IMPROVING INTERIOR DESIGN BILLINGS INDEX (IDBI) WITH SEASONAL ADJUSTMENT CALCULATION

ASID IDBI and Inquiries indices will use a seasonal adjustment (SA) calculation beginning with the January 2019 data and report. This adjustment includes changes that are brought about by the seasons themselves, such as home building increases during summer months and increased retail sales during the holiday season.

Seasonal adjustment methodologies have been developed to remove these predictable patterns and reveal a more accurate picture of the underlying changes affecting the data. This is a common feature of most economic data and distorts analysis of underlying strength or weakness of economic trends. Many prominent institutions use a seasonally adjustment calculation when reporting on trends such as the Bureau of Labor Statistics, the U.S. Census, the Federal Reserve, and many universities.

Taking the over eight years of data that ASID has compiled through IDBI, a seasonal adjusted factor will be continuously calculated for each month during the year using this information. Figure 1 showcases the monthly averages for this time period. When applying a seasonal adjustment methodology, the ASID data indicates that panelists report stronger revenues in the first half of the year compared to the second half of the year. For example, the months of February and March regularly report increased revenues that are much higher than other months (i.e. greater than 1.0; Figure 1). While the cause has not been fully investigated, this pattern may be related to the increased number of tax refunds that become available by households in these months, the proceeds of which may be used for interior design spending; or, that plans for nonresidential spending begin to take shape for the coming warmer weather months. Likewise, it appears that revenues tend to fall off in the second half of the year; specifically, panelists report that December revenues tend to be the weakest compared to other months (i.e. less than 1.0). If a month is closer to 1.0, such as June and November, this means that minimal seasonality occurs, so, little or no adjustment is needed.
To help with understanding how the seasonally adjusted calculation functions, Figure 2 shows a comparison between the unadjusted (IDBI) and adjusted (IDBISA) IDBI for July 2017–January 2019. Both lines use the same data compiled from our panelists for the corresponding months; the only difference is that the seasonally adjusted line has a factor for each month based on prior years’ data (Figure 1) to account for the seasonal effects mentioned above.
Let's look at two examples. In Figure 3, you can see that the unadjusted (IDBI) index is above the adjusted (IDBISA) for February–March 2018. Due to the higher reported revenues in these months from Figure 1, the seasonally adjusted calculation will cause the adjusted (IDBISA) index to fall.

Conversely, in Figure 4, the exact opposite is true for Dec 2018. The unadjusted (IDBI) index is below the adjusted (IDBISA). Due to lower reported revenues in this month from Figure 1, the seasonally adjusted calculation will cause the adjusted (IDBISA) index to rise. With these two examples, you can see that the seasonal adjustment is meant to “smooth out” the index allowing for a real effect (e.g. recession, change in legislation, etc.) to emerge.
This change is meant to improve the accuracy of our updates and provide a clearer insight into the true trends occurring within the interior design industry, allowing you to make better business decisions in the current economic climate. With over eight years of data from the IDBI project, a seasonal adjustment calculation produces a more comprehensive view of economic trends given past performance. If you have any additional questions about the seasonal adjustment calculation or IDBI in general, please reach out to the ASID Research & Knowledge Management team at research@asid.org.