## Unemployment and Underemployment, 1970 - 2012 Edward D. Duvall 22 Feb 2012

We are all aware of the high levels of unemployment in the U. S. high since the housing bubble burst in 2007 - 2008. Although the stock market appears to be slowly regaining its prior levels, we have not seen a corresponding increase in employment, which would indicate a true return to prosperity for the general public.

We do not know, and will probably never know, if the housing bubble and collapse was engineered. What is reasonably certain is that the influence of Wall Street bankers, financiers, and ratings analysts upon Washington politicians and their consequent ability to demand taxpayer assistance played a role in Wall Street's negligence or willing ignorance of risk. In any case, four years after the collapse, unemployment remains high, and some commentators have pointed out (correctly) that the real unemployment rate, when those who have given up finding work are included, is much higher than the stated official rate. That is a true statement - many people have quit searching for work, believing (from hard experience) that there is none to be had; many more are working at lower-paying jobs than they are qualified for, or are working part-time when they would like to be working full-time.

These same commentators then claim that this is some kind of anomaly, and seek to blame the current administration for failed policies that permit the true unemployment to be high. Some defenders of the current administration choose to claim there is no "underemployment". Other supporters of the current administration continue to blame the previous administration for causing such a severe financial problem that the number of underemployed is a unique consequence of the housing collapse. Both sides are wrong. The fact is that the Bureau of Labor Statistics (BLS) has always published several unemployment metrics. Many decades of statistics show that "underemployment" is a persistent feature of the U. S. economy, in good times and bad. It really is common sense: unless there is truly full employment, there will be, by definition, some who are unable to find work in their desired fields for long periods, or who are working less than they would like. Let us now examine the historical facts of employment and underemployment.

Since 1948, the BLS has used monthly surveys of households to gather data from which to estimate various categories of unemployment. Currently, the BLS or Commerce Department conducts a "Current Population Survey" of about 60,000 households monthly. Among the questions asked are ones pertaining to the fraction of people in the household who are employed or unemployed. After subtracting out those who are not in the labor force (i.e., those who are not employed but not looking for work because they do not desire employment, like retirees and stay-at-home mothers), the BLS derives statistics for the general rate of unemployment. From 1948 to 1994 the BLS interpreted the questions and derived statics for seven categories of unemployment statistics, named U1 to U7. For this discussion, only two of them are of interest; U5 and U7. The U5 metric was defined as the total unemployment rate for all persons aged 16 and over who were actively looking for work. It excluded those on active duty in the military, in prison, or confined in rest homes or mental institutions. The U7 metric was defined as the total unemployment rate for all people looking for full-time work (i.e., the U5 definition), but also included the following three categories: a) one-half of those looking for part-time work; b) one-half of those who were employed part time for economic reasons; and c) discouraged workers (those who had given up looking for work). It also excluded the same people as the U5 metric. The "official" unemployment rate from 1948 to 1994 was the U5 metric as described above.

Figure 1 shows the U5 "official" unemployment rate and the U7 rate (both read on the left side) and the ratio of these from 1970 to 1993 (read on the right) [1, 2]. It is evident that the U5 and U7 rates were highly correlated; from 1970 to 1982, the ratio of U7 to U5 was about 1.35; from 1983 to 1993 it was

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about 1.45. We do not know if something fundamental changed after 1982 or if the data was interpreted differently than before. In any case, the ratios are very consistent over long periods of time. In other words, total marginal unemployment, which includes those working part-time when they would rather be working full-time, and those who have given up, was approximately a fixed factor above the "official" unemployment rate.

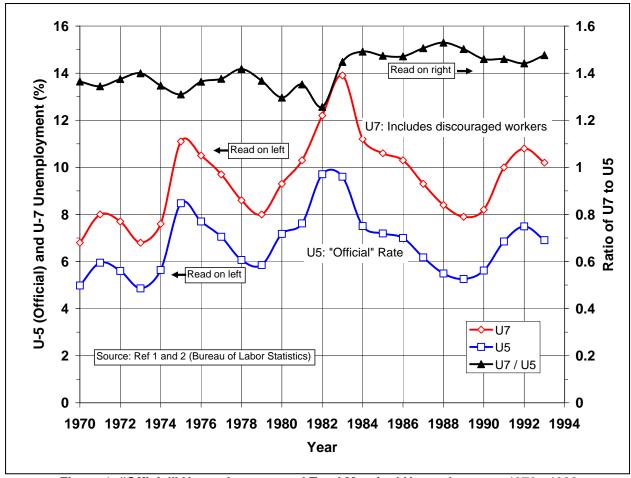


Figure 1: "Official" Unemployment and Total Marginal Unemployment, 1970 - 1993

The BLS revised its procedures and definitions in 1994. The then-prevailing U3 and U4 metrics were abolished, and several changes were made to some of the definitions: a) the definition of the "official" unemployment rate was retained, but was renamed from U5 to U3; b) the old U6 was revised and moved to U5; and c) the old U7 was revised and moved to U6. The new U6 metric, which measures the total unemployment rate including the marginal cases, is defined as the total official unemployed (i.e., U3), plus: a) those who are not currently working or looking for work, but desire employment (including those who have given up on finding work); and b) those who desire full-time work but can only find part-time work.

Figure 2 shows a comparison of the "official" U3 and "total marginal" U6 unemployment data from 1994 to 2012. It is clear that the two of them fluctuate together as indicated on the left scale in a manner similar to U5 and U7 on Figure 1. The scale on the right side shows the ratio of U6 to U3. It is easy to see that the ratio U6 to U3 is nearly constant at about 1.76 for the entire time U6 has been defined. So, the un-

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deremployment concept is true (contrary to defenders of the current administration), but is not behaving any differently with respect to the "official" rate than it ever has (contrary to claims made by critics of the current administration).

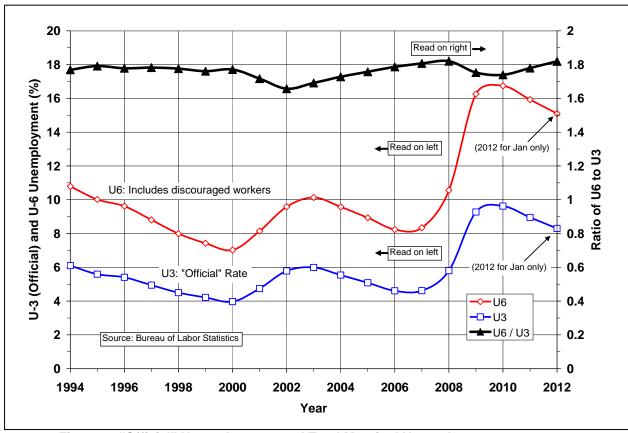


Figure 2: "Official" Unemployment and Total Marginal Unemployment, 1994 - 2011

It is clear from both Figures that underemployment is a structural feature in the U.S. work environment; as I mentioned earlier, it is a natural thing unless there is truly full employment. The underemployment rate has maintained a steady relation to the "official rate" over several decades and can be represented as simple multipliers of the "official" rate: 1.35 (1970 - 1982), 1.45 (1983 - 1993), and 1.77 (1994 to present).

It is also evident from these two Figures that the current unemployment rates are worse than both the recession of the mid-1970's and the early 1980's. It is also clear that the current high unemployment condition is lasting longer than either of those two previous recessions.

- [1] Marillyn A. Hewson, Michael A Urquhart, "The Nation's employment situation worsens in the first half of 1982", Monthly Labor Review, Aug 1982, pp. 3-12
- [2] Constance Sorrentino, "International unemployment indicators, 1983-1993", Monthly Labor Review, Aug 1995, pp. 31 50

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