U.S.

Economic Watch

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Economic Analysis

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Plenty of Slack

Nontraditional indicators support Fed monetary policies

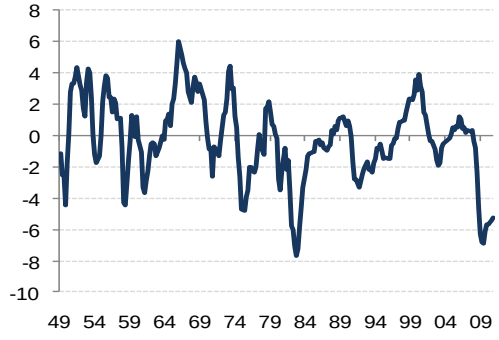
- **Improvements since all-time high slack, but distance to normal is still large**
- **Vacancy rates, unemployment-vacancy ratios, represent viable alternative measures for economic slack**

Resource slack indicators beyond the output gap and NAIRU

In order to better understand inflationary pressures, many forecasters turn to estimates of the output gap. The output gap is defined as the percentage difference between actual and potential output. A zero output gap represents the point at which the economy is using all its potential without generating inflation. This is an ideal situation for an economy, in that it is using all its available resources without triggering any inflationary pressures. In the context of our economy today, the distance between this ideal situation and our current level of output should offer some yardstick of when we expect inflationary pressures to bind, in theory. We say "in theory" because in practice the output gap is difficult to measure and forecast uncertainty in GDP complicates the use of the output gap in policy settings. More specifically, since monetary policy works with a long lag, forecasts of GDP may unfold differently than previously expected, triggering swings in the output gap forecast. Given these real world difficulties in using the output gap, we outline below alternative measures of resource slack and examine the degree to which they are consistent or inconsistent with current projections of the output gap. We first discuss two traditional counterparts to the output gap (capacity utilization and the non-accelerating inflation rate of unemployment, or NAIRU) and then discuss overlooked alternatives.

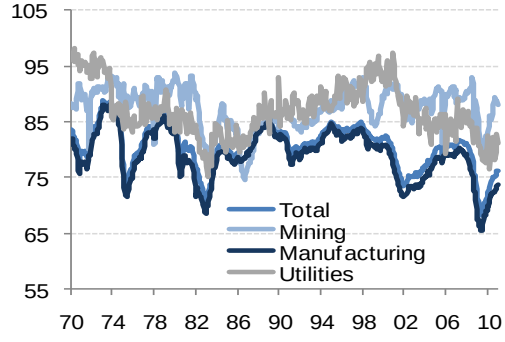
With regard to traditional counterparts to the output gap, capacity utilization is a natural candidate as it is purely a measure of resource slack in industrial production. If a factory can produce ten flat screens TV's a year and is currently only producing nine, then the utilization rate is 90%. It is unreasonable to target 100% utilization rate, since in practice factories always have some spare capacity. Nonetheless, the closer we get to 100%, in the short-run the firm can only raise prices in response to more demand. In the longer run (and in reality) companies build new factories. As it stands today, capacity utilization in the US is at 76%, which is greatly improved from an all-time low of 68.2% reached during the crisis, but still below the historical average of 80.5%.

Chart 1
Output Gap



Source: CBO, BEA and BBVA Research

Chart 2
Capacity Utilization



Source: Federal Reserve

Our second alternative to the output gap is the NAIRU. The NAIRU is like a version of the output gap, but for the labor market. It represents the level of unemployment which is consistent with price stability. The reason why prices are stable at this level of unemployment is because when the unemployment rate is lower than the NAIRU, workers are relatively scarce and difficult to find. This causes higher wage pressure than when the unemployment rate is higher than the NAIRU. Wage pressures are also observable from various data sources, but these are not directly a measure of resource slack, but it is a result of economic slack. For example, at times of normal economic output but high inflation, wage increases largely reflect inflation conditions rather than resource slack. As such, the NAIRU presents similar measurement errors and different modeling techniques as the output gap.

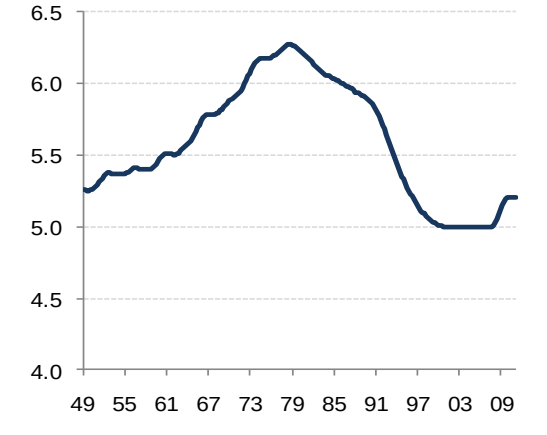
Turning to less-discussed alternatives to the output gap, measures of excess resource slack in the labor market are tied to the discussion of structural unemployment. More specifically, if the unemployed lose skills needed in today's market, then the level of unemployment consistent with no change in inflation will be higher. This is because the skill-degraded unemployed are essentially locked out of the labor market and they pose no threat to wage bargaining and wage increases will not be subdued by the higher level of unemployment. At this point in time, the Federal Reserve does not attribute most of the rise in unemployment to structural deficiencies. Recent revisions to the JOLTS-based Beveridge Curve (the plot of the job openings rate to the unemployment rate) also imply only a limited uptick in structural unemployment. Given that most of unemployment today represents cyclical conditions, two measures of resource slack in the labor market imply still-high levels of slack. The gap between the peak level of the nonfarm payroll and the latest data is still 6.3%. Additionally, the ratio of unemployed to job openings stands at 5 compared to the 2001-2007 average of 2.

Another means of measuring resource slack stems from certain areas of the real estate market. Commercial real estate vacancies measure physical slack in a similar manner as capacity utilization. Vacancies in the form of spare offices, unrented apartments and empty retail locations offer a picture of unused services activity and consumption. One wrinkle in this story is that due to the unprecedented degree of housing trouble, more people today are becoming renters rather than owners. However, measures of multifamily commercial real estate vacancies still demonstrate high resource slack, alongside the office and retail vacancy indicators. Since vacancies are expressed as a ratio, it may be more straightforward to compare levels across time periods than measures of residential homebuilding and sales.

Bottom line: What are our measures of resource slack telling us?

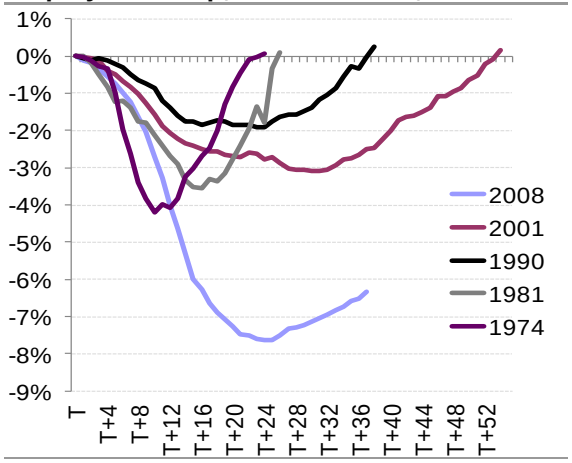
Almost all indicators of slack show all-time high levels of slack during the economic crisis, but we have seen significant improvements since then. However, the distance between where we are now and normal levels is still large. Even if one does not agree with current estimates of the NAIRU and output gap, many other indicators still show excess resource slack.

Chart 3
NAIRU (%)



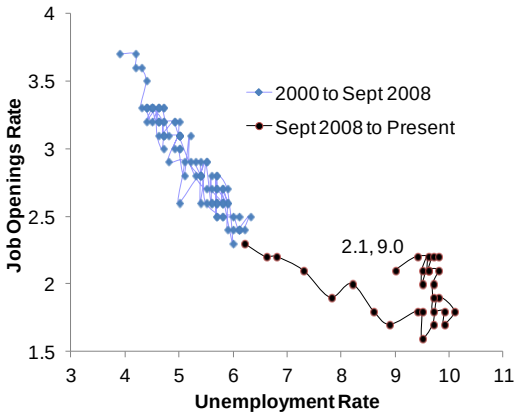
Source: CBO

Chart 4
Employment Gap, T= Peak Level, Months



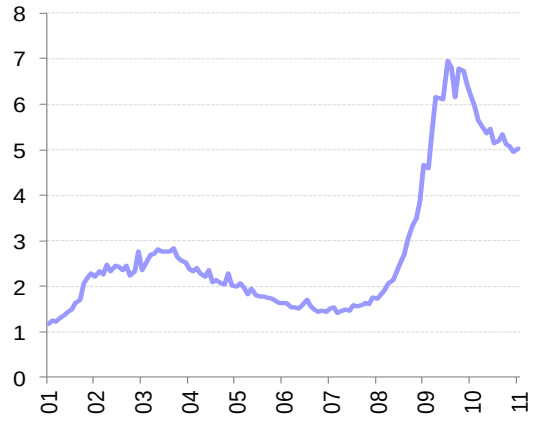
Source: BBVA Research

Chart 5
JOLTS-Based Beveridge Curve



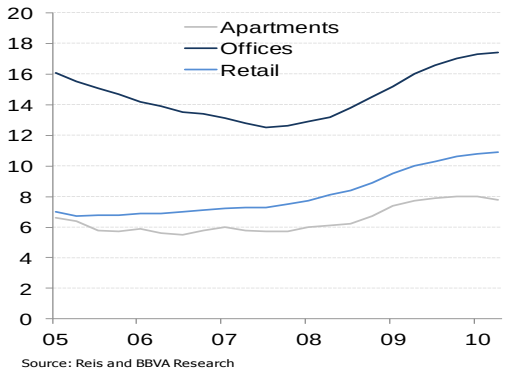
Source: BLS and BBVA Research

Chart 6
Unemployment-Vacancy Ratio



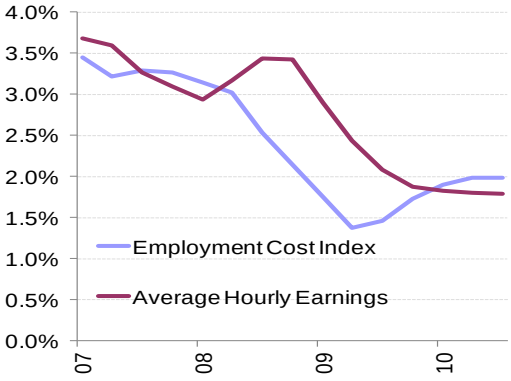
Source: BLS and BBVA Research

Chart 7
CRE Vacancies



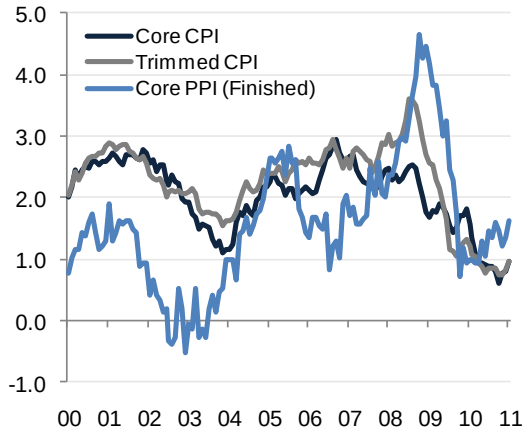
Source: REIS and BBVA Research

Chart 8
Employment Cost and Average Earnings



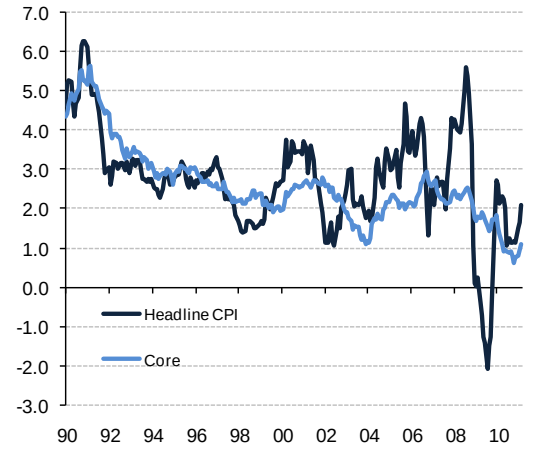
Source: BLS and BBVA Research

Chart 9
Core Consumer Prices (YoY % change)



Source: BLS, Cleveland Fed and BBVA Research

Chart 10
Consumer Prices (YoY % change)



Source: BLS and BBVA Research

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