

Bankruptcy? Rest easier

Due to the pandemic, “there’s every reason to believe there’ll be an increase in the number of personal bankruptcies,” says Paul Goldsmith-Pinkham, assistant professor of finance at the School of Management and an expert on debtor protection policies and the role of consumer debt.

Goldsmith-Pinkham and his colleagues wanted to know what a bankruptcy filing might mean for the future job prospects of individuals who seek debt relief through bankruptcy.

They examined employment data for those filers before and after the Great Recession of 2008. In an analysis soon to be published in the *Journal of Finance*, the researchers report good news for anyone worried about having a bankruptcy flag on their credit report. “To potential employers, it’s just not a big deal,” says Goldsmith-Pinkham.

The research team examined credit bureau and Social Security Administration data



on several hundred thousand people from the years 2002 to 2011. They compared two groups: those who’d filed for bankruptcy under Chapter 7, whose flags remained on their credit reports for ten years; and those who’d filed under Chapter 13 and had their flags removed after seven years. The finding: in the three-year period following Chapter 13 removal, the two groups had very similar employment outcomes.

“Psychologically, people take bankruptcy very hard, but the benefits of doing this can be large,” says Goldsmith-Pinkham. “We’ve found one reason to reduce stress: employers don’t see this as a scarlet letter.”

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Noted

EVEN A SHORT introduction to mindfulness techniques can have benefits. In a study by Yale associate professor Hedy Kober and colleagues at Columbia and Dartmouth, participants were briefly instructed to use mindful acceptance while being exposed to negative images and having high heat applied to their forearms. Brain scans showed significant reductions in activity associated with pain and negative emotions, compared with times when participants were asked to respond as they normally would. The participants themselves also reported less physical pain and emotional distress. “Our findings suggest that mindful acceptance is a powerful self-regulation strategy that can be learned quickly and deployed effectively,” Kober writes.

WARM-BLOODED DINOSAURS?

Yes, say researchers, including Yale assistant professor Pincelli Hull and Robin Dawson '19PhD. They analyzed patterns of oxygen and carbon atoms in fossilized dinosaur-egg shells to calculate the internal body temperatures of dinosaur moms. For comparison, they examined fossilized shells of cold-blooded invertebrates, which take on the temperature of their surroundings. The tests suggested that the dinosaurs' body temperatures were warmer than their surroundings. So, unlike reptiles, which rely on ambient warmth, dinosaurs appear to have been capable of generating heat internally. Whether dinosaurs are cold- or warm-blooded matters, Hull notes, because the answer changes how they would have interacted with the environment.



Journey from the depths

In the hills of northern Connecticut, there’s a gray rock outcrop with a deep history: it was once buried a hundred miles below Earth’s surface. The ancient rock was created as the Appalachian Mountains were forming, and it is the only part of Earth’s crust in the United States, Canada, or Mexico that is known to have traveled so far to reach the surface. It offers a glimpse of what happens deep below mountains that are in the process of forming.

“It’s so unusual to have rocks that return from that depth,” says Duncan Keller '21PhD, explaining that for crustal rocks, returning from 30 miles deep is noteworthy. “The vertical height that these rocks traveled was about 23 times the height from sea level to the top of Mount Everest.” It was Keller, with geology professor Jay Ague, who proved how far the rocks had risen.

About 400 million years ago, a portion of seabed was pushed deep under what is now the eastern North American continent. After its dive into the Earth’s mantle—where slowly

rolling convection currents power tectonic plate movements, earthquakes, and the birth of mountains—the rock made its way back to the exterior, possibly by floating up through denser rock. (The work appeared in *Science Advances*.)

To decipher this story, Keller and Ague examined garnet, a hard, red mineral commonly found in metamorphic rocks. By thinly slicing garnets found in the Connecticut outcrop, they discovered microscopic needles and plates. These are made of other materials, including quartz and rutile.

Such minerals, Keller and Ague showed, had in turn formed from the residue of a rare kind of garnet—one that can exist only under the extreme pressure present at 100 miles below the surface of the Earth. Garnets are well suited for preserving such information about depth and temperature. They are “snapshots of what’s going on in the rock at every little interval of growth,” Keller says. They’re “like tree rings.” Y JENNY BLAIR '97, '04MD