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The nine lives of the modern leveraged company

Two Tuesdays ago, not a single yen's worth of the currently issued 10-year Japanese government bond changed hands. Nobody seemed to think it was worth the bother. You've heard of stranded oil. Now come stranded bonds.

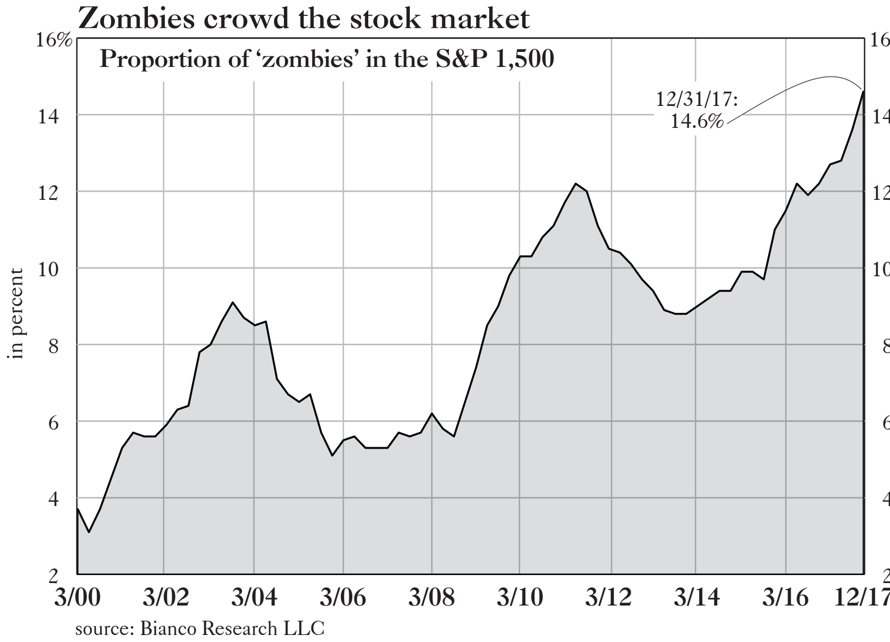
Dead bonds and living-dead companies are the topics at hand. A decade of interest-rate suppression has created an anomalous boom. Smack dab in the middle of the vibrant, Donald Trump-branded business expansion comes the rise of corporate zombies. Maybe you yourself are unwittingly invested in companies whose operating income falls short of the borrower's debt-service requirements (concerning one such specimen, Sunrun, Inc.—RUN on the Nasdaq—more below).

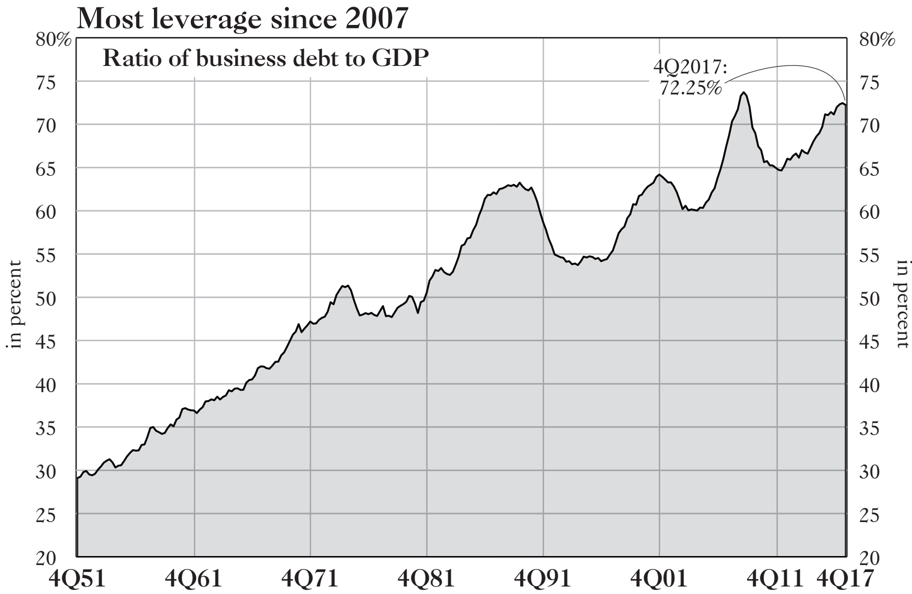
The zombies didn't just climb up out of the grave by themselves. Low interest rates and tight credit spreads have sustained them in their unnatural lives. In the 10 years through 2017, the combined assets of the Federal Reserve, Bank of Japan, the European Central Bank and People's Bank of China grew by 212%. Over the same span, nominal world GDP rose by just 36%. Whatever else the central banks' interest-rate-doctoring campaign has accomplished, it has brought about persistently cheap and accessible credit. Now companies, like cats, can have nine lives.

In remarks to a New York audience on Feb. 23, Benoît Cœuré, a member of the executive board of the European Central Bank, said that the world's central banks may hold as much as 90% of all German bunds. By cornering or, really, smothering the euro-denominated bond market, the ECB and its ilk have neutralized the ability of price-sensitive investors to move yields.

Cœuré was not so immodest as to name his own discovery, so we'll give the devil his due. Cœuré's Law holds that the compensation that private bondholders demand for bearing interest-rate risk varies with the volume of bonds available to buy; the lower the supply, or free float, the less the remuneration the coupon-clippers require. So small today is the relevant euro-denominated supply "that investors are willing to absorb new bonds without requiring much higher compensation," he said. "Supply is effectively constraining demand. . . . In these circumstances, only very large changes in the expected supply of bonds can cause yields to rise more meaningfully."

The reason that bund yields traded in so tight a range over the past year, despite the decline in the pace of ECB monthly purchases to €30 billion from €80 billion, was that central-bank purchases had achieved critical mass. That is, Cœuré posited, the monetary authorities had accumulated a bond portfolio sizable enough to snuff out price discovery. They had reached a "crossover point" beyond which a monetary manipulator could sit back and say, "We have done our work; private investors are defeated; they can do no damage to the yields that we have chosen to impose." So we characterize the gist of Cœuré's remarks. What he actually said was, "Once the 'crossover point' has been passed, additional purchases become less neces-





sources: Federal Reserve, Bureau of Economic Analysis

sary to contain the term premium at low levels."

"Conditions are not so propitious—as Cœuré would use the word propitious—on this side of the Atlantic," Deputy Editor Evan Lorenz observes. "No such crossover point is in sight in U.S. sovereign debt. The Fed owns $2.4 trillion of Treasury securities. The world's other central banks show dollar-denominated reserve holdings (which include non-Treasury paper) of $6.1 trillion. So the Fed and its counterparts possess, at most, 56% of the supply of Treasurys outstanding, which is roughly what they held in 2013, the year of the taper tantrum. Had the Fed anticipated the ECB by organizing the purchase of up to 90% of the free float of benchmark Treasury issues, Cœuré just about said in just about these words, there would have been no taper tantrum: no 130 basis-point leap in yields in less than three months in panicked reaction to Bernanke's broad hint that QE was sooner or later to end. Thus, the Fed's mistake lay in not removing enough notes and bonds from the hands of investors who actually care about price and value."

Now the proportion of Treasurys in the vaults of official monetary institutions is set for further decline. You will recall (*Grant's*, Feb. 9) that the U.S. government's net marketable borrowing needs are lurching higher, to $955 billion in fiscal year 2018 from $519 billion in fiscal 2017, and to a projected $1,083 billion in fiscal 2019. Simultaneously, the Fed is preparing to go on a balance-sheet diet. The central bank is set to return $300 billion to the market in the 12 months ending Sept. 30, 2018 and $600 billion in the 12 months ending Sept. 30, 2019. Adjusting for prospective Fed sales, public investors (the pesky, price-sensitive kind) will have to absorb $1.7 trillion worth of Treasury issuance in fiscal 2019, the equivalent of 8% of forecast GDP, the highest such percentage since 1945. It is not the way that Benoît Cœuré would run a railroad.

The dollar-denominated bond market is of two minds about this state of affairs:

1. Treasury yields are rising because the market is worried about inflation.
2. The spread between Treasury yields and junk-bond yields is closing because the market is not worried about credit risk.

Thus, from year-end 2016 to present, the yield on the 5-year Treasury has jumped by 77 basis points, to 2.7%. Over the same interval, junk-bond yields (as reflected in the ICE BofA Merrill Lynch U.S. High Yield Index) have risen by just 10 basis points, to 6.29%. The contraction in the spread of junk yields to Treasury yields measures a full 57 basis points. While nothing says that this difference can't continue to narrow, it's already quoted at a near post-crisis low.

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In a free market, unproductive firms give way to productive ones, much to the benefit of the consuming public. In this central-bank-rigged, neurologically impaired market, unproductive firms don't necessarily give way. They survive by borrowing at low interest rates. The great question is whether the unfit could survive even a moderate rise in interest rates.

Ben Brietholtz, a data scientist on the staff of Bianco Research LLC, has some interesting things to say on this subject. He observes that the bond market, which long doubted the Fed's declared intention, or perhaps ability, to normalize interest rates, is now on board with the official tightening timeline. Since September, the 10-year Treasury has tacked on 80 basis points. According to his deconstruction, says Brietholtz, 70% of that uplift is attributable to the rise of inflation anxiety—not to the visible evidence of increasing prices and wages but to the fear of them. You wonder, of course, how the market would react if the new inflation story, like so many of its predecessors, goes poof. A 2%–2½% (let us say) funds rate in the context of a drooping consumer price index would likely jolt every market in which interest-rate expectations play an integral part in price-setting (we can think of few markets in which they don't).

Curiously, too, the surge in zombies coincides with high aggregate corporate profits (11.4% of GDP in the third quarter of 2017, compared with a 70-year average of 9.7% of GDP), ebullient expectations for per-share profit growth in the S&P 500 this year (up by 27%, according to Wall Street consensus) and sky-high business sentiment. As to the latter, the Optimism Index of the National Federation of Independent Business stands at its highest reading since September 1983, the Consumer Confidence Index of the Conference Board has reached its loftiest level since November 2000 and the CEO Economic Outlook Index of the Business Roundtable has never been greater since scorekeeping began in 2002.

Yet zombies walk the earth. According to Bianco Research, the proportion of firms whose earnings before interest and taxes (EBIT) fail to cover interest expense is 14.6% of the nearly all-encompassing S&P 1,500. That's up from 12.2% in the fourth quarter of 2016 and from 5.7% in the final quarter of 2007, the start of the Great Recession.

(Do you wonder how the Bianco firm does its figuring? It eliminates companies from the sample set with fewer than three years of data or for which the data are incomplete. It searches the remaining 1,110 entrants for cases in which interest expense is greater than the three-year average EBIT; 162 companies answer the description.)

Then, again, just four familiar names—Alphabet, Inc., Apple, Inc., Facebook, Inc. and Microsoft Corp.—account for a tenth of the S&P 500's trailing operating income, and much of this year's projected EPS growth is a result of tax cuts and buybacks financed by the repatriation of overseas cash. All well and good, but you can't pay your creditors with a lower share count.

Besides, while profits are elevated, so is business borrowing. In the fourth quarter of 2017, American company debt reached 72.2% of GDP, north of the 68.8% reading in the fourth quarter of 2007. One fertile tributary of the mighty river IOU is the private-equity business; multiples to EBITDA paid in p.e. transactions reached a new all-time high of 10.6 times in 2017 (*Grant's*, Feb. 9). Typically, you don't pay fancy prices without incurring debt.

"Diving into Bianco's zombie data," Lorenz relates, "you find that oil companies dominate the list—no surprise given the post-2014 swoon in crude prices. Of the 70 energy companies with adequate data for Bianco's calculations, 43 (61% of the total) were classified as zombies.

"What is a little surprising," Lorenz goes on, "is how elevated the zombie population remains, even ex-energy. Remove the oil-and-gas 43, and the proportion of zombies in the S&P 1,500 only drops to 11.4%, exactly double the 5.7% rate in the fourth quarter of 2007."

To get a sense of how much debt is tied to less productive borrowers, this publication ran its own screen of companies listed on the Big Board or Nasdaq. We sought to identify any showing a ratio of EBIT to interest expense of less than one for two consecutive years. Our efforts brought to the surface 471 prospective zombies with total borrowings of $412.6 billion.

Like all such nets, ours is imperfect. We did, for instance, capture Caesar Entertainment Corp., the overleveraged casino purveyor, but we also snagged Schlumberger Ltd., the very-much-living oil-services giant which owes its presence on the list to back-to-back $3 billion-plus asset impairment charges in 2016 and 2017. While such exactions do not enhance a company's earning power, neither, in the short to medium term, do they reduce its debt-servicing ability.

Some creatures slipped through: Netflix, Inc., for example, whose net income grew to $559 million in 2017 from $187 million in 2016, but whose free cash flow slumped to negative $2 billion in 2017 vs. negative $1.7 billion in 2016 (*Grant's*, Jan. 26). And Uber Technologies, Inc., the SoftBank Group Corp.-investee that reportedly lost $4.5 billion in 2017. Having secured a $1.15 billion B-term loan in 2016, the ride-hailing unicorn is back in the market for $1.5 billion in new credit (upsized from $1.25 billion just the other day). Interestingly, pricing talk on the new loan moved to Libor plus 425–450 basis points from Libor plus 400 basis points after the Uber front office met with investors on March 15 (commitments were expected to close after we went to press).

"Zombie" may not be quite the designation, but loss-making companies dominated the 2017 American IPO class. Fully 76% of the businesses that went public last year showed negative net income—the highest percentage since 2000 (when 81% of IPOs had no earnings) and well above the last cycle's peak in 2007 (55%), according to data crunched by Jay R. Ritter, the Joe B. Cordell Eminent Scholar Chair at the Warrington College of Business at the University of Florida.

Solid Biosciences, Inc. has kept the ball rolling in 2018. A zero-revenue, loss-making biotech, Solid served notice in its January S-1 filing of a looming contretemps with the Food and Drug Administration. The full nature of that issue, however, came to light only when the agency put a kybosh (not a "partial hold") on continued testing of Solid's supposed in-development blockbuster, SGT-001, a treatment for Duchenne muscular dystrophy. The news sent the newly issued shares tumbling by 65% on March 15.

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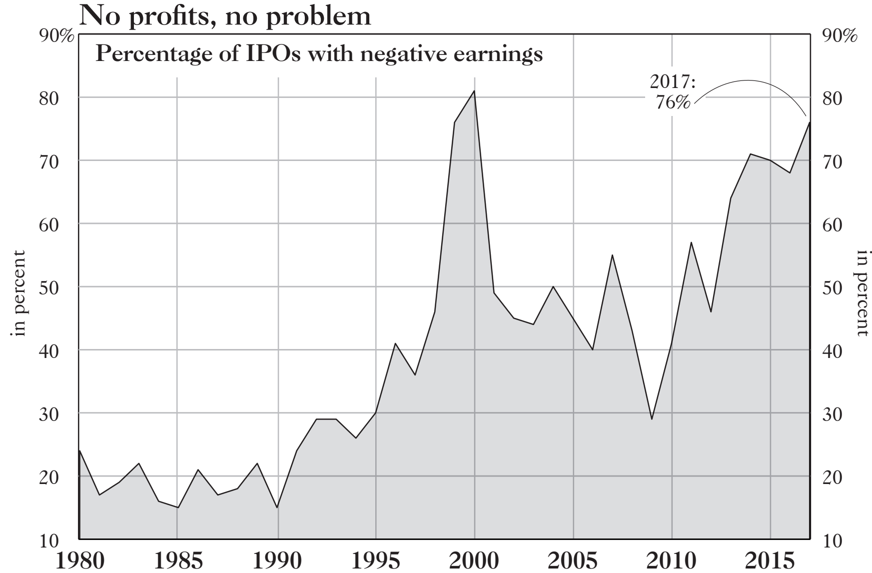
Do you wonder about the greater cost of zombie-ism? The connection between the corporate living dead, on the one hand, and productivity growth and business dynamism, on the other, is the topic of Working Paper No. 1372, published by the Organisation for Economic Co-operation and Development in Paris last year. In it, three authors (Müge Adalet McGowan, Dan Andrews and Valentine Millot) make a persuasive case that the panoply of post-crisis economic stimuli has brought about a kind of anti-Darwinian survival of the un-fittest. Such corporate husks in times past would have had to fail, and in failing they would, in a sense, have succeeded, for society if not for themselves. Getting out of the way, they would have made room for new life. Nowadays, in surviving, they crowd out what might have been.

You don't necessarily read an essay designated Working Paper No. 1372 for pure reading pleasure, but the meaning of the prose is clear enough.

No profits, no problem



source: Prof. Jay R. Ritter

Thus, for instance, "Evidence of a decline in productivity-enhancing reallocation is particularly significant in light of rising productivity dispersion, which would ordinarily imply stronger incentives for productive firms to aggressively expand and drive out less productive firms," the OECD authors write. "Instead, the productivity gap between frontier and laggard firms has risen, even while the forces bringing dynamic adjustment are waning. This tension is a red flag that something is wrong with productivity, but also points to a potential deterioration of the exit margin," i.e., firms dying (and not then walking around, blank-eyed, with their arms extended, as zombies do).

The Fed is a fine one for bewailing the seemingly inexplicably slow growth in productivity in these post-crisis years. At the Group of Thirty International Banking Seminar in Washington, D.C. on Oct. 15, 2017, Janet Yellen blamed the tepid rise in hourly wages on the anemic growth in productivity. It seems not to have occurred to the former chair that the OECD thesis has merit or that the Fed itself, through its asset-levitating and interest-rate-suppressing interventions, has unintentionally contributed to the downshifting of American economic dynamism.

The bizarre doings in the 2008–09 junk-bond market point up the problem. On form, as Marty Fridson told the audience at the Spring 2014 *Grant's* Conference, speculative-grade borrowers tend to default in multi-year waves. The 2008–09 default surge was unique in its brevity. "We actually had the situation where the default rate went from a record level to below average the very next year," said Fridson. "I would submit that is physically impossible. But, it did actually happen." What corrections correct are the errors of the boom. Cut a correction short, as the Fed arguably did in 2008–09, and the errors—the zombies—don't die but live on (see footnote 3, page 8 of the OECD treatise for scholarly validation of this common sense).

Real estate, too, has its zombies. You can see them in the shape of vacant store fronts in the upscale Manhattan precincts of Madison Avenue or SoHo. "A lot of these buildings were financed with cap rates that were in the 4% range or low-5% range," Brian Horey, president of Aurelian Management, tells Lorenz. "They have debt yields baked into them of the low-7% range. With cap rates now moving up, if they go out and write long-term leases at 20% to 30% off of what they underwrote at the top of the market, then those loans won't be in the money when it comes time to refinance them. You've had a phenomenon of people trying to wait out the market and not sign new long-term leases.

"It is very early days, but there are a few high street retail loans in securitizations that have hit watch lists or started to default," Horey goes on. "It is too early to draw any hard conclusions, but a bunch of those loans written two to four years ago are starting to run into issues."

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Which brings us to Sunrun, a zombie out of central casting and the largest installer of residential solar panels and rechargeable batteries in America. As of year-end, the company had installed 1,202 megawatts for around 180,000 customers in 22 states. The Street loves it: Out of 10 analysts who hold an opinion, nine say "buy," none says "sell." The bears hate it: Short interest almost reaches 20% of the Sunrun float. To anticipate, *Grant's* lines up with the bears.

Installing a solar system requires a big upfront investment. The monthly lease payments Sunrun receives are comparably small. And as installations are growing rapidly—up 15% year-over-year in 2017 to 323 megawatts—Sunrun is generating large losses. Thus, in 2017, EBITDA was negative $45.8 million vs. net debt of $1.1 billion.

Bulls divide Sunrun's financial accounts into a development company ("devco"), which borrows to build solar systems, and a power company ("powerco"), which profits by collecting monthly lease payments. Based on Sunrun's own calculations, the net present value of the discounted future-lease income totaled $1.2 billion as of Dec. 31, 2017, a 16% year-over-year rise. The value from the powerco is, therefore, supposedly, greater than the company's current $862 million market cap.

"However," as Lorenz points out, "the positive net present value that Sunrun reports deserves an asterisk. Management assumes that customers will renew their contract with Sunrun for an additional 10 years after their lease expires in 20 years. It is an arbitrary, subjective and self-interested supposition. As Sunrun was founded in 2007, it has no idea what to expect in the 20th year of a lease, though a perusal of its own online reviews could provide a clue."

Thus, a representative review from the Better Business Bureau on Jan. 5, 2018: "When I purchased a house I took over an existing solar lease with Sunrun and it was one of the worst financial decisions I have ever made. I am paying more for the lease than I would if I just paid a utility company [for electricity]. I am trying to sell the house now and nobody wants to buy it because of the bad lease. The only options Sunrun provided were to prepay $32K for the rest of the lease or pay $52K to own the solar [panels]."

Then, too—a technical point—management uses a 6% rate to discount future cash flows, a low rate for a highly indebted, non-rated money-losing company.

Besides, the bull case starts to fray when you pick apart Sunrun's income statement, as an anonymity-seeking short-seller proceeded to do on a telephone call with Evan Lorenz: "The most common argument is, if you stop installing new systems, you are left with a residual value that is the present value of future cash flows. But the interest expense has gotten so high [that] they are not making much profit at all. If you look at cash flow from operations before interest is paid—not even free cash flow—they are not covering interest from that, which is why they need to keep raising debt. If you look at the more common metric and take EBIT, EBIT is negative. If you take EBITDA with no sales and marketing expense and no R&D expense, you are just barely covering interest. If you then take off 50% of their general and administrative expenses, then you have two-times coverage. EBITDA with no sales and marketing, no R&D and only half the G&A because you assume a skeleton organization that is running the powerco, then you are covering it two times. That number is deteriorating as they take on more debt."

As of Dec. 31, 2017, Sunrun showed $202.5 million in cash and $1.3 billion in debt for the aforementioned net debt of $1.1 billion. Interest expense of $70.5 million last year implies a 6.4% interest rate based on average outstanding debt. Sunrun funds itself with a mixture of loans ($1.2 billion) and notes securitizing customer payments

($96 million). Most borrowings ($1 billion worth) are secured by the installed base of solar panels and customer contracts and are non-recourse to the parent; the balance, $247 million in loans, are recourse to Sunrun. The company's earliest maturity, the recourse loan, is April 1, 2020.

According to a March 9 Bloomberg dispatch, Sunrun is seeking around $500 million in new, non-recourse loans, which would be the largest such deal in the company's history. South African bank Investec plc is reportedly leading the deal. KeyBank Capital Markets, Inc., and ING Capital LLC featured as coordinating lead arrangers on an Oct. 20, 2017 Sunrun credit.

In the past 12 months, insiders have sold 148,670 shares for net proceeds of $1 million; there were no recorded purchases. Asked for comment by email and phone, Sunrun was mum.

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Which leaves us—the greater *Grant's* community—with a riddle. If the anticipated inflation does materialize, Treasury yields are bound to rise. In which case, junk-bond yields are likely to rise, too. If, however, inflation proves a no-show, Treasury yields are likely to fall. In that event, would junk yields fall as much? Or would they—perhaps discounting more difficult credit conditions—rise, thus widening the historically narrow government-to-junk-credit spread?

Spreads yawned wide between the second half of 2014 and the early going of 2016 (to be exact, from June 30, 2014 till Feb. 11, 2016). The market had set itself up for a reflationary uptick in rates and business activity but instead became converted, almost en masse, to the doctrine of "secular stagnation." (In February 2016, 88% of the respondents in the Bank of America Merrill Lynch Global Fund Manager Survey professed to believe the world was returned to something like the late-1930s slough of despond.) The result was a 50 basis-point decline in the 5-year Treasury yield and a blow-out of junk-bond spreads, to 887 basis points from 353 basis points. It happens that 353 basis points is approximately where spreads are quoted today.

Mindful of the burden of zombie-company supply, we judge that speculative-grade corporate yields would probably rise in the event of a renewed bout of unscripted economic weakness. In no case, we judge, is junk now a timely investment. Reviewing some of the euro-denominated speculative-grade issues we identified as picks not to click in December—e.g., the Ba/double-B-plus-rated Telecom Italia S.p.A. 1 1/8s of 2022, priced to yield all of 1.2% to worst—we judge them not merely undesirable investments. We will call them virtually stranded.

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