14. Publication, Dissemination, and User Relations

A. Introduction

14.1 As discussed in Chapter 3, the XMPI is an important statistical series for monitoring inflation and assisting in the measurement of GDP at constant prices. It follows, therefore, that the XMPI must be published, and otherwise disseminated, according to the policies, codes of practice, and standards set for such data.

14.2 The XMPI, therefore, should be

- Released as soon as possible (noting the tradeoff between timelines and quality),
- Made available to all users at the same time,
- Released according to pre-announced, credible and independent timetables,
- Released separately from ministerial comment,
- Made available in convenient form for users and include analysis of the main contributors to overall change,
- Released by a single agency. If, for example, some institution such as the Central Bank publishes unit value indices it can undermine the efforts of statistical agencies doing surveys.
- In accordance with any legal requirements including the level of classification.
- Open to criticism and willing to adjust or expand to cover any new activities and stay relevant.
- Accompanied by any issues concerning the quality of the indices.
- Accompanied by methodological explanation to maintain transparency and advice as to where more detailed metadata can be found, and
- Backed up by professional statisticians or economists who can answer questions and provide further information.

14.3 Above all, the XMPI should meet the United Nation's (UN's) *Fundamental Principles of Official Statistics*, which is published in several languages on the website of the UN (www.un.org). The *Principles* refer to dissemination and to all aspects of statistical work. In addition, the data dissemination standards developed by the IMF should be reviewed and followed by statistical offices. These and other standards are discussed in this chapter.

B. Types of Presentation

B.1 Time series presentation of level and change

14.4 It is common to give prominence to indices that show changes in aggregate prices between the month or quarter for which the most up-to-date data are available, the change from the same period one year earlier, and the one-period change. It is also usual to compare the annual change with the annual change shown one month or quarter previously. The model presentation in section B.6 provides examples of these.

14.5 The arguments for the first presentation shown in the example are as follows. The 12-month comparison provides an indication of price changes in a reasonably long time frame by referring to periods that are unlikely to be influenced by seasonal factors. The one-month change might be one-off changes in either of the two months that can have an influence on the index.

14.6 Data on the one-month change, especially for some components of the XMPIs, need to be treated with caution to avoid, for example, suggesting that a 2 percent change in one month is similar to a 24 percent change over a year. (See the second presentation in the example.)

14.7 It is normal practice to set a reference period (usually a year, though a shorter period, such as a month, may be used) for which the price index is set or based at one hundred. Index numbers for all subsequent periods are percentages of the value for the reference period. Indeed, this index is used as the basic figure from which the other changes are calculated.

14.8 The base period is generally considered to be the period with which other periods are compared and whose values provides the weights for the price index. However, the term "base period" is not used in a precise and consistent manner. Three types of "base periods" may be distinguished. First, the *price reference period*, that is, the period whose prices appear in the denominators of the price relatives used to calculate the index. Second, the *weight reference period*, that is, the period, usually a year, whose values serve as weights for the index. However, when hybrid expenditure weights are used in which the quantities of one period are valued at the prices of some other period, there is no unique weight reference period. Finally, the *index reference period*, that is, the period for which the index is set equal to 100. The three reference periods may coincide but frequently do not. The status of the reference period should be made clear in the methodological explanation. For technical reasons, a reference period that is abnormal (for example, in terms of absolute or relative price levels, industry structure, etc.) should be avoided. In order to maintain the usability of the indices, the reference period should be changed infrequently. Under some circumstances, namely if index values have moved too far away from one hundred, consideration should be made to rebase the index series to one hundred in a more recent period.

14.9 Generally if an index series is discontinued and then resumed, the series should be disseminated as a new series, based equal to one hundred in the period it is resumed, and any historical data previously published should be removed. Otherwise, the index movement over the period the index was not published would be derivable. However; exceptions might be made in cases where the index is discontinued for only a short period of time (less than a year), such as with a commodity that only traded during part of the year.

14.10 These indices are usually shown to only one decimal place, as are the other changes mentioned here, so figures have to be rounded.[1] Rounding in these circumstances can,

[1] Recent work by the U.S. Bureau of Labor Statistics has suggested the desirability of rounding to three decimal places rather than one.

however, give a false impression of comparative change and must, therefore be explained, especially where price changes are small.

14.11 Care also has to be taken to differentiate between changes in index points and percentage changes between one period and the next. If in one month the index is, for example, 200 and the following month it is 201, then the change can be described as one index point (above the previous level of 200) or as an increase of half a percent. Both measures are valid, but they require careful specification.

14.12 XMPIs are, by definition, indices; they are therefore, not a level or a series of absolute changes in prices. Nevertheless, in the process of presenting the indices, average prices are sometimes calculated for categories of goods and services. This would be particularly useful for exports or imports of major commodities such as coffee or oil. It is thus possible to publish some average prices for groups of goods or services and also to show the upper and lower bands of the prices from which the averages have been calculated. Some users of the index find average price levels useful, and they should be made available to researchers who may want them.[2] It must be noted, however, that price level data may be less reliable than the price change indices for any given group of goods or services because of the sampling strategies used. This is especially true in the case of XMPI indices where, in general, sample size is smaller than the samples used to derive CPI and PPI indices. Further, quality changes can distort comparisons over time.

14.13 So far this chapter has referred to only the broadest aggregates without reference to subgroups of prices or to variants of the XMPIs that may include or exclude certain items. Nor does it refer to price indices with underlying concepts which may differ from those underlying the XMPIs. Some of these considerations are discussed later in this chapter.

14.14 All of the above can refer to the most common form of the XMPIs, which is usually intended to refer to the average price change in a specific country and to include high coverage of import and export prices in that country. But it can equally refer to countries or regions of origin (for imports) or destination (for exports), or to subcomponents (such as raw materials versus manufactured goods), different commodity groups, or related or alternative measures of price change. Subaggregate indices are discussed in Section B.5.

B.2 Seasonal adjustment and smoothing of indexes

14.15 The treatment of seasonal commodities and the estimation of seasonal effects are discussed in Chapter 23. In the present chapter, the dissemination of such adjusted or smoothed series is discussed.

14.16 Many economic statistics are shown seasonally adjusted as well as unadjusted. Normally however, XMPIs are not seasonally adjusted. In cases where there are seasonal factors, statistical series are frequently recalculated using the latest data. As a result, seasonally adjusted series can be retrospectively revised. Unadjusted XMPIs are not necessarily revised, although in some countries, there is an explicit revision policy to publish

[2]When releasing data on average prices, confidentiality requirements must be maintained. See Section C.4.

a preliminary XMPI and then revise that index over a fixed period (usually one-three months). This occurs because the entire sample is not received by the index cutoff date, so the index is released on a preliminary basis; but, after a few months, practically the entire sample is received and a revised index is published. XMPI indices are more commonly revised than CPI or PPI indices because of generally smaller sample sizes which lead to a greater sensitivity to late data.

14.17 In comparing one month with the same month a year earlier, it is implicitly assumed that seasonal patterns are much the same from one year to the next. However, there may be exceptional months when the usual seasonal change is advanced or delayed, in which case the advance or delay should be identified as one of the likely contributors to a change in the XMPIs or one of their components.

14.18 Changes over periods of less than a year are subject to seasonal influence. To differentiate them from other factors, it is necessary to try to quantify seasonal effects and identify them as contributing to changes in the index.

14.19 Although the XMPIs themselves are not seasonally adjusted normally, some variants of the XMPIs may be seasonally adjusted (such as the XMPIs for raw materials or agricultural commodities) because they are more subject to seasonality and can be revised retrospectively if necessary. If such variants are seasonally adjusted, it is important to explain why.

14.20 Seasonal adjustment usually leads to a smoother series than the original unadjusted one. But there are other ways of smoothing a monthly series, such as using three-month moving averages. However, statistical offices do not usually smooth the XMPI series in their published presentations. Import and export price changes are not usually so erratic from month to month that they disguise price trends. To the extent that there might be an erratic change, the compilers of the index can usually explain the reasons for any sharp fluctuation.

14.21 In cases where any seasonally adjusted or smoothed XMPI series are published, it is important to publish the unadjusted series as well, so that the effects of the adjustment process are clear to users who may wish to know what has happened to the actual transaction prices and whether the changes can attributed to seasonal factors. Similarly, a full explanation should be given for the reasons why a particular seasonal adjustment procedure is followed.

B.3 Analysis of contributions to change

14.22 XMPIs are aggregates of many different commodities, whose prices are changing at different rates and possibly in different directions. Many users of the index want to know which commodities have contributed most to changes in the aggregate index and which prices may be out of step with general price trends. The index compilers are well placed to provide analyses of the contributions to the price change in the current press release and current issue of the XMPI publication.

14.23 Sufficient detail should be made available to the users of the index, so they can see for themselves what has happened to various groups of prices. However, because of the time

constraints facing many users, the statistician should indicate which prices are the main contributors to the aggregate XMPI and which ones may be most different from the aggregate. They can be presented in the form of tables and charts, so that trends may be compared.

14.24 Similarly, statisticians should indicate any reasons for price changes that may not be immediately obvious but are nevertheless discernable from the published figures. For example, if there had been a sharp price rise or fall one year earlier, then it will affect the current year-on-year change, regardless of what happens to the current period prices.

14.25 Analysis of contributions to change should also refer to any preannounced price changes, or major changes since the last price-reporting date that will affect the outlook for the index over the following months.

B.4 Economic commentary and interpretation of index

14.26 In undertaking analysis such as that described above, statisticians must be objective, so that users of the data may differentiate clearly between the figures themselves and the interpretation of them. It is, therefore, essential to avoid expressing any judgment of the policy causes or possible implications for future policies. Whether the figures should be seen as good news or bad news is for the users to decide. The statistician's role is to make it as easy as possible for users to form their own judgments from their own particular economic or political perspective. Care should also be taken when deciding to mention the reasons for index movement when those reasons involve unpublished micro data. In general, if the price movement in any unpublished series is general knowledge, for example a price change for something traded in the commodities market, then it is all right to include that in the overall analysis of price movement. If the price movement in unpublished micro data is not common knowledge, it should not be mentioned in any analysis.

14.27 There are several ways of avoiding any apparent or real lapses in objectivity in the analysis. The first and perhaps most important way is to publish the figures independently of any ministerial or other kind of political comment. Another is to be consistent in the way the analysis is presented. That is to say, the data should be presented in much the same format every month (see Section B.6). For example, tables and charts should cover the same periods every month and use the same baselines.

B.5 Presentation of related or alternative measures

14.28 One type of alternative index is to produce XMPIs in foreign currency terms rather than the home currency of the country. Movements in foreign-currency import indices can be used to observe fluctuations in revenues received by exporters, while foreign-currency export indices show the price movement of exports from the perspective of foreign buyers. XMPIs are derived by using average exchange rate indices to convert the home currency indices into foreign currency terms, much the same way an exchange rate is used to convert an item price from one currency to another. Average exchange rate indices measure the change in the price of trade-weighted baskets of currencies against the home currency.

14.29 A second example of an alternative index is the XMPI by locality or origin (for imports) or destination (for exports), rather than commodity type. Generally indices of this type are aggregated up at the commodity level of detail, but broken out by various countries or regions of interest. These index types can be published at an aggregate level of detail for each locality or be sub-divided by commodity type or industry. These indices could also be published in foreign or local currencies. Generally, however, unless separate provisions are made in the sample for the import or export locality, there are limitations as to the robustness of these indices below aggregate levels.

14.30 Another alternative index is terms of trade indices which measure the ratio of an export price index over an import price index. These could help build interest in XMPIs by providing a measure of a country's economic welfare. Terms of trade indices could be presented by commodity or industry as well as by major trading partners. The indices could be published in foreign or local currencies. Similar to producing indices by locality of origin or destination, one limitation to producing terms of trade indices by trading partners would be the size of the sample and whether separate provisions are made to sample for import or export localities.

14.31 In addition to producing XMPIs using a standard index formula, data can also be published using alternative index formula. If the primary XMPIs are derived using a Laspeyres formula, retrospective indices can be produced using either a Fisher or Törnqvist formula as an alternative. Although such indices would not be as timely, that should not be an issue if these indices served as a supplement to the Laspeyres indices. These could be useful to analyze any upper-level substitution bias existing in the primary indices.

14.32 Further examples are XMPIs for services. No country, at this time, has complete coverage of all goods and services in their XMPIs. Many countries started by developing XMPIs for goods and then progressively added service activities over time. This results in the availability of a range of XMPIs for different sectors of the economy. However, not of all sectors of the national economy have their own XMPIs.

B.5.3 Subaggregate indices

14.33 Countries commonly calculate price indices for hundreds of commodities (for example, bread or footwear) based on thousands of individual price records. Therefore, the number of possible subaggregates is quite large.

14.34 One kind of subaggregation is by groups of commodities (products) that, when aggregated, comprise the whole of the XMPIs. An important consideration here is the relationship between different commodities within the subgroups. For example, an index may be presented for food; then, under the "food" heading, indices may be presented for subgroups such as breads, cereals, vegetables, et cetera.

14.35 Another type of aggregation is by industry. Indices for each four-digit industry aggregate to three-digit, two-digit, and one-digit groupings. For each aggregate grouping, there are subgroups that represent the industries within the grouping. Another important consideration is that the XMPIs by industry and the XMPIs by commodity produce the same

aggregate price change in the overall XMPI, so that the weighting structure used in the commodity and industry aggregations is consistent.

14.36 One of the first considerations in presenting such subaggregate data for related commodities or by industry is consistency over time. That is, there should be a set of subaggregates for which indices are calculated and presented each month. Users commonly attach great importance to being able to continue their analysis from month to month.

14.37 Another consideration is international standardization of the division of the index into groups of goods and services, which enables comparison among countries. Some countries also have their own subaggregate groupings that may predate the current international standard. The generally accepted international standards for the presentation of subaggregates are the International Standard Industrial Classification (ISIC revision 3.1), the Harmonized Commodity Description and Coding System (HS), the Standard International Trade Classification (SITC), and the Central Product Classification (CPC). These classifications are important because they define groups of industries or products (commodities) by the technology used for production or the purpose for which they are produced (for example, manufactured commodities or transport services). Many national classifications are derived from these international standards by adapting them to local circumstances. Locally, it is important to identify and include certain modifications that make the classification more useful and better understood within the country.

14.38 A further type of subaggregate index is an index that is essentially the same as the XMPI except that it excludes certain items. The underlying inflation index discussed earlier is an example. In the presentation of all related or alternative measures, the concepts and definitions should be made clear, and it is advisable to give the reasons for the alternative presentation. Most importantly, it should not be suggested that the subaggregate index is more meaningful than, or superior to, the XMPIs themselves.

B.6 Model press release, bulletin, and methodological statement

14.39 An example of a press release for a fictitious country appears at the end of this chapter. The example only provides text and charts. It does not include data tables that would normally be attached to support the analysis in the text. Other formats are possible; for example, it might include a seasonally adjusted index.

14.40 Note that the example press release contains the following information:

(i) Details of issuing office,
(ii) Date and time of release,
(iii) Percentage change in new month versus a year ago,
(iv) Comparison of percentage in a new month with that of the previous month,
(v) Information on commodity (product) groups that contributed to change and on any significant component price,
(vi) Reference to where more information can be found, and
(vii) Any announcements pertaining to changes in the presentation of the data such as the addition of new series or changes to the reference base period.

14.41 Note also that

- No judgments are offered on policy or economic reasons for the price change, and
- No judgment is given on whether the change is good or bad.

14.42 What is not obvious from just one example is that the format should be the same in all releases from period to period. Using a consistent format is important to avoid appearing to indicate a preference. A format with a selected starting date, for example, might indicate a preferred trend.

14.43 Other pages of the press release should give the monthly or quarterly indices (reference period that equals one hundred) from which the percentage changes are calculated. Similar indices should also be given for major groups of goods and services. Charts may also be used to illustrate, for example, which prices have contributed most or least to the overall XMPIs.

14.44 If any other import and export price variant is also being published, then the differences between the indices should be briefly explained, including any methodological differences. Variants that require explanation include unit value indices, indices by locality of origin or destination, or indices in foreign currency terms. More detailed explanation can be given in handbooks.

14.45 In addition, the press release should include a short note on methodology similar to the following:

What are the Import and Export Price Index (XMPI) measuring and how is it done?

For example:

"The all items Import Price Index (MPI) is an overall measure of the change in prices received by residents of other countries from residents of the home country. The all items Export Price Index (XPI) is an overall measure of the change in prices received by residents of the home country from residents of other countries. Both are valued at border transaction prices. The XMPI is a key indicator of price movements that contribute to inflation. It measures the average change in prices, from period to period, of the goods and services traded with residents of other countries.

Prices are collected from establishments that import or export goods and services. The trade value for these goods and services is derived from a regular census of establishments. The prices and trade values are then combined to calculate the price indices for divisions and groups of industries, and for the all items index.

The overall index, with all of its component indices, is published each month in our *XMPI Bulletin*. The *Bulletin* also contains more information on the methodology used in calculating the XMPI. A small booklet can also be made available. For a detailed account of the methodology used in calculating the XMPI, the NSO has published the *XMPI Technical*

Manual. For more information on these publications and how they may be obtained, please refer to our website at www.nso.gov.cy or call the numbers listed on the front of this press notice."

(Press release example goes here)

B.7 UN Fundamental Principles of Official Statistics, IMF data standards and ILO standards

14.46 Many international standards apply, in general terms or specifically, to the XMPI. One very general but fundamental standard is the UN's *Fundamental Principles of Official Statistics* (1994). It is available in several languages on the UN's websites. It refers not just to dissemination but to all aspects of statistical work.

14.47 The introduction to this chapter lists some of the broad principles that are reflected in many of the international standards in some form.

14.48 IMF standards are particularly pertinent in this context because they are specifically aimed at dissemination issues. There are two that refer to statistics, including import and export price indices. One is The General Data Dissemination System (GDDS), and the other is the Special Data Dissemination Standard (SDDS). The GDDS provides a general framework with some specific indicators defined as *core* and others defined as *encouraged*. The SDDS is based on the GDDS framework but is more demanding and applies only to those countries that choose to subscribe to it in writing to the IMF Board. Both are available on the IMF Data Dissemination Bulletin Board (www.ddsb.org).

14.49 The GDDS has several dimensions for dissemination standards. Under the heading of *quality*, the GDDS refers to the necessity to provide information on sources, methods, component detail, and checking procedures. Under *integrity* it refers to declared standards of confidentiality, internal government access before data release, identification of ministerial commentary information on revision, and advance notice of changes in methodology. Under *access by the public*, it refers to the need for preannounced release dates and simultaneous access for all users. In the tables of data categories, it refers to the XMPI as *core indicators* that should be issued monthly or quarterly, within one to two months of the data collection date. All of these standards are reflected in the present manual. The ILO also has guidelines on the dissemination of labor statistics on its ILO website (www.ilo.org).

C. Dissemination Issues

C.1 Timing of the release

14.50 The XMPI should be released as soon as possible, but it is equally important to release the index according to a strict timetable with an unambiguous embargo time to ensure simultaneous access. It is also important to publish the timetable of release dates as far in advance as possible. Having a fixed release date, published well in advance, is important for several reasons. First, it reduces the scope for the manipulation of the release date for political expediency. Second, it gives confidence to users that the release date is as early as possible and has not been delayed (or brought forward) for purely political reasons. A third advantage is that users know when to expect the figures and can be prepared to use them.

14.51 Ideally, the XMPI—complete with any essential metadata—is released simultaneously to the press, government users and all others. Also, some statistical offices

bring the journalists together, perhaps half an hour before the official release time, to provide them with the printed press release, explain the data, and answer any questions. Then, at release time, the journalists are permitted to transmit the figures to their offices for wider distribution.

C.2 Timeliness of the release versus data accuracy

14.52 There is a basic trade off between accuracy, assuring the credibility of the data by maintaining the high quality of the indices, and timeliness, releasing the data in a timeframe that is useful to data consumers. Maintaining accuracy means waiting to publish indices until enough data has been reported and reviewed. Timeliness means releasing the indices as close as possible to the reference period.

14.53 The accuracy of the index is particularly important because so much depends on the XMPI. In addition to the economic policy implications of the index, its components are used in many countries as deflators in the foreign sector of national accounts to derive constant price GDP; they are also used in a variety of commercial contracts.

14.54 It follows that although timeliness is important, the timetable must allow time for the data to be properly prepared and thoroughly checked. If a revision policy is in effect or the XMPI series is revised on an ad hoc basis, then the policy or the changes must be fully described and explained when the new data are released. If there is any methodological change, then users should be advised several months before the change occurs.

C.3 Confidentiality vs. Accessibility

14.55 For administrative data from customs authorities the data provided to the statistical authority is a secondary source. Data from establishment surveys are, however, obtained under assurances of confidentiality given by the statistical authority. There is a trade off between confidentiality, the assurance given to data providers that the micro data they provide won't be released to anyone else without their permission, and accessibility, making as much micro data as possible available to data customers. Confidentiality is important because data providers need to feel confident the micro data they produce won't be revealed to anyone outside the agency. Yet if the data is to be useful to researchers, it needs to be made available.

14.56 Although as much data as possible should generally be made available to users as explained above, there are reasons why confidentiality is important in most instances.

14.57 First, most data supplied by establishments are provided on the understanding that the data will be used only for the purpose of aggregation with other data and will not be released in any other form. This can be especially important when the data are supplied voluntarily, as they often are. Most statistical offices make a pledge that the price data are strictly confidential or confidentiality requirements may be included in statistical legislation. In such cases, the statistical office will not provide the information to any other organizations or publish the data in a manner that would reveal the individual respondent's information. Many agencies have rules about the minimum number of establishments (for example, three or more) that must report before data can be published or released. In addition, many statistical

offices have rules about dominant enterprises within an industry (for example, 75 percent of production), so that data for large firms are not divulged without the firm's consent.

14.58 Second, only a sample of particular commodity transactions is priced as representative of a much larger group of commodities. If it were known which varieties are included in the index and which are not, then it might be possible to bias components of the index by manipulating a small number of prices.

14.59 Even the knowledge that price data are or might be collected on one particular day in the month could enable some component price indices to be biased by respondents choosing to change prices on a particular day. However, this provides only a short-run advantage and cannot be sustained.

14.60 With the XMPI, as with other statistics, users should be allowed access to as much data as possible for two main reasons. First, some users find the detailed data very useful in their analysis. Second, access to the detail increases the understanding of and the confidence in the data.

14.61 There are, however, limits on the amount of data that can be made available to users. One constraint is confidentiality. Another is the limited volume of data that most users can absorb. Still another reason is the cost of publishing large amounts of data that few users need.

14.62 In general, the XMPI and its major components are deemed to be of such wide importance that they are freely available through press releases and statistical office websites. More detailed data are often published only in statistical office bulletins and other media, and users are charged fees so the statistical office can recover some of the dissemination costs. Similarly, special analyses made at the request of particular users are usually charged using a rate commensurate with the work involved.

14.63 In some cases, additional micro data might be disseminated to researchers beyond what is released to the general public. However; researchers receiving unpublished micro data should be required to sign confidentiality agreements that specify they will not give out or publish any micro data beyond what is available to the public.

C.4 Electronic release format - utilizing technology versus fairness

14.64 The issue of how to utilize electronic release formats is the trade off of fully utilizing the available technology to disseminate data and being fair to all users, some of which might not have access to receive the data in the same timeframe as others. Statistical agencies should seek to disseminate data to customers as quickly as possible and in formats that provide the greatest flexibility for users. However; it is also preferable that data be made available to all users at the same time, yet not everyone has the same access to electronic means.

14.65 The World Wide Web has several advantages as a dissemination medium. For the data producer, distribution costs are relatively small, involving no printing or mailing. As soon as the data are on the Web, they are available to all Web users at the same time. Putting

a large amount of data on the Web costs little more than doing the same with a much smaller amount. Web users can download the data without rekeying, thus increasing speed and reducing transmission or transposition errors.

14.66 One disadvantage is that all data users do not have equal access to the Web. Another is that users may go straight to the data without reading the metadata that may be crucial to understanding the data. Also, it may be as easy for a user to disseminate the XMPI widely by electronic means as it is for the statistical office, thus enabling users to preempt the statistical agency by providing statistics without the metadata that may prevent a misunderstanding of the figures. Another disadvantage is the web makes it more difficult to track who the users of the data are.

14.67 Care must be taken to ensure that the XMPI is available at the same time to all users regardless of the dissemination medium used.

C.5 Revision policy – using all data versus the stability of initial measures

14.68 The XMPI may be subject to revision, depending on the data collection method used and the timeliness of source price data. XMPI data differ from CPI data which are collected though personal visits where the source prices are practically all available by the end of the month. For that reason, it is rare for the CPI to be revised after first publication. Most XMPI source data are collected by a mail survey, where the returns arrive more slowly and may not all be available at the time of first publication. In such instances, the statistical office may institute a revision policy in which the monthly XMPI is first published on a preliminary basis; then revised for one to three months when practically all sample returns have been received. If data are revised, it is important to have a transparent and set policy as well as a published revision calendar.

14.69 Revising indices is also more important for XMPIs because the sample size is generally small relative to either the CPIs or PPIs, obviating the need to use the maximum available data to calculate indices (See the discussion in the following section).

C.5 Limitations on data dissemination due to sample size

14.70 Generally, due to budgetary constraints, the sample size for XMPIs is much smaller than the samples used to produce CPIs and PPIs. The size of the sample puts limitations on both the number of published indices and the level of aggregation.

14.71 The smaller sample size also makes XMPIs more sensitive to data outliers. If possible, measures of standard errors should be included with the indices. Standard errors are useful measures to include with any indices, but are especially important in cases where the sample size is small.

14.72 XMPIs are generally sampled by commodity or industry type rather than by locality of importation or exportation. Unless separate provisions are made, there are limitations as to the robustness of indices disaggregated by locality below aggregate levels of commodity types.

D. User Consultation

D.1 Explanation of different uses of XMPIs

14.73 The different uses of XMPIs are discussed in some detail in Chapter 3. It is important to explain to potential users of the XMPI what are suitable uses and what are not. To this end, it is important to explain how the XMPI is constructed, in terms of its sources and methods (see Section D.2).

14.74 It is also important to make readily available explanations of alternative or subindices such as foreign currency indices, indicating how their uses are different from or supplement the uses of the XMPI itself.

D.2 Presentation of methodology

14.75 When the XMPI is published each period, users are anxious to see the main figures and to use them. They do not generally want to be burdened with explanations of the methodology underlying the data. Nevertheless, methodological explanations must be accessible to those who may want them and in forms that are comprehensible to users with different levels of expertise and interest.

14.76 Any significant changes in methodology must be fully explained, and users must be notified as far in advance as possible of the change being made.

14.77 In addition to a brief statement in press releases (see Section B.6), methodological explanations should be available on at least two levels. Nonexperts should be able to refer to a booklet that explains the history, principles, and practice underlying the XMPI and any alternative measures that may be available. A more thorough explanation of sources and methods should be readily available to those users who are sufficiently interested to use it. An example would be statisticians in training who may be new to working in the production of the XMPI. The information must also be kept up to date despite the pressures to devote time to the output at the expense of documentation.

14.78 As noted earlier, the ready availability of a full explanation of sources and methods is essential to confidence and trust in the XMPI.

D.3 Role of advisory committees

14.79 For a statistical series as important as the XMPI, it is essential that there is an advisory committee or set of committees that is representative of users and producers. There are many contentious issues in the construction of the XMPI. The role of an advisory committee is to consider and advise on issues contentious and otherwise. But perhaps its equally important role is *presentational*, that it provides evidence that the XMPI can be trusted and is not a tool of government propaganda.

14.80 In those countries where advisory committees have not been the norm, there may be a fear on the part of statisticians that by including nongovernment participants, their expectations may be raised beyond what the statisticians can deliver, thus increasing their

dissatisfaction. On the other hand, the inclusion of nongovernment users can lead to a greater understanding of the realities and practical constraints of meeting theoretical needs. This is the usual experience of statistical offices that already have advisory bodies that include representatives of all the major constituencies inside and outside government.

14.81 It is, therefore, important that the advisory committee should be composed of academics, employers, trade unions, and others who have an interest in the index from differing points of view. It is also important that its reports are made available to the public fully and without undue delay.

D.4 Presentation of issues concerning index quality

14.82 The XMPI may be regarded with suspicion at many different levels. As countries continue to move to more open economies, international trade is becoming an increasingly more important component of those respective economies. Therefore, unless the XMPI is expanded to cover more economic activities, it will be criticized for being less relevant than appropriate. Also, there may be criticism of the index because of suspicion that it does not keep track of newer types of goods and services or changes in the quality of commodities. In transition economies, there is also the concern about the ability of the XMPI to measure changes in trade patterns including newly emerging industries in the home country or the movement of existing industries abroad.

14.83 In the light of such suspicion, it is important for the producers of the index to be willing to discuss these issues and explain how they are being dealt with. As with other issues discussed here, the producers of the index must be open about their methods and the extent to which they can overcome the theoretical and actual problems that have been identified.

14.84 It follows that the statisticians who produce the index should publish explanations of quality issues, whether or not the quality of the index is being questioned currently.

E. Press release example

National Statistical Office of [name of country]

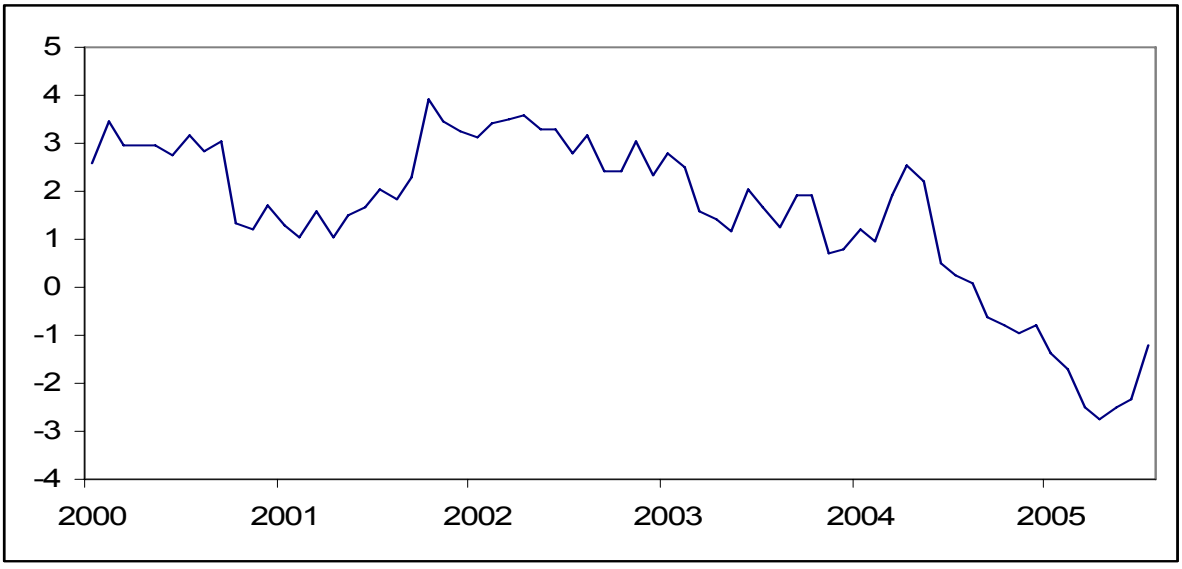
Friday August19, 2005
for release at 11:00 a.m.

IMPORT/EXPORT (XMPI)

JULY 2005: PRESS RELEASE

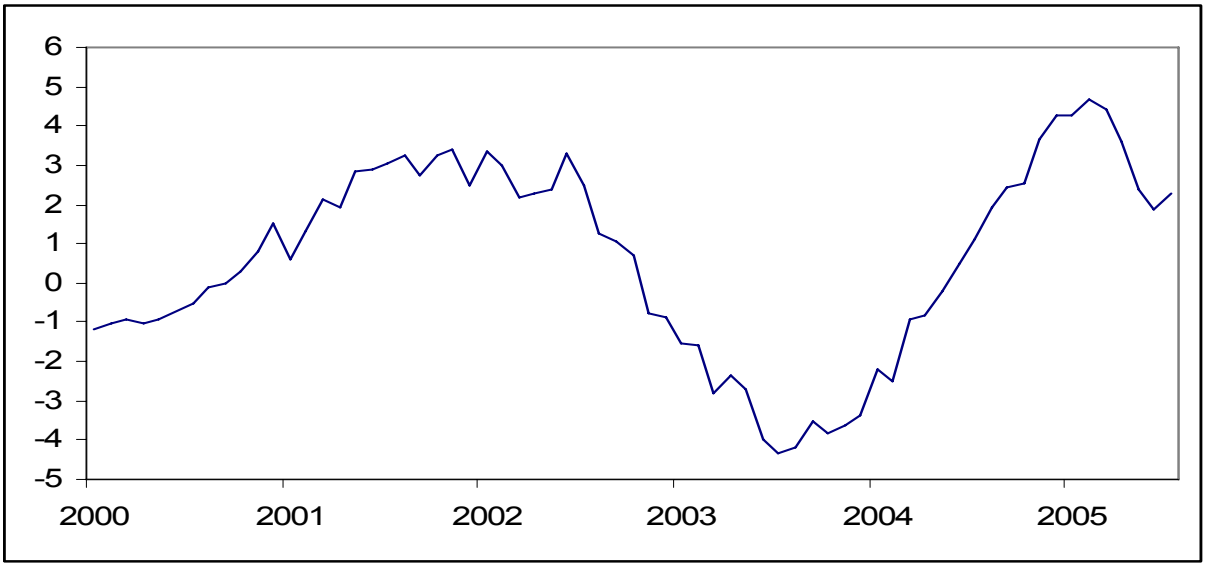
In July 2005, prices were 1.2 percent lower than in July 2004 for overall imports and were 2.3 percent higher for overall exports. These 12-month changes followed 12-month changes recorded in June (–2.3 percent for imports and +1.9 percent for exports) and May (–2.5 percent for imports and +2.4 percent for exports).

Chart 1. Percentage Change in the Import Price Index: 2000–2005
Relative to the Same Month of the Previous Year *[line chart]*



Main contributors to the overall 1.2 percent decrease
Over the past 12 months, import raw materials prices declined 3.3 percent, led by a 5.4 percent decrease in energy prices. In contrast, the import price index for import finished goods rose 0.9 percent for the year ended in July. Import food prices declined 1.0 percent over the past year.

Chart 2. Percentage Change in the Export Price Index: 2000–2005
Relative to the Same Month of the Previous Year *[line chart]*



Main contributors to the overall 2.3 percent increase

The price index for export raw materials declined 1.2 percent over the past 12 months as energy prices fell 2.3 percent over the period. Export finished goods prices rose 3.1 percent for the year ended in July. Over the past 12 months, export food prices increased 2.1 percent.

Current Period Changes

The price index for overall imports increased 0.5 percent in July from the June level, compared to a 0.7 percent decline the previous month. The increase was led by a 2.3 percent advance in import raw materials prices, which previously declined 0.9 percent in June. Food prices also rose in July, increasing 1.2 percent for the month. In contrast, the price index for import finished goods declined for the second consecutive month, decreasing 1.0 percent in July after a 0.2 percent drop in June.

Overall export prices rose 0.4 percent in July, a downturn from the 0.8 percent increase the previous month. Raw material prices also contributed to the July increase in export prices, rising 1.2 percent for the month following a 0.5 percent increase in June. The price index for export finished goods declined 0.2 percent in July after recording no change for the month of June. Export food prices increased 0.7 percent in June.

Chart 3. Percentage Change in the Import Price Index: 2000–2005
Relative to the previous month *[line chart]*

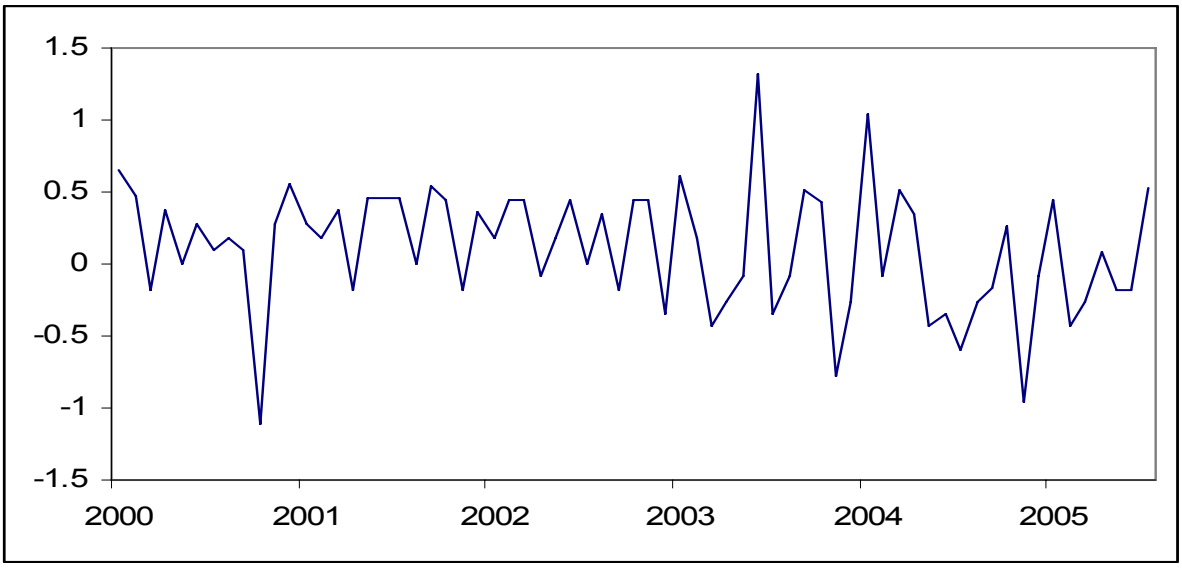
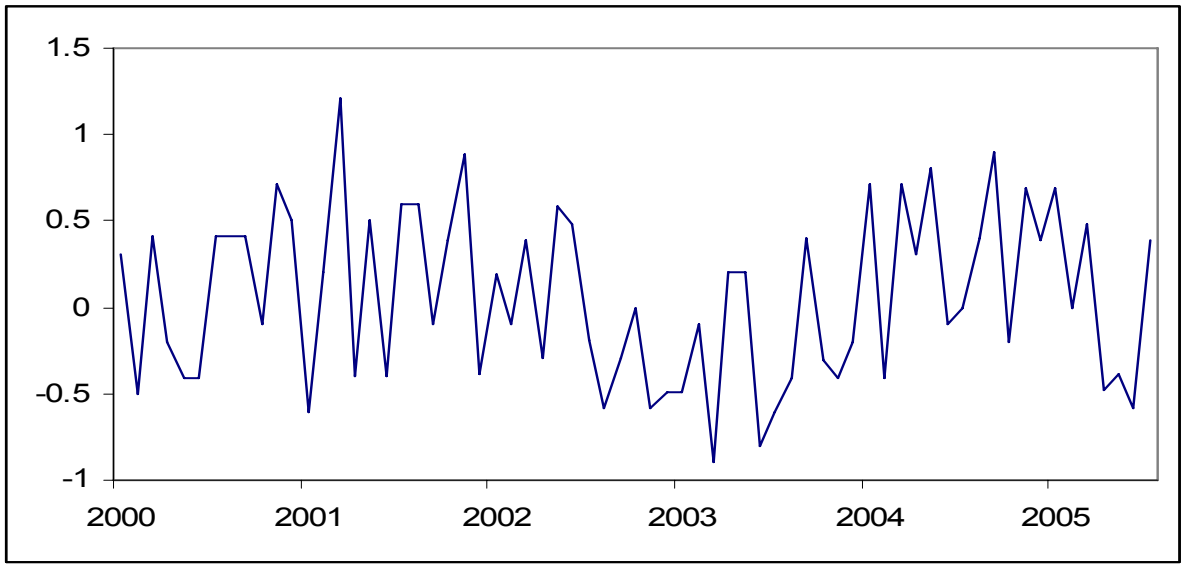


Chart 4. Percentage Change in the Export Price Index: 2000–2005
Relative to the previous month *[line chart]*



Issued by the National Statistical Office of Xxxxx address xxxxxx
Press enquiries 1 111 1111, Public Enquiries 2 222 2222 (name of a contact is helpful), Fax number, and e-mail address.
Background notes on the XMPI are given in the annex to this note.
More notes and details are given on our website at www.nso.gov.cy