Technical Expert Group for updating the 2004 CPI Manual (TEG-CPI)

Minutes of the First Meeting
(March 7-9, 2016)

Participants:

1. Maria Mantcheva (chair)
2. Brian Graf (editor)
3. Valentina Stoevska (ILO)
4. Paul Armknecht (international expert)
5. David Fenwick (international expert)
6. Jan Walschots (CBS, Netherlands)
7. Claude Lamboray (STATEC, Luxembourg)
8. Rafael Posse (INEGI, Mexico)
9. Yunita Rusanti (BPS-Statistics Indonesia, Indonesia)

1. Discussion on the role, structure and terms of reference of the TEG

Members of the TEG agreed that (i) the main objective of the update is to provide, wherever possible, clearer and more prescriptive recommendations and guidelines on CPI compilation; (ii) the updated manual should be streamlined, with the right balance between theory and practice; (iii) the update should incorporate, as needed, sections from the *Practical Guide to Producing CPIs*; (iv) references to theoretical and empirical literature will be made; and (v) preferably more cross-referencing between chapters will be available.

2. Structure of the Manual

The TEG agreed that the Manual will be done in two volumes with a single title "*CPI Manual – Theory and Practice*". Volume 1 will deal with CPI practice, while Volume 2 will deal with CPI theory. Volume 1 will cover current chapters 1-13, while volume 2 will cover chapters 15-21. It was agreed that Chapter 14 will be dropped (summary text will be included in Chapter 1). A summary of the main methodological concepts will also be added to Chapter 1. The TEG needs to further discuss the placement of the glossary, bibliography, and Annexes.

3. Chapter-by-chapter agreed proposals – a summary

Chapter 1: An introduction to CPI methodology

The TEG agreed that Chapter 1 will have 2 main sections: (i) the 10 basic steps for developing a CPI; and (ii) a summary of key CPI methodological concepts. Some text from Chapter 14 on consistency between the CPI concepts and the 2008 SNA will be included.

Chapter 2: Uses of CPIs

1. Some discussion and clarification of differences in scope and methods of CPIs for different purposes (COLI, inflation measure, deflation of national accounts series), advantages and disadvantages, and possible clashes that should be considered.

2. On core inflation – a section on compiling core inflation (1 or 2 pages), with discussion/elaboration of the different approaches; however, no suggestions will be made on how statistical offices should measure core inflation (should be mentioned that this is usually done by the central banks). The section will stress that the statistical office should collaborate with the central bank. Ideally, the stats office should provide detailed indexes and weight data for the central bank to compile measures of core inflation as needed. Footnote with links/references to the working papers of M. Silver and others.
3. The section on flash estimates should be moved to Chapter 13 (Dissemination). Same about CPI aggregates, including G20 CPI (OECD), EU (Eurostat), WEO aggregates (IMF), ILO, FAO, etc – all should be in Chapter 13.
4. Specific references to the MIT billion prices project will not be included.

Chapter 3: Concepts and Scope

1. The chapter should be re-titled as "Concepts, scope, coverage and classifications".
2. The cross-reference to Chapter 14 should be dropped (since there is no chapter 14).
3. The two concepts – domestic and national – should be elaborated. Some special cases from Chapter 10 (i.e. subsidized goods and services, etc) should be mentioned and cross-referenced.

Chapter 4: Expenditure weights and their sources

1. The COICOP issues (i.e. level of details, etc) should be included in Chapter 3, and not here.
2. A section about quality assessment of HBS data - recall versus interview surveys, HBS for a period shorter than 1 year, subsidized goods and social transfers in kind, commodity flow method, use of scanner data for validation.
3. Other issues: data sources for weights (NA, HBS, others), developing regional weights (including rural/urban), lower level weights, criteria/threshold for including items in the basket (stress that country circumstances dictate threshold, but give an example, like 0.1 for goods and 0.2 for services), update of the CPI basket, use of scanner data for deriving and assessing the weights, coherence issues when a variety of data sources are used.
4. A special case – weights for seasonal goods – clear recommendation will be made not to use monthly weights (although the approach where in and out-of season periods are defined and a zero weight is given to out-of-season will be covered). The issue about in and out of season – an elaboration of the best approach (conservative approach with a priori defined periods).
5. Elaboration of regular updating of the weights, a normal year, adjusting for abnormal seasonal conditions and a brief reference to ad hoc updates e.g. when a revolutionary good appears.

Chapter 5: Sampling

1. The chapter needs extensive editing and restructuring. It will consist of 2 main sections - probability sampling and non-probability sampling. Section on non-probability sampling will include suggestions for how statistical offices can ensure representivity of a sample when using non-probability methods.
2. The chapter will deal with sampling of outlets and sampling efficiency/optimization. The outlet initiation should be moved into Chapter 6 (Price collection). A link to ILO papers on optimization could be useful.
3. Paragraph 5.46 (the representative item method) is too short and needs to be elaborated.

4. The examples of USA, Sweden, France, and Luxembourg - should be dropped.
5. The section on sampling in time needs to be further expanded and the importance of outlet sampling given greater emphasis.
    6. Criteria for number of price quotations needed to develop robust estimates of price change– should be included with cross-reference to Chapter 6.

Chapter 6: Price collection

1. Scanner data – it has been decided that it will be an Annex to the Manual, covering all issues. Cross-references to the scanner data annex then will be made when needed e.g. coherence issues when taking weights/prices from different sources.
2. The collection of prices from the internet should be discussed.
3. A good example of a data collection form will be included in the chapter. No need for a print screen of a hand-held computer.
4. The main elements/issues of a country data collection manual should be included too. Whether a web link to a country manual on data collection can be included will be further explored.
5. More issues from the *Practical Guide* need to be included here (operational issues – subsidized prices, bargain process, etc). Price differentiations – should be in Chapter 3, and not in Chapter 6.
6. An example of web scraping for prices for some goods and services should be included with a review of the issues arising.
7. The ICP issues should be dropped (current item 8 from the outline)

Chapter 7: Adjusting for Quality Change

1. A section on quality adjustment for services needs to be added.
2. More examples are needed here from the *Practical Guide*.
3. The decision about not recommending the carry forward method should be made stronger.
4. Elaboration of the class mean imputations and the risk of bias when there are no sufficient number of quotations – needs to be included here.
5. An example of explicit versus implicit methods needs to be added.
6. There is no need for so many formulas here. All we need is a discussion of the alternative methods and minimize/streamline current sections on hedonic quality adjustment methods.

Chapter 8: Item substitution, sample space and new products

1. This chapter needs to be more practical. More materials from the *Practical Guide* has to be included.
2. The two annexes – these should be also practical, again drawing from the *Guide*.

Chapter 9: Calculating CPIs in practice

1. Chapter 9 requires a re-write. It has to be more prescriptive in terms of recommendations.
2. The UVI section should be moved to the scanner data annex.
3. We have to stress that that the Carli index should not be used.
4. The concept of missing prices should be made more clear. Par. 9.172 is repetitive, needs to be dropped.
5. The terminology has to be clarified and be consistent throughout the Manual – item, variety, observation, etc.
6. Point 15 from the current TOR outline (new methods of using scanner data RYGEKS RYWTPD) should be in Volume 2 with a summary discussion in the Annex on scanner data.. Same about Young and Lowe and superlative approximations.
7. A section about regional index aggregation should be included in this chapter.
8. More elaboration is needed about chaining/linking to create a consistent time series (incorporate Paul Armknecht's draft guides). This also relates to the issue of re-calculating back data when rebasing
9. Point 11 from the current TOR has to be dropped. Same about point 13.
10. Zero prices- a document from Statistics Netherlands could be used.
11. A section on Jevons/Dutot – an elaboration is needed on the strengths and weaknesses of these 2 calculation methods, including more clear definition of what is meant by homogeneity.
12. Par. 9.73 has to be taken out. Sections on price updating, quality adjustments, weight updates are needed. The introduction of new weights – could be an appendix to the chapter.
13. More emphasis should be put on the Modified or Two-Stage Laspeyres formula.

Chapter 10: Some special cases

The chapter will deal with special measurement issues. Most of the issues will incorporate sections from the *Guide*. The following sections were agreed to be included:

1. Owner-occupied housing
2. Seasonal goods (but perishable goods should be in Chapter 6)
3. Services subsidized by the government (from the *Guide)*
4. Second hand goods (from the *Guide*)
5. Internet purchases (with cross reference to price collection chapter)
6. Treatment of bundled services in telecommunication
7. Tariffs
8. Not clear what should be included in financial services. This needs further discussion.
9. Erwin's suggestions for Chapter 10 – these should go to Chapter 13, but cross references in Chapter 1 and 10 should be included.

Chapter 11: Errors and bias

1. A link to the paper presented by John Greenlees at the Ottawa Group meeting on geo mean formula needs to be added, with some text about potential errors and bias.
2. The issue of outdated weights and the substitution bias should be included here.
3. The issue with the NA weights and the impact of NA revisions should be added.
4. A footnote with reference to the UN Handbook on HBS should be included.

Chapter 12: Organization and management

1. Chapter 12 should be renamed 'Quality management'. It should be a summary of all data quality issues – from validation of prices during data collection to processing and compilation. Cross-references should be made to respective chapters.
2. References should be made to: IMF DQAF for CPI, Eurostat HICP regulation and Paris 21 documents on data quality. Eurostat CPI inventory headings also could be used as an example.
3. Data verification – the section needs to be expanded but should be restricted to quality assurance at the time of collection i.e. in the field, with a cross reference to Chapter 12 where data editing at HQ is covered.

Chapter 13: Publication, dissemination and user relations

1. Recommendations should be given for dissemination of metadata on CPI sources and methods (a box).
2. Guidance for CPI data tables for disseminations should be provided too. A minimum set of tables would be useful (monthly change, 12-month change).
3. Should define terminology – monthly change, 12-month change, annual change, etc.
4. The issue about disseminating weights and average prices – it has to be reflected here too.
5. CPI special aggregations – should be included here.

Chapter 14: the System of national accounts

1. To be dropped, the link to the SNA will be summarized in chapter 1.

Other issues

The TEG-CPI agreed that the working arrangements (i.e. allocation of chapters to main drafters/updaters, reviewers) would be discussed during a side meeting during the UNECE/ILO CPI Experts meeting in Geneva during May 2-4, 2016. It was agreed that a working lunch will be organized for those members of the TEG in attendance. The main drafters could be experts outside the TEG. Volume 2 will be discussed at the side meeting in Geneva. Brian will make a presentation on the CPI manual update during the meeting in Geneva. The draft presentation will be circulated to the TEG membership for review/comment.

The ILO (Valentina) agreed to provide the MS Word versions of each chapter of the current CPI manual. It was agreed that the next TEG meeting will be held during November 28 to December 2, 2016 in Washington.