

Mitchell's Musings 4-6-15: What's Upfront?

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Statistics are in principle “neutral.” They are just facts. In theory, it’s up to the user of the statistics to interpret the numbers. But nice as that theory is, it is not quite true. How you *display* statistics or *which* statistics you choose to display can influence users’ perceptions. To take an example, consider the monthly “Employment Situation” release of the U.S. Bureau of Labor Statistics shown below. There is much information in the body of the release. But someone has determined for you that the two most important pieces of data you want to see first are the official unemployment rate and its trend and the monthly change in nonfarm payroll employment over the past two years. In effect, those two items are the cover story to the rest of the information. They are often the headline stories in the news media.



NEWS RELEASE



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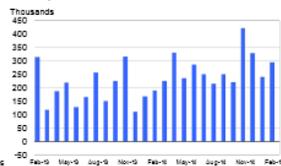
THE EMPLOYMENT SITUATION — FEBRUARY 2015

Total nonfarm payroll employment increased by 295,000 in February, and the unemployment rate edged down to 5.5 percent, the U.S. Bureau of Labor Statistics reported today. Job gains occurred in food services and drinking places, professional and business services, construction, health care, and in transportation and warehousing. Employment in mining was down over the month.

Chart 1. Unemployment rate, seasonally adjusted, February 2013 – February 2015



Chart 2. Nonfarm payroll employment over-the-month change, seasonally adjusted, February 2013 – February 2015



Household Survey Data

Both the unemployment rate (5.5 percent) and the number of unemployed persons (8.7 million) edged down in February. Over the year, the unemployment rate and the number of unemployed persons were down by 1.2 percentage points and 1.7 million, respectively. (See table A-1.)

Among the major worker groups, the unemployment rate for teenagers decreased by 1.7 percentage points to 17.1 percent in February. The jobless rates for adult men (5.2 percent), adult women (4.9 percent), whites (4.7 percent), blacks (10.4 percent), Asians (4.0 percent), and Hispanics (6.6 percent) showed little or no change. (See tables A-1, A-2, and A-3.)

As noted, it’s not that those two items are the only pieces of information contained within the release. But they are prominently displayed. For example, someone might alternatively have chosen average weekly hours or the median duration of unemployment to display, data that are also part of the release. There are alternative unemployment rates in the release based on definitions differently from those used for the official rate. But you have to know about these other data series and look for them.

How you display data has long been known to be important. When I taught a course in labor markets and we arrived at the unit on productivity, I would note that in a broad context, productivity can refer to management and effective decision making. Your decision making is in part a function of the facts at hand. In that context, I would bring up the name of Florence Nightingale who at least some students would identify as “the first nurse.” Less known about her is her use of statistics and her presentation of statistics to

persuade the powers-that-be in Britain on appropriate treatment of wounded and ill Crimean War soldiers. Nightingale developed a circular bar chart form of display to make her points.¹ Indeed, she said that “To understand God's thoughts we must study statistics, for these are the measure of his purpose.”² She didn't add that the choice of which statistics to study is a human choice.

The display of data may not necessarily tell you about God's thoughts, but they do tell you something about the thoughts of whoever arranged the display. Which brings me to the Mitchell's Musings of March 23, 2015.³ In a footnote in that musing, I noted that the St. Louis Fed's database system “Fred” indicated that a statistical series on the holdings of U.S. Treasury securities holdings of foreign official monetary institutions (central banks and similar institutions) had been discontinued.⁴ This series, which has been produced by the Bureau of Economic Analysis (BEA) in the Dept. of Commerce, may seem obscure to you. But it previously could be found on Table 1 of the quarterly “balance of payments” releases of the BEA. Putting it on Table 1 – and therefore among the first information you see - was a decision someone had made that the information was important. I agree with whoever that was that the series was important, and still is, but let me delay getting into why.

When you go to that release now, the series has indeed vanished from Table 1 as can be seen on the latest posting.⁵ A year earlier, the same release had the series.⁶ So I emailed BEA to find out why the change was made. The response I got back was essentially in two parts. Basically, there was an effort by BEA to simplify the release and put it in a format similar to that said to be used by other countries. Second, it was noted that because users might want to see the information that had previously been displayed, you could go *on the web* and find it on another table (a table not included in, or mentioned in the latest release). So the data are available (FRED was wrong), but surely not displayed in a way that Florence Nightingale would have used if she thought there was importance in the series. (You go to <http://www.bea.gov/iTable/iTable.cfm?ReqID=62&step=1#reqid=62&step=6&isuri=1&6210=1&6200=74> and then click on “Addendum Table 9.1”)

OK. Who cares? Why is the series important? To answer that question, you have to know something about the international monetary system. From the end of World War II and until the early 1970s, the U.S. and other major currencies used a fixed exchange rate system. All countries defined the price of their currencies relative to the U.S. dollar. To make the market price the same as the official price, central banks committed themselves to buy and sell their currencies in unlimited amounts at that dollar exchange rate. The system suffered a major shock in 1971 and essentially fell apart in 1973. Thereafter, with some exceptions, the U.S. took a relatively passive position with regard to the dollar. However, other countries in varying degrees

¹<http://www.uh.edu/engines/epi1712.htm>

²<http://www.goodreads.com/quotes/330822-to-understand-god-s-thoughts-we-must-study-statistics-for-these>

³<http://employmentpolicy.org/page-1775968/3264258#sthash.Wlap5LMs.dpbs>

⁴<http://research.stlouisfed.org/fred2/series/BOPIOGT>

⁵<http://www.bea.gov/newsreleases/international/transactions/2015/pdf/trans414.pdf>

⁶<http://www.bea.gov/newsreleases/international/transactions/2014/pdf/trans413.pdf>. Go to line 58 and the more comprehensive line 56 of Table 1.

bought and sold their currencies to achieve a target exchange rate with the dollar, or at least to stay within an exchange rate range around the dollar.

When we look at the change in U.S. dollar holdings of foreign central banks and official monetary institutions, particularly U.S. Treasury securities, we can determine whether they were acquiring more dollars (a “capital inflow” aimed essentially at preventing their currencies from rising in value relative to the dollar) or doing the opposite (a “capital outflow”). The series on the change in foreign official dollar holdings (flow data) is paralleled by a series showing the absolute amount of the holdings at the end of each quarter (stock data). As in the case of the flow data, BEA no longer includes this information on its basic table and leaves it to the user to find it in a supplementary table.⁷

The question of exchange rates and what other countries are doing to control the movement of their exchange rates relative to the dollar is crucial to the debate over the unprecedented growth of U.S. liabilities to the world, the imbalance of trade (imports far in excess of exports), and the shrinkage of American manufacturing due to that imbalance. A decision to reduce the prominence of a data series that relates to that debate (whether deliberate or not) is equivalent to a decision that the debate over those issues isn’t of much importance. Florence Nightingale would have understood the significance of the change in data presentation. Whether the decision maker at BEA understood is unknown.

⁷You go to <http://www.bea.gov/iTable/iTable.cfm?ReqID=62&step=1#reqid=62&step=5&isuri=1&6210=5> and then click on Table 3.1.