

# A Comparison of Consumer Expenditure Surveys

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# Background

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- Input for Consumer Expenditure (CE) Gemini Survey Redesign
- **Design features of 35 countries'** household expenditure surveys
- Surveys selected based on the diversity of their characteristics and the extent of information provided

# Information Sources

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- Survey information was collected from:
  - ▶ Program websites
  - ▶ Methodology reports
  - ▶ E-mail correspondence with survey representatives

# General Survey Characteristics

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- For each survey, the following general survey characteristics were collected:
  - ▶ Country and survey name
  - ▶ Achieved sample size and year
  - ▶ Response rate
  - ▶ Data collection method
  - ▶ Reference period

# Notable Design Features

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- Notable Design Features
  - ▶ Individual Diaries
  - ▶ Receipts
  - ▶ Incentives
  - ▶ Administrative Records
  - ▶ Technology
  
- Recent Survey Redesigns

# General Survey Characteristics: Achieved Sample Size

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- Germany had the largest sample size (2008)
  - ▶ Conducted every 5 years
  - ▶ 81,530 target; 55,110 completes
- **U.S.' CE had second largest (2010)**
  - ▶ Unique in using two independent samples
  - ▶ 72,000 target; 50,442 completes
- Denmark had the smallest (2010)
  - ▶ 858 completes
  - ▶ Data aggregated across three years

# General Survey Characteristics: Response Rates

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- Lowest response rate: 18% in Luxembourg
- Highest response rate: 89% in Cyprus
- Average across the (33) surveys was 60%

# General Survey Characteristics: Data Collection Method

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- Almost all countries used at least two instruments (an interview/questionnaire and a separate diary)
- Some countries used individual diaries in addition to household diaries
- Population registries also used as source of data in some countries



# General Survey Characteristics: Reference Period

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- Interview: Survey question reference periods either 1, 3, or 12 months
- Diary: Almost all countries had respondents enter purchases over 14-day period
  - ▶ Exceptions included periods of 7 days, 1-2 months, or 3 years

# Notable Design Features: Individual Diaries

Cyprus, France, Greece, Hong Kong, Ireland, Latvia, Malta, the Netherlands, Norway, Portugal, Slovenia, Spain and the United Kingdom

- Age of eligibility to complete individual diaries varied, most commonly 15 years old and older
  - ▶ Exception: **UK Children's diary (ages between 7 - 15)**
- Only France, Ireland required that all fill out diary for household to be counted as a complete
- Spain had **(2-week) diary for the 'housekeeper'**, and separate (1-week) personal expense diaries
  - ▶ 75% of recruited households had all diaries filled out

# Notable Design Features: Individual Diaries (cont.)



# Notable Design Features: Receipts

Canada, Estonia, France, Hong Kong, Ireland, Romania, Sweden, United States

- Estonia: about 30% of households only provided receipts (2011)
  - ▶ 3-5% of receipts had insufficient level of detail
- Ireland asks households to annotate food receipts
  - ▶ Weight or volume of food
  - ▶ Bought online

# Notable Design Features: Receipts (cont.)

Murphys Store, Letterkenny		
14-02-2009 12.29	Tel No 012 234 456 78 VAT No 123456789	TRANS: 0231 CASHIER: Jane
		TILL: 002 STORE: 003
	S/W MED 800g <i>(sliced, standard white bread)</i>	1.49
	WMEAL LOAF 800g <i>(unsliced wholemeal)</i>	0.95
4oz each	4 ROLLS @ 23c each <i>(white bread)</i>	0.92
450g	WEETABIX x24	1.89
500g	KERRY LOW LOW <i>(low-fat spread)</i>	2.50
250g	KERRYGOLD BTR <i>(butter)</i>	0.99
1lb	CHK BRST x4 <i>(chicken - uncooked, fresh)</i>	3.99
450g	SMALL CHICKEN <i>(frozen, uncooked)</i>	5.49
1/2lb	SWEET 'n' SOUR PORK <i>(chilled, cooked)</i>	1.99
1/2lb	HAM <i>(cooked, sliced)</i>	1.26
7oz	DENNYS SAUSAGES <i>(pork, fresh)</i>	2.25
28g	SALMON <i>(filleted, frozen)</i>	3.29
	MONSTER MUNCH <i>(crisps)</i>	0.60
	WHISKAS <i>(cat food)</i>	0.99
	6 EGGS FREE RANG E	2.25
450g	CDR CHEESE <i>(cheddar)</i>	1.99
	MILK 2LTR <i>(own brand, full-fat)</i>	1.65
	MILK 2 LTR <i>(low-fat)</i>	2.25
	HELLO! <i>(magazine)</i>	

# Notable Design Features: Incentives

Austria, Belgium, Bulgaria, Denmark, Estonia, Germany, Hong Kong, Ireland, Luxembourg, Malta, the Netherlands, Slovakia, South Korea, Spain and the United Kingdom

- Only two countries structured incentives at the person-level (Ireland, United Kingdom)
- **Belgium's incentives varied by household size:** 75€ (1-2 people) to 124€ (6+) (2010)
- Incentives mainly contingent upon survey participation

# Notable Design Features: Incentives (cont.)

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- Monetary incentives varied in amount
  - ▶ \$10 min in South Korea to 124€ max in Belgium
- Non-monetary incentives used
  - ▶ Lottery in Denmark
  - ▶ Pen and expenditure information in Estonia
- South Korea offered incentive contingent on completion AND diary type
  - ▶ If paper diary - \$10
  - ▶ If web diary - \$40
  - ▶ If web diary linked to account/bank records - \$50

# Notable Design Features: Administrative Records

Canada, Denmark, Finland, the Netherlands, Norway,  
Sweden

- Data taken from administrative records
  - ▶ Income (all countries above)
  - ▶ Education (Denmark, Finland, Norway)
  - ▶ Property tax/taxable benefits (Denmark, Sweden)
  - ▶ Housing (Denmark, the Netherlands)
- The Netherlands also used demographic data from population registries for non-response adjustments



# Notable Design Features: Technology

Online: Belgium, Germany, the Netherlands, South Korea

- Belgium found 15%-20% chose to enter data via the website when given option (vs. paper)
- The Netherlands collected 100% of data online (2012)
  - ▶ Developed instructional tutorials
  - ▶ Included downloadable diary, online questionnaire
  - ▶ Found (still) low response rates, but cost savings
- The Netherlands tutorial (in Dutch):

<https://www.budgetonderzoek.nl/Pagina/Instructiefilmpje>

# Recent Survey Redesigns

Belgium, Canada, Estonia, France, Lithuania, the Netherlands, Spain

- Various objectives of household expenditure survey redesigns
  - ▶ Bolster response rates
  - ▶ Minimize respondent burden
  - ▶ Boost data quality and update design
  - ▶ Reduce costs

# Redesign: Estonia

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- Concern – declining response rates (65% in 2000 to below 50% in 2007)
  - ▶ Limited expenditure entry to one diary
  - ▶ Reduced diary reporting period to 2 weeks (from 1 month)
  - ▶ Removed income questions
  - ▶ Added few additional retrospective questions
- Achieved minor increase in response rates (38% to 42%)

# Redesign: France

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- Mandatory survey with large respondent burden (three one-hour interviews, a two-week individual diary)
  - ▶ Removed one of the interviews
  - ▶ Reduced diary reporting period to one week
- Saw 2010-11 response rates return to 2000 levels (above 75%)

# Redesign: Spain

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- Large-scale restructuring of survey design
  - ▶ Moved from quarterly to annual data collection
  - ▶ Increased diary reporting period from one to two weeks (household diary)
  - ▶ Removed some interview questions
  - ▶ Introduced 30€ gift card as incentive
- **Response rates 'at similar levels' (71%)**
- Some drop-off in reporting of expenditures in second week of diary data collection
- Improved overall reporting (more expenditures)

# Summary

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- **Common themes, innovations in others countries' design characteristics can inform CE Survey program's redesign efforts**
- CE Survey shares similar data collection methods, but uniquely uses two independent samples
- Among notable design features, only commonality is CE Survey encouraging respondent use of records and receipts

# Summary (cont.)

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- Few common notable design features, but similar intentions moving forward
  - ▶ **Incorporation of new (online) technologies**
  - ▶ Data collection at individual-level
  - ▶ **Motivating respondents through incentives**

# Applications

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- Ongoing research has led to suggestions, many of which are also recommended in the Gemini Design Proposal
  - ▶ **Sample size:** explore the use of a single sample
  - ▶ **Individual diaries:** identify various ways to encourage individual reporting (Ireland, Spain)
  - ▶ **Records/receipts:** encourage use of records and receipts (Canada, Ireland)
  - ▶ **Incentives/modes:** boost response rates, respondent use of lower-cost collection modes (South Korea, Estonia, Spain)



# Applications (cont.)

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- ▶ **Technology:** learn how web can effectively be implemented (the Netherlands, Belgium, South Korea, Germany)
- ▶ **Burden:** learn from redesigns that reduced reporting burden (France, Estonia, Canada)
- ▶ **Administrative records:** consider use of administrative data (Scandinavian countries)

# Conclusion

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- Survey programs can benefit from communicating best practices for effectively collecting high quality data, and sharing lessons learned from testing new features and implementing new survey designs

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