



## Shopping Travel Survey 2004

A Erath

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### Abstract

The Swiss Study of value of travel time savings (VTTS), conducted by König, Axhausen und Abay (2004) has lead to unexpected high values for shopping trips, especially compared to other trip purposes. Furthermore, apart from destination choice models none information about larger shopping trips can be found in literature. Therefore, on the occasion of a diploma thesis, a study focusing only shopping travel behaviour was conducted. As in Switzerland the discussion about the market entry of foreign discount markets as Aldi or Lidl arose, costumers were interviewed in three supermarkets, any one time in Switzerland, Germany and France Swiss costumers were surveyed about their shopping travel behaviour. In the area of Basel 386 costumers were interviewed when they were queuing for the cash desk at the supermarkets Migros Dreispitz, Géant in St. Louis and Marktkauf in Weil am Rhein. 110 persons returned a filled stated choice questionnaire and represent the data pool for the VTTS calculations. Apart from the VTTS the study gives insight about additional travel time and cost of people who do their purchase abroad, respectively in over-regional shopping centres. Especially the discount market in Germany attracts people from far distances, whereas the classier French supermarket acts like a regional alternative. Moreover it was studied if there are further differences which motivate people to their behaviour. Interestingly, the recognition of the quality does not vary much between the shops. Although some differences concerning the shop preferences between the customers could have been detected, most attempts of clustering the main unit failed. Further research in the field of destination choice for shopping trips would be eligible. The calculation of the VTTS is based on a set of discrete choice models. Several model attempts lead to the final model which contains elasticity parameters of income and distance besides a dummy-variable of the preferred supermarket-type. This study estimates the VTTS for shopping trips significantly higher than other, similar studies. Depending on the preferred supermarket values between 60 and 110 CHF/h result. The effect of the preference of shopping in low price supermarkets on the VTTS is much stronger than income or the travel distance. In contradiction to the findings of the study by Koenig et al. the value of time falls with larger distances.

## **Keywords**

Value of Travel Time Savings in Shopping Travel

## **Preferred citation style**

Erath, A. (2005) Shopping Travel Survey 2004 , *Travel Survey Metadata Series*, **20**,  
Institute for Transport Planning and Systems (IVT); ETH Zürich, Zürich.

# 1.0 Document Description

## Citation

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## 2.0 Study Description

### Citation

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Authoring Entity: Erath Alex (IVT ETH Zurich)

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## Study Scope

Keywords: Value of Travel Time Savings in Shopping Travel

Topic Classification: Value of Travel Time Savings

Abstract:

The Swiss Study of value of travel time savings (VTTS), conducted by Koenig, Axhausen und Abay (2004) has led to unexpected high values for shopping trips, especially compared to other trip purposes. Furthermore, apart from destination choice models none information about larger shopping trips can be found in literature. Therefore, on the occasion of a diploma thesis, a study focusing only shopping travel behaviour was conducted. As in Switzerland the discussion about the market entry of foreign discount markets as Aldi or Lidl arose, costumers were interviewed in three supermarkets, any one time in Switzerland, Germany and France Swiss costumers were surveyed about their shopping travel behaviour. In the area of Basel 386 costumers were interviewed when they were queuing for the cash desk at the supermarkets Migros Dreispitz, G?ant in St. Louis and Marktkauf in Weil am Rhein. 110 persons returned a filled stated choice questionnaire and represent the data pool for the VTTS calculations. Apart from the VTTS the study gives insight about additional travel time and cost of people who do their purchase abroad, respectively in over-regional shopping centres. Especially the discount market in Germany attracts people from far distances, whereas the classier French supermarket acts like a regional alternative. Moreover it was studied if there are further differences which motivate people to their behaviour. Interestingly, the recognition of the quality does not vary much between the shops. Although some differences concerning the shop preferences between the customers could have been detected, most attempts of clustering the main unit failed. Further research in the field of destination choice for shopping trips would be eligible. The calculation of the VTTS is based on a set of discrete choice models. Several model attempts lead to the final model which contains elasticity parameters of income and distance besides a dummy-variable of the preferred supermarket-type. This study estimates the VTTS for shopping trips significantly higher than other, similar studies. Depending on the preferred supermarket values between 60 and 110 CHF/h result. The effect of the preference of shopping in low price supermarkets on the VTTS is much stronger than income or the travel distance. In contradiction to the findings of the study by Koenig et al. the value of time falls with larger distances.

Time Period: -

Date of Collection: -

Country: Switzerland , Germany , France

Geographic Coverage: The Survey was conducted in three supermarktes (CH, F, D) considering only swiss costumers

Unit of Analysis: Individual Shoppers, for groupshoppers one personen were selected to do the survey.

## Methodology and Processing

Time Method:	2004-11-27 (Supermarkets Migros and Marktkauf); 2004-12-04 (Geant)
Sampling Procedure:	Shoppers queing for check-out were asked if they would like to participate in the surrvey, no population representation is achieved.
Mode of Data Collection:	Shoppers queing for check-out were asked if they would like to participate in the surrvey, no population representation is achieved. For the stated preference survey the shoppers had th fill a separate questionnaire at home and send it by mail.

## **Sources Statement**

Weighting:            No weighting was used.

## **Other Study Description Materials**

### **Related Studies**

### **Citation**

Title: Zeitkosten im Einkaufsverkehr

Holdings  
Information: <http://www.ivt.ethz.ch/docs/students/dip47.pdf>

## 3.0 File Description

### File: shopping\_survey2.NSDstat

- File Structure: hierarchical
- Record Group
- Number of cases: 384
- No. of variables per record: 117
- Type of File: NSDstat 200203

## 3.0 File Description

### File: Sp\_data2.NSDstat

- File Structure: hierarchical
- Record Group
- Number of cases: 936
- No. of variables per record: 8
- Type of File: NSDstat 200203

## 4.0 Variable Description

### Variable Groups

- [Socio-Demographics](#)
- [Qualitative information on shopping](#)
- [Shoppingtravel information](#)
- [INDEX](#)
- [Stated Preference Data](#)
- [Index variables](#)

### Socio-Demographics

Variables within *Socio-Demographics*

- [Identificationnumber](#)
- [Number of the Questionnaire](#)
- [supermarket](#)
- [Origin](#)
- [Kanton](#)
- [Postcode Place of Residence](#)
- [Place of Residence](#)
- [street \(PoR\)](#)
- [number \(Por\)](#)
- [Nationality](#)
- [Abreviation Nationality if not Switzerland](#)
- [Number of persons of the group doing shopping](#)
- [number of children in the shopping group](#)
- [street of residence](#)
- [streetnumber of residence](#)
- [postcode of residence](#)
- [place of residence](#)
- [sex](#)
- [age](#)
- [size of household](#)
- [number of working persons](#)
- [children](#)
- [education](#)
- [job](#)
- [part-time: percents](#)
- [terms of employment](#)

- [income](#)
- [Email Adresse](#)

## Qualitative information on shopping

Variables within *Qualitative information on shopping*

- [Identificationnumber](#)
- [Number of the Questionnaire](#)
- [supermarket](#)
- [Type SP-Questionnaire](#)
- [homebased roundtrip](#)
- [Interviewer](#)
- [Purpose](#)
- [Postcode Place of Residence](#)
- [price awareness](#)
- [frequency of shopping in this supermarket](#)
- [most important type of goods in the basket/purpose of choosing this shoppingcenter](#)
- [notes](#)
- [other important goods \(1\)](#)
- [other important goods \(2\)](#)
- [associated stated preference datatyp](#)
- [returned questionnaire number](#)
- [price paid](#)
- [favorised supermarket in switzerland](#)
- [frequency of shopping Switzerland](#)
- [frequency of shopping Germany](#)
- [frequency of shopping France](#)
- [other shops visited in Germany](#)
- [other shops visited in Germany \(2\)](#)
- [other other shops visited in Germany](#)
- [other shops visited in F](#)
- [other shops visited in F \(2\)](#)
- [appraisal of the quality of goods in Switzerland](#)
- [appraisal of the quality of goods in Germany](#)
- [appraisal of the quality of goods in France](#)
- [favorised supermarket](#)
- [unknowed supermarket in the list of favorised supermarkets](#)
- [importance of parking availability](#)
- [importance of distance to residence](#)
- [importance of product quality](#)
- [importance of level of price](#)
- [importance of supermarket quality](#)
- [importance of brandimage of supermarket](#)
- [importance of the presence of other shops](#)
- [importance of friendliness](#)
- [importance of knowledge of the offered products](#)

- [importance of offering organic products](#)
- [importance of offering local products](#)
- [importance of little queuing](#)
- [importance of product provenance](#)
- [importance of protest of not shopping in switzerland due to too high prices in switzerland](#)
- [importance of supporting Switzerland](#)
- [most important attribute](#)
- [second important attribute](#)
- [third important attribute](#)
- [fourth important attribute](#)
- [Paid Prices](#)
- [activity time for weekly shopping in foreign country](#)
- [activity time for weekly shopping in switzerland](#)
- [difference between estimated and paid price of basket](#)
- [favorised group](#)

## Shoppingtravel information

### Variables within *Shoppingtravel information*

- [Identificationnumber](#)
- [Number of the Questionnaire](#)
- [supermarket](#)
- [Type SP-Questionnaire](#)
- [homebased roundtrip](#)
- [Purpose](#)
- [Postcode Place of Residence](#)
- [Place of Residence](#)
- [Mean of Transport](#)
- [estimated traveltime \(one way\)](#)
- [activity time](#)
- [shopping time](#)
- [estimated cost of travel](#)
- [activity time of shopping in switzerland \(if interviewed in germany or france and viceversa\)](#)
- [last institution if not residence](#)
- [last street if not residence](#)
- [last streetnumber, if not residence](#)
- [last postcode, if not residence](#)
- [last place, if not residence](#)
- [next institution, if not residence](#)
- [next street if not residence](#)
- [next streetnumber, if not residence](#)
- [next postcode, if not residence](#)
- [next place, if not residence](#)
- [travelcost per km](#)
- [estimated traveldistance](#)
- [calculated traveldistance Migros](#)

- [calculated distance to Marktkauf](#)
- [calculated distance to Geant](#)
- [traveltime to Migros](#)
- [traveltime to Marktkauf](#)
- [estimated Price of basket in Switzerland \[CHF\]](#)
- [estimated Price of the same Basket in EU \[CHF\] \(if quoted in EU, multiplied by 1.55\)](#)
- [effective traveldistance](#)
- [estimated traveltime](#)

## INDEX

### Variables within *INDEX*

- [Identificationnumber](#)
- [Number of the Questionnaire](#)
- [Type SP-Questionnaire](#)
- [Interviewer](#)
- [Origin](#)
- [Postcode Place of Residence](#)
- [choice sp1](#)
- [choice sp2](#)
- [choice sp3](#)
- [choice sp4](#)
- [choice sp5](#)
- [choice sp6](#)
- [choice sp7](#)
- [choice sp8](#)
- [choice sp9](#)
- [choice sp10](#)
- [questionnaire response](#)

### Stated Preference Data

Variables within *Stated Preference Data*

- [Identificationnumber](#)
- [Place of Residence](#)
- [street \(PoR\)](#)
- [Traveltime Alternative A \(oneway\) \[min\]](#)
- [Price of Basket Alterative A](#)
- [Quality of Supermarket A](#)
- [Traveltime Alternative B \(oneway\) \[min\]](#)
- [Price of Basket Alterative B](#)
- [Quality of Supermarket B](#)
- [Decisionnumber](#)

**Index variables**

Variables within *Index variables*

- [Identificationnumber](#)
- [street \(PoR\)](#)
- [ID](#)









































































































































































































































































