SLACKING OFF- OUTPUT GAPS AND FED EASING © Leo Haviland, 646-295-8385

October 25, 2011

"If you don't know the difference between reality and entertainment, there's a place for you. It's called a mental institution." The rapper, 50 Cent (NYTimes, 9/19/11, pD8)

CONCLUSION

In marketplaces and elsewhere in culture, there are many gaps. We deal with information gaps. Individuals and institutions seek to fill in holes in their knowledge by gathering additional information and evaluating what they have accumulated. They battle to improve the accuracy of their data. People ask "how and why do all these things fit together." They seek to resolve apparent contradictions and tensions in the evidence. Some information gaps relate to the past and present, whereas other ones focus more on the future. "What's going on in China's banking system and its property marketplaces? How severe are its local government debt problems?" "What will foreign owners of United States stocks do if the dollar depreciates sharply from current levels and if interest rates climb up?"

Politicians demonstrate credibility and leadership gaps. The US fiscal deficit disaster situation is merely one of many examples.

Traders observe price gaps. For example, imagine some stock. Picture a space between one day's high price (such as 66) and the lowest price achieved for that stock on all the subsequent trading days (such as 67) over the next two months.

One very important gap discussed by the International Monetary Fund, the Federal Reserve Board, and other economic players is the output gap. Why not investigate that topic? The Fed and other key players make key decisions significantly influenced by their views on this measure.

Output gap estimates about any given current and future output gap situation (and therefore to some extent even regarding past gaps) probably are much less reliable than the Fed's orations on the subject would have its audiences believe. The Fed is making decisions that are significantly based on very conjectural resource slack information.

Moreover, some evidence indicates the US output gap is less extreme than the Fed believes. What follows? The Fed's sustained effort to pin interest rates near the floor (and thus beneath even low inflation levels) as well as its past money printing (quantitative easing) adventures fought to ignite and sustain economic recovery. However, if it has overestimated the US output gap significantly, its policies have increased the risk of creating not only inflation (however long it may take for that to appear), but also more inflation than it and many others see as desirable.

OUTPUT GAPS

According to Federal Reserve Board Chairman Bernanke: "In addition to the stability of longerterm inflation expectations, the substantial amount of resource slack in U.S. labor and product markets should continue to restrain inflationary pressures." ("Economic Outlook and Recent Monetary Policy Actions"; Congressional testimony before the Joint Economic Committee, 10/4/11). How much faith should one place in this authoritative statement regarding "resource slack" by this guiding economic light? One should be wary. The OECD defines an output gap as the difference between actual gross domestic product and potential GDP as a percent of potential GDP. Roughly speaking, a negative output gap implies a slack economy and downward pressure on inflation. If the number is positive, some call this a positive output gap (or an inflationary gap). The positive number indicates that the growth of aggregate demand is outpacing aggregate supply growth, that actual output is more than so-called full capacity output.

Some of the references below to "output gap" refer to both positive and negative output gaps. However, sometimes a specific reference to an "output gap", or to the absence or disappearance of an output gap, will imply only the negative (resource slack) variety. The given context makes the meaning clear.

Buried deep within the International Monetary Fund's "World Economic Outlook Database" (September 2011) are specific output gap estimates for many advanced nations. The IMF measures the output gap as a percent of potential GDP. How do they know what this "potential GDP" is? Though the World Economic Outlook ("WEO") text makes some general references to emerging and developing nations such as China, neither the WEO nor its database provides specifics on them. Anyway, compare the United States, Japan, and Germany, from the sunny heights of the eternal prosperity promised by Goldilocks Era devotees in 2007 to the present, and venturing out to 2016. In the following table, a minus sign indicates a negative output gap. Statistics are rounded to one decimal place.

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
US	zero	-2.2	-7.1	-5.6	-5.6	-5.5	-4.9	-3.8	-2.6	-1.3
Japan	.6	-1.3	-7.8	-4.4	-5.2	-3.5	-2.2	-1.0	4	zero
Germany	2.7	2.3	-3.7	-1.6	3	4	3	1	zero	zero

Thus America had no output gap (resource slack) in 2007. In the sense of resource slack, neither did Japan and Germany (their output gap number was positive). However, with the advance of the global economic disaster, the US and Japan had dreadful output gaps in 2009. America's situation improved some by 2010. However, it remains about unchanged for 2011 and 2012, with only gradual progress out to 2016. This IMF viewpoint regarding the US output gap thus mirrors the Fed Chairman's opinion.

The WEO comments that current output gaps around the globe generally are not remarkably wide, with the exceptions of Japan and the US. It adds: "Evidence of labor market tightness is clearer for a number of smaller advanced economies and for many emerging and developing economies." (Chapter 1, p10).

Despite Bernanke's resource slack sermon and the IMF s statistics, let's dig further into the output gap issue. First of all, one should underline an IMF confession: "Output gap estimates are notoriously unreliable, whether for advanced or for emerging and developing economies. They frequently overestimate the extent of slack following periods of strong growth, such as many emerging and developing countries have enjoyed." (p23). Extend the logic of this IMF viewpoint on notorious unreliability. One can overestimate the output gap following eras of weak growth,

and one can underestimate the slack succeeding boom times of boom periods as well as periods of weak growth (or recession).

Taking the IMF at its word on notorious unreliability, the resource slack (negative output gap) claims of the Chairman and his allies are highly conjectural. One should not place too much faith in Bernanke's resource slack opinion and forecasts, and thus in that element of his inflation outlook.

Suppose financial sentinels overestimate the slack following a period of robust growth. Many agree that this risks not being sufficiently vigilant against inflation.

However, look at an alternate scenario. We all know the US and many other major nations fairly recently endured a recession. Although all output gap estimates are highly questionable, assume American guardians overestimate the output gap following a period of weak growth or a downturn. These sheriffs consequently may be excessively worried about deflation (or in recent central banking wordplay, insufficient inflation) due to this output gap variable. And since they're overly scared about deflation (inadequate inflation), they may be inadequately fearful about "inflation in general", regardless of their talk of vigilance regarding this. Trying to generate "sufficient inflation" (or to avoid ore escape deflation) could engineer more inflation than the watchdogs (and many owners of interest rate instruments) desire.

The IMF states (and as its database underlines) that output gaps remain. It remarks that crisisrelated output losses will be long-lasting. However, it also adds: "most of the output lost in the euro area and the United States during the crisis will not be recovered" (WEO, Ch. 1, pp9-10; Figure 1.13, p15.). One should be wary about stretching this unrecoverable output statement comment too far, for it contradicts (or at least is in tension with) the narrowing output gap from 2009 to 2016 for the US (and many Euro countries) displayed in the WEO database. Yet this unrecoverable lost output scenario is another key reason to be wary of the Fed's resource slack diagnosis and prediction.

Though issued four months ago, the Bank for International Settlements Annual Report (81st, 6/26/11, pp55-61) offers additional central banking views on the issues of output gaps, inflation, and the speed of monetary tightening. The BIS states that one key influence on the pace of monetary tightening due to inflation fears relates to higher commodity prices, especially food and energy ones. It then addresses a second factor influencing the tightening pace: "the extent of economic slack".

It remarks: "The persistently high unemployment rates in some countries are often interpreted as indicating that there is significant slack in labour markets. For the economy as a whole, some measures of the output gap (actual output minus potential output) also point to ample unused capacity."

However, note the BIS skepticism regarding this interpretation. First, "Monetary policymakers face uncertainty about economic slack..." This seems to fit with the notorious unreliability comments regarding that measure given by the IMF.

In addition, the BIS significantly states: "some measures of the output gap suggest...there may be much less unused economic capacity in many economies and, on average, globally. For example, some statistical measures of global output gaps indicate that a substantial narrowing, if not

outright closure, is in train..." Not only does this general comment about the global situation hint at overall inflationary risks.

Now think particularly of America and Europe. "The less benign inflation perspective...reflects the possibility that potential output in the advanced economies was more aversely affected by the international financial crisis than is commonly thought. In particular, potential output trends may be suffering from high private and public debt, which can have negative effects on consumption and investment prospects. Moreover, large investments that took place prior to the crisis, eg in the construction sector, may prove to be much less productive than was originally expected."

Inflation levels and trends in the US and elsewhere of course involve numerous interrelated factors. Analysis should extend beyond the output gap perspective. Yet we should read between and stretch beyond these BIS lines a bit.

Suppose the potential American output is lower than the Fed and many other economic and political experts believe. Then some of the output gap is imaginary. If potential output (and thus the output gap; resource slack) turns out to be less than believed, valiant efforts to propel output to the higher (mistaken potential output) level probably will fail. Also, even well-intentioned efforts to boost output to the mistaken potential output level therefore can be excessive (misguided). Consequently, the Federal Reserve's massive money printing (quantitative easing) and its long running determination to keep low policy rates, as well as enormous rescue-oriented deficit spending measures, probably create noteworthy inflation risks (even if such inflation takes some time to emerge).

The BIS, in its concerns about higher inflation, sees parallels between the current situation and the 1970s. The present economic environment may seem much different in many respects. It nevertheless underscores: "Today, with hindsight, it is clear that conventional measures of economic slack at that time were grossly overestimated. The rise in the unemployment rate was due in large part too structural changes in labour markets. The slowdown in economic activity was mistakenly attributed to insufficient demand rather than to a substantial slowing of potential output growth. In other words, the estimated output gap was thought to be quite large and persistent, when in reality it was not...This misperception helps to explain why monetary policy at the time ended up being too accommodative for too long."

US capacity utilization statistics suggest, though not decisively, that the Fed's current conjectures on US resource slack are mistaken. Admittedly these utilization statistics cover only the industrial sector, not the whole of US GDP. The Fed defines the industrial sector as manufacturing, mining, and electric and gas utilities (Federal Reserve, G.17; 10/17/11). The data nevertheless hints that some US productive capacity has disappeared; therefore the American output gap is narrower than the Fed believes. Has the capacity utilization aspect of the rest of the US economy in general, and particularly in recent years, been fairly similar to that of the industrial sector? If it has- and this obviously is a big if- the Fed's output gap claims would be even more likely to be incorrect.

The total industry capacity utilization average for 1972-2010 is 80.4 percent. In September 2011, total industry capacity utilization was 77.4 percent. Manufacturing utilization (77.9pc of the index) that month was 75.1pc, mining (11.7pc) 91.3pc, and utilities (10.4pc) 77.6pc. So over two years into the economic recovery (two and a half years since the March 2009 stock marketplace valley) capacity utilization remains below average. Lofty prices for many natural resources

generate recent elevated levels for the mining category, which raise the overall utilization numbers slightly.

The National Bureau of Economic Research states that the last four US recessions were 12/2007 to 6/2009 (18 months; the longest one since World War Two), 3/2001 to 11/2001 (8 months), 7/1990 to 3/1991 (8 months), and 7/1981 to 11/1982 (16 months).

Not only is current capacity utilization well into a recovery notably below average. The capacity low achieved as the 2009 recession ended, June 2009's 67.3, is the low for the index over the 1972-2010 period. It is clearly under the lows of the most recent three recessionary periods. The 2001 bottom- just after the end of the 2001 recession- was 12/2001's 73.5. The utilization low for the 1990-91 downturn was March (and April) 1991 at 78.8. Just after the long recession of 1981-82, capacity reached a trough at 70.9 in 1/1982 (distant from the 1978's yearly average peak at 85.0). The record low of June 2009, when read alongside the relatively modest rebound to date (September 2011 is still beneath the 1972-2010 average of 80.4), suggests severe damage to actual capacity (and thus to output potential) during the recent savage downturn.

Another perspective suggests the error of the opinion that a lot of resource slack (a very wide negative output gap) exists in the US economy. There are warnings of a longer run downtrend in industrial capacity utilization potential (in other words, potential output may be less than many assert). First, the monthly peaks during the incredible Goldilocks Era only made it up to 81.3 (September and December 2007; 81.0 yearly average), barely scraping above the 1972-2010 average of 80.4. In addition, as time passed from 1973 to 2007, yearly tops in capacity utilization became lower. In comparison with 2007 summits, recall the not ancient yearly average highs of 84.2 (1997) and 84.1 (1995), as well as more distant yearly peaks 84.3 (1988), 85.0 (1978), and 1973 (88.3).

Current utilization statistics show that manufacturing, the major part of industrial capacity, is still feeble. Also, anecdotal evidence suggests that some American manufacturing potential (and thus jobs) ventured overseas in recent years. Don't we hear of closed plants and lost jobs in America, and the relative cheapness of manufacturing in China and many several other developing and emerging lands?

Assume constant demand for a given amount of produced goods (or services). To some extent, the export of American output potential overseas tends to reduce the output gap of those nations. All else equal, those foreign nations use their existing capacity, or build new capacity, to meet that demand.

Though inflation derives from numerous sources, a very narrow (negative) output gap, and especially a positive output gap, may help to create inflation. In an interconnected global economy, to the extent major developing and emerging marketplaces have minimal output gaps (and especially if they have inflationary pressures from other sources), they eventually may export their inflation around the world, including to the US and Europe.

SLACK TIMES

The Kinks sing in "Where Have All The Good Times Gone": "Will this depression last for long? Won't you tell me Where have all the good times gone?" According to the IMF, the US output gap in 1982 was about -7.4 percent of potential GDP, slightly wider than the -7.1pc of 2007. The 1982 resource slack hole was filled fairly quickly. Though the output gap was around -6.0pc in 1983,-it narrowed to -2.3pc in 1984. It fell to -1.4pc in 1985 and -1.1pc in 1986, becoming positive (.1pc) in 1988. The narrowing from 1982 to 1985 lasted about three years. The IMF forecasts it will take until 2016 (seven years from the wide 2009 level) for the US output gap to reach -1.3pc, about the 1985 level.

Bernanke's Congressional testimony as well as the Fed's recent policy statements on resource slack underline that the Fed shares the IMF's database opinion regarding the probability of a slow narrowing of the US output gap. Recall the Fed's specific comments regarding conditions warranting "exceptionally low levels for the federal funds rate at least through mid-2013" (FOMC "Press Release", 8/9/11). That August interest rate decision resulted from its view of "economic conditions- including low rates of resource utilization and a subdued outlook for inflation over the medium run". Thus the Fed's faith that the 2009 output gap was very wide, that the output gap remains substantial, and that it will narrow slowly is a crucial factor motivating the exceptionally easy Fed monetary policy. In regard to its choice of at least mid-2013 as a key time horizon to monitor, only from that time and level (-4.9pc) does the output gap begin to narrow relative to the depth of 2009 and the stagnation of 2010-2012.

The Fed's previous quantitative easing (money printing) rounds were partly inspired by the yawning output gap. Suppose the American economy weakens anew, and that the alleged large output gap remains so, with unemployment very high. The Fed might leap into another round of money printing (QE3).

Focus on unemployment in the resource slack context. There are of course many intertwined causes of unemployment. However, there obviously needs to be potential for jobs prior to the creation of positions and hiring. Put issues of productivity innovation, new industries, US dollar trends, and all sorts of other variables to the side. Suppose that the output gap is narrower than the Fed and many others believe because some of the potential GDP "permanently" disappeared. Lower potential GDP means that all else equal, there probably will be fewer potential jobs. And if the great majority of available positions (work opportunities) actually around are filled, there is little hiring slack at firms (and the government cannot employ everyone). Thus if the output gap is much narrower than the Fed and other marketplace oracles believe, the US unemployment rate probably will remain stubbornly elevated for an extended period.

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Picture closed-down US manufacturing facilities or service businesses. Suppose these were generally efficient enterprises that went out of business largely because of relatively high employment costs. Suppose the manufactured goods and services once created by them remained in demand, but that the ability to produce them migrated elsewhere around the globe.

All else equal, what is one way to recreate (add to) potential US GDP (assuming that pundits previously eliminated these businesses from their calculations of that potential)? Alternatively viewed, what is one way to narrow the output gap (supposing gurus didn't cut them out of their calculations)? One method would be for wages and associated costs to tumble to levels sufficient to enable the businesses to reopen and hire workers. Thus to some extent in some arenas, for America (and other advanced nations) to compete with developing and emerging countries and

reduce unemployment, it faces pressure to lower wage costs toward levels in such developing and emerging lands.