

# How to Use the Consumer Price Index for Escalation

The Consumer Price Index (CPI) published by the Bureau of Labor Statistics (BLS) is a measure of the average change in the prices paid for a fixed market basket of goods and services purchased for consumption by the population covered by the index (either All Urban Consumers, CPI-U, or Urban Wage Earners and Clerical Workers, CPI-W).

The CPI, as the most widely used measure of price change, is often used in escalation agreements to adjust payments for changes in prices. The most frequently used escalation applications are in private sector collective bargaining agreements, rental contracts, insurance policies with automatic inflation protection, and alimony and child support payments.

The following are general guidelines to consider when developing an escalation agreement using the CPI:

*Define* clearly the base payment (rent, wage rate, alimony, child support, or other value) that is subject to escalation.

*Identify* the precise CPI index that will be used to escalate the base payment. This should include: The population coverage (CPI-U or CPI-W), area coverage (U.S. City Average, West Region, Chicago, etc.), series title (all items, residential rent, etc.), and index base period (1982-84=100).

*Specify* a reference period from which changes in the CPI will be measured. This is usually a single month (the CPI does not correspond to a specific day or week of the month) or an annual average. There is about a 2-week lag from the reference month to the date on which the index is released (e.g., the CPI for May is released in mid-June). The CPI's for most metropolitan areas are not published as frequently as are the data for the U.S. City Average and the four regions. Indexes for the U.S. City Average, the four regions, and five major metropolitan areas (Chicago, Los Angeles, New York, Philadelphia, and San Francisco) are published monthly. Indexes for the remaining 24 published metropolitan areas are available only on a bimonthly, semiannual, or annual basis. Contact the BLS address at the end of this fact sheet for information on the frequency of publication for the 29 metropolitan areas.

*State* the frequency of adjustment. Adjustments are usually made at fixed time intervals, such as quarterly, semiannually, or, most often, annually.

*Determine* the formula for the adjustment calculation. Usually the change in payments is directly proportional to the percent change in the CPI index between two specified time periods. Consider whether to make an allowance for a "cap" which places an upper limit to the increase in wages, rents, etc., or a "floor" which promises a minimum increase regardless of the percent change (up or down) in the CPI.

*Provide* a built-in method for handling situations that may arise because of major CPI revisions or changes in the CPI index base period. The Bureau always provides timely notification of upcoming revisions or changes in the index base. In addition, the Bureau offers detailed technical assistance when transition to a new measure is necessary.

## The CPI and escalation: some points to consider

The CPI is calculated for two population groups: All Urban Consumers (CPI-U) and Urban Wage Earners and Clerical Workers (CPI-W). The CPI-U represents about 80 percent of the total U.S. population as of 1982-84 and is based on the expenditures of *all* families living in urban areas. The CPI-W is a subset of the CPI-U and is based on the expenditures of families living in urban areas who meet additional requirements related to employment: more than one-half of the family's income has to be earned from clerical or hourly wage occupations. The CPI-W represents about 30 percent of the total U.S. population.

There can be small differences in movement of the two indexes over short periods of time because of slight differences in the spending habits of the two population groups (resulting in slightly different weighting) as measured by BLS during the period 1982-84. The long-term change in the indexes is virtually identical. Both indexes are calculated using measurement of price change for the same set of goods and services with the same specifications and from the same retail outlets. The CPI-W is used for escalation primarily in blue collar cost-of-living adjustments (COLA's). Because the CPI-U is more comprehensive, it is used in most escalation agreements other than COLA's.

The 29 local area indexes that BLS publishes are by-products of the U.S. City Average index. Local area indexes have a relatively small sample size, and, therefore, are subject to substantially more sampling errors. Local area indexes often exhibit greater volatility than the national index, although

long-term trends remain quite similar. BLS strongly recommends that users adopt the U.S. City Average CPI for use in escalator clauses.

The U.S. City Average CPI's are published on a seasonally adjusted basis as well as on an unadjusted basis. The purpose of seasonal adjustment is to remove the estimated effect of price changes that normally occur at the same time and in about the same magnitude every year (e.g., price movements due to the change in weather patterns, model change-overs, holidays, or end-of-season sales, etc.). The primary use of seasonally adjusted data is for current economic analysis. In addition, the factors that are used to seasonally adjust the data are updated annually and seasonally adjusted data that have been published earlier are subject to revision for up to 5 years after their original release. For these reasons, the use of seasonally adjusted data in escalation agreements is inappropriate.

Escalation agreements using the CPI usually involve changing the base payment by the percent change in the level of the CPI between the reference period and a subsequent time period. This is calculated by first determining the index point change between the two periods and then the percent change. The following example illustrates the computation of percent change:

CPI for current period	136.0
Less CPI for previous period	129.9
Equals index point change	6.1
Divided by previous period CPI	129.9
Equals	0.047
Result multiplied by 100	0.047 x 100
Equals percent change	4.7

The Bureau of Labor Statistics neither encourages nor discourages the use of price adjustment measures in contractual agreements. Also, while BLS can provide technical and statistical assistance to parties developing escalation agreements, we can neither develop specific wording for contracts nor mediate legal or interpretive disputes which might arise between the parties to the agreement.

The Bureau has prepared a more comprehensive report on escalation entitled *Using the Consumer Price Index for Escalation* (BLS Report 761). For a copy of this report or for any additional information about the CPI, please call (202) 606-6965, or write to:

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