some booksellers who preffered to write on paper instead of using the computer. Two reminder actions were sent out for the online survey. Intensive mail, phone and letter contacts were maintained with the large book-selling companies to ensure their collaboration.

The field work for the the control survey was carried out by students. The students were instructed centrally. After an intent to visit a book-shop they reported via SMS whether the visit was successful or not or whether a specific problem occurred. New instructions could be sent to the students immediately.

Table 1 shows the sizes of gross and net samples. Obviously it is very difficult to obtain responses from the booksellers in spite of the full support by their associations.

## 4 Data preparation and Estimation

Data preparation involved careful checking of prices and quantities. For each title the distributions were checked and outliers were detetected. Comparison between list prices and selling prices also revealed problems, e.g. titles which appeared in two different forms (hard and paper-back) with different prices*.

The sample overlap between the control survey and the main survey was only 15 booksellers. The

[^1]Table 1: Sample sizes and response rates

|  | CH-D | CH-F |
| :--- | ---: | ---: |
| main sample |  |  |
| gross sample size | 406 | 197 |
| net sample size | 172 | 53 |
| response rate | 0.42 | 0.27 |
| control sample |  |  |
| gross sample size | 43 | 33 |
| net sample size | 35 | 25 |
| response rate | 0.81 | 0.76 |
| joint sample |  |  |
| joint analysable sample net size | 129 | 44 |

responses were checked manually and, of course, there were differences. In particular there were less missing values in the control survey. However, due to the small overlap and due to time constraints, no statistical analysis was made on the size and direction of possible differences in the estimates. For the overlapping booksellers the data preparation took both responses into account and a rule was developed to decide whether the value of the main survey or the value of the control survey was taken into consideration for the analysis.

The inclusion and response probabilities for the main survey and for the control survey were taken into account for the sampling weights. For the main survey response rates were calculated per partial title-list because they seemed to have differed slightly in terms of difficulty to be filled in. A correction was necessary for the non-urban booksellers because they had lower inclusion probabilities and worse response probability than the urban booksellers. This low response might be due to transport problems or to quality problems of the frame or the field work.

For each title the mean of sales and the mean of the quantity sold was estimated from the information of the sample of partial title-lists containing the title. The title prices and quantities sold were aggregated to prices and quantities sold per good via weighted geometric means, where the weight per title is the product of the sampling weight corresponding to the title sample design and the quantity sold. The basic index then was a concatenation of the price-relation per good when comparing selling prices with list prices (S08/L08) and the price relation of list prices of March 2008 compared with March 2007 (L08/L07), which was estimated from the sampling frame.

Table 2 shows the ratio S08/L08. In the German speaking part the ratio is estimated slightly below 1 but not significantly. The estimate of the ratio S08/L08 is 1 in the French speaking part but the standard error is rather large. The list prices seem to have increased from 2007 to 2008, i.e. $\mathrm{L} 08 / \mathrm{L} 07=1.068$ in $\mathrm{CH}-\mathrm{D}$ and 1.078 in $\mathrm{CH}-\mathrm{F}^{\dagger}$. As a result the estimated overall evolution of the prices showed a small increase, which however was not significant. The conclusion was that in the year after the abolishment of RPM for books in Switzerland neither a drop of prices nor a sharp increase was observed.

[^2]Table 2: Estimated ratio of selling prices to list prices per good

|  |  | CH-D |  | CH-F |  |
| :--- | :--- | :---: | :---: | :---: | ---: |
| Type | Form | S08/L08 | SE | S08/L08 | SE |
| Fiction | hard-cover | 0.97 | 0.07 | 0.98 | 0.11 |
|  | paper-back | 1.00 | 0.05 | 1.02 | 0.08 |
| Youth | hard-cover | 0.98 | 0.08 | 1.01 | 0.07 |
|  | paper-back | 1.04 | 0.03 | 1.01 | 0.13 |
| Non-fiction | hard-cover | 0.98 | 0.07 | 1.00 | 0.27 |
|  | paper-back | 0.91 | 0.14 | 1.00 | $*$ |
|  | hard-cover | 0.99 | 0.07 | 1.00 | 0.26 |
|  | paper-back | 1.05 | 0.13 | 0.99 | 0.41 |
| Total |  | 0.986 | 0.031 | 1.001 | 0.088 |

*: The standard error (SE) could not be calculated for this case. The total is a turnover weighted geometric mean of the S08/L08 of goods.

## References

Hulliger, B., M. Binswanger, D. Lussmann, P. Perret, and N. Steiner (2009). Erste Auswirkungen der Abschaffung der Buchpreisbindung, Technischer Bericht und Vertiefung. In Strukturberichterstattung Nr. 45. Staatssekretariat für Wirtschaft SECO.


[^0]:    ${ }^{*}$ This work is based on the joint effort of a team of researchers at FHNW comprising Pieter Perrett, Daniela Lussmann, Nina von Arx - Steiner, Mathias Binswanger and Beat Hulliger. The sole responsibility for this article is with Beat Hulliger. This article is prepared for the European Establishment Statistics Workshop, Neuchâtel 2011.

[^1]:    ${ }^{*}$ Booksellers were given Author, Title and ISBN which usually uniquely determines not only the title but also editions etc. However, mistakes occurred.

[^2]:    ${ }^{\dagger}$ These increases are about halved when sales volumes of goods are not taken into account

