RESEARCH BRIEF

Low Interest Rates, Market Power, and Productivity Growth


KEY TAKEAWAYS

✓ Most advanced economies have suffered from low productivity growth for a number of years, even while interest rates are at historically low rates
✓ One explanation for this “secular stagnation” is that decreased demand has kept interest rates persistently low
✓ However, new research challenges this demand-side explanation and argues that low interest rates favor large companies
✓ Over time, the ultimate effect is that persistent low interest rates can limit productivity and economic growth by stifling competition

In the aftermath of the Financial Crisis and Great Recession of 2007-09, one explanation for the US economy’s low-level growth rate was a depression-era idea known as “secular stagnation,” which posits that such factors as persistent and very low interest rates, and/or wages and prices that remain at consistent levels, weigh down the economy’s growth rate. Interest rates near zero cannot be lowered further to incent borrowing and spending, and without such fuel for the economy, wages and prices become stagnant, or “sticky.” Growth remains sluggish.

For economists, the term “secular” means persistent over time, suggesting that the post-Great Recession years of slow growth were unlike a typical business cycle recovery. Something unexpected was happening. Some even suggested that this stagnation was inexorable, a “new normal” that would shape the economy for years.
A recent paper by Ernest Liu, postdoctoral student at Princeton University, Atif Mian, professor at Princeton University, and Amir Sufi, professor at UChicago’s Booth School of Business, “Low Interest Rates, Market Power, and Productivity Growth,” offers a new explanation for the phenomenon of long-term sluggish growth. The authors acknowledge that very low interest rates, initiated by policymakers in response to a large economic shock, drive people to save and discourage borrowing. However, they offer a supply-side explanation for the resulting slow growth: persistent low interest rates favor larger companies, which—over time—increases market concentration and stifles productivity growth. These insights offer new considerations for researchers and policymakers on the causes of—and cures for—secular stagnation.

Low interest rates are not created equal

Persistent low interest rates are not just a post-Great Recession phenomenon; rather, interest rates have fallen globally since the 1980s. This means that the effects of low interest rates—on both the demand and supply side—have been felt for some time. As described above, low interest rates are presumed to be expansionary; monetary policymakers, for example, typically lower interest rates in response to an economic downturn to stimulate investment and spending. In accounting terms, declining interest rates increase the net present value of future cash flows (money today is worth more than money tomorrow), which leads firms to invest.

Most economic models assume that this effect is always in place, regardless of market structure. For example, imagine a market where most companies are roughly the same size and are in competition with each other. If one of the companies makes a capital investment to improve productivity, the others have a strong incentive to make similar investments or risk falling behind. In this case, low interest rates have the expected effect.

However, now imagine a market with a large player and many smaller companies. In such a scenario, when the larger company makes capital investments, the smaller companies may become discouraged and, in effect, drop out of competition. There is no way that they can keep up with their larger, and relatively wealthier,
competitors. In such a scenario, over time, a market could become dominated by one or a few players. These large companies might have little incentive to keep improving because all of their effective competition has left the market. Why continue to invest if you have no further market share to gain? Ultimately, society is worse off because without the incremental investments that companies make under competition, productivity gains are lower than they otherwise would be.

To test this hypothesis, the authors construct a model where these changes happen gradually over time as two competitors’ make decisions based on the productivity gap between the two. If the productivity gap is small, the two companies are in a competitive region and both make investments to keep up with the other firm. The authors describe this as the traditional effect of lower interest rates. If the productivity gap gets too large, though, the firms enter a monopolistic region, where a leader is closer to achieving a higher-payoff position and therefore has even more incentive to increase investments. This incentive to invest marginally increases with reductions in interest rates. Lower rates, then, favor those with the incentives and the resources to be patient—larger firms. The authors term this the strategic effect of persistent low interest rates.

One analogy that broadly describes this relationship is a race between two runners. When the runners are next to each other, or one is just slightly ahead of the other, they both have incentives to keep up their pace to ensure that they don’t lose stride with the other. If one of the runners pulls ahead, they will both still have incentive to keep pushing; in the leader’s case because she wants to increase her lead, and in the follower’s case because he doesn’t want to fall further behind. Should the gap between the leader and the follower become too large, though, the follower may see no chance of winning and become discouraged, to the point of slowing down or even quitting. At that point, with no competition, the leader may also slow down or stop running. With no competition there is no improvement. The race is over.

A key insight of the authors’ model is that the traditional effect of low interest rates—wherein all companies invest—occurs when interest rates are reduced from a relatively high level, say from 7 percent to 5 percent. However, if interest rates continue to fall and approach zero, the benefits increasingly accrue to larger firms and the strategic effect described above takes hold. In a result that is incongruous with the traditional effect, economic growth slows as the interest rate decreases and larger firms exploit their relative market position. Importantly, if the initial interest rate level is relatively low and then falls, the benefits that accrue to leading firms is larger than if the initial rate were higher. In other words, in a world where interest rates start low and drop even further, larger firms benefit at a higher relative rate.

Finally, the authors conduct an empirical analysis of their hypothesis based on company data dating to 1962, and the results confirm their model’s prediction: leading companies within industries benefit more from reductions in interest rates, and those benefits are higher when starting from a lower level interest rate.

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Conclusion

The slowdown in productivity growth is a phenomenon that began well before the Great Recession and persists throughout most advanced economies. To this point, answers to this complex riddle have focused on the negative demand effects from price and wage stickiness and the effect of the zero lower bound on nominal interest rates. However, these answers appear incomplete. By modeling competition within industries and analyzing how lower interest rates affect that competition, this new research offers a counterintuitive answer: the effect of persistent low interest rates on economic growth can be negative.

The authors don’t claim to have the only—and final—explanation for persistent low interest rates, but their research suggests that the answer may encompass more than demand-side considerations. Also, the authors offer no policy prescriptions except to encourage economists and policymakers to focus attention on the production side of the economy and to raise new questions about the role and effect of persistent low interest rates on an economy. Better questions, of course, mean more helpful answers.

CLOSING TAKEAWAY

By modeling competition within industries and analyzing how lower interest rates affect that competition, this new research offers a counterintuitive answer: the effect of persistent low interest rates on economic growth can be negative.

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Low Interest Rates, Market Power, and Productivity Growth
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