Purchasing power parity Methodology

Turner & Townsend has worked with Bond University, Queensland, to develop a more reliable method for comparing international construction costs. There are two major reasons why construction costs between countries cannot be compared reliably using currency exchange rates. First, this method fails to take into account local standards. And second, exchange rates are highly volatile.

Take Australia and the US as an example. In 2001,

1 AUD = 0.5 USD. In 2012, 1 AUD = 1.08 USD.

Yet the relative prices (or purchasing power) of construction items remained virtually unchanged. Purchasing power parity is a more reliable way of comparing prices. Although, it is used in other areas of economics, its application in this survey and report is the first attempt to properly compare international construction costs.

We use a standard basket of equally weighted construction items, comprising material, labor and plant, to calculate purchasing power parity values in each country. The average price of items in the standard basket for a particular country is then divided by the average price for a 'base country' to calculate relative purchasing power parity. The values in the purchasing power parity columns in the report express local costs in terms of purchasing power by weighting them according to the basket priced in-country. The higher the purchasing power parity-adjusted cost, the higher are the relative costs of building in one country over another. When making relative cost comparisons between cities in different countries, purchasing power parity is the correct methodology to apply. In countries where cheap labour predominates, the value of the basket is lower to reflect lower living standards. The choice of items in the standard basket is based on typical construction items available globally.

Use of purchasing power parity to compare cost performance over time should be aware of current market conditions in each location, therefore after converting all costs to a common year, further adjustment (perhaps ± ten percent) for abnormal levels of competition may be required.

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