

STOXX[®] Global Metaverse Index

Index description

Metaverse is an emerging technology theme that aims to simulate the real world – or imagine a world beyond it – integrating digital and physical interactions for an immersive experience.

The STOXX Global Metaverse Index selects companies driving innovation and commercialization of technologies related to the adoption of the Metaverse. The index uses EconSight's patent data, including patent quality and specialization scores, to identify companies that are market leaders and innovators in the field.

A new approach to thematic investing

Unlocking patent data

Spotlight on patents: identify disruption ahead of time

The filing and publication of patents in a specific technology indicate a company's research focus and future direction of activity, before products and revenues become apparent.

Not all patents are equal: class not mass

Patents are one of the few robust resources to assess innovation activity. By leveraging EconSight's data, the index relies on a rigorous methodology to define **high-quality patents (HQPs)**. Patent quality is the product of technology relevance (citations) and market coverage.

Defining the key technologies fostering Metaverse adoption

EconSight's patent classification system is used to identify companies exposed to a defined set of technologies related to the ongoing adoption of the Metaverse.

Experiencing

3D Image Modelling: Recreates accurate 3D representations to offer a seamless experience.

Avatars: Digital copy of the user to increase immersiveness, user-friendliness and human-machine interaction.

Virtual & Augmented Reality: Provides the ability to perceive reality in a computer-generated and interactive environment through lenses, wearable technologies or projection systems. Augmented reality superimposes information on the real world.

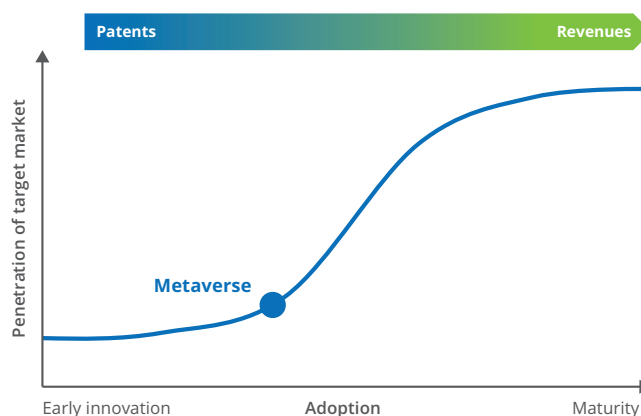
Digital twin: Digital mapping and modeling of real or unreal objects, to test the functionality or simulation of processes.

Key facts¹

- > Allows targeted investment in the emerging Metaverse theme
- > Leverages EconSight's patent taxonomy, quality and specialization scores to identify innovative players
- > Includes size and liquidity filters to ensure replicability of the index
- > Utilizes sustainability data from Sustainalytics, a leading provider, to avoid exposure to companies engaged in controversial activities

¹ Refer to the STOXX Methodology guide for full details.

Capturing innovation



Transacting

Blockchain: Blockchain is a decentralized, distributed ledger that securely records digital transactions across a peer-to-peer network.

Non-Fungible Tokens (NFTs): Allow for digital assets to be traded and valued in a digital environment.

Fueling

Graphic Processing Unit (GPU): Broad adoption of immersive technologies and virtual experiences requires powerful infrastructure to host and support the Metaverse environment.

Index methodology

Country, size and liquidity screens are applied on the STOXX® Global Total Market Index to capture liquid companies from developed and emerging countries. Additionally, companies that are not compliant with the Sustainalytics Global Standards Screening (GSS) assessment or are involved in controversial Weapons and other controversial activities are excluded from selection.

EconSight's patent classification system is used to identify companies exposed to a defined set of technologies related to the ongoing adoption of the Metaverse.

The index is reviewed annually in March and weighted according to adjusted equal weights and adjusted by the Metaverse patent specialization score.

Patent data captures Metaverse companies in two ways

High-quality patents

Selecting the top 10% ranking companies based on the number of high-quality patents that they have across Metaverse related technologies.

Innovation Leaders (cutting edge companies)

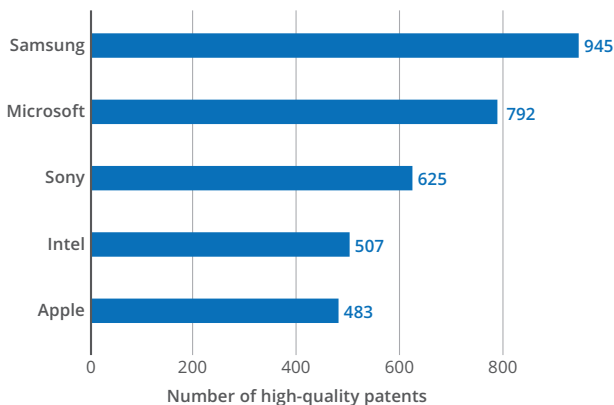
Specialization score

The specialization score shows how important the technology suite is to a company. This is defined as the proportion of Metaverse related patents within the overall company's patent portfolio.

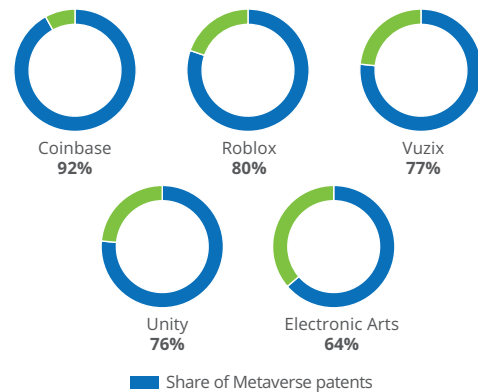
Companies with a score greater or equal to 30% in the defined technologies are selected.

Specialists (focused players)

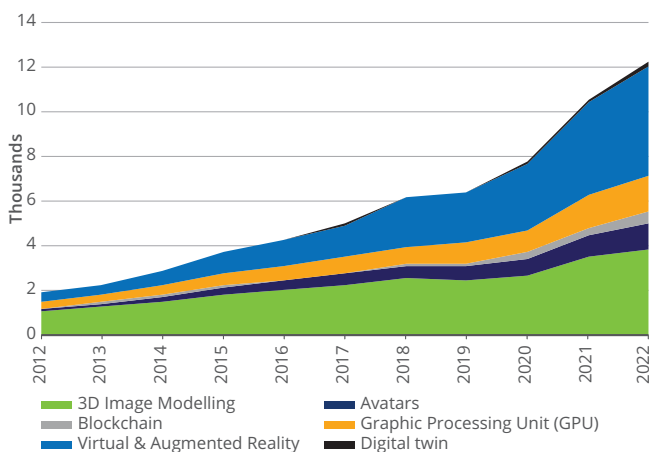
Top 5 companies captured through high-quality patents



Top 5 companies captured through specialization score

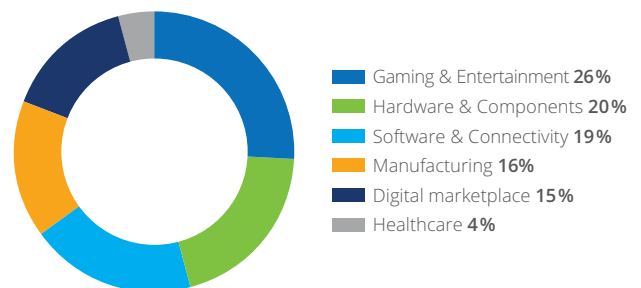


Historical number of high-quality patents captured in the index²



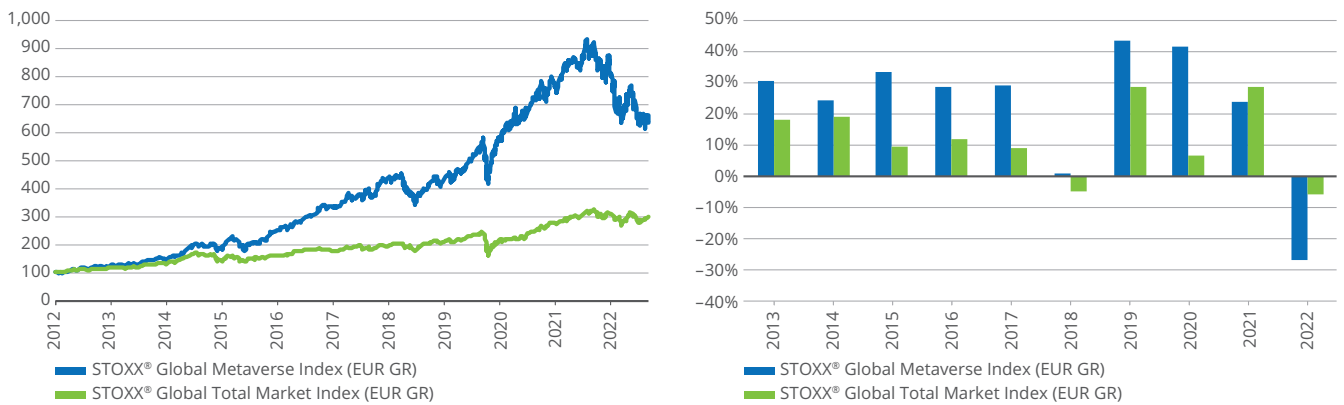
² STOXX data from March 19, 2012 to November 30, 2022

Index exposure, based on companies' existing business lines (sub-themes)³



³ STOXX data as of November 30, 2022

Performance and annual returns⁴ STOXX Global Metaverse Index



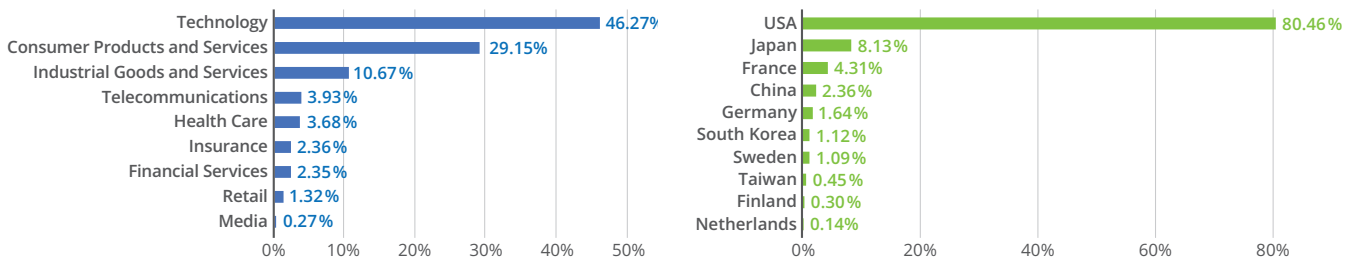
⁴ STOXX data from March 19, 2012 to November 30, 2022

Top 10 components⁵ STOXX Global Metaverse Index

Company	Supersector	Country	Weight (%)
Electronic Arts Inc.	Consumer Products and Services	United States	8.02
Activision Blizzard Inc.	Consumer Products and Services	United States	7.83
Nvidia Corp.	Technology	United States	7.10
Autodesk Inc.	Technology	United States	6.02
Meta Platforms Inc., Class A	Technology	United States	4.49
Nintendo Co. Ltd.	Consumer Products and Services	Japan	4.43
Dassault Systems SE	Technology	France	4.31
Intel Corp.	Technology	United States	3.09
MasterCard Inc. Cl A	Industrial Goods and Services	United States	3.01
Microsoft Corp.	Technology	United States	2.94

⁵ STOXX data as of November 30, 2022

Supersector weighting (top 10) and country weighting STOXX Global Metaverse Index⁶



⁶ STOXX data as of November 30, 2022

Fundamentals (for last 12 months) STOXX Global Metaverse Index⁷

Index	Price/earnings incl. negative		Price/earnings excl. negative		Dividend yield (%) ⁸	Price/sales	Price/cash flow
	Trailing	Projected	Trailing	Projected			
STOXX® Global Metaverse Index	34.5	27.3	24.0	20.6	0.7	2.7	25.2
STOXX® Global Total Market Index	19.7	16.3	15.3	14.9	2.0	1.6	12.4

⁷ STOXX data as of November 30, 2022

⁸ Gr. div. yield is calculated as gr. return index return minus price index return.

STOXX Ltd. (STOXX), Deutsche Boerse Group (DBAG) and their licensors, research partners or data providers do not make any warranties or representations, express or implied, with respect to the timeliness, sequence, accuracy, completeness, currentness, merchantability, quality or fitness for any particular purpose of its index data and exclude any liability in connection therewith. STOXX, DBAG and their licensors, research partners or data providers are not providing investment advice through the publication of indices or in connection therewith. In particular, the inclusion of a company in an index, its weighting, or the exclusion of a company from an index, does not in any way reflect an opinion of STOXX, DBAG or their licensors, research partners or data providers on the merits of that company. Financial instruments based on the STOXX® indices, DAX® indices or on any other indices supported by STOXX are in no way sponsored, endorsed, sold or promoted by STOXX, DBAG or their licensors, research partners or data providers.

This document contains index performance data based on backtesting, i.e. calculations of how the index might have performed prior to launch if it had existed using the same index methodology and based on historical constituents. Backtested performance information is purely hypothetical and is provided in this document solely for information purposes. Backtested performance does not represent actual performance and should not be interpreted as an indication of actual performance.

To learn more about Qontigo's Thematic index solutions, please contact us, or visit qontigo.com/thematics



sales@qontigo.com
support@qontigo.com



Part of



DEUTSCHE BÖRSE
GROUP

AXIOMA | DAX | STOXX