Supplying demand
As a share of GDP, investment is not in decline
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IN OUR cover leader this week, my colleague makes the following point:

Nor are firms investing less. The same system that is accused of myopia has just financed the $500 billion shale-energy revolution, a boom in experimental biotech companies and the electric-car ambitions of Elon Musk, a maverick entrepreneur. Relative to assets, sales and GDP, American firms’ investment has held steady. The mix has shifted from plant and machines to things like software and research and development (R&D), but that is to be expected as equipment costs fall.

This may strike some readers as surprising. Here is the chart behind it. Gross private non-residential investment, though volatile, has fluctuated around 13% of GDP since the 1970s. Today, it is almost exactly at its long-run average. There has been a shift in the composition of investment, towards intellectual property. But, relative to GDP, investment as a whole has held steady. The IMF made a similar point in its April World Economic Outlook, noting that America’s investment slowdown has been no more severe than expected, given the depth of the recession.
A chronic shortfall in investment is part of the secular stagnation thesis, which says a surplus of savings over investment will cause a persistent demand shortfall, keeping growth stagnant and interest rates low. In a recent column in the Financial Times, Martin Wolf argues that business investment is “structurally weak”, and that as a result, consumers, governments or foreigners must juice up their spending to compensate.

This strikes me as suspicious. Usually, we think about the supply-side, not the demand-side, when we read “structural”. In the long term, Say’s Law should kick in and supply should create its own demand. How could weak business investment lead to a structural demand shortfall?

While gross business investment has held steady, net business investment—that is, investment adjusted for depreciation—has been in long-run decline. This is because depreciation (the red line) has crept up, as the capital stock has grown. But it is gross investment, not net investment, that matters for demand: when counting spending, it does not matter if a company buys a new machine to replace an old one, or buys a machine for a whole new purpose. GDP is exactly that: gross domestic product.

The main effect of rising depreciation is not a demand shortfall. It is a capital stock which grows less quickly relative to the economy. That constrains supply, not demand. This is consistent with recent weak productivity growth; it is often argued that falling capital per worker leads to falling output per worker.

I like to think of it the other way around. Technological advances allow workers to use more capital. Today’s manufacturing workers can use computers to program robots, rather than working on production lines themselves. Technology make a bigger capital stock worthwhile, encouraging net investment. (This framework does not work for R&D investment, which is itself aimed at finding advances).

For most of the economy, that technological advancement has been drying up. Recent technological innovation—Uber, Facebook and the like—has provided a lot of value to consumers. But it has not much increased the amount of capital each worker can productively use (at least, not on the same scale as the introduction of computers to workplaces in the 1990s).

In a model of a stable economy with no growth, net investment is zero. Gross investment exactly equals depreciation, and the capital stock is constant. I do not think that is where we are headed. But long-run growth is slowing. For the explanation, look to supply, not demand.