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# Hotel Profit Implications from Rising Wages and Inflation in the U.S.

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# Hotel Profit Implications from Rising Wages and Inflation in the U.S.

## **Abstract**

Macroeconomic models based on the Phillips Curve predict that as the unemployment rate declines toward the long-run, natural rate, the pace of wage and price growth accelerates and inflation rises.<sup>1</sup> In this paper I analyze the profitability prospects for the U.S. hotel industry in today's relatively volatile economic environment, keeping in mind the Phillips Curve's general principle that inflation and employment have an inverse, but relatively stable short-term relationship. Although employment and economic growth in the U.S. have been uneven in recent months, the unemployment rate has declined to less than 5 percent, which many economists believe is close to the natural rate. Growth in wages and salaries, as measured by the Employment Cost Index, has concurrently been moving upward between 2.5 and 3.0 percent during the past 12 months. At the same time, general inflation remains below levels that might typically be expected this late in the cycle, although core inflation is bumping up against the Federal Reserve's 2-percent target. If the inflation rate continues to move upward as predicted by Phillips Curve models (and encouraged by the Federal Reserve), rising labor costs and other expenses will exert downward pressure on U.S. business profits. Backward movement up the Phillips Curve (with greater inflation) coincides with an expanding economy. In that scenario, prices of goods and services also will rise in real terms if their supply cannot keep up with demand, and producers have the ability to raise prices (absent fixed-price contracts such as leases).

## **Keywords**

unemployment rate, Phillips Curve, hotel industry, inflation, labor costs

## **Disciplines**

Hospitality Administration and Management | Labor Economics

## **Comments**

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# *Hotel Profit Implications from Rising Wages and Inflation in the U.S.*

by Jack Corgel

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## EXECUTIVE SUMMARY

**A**s the U.S. economy approaches what appears to be the late portion of the economic cycle, this analysis explains how hotels can generate oversized profits in this late cycle period, even as labor costs increase. Although the mechanism has several moving parts, the essential point is that hotels can raise rates to match or exceed the effects of wage inflation. The reason for this is that economic expansions create increases in demand for travel that elevate occupancy and promote real growth in ADR. Economic expansions also lead to lower unemployment rates, which initiate general wage and price increases that can compromise hotels' profitability to the extent that employee compensation is a sizeable expense. At the same time, wage growth manifests in higher levels of hotel room consumption. Because hotel management can change room rates with little formal resistance, late cycle nominal changes in ADR historically have well exceeded inflation. Hotels' distinctive ability to absorb general price movements stems from the combination of low contract friction (that is, the absence of leases or other pricing limitations) and delivery lag, because supply additions require a substantial lead time. Most other services do not have delivery lag, as barriers to entry are relatively low and expansions cost little. Other types of commercial real estate have far greater contract friction than hotels because of the presence of leases. Thus, the analysis anticipates that in the coming months hotels should be able to improve real profits to a greater extent than other types of services or real estate operations.

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## ABOUT THE AUTHOR

**John B. (Jack) Corgel**, Ph.D., held the Robert C. Baker Professorship in Real Estate at the Cornell University School of Hotel Administration until January 2016, when he began a sabbatical leave and phased retirement. He was also Director of Graduate Studies for the Baker Program in Real Estate, and earlier was the first director of the Center for Hospitality Research. After receiving a Ph. D. degree from the University of Georgia in real estate and corporate finance, he held faculty positions in several business schools at major universities before joining Cornell. He remains at Cornell in a half-time capacity.



Corgel serves as managing director at CBRE Hotels' Americas Research, where he helps the firm develop products for the hotel industry based on property-level financial and real estate performance information, including *Hotel Horizons* econometric forecast of U.S. hotel market. His work extends to a variety of advisory assignments related to hotels and real estate.

Corgel has published 80 articles in academic and professional journals, mainly on the subjects of real estate finance, investment, valuation, and hospitality real estate. His research has appeared in the most prestigious journals in real estate (*Real Estate Economics*), urban economics (*Journal of Urban Economics*), insurance (*Journal of Risk and Insurance*), business law (*Journal of the American Business Law Association*), and hospitality management (*Cornell Hospitality Quarterly* and *International Journal of Hospitality Management*). In addition, he has written for nearly every national journal read by real estate professionals. His textbook, *Real Estate Perspectives*, was used throughout the nation for introductory real estate courses. He co-edited and contributed chapters to *The Cornell School of Hotel Administration on Hospitality: Cutting Edge Thinking and Practice*. Corgel's current research interests include the relationship between the macro-economy and hotel markets and real estate price and capitalization rate formation.

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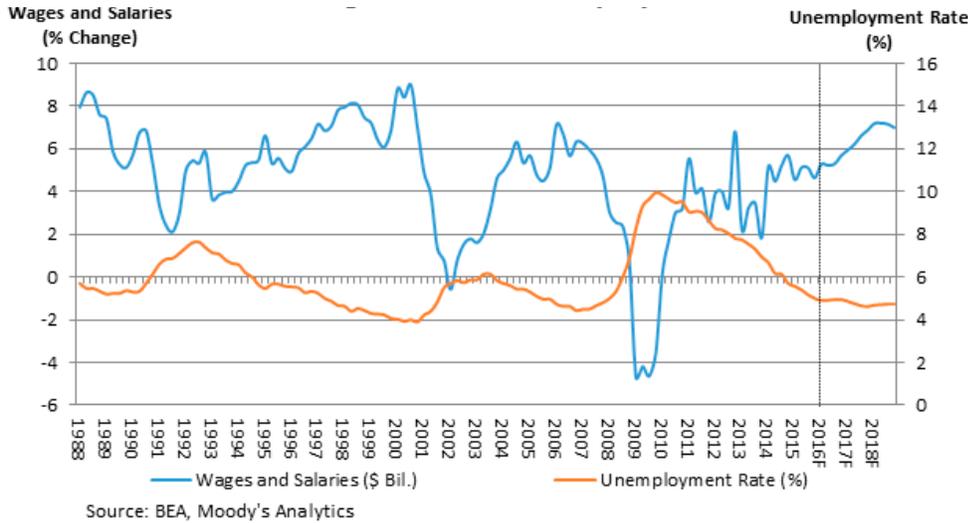
**M**acroeconomic models based on the Phillips Curve predict that as the unemployment rate declines toward the long-run, natural rate, the pace of wage and price growth accelerates and inflation rises.<sup>1</sup> In this paper I analyze the profitability prospects for the U.S. hotel industry in today's relatively volatile economic environment, keeping in mind the Phillips Curve's general principle that inflation and employment have an inverse, but relatively stable short-term relationship. Although employment and economic growth in the U.S. have been uneven in recent months, the unemployment rate has declined to less than 5 percent, which many economists believe is close to the natural rate. Growth in wages and salaries, as measured by the Employment Cost Index, has concurrently been moving upward between 2.5 and 3.0 percent during the past 12 months. At the same time, general inflation remains below levels that might typically be expected this late in the cycle, although core inflation is bumping up against the Federal Reserve's 2-percent target. If the inflation rate continues to move upward as predicted by Phillips Curve models (and encouraged by the Federal Reserve), rising labor costs and other expenses will exert downward pressure on U.S. business profits. Backward movement up the Phillips Curve (with greater inflation) coincides with an expanding economy. In that scenario, prices of goods and services also will rise in real terms if their supply cannot keep up with demand, and producers have the ability to raise prices (absent fixed-price contracts such as leases).

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<sup>1</sup> As first explained in: Alban W.H. Phillips, "The Relation Between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861–1957," *Economica*, Vol. 25, No. 2 (1958), pp. 283–299.

EXHIBIT 1

Wages and the unemployment rate



With those economic forces in mind, the topic of this report is near- and intermediate-term profitability in the U.S. lodging sector given expectations of further, albeit steady and modest economic growth that will likely pressure real room rates higher, cause wages and other expenses to rise, and test the proposition once again that nominal hotel room rates can be a hedge for inflation. The dynamic interactions of these factors may support higher hotel profits or greatly diminish them, with labor being a particular factor, as I discuss below. Lodging analysts (for example, Bank of America Merrill Lynch) forecast modest RevPAR growth of 3 to 4 percent and EBITDA, profit, and NOI growth rates near or exceeding double digits in 2016.<sup>2</sup> This enlarged flow through of 3X (calculated as the percentage change in RevPAR divided by percentage change in profit) is characteristic of late-cycle ADR dominance in the RevPAR mix and is projected to occur without much higher wage growth or inflation. Hotel managers and owners anticipate real and inflation-driven ADR growth in excess of increases in employee compensation and other expenses, until either supply growth or business cycle changes weaken hotel demand.

Because labor costs account for nearly one-half of total expenses at typical full-service U.S. hotels, increases in employee compensation not commensurate with productivity gains represent a threat to future hotel profitability and capital invest-

<sup>2</sup> See: Bank of America Merrill Lynch, “Lodging Year Ahead 2016: Closer to the End than the Beginning,” January 12, 2016. These three terms are closely related measures of unleveraged, pre-tax cash flow—EBITDA applies in corporate settings and includes corporate charges, while profits and NOI are used interchangeably in practice for measuring the same. I use the term profit in this report to represent hotel property unleveraged, pre-tax cash flow.

ment.<sup>3</sup> Narrowing of the gap between labor demand and supply as evidenced by the steadily declining unemployment rate eventually will show up in stronger wage growth on hotel income statements. Wages also may experience upward pressure from ongoing political actions to elevate minimum wages. The mitigating factor in that situation is that as wages rise so does consumption on discretionary items, such as travel.

Meaningful increases in economic growth, wages, and inflation over the next few years represent complex opposing financial forces that will determine future hotel

cash flows. I examine in this report how financial crosscurrents characteristic of a growing economy may influence hotel profits in the coming months. It now appears that the forces favoring profit growth will remain strong in the near term. If the forecasters are correct, hotel profit levels will remain high, but growth in those profits will markedly decline as we approach the next decade. The remainder of this report examines how those forces will likely interact in relation to hotel profits. The next section presents recent data on labor market strength, wage growth (both economic and political), and consumption. I then review the economics of the Phillips Curve’s connection between unemployment levels and inflation. There follows a discussion of the importance of labor cost changes to hotel profits together with historical data on the ability of hotel room rates to hedge expected inflation. The concluding section integrates these undercurrents to examine the net effect of increasing wages and inflation on near future hotel financial performance.

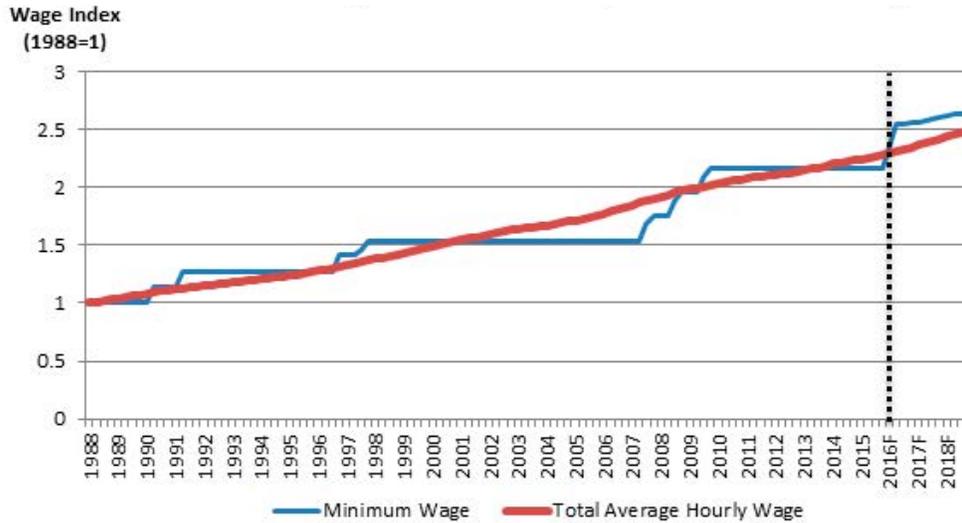
U.S. Labor Market Conditions

Although unemployment rates were relatively high during the Great Recession and the economy’s subsequent early recovery stage, the continuing downward trend in the unemployment rate indicates a tightening of the U.S. labor market. As an indication of a strong labor market in the future, most macroeconomic forecasts have national employment levels growing in 2016 for the sixth consecutive year. Employment appears to be

<sup>3</sup> According to data from PKF’s *Trends in the Hotel Industry* (2014) the following percentages of labor-to-total hotel expenses apply by market segment: Full service; 45.0%, Limited service: 35.4%, Resort: 47.6%, Convention: 47.7%, Suite: 35.0%-38.2%, and all hotels: 44.8%.

## EXHIBIT 2

### Wage level indices (market vs. political)



Source: BLS, Labor Department, Moody's Analytics

nearing equilibrium, given the current size of the labor force.<sup>4</sup> Economists at the Federal Reserve Bank of St. Louis estimate that the long-run natural rate of unemployment is 5.0 percent, one-tenth of a percentage point above the current level of 4.9 percent reported by the U.S. Bureau of Labor Statistics.<sup>5</sup>

### Market and Regulated Wages

Exhibit 1 charts the movement of the unemployment rate with national average hourly pay. The annual percentage change in wages, as expected, has a decidedly inverse relationship to the national unemployment rate. The exhibit shows that the upward trend in nominal wage growth ( $W$ ) is expected to accelerate during the next three years, while the unemployment rate ( $UER$ ) levels off to the long-run average. The same pattern is evident in these data at similar phases of the cycle. The regression equation for the long-run relationship with the unemployment rate lagged one year is  $W = 12.22 - 1.26 (t = -10.38) [UER_{t-1}]$ ,  $R^2 = .50$ .

The unusual stickiness of wage growth following the gradual decline in the unemployment rate during the recent economic recovery remains a topic of discussion among economists. Daly and Hobijn of the Federal Reserve Bank of San Francisco show that lower than expected wage growth was the result of the less than normal wage cuts during the recession.<sup>6</sup> Others argue that

<sup>4</sup> Despite a decline in the labor force participation rate, non-farm payrolls grew by more than 2.5 million workers during 2015, as reported by the Bureau of Labor Statistics.

<sup>5</sup> St Louis Federal Reserve Bank. *Natural Rate of Unemployment*, November 2014.

<sup>6</sup> Mary C. Daly and Bart Hobijn, "Downward Nominal Wage Rigidities Bend the Phillips Curve," FRB San Francisco Working Paper (2013-08). 2014

real wages are now growing at expected rates given the persistent low inflation in the U.S.<sup>7</sup> That is, wages should grow at the inflation rate plus the rate of labor productivity growth. Exhibit 1 shows that Moody's Analytics forecasts a noticeable pickup to over 5-percent nominal wage growth in 2016 through 2018 likely resulting from some decline in the unemployment rate, but also possibly reflecting employers distributing "make up" wages to employees.<sup>8</sup>

Another possible driver of nominal wage growth is the political movement in the U.S. for enactment of laws and regulations to raise minimum wage levels.<sup>9</sup> When political outcomes produce minimum wage increases, total hourly wage levels eventually rise in all markets.<sup>10</sup> Exhibit 2 shows how regulatory wage increases relate to the movement in nominal market wages since the late 1980s. For scaling purposes these series are indexed to base year 1988. As indicated by the similar slopes, total hourly wage rates and the discrete, step up changes in the minimum wage historically occurred along same trend during

<sup>7</sup> Comment on Daly and Hobijn (2015) in [www.ritholtz.com/blog/2015/why-is-wage-growth-so-slow/](http://www.ritholtz.com/blog/2015/why-is-wage-growth-so-slow/)

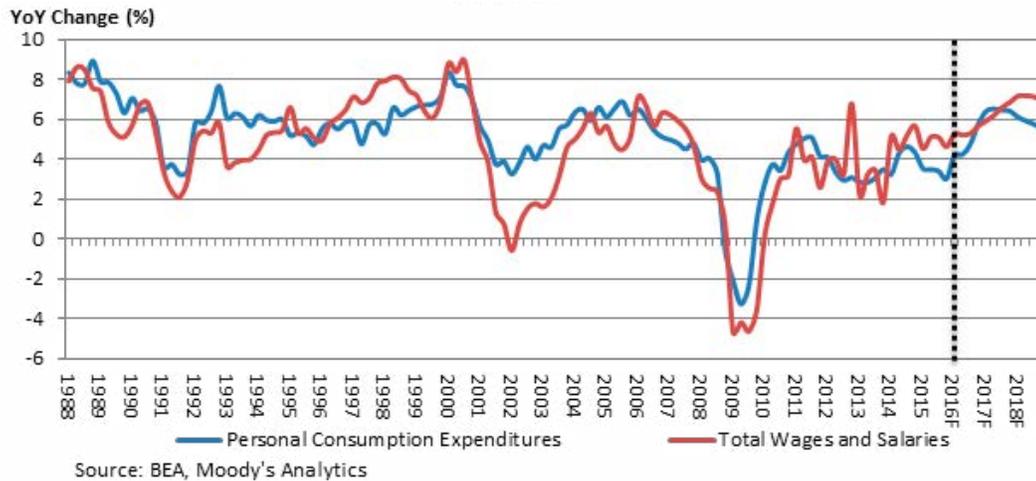
<sup>8</sup> Mark Zandi, *U.S. Macro Outlook: Hitting the Accelerator*. Moody's Analytics, January 2015.

<sup>9</sup> Historically, most states' minimum wage levels have been lower than those dictated by federal minimum wage laws. However, due to increases recently mandated in many states' legislation, 29 states have minimum wages laws above that of the federal minimum wage. See [www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart](http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart).

<sup>10</sup> Research conducted by Harris and Kearny indicates that an increase in the national minimum wage could increase hourly wages for 35 million workers. See: Benjamin H. Harris and Melissa Kearney, *The 'Ripple Effect' of a Minimum Wage Increase on American Workers* (Washington, DC: Brookings Institution, 2014).

### EXHIBIT 3

## Changes in personal consumption and wages and salaries



the past several decades. It appears that minimum wage laws have “followed the market” and therefore are part of process by which all wages rise.

### It Matters How Workers Spend Wage Increases

Changes in personal income resulting from changes in wages strongly influence consumer spending during normal periods, that is, when fear or uncertainty are not driving consumers to disproportionately save. Exhibit 3 presents the movement of U.S. consumption as the annual percentage change since 1988. By laying Exhibit 1 and Exhibit 3 on top of each other one can see that the more wage and salary growth exceeds the unemployment rate, the greater the growth in national consumption relative to saving. National consumption growth is forecast to peak at about 6 percent in 2017, while the growth in wages is forecast to peak soon thereafter. From these data, I conclude that a high

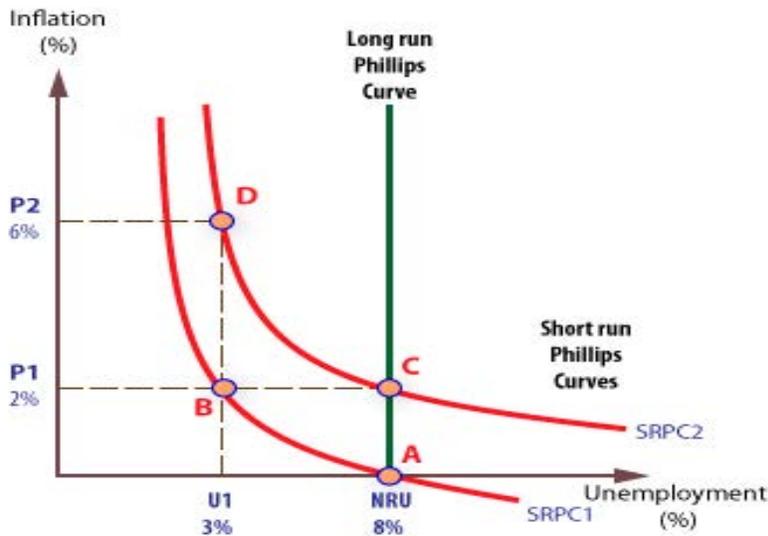
marginal propensity to consume will likely persist during the next three years resulting from accelerating wage growth and low unemployment rates. My expectation is that people will begin spending a greater percentage of their wage gains, because, given the strong labor market, they will feel secure in their current employment or will freely seek higher paying jobs. One outcome of these conditions is improved nominal and real hotel financial performance, given that the majority of hotel stays in the U.S. are consumption related.

### Unemployment and Inflation along the Phillips Curve

An important macroeconomic question about accelerating wages is, how much inflation might higher wages produce? The downward sloping, nonlinear trace of unemployment and inflation rates known as the Phillips Curve originated from repeated

**EXHIBIT 4**

**Effects of inflationary policies on the Phillips Curve**



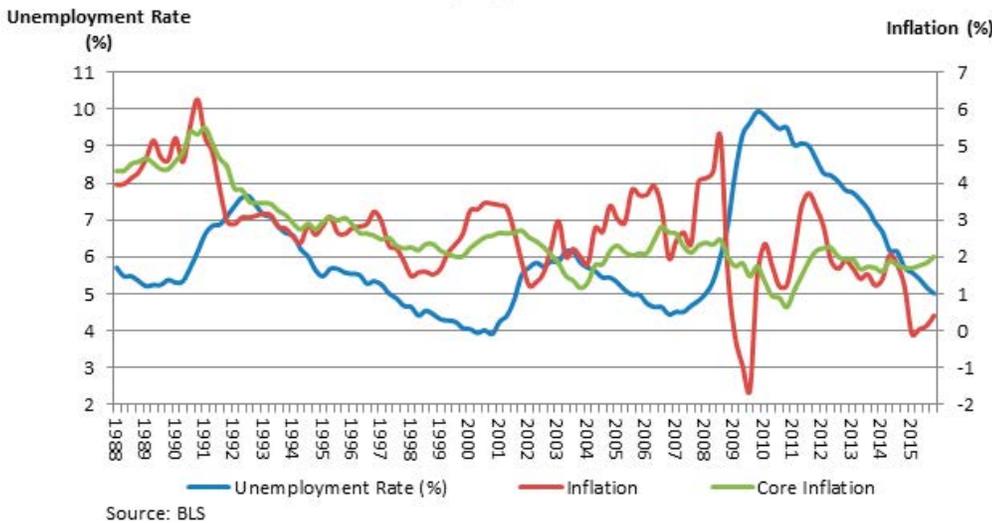
Note: Expansionary policy moves the unemployment rate from A to B. However, inflation expectations rise, as indicated, moving the curve to reflect the higher level of inflation. As a result, unemployment moves to point C. Source: economicsonline.co.uk.

labor market moves to the natural rate of unemployment. The short- and long-run relationships appear in Exhibit 4.

In this analysis, I reverse engineer the Phillips Curve to demonstrate what might happen to inflation as the unemployment rate falls below the natural rate. Since general inflation in the U.S. has responded only weakly to the dramatic decline in the unemployment rate (in defiance of the Phillips Curve prediction), either the process is experiencing a longer than normal lag or the natural rate has not been attained. Recent and near-term forecasts of wage growth rate increases suggest a longer than normal lag. Going forward, improving economic conditions should result in more workers finding suitable jobs leading to possible declines in the unemployment rate—although this process has been moving in fits and starts. Note that the unemployment rate has dipped into the low 4-percent range twice already this century (see Exhibit 1). Assuming the supply of labor remains relatively fixed in the

**EXHIBIT 5**

**Unemployment and inflation**



Source: BLS

short run, an increase in the demand for labor will have a direct effect on the price of labor. As workers earn increasingly higher wages, aggregate consumption should rise. This process would lead to a rise in the general price level again, assuming the Phillips Curve prediction is correct.

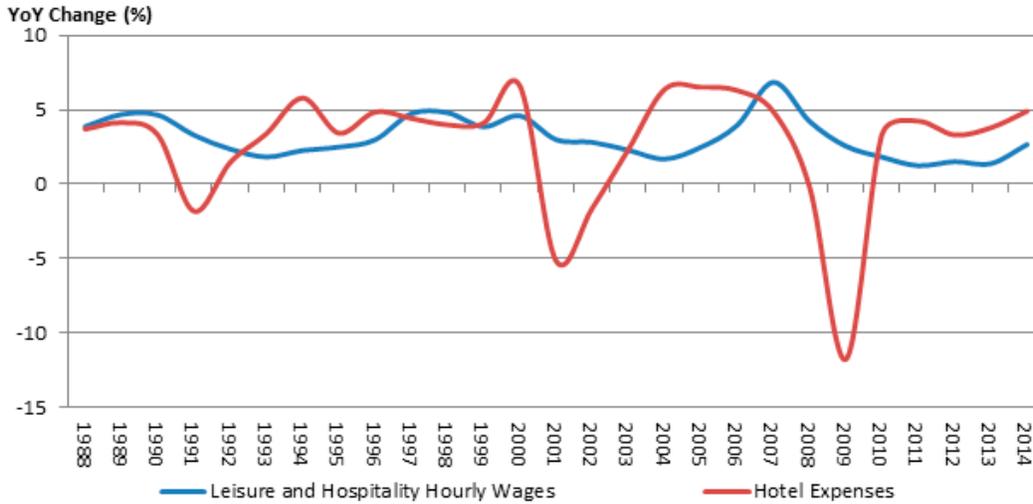
The Phillips Curve model might be sensitive to the way inflation is measured. Both of the widely followed inflation indicators in the U.S., CPI and personal consumption expenditures (PCE), are reported in their aggregate forms exclusive of food and

statistical analyses of different countries' historical data. This empirical artifact created a policy debate as to whether central government actions designed to raise the inflation rate may have the effect of lowering unemployment. Detailed analyses revealed that inflationary policies may have the intended effect in the short run, but that is not the case over an extended period as the

energy prices, traditionally the two most volatile components. The "ex-food and energy" variations are believed to represent "core" inflation. Exhibit 5 presents historical data for the U.S. unemployment rate, CPI, and core CPI. The contemporaneous short-run inverse relationship between inflation and unemployment throughout most of history is apparent in Exhibit 5

EXHIBIT 6

Hotel expenses and hospitality wages



Source: BLS, CBRE Hotels | Americas Research Trends <sup>®</sup> in the Hotel Industry

even though the long-run correlation is not high (CPI Inflation = 4.17 - .25 (t = -3.05) [UER],  $R^2 = .07$ , and Core CPI Inflation = 3.50 - .15 (t = -2.30) [UER],  $R^2 = .04$ ). The lower volatility of core CPI relative to CPI only slightly alters the unemployment and inflation association, as we see that the inverse relationship of the unemployment rate core CPI is a little weaker.

The Phillips Curve relationship has been shown to lose strength as the labor market moves toward the natural rate of unemployment and the spread between the current and natural unemployment rates narrows. Estimating the natural rate is not a certain science and the impact on the Phillips Curve of more-aggressive-than-normal Federal Reserve stimulative actions during the past seven years is difficult to assess. One recent phenomenon that has not been explained is the relatively high percentage of people not participating in the labor force (which may artificially lower the unemployment rate). Notwithstanding, most economists predict accelerating wage growth and rising inflation through 2018.

**Hotel Profit Crosscurrents**

Tightening labor market conditions will encourage hotel managers to accelerate their search for workers. A scarcity of labor available for hotel employment would likely result in wage increases as management attempts to attract the most experienced workers. Meaningful increases in labor costs will diminish hotel profits, particularly for full-service, convention, and resort properties, where labor costs represent up to one-half of total

operating expenses.<sup>11</sup> Exhibit 6 charts the movement of hotel expense levels with the average wage rate for U.S. workers in the leisure and hospitality industry (r = .52; with wages lagged one year). Also, as expected, hotel employee wages are less volatile than hotel expenses.

Historically, higher average daily room rates have countered increases in labor costs during economic expansions. Although ADR growth would be stymied by excessive supply growth (and profits would probably fall), that scenario is uncommon for the hotel industry in the short-term.<sup>12</sup> Exhibit 7 shows that except for periods when severe demand shocks had deleterious effects on ADRs, real increases in room rates occurred because construction of hotel rooms was unable to keep pace with increasing demand due to the considerable time required for hotel planning and construction. With the exception of a few city markets, additions to supply should not threaten real ADR growth for a few more years.

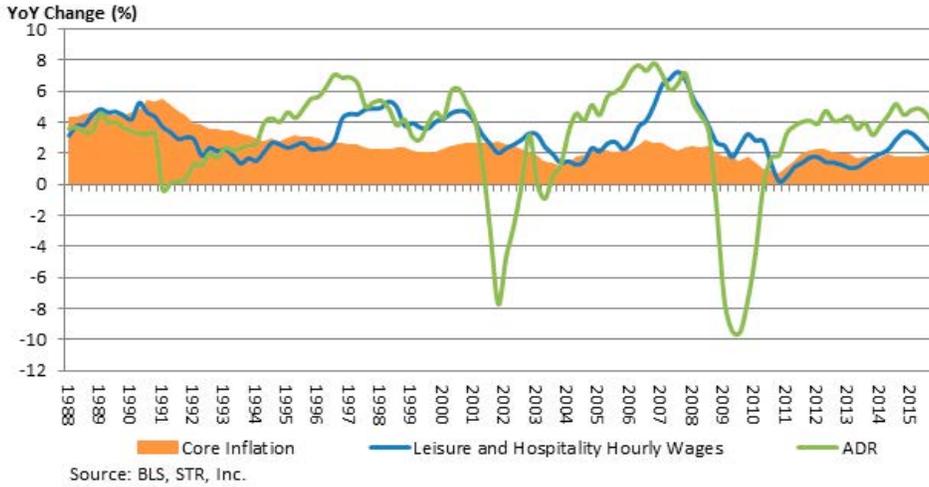
The remaining factors in the mechanism by which hotels can generate oversized profits late in the cycle include the fact that economic expansions create increases in demand for travel

<sup>11</sup> See: PKF Hospitality Research, *Trends in the Hotel Industry USA 2014* (Atlanta: PKF Hospitality Research, 2015).

<sup>12</sup> For this report, which offers forecasts over the next three years, a simplifying assumption is made that that aggregate U.S. hotel supply growth will not exceed the long-run average, about 1.9 percent. In local markets with hyper-supply growth, such as NYC, the conclusions in this report may not entirely hold as ADR will experience downward pressure despite strong demand growth.

**EXHIBIT 7**

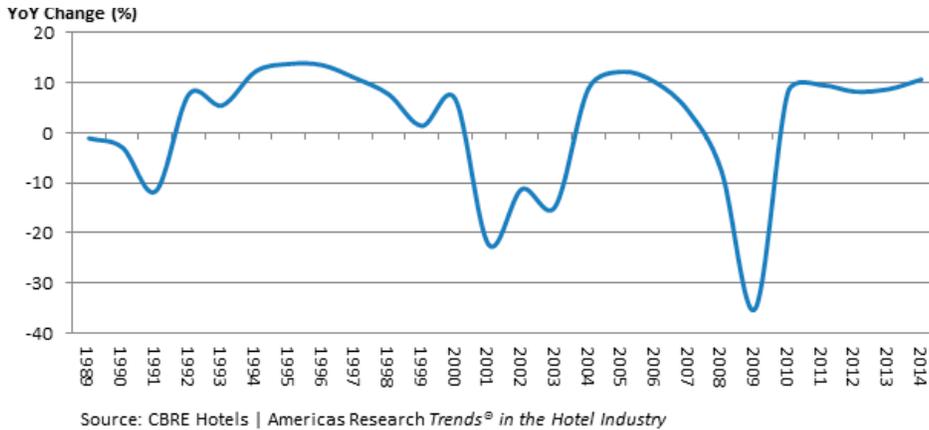
**Inflation and ADR**



The validity of this argument is clear from the data presented in Exhibit 7. The only times ADR has not hedged inflation were during and shortly after recessions. The exhibit also shows that ADR growth exceeds or equals leisure and hospitality wage growth, on balance. In summary, hotels' singular ability to absorb general price movements stems from the combination of low contract friction and delivery lag. Most other services do not have delivery lag, because barriers to entry are relatively low and expansions incur low costs. Other forms of commercial real estate have endemic delivery lag as do hotels, but far greater contract friction than hotels because of the presence of leases.<sup>14</sup>

**EXHIBIT 8**

**Real NOI change**



**Profit Picture**

The historical evidence that ADR hedges inflation gives some assurances that hotel profit growth will not be severely compromised by a surge in hotel workers' wages. In that context, Exhibit 8 provides a direct look at real profit levels and growth since the late 1980s.<sup>15</sup> Both real NOI levels and growth rates are decidedly cyclical. Currently

which first elevate occupancy and then foster real growth in ADR. Economic expansions also lead to lower unemployment rates, which initiate general wage and price increases. I have already pointed to the negative effect that increasing wages have on hotel profitability. Fortunately for hotel managers and owners, wage growth manifests in higher levels of hotel room consumption even as it drives expenses higher.

The key to the hotel industry's ability to increase ADR (compared to other forms of real estate) is the absence of long-term leases. Because hotel management can change room rates with limited contract friction of the type caused by leases, late cycle nominal changes in ADR historically have well exceeded inflation, culminating in generous real contributions to profit.<sup>13</sup>

<sup>13</sup> Hotels that rely on group and convention business for which room rates are determined by annual contracts do incur pricing friction similar to some leased real estate.

and for the foreseeable future, nominal hotel NOI growth is expected to persist at elevated rates. CBRE Hotels' Americas Research, for example, forecasts nationwide hotel NOI growth to be 10.2 percent in 2016 and 7.8 percent in 2017.<sup>16</sup>

<sup>14</sup> Some commercial property leases have CPI escalation clauses and natural hedging components, such as percentage rent based on retail sales. Nevertheless, CPI-based (usually not core) rental adjustments may only occur once per year and retail sales may not be highly correlated with inflation for a variety of reasons.

<sup>15</sup> Hotel profit and net operating income (NOI) are synonymous. In *Trends in the Hotel Industry*, 2014, profit is defined as income after deductions for management fees, property taxes, and insurance, but before deductions for capital reserve, rent, interest, income taxes, depreciation, and amortization.

<sup>16</sup> See also: [www.cbrehotels.com/EN/Research/Pages/March-2016-Lodging-Insights.aspx](http://www.cbrehotels.com/EN/Research/Pages/March-2016-Lodging-Insights.aspx)

## Upper and Lower Price Hotel Profits

The crosscurrents of economic expansions and backward movement along the Phillips Curve are stronger for upper-price, full-service hotels than for low-price, limited-service hotels for two reasons. First, labor costs as a percentage of total expenses is approximately ten percentage points lower in lower-price hotels (i.e., 35 percent or lower for budget-type hotels compared to 45 percent or higher for full-service or resort properties). Second, the income elasticity of hotel demand has been estimated by Corgel and Lane to be .43 for lower-price hotels and 1.01 for upper-price hotels.<sup>17</sup> Consequently, upper-price hotels benefit more than lower-price hotels from consumer spending following a general increase in worker compensation and other income.

While the crosscurrents are relatively strong for upper-price hotels, higher labor costs and greater income elasticity counteract one another. The net effect of these two economic forces is difficult to estimate, as is the near-term difference in hotel profitability across the hotel ADR spectrum.

## Summary and Forecast

The gradual recovery from the Great Recession in the U.S. brought about improvements in many economic indicators. What we have seen, however, is that changes in the component parts of the economic system are non-synchronous, and each recovery has a different maturation pattern. The nation's unemployment rate is hovering around the natural rate, quarterly GDP growth has generally been positive since early 2014, and recent wage increases are encouraging.

For producers in labor-intensive businesses such as hotels, increasing costs of operations, especially labor costs, may severely compromise profitability. The salaries, wages, and benefits provided to workers who operate U.S. hotels make up the largest portion of expenses—an average of 44.8 percent of total costs. Assuming that current projections for the next few years hold, owners will see the level of worker compensation noticeably

<sup>17</sup> Jack Corgel and Jamie Lane, *Hotel Industry Demand Curves*, *Trends in the Hotel Industry USA 2012* (Atlanta: PKF Hospitality Research, 2013).

increase and likely the labor cost contribution to total costs will commensurately rise.

In sum, I submit in this report that healthy real increases in hotel profits as forecast from industry analysts will be realized even in the event of unexpected increases in labor costs for following three reasons:

**Revenue growth.** Economic expansions historically result in strong hotel *real* revenue growth—along with higher labor costs—provided additions to supply lag demand growth. Current and near-term future conditions indicate the threats to top-line revenue growth in most hotel markets from overbuilding are minimal.

**ADR inflation hedge.** The Phillips Curve predicts that declining unemployment corresponds to increasing inflation. Hotel property wage growth in a tightening labor market following from lower unemployment can be countered by hotel management adjusting nominal ADRs to rising inflation because hotel room rates have low contract friction and while benefiting from delivery lag.

**Hotels participate in wage growth.** Household wage increases will be proportionally allocated to consumption. Hotel services have an income elasticity of ranging from .43 to 1.0.<sup>18</sup> Some business travel may be forestalled due to late-cycle fears of an impending economic downturn, but leisure travel constitutes 70 percent of total domestic travel.<sup>19</sup>

Late-cycle wage growth is a force worth watching for its potentially negative influence on hotel profits. Nevertheless, the evidence supports the case that crosscurrents of the economic expansion will overwrite the negative effects of wage growth on hotel profits and generally push hotel profits in a decidedly positive direction. This conceptual story supports forecasts of strong real profit growth during the next two or more years. ■

<sup>18</sup> Corgel and Lane estimate that income elasticity for Upper Price hotels is 1.01. See: Corgel and Lane, *op.cit.*

<sup>19</sup> U.S. Travel Association (2011) estimates that the number of domestic leisure trips is approximately three times the number of domestic business trips (1,516.8 million to 447.8 million in 2010).

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