

SECT What are you looking for?

LOG IN SUBSCRIBE SUPPORT

What are you looking for?

BUSINESS Posted October 21 | Updated October 21

INCREASE FONT SIZE AA+

Average temperature can be indicator of region's economic success, researchers find

When the figure rises above 55 degrees F, productivity declines, the study says, adding a new worry about global warming.

THE WASHINGTON POST

Share      2 Comments

In a sweeping new study published Wednesday in Nature, a team of researchers says there is a strong relationship between a region's average temperature and its economic productivity – adding another potential cost to a warming climate.

Culling together economic and temperature data for more than 100 wealthy and poorer countries alike over 50 years, they assert that the optimum temperature for human productivity seems to be around 13 degrees Celsius or roughly 55 degrees Fahrenheit, as an annual average for a particular place. Once things get a lot hotter than that, the researchers add, economic productivity declines “strongly.”



You've read 1 of 10 free articles



“The relationship is globally generalizable, unchanged since 1960, and apparent for agricultural and non-agricultural activity in both rich and poor countries,” write the authors, led by Marshall Burke of Stanford’s Department of Earth System Science, who call their study “the first evidence that economic activity in all regions is coupled to the global climate.” Burke published the study with Solomon Hsiang and Edward Miguel, economists at the University of California, Berkeley.

If the findings are correct, they add, that means that unmitigated global warming could lead to a more than 20 percent decline in incomes around the world, compared with a world that does not feature climate change. And this would also mean growing global inequality, since poorer countries will be hit by worse temperature increases – simply because “hot, poor countries will probably suffer the largest reduction in growth.” Indeed, some already wealthier countries with cold weather, such as Canada or Sweden, will benefit greatly based on the study, moving closer to the climatic optimum.

“If you’re in a country where the average temperature is cooler than 13 degrees C, a little bit of warming could actually be beneficial,” says Burke. “On the other hand, if you’re already at 13 degrees C, a little extra warming is going to hurt you.”

Assuming this relationship between temperature and productivity is correct, that naturally leads to deep questions about its cause. The researchers locate them in two chief places: agriculture and people. In relation to rising temperature, Burke says, “We see that agricultural productivity declines, labor productivity declines, kids do worse on tests, and we see more violence.”

Welcome.

You have 10 free articles this month.

[Subscribe today](#) for just \$1 for your first month.

Already a subscriber? [Log In](#) ?



READ OR POST COMMENTS

Share    

Were you interviewed for this story? If so, please fill out our [accuracy form](#).

[Send questions/comments to the editors.](#)

YOU MAY LIKE

Sponsored Links by Taboola

Surviving Heart Surgery, Simon Keith Stays Competitive
Future of Personal Health | Mediaplanet

NerdWallet's Top 10 Credit Card Deals of 2015
NerdWallet

The 3 Super High-Paying Cash Back Cards For Those With Good Credit
LendingTree

Learn Why This Razor May Be the Best Gift He Can Get
Dollar Shave Club

FROM THE WEB

- How I Finally Understood My 401(k)... in 10 minutes (Mint | Future Advisor)
- 3 Banks Are Competing To Offer Cards Paying Higher And... (LendingTree)
- Best Balance Transfer and 0% Interest Credit Cards, 2015 (NerdWallet)
- Forget Your 401K if You Own a Home in California (Bills.com)
- Thinking about getting Solar Panels? Read This First (Solar America)
- Nova Star gone for good, leaving dashed hopes in its wake - The Por...
- 25 things restaurant chefs never tell you

MORE FROM PORTLAND PRESS

- The Portland Press Herald / ...

- Cynthia Dill: In a complicated time, LePage and Trump feed need for si...
- Lewiston's Christmas tree will have electric zapper to shock squirrels - ...
- Bill Nemitz: Anti-Muslim talk in Maine coming from the clueless - The Port...

Promoted Links by Taboola

BUSINESS

Maine home sales up 22.7 percent in November



ON THE JOB

On the Job: Ice-cream seller gets in some extra licks



PORTFOLIO

Portfolio: The latest news on tax extensions, credits and filing



BUSINESS

After 50 years, Biddeford baker getting out of the mix

RECENT	READ	SHARED
--------	------	--------

Maine AG: No basis for criminal inquiry into LePage-Eves affair

Man who loaned gun to marathon bomber gets time served

Drunk college students offer untapped market for ride entrepreneur

Iraqi troops advance in battle for Islamic

State held city of Ramadi

Dartmouth puts professor on leave after prostitution sting



[BACK TO TOP](#)

CUSTOMER SERVICE

- [My Account](#)
- [Subscriptions](#)
- [Home Delivery Help](#)
- [Digital Subscriptions](#)
- [Reader Services](#)
- [Contact Us](#)
- [Privacy Policy](#)
- [Purchase a Photo](#)

CONNECT

- [e-Edition](#)
- [Mobile](#)
- [Email Newsletters](#)
- [Contact Advertising](#)
- [Site Feedback](#)
- [Staff Directory](#)

SITE INDEX

- [Full Site Index](#)
- [News](#)
- [Politics](#)
- [Business](#)
- [Lifestyle](#)
- [Opinion](#)
- [Sports](#)
- [Obituaries](#)
- [Blogs](#)
- [Video](#)

NETWORK

- [About MaineToday Media](#)
- [Work Here](#)
- [Media Kit](#)
- [CentralMaine.com](#)
- [MaineToday.com](#)

© 2015 MaineToday Media