LISTEDRESERVE

MoneyBits

Explaining the bitcoin halving

Today there are 19,679,792 bitcoins on issue. Tomorrow there will be 900 more.

The network processes transactions on average every 10 minutes and in doing so, delivers 6.25 bitcoins per block to miners. 6.25 *6 *24 = 900 bitcoins per day.

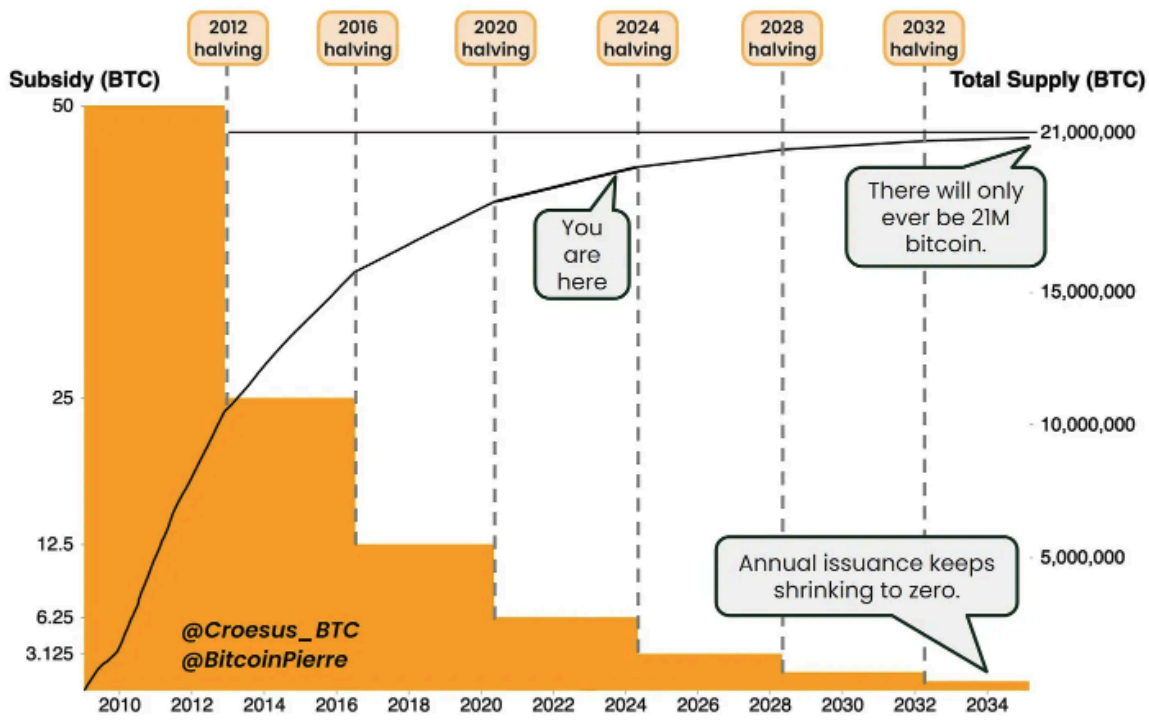
From the 20th April, that reward for miners will drop to 3.125 bitcoins per block, or 450 daily. This was coded into the software from the very start, resulting in a monetary policy for bitcoin that is just six lines of code long.

```
// main.cpp

CAmount GetBlockSubsidy(int nHeight, const Consensus::Params& consensusParams)
{
    int halvings = nHeight / consensusParams.nSubsidyHalvingInterval;
    // Force block reward to zero when right shift is undefined.
    if (halvings >= 64)
        return 0;

    CAmount nSubsidy = 50 * COIN;
    // Subsidy is cut in half every 210,000 blocks which will occur approximately
    nSubsidy >>= halvings;
    return nSubsidy;
}
```

In English: count the number of halvings. If there have been more than 64, the reward is 0, otherwise it is 50 bitcoins divided by 2 for each halving you have counted.

Now obviously, very few readers know the C++ programming language and I show it only to display the pure simplicity of the monetary policy. It could not be more straightforward. No monthly meetings, no witchcraft about pretending to know the future trends of inflation or employment. It is what it is, in perpetuity.

You can visualise the halving below. Issuance is represented by the descending stair bars; total supply by the asymptotic curve.



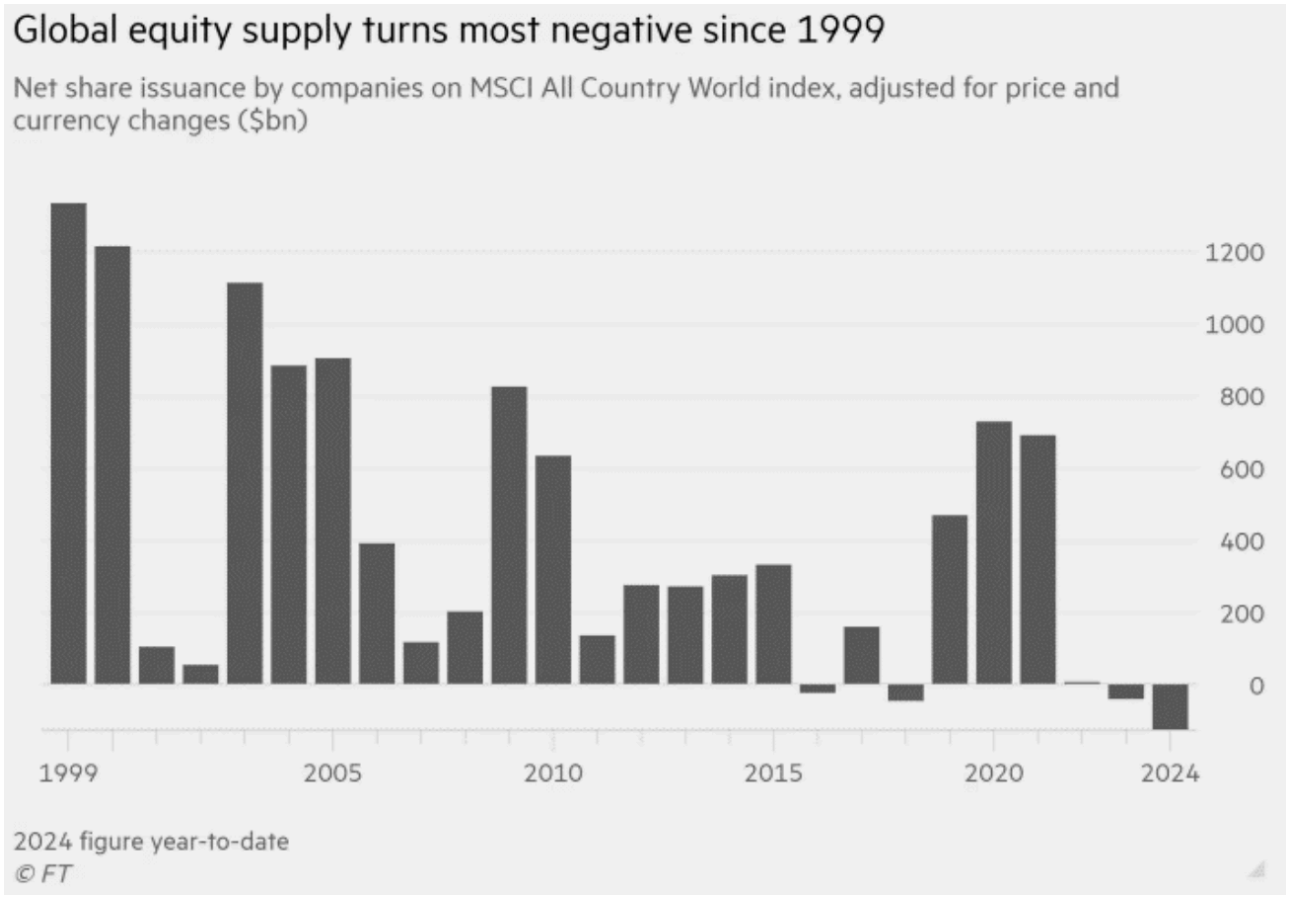
The halving itself generates a lot of discussion because no other asset shares the characteristic. Can anybody honestly say what the impact will be? There is a school of thought that every halving is already priced into bitcoin because all participants know when and how they will occur.

I must say, I don’t share this view. I am asked about it all the time and most people's understanding is either non-existent, or at best, partial. So how could it be priced in?

To me the impact of the halving is not instant but it is powerful because the effect is permanent and compounding. We do not have money that behaves like this anywhere else in the world, it's one of the most exciting and clever features of bitcoin.

I borrowed these charts from a more fulsome discussion of the halving by Jesse Myers here.

Nothing to buy



Global equity supply has turned negative. The FT explained this phenomenon as *“uncertainty weighs on new issuances and companies continue to buy back large volumes of stocks.”*

Maybe that’s the issue but maybe there are others. Perhaps there is a fixed pool of investment monies, every household, every fund, every corporate only has so much. The US government is issuing 1 trillion dollars in debt every 100 days. Pension funds, private investors and insurance companies are (inexplicably in my view) buying up the debt.

Perhaps then the issue is crowding out? The more and more the government spends simply the less there is for everybody else. That includes less to spend on shares and new issuances. At the end of the day there is only so much money, if the government spends it, then you can’t.

Not just that though, the concept of being a public company was once highly appealing and came with considerable cachet. Now it's just a massive pain that comes with enormous compliance costs; a case in point this week laid out in the Sydney Morning Herald.

> Australian corporations are poised on the precipice of the most substantial change to company reporting in a generation, with new climate-related financial disclosure requirements due to commence from July 1, this year.
>
> This seismic shift, which aims to increase transparency and accountability, is set to align corporate Australia with the country’s emissions reduction targets – and bring the nation into line with international sustainability targets.

I can just imagine how awful doing this must be at a large corporation which relies on the government for its existence (like a bank). It’s not just the doing of the disclosures; it’s the auditors auditing them (how could they?) and the collation of the data which will be an all year round process.

> In October 2023, ASIC chairman Joe Longo warned companies that the forthcoming regime will demand unprecedented levels of detail about their operations.

I find it strange that Australia’s leading regulator is so happy about this “unprecedented level of detail”. As a shareholder that is most likely *not what I want.* I want management focused on whatever it is I actually employ them to do.

> “We are seeing barriers in the form of insufficient access to data, insufficient resources to and knowledge of climate risks and management strategies,” Cox says.

I’m looking forward to these ‘disclosures’ because they will be entirely made up, unauditable, uncheckable and legions of Australians are currently working on them.

“How are we going with the climate disclosures, John?”

“Yeah, good. They’re looking good.”

Can we play too?

Some subtle changes to the Blackrock Bitcoin ETF prospectus last week adding new Authorised Participants to the mix. Wanting a piece of the action are, Goldman Sachs, Citadel Securities, UBS Group & Citigroup.

The Authorised Participants are the entities that create and redeem the ETF shares and maintain the liquidity in the product by buying and selling both the shares and also the underlying assets, in this case bitcoin. There are lots of arbitrage opportunities in doing that kind of thing and big Wall Street firms love nothing better than 'risk free' arbs.

Given the sheer scale of the flow, one imagines that this is now quite a profitable endeavour and the fact that half of Wall Street is queueing up to do it should tell us something.

Blackrocks list of ETFs can be found on their website. The Bitcoin Trust now sits at #36 in their list with $18 billion under management. Look at the ETFs around it, they are a decade old (or more) in most cases. To get in the top 10 they need $75 billion in AUM (4x from where we are). Top spot has $450 billion in AUM, the S&P 500 tracker.

GOVT	**iShares U.S. Treasury Bond ETF**	-0.90	-0.03	-2.80	-0.17	0.94	0.81	Mar 31, 2024	Feb 14, 2012	25,282M
SHY	**iShares 1-3 Year Treasury Bond ETF**	0.23	2.75	-0.11	1.00	0.92	1.74	Mar 31, 2024	Jul 22, 2002	24,535M
USMV	**iShares MSCI USA Min Vol Factor ETF**	7.66	17.16	8.30	9.24	10.88	12.22	Mar 31, 2024	Oct 18, 2011	24,134M
IGSB	**iShares 1-5 Year Investment Grade Corporate Bond ETF**	0.68	5.22	0.35	2.00	1.81	2.52	Mar 31, 2024	Jan 5, 2007	20,852M
SGOV	**iShares 0-3 Month Treasury Bond ETF**	1.32	5.35	2.67	-	-	2.09	Mar 31, 2024	May 26, 2020	19,503M
ACWI	**iShares MSCI ACWI ETF**	8.20	23.13	6.96	10.95	8.82	7.13	Mar 31, 2024	Mar 26, 2008	19,459M
IBIT	**iShares Bitcoin Trust**	Currently at #36 in the Blackrock list.				-	-	Mar 31, 2024	Jan 5, 2024	18,954M
EIMI	**iShares Core MSCI Emerging Markets IMI UCITS ETF**	1.95	9.48	-4.00	2.91	-	2.79	Mar 31, 2024	May 30, 2014	18,751M

Tether made 6.2 billion

Now firmly through the $100 billion mark, Tether market cap stands at $107 billion today.

The short version of Tether is simply this; Tether issues a digital token in return for each $1 they receive. Those digital tokens can be transacted on the internet and redeemed for $1 by the recipient. Tether invests the dollars it holds on behalf of token holders in US Treasury bills. That's it.

The difference between a Tether dollar and a normal USD is that Tether has a 100% reserve (of treasuries *not* *cash)*. That point has been hugely contentious, but more and more people are now starting to believe that Tether is indeed 100% backed by US Treasury bills and their audit reports attest to that fact.

Tether's net income in 2023 was $6.2 billion, all from interest on their bond holdings. They have less than 100 employees.

Goldman Sachs made $7.9 billion; 49,000 employees.

Morgan Stanley made $8.5 billion; 82,000 employees.

The Companies with the Highest Profit per Employee Ranked

FILTER BY SECTOR: All

RANK	COMPANY	SECTOR	PROFIT	NUMBER OF EMPLOYEES	PROFIT PER EMPLOYEE
1	Air Lease	Business Services	$516.3m	120	**$4,302,500**
2	Fannie Mae	Financials	$11.8bn	7,700	**$1,533,117**
3	KKR	Financials	$2.0bn	1,583	**$1,265,003**
4	NortonLifeLock	Technology	$3.9bn	3,600	**$1,079,722**
5	Freddie Mac	Financials	$7.3bn	6,922	**$1,058,365**
6	Vertex Pharmaceuticals	Health Care	$2.7bn	3,400	**$797,529**
7	Altria Group	Food, Beverages and Tobacco	$4.5bn	7,100	**$629,155**

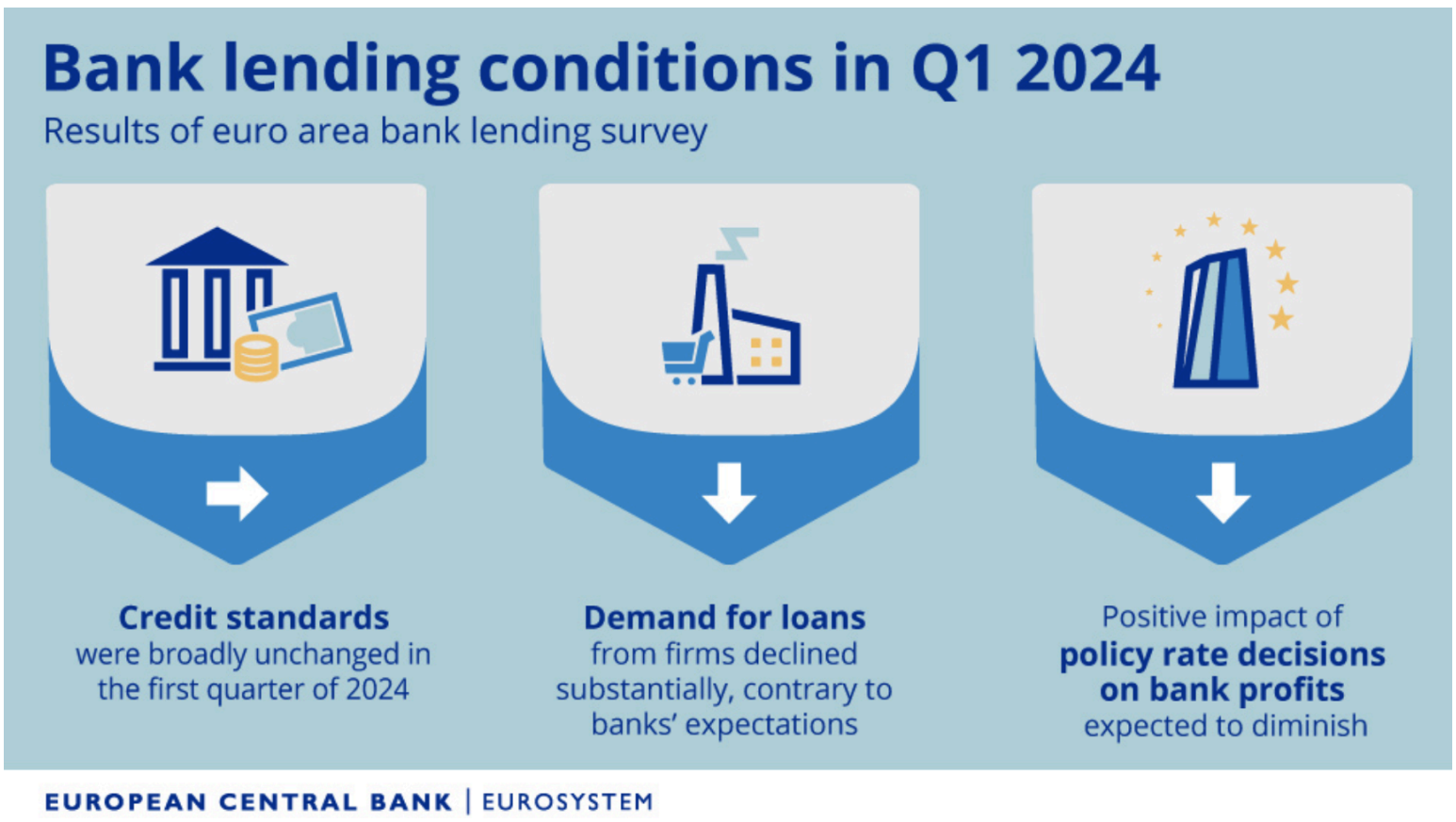
Profit

Looking at the website of profit per employee Goldman (45th) and Morgan Stanley (71st) don't really register. Apple is 20th, Google 31st.

Tether aren't on the list as they aren't public. Their figure of $62 million dollars per employee is an order of magnitude larger than their nearest competitor in the public domain.

It's a truly staggering success. So staggering in fact that I am not surprised everybody hates them and says it can't be true. I believe it is true and more and more we will see companies with very few employees and lots of code using that infinite leverage to make billions of dollars.

Euro-Trash



"Broadly unchanged" caught my eye. In public markets every analyst worth their salt knows that "broadly unchanged" means down. The euphemistic language of the public markets has a way of making sure nothing bad ever happens.

Next year always looks like it will be 'in growth' and if this year wasn't, well, that's because it was 'broadly in line'.

Departing senior executives who delivered massive value destruction are "thanked for their lasting contributions". All sorts of semantic hilarity.

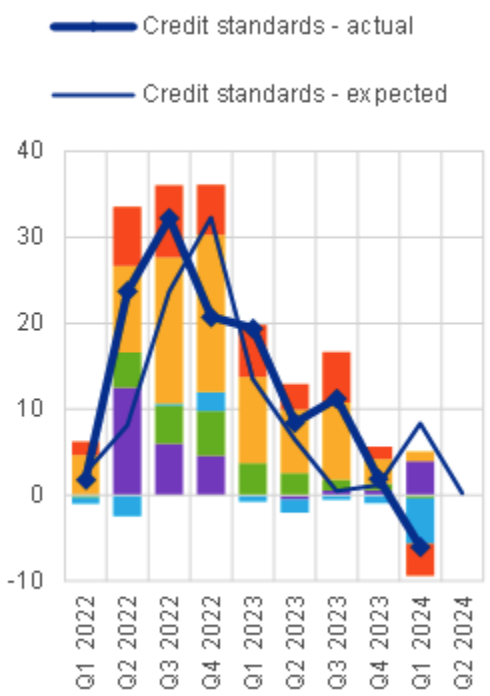
Sell words in this language might be considered:

"headwinds" = no growth
"launching a review" = something gone badly wrong
"strategic alternatives" = whatever we did, or bought, didn't work
"longer than expected" = it's not working

With that in mind then, it was alarming to read about the credit standards at the European banks being 'broadly unchanged'.

As I delved into the report, it would be true to say that about business credit (hence the collapse in loans). It was absolutely not true for households though, where the report points out the credit standards were eased substantially for housing loans.

Here is the ‘broadly unchanged’ graph, which might also be interpreted as a ‘very steep decline indeed’.



Interest rates go up, which makes it harder to service loans and so we simply drop the credit standards. Why do we do that? We do that so that we are ‘in growth’ and do not suffer from a ‘broadly in line’ moment.

Now you can be a banking executive too.