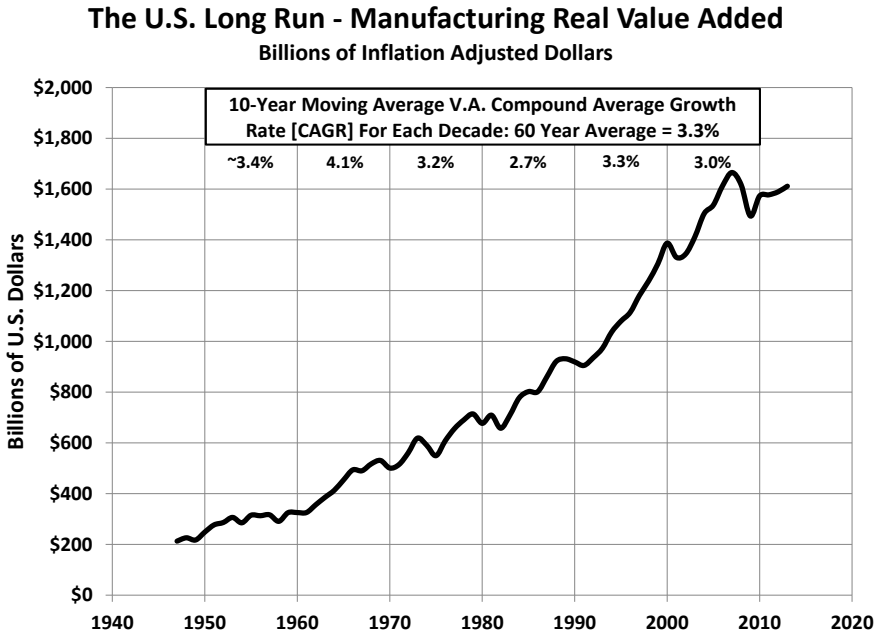
January 10, 2015

Rumors of U.S. Manufacturing's Decline Are Wildly Premature

U.S. Manufacturing *Real* *Value Added* has grown at a relatively consistent trend rate over the past 7 decades. There are two key points of emphasis to consider in this statement:

- Value Added is the ultimate acid test of U.S. manufacturing. Unlike total sales, it does not include the value of any ingredients that were not extracted or produced in the United States. For example, in the extreme case, if U.S. manufacturers were radically increasing the imported portion of the value of their own finished goods, we might instead have seen a flat line in the last two decades, or even a declining line. But instead, for decade after decade it has kept steadily increasing. The only exception is the 'Great Recession', which the U.S., and much of the world, is still climbing out of. But that is driven by lower current demand, not a significant shift of manufacturing out of the United States since 2007.
- Real dollar quantities are inflation adjusted. Therefore, one dollar in the 2000s, and one dollar in the 1940s, represents the same quantity of product. So it is the same as physical output of product.



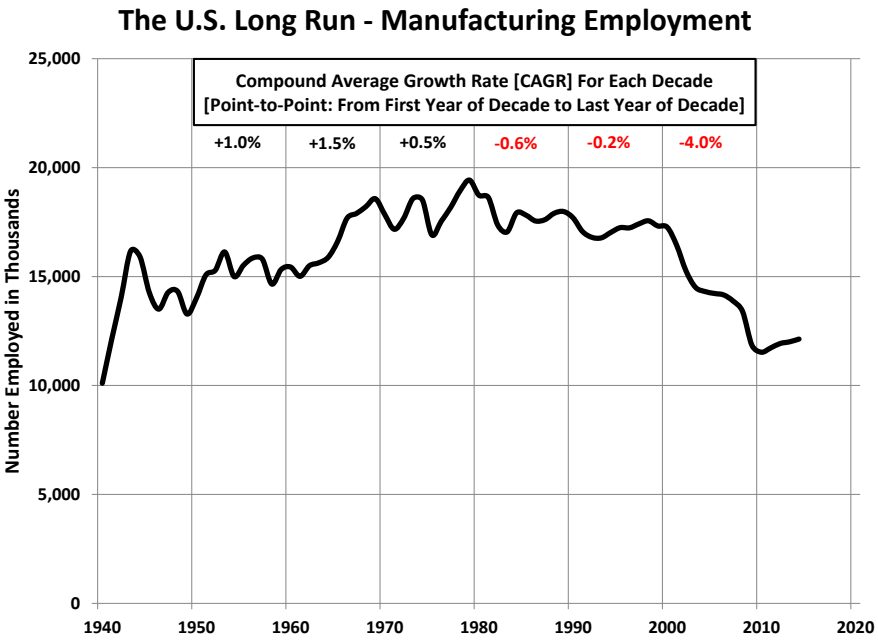
From the Mid-1940s to the Mid-2000s the average compound annual growth rate in Real Value Added[1] was 3.3% [The last data point on the chart is 2013. 2014 was up considerably from 2013. And 2015 is anticipated to be up by more than the 2014 growth over 2013].

Thus, with the exception of cyclical recessions over the time span, the decade to decade growth rate has only ranged from a 2.7% to 4.1% CAGR. And the 2000s were well within that range.

[1] J.T. Gabrielsen Consulting, LLC analysis of data from The U.S. Bureau of Economic Analysis [BEA]

So why is there such a strong perception that U.S. Manufacturing is declining rapidly?

Because all the focus is upon the number of jobs in the U.S. manufacturing sector, not the amount of U.S. produced value. And the number of jobs[2] did slowly erode in the 1980s and 1990s. And has declined quite significantly in the 2000s, before hitting a bottom in 2010 and increasing slightly since then.

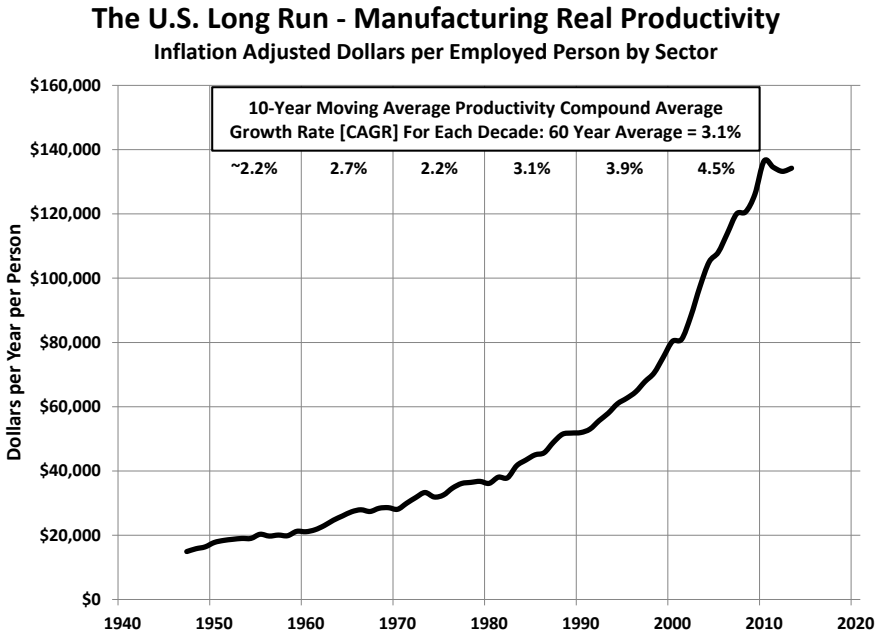


But how could total Real Value Added [and thus physical output] just keep steadily increasing, while the manufacturing employment rate has been declining since a peak in about 1980?

In a single word, **Productivity**.

In the chart below we look at productivity by a different formula that the most common one, but the results are similar. This chart divides total real value added from the first chart, by number employed in manufacturing in the second chart, to obtain real manufacturing value added per person employed in manufacturing[3]. By this measure, productivity improved the least in the 1970s. Since then the annual rate of improvement has become larger in percentage terms in each of the last 4 decades.

[2] J.T. Gabrielsen Consulting, LLC analysis of data from The U.S. Bureau of Labor Statistics [BLS]
[3] J.T. Gabrielsen Consulting, LLC analysis of data from The U.S. Bureau of Economic Analysis [BEA] and The U.S. Bureau of Labor Statistics [BLS]



Summary and Conclusions –

- Any job losses are very unfortunate.
- And in no way is this meant to say that there has not been any increase in the quantity of ingredients sourced from outside the U.S. over the past 3 decades.
- But, the degree of increase has not significantly impeded the rate of growth of Manufacturing Real Value Added.
- And consider this, had it not been for the tremendous improvements in productivity achieved by U.S. manufacturers, would anything still be manufactured in the U.S.?
- And for that matter, if that U.S. were that unproductive, while other countries were either more productive, or had much cheaper labor, would the U.S. have the wellbeing and wherewithal to import anything either? Or would the U.S. be in worse shape than Southern Europe?

What do you think?

Next Week – "The Circle of Economic Life - A 170 Year Perspective on Shifting Employment" – From 'Agriculture' to 'Manufacturing & Services'. And then from 'Manufacturing' to 'Services'. Once again, it is different from how the story is constantly told. I was surprised by what the data shows.

Jon T. Gabrielsen is President & CEO of J.T. Gabrielsen Consulting, LLC. http://www.jtgabrielsenconsulting.com/ The main focus of the firm is on the market economics of durable goods B2B markets and supply chains and the economics of the use of energy for durable goods manufacturing and for transport providers.