Article | Intelligent Investment

# Are Turning Points in Business and Hotel Cycles the Same?

HOTEL CURRENTS™

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## Key Takeaways

- Hotel supply cannot quickly respond to changing demand conditions suggesting that hotel and business cycle turning points may occur at different times, contrary to conventional wisdom.
- Hotel market turning points at peaks preceding downturns are equally likely to happen before, after, or coincidentally with those of the general economy.
- Hotel market turning points at troughs preceding recoveries are more likely to happen coincidently with those of the general economy.

Predicting turning points in both the business and lodging cycles remains a challenge for econometric forecasters. Yet, some ability to anticipate turning points may lie in non-statistical examinations of the relationship between inflection points and hotel industry KPIs.

I analyzed the alignment between the business and hotel cycles using historical experiences. If inflection points in business and hotel cycles are aligned, then investors cannot time the market by acquiring and disposing hotels prior to the business cycle phase reversals. If the hotel and general macroeconomic cycles are not aligned, it is possible to enhance returns by capitalizing on misalignments.

Many economists expect the U.S. economy to enter a period of contraction following the post-pandemic upswing during 2023. If the economy turns, does that mean the hotel cycle will go through the same transition at the same time?

The empirical question: Does history support the hypothesis that turning points in the business and hotels cycles are asynchronous?

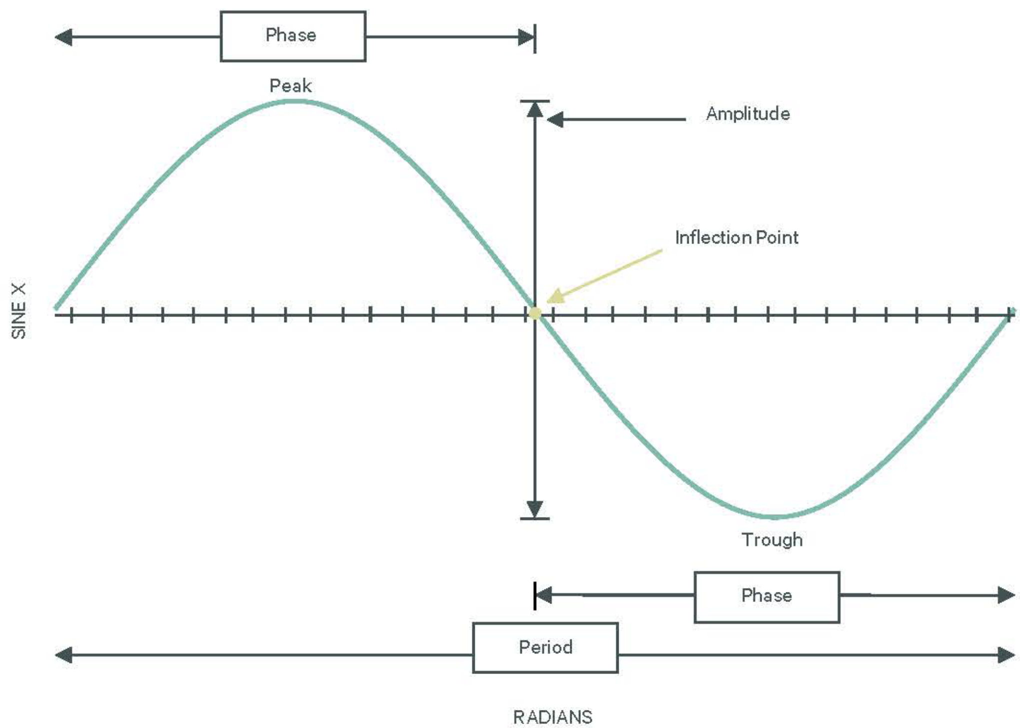
## Relationship Between Business and Hotel Cycles

When the business cycle turns negative travel demand withers as non-discretionary expenditures (e.g., food, utilities, and local transportation) take precedent over discretionary spending. Given the absence of lease protections against economic downturns, turning points in the hotel cycle 'should' resemble those of the business cycle.[1] The resemblance is to hotel demand. Real estate supply does not respond as quickly to demand changes as most other segments in the economy due to the durability of the assets. That is, demolitions and construction are (by their nature) delayed. Yet, short-term capacity adjustments in hotel markets do occur in response to demand changes. Investors (and prospective hotel investors) worry about business cycle risk even though the fits between business cycles and hotel cycles are not perfect. The opposite scenario (i.e., during up-cycle phases) also is true although risk aversion tends to dominate.

The cycle nomenclature in economics is borrowed from the fields of mathematics, physics and engineering. Figure 1 shows a sine wave and accompanying terms. The wave, resembling a cycle, begins at sine equals zero, reaches a peak, and then declines back to zero at the *inflection point*. This path is called a *phase* and the distance in radians from zero to the peak is the *amplitude*. For economic cycle interpretations, the horizontal axis represents time, and the vertical axis is in units of an important market indicator such as employment and income – for hotels RevPAR or NOI. The inflection point is where reversals occur between negative and positive conditions. However, for purposes of this article *turning points* occur at the peaks and troughs. That is when the upward and downward trends reversals occur.

[1] Other investment grade commercial real estate has lease protection from short-term downturns. Retail has the most exposure within this group, but many establishments rely on non-discretionary expenditures.

**Figure 1: Sine Wave Plot of a Cycle and Its Basic Characteristics**




Source: Pyhrr, S., S. Roulac and W. Born. 1999. Real Estate Cycles: Their Strategic Implications for Investors and Portfolio Managers in the General Economy. *Journal of Real Estate Research* 18(1): 7-68.

## Data and Method

CBRE Hotels Research collects and maintains a database of annual hotel income statements (*Trends® in the Hotel Industry*), dating back to the first half of the 20th century. The study period selected for the analysis performed here extends from 1959-2019 covering the seven recessions prior to the COVID pandemic. Variables of interest for comparing economic and hotel cyclical turning points include annual percent changes in real GDP obtained from the Federal Reserve Economic Database (FRED) and real RevPAR obtained from the CBRE Hotels *Trends®* database. Figure 2 identifies turning points. The synchronicity of the turning points between business and hotel conditions appears in a summary table as Figure 3.

**Figure 2: Year-Over-Year % Change Real GDP and RevPAR, 1959-2019**

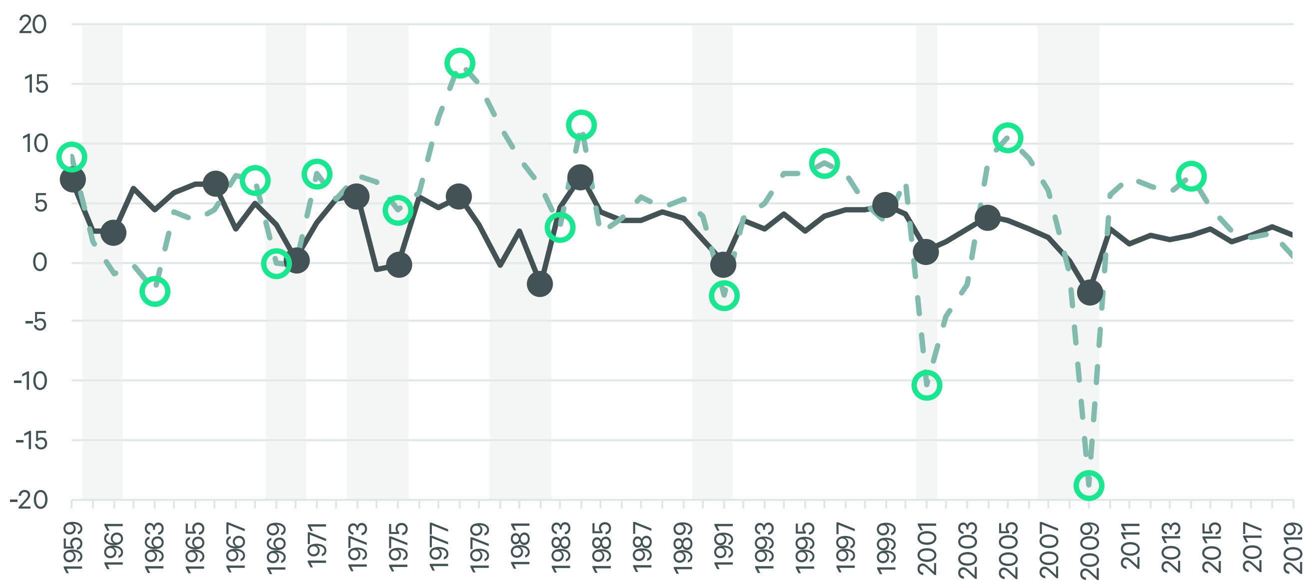



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**Figure 3: Comparison of Turning Points in the General Economy and Hotel Market**

(Recessions are: Early 1960s, Late 1960s, Mid 1970s, Early 1980s (2), Early 1990s, Early 2000s, Late 2000s.)

| Turning Point | Hotel Before Business | Hotel After Business | Coincidental |
|---|---|---|---|
| Downturn (from a peak) | Mid 1970s<br>Early 2000s | Late 1960s<br>Late 2000s | Early 1960s<br>Early 1980s (2)<br>Early 1990s |
| Recovery (from a trough) | | Early 1960s<br>Early 1980s (2) | Late 1960s<br>Early 1990s<br>Early 2000s<br>Late 2000s<br>Mid 1970s |

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## Interpretations

Cyclical peaks preceding downturns and the troughs preceding recoveries have occurred during the past 60 years in the U.S. in and around the seven recessions declared by the Bureau of Economic Research's Cycle Dating Committee.[2] The peak revenue per available room (RevPAR) turning points shown in Figure 2 should, in theory, either occur just prior to or at the beginning of the recession periods indicated by shaded areas in the figure. Referring to the summary table in Figure 3, this is the case relative to the mid-1970s and early 2000s recessions, but none other. In those instances, the peak in RevPAR occurred two to five years prior to a recession. In addition, the trough turning points should occur during recessions; this happened in five of the seven recessions since 1959.

## Conclusions

During periods of contraction, the hotel business cycle and the broader economic cycle were aligned in only two out of the six business cycles evaluated. During periods of recovery, the alignment increased to five out of seven upcycles. This suggests that the hotel and business cycles are not consistently aligned, and timing future hotel market transactions isn't supported by the historical evidence. Turning points at hotel market peaks preceding downturns are more likely to be out of sync with those in the business cycle than turning points preceding recoveries, in accordance with theory. Thus, if history is a guide, it is almost equally likely that a turning point in hotel market conditions resulting in a downturn will occur before, after, or coincidentally with a turning point downward to a moderate recession in 2023 or 2024. Once a trough is reached, however, it is quite likely that a hotel market recovery will happen in the same year as the economy begins a recovery.

[2] These are: Early 1960s, Late 1960s, Mid 1970s, Early 1980s (2), Early 1990s, Early 2000s, Late 2000s.