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ECONOMY | MARKETS

Negative Rates Around the World: How One Danish Couple Gets Paid Interest on Their Mortgage

In Denmark and Sweden, savings accounts pay nothing and real estate is booming



Hans Peter Christensen, shown with his family in Aalborg, Denmark, has a negative interest rate on his mortgage. *PHOTO: MORTEN KOLDBY FOR THE WALL STREET JOURNAL*

By CHARLES DUXBURY and DAVID GAUTHIER-VILLARS

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AALBORG, Denmark— Hans Peter Christensen got some unusual news when he opened his most recent mortgage statement. His quarterly interest payment was *negative* 249 Danish kroner. Instead of paying interest on the loan he got a decade ago to buy a house in this northern Denmark city, his bank paid him the equivalent of \$38 in interest for the quarter. As of Dec. 31, his mortgage rate, excluding fees, stood at negative 0.0562%.

	It has
MEET HANS PETER CHRISTENSEN AND HIS FAMILY	been
Purchase price of their home in Aalborg, Denmark: 1.7 million Danish kroner (\$261,000)	nearl
Mortgage rate: -0.0562%	y four
Quarterly interest payment: -249 Danish kroner (-\$38)	years
Realkrdit Denmark, one of the nation's largest home lenders, provided 758 borrowers with negative interest	since
rates last year.	Denm
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entered the world of negative monetary policy, and borrowers and lenders alike are still trying to make sense of the upside-down world it has brought.

"My parents said I should frame it, to prove to coming generations that this ever happened," said Mr. Christensen, a 35-year-old financial consultant, about his bank statement.

Denmark isn't the only place where central bankers are experimenting with negative rates. The European Central Bank and the Bank of Japan, grappling with stagnant economies, are using subzero rates to stimulate growth. Switzerland and Sweden, like Denmark, are trying negative rates to keep their currencies in line with the struggling euro.

Denmark, where the central bank's benchmark rate stands at minus 0.65%, has lived in negative territory longer than any other country. Neighboring Sweden has been below zero for 14 months, and its central bank has said it would go lower than the current benchmark of negative 0.5% if it needs to. In Norway, the central bank still has positive rates, but it is considering resorting to negative ones to prop up an economy hit hard by the prolonged spell of low oil prices.

Scandinavia's experience has given economists a chance to study what happens when rates drop below zero—long considered an inviolable floor on rates. Already, there are concerns about undesirable side effects. Consumer savings accounts pay no interest, and there is pressure on bank profitability. A boom in real-estate borrowing has kindled fears that problems will arise if rates bounce back up.

A WORLD OF NEGATIVE RATES

As central bankers around the world push deeper into the once-unthinkable world of negative interest rates—essentially charging customers to hold their cash—The Wall Street Journal explores how negative rates are playing out on the ground and what they mean for policy makers and markets. Other articles in the series:

- Japan's Subzero Rates Cast Chill Over Markets
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- Would Negative Rates Work in the U.S.?
- Negative Rates: What You Need to Know
- Read on Flipboard: A World Awash in Negative Rates

"If you had said this would happen a few years ago, you would have been considered out of your mind," said Torben Andersen, a professor at Denmark's Aarhus University who serves on the government's economic-advisory council.

Central banks rely on benchmark rates to spur or cool their economies. They want inflation to be low but steady. When prices rise too slowly, they lower rates to make it cheaper to borrow and spend, with the goal of pushing prices higher.

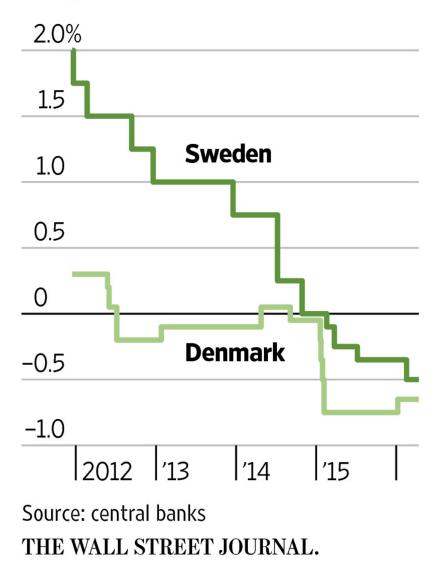
Central bankers in Europe and Tokyo, facing stagnant prices, decided that the only way to regain leverage over their economies was to cross the zero threshold and enter negative territory.

In Denmark, the central bank, Nationalbanken, doesn't have an inflation target. Its goal is to keep its currency steady against the euro to protect trade with the eurozone. With the euro falling in recent years, the Danish central bank cut rates repeatedly, going negative for the first time in mid-2012 in a bid to keep its currency in check. The policy has achieved its main objective, Moody's Investors Service said in a recent research note, because appreciation pressure on the krone has "disappeared completely."

Sweden's Riksbank, the world's oldest central bank, first went negative in February of last year in an effort to import inflation. It hoped that a weaker Swedish krona would make goods coming into the country more expensive, raising domestic prices. But it hasn't hit its 2% inflation target in more than four years, and any significant uptick in prices has yet to materialize.

Going Negative

Denmark's central bank lowered its benchmark rate below zero in 2012, and Sweden followed last year.



borrowers with negative interest rates last year.

Authorities in both countries are concerned that low rates have caused households to gorge on loans that they won't be able to repay if rates increase or real-estate values fall. "It's dangerous," Riksbank governor Stefan Ingves said in an interview. "Our households are borrowing way, way too much. It must be reversed sooner than later."

Mr. Christensen, the financial consultant, bought his home outside Aalborg for 1.7 million Danish kroner (\$261,000) in 2005, then renegotiated his mortgage several times after rates dropped. His interest rate first dipped below zero last summer. Because of various mortgage fees, he still pays a modest amount each quarter in addition to his principal payment.

It isn't known how many Danes have negative rates because lenders often don't disclose such numbers. Realkredit Danmark, one of the nation's largest mortgage lenders, said it provided 758

The flip side of the picture is that banks no longer pay interest on most saving accounts. Mr. Christensen said Danes are turning to property investments as an alternative.

In 2013, pooling money with three other investors, Mr. Christensen bought 10 small



In Denmark, banks no longer pay interest on most saving accounts. Mr. Christensen, at home with his family, said Danes are turning to property investments as an alternative. PHOTO: MORTEN KOLDBY FOR THE WALL STREET JOURNAL

apartments for 9.7 million Danish kroner, borrowing 8 million of the amount. The mortgage rate wasn't negative but was low enough to be attractive.

Such investments are rekindling an Aalborg housing market that went into a deep freeze after the 2008 crisis. "People feel that they have to use the money because it is so cheap," said Michael Soebygge, deputy manager of a local branch of Nordjyske Bank.

Mr. Soebygge thinks some household investors may be taking on more than they can handle. "A lot of people sitting with short-term loans close to zero can't afford to see them go to 2% or 3%," he said.

Prices of owner-occupied apartments have been rising. In Copenhagen, prices were 14.5% higher in the fourth quarter of 2015 than in the year-earlier period, compared with a 5.5% increase in 2014, according to the Association of Danish Mortgage Banks. In Stockholm, prices rose 17% in 2015, following a 10% increase in 2014, according to price-tracking company Svensk Maklarstatistik AB.

Danish and Swedish central bankers worry that the negative-rate policies could cause financial instability if too much money goes into real estate.

Mr. Ingves, the Swedish central bank governor, is concerned that the ratio of Swedish household debt to disposable income, which stands at around 175%, up from a low of 90% in the mid-1990s, is "unsustainable."

When a property-price bubble burst in Sweden in 1992, leaving some large banks near collapse, Mr. Ingves, then undersecretary for financial markets, led the cleanup.

In his current position, he has pushed for regulations to limit the appetite for mortgage loans and asked the government and parliament to give the central bank control over financial stability. In 2013, however, authorities gave that power to Sweden's Financial Supervisory Authority.

"There are significant flaws with vague mandates, unclear processes and inefficiencies that, in the long run, threaten financial stability in Sweden," Mr. Ingves said in a speech last week.

Erik Thedeen, head of the Financial Supervisory Authority, said decisions made by the central bank, not lax regulation, are a primary cause of the real-estate boom.

"Low interest rates are a risk because they drive lending and can drive risk taking," he said in an interview. "This is not me criticizing the low rates. I am just stating the fact that this is a consequence of central banks stimulating the economy to get inflation up."

Authorities also are concerned that negative rates could hurt banks by sapping their ability to make money. Negative rates mean commercial banks incur fees, rather than collect interest, when they park money with the central bank—something they must do for regulatory reasons and to facilitate lending among themselves.

An industry lobbying group estimated the cost to Danish lenders at more than 1 billion kroner last year.

Torben Frederiksen, head of asset management at Alm Brand Bank in Copenhagen, said that when it became clear that negative rates would be around for a while, banks started to look for ways to pass on some of the costs.

Big banks in both Sweden and Denmark have started to make some larger commercial customers pay for deposits. They haven't charged retail depositors for holding their money, fearing it might trigger a withdrawal spree. Depositors leaving banks could leave them short of funds.

In Aalborg, there isn't any sign that households are pulling their money from banks. John Berg, a locksmith on the main street, says sales of safes are flat.

"If people are hoarding cash, they aren't telling me about it," he said.

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