My favorite fact of this past year was the proof that China makes almost nothing out of assembling Apple's iPads and iPhones. It's a favorite because it speaks so directly to one of the great political arguments going on in both the US and the UK. I refer, of course, to this very strange idea that both countries would get (even) richer if only they would do more manufacturing.

The paper itself is here and it's an analysis of who gets what out of the sales price of either an iPad or iPhone.

This article analyzes the distribution of value from innovation in the global supply chains of the Apple iPad and iPhone. We find that Apple continues to capture the largest share of value from these innovations. While these products, including most of their components, are manufactured in China, the primary benefits go to the U.S. economy as Apple continues to keep most of its product design, software development, product management, marketing and other high-wage functions in the U.S. China's role is much smaller than most casual observers would think. A key finding for managers is that they need to beware of relying too heavily on single customers. With its control over the supply chain, Apple has the power to make and break the fortunes of many of its suppliers. A key finding for policymakers is that there is little value in electronics assembly. Bringing high-volume electronics assembly back to the U.S. is not the path to "good jobs" or economic growth.

Or more simply seen in these charts at Mark Perry's.

As you can see the two largest inputs are materials and Apple's own profit margin. Despite the machine being assembled in China it's still true that the value of that labour is trivial: 2% or so of the cost of the machine.
Here the amount that goes to Apple's profits is even higher and China's labour input about the same.

The reason the profits are so much higher is really a measurement issue: the iPhone tends to be sold through the networks, thus the sales costs are somewhere in the networks' accounts, not here.

But here's the real takeaway point from these numbers. Basic manufacturing, electronics assembly type manufacturing, simply isn't a high value occupation any more. And the level of wages that can be paid in any particular occupation depend, inexorably, on the amount of value that occupation adds. So if electronics assembly adds little value then there simply cannot be high wages for those doing that work for it just isn't a high value added occupation.

So quite why there are those insisting that bringing all this manufacturing “home”, to the UK or US, will lead to lots of well paid jobs in manufacturing I'm just not sure. There are indeed high paid jobs in manufacturing, as the onshoring of Samsung's chip plant for Apple shows. But that's producing 1,100 jobs to produce all of the processing chips for all of Apple's products.

If you like, the end lesson here is that you can have lots of manufacturing jobs, sure, as Foxconn does, but they pay $400 a month maybe. And you can have high paying manufacturing jobs like at that Samsung plant in Texas, but you're not going to get very many of them.

If you want lots of jobs and lots of high paying jobs then you're not going to find them in manufacturing. They're where the money is, in the design, the software and the retailing of the products, not the physical making of them. Manufacturing is just so, you know, 20th century.