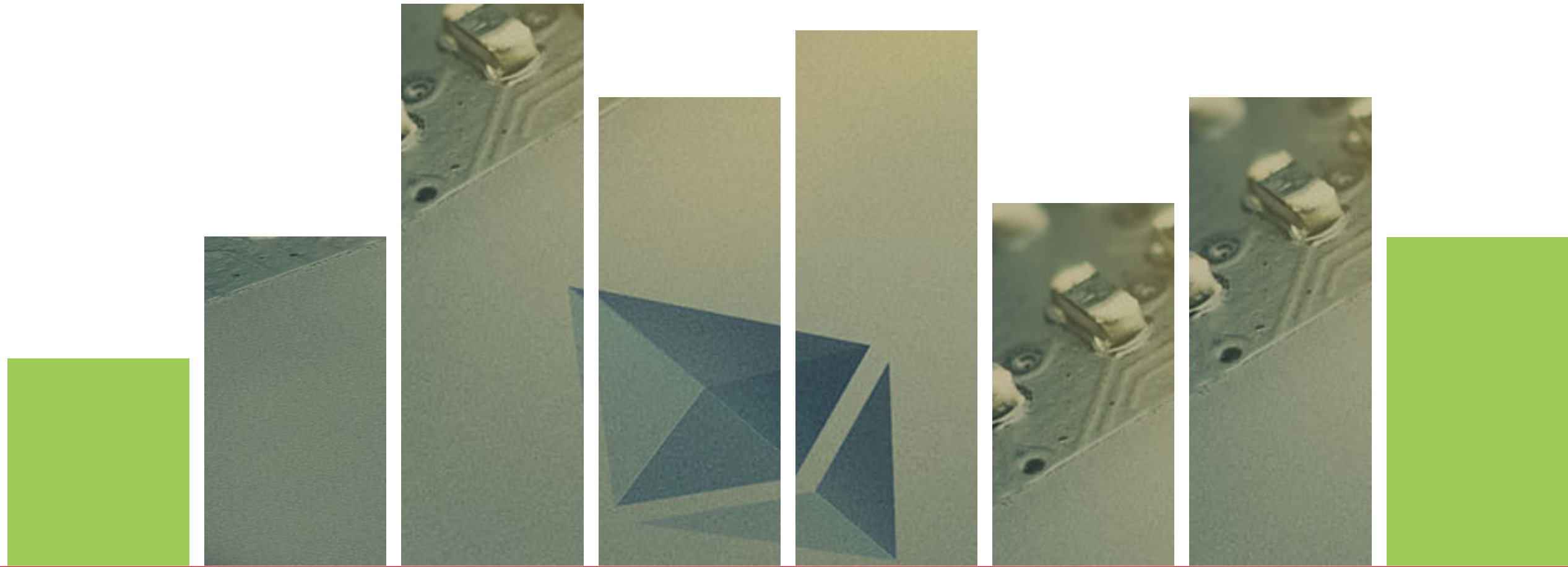




EVERYTHING YOU NEED TO KNOW BEFORE TRADING & INVESTING IN ETHEREUM

A beginner's guide to the exciting world of cryptocurrencies



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AN INTRODUCTION TO ETHEREUM

‘THE NEW BITCOIN’

Bitcoin has become the centre of many an online trader’s strategy in recent years. Its volatility as an investment asset and explosive growth as a technical innovation make it incredibly attractive to day-traders.

With Bitcoin now on the cusp of entering mainstream investment markets, which could stabilise its price and dilute its appeal, traders are now hungrily searching for ‘the next Bitcoin’.

Ethereum v Bitcoin

We’re going to explain to you the similarities and the differences between Bitcoin and Ethereum in more detail in this guide. For now, we’ll summarise by saying they use the same fundamental blockchain technology, where digital data is distributed rather than stored centrally, but Ethereum has the capacity to be applied to a lot more than ‘just’ currency and online payments. It could become the foundation of a whole new internet.

When Bitcoin and blockchain technology first emerged it very quickly had investors clamouring to own chunks of it. Bitcoin was available for just a few cents back then and investors realised that it could become the future of global online payments, making it incredibly valuable in years to come. Ether is the crypto-currency equivalent of Bitcoin. It’s the fuel that powers the Ethereum network. Investors now want to buy up Ether at a low price and sell in several years’ time for a huge profit, just like they did when Bitcoin first hit the headlines.

The early bird catches the worm

Ethereum is still niche. It’s not widely understood. This gives you the opportunity to get ahead of the crowd and perhaps even trade and invest in Ether before the mass market becomes aware of its astonishing capabilities.

Next, we’re going to look at exactly what Ethereum is and explain how it works so you can understand its true potential and identify the commercial developments that might accelerate its value. Acquiring such knowledge could help you know when to buy and when to sell your Ether to make a profit.

Ethereum, like Bitcoin, uses blockchain technology. With blockchain, digital data is distributed, not copied. It doesn't exist in one central place and isn't owned by one person, so there's no single point of failure.

Blockchain could be the foundation to a new type of internet and it's what Bitcoin, a digital currency, relies on as a new way of paying for things. Ethereum meanwhile uses the same blockchain technology but applies it to a lot more functions. It allows developers for example to build apps using the blockchain approach.

The share generation

With Bitcoin, blockchain is used to track ownership of a digital currency – the Bitcoins – but with Ethereum, blockchain runs the programming code of any decentralized application. In simple terms think of it as a bit like having a shared google document, where many members on your shared network can see and edit the document, but on a greater scale and in a much more sophisticated way. In the Ethereum blockchain, instead of mining for Bitcoin, miners work to earn Ether, a type of crypto token that fuels the network.

Ultimately developers using Ethereum blockchain can create apps and systems in this way that cut out the need for any central intermediary. Imagine, for example, a world where we don't need the banks to service loans, or estate agents for property, or insurance brokers, or even government departments.

Smart contracts

The term 'Smart Contract' represents a line of code which can be used to exchange money, property, shares, or anything of value in a transparent, conflict-free way, while avoiding the services of a middleman. If all sides agree to the terms, the smart contract is valid and is ready to be carried out. Smart Contracts are what separates Ethereum from other cryptocurrencies, they allow the creation of a whole new infrastructure.

With Smart Contracts, you cannot in theory have one person corrupt, tamper or destroy the data because they effectively exist across multiple places on the network. Thanks to Smart Contracts, Ethereum can be more secure and there can be zero, or close to zero, downtime.

Next, we look at the key differences between Bitcoin and Ethereum.



UNDER THE HOOD:

HOW ETHEREUM WORKS



ETHEREUM & BITCOIN:

THE KEY DIFFERENCES

We've looked at the important similarities between the current giant of the cryptocurrency landscape, Bitcoin, and the young challenger to its throne, Ethereum. Let's now highlight the key differences.

Understanding these may help you become a better trader or investor of Ethereum.

1. Ether was not created to replace currencies

While Bitcoin was conceived as a form of alternative payment, the Ether currency was initially created to serve the users of the platform, as an Ethereum wallet to use with the apps they develop.

2. Ether's supply is infinite

While the supply of Bitcoin is finite – it's scheduled to cease in the year 2140 - Ether strictly speaking has no top limit, with its currency supply driven by its creators and miners.

3. Bitcoin is a lot slower

A Bitcoin transaction takes some 10 minutes to complete but Ether transactions are processed in around 15 seconds, which contributes to its liquidity and volatility.

4. Ownership

While almost all of the Bitcoin in existence was mined by early adopters, Ether's launch was crowdfunded, meaning most of the currency is owned by people who purchased it. It is predicted that the balance will shift in favour of the Ether miners in about five years.

It's still very early days for Ether trading so it's not always that simple and straightforward to get hold of it. Here we show you how best to get started in the world of Ether trading.

There are a number of ways you can try to do so, as we've outlined below. But before we get into the mechanics, it's worth briefly noting there are actually two types of Ethereum – Ethereum (ETH), the 'original' version and still most common, maintained by its original developers, and Ethereum Classic (ETC), an alternative blockchain maintained by a new team. Both offer the same technology platforms and seem to be in broad agreement on a future roadmap but their small differences have created two markets.

If you're looking to buy Ether, first of all you can download an Ether wallet from the likes of Github, or MyEtherWallet. This may sound like the easiest and most direct way of getting Ether but they are not the most user-friendly of interfaces or processes, so you might prefer going to one of the more established Bitcoin exchanges, most of which now offer Ether as well – somewhere like Coinbase or Kraken.

When the price is right

You can usually use credit or debit card to make payment on the exchange sites or you can buy Bitcoin and use that to pay for your Ether. It's worth shopping around the different exchanges as the fees for buying and selling can vary quite a lot. Be prepared to upload several documents too, as robust proof of ID and address will be necessary. If you're technically minded you can also mine for Ether, just like you can Bitcoin.

Trading Ethereum the easy way - on eToro

For a really simple way to trade and invest in Ether, you could use eToro. On eToro you can buy CFDs (Contracts For Difference) which allow you to trade against the price of Ether without having to actually buy and own it as an asset. You open a trading position via a CFD – the contract - and close it to make a profit or cut your losses.

Know your market

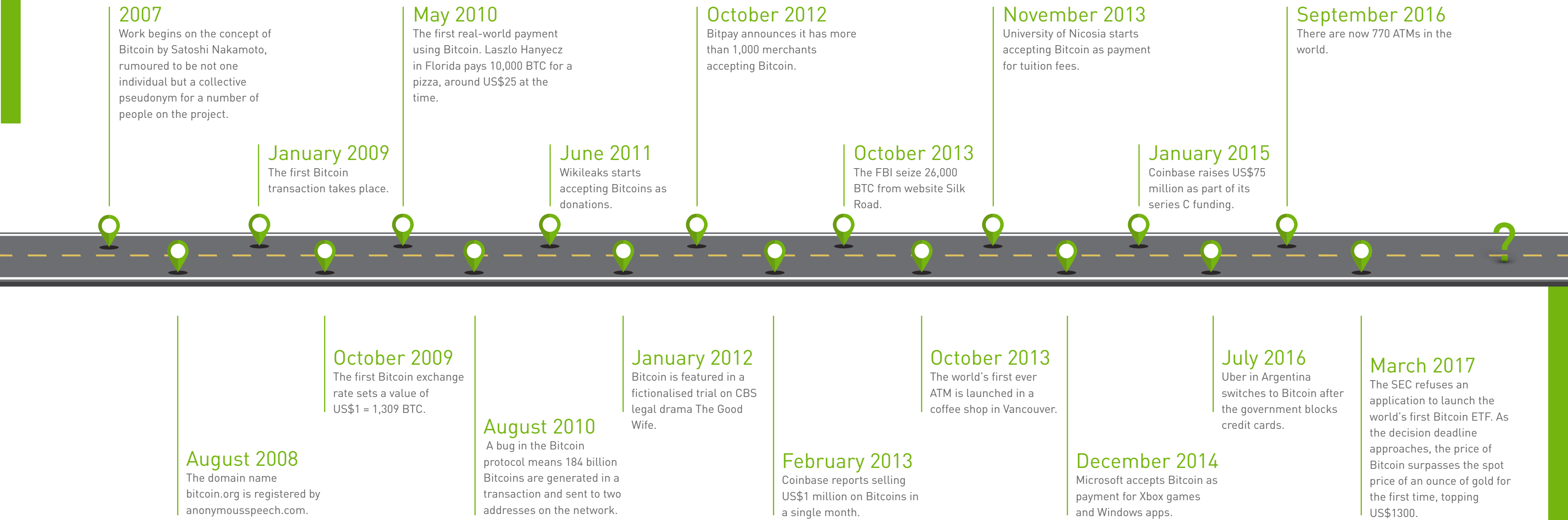
Ethereum can be extremely appealing as a long term investment, where you buy now in the hope its value will go up astronomically in several years' time, just like Bitcoin. Or you can look at short-term day-trading to make quick profits. Ethereum is a very new technology that has got some people very excited and this in turn makes the marketplace for Ethereum very volatile, which accentuates the interest for short-term traders. When they see an emerging technology or company innovation that's based on Ethereum they might buy quickly, knowing its value could increase significantly if that innovation were to really take off and become mainstream.



HOW AND WHERE
TO BUY & SELL ETHER

A SHORT HISTORY OF CRYPTOCURRENCIES

If we want to picture how the Ethereum marketplace might evolve, we could do a lot worse than look to the short, colourful history of Bitcoin, the leading light of the fledgling cryptocurrency industry, for clues.



eToro Popular Investor, Jay Smith, 28, has been trading and investing in Bitcoin for several years. He's one of eToro's Popular Investors and is regularly copied by others on the eToro global network of six million users. In his own words, this is what Jay has to say about Bitcoin, Ethereum and the future of the crypto-currency markets.

When did you first discover cryptocurrencies?

At £25! That was the price of the first Bitcoin I bought. And I still have it today. I've moved it around quite a lot but I still own it. I was introduced to it quite naturally, because I work with technology as an e-sports manager and that's where my interests lie, in technology and innovation. I understood it quickly and liked the opportunities it had for future industry and as an asset to trade. You need to know how cryptocurrencies work and realise their potential to successfully trade in them.

How much do you focus on Bitcoin compared to other assets on eToro?

I have a very split approach, so I use Bitcoin for day-trading and with tech stocks I look mid to long term. So a lot of my time now is dedicated to Bitcoin where I can make short-term profits.

Why are traders and investors so drawn to the cryptocurrency markets like Bitcoin and Ethereum?

It's partly because of the volatility. You can make quick profits in volatile markets if you know what you're doing. That's not to say there isn't risk involved though! You can lose money too, of course. There's also a big attraction to it because it's new, cool and techy. Philosophically it attracts a certain community, the kind of people who like the innovative and revolutionary aspect of cryptocurrencies and blockchain technology.

Where do you see the future of Ethereum and the other Bitcoin-type exchanges?

There are some 700 cryptocurrencies out there. We've seen a lot of spin-offs from the Bitcoin model. Many will prove to be rubbish and some will become big. Ethereum is a good one, it offers something different. The traders who like volatility will go there and to similar cryptocurrency markets as Bitcoin continues to grow and stabilise because it will probably lose its volatility.



**CRYPTOCURRENCY INVESTOR,
JAY SMITH**



BITCOIN WHITEPAPER

51% attack

This occurs when more than half the computing power on a digital currency network is run by a single miner, which theoretically makes them the main controller and authority of that network.

Altcoin

The alternatives and rivals to Bitcoin are collectively known as Altcoins. This includes the likes of Litecoin, PPcoin, and to some, but not all, Ethereum.

Bitcoin Whitepaper

Written by Satoshi Nakamoto in 2008, the famous document explains the Bitcoin concept and protocol. The Bitcoin code was released the following year.

Block reward

The recompense a miner receives when they have successfully hashed a transaction block. It can be a mixture of coins and transaction fees.

Faucet

This is where a number of coins are given away for free to generate interest and build initial momentum in a cryptocurrency mining community.

Fiat currency

A legal tender that is backed and forced into circulation by a government, as opposed to a currency whose value is underpinned by a physical entity like gold, which is known as 'commodity money'.

Fork

The emergence or creation of a new version of a particular blockchain. It typically happens when one set of miners begins hashing a different set of transaction blocks from another.

Genesis block

If you know your biblical readings you'll get know why this is the term for the very first block in the block chain.

Mining

Basically, this is where new Bitcoins are generated, which happens as crypto problems resolved.

Satoshi Nakamoto

The inventor of the Bitcoin concept and protocol. Some believe it is a group of people rather than one individual. The term 'Satoshi' refers to the smallest subdivision of a Bitcoin currently available (0.00000001 BTC).

Silk Road

The controversial underground online marketplace, which has been often linked to cryptocurrencies in the past, was shut down by the FBI in 2013.

Virgin Bitcoin

Bitcoins purchased as a reward for mining a block. These have not yet been spent anywhere.

Bitcoin and Ethereum are quite clearly the two big guns of the blockchain world right now. They're certainly the ones you'll be able to trade and invest in most easily too. But there are plenty of others that are worth keeping an eye on and that could still yet emerge from their shadows. Here we take a look at just five of them.

Litecoin

The open-source Litecoin is often billed as a companion to Bitcoin. It is effectively a peer-to-peer online currency that you can use to make instant payments at near-zero cost to anyone in the world. Transactions are super-fast. It has a lot of industry support, decent trading volume and good liquidity.

Monero

Monero is the largest market cap "anonymous" cryptocurrency. It is for private, secure and untraceable transactions between two parties. Monero's biggest advantage - its untraceability, could also be its biggest liability, as it means it will never be accepted by Governments and large financial institutions.

Ripple

Ripple is a decentralized transaction network that also contains a digital currency called Ripples (or XRP). The Ripple network acts as a decentralized currency exchange. So if someone wants to sell their XRP for EUR or even BTC, they can do that within the network without needing a third party. Overall, this allows for much more efficient P2P transactions, reducing not only time, but also energy costs.

Ethereum Classic

Ethereum Classic is a continuation of the original Ethereum blockchain and consensus rules which were the target in the famous DAO attack incident - resulting in the theft of over \$60 million in Ethers. Ethereum Classic is currently priced lower than its 'younger brother' and holds a much smaller market cap.

Dash

[DASH] is a digital currency that focuses on privacy as its main distinguishing feature. You can make instant, private payments online or in-store using its secure open-source platform hosted by thousands of users.

5 ALTERNATIVES TO ETHER AND BITCOIN



About eToro

eToro is the world's leading social trading network, with over 6 million registered members from 180 different countries and thousands of new accounts opened each day. eToro's mission is to revolutionise the way people access the financial markets and make their trading and investment experience more social, simple, enjoyable and transparent.

Over the last ten years, eToro has established itself as the market leader in 'social trading' and has been awarded many prestigious accolades including the Best of Show award at FinovateEurope 2015. Yoni Assia, CEO and Co-Founder of eToro is also featured in Financial News' FinTech 40 power list.

A global social platform, it allows members to communicate, copy and follow each other to harness the wisdom and success of others. The community element is the first of its kind, making trading transparent and open, unlike traditional solitary trading platforms.

All trading involves risk. Only risk capital you're prepared to lose. Past performance does not guarantee future results. Trading history presented is less than 5 years and may not suffice as basis for investment decision. This post is not investment advice. eToro is regulated by both the FCA in the UK and CySEC in Cyprus.