

California Real Estate Economics, 3rd Edition, Update
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Chapter 17: Understanding and Using Economic Data

- I. Population Projections
 - A. U.S. Population Projections
 - B. Creating Population Projections
 1. U.S. Census Bureau
 2. California Department of Finance
 - C. Demographics
 1. Births
 2. Deaths
 3. International migration
 4. Domestic migration
 5. Net-Internal migration
 6. Internal in-migration
 7. Internal out-migration
 8. Cohort component migration
 - a. A cohort consists of the persons born in a given year.
 - b. Cohort component method include fertility, mortality, and net migration.
 - c. Each year a new cohort is added to the population by applying the project fertility rates for each race.
 - d. The four race groups include:
 - White
 - Black
 - American Indian, Eskimo, and Aleut
 - Asian and Pacific Islander
 - e. These groups include Hispanic and non-Hispanic categories for each of the four races.
 - f. Household projections are made at the national level.
 - g. Household projections estimates are projected forward using alternative martial status and household-type proportions by age of householders.

- h. Three alternative series are used to illustrate alternative patterns.

D. Interim Population Projections

1. By 2050 the interim projections show a US population of 419.9 million.
2. Average life expectancies for 2050:
 - a. Males 81.2 years
 - b. Females 86.7 years
3. 33.8 million in 2006 vs. 46.6 million in 2030 for California
4. More strain on California's resources.
5. The western states are projected to be the home of 25.3 percent of the population in 2030.
6. Florida will lead the states in residents age 65 and older
7. Every state will need to prepare for increase in senior populations.
8. Nationally, by 2030, the population under age 18 will have decreased in relation to the size of the population as a whole.

E. Population Shifts

1. Population shifts are attributed to:
 - a. Housing demand
 - b. Cost
 - c. Employment levels
2. In California who showed the greatest growth?
3. Elk Grove, CA (Sacramento County) fastest growing city in the United States. Population growth rate of 11.6percent from 2004 to 2005.
4. Compared to other places, Elk Grove has affordable housing, which attracted people from the San Francisco Bay Area.
5. Since 2000, Placer County has had nearly twice the growth rate of other counties in California.
 - a. Statistics can tell real estate professionals how the housing market is likely to evolve.

II. UNDERSTANDING THE CONSUMER PRICE INDEX

A. Definition of the CPI

1. The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.
 2. The CPI market basket is developed from detailed expenditure information provided by families and individuals on what they actually purchased.
 3. The CPI reflects spending patterns for each of two population groups
 - a. All urban consumers
 - b. Urban wage earners and clerical workers
 4. The CPI is based on the expenditures of almost all residents of urban or metropolitan areas, including professionals, the self-employed, the poor, the unemployed, and retired persons, as well as urban wage earners and clerical workers.
- B. Buying habits reflected in the CPI
1. Who is not included in the CPI?
 - a. People living in rural areas
 - b. People living on farms
 - c. Persons in the Armed Forces
 - d. Persons in institutions
 - e. People in prisons
 - f. People in mental institutions
 2. CPI-W for all wage earners and clerical workers
 - a. $\frac{1}{2}$ of the household's income must come from clerical or wage occupations.
 - b. Household earner must have been employed at least 37 weeks out of the year.
 - c. The CPI-W population represents about 32% of the total U.S. population.
- C. The CPI and the Cost of Living
1. The CPI is often referred to a cost-of-living index
 2. The CPI is a conceptual measurement goal, and not a straightforward alternative to the CPI.
 3. A cost-of-living index measures changes over time in the amount that consumers need to spend to reach certain utility level or standard of living.

4. Both the CPI and cost of living index reflect changes in prices of goods and services.
 5. However, the cost of living index would also take into consideration governmental and environmental factors that affect consumers' well being.
 6. Public goods include the following:
 - a. Safety
 - b. Education
 - c. Health
 - d. Water quality
 - e. Crime
- D. Goods and Services included in the CPI
1. Food and beverages
 2. Housing
 3. Apparel
 4. Transportation
 5. Medical care
 6. Recreation
 7. Education
 8. Others (tobacco, haircuts, funerals, and other personal services)
- E. Taxes
1. Sales taxes
 2. Excise taxes
 3. Government user fees (park fees, toll charges, taxes on oil & gasoline, etc.).
 4. Property taxes should be reflected indirectly in the BLS method of measuring the cost of the flow of services provided by housing shelter, called owners' equivalent rent.
 5. Taxes influence rental values.
 6. Taxes not directly associated with specific purchase, such as income and Social Security taxes are excluded.
- F. Investments
1. The CPI does not include investment items such as stocks, bonds, real estate, and life insurance.

2. Investments are related to savings and not to day to day consumption.

G. Data collection

1. The CPI is a product of a series of interrelated samples.
2. Point of purchase survey
3. BLS data collectors called economic assistants
4. Economic assistants collect price data on specific goods and services

H. How the CPI is used

1. An index is a tool that simplifies the measurement of movements in a numerical series.
2. Examples: an index of 110 represents a 10% increase in prices since the last reference point; an index of 90 represents a decrease of 10%.
3. Movements in the index from one date to another can be expressed as changes in index points.
4. Historically, the BLS has updated its reference periods every ten years.
5. The major uses of the CPI are as:
 - a. An economic indicator
 - b. A deflator of other economic series
 - c. A means of adjusting dollar values.
6. Inflation is defined as a process of continuously rising prices or, equivalently, of a continuously falling value of money.
7. Accounting for price escalation.
8. CPI reported in the media
9. Seasonally adjusted data

III. OTHER INDEXES

- A. Various indexes have been devised to measure different aspects of inflation. Other indexes include:
 1. Producer Price Index (PPI)
 2. Employment Cost Index (ECI)
 3. Gross Domestic Product (GDP)
- B. The Bureau of Labor Statistics (BLS)

1. The BLS publishes indexes for 27 local areas around the country.
2. Monthly CPI indexes are published for four (4) census regions
 - a. Northeast
 - b. Midwest
 - c. South
 - d. West
3. Areas where no CPI is published, the user can select the area most like the subject in terms of market conditions.
4. The BLS strongly urges the use of the national or regional CPI for use in escalator clauses.

IV. TYPES OF DATA PUBLISHED

- A. Many types of data are published as outputs from the CPI program.
 1. The most popular are indexes and percent changes
 2. Individual indexes are available for more than 200 items.
 3. The BLS classifies consumer items into eight categories.
 4. Some indexes are available back to 1913.
 5. Each month indexes are published along with short term percentage changes.
 6. Each month the BLS publishes average price data for food items (for the four U.S. regions) and for some energy items (for the four U.S. regions).

V. LIMITATIONS OF THE CPI

- A. The CPI is subject to both limitations in applications and limitations in measurement.
 1. The CPI may not be applicable to all population groups.
 2. The CPI does not produce official estimates for the rate of inflation experienced by subgroups of the population, such as the elderly or the poor.
 3. The CPI cannot be used to measure differences in price levels or living costs between one place and another.
 4. The CPI cannot be used as a measure of total change in living costs because changes in these costs are affected by factors as social and environmental changes in income taxes.
- B. Limitations in measurement can be grouped into two basic types:

1. Sampling errors
2. Non-sampling errors
- C. Updates and revisions
 1. CPI will need to be revised as long as there are significant changes in consumer buying habits or shifts in population.
 2. Consumer expenditure surveys
 3. Internet access to CPI data
 4. LABSTAT
 5. Summary data
 6. CPI detailed report
 7. Monthly Labor Review (MLR)
 8. Recorded CPI data
 9. Other sources of CPI data
 10. Special Publications

VI. SUMMARY

- A. Use of demographics
- B. Understanding the needs of society
- C. Housing demands
- D. Employment levels
- E. The cost of goods and services must be measured
- F. The Consumer Price Index (CPI)
- G. What is covered by the CPI?
- H. Gauging the overall market and determining what consumers are able to spend money on.