Ratings Documentation

A.R.I.A. (Algorithmic Ratings & Investment Analysis) has developed a Web Terminal which includes a wide suite of tools to support investors navigating the complex and fast-paced world of cryptocurrencies.

🚀 **Know Your Crypto**

While digital assets remain a young and developing type of asset, its place in a money-making portfolio can bring you significant profits.

⚠ But it can be a dangerous, volatile and high-risk space as well.

You may gamble and win big if you're lucky. But we think, with solid data and a navigator, you can create your own perimeter 🍀

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What is A.R.I.A. Ratings?

ARIA Ratings is the central pillar of ARIA's analytical ecosystem. It was designed and developed to simplify and support crypto investors.

With ARIA Ratings, investors no longer need to spend hours manually extracting data, analysing it, and attempting to compare different projects (e.g. Gaming vs. Meme vs. DeFi). Our Ratings allow you to determine, at a glance, the level of risk a crypto carries, with the knowledge that this grade:

1. Provides a holistic perspective of the crypto's health— it is powered by over 35 metrics (rather than only market cap or volume)
2. Uses data and metrics that are entirely factual, and not based on any form of speculation
3. Remains transparent and reliable — the grade follows a methodology was designed to equalise different projects' risk assessment through an automated algorithm, thus removing the risk of human intervention, tampering with grades, introducing discretionary bias or conflicting interests (as has historically been witnessed in traditional finance — *The Big Short* vibes) .
4. Reflects accurate and up-to-date information through its automation, allowing for daily updates to reflect the latest state of the market.

Blending in Web 3.0's core value of decentralisation, our mission is to deliver you a robust and trustworthy ratings system that allows for logical and meaningful comparisons of cryptocurrency projects, while evaluating deeply their token risk. Each evaluated crypto is thus given a lettered grade ranging from J (Junk) to AAA (Top Investment Grade).

For our Premium Users, each Rating is additionally accompanied by a granular decomposition of its risk into 5 core categories along which the assessed metrics are split (See More: *How does ARIA evaluate cryptocurrencies?*)

💡 Note that the algorithmic methodology power A.R.I.A. Ratings is consistently evolving as we look to incorporate more valuable and detailed metrics and advanced evaluation methods in order to increase accuracy while capturing a global overview of risk.

A.R.I.A. Ratings Grading Scale

AAA	**Top Investment Grade**
AA	**Investment Grade**
A	**Investment with acceptable risk**
BBB	**Moderately risky**
BB	**Mixed Acceptable and Speculative Risk**
B	**Opportunistic**
S	**Speculative**
SS	**Super Speculative**
J	**Junk**

What cryptocurrencies does ARIA rate?

We at ARIA believe that cryptocurrencies have a legitimate space to occupy in your investment portfolio. But in a space where anyone can easily launch a coin, and every day we see new projects emerge, it can be challenging to discern the gems from the scams.

Not every project deserves your attention, which is why we have defined a specific scope to select cryptocurrencies and add them to our ratings algorithm.

A.R.I.A. includes in its scope any cryptocurrency that:

- Has been in circulation for at least a period of 3 months
- Has reached a market capitalisation of 500 million USD at least once since A.R.I.A.'s launch. In the event a coin or token's market capitalisation falls below

500 million USD, its rating will continue to be tracked and updated by our algorithm.

- Is not a stablecoin

> ❓ We have purposefully excluded stablecoins from A.R.I.A.'s scope as an accurate and fair evaluation of a stablecoin would require privileged access to the issuing entity's reserves backing the token.
>
> In a world that can sometimes appear opaque, at A.R.I.A. we value transparency in our processes and evaluation, which is why all metrics incorporated into our Ratings Methodology and documented herein are publicly available and verifiable.
> (
> See more: *How does ARIA evaluate cryptocurrencies*)

How frequently are ARIA Ratings updated?

ARIA's Ratings are set to automatically update on a daily basis to bring you up-to-date snapshot of the market's risk.

How does ARIA evaluate cryptocurrencies?

The cryptocurrency space is abundant in data, however not all available and meaningful data is appropriate to help the investor choose the adjusted level of risk to their profile when selecting an investment. ARIA endeavours to combine both on-chain and off-chain data to provide investors with a global representation of risk that can be consumed at a glance, saving the investor not only hours upon hours of research, but also from dealing with questionable or doubtful information.

With our objective being the logical and meaningful comparison of different cryptocurrency projects and their legitimacy as an investment asset, we've processed by taking a holistic approach, taking in a 360 degree global view of each evaluate project.

After factoring in base information such as the type of project (is it a DeFi project? a metaverse or gaming project? a meme coin?), the date of its creation, and so on, we've split the metrics used into 5 pillars:

- Tokenomics
- Adoption
- Risks
- Governance
- Financial Performance

💡 Note that all of the data collected, treated and processed by A.R.I.A. is publicly available and verifiable. We do not evaluate or incorporate considerations of private or restricted information on rated projects.

This was a conscious decision in the development process of our Ratings System in order to align with our value of transparency, as well as to protect both integrity of A.R.I.A. Ratings and the privacy of evaluated projects.

(See more: *What cryptocurrencies does ARIA rate?*)

Overall, this methodology has been meticulously designed to scrutinise digital assets from every angle (qualitative and quantitative factors), while also collecting valuable insights that we've quantified while attempting to eliminate any bias (e.g. celebrity backing), in order to enable investors in making more informed decisions in the rapidly changing world of crypto investment. The detail, depth and precision of this methodology, in addition to its automated nature within ARIA Ratings' algorithms sets A.R.I.A. apart as the go-to platform for crypto ratings and investment analysis.

It is critical to note that ARIA aims only at rating digital assets and legitimate investment assets and does not in any circumstance provide any investment advice. More Information in our Term of Service.

Read more on each category ahead.

I. Tokenomics

A holistic evaluation of a cryptocurrency project cannot start without looking at its internal economics and the functioning of the digital asset, in other words its tokenomics.

ARIA's assessment is based along two primary axes:

1. **Information of its supply model** — whether it is inflationary or deflationary, and more specifically its level of decentralisation, with the fundamental assumption borrowed from the Web 3.0 industry's DNA that the more decentralised a token's supply, the more legitimate its project.
   This first axis will be looking at this level of decentralisation primarily by taking into supply metrics (i.e. a coin's circulating supply, total supply and maximum supply, if there is one).

2. **Ownership incentive** — by evaluating the incentives to own the coin/token designed within its internal ecosystem, we consider the framework for support from investors to buy, use and/or hold the cryptocurrency.
   This second axis evaluates investor incentive by looking at a token's utility and usefulness. We've divided these into 4 broad types of utility/incentive:

   a. **Transaction Fees** — ARIA considers whether the asset is required to pay network gas fees. This would typically be the case for any native blockchain coins.

   b. **Native Staking** — while there are multiple forms of "staking", ARIA considers specifically whether the cryptocurrency offers native passive revenues, and the extent of this potential revenue. The greater the revenue offers, the greater the incentive to buy and hold this coin.

      Note that the traditional concept of "higher staking return, higher risk taken" is incorporated into staking consideration within the methodology across not only its Tokenomics pillar, but Risks and Financial Performance metric pillars. *(**See more:** Risks, Financial Performance)*

   c. **Native Governance** — within the Tokenomics framework, native governance refers specifically whether buy and/or holding the asset in question gives its owner any rights or governing function in the crypto's native ecosystem.

*Note this section's Native Governance is different from the metrics explored in the Governance metric pillar (**See more:** Governance).*

d. **Service Access —** In addition to the previous three types of utility, some cryptocurrencies additionally grant their holders additional functions designed to be activated in its internal ecosystem. ARIA thus further considers whether the cryptocurrency is a "utility token", defined as a token which has a specific function that is not 'common utility' such as payments of transaction fees, staking returns or native governance rights. (Example: *gaming tokens*).

II. Adoption

Although cryptocurrencies have a more significant (and growing) place in online news and media today than they held in the past, as a market it remains a highly technical and complex field, still populated primarily by technology experts, financiers, speculators, and the otherwise interest or curious investors. As a result, there remains a significant entry barrier to this market blocking it from truly becoming "mainstream" as of yet, whether as an investment, trading or even gambling field).

Accordingly, ARIA Ratings incorporates consideration for the level of "mainstream" adoption in the Adoption metrics group, thus assessing each digital asset's level of endorsement by both the Web 3.0 and Web 2.0/traditional/mainstream communities. The aim is to highlight the token's legitimacy and support by the quality and influence of its active users, the level of interest on its network, the size of its audience and its transaction accessibility level.

In order to do so, ARIA Ratings assesses Adoption along the following four axes:

1. **Level of liquidity through centralised exchange listings —** for each digital asset assessed, the Ratings will look at how many exchanges is it listed on, incorporating consideration for the quality of the exchange based on its overall trading volumes, the token's trading volumes and level of liquidity available.

2. **Coin/Token Trend** which evaluates the strength of community engagement, while also acting as a measure of investors sentiment, taking into account shorter and longer term trading volumes. The stronger the community engagement, the greater the potential that the digital asset will face and survive possible downtrends and future challenges.
3. **Integrations & Partnerships** with corporations and/or entities, particularly in the non-Web 3.0 space. This axis measures the level of integration of a particular digital asset by non-crypto companies (e.g. Tesla, Alibaba, etc...), suggesting a wider mainstream knowledge and acceptance of the project, taking into consideration several factors of the partnering entity including the size of the company, its sector and sector relevance to the project, and its brand's level of influence. In essence, this axis assesses the legitimacy of a Web 3.0 project in the traditional world by its degree or use and/or interest by well-established companies, which may have a significant impact on the project's growth, brand image, and mainstream adoption.
4. **Lifecycle Interest** in the cryptocurrency project. Although the trend may be more variable when looking at the short term trading volumes, the Adoption pillar also takes into account the longer term sustained interest in the cryptocurrency project. This currency-specific index is compared to the overall global interest in the cryptocurrency market as a whole, establishing whether the project itself has long-term sustained interest from its holders and investors that is resilient during the volatile cycles of the market. The Rating will therefore be examining notably the project's market capitalisation, both present and historic, while assessing the delta between the all time high and its present value.

III. Risks

The crypto market and its many associated risks are well known and widely publicised since the asset's early days. The number of scams, security breaches, exploits and, more recently, legal action taken against projects — is all a list of potential risks to the investor and long enough to merit its dedicated metrics group for consideration in ARIA's Ratings methodology.

We consider this metrics group to be of fundamental importance to the evaluation of a cryptocurrency's legitimacy as an investment asset. Unlike other investment assets, cryptocurrency projects have a significantly higher risk of crashing and/or disappearing. Accordingly, ARIA measures the risk along two broad axes that would impact the investor:

1. **Security Risk**
   A.R.I.A. is proud to be partnered with Certik, Web 3.0's leading smart contract auditor and pioneer blockchain security firm, to power our Security Risk axis with their accurate and specialised data.
   The risk of security specifically refers to the consideration of the cryptocurrency's code, whether it has been audited and its history of hack9s)/exploit(s), if any have occurred. The objective of this axis is to highlight a cryptocurrency project's technical vulnerabilities or security strengths, which is beyond the capacity of the average investor not well-versed in code and blockchain security matters to assess.

2. **Litigation Risk**
   In a continuously evolving and sensitive regulatory environment, the consideration of law and litigation are crucial to a digital asset's viability as an investment asset. Therefore, ARIA incorporates regulatory consideration by identifying any ongoing legal battles an assessed cryptocurrency project is engaged or involved in, and evaluates it accordingly.
   It is important to note that ARIA does not incorporate consideration of rumours of upcoming litigation and does not engage in any speculation as to the outcome of the legal battle itself. The consideration is purely factual as to the existence and/or persistence of a legal conflict which may impact the asset from an investment perspective.

   ARIA's assessment of the risk posed by litigation is further influenced by the country in which such litigation has been initiated, is ongoing and/or where the regulatory body is prosecuting, in addition to the potential impact of a complete ban of the digital asset in the country. Accordingly, an ongoing litigation in Country 'A' which has a significantly more important place in the crypto market than in Country 'B' would have a higher impact on the risk measurement.
   The evaluation of a country's significance follows a proprietarily and dynamic methodology, which takes into account multiple statistics on the country itself including its GDP, the size of its population, the estimated percentage of

people owning cryptocurrencies amongst its population, the number of Bitcoin nodes, the number of blockchain jobs, and the number of ATMs in the country.

IV. Governance

When assessing the governance of a cryptocurrency project and following the fundamental DNA of the Web 3.0 space, we based ARIA's evaluation on the assumption that the greater the level of decentralisation in a project's governance and decision-making, the more trustworthy and unbiased the outcomes of these decisions, granting the crypto project greater legitimacy as an investment asset.

The following axes form the basis of the governance evaluation:

1. **Presence of governance mechanisms**

   This measure registers whether the coin/token has any native governance embedded in and/or if a Decentralised Autonomous Organization (DAO) has been established.

   Note that this consideration of governance differs from the utility governance metrics assessed in the Tokenomics pillar. While in Tokenomics the consideration lay primarily around whether the coin/token itself provided a utility/function in relation to the governance of the project, here ARIA focuses specifically on the type of governance built in (if any) that leads to decision-making around the project's development.

2. **Supply Ownership Concentration**
   Investors should always be wary of whale movements in the market as these can have a significant impact on your portfolio holdings' value. Therefore, a key metric evaluated by ARIA is the level of democratisation of the supply, or otherwise ownership concentration of the supply amongst a few select rich wallets.
   A project may have strong fundamental across all categories, but if its owners/developers have kept a large portion of the total available supply, the investor may be exposed to the risk of a whale movement that leads to their asset's market crashing and the investor's holdings plummeting into a significant loss. Accordingly, ARIA incorporates into its Ratings an estimation of the portion of the supply held by the assessed currency's rich, and

incorporates that into its governance score.

Note that ARIA does not speculate as to the probability of whale movements on chain. Whether it be by choice of the owner or as a result of a security breach, if the rich wallet starts selling its large supply, leading to a market crash in the particular asset, ARIA only flags the risk of this scenario. We believe investors should be aware of all existing risks to their holdings, and then have the freedom to choose to take that risk or not.

3. **Investor Backing in Early Stages**
   While a project does not necessarily require reputable investors backing it to make it legitimate, ARIA has implemented an additional metric providing “bonus” points to projects backed by renown Venture Capitalists (VC). However, in order to eliminate any bias due to the trending nature of a project, these points are only allocated on VC investor backing at the Seed Round, which allows to better identify potential gem projects.

   The reasoning for this addition is that the Seed Round, as an earlier stage is when the fewest information is available due to the youth of the project. With the base assumption that quality VC investors engage in proper due diligence prior to investing in any project at this stage, legitimacy points are granted to a digital asset that has garnered backing from esteemed venture capitalists so early in their development, which is set to support, and possibly accelerate, their adoption.

V. Financial Performance

Given A.R.I.A.’s core objective in providing cryptocurrency investors with a benchmark risk standard, no such assessment of any digital asset could be complete without taking into account its adjusted and benchmarked financial performance.

Thus, the financial metric pillar within the ARIA Ratings Methodology evaluates quantitative key performance indicators of the assessed crypto's oscillations and market behaviour, which directly translates to the asset's stability as an investment.

The evaluated metrics include:

1. **Annualised Volatility**
   The annualised volatility measures the amount of fluctuations or variability in an investment's returns over a period of one year. A higher annualised volatility suggests the crypto experiences larger price swings, indicating higher fluctuations in the price.
   It is essential to consider volatility, especially when evaluating cryptocurrencies, because while higher volatility may lead (not always) to higher returns, it can also generate higher losses for the investor.
   As some cryptocurrencies in ARIA's scope may have been launched less than one year ago, and thus have less than 365 days of market data, their existing track record will be taken into account.

2. **Maximum Drawdown**

   The maximum drawdown is a measure of the largest percentage drop in the value of an investment from its highest to lowest point.
   This metric provides a tangible measure of the historical maximum move which occurred during a specific time period, highlighting the downside risk of the investment crypto in question.

3. **The Sortino Ratio**

   The sortino ratio is a risk-adjusted performance metric that focuses on the risk/return profile of an investment crypto in downside periods. It solely evaluates how well the investment performs in its challenging moments.
   The higher the sortino ratio, the better the risk-adjusted performance is.

4. **Beta v. Benchmark**

   The beta is a measure indicating the sensitivity of an investment's returns in comparison to a set benchmark. The benchmark selected is chosen so as to reflect overall market movements.

The benchmark used in this case is Bitcoin at present, as the cryptocurrency with the largest market dominance, capitalisation, time since creation and widespread adoption. In this context, the “Beta v. Bitcoin” metric assesses how much a given cryptocurrency’s returns are sensitive to Bitcoin’s price movements.

5. **Hit Ratio v. Benchmark**

   The Hit Ratio v. benchmark compares the number of similar returns signs. It helps in tracing the closeness of an crypto’s behaviour and evolution versus a defined benchmark. It is also a way to assess discrepancies in a benchmark investment strategy.
   The benchmark used in this case is Bitcoin, as the cryptocurrency with the largest market dominance, capitalisation, time since creation and widespread adoption.
   The higher the hit ratio, the better the score in the case of a benchmarked view. In case of an absolute strategy, this can also provide an insightful KPI.

These performance indicators are internally converted to exploitable, interpretable scores through proprietary methods and a statistical approach. They are essential tools for both investors and analysts to assess the risk and performance of their investments, hence their inclusion in the Ratings’ final grade. Understanding these metrics can help you, as an investor, make more informed decisions and manage your investments under an exhaustive assessment of digital assets.

> 💡 For more details or to view the breakdown of each of these financial statistics per assessed cryptocurrency, we invite you to check out ARIA’s Data Harbour — your statistical hub for comprehensive cryptocurrency analysis.

While some investors may choose to invest in higher volatility projects, this higher risk appetite does not translate to all investors. Furthermore, higher volatility does not causally involve higher returns. Please only invest in alignement with your risk appetite. ARIA is here to guide and assist you in this process.

Metadata Adjustments

As mentioned in *How does ARIA evaluate cryptocurrencies?,* outside of the five metric pillars, ARIA collects additional information on the assessed projects in order to adjust the final score into a meaningful comparison across different cryptocurrency projects.

Specifically, ARIA looks at the cryptocurrency's sector of activity (*e.g.* Blockchain, Gaming, Metaverse, DeFi, etc...) and their time since inception (launch date). We take these as adjustment categories, which have an influence on the final calculates ratings.

These adjustments are based on the fundamental assumption that two projects of theoretical equal measure across all metrics but that are in different sectors (e.g. a meme coin vs. a DeFi project) or that have been in circulation for different amount of times (e.g. 10 years vs. 9 months) cannot have the same final risk score, when considering legitimacy or especially the projected survival of the project.

1. **Sector Adjustment —** these values impact the importance attributed to each of the five metric pillars in view of the project's long-term success potential.
2. **Time Since Inception —** digital assets remain a relatively young investment asset class versus traditional assets, and thus their legitimacy and level of risk, particularly when considered for longer-term investment, is strongly influenced by the amount of time they've survived since their launch. This can be especially relevant for cryptocurrencies on the higher end of the speculative spectrum. Given the multiple upwards and downwards cycles that have occurred in the crypto market since Bitcoin's first launch, this adjustment is also a measure of the proven resilience of an assessed coin/token, through historical data.
   ARIA implements its adjustment of the time factor on US Bureau of Labor statistics on a startup's survival probabilities based on its age.

Important Information

It is crucial to note that *ARIA Ratings DO NOT provide any speculation or prediction into future price movements*. A highly rated coin/token does not signify it's value will increase in market tradable price, and similarly a poorly rate coin/token does not signify it will crash. Rather it is a representation of the holistic risk taken by the investor should they choose to buy and/or hold it in their portfolio, in a standardised and comparable format, where any crypto can be positioned versus any other crypto.

An investor looking for higher returns may choose to invest in a poorly rated coin/token if their risk appetite is higher. This is solely dependent on the investor and ARIA Ratings should be used as a reference point or informative indicator to the investor to complete their research and analysis. It is up to the investor to decide on what constitutes adequate and acceptable risk to them.