

Minutes of TAG Meeting – January 21-23, 2004

Participants

Alan Heston, Chair
Irwin Diewert, Vice Chair
Silke Stapel, Vice Chair
David Roberts
Paul McCarthy
Prasada Rao
Kim Zieschang
Angus Deaton (first two days)
Michael Ward (first day)
Shaida Badiie (first day)
Misha Belkindas (first day)
Fred Vogel
Yonas Biru
Yuri Dikhanov

Angus Deaton presented a set of comparisons based on HESs of India and Indonesia to examine the feasibility of using household surveys as a check on ICP results for food, fuels and transport, and as a basis for distributions of expenditures relevant for developing poverty PPPs from ICP heading parities.

The TAG meeting principally focused on the 5 topics below. For each topic the TAG chair has provided an abbreviated set of bullet points reflecting decisions, recommendations or suggested actions relating to each subject area. For each of the 5 subject areas fuller discussion is provided in an appendix of the same name. These longer discussions were prepared by the indicated members of the TAG with minimal, if any, editorial changes. Data validation and the treatment in the Handbook were also discussed and the Global Office is better situated to report on this part of the meetings and comments on the new draft of that chapter.

Many of the points made below may appear more operational than technical. In some cases the TAG was asked by the Global Office to provide advice on an operational decision where there may be technical considerations that should lead to one course of action versus another. In other cases, operational suggestions are offered by the TAG based on the particular experiences of its members or after lengthy technical discussions produced recommendations for a concrete set of actions.

1. Government

This set of bullets condenses a very clear discussion of the issues of valuing government provided in the appendix. For the 3 heads of government singled out in the ICP, Education and Health (which enter into actual consumption of households) and general governments, there are three components. These are purchases of priced products for which actual price comparisons can be made or reference PPPs used, compensation, and capital consumption. Michael Ward, who drafted much of the Chapter 9 took part in the discussions.

Recommendations:

The TAG recommended

- for this round the regions should adopt an input based approach to valuing non-priced outputs of government, recognizing that this does not adequately take account of productivity between governments in different countries and often within countries for various activities and levels of government;
- a number of indicators of government output in health, education and other activities should be requested from countries as a check on the results of this round and for possible future rounds;
- regions should adopt the reference PPPs for market purchases and capital consumption used in the Eurostat-OECD comparisons;
- using the 46 selected occupations used in the Eurostat-OECD comparisons as a starting point for comparisons for compensation.

Actions:

The TAG recommended that Ch. 9 of the ICP Handbook be revised so as to:

- a. make clear the differences between the 1968 and 1993 SNA and to give priority to country development of government expenditures for education and health that are parts of actual consumption of the households;
- b. discuss the expanded definition of the capital consumption portion of government expenditures;
- c. make clear that all levels of government should be included;
- d. make clear that unfunded social benefits employees receive as part of their compensation be included in salary comparisons;
- e. include an expanded list of indicators that might be used either as: i) checks on the volume measures that emerge from input comparisons or ii) a possible direct measure of output in the education, health and general government headings.

The Global Office will need to develop worksheets for countries to use in providing information on government expenditures, capital consumption, and on salaries for the selected occupations used in each region. These worksheets will need to be disseminated to the regional coordinators.

- The Global Office will either need to develop a worksheet for physical indicators to be provided by countries based on the revised Ch. 9; or since many of these indicators are already assembled in publications like the WDI, develop this data base over the next year.
- The Global Office will disseminate these data needs to the regional coordinators.

2. Housing

Several action items emerged from the discussion of measuring the services of housing:

- A chapter or large section on housing should be added to the ICP Manual. This chapter would include a discussion of the market rent and user cost approaches and could build upon the papers listed in the appendix. It should explain that the market rent approach based on stratification of dwelling types can be implemented by purposive surveys on the rental cells or by hedonic estimates from a random survey of rents used by a number of countries for their CPIs.
- To develop the background materials for each country and region, worksheets need to be developed to obtain the following information:
 - I. The structure of the dwelling markets. This would include availability of price and dwelling stock data, information that would help determine whether a market rent or user cost approach should be undertaken in each country in its entirety or say, the market rent approach for urban areas and user cost approach for rural areas.
 - II. Basis for stratification of dwellings. The background country worksheets would provide the basis for the stratification to be used for sampling rents in each region. The Global Office and the regional coordinators will need to ensure some overlap of stratification so that ring comparisons can be carried out with minimal additional effort.
 - III. The methods used in estimating rental services in national accounts. As discussed in the appendix it is essential that the basis for rent estimation embodied in the national accounts be consistent with the methods for obtaining rent estimates for comparable dwellings as used in the ICP.

3. Ring Comparisons

The bullets below summarize a long discussion. It was agreed that if right now collated product lists from all countries were available then it would be relatively easy to decide on appropriate ring countries and to minimize the extent of extra pricing by the ring countries, essentially the Diewert proposal in the Appendix. For the next round of comparisons, establishing the ring country comparison along the lines suggested by Diewert, Zieschang and others, should be relatively easy. But, as discussed in the Appendix on timing issues, these collated product lists are not on the immediate horizon for this round.

- Using binary linking methods at the GDP level as proposed by Peter Hill was discussed and as discussed in the Appendix, rejected.
- Use of binary links at the basic heading level was thought a better approach but less desirable than a multilateral approach to the ring that involves linking only at the basic heading level.
- The criteria for choosing countries for multilateral ring comparisons at the basic heading level were developed along the lines of the May meeting of the TAG. The main criteria are:
 - i. Openness of the economy;
 - ii. Presence of a significant market for traded and also non-traded goods;
 - iii. Existence of a good statistical system in general, especially for price surveys and national accounts;
 - iv. A country that is not too large or too small in size; and
 - v. A country's willingness to participate.
- The following 23 countries for the 6 regions were recommended. It was suggested that more than 18 countries should be recommended to cover possible country unavailability for cost, timing or other reasons that may affect decisions of the Regional Coordinators or Global Office.
 - I. OECD: UK, Japan, Estonia and Slovenia. Australia, (Czech Republic reserve list)
 - II. CIS: Russia, Kazaksthan, or Ukraine.
 - III. ESCWA: Oman or Lebanon, Jordan
 - IV. ECLAC: Brazil, Chile and Mexico
 - V. AFRICA: Egypt, Kenya, Senegal and South Africa
 - VI. ASIA: Hong Kong, Malaysia, Singapore and Sri Lanka, (Philippines reserve list)

4. Capital Formation

Several Regions have raised questions about capital formation comparisons. TAG discussions were to the effect that work needed to begin now if either construction or producers durables comparisons are to be carried out in a timely fashion. Two essential tasks need to be coordinated by the Global Office and the Regions. First, learning from countries exactly how they estimate construction totals in the national accounts as to mark-ups for projects for which permits are the data source, and construction cost estimates for rural housing and the like; and second, learning what proportion of machinery and equipment are imported in each country and how these items are valued in the national accounts (addition to c.i.f. charges for duties, taxes, transport and dealers margins. The Appendix discusses these issues and the bullets below are grouped under the two large categories.

Construction

The Bills of quantities approach has been used successfully in Eurostat-OECD, but it is expensive and it may be possible to accomplish this more economically (Eurostat is carrying out research on this question). An approach being examined by the Global Office is to either make comparisons for individual bills of quantities, not whole projects, or based on inputs as discussed in the Appendix.

Recommendations:

- Separate specs will be developed, as needed, for urban/rural areas and for different regions. This may apply to whole construction projects or to bills of quantities.
- Split basic headings into urban/rural dwellings and use an input cost approach for rural residential construction.

Actions:

- Consultants are now in Africa and their report will be distributed to the TAG. Statistics Canada will undertake collection of construction specs in Latin America basing part of their work on the work of the African consultants.
- The Global Office will obtain specifications of housing from previous ICP rounds from the UNSD and other sources.
- A worksheet for construction will be developed composed of a. pricing information on bills of quantities referring to a scale consistent with existing Eurostat-OECD projects. (The bill of quantities will have different prices in the same country if it is for example, a single residence, or a single residence in a development of 48 homes, both of which are Eurostat-OECD specs).

Machinery and Equipment

Actions:

- The Global Office will follow up with Peter Hill about the necessity of making the basic headings less OECD-centric.
- The Global Office in cooperation with the Regions will investigate the feasibility of using the exchange rate plus mark ups in those countries that import most of their machinery and equipment. The exchange rate approach may also be applied partially to certain headings of machinery and equipment, e.g., aircraft.
- The Global Office will need to see that Ch 9 incorporates these actions.
- Where the traditional approach of SPD pricing is to be used, the Global Office will coordinate use of SPDs between all regions once Africa has finished with its list.
- Kim Zieschang will contact the BLS regarding their specs for equipment to aid in development of SPDs.
- The validation process for machinery and equipment will be incorporated in Chapter 9.

Other Decisions:

- Reference PPPs will be used for valuables.
- For inventories, reference PPPs will be applied to starting and ending balances of stocks.
- For now the reference PPP for the net balance of trade will be the US\$ exchange rate though other options, like the PPP for domestic absorption, may merit discussion at a later time.

5. Some questions of Timing

- Action Items: 1. The Global Office and Regional Coordinators need to assess the time required for translation and back translation of the collection forms into the languages of the price collectors in the various countries and the results of independent testing of the Price Administration and Price Collection modules of the Tool Pack and to report the findings to the Executive Board and TAG as they become available.
- Recommendation: The Global Office should continue a July start-up for pricing to begin in Africa and Asia, recognizing that there are uncertainties with regard to completion of the Global SPDs, translations and back translations of the product descriptions, and testing of the Tool Pack modules.

1. Appendix on Government

Prepared by David Roberts

1. MW introduced the draft Chapter 8 of the ICP handbook covering the government sector which describes the treatment proposed for general government expenditure on the individual and collective services that governments provide households. The main points of the chapter are:

* Individual services include housing, health, recreation and culture, education and social protection; collective services cover general public services, defence, public order and safety, economic affairs, environment protection, and housing and community amenities. Each individual service is separately identified in the ICP expenditure classification, whereas collective services are lumped together as a single aggregate. Of the individual services, Chapter 8 focuses on the two most important: health and education.

* The ICP expenditure classification makes a distinction between general government expenditure on health and education services that governments purchase from market producers and general government expenditure on health, education and collective services that governments produce themselves. The PPPs for the former will be calculated using the market prices that participating countries collect for a specified basket of medical goods and services and a specified basket of education services - in other words, the standard approach for consumer products.

* The health, education and collective services that governments produce themselves are non-market services being provided free or at prices that are not economically significant. PPPs for non-market services, unlike those for the individual services that governments purchase for households from market producers, cannot be calculated using economically-significant market prices of outputs. Instead, to be consistent with the way national accountants estimate the expenditure on non-market services (by summing their production costs), they will be calculated using economically-significant market prices of inputs.

* To facilitate application of the input-price approach, the ICP expenditure classification breaks down expenditures on government-produced health, education and collective services by cost structure (compensation of employees, intermediate consumption, capital consumption, etc.). PPPs will only be calculated for compensation of employees: they will be based on the compensation of employees that participating countries provide for a selection of representative occupations in health, education and collective services. Reference PPPs will be used for the other cost components.

Reference PPPs will also be used for the individual services of housing, recreation and culture, and social protection.

* Currently, there are 46 selected occupations in total. Each is defined according to ISCO-88. Countries will be required to provide the compensation of employees that their (general) governments pay the modal employee in each of the selected occupations. Chapter 8 explains in detail how the compensation of employees for the modal employee is to be determined from information on the numbers employed and the wage and salary scales of general government.

* The disadvantage of the input-price approach is that it does not take into account differences in productivity between the producers of non-market services of participating countries. This can lead to a serious overestimation or underestimation of volumes both at the level of government final consumption expenditure and at the level of GDP. Should productivity adjustments be attempted?

2. During the discussion that followed MW's presentation, the following points were made:

* The input-price approach is a "less satisfactory" option because it assumes, unjustifiably, that the non-market producers of participating countries are equally productive. In the absence of output prices, it would be preferable to use physical indicators of output and calculate volume measures directly (and derive the PPPs indirectly). However, a list of physical indicators of output has still to be agreed and their general availability across participating countries ascertained. Therefore, while retaining the input-price approach for ICP 2004, efforts should be made during the round to establish a list of physical output indicators and to determine their availability in participating countries. Data on the indicators should be collected at the same time as data on compensation of employees for the selected occupations. To this end the list of indicators in Annex B of Chapter 8 should be revised and expanded.

* Other points made concerning the use of the input-price approach in ICP 2004 were:

* In the absence of an agreed methodology, productivity adjustments should not be attempted. The bias this brings to the results will need to be carefully explained. Annex A of Chapter 8 should be expanded to include a more detailed discussion of productivity adjustments and the consequences of not making them.

* The methodology for determining modal compensation of employees and the proposed list of selected occupations originate from Eurostat and the OECD. Both the methodology and the list need to be reviewed for applicability and representativity vis-à-vis non-Eurostat-OECD countries. The review should be initiated by the Global Office in consultation with the regional offices.

* Weights should be used when calculating PPPs with the compensation of employees for the selected occupation. The weights - either total numbers employed in a selected occupation or, preferably, total compensation paid to employees in a selected occupation - should be collected at the same time as the compensation of employees for the selected occupations is calculated.

* It is important that the chapter emphasizes that participating countries adhere to the definitions, concepts, classifications and accounting rules of the SNA 93.

* In the SNA 93, household and government expenditures on individual services are recorded according to "who pays": government reimbursements of expenditures made by households are therefore recorded under government. Previously, in the SNA 68, expenditures were recorded according to "who effects the purchase": government reimbursements of expenditures made by households were treated as transfers and recorded under households.

* The SNA 93 has a broader definition than the SNA 68 of capital consumption in general and of government capital consumption in particular. Capital consumption of government is probably not being estimated consistently across participating countries.

* Government means general government and should include the expenditures of all levels of government: central, regional, state, municipal, etc. Not all participating countries are currently following this definition.

* The division between individual services and collective services is clearly defined in COFOG 98. Nonetheless, participating countries may have difficulties in applying the classification when ministerial portfolios do not broadly comply with it.

* Compensation of employees includes the imputed social contributions of general government. In other words, the expenditures on compensation of employees that participating countries report for government-produced health, education and collective services should include an imputation for the unfunded social benefits paid by general government. Likewise, the

compensation of employees that participating countries report for the selected occupations in government-produced health, education and collective services should include a similar corresponding imputation.

2. Appendix on Housing

Summary by Erwin Diewert and Silke Stapel

Silke Stapel presented the highlights of the Eurostat experience on comparing the price of housing across EU member States and Candidate Countries.¹ Her main recommendations follow.

1. For housing it is important to look at prices (rents) and GDP expenditure weights at the same time. Given the high share of housing to GDP, consistency of the rents used for PPP and the prices underlying the expenditure weights in NA is absolutely vital for correct volume estimates. Moreover, methods to be used for housing services in the ICP for both, prices and weights, need to be built on already existing basic data in the countries, as timing and finance would not allow to set up housing census or rent surveys if they do not yet exist.

2. The main difficulty is that the housing market in every country is split into a market part (privately rented) and a non-market part (owner-occupation or highly subsidized rents). In many countries the rented market is very small and, even more importantly, not representative of the total housing market.

3. There are two principle methods for obtaining prices for housing:

- Sample the prices of rental houses, segmenting the various types of houses into a number of discrete categories or, which need to be the same for all countries in a region to compare “like with like”, or
- Obtain estimates of the quantity of owner occupied housing (again segmenting the market into a discrete number of types of house and then quality adjust them into common quantity units). Once this quantity estimate has been obtained, it could be divided into the national accounts imputation for expenditures on owner occupied housing in order to obtain an implicit price for owner occupied housing.

The first method should be applied to rental housing of course.

4. In order to obtain rents for owner occupied housing, the first method was recommended if the rental market in the country is relatively representative of the owner occupied dwelling units in the country. Then market rents can be used to impute rental equivalence prices for the owner occupied units. If this method is applied, then care must

¹ The presentation was based on Sergueev (2004) and the Eurostat documents in the references.

be taken to use market rents rather than highly subsidized rents (or the subsidized rents must be adjusted up to market levels).

5. The second method was recommended in order to impute rents for owner occupied housing if the rental market is not representative in the country. However, it will be necessary to work with the national accountants in the country to determine exactly how they imputed rents for their stock of owner occupied housing.

6. There are three principle methods to estimate GDP expenditure weights for housing in National Accounts:

- I. Output approach for the rental market
- II. Stratification approach for imputing values for owner-occupiers by using representative rents from the rented market
- III. User cost for estimating values for owner-occupation in the case no representative rental market exists, which can be used for imputations

7. The stratification approach for the EU is defined in the Commission Decision on dwelling services of 1995. It samples the prices of rental houses, segmenting the various types of houses into a number of discrete categories, which have to be the price determining factors in a given country, as location, facilities etc. The use of hedonic regression is permitted too; given the country can show that the estimated function is statistically sound. The latter method is used in the UK.

8. The user cost method was developed in detail by an EU task force for those EU Candidate Countries which have high shares of owner occupation (mostly over 90%) and tiny, unrepresentative privately rented market. The detailed methodology and estimation templates in use are given the task force report, see references

9. Erwin Diewert also made some comments on housing based on his paper that was circulated at the meeting.² He was in broad agreement with the Eurostat approach outlined above. His paper gave more weight to using hedonic regression methods rather than using a discrete classification of housing units and he also focused more on the details involved in constructing user costs for owner occupied housing. His paper also noted that there were a number of reasons why imputing rents using the rental equivalence method may not be completely accurate for owner occupied units, since rents include some costs not faced by owner occupiers of comparable units. However, there is no method for imputing rents for owner occupied units that is completely free of difficulties. Diewert's (2003; 54-55) national accounting approach for dealing with the price and quantity of owner occupied housing is very close to the Eurostat quantity approach outlined above.³

² See Diewert (2003).

³ In order to apply this approach in the context of making cross country comparisons, it will be necessary to have good housing price deflators that can be made comparable across countries so that this method does

Finally, it was recommended that

- a chapter on housing be added to the ICP Manual.
- An analysis of the structure of the dwelling markets should be undertaken in each country in order to...
- ... have a basis to decide on the stratification to be used for sampling rents in each region
- an analysis of the availability of price and dwelling stock data should be executed in each country in order to...
- ...finally decide which of the above methods should be applied to gain rents and expenditure values.
- For the necessary analysis common templates are recommended.

References

Diewert, W.E. (2003), "The Treatment of Owner Occupied Housing and Other Durables in a Consumer Price Index", Discussion Paper No. 03-08, Department of Economics, University of British Columbia, Vancouver, Canada, V6T 1Z1. Website: <http://www.econ.ubc.ca/diewert/disc.htm#2003>

Sergueev, S. (2004), "International Comparisons of Housing: Experience from the European Comparison Program", document circulated at the Washington Technical Advisory Group meeting for the ICP, January 21-23, 2004.

European Commission, COMMISSION DECISION of 18 July 1995 specifying the principles for estimating dwelling services for the purpose of implementing Article 1 of Council Directive 89/130/EEC, Euratom on the harmonization of the compilation of gross national product at market prices (Text with EEA relevance), (95/309/EC, Euratom)

Eurostat Task Force Report on Alternative Estimation Methods for Dwelling Services in the Candidate Countries Meeting of the Working Parties on National Accounts and Purchasing Power Parities, in Luxembourg 19 November 2002

hinge to a certain extent on the existence of comparable cross country house price indexes that would be calculated as part of the ICP investment goods pricing program.

3. Appendix on Ring Comparisons

Summary by Prasada Rao

The Group devoted a significant part of the Meeting to the problem of Ring Comparisons for the 2004 ICP Round. Papers by Peter Hill (ring comparisons based on spatial linking) and Erwin Diewert (CPD method for ring and global comparisons) formed the basis for initial discussions. The Group also discussed the selection of countries to be included in the ring comparisons. After initial discussion of various issues, it was resolved that the selection of ring countries intrinsically depended on the approach used for linking ring and regional comparisons.

After discussing pros and cons of spatial linking proposal of Peter Hill, the TAG members concluded that implementation of specific binary links may be more difficult and also more costly compared to multilateral ring comparisons.

Four alternatives to spatial linking were considered and discussed at length.

Option A (Diewert's suggestion): The main suggestion made here is to compare all the regional lists (before embarking on price surveys);, and to make minor adjustments to product specifications so that the items could be priced in two or more regions. Once such a master list is prepared all the countries in all the regions use the same master list for price collection. Price data collected from regional surveys could be used in conjunction with existing aggregation methods to derive regional and global comparisons. Option A implies a simultaneous price comparison of prices (and computation of PPPs) for all the countries in all the regions.

Option B: The strategy canvassed here requires each country involved in the ring comparisons to price products lists in another region (only one region). Prices collected by the ring country, under this strategy, are then used in deriving global comparisons. TAG members felt that this is essentially a variant of the spatial linking method.

Option C: In contrast to Option B, this option suggestions that each ring country be given a global list made up of all the regional lists and see if ring countries could price some subset of the items from this global list. Each ring country would be required to price at least one item from each of the clusters (product groups). This option requires the global office to collect lists from all the regional lists and edit them to prepare a global list (translation of some product lists may be required). This may require resources at the global office.

Option D: This option suggests that multilateral price comparisons for all the ring countries involved. A single item list is compiled and given to ring countries. This item list is based on items priced by various ring countries within their respective regional comparisons as well as an additional list drawn from the regional lists. Option D implies

that ring country price surveys are conducted only after the first phase of regional price surveys is completed.

The TAG members discussed all the options, their relative merits and implications for the implementation of the 2004 ICP Round. The following are the main recommendations.

1. The Diewert suggestion (Option A) is considered too complicated and elaborate for implementation in this round. This option in essence implies a global price survey by all the countries in all the regions using a single master list. This is clearly too ambitious for this round. This suggestion needs to be further investigated and its properties with respect to fixity need to be examined in more detail.
2. Option B was considered to be too similar to the spatial linking proposal and the links generated could be too weak or fragile to be used in generating global comparisons. Results could be sensitive to the choice of which regional list is priced by which country in the ring group. These problems can be adequately handled through the use of Options C and D.
3. The main choice is thus reduced to one of choosing between Options C and D. It was felt that Option C and D are very similar and in essence Option D encompasses Option C as a special case. It was felt that Option C, based on a global list encompassing all the regional lists, is superior to the way product list is compiled in Option D.
4. The TAG members recommend the use of Option D for the next round and suggest that effort is channeled towards producing a list of products close to that implied in Option C.
5. Based on the recommendation to use Option D, the TAG recommends that ring country price surveys are conducted in the first quarter of 2005.

List of Ring Countries

The TAG Group discussed a possible list of countries to be included in the ring comparisons. Several criteria were used in arriving at the list. In particular the criteria used were:

- Openness of the economy;
- Presence of a significant market for traded and also non-traded goods;
- Existence of a good statistical system in general, especially for price surveys and national accounts;
- A country that is not too large or too small in size; and
- Country's willingness to participate.

Using these criteria and based on the expertise of various members of the Advisory Group the following countries have been recommended for inclusion in ring country comparisons.

- OECD: UK, Japan, Estonia and Slovenia. Australia (reserve list)
 CIS: Russia, Ukraine and Kazaksthan. Czech Republic (reserve list)

ESCWA	Oman, Lebanon, Jordan
ECLAC	Brazil, Chile and Mexico
Africa:	Egypt, Kenya, Senegal and South Africa
Asia:	Hong Kong, Malaysia, Singapore and Sri Lanka. Thailand and the Philippines (reserve list)

4. Appendix on Capital Formation

Summary by Paul McCarthy

CAPITAL FORMATION

Construction

- An approach adopted by the OECD and Eurostat is to price bills of quantities for models, some of which are designed specifically for different regions
 - OECD/Eurostat have developed 15 models for 3 basic headings
 - countries generally price about 8 models each.
- The OECD/Eurostat experience is that using consultants and quantity surveyors is very expensive and they have reduced costs by excluding the very small building components.
- One possibility for the ICP is to cost basic elements across countries
 - can significantly reduce the number of items being priced but still cover 80% or so of total products by value
 - Eurostat/OECD say that these costs will differ per unit depending on the scale of the project
 - could cost the basic elements that would be included in projects similar in size to those specified by Eurostat/OECD
 - parities could be derived from the same basic elements across regions if all regions go in the same broad direction
 - the weights likely to be important in this exercise, which is the reason that Eurostat/OECD do complete models of construction projects
 - this “components approach” excludes margins which can be worth up to 25% of the total cost, and so there are some doubts about its validity.
- An alternative would be an input approach based on prices of materials and the wages of construction employees
 - but this also excludes margins.

- Comparability versus representativity
 - the prototype model does not pick up changes in the type of construction
 - the models are not representative of a structure actually found in any country.
- Proxy approach based on standard procedures
 - pick major components such as building foundations, electrical work, plumbing etc.
 - David Roberts noted that comparability problems could arise from the effects of having different relativities for the quantities.
- A reason for not calculating PPPs for individual components is that businesses often “front load” tenders to improve cash flow so the early stages of the project are over-costed while later stages are under-costed.
- In summary, there are 3 broad alternative approaches that could be considered
 - I. a model approach, in which quantity surveyors price full bills of quantities
 - II. a restricted model approach in which subsets of the specifications are priced
 - III. a basic input cost approach.
- Linking would be done at the basic heading level.
- The Global Office would have to be responsible for developing the bills of quantities for developing countries to maintain as much consistency as possible between regions, although it may turn out that the bills will differ by region.
- The Global Office has budgeted \$300k (\$150k in 2004 and \$150k in 2005) for setting up construction models
 - some regions also have funds for this purpose.
- **Recommendation:**
 - Separate specs will be needed for urban/rural
 - urban/rural differences within a country can be larger than those between countries for rural areas.

- SPDs for construction are currently being developed in Africa based on a restricted set of materials.
- Statistics Canada intends to do the same for Latin America and is due to provide a report by March.
- **Recommendation:**
Split basic headings into urban/rural dwellings and use an input cost approach for rural.
- Linking issues will have to be considered as part of the ring comparison.
- An OECD/Eurostat type approach can be used for urban dwellings.
- **Action:** Reports for Africa and Latin America will be distributed to the TAG when they become available in March.
- Specs for houses are available in UNSD from previous rounds of ICP
- **Action:** The Global Office will obtain these from the UN.

Machinery and equipment

- The May 2003 TAG recommended that exchange rates be used for basic headings dominated by imports and a “standard approach” be used for other basic headings
 - Eurostat has tested this approach for Luxembourg using the structure of relevant components of imports and the results are promising.
- A potential problem arises in obtaining expenditures for each basic heading
 - may need to respecify basic headings because they are too OECD-centric.
 - **Action:** The Global Office will follow up with Peter Hill
 - need to examine the impact of mark-ups
 - track prices of imports from f.o.b. to final consumer (check with national accountants whether they apply mark-ups in a commodity flow framework)
 - apply mark-ups to exchange-rate based price.
- SPDs have to be set up to cover machinery for both large and small countries.
- An exchange rate approach could also be used for imported second-hand equipment
 - high tariffs in some countries can affect imported goods
 - **Action:** The Global Office will investigate.

- Chapter 9 of the ICP Manual will have to be rewritten to incorporate the above suggestions
Action: The Global Office will arrange for this to be done.
- **Decision:** Exchange rates will be applied to net trade.
- **Decision:** For inventories, reference PPPs will be applied to starting and ending balances of stocks.
- **Decision:** Reference PPPs will be used for valuables.
- All regional offices will have to develop SPDs for equipment for which the traditional approach is being adopted
Action: The Global Office will coordinate this between all regions once Africa has finished.
- Pictures are required for all products.
- The task of developing specs for equipment is likely to be quite time consuming. For example, it takes Eurostat about 6 months to update its existing list.
- Guidance will be required by countries on the validation process
Action: Details will be incorporated in chapter 9 of the Manual.
- **Action:** Kim Zieschang will contact the BLS regarding their specs for equipment.

5. Appendix on Timing

Summary by Alan Heston

Timing Issues

The TAG noted a number of questions affecting the timeline for carrying out ICP price collection that are quite difficult to predict in advance. These uncertainties generate tradeoffs between maintaining the momentum in the regions and countries and the overall quality of the data collected. Some uncertainties discussed were:

1. The regions are generating their product lists for food and clothing beginning pricing in July, with Latin America preferring an October/September start. These product lists are within the SPD framework. The three question marks here are the Global SPDs, translations, and testing of the modules of the Tool Pack.

a. Global SPDs: Within an SPD, at least for this round, it was important for the Global Office to permit regions to introduce new products into the initial list to appropriately internationalize the SPDs. If the Global Office was to maintain control of the process of the introduction of products within an SPD, a region would have to send a change to the Global Office, have it added to the possible products, and send it out again to all the regions. It became clear that this would be a cumbersome process in which the Global Office was likely to become a bottleneck.

However, this means that the regions may modify SPDs to better reflect their markets and the Global Office, the world SPDs must in turn be modified to incorporate changes from each region. This means that the Global Office will not be able to develop a final version of the SPDs for ICP 2004 until perhaps summer, 2004. And this will work if; the Latin American list is available at that time; if Eurostat has been able to complete mapping items they are pricing to SPD codes and modifying those SPDs as necessary; and if there are no big surprises for the Global Office, probably a reasonable assumption.

b. Translation Questions: Work is going forward on translation of the Tool Pack into Arabic, French, Spanish, Chinese and Russian. This will be essential for several of the regions and for supervisory personnel in the countries who will be overseeing price collection. It is not anticipated that this will be a problem, though as discussed under c. below, the software has not been tested.

There remains the question of translation of the item collection forms for countries into the language of the collectors. This is clearly a task that will vary across regions and countries, but probably a necessary task in many countries in Africa and some large countries, like Brazil. One question here is back translation; that is, how to make sure that the translation from say English to Swahili was done so that a back translation in fact would yield the item description in English. Unless back translation is carried out, there is not assurance that pricing was done for the same item across countries. This is a necessary country task that may well affect the beginning date of price collection but the impact at this time is not easy to anticipate.

c. Tool Pack Testing: The SPD is stand alone software containing a set of all SPDs and the capability for regions to change SPDs to reflect local markets, for example adding a new brand or package size. The SPD software allows creation of individual product specifications from a given SPD and to produce a set of country recommendations within each region with respect to modify product specifications.

The Tool Pack has two modules. The Price Administration Module (PAM) is designed to import Product Specifications from the SPD software. Each country will supply a mapping of products to outlets, locations and collectors. When this information is supplied to the PAM it is transferred to the Price Collection Module (PCM).

The PCM prints the forms for price collection in one of the six languages mentioned above. If countries require local languages for their collectors they will need to supply this to the PCM, and it will produce forms in the language of the collector, retaining headings in the relevant international language. Outlier checks are performed

within the PCM. When these have been completed, the price observations are moved to the PAM. The PAM will prepare Quaranta Tables and will also have capabilities for aggregating the price data to heading parities and the like.

Testing of the SPD software has been carried out in the regions for a number of months. The PCM mapping function and various functions of PAM have been tested by the developers. Training in the use of the Tool Pack is being carried out in the regions including the various data validation tasks. Independent tests of the Tool Pack are to be carried out by Statistics Canada beginning in February, 2004. Additional tests are also planned in Spring 2004 in other countries. The Global Office does not anticipate that there will be major changes in the PAM or PCM modules as a result of these tests. However, the TAG noted the received view that development of most software packages typically involves changes as the result of tests on real data by users not associated with the software development. Likewise, translation of the SPDs from English into the 5 other international languages has not yet been completed. And thus far there has been no testing of the Tool Pack in actual use in languages of price collectors other than the six international languages.

Conclusion: Maintaining July for initial pricing as a target date seems desirable. At the same time it should be recognized that for the reasons discussed above this objective may not be realized in all countries and regions now planning a July start. Should such delays occur it will move the pricing closer to 2005 as a reference year. The TAG noted that delays would have a negative impact on the timetable but that they would have two positive effects. These are: a. any delay would reduce the need to extrapolate the country prices over time and b. delays may put the OECD exercise for 2005 on the same year as the global comparisons.

Action Items: 1. The Global Office and Regional Coordinators need to assess the time required for translation and back translation of the collection forms into the languages of the price collectors in the various countries and the results of independent testing of the Price Administration and Price Collection modules of the Tool Pack and to report the findings to the Executive Board and TAG as they become available..

Recommendation: The Global Office should continue a July start-up for pricing to begin in Africa and Asia, recognizing that there are uncertainties with regard to completion of the Global SPDs, translations and back translations of the product descriptions, and testing of the Tool Pack.