RIETUMU

ASSET MANAGEMENT

INVESTMENT PORTFOLIO «INDUSTRY 4.0»

INVESTMENTS IN FUTURE TECHNOLOGIES

“INDUSTRY 4.0”: MORE PROFITABLE THAN A FUND AND MORE ACCESSIBLE THAN A PORTFOLIO

Investment technologies currently allow for diverse allocation of capital: starting with individual portfolios and up to interest in investment funds. Financial analysts and portfolio managers at Rietumu Bank are focussed on tailoring optimal scenarios that match the preferences of each investor.

Large professional investors that need to find solutions for allocating substantial amounts of capital usually prefer individual portfolios, which means individual selection of instruments and «singularity» in their management.

Purchasing shares in investment funds is an alternative way of investing, designed to find simpler solutions and allocate capital in smaller amounts.

The range of investment portfolios developed by Rietumu Bank’s team of experts, is characterized by the combination of investment portfolio creation principles and the investment fund formation techniques. These portfolios are **distinguished by:**

- **a personalized approach to holding securities,**
- **use of the most effective fund investment models.**

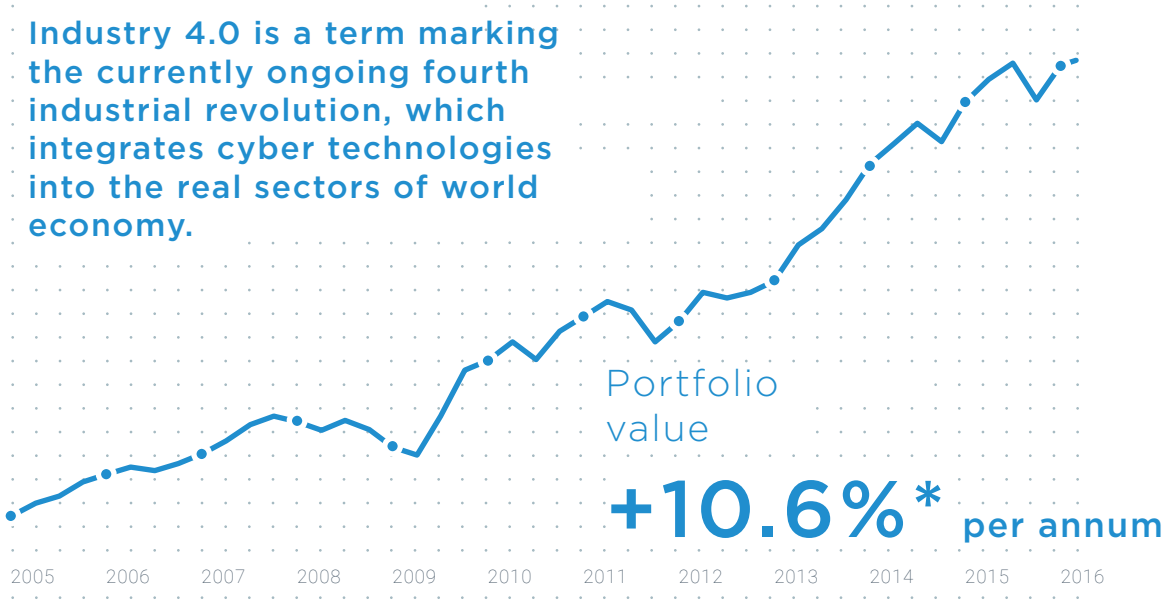
Introducing the key parameters of the “Industry 4.0” portfolio

“INDUSTRY 4.0”: INVESTMENTS IN FUTURE TECHNOLOGIES

The Investment Universe of “Industry 4.0” consists of companies from various innovative segments of the global economy:

- Biotechnology
- Medical Equipment
- Bioinformatics
- Artificial Intelligence
- Drones, Robotics and Automatization
- 3D printing
- Nanotechnology
- Car and Aviation Industry
- Information Technology
- Cloud Technology
- Big data analysis
- Internet of Things
- Cybersecurity
- E-commerce
- Mobile Payment Systems
- Telecommunications
- Social Networks
- Digital Media
- Chemical Industry
- Clean technologies

Industry 4.0 is a term marking the currently ongoing fourth industrial revolution, which integrates cyber technologies into the real sectors of world economy.



Historical performance of the model portfolio “Industry 4.0”, 10 years

* Simulation of the historical performance of the model portfolio “Industry 4.0” from 01.01.2005. Past performance does not guarantee future profitability.

The investment portfolio “Industry 4.0”, created by the Rietumu Asset Management team, offers the opportunity **to invest in future technologies** and get a return from common human progress. We offer investments in shares of companies which **lead the way in innovative processes**, defining the new outline of the modern world and widening economic boundaries.

“INDUSTRY 4.0”: INVESTMENT IDEA

Investment portfolio “Industry 4.0” is the opportunity to make profit from the development of future technologies. The structure of the portfolio is balanced between companies that are well-established and of significance in the global economy and smaller-scale players in promising segments, which are just starting their rapid development.

Biotechnology and Medical Equipment
Currently the majority of medical pharmaceuticals are developed with biotechnologies, and this industry continues to provide solutions for previously unresolved medical problems. Data from the FDA (Food and Drug Administration – Agency for the Ministry of Health and Medical Services of the USA) shows that in the first decade of the 21st century more drugs were approved than during the 1980s and 1990s combined, demonstrating the rapid growth of this industry through decades of research.

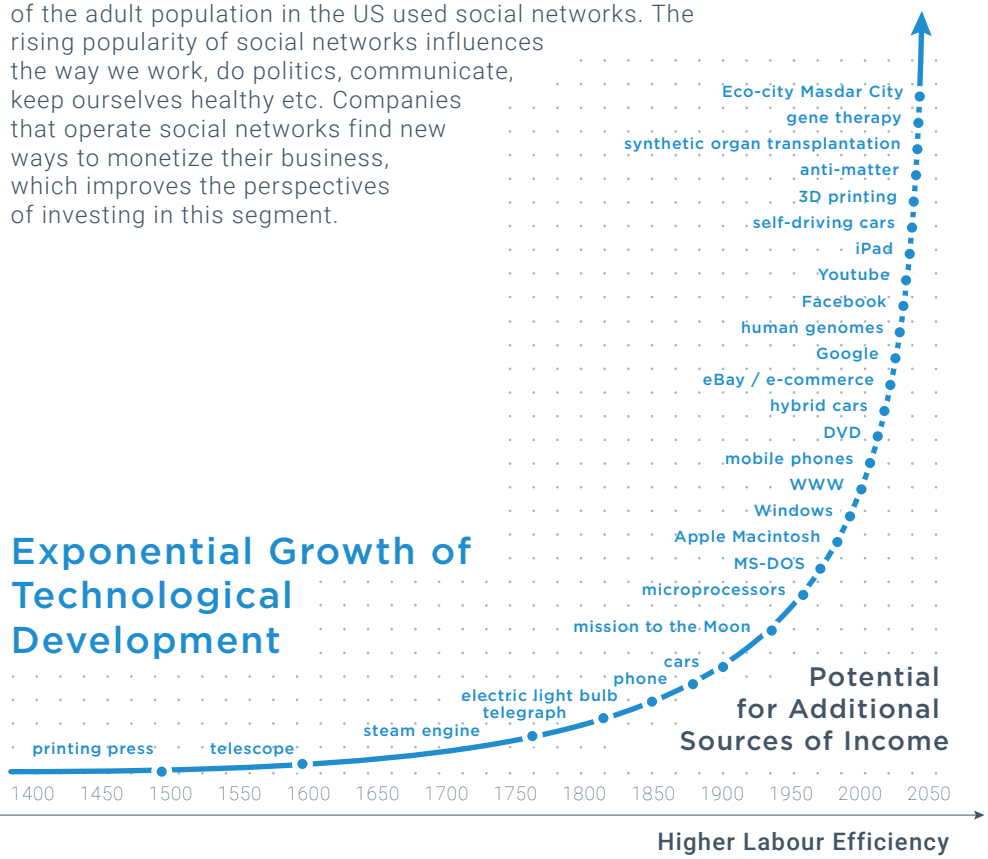
Revolution in Robotics
During the last few years companies such as Google, Apple, Facebook, and Amazon have initiated rapid development of robotic technologies. The International Federation of Robotics predicts double-digit growth in the robotics market in the near future. Robotization applies to various segments of the economy, including the production sector, and professional and personal services.

Cloud Technology
Market Research Media suggests that annual growth of the cloud technology market will hit 30% by 2020. Cloud technologies define new trends in data storage and processing, making these services cheaper and more accessible. Storing data in clouds, still a fantastical idea for many people, is dependent on the availability of components like software, hardware, computers and parts etc.

Cybersecurity
This industry is in the stage of rapid development. It has transformed itself from a narrow segment of the market into a vitally important direction for every modern company. Research company Gartner estimated the size of the cybersecurity market in 2015 at 75.4 billion US dollars and predicts its doubling by 2020.

“Clean” Technologies
As humanity develops, environmentally clean technologies become more and more important. Technological progress allows many ideas in the industry to become economically viable. The energy industry moves in the direction of renewable resources while the car industry becomes ever more complex — especially in regards to electric cars.

Social Networks
Social networks have become an integral part of our lives. Data from the Pew Research Center shows that in 2015 two thirds of the adult population in the US used social networks. The rising popularity of social networks influences the way we work, do politics, communicate, keep ourselves healthy etc. Companies that operate social networks find new ways to monetize their business, which improves the perspectives of investing in this segment.



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“INDUSTRY 4.0”: STRUCTURE (1-2)

The core of the “Industry 4.0” portfolio is formed by the stocks of public companies operating in innovative sectors of the world economy.

The formation of the investment portfolio over time is a dynamic process. Its current structure is defined by its managers, who occasionally re-balance it. As a result, during different time periods, stocks from up to 25 to 35 issuers can be included in the portfolio.

The portfolio is composed of the leading companies’ stocks in respective industries, with strong key indicators and relatively low market prices.

The portfolio is created, using effective modern investment models, developed by the experienced financial analysts and portfolio managers of Rietumu Bank.

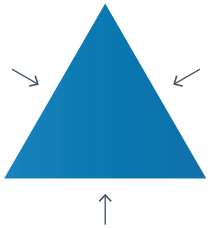
Type of investment	Individual portfolio
Asset class	Stocks
Currency	USD
Minimum investment	100 000 USD
Geographical focus	Global markets
Scope of investments	stocks of public companies from innovative sectors of the global economy
Recommended period of investments	over 3 years
Expected yield	over 10% per year
Brokerage comission	0.35%
Management comission	1.50% per year

INVESTMENT PROCESS

Investment Universe

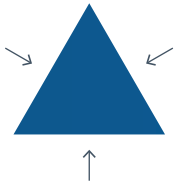
Industries: Information Technology, biotechnology, car manufacturing, aircraft industry, telecommunications and others.

Quantitative Analysis



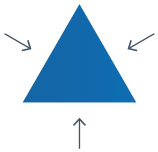
RAM investment models filter stocks with strong fundamental indicators and low market price.

Qualitative Analysis



Analytical data entry is based on available information about the stock issuer and industry.

Portfolio Formation



Portfolio managers tailor the final portfolio based on their expertise.

RISK CONTROL AND MONITORING

Including public companies' stocks into «Industry 4.0» portfolio is preceded by a multi-stage, rigourous selection process, executed by Rietumu Asset Management professionals.

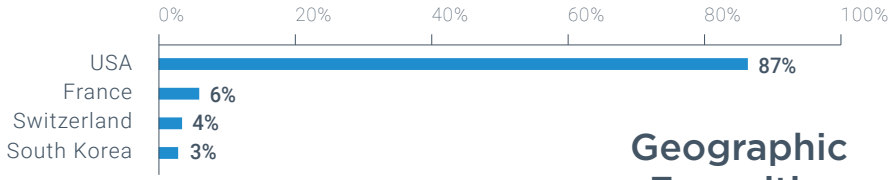
“INDUSTRY 4.0”: STRUCTURE (2-2)

Key indicators

Number of issuers	29
Average Equity Multiplier	58.06%
Average ROE	26.36%
Average PE ratio	16.57
Average PB ratio	3.85
Average Beta Coefficient	1.09

Top 10 positions

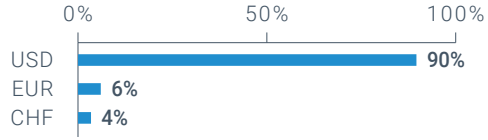
CISCO SYSTEMS INC	3.52%
ORACLE CORP	3.52%
SYNAPTICS INC	3.52%
KARDEX AG	3.51%
VALEO SA	3.51%
F5 NETWORKS INC	3.50%
GILEAD SCIENCES INC	3.50%
DOLBY LABORATORIES INC	3.49%
TESSERA TECHNOLOGIES INC	3.48%
SYMANTEC CORP	3.48%

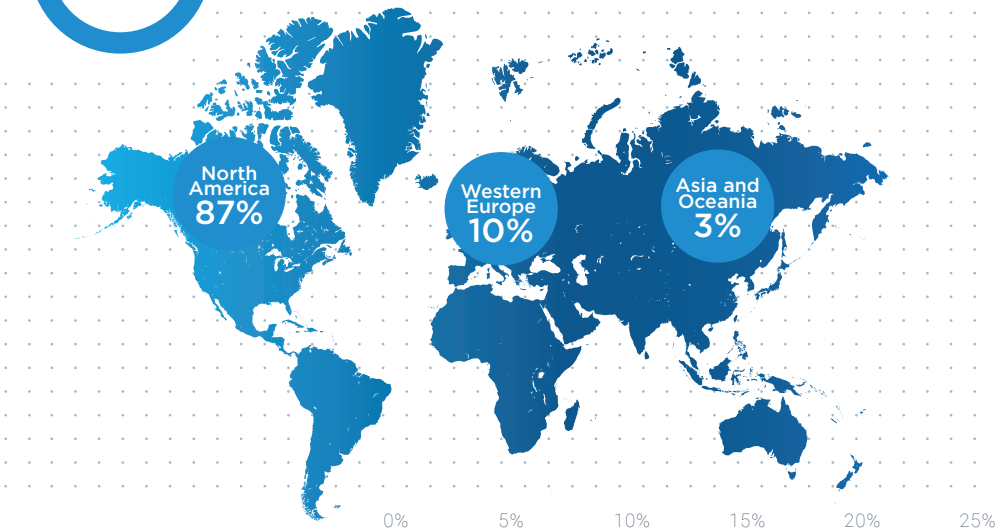


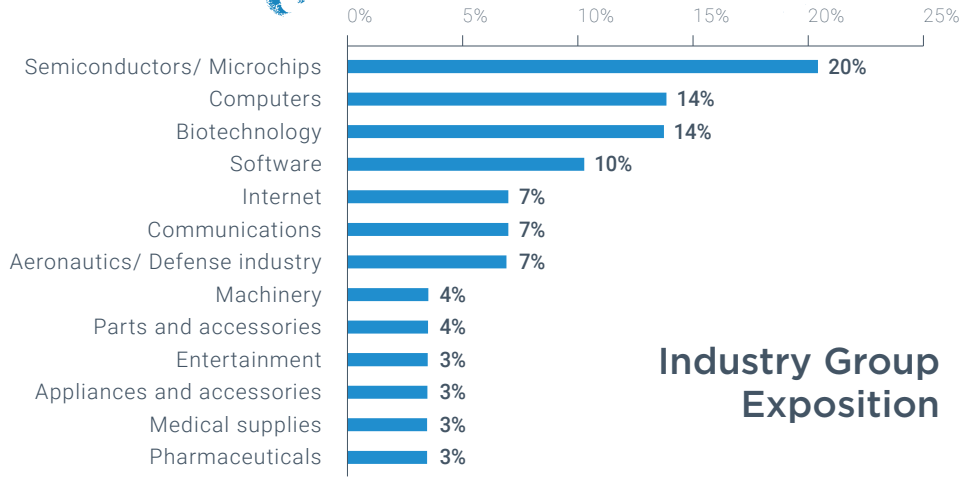
Geographic Exposition

Assets Distribution

Currency Exposition







Industry Group Exposition

Data source: Bloomberg, Rietumu Asset Management

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"INDUSTRY 4.0": PORTFOLIO COMPOSITION

Ticker	Name of the issuer	Country	Industry Sector	Industry Group	Equity ratio	Return on Equity ratio	Price to Earnings ratio	Price to Book ratio	Dividend Yield (indicated)	Beta	Price (local currency)	Currency
CSCO US	CISCO SYSTEMS INC	USA	Communications	Communications	52.61	17.43	14.62	2.38	3.62	1.17	28.69	USD
ORCL US	ORACLE CORP	USA	Technology	Software	43.88	18.82	19.40	3.73	1.46	1.11	41.16	USD
SYNA US	SYNAPTICS INC	USA	Technology	Semiconductors/Microchips	52.20	16.45	25.38	3.73		1.49	77.69	USD
KARN SW	KARDEX AG-REG	Switzerland	Industrial	Machinery	58.71	23.25	19.38	4.27	3.85	0.79	77.95	CHF
FR FP	VALEO SA	France	Consumer, Cyclical	Parts and accessories	30.36	23.47	14.27	3.01	2.25	1.64	133.25	EUR
FFIV US	F5 NETWORKS INC	USA	Communications	Internet	56.94	27.93	20.65	5.75		0.86	105.58	USD
GILD US	GILEAD SCIENCES INC	USA	Consumer, Non-cyclical	Biotechnology	35.75	106.64	7.90	7.22	1.83	0.89	94.12	USD
DLB US	DOLBY LABORATORIES INC-CL A	USA	Consumer, Non-cyclical	Entertainment	84.71	9.55	28.49	2.42	1.11	1.06	43.37	USD
TSRA US	TESSERA TECHNOLOGIES INC	USA	Technology	Semiconductors/Microchips	95.51	22.15	12.91	3.02	2.59	1.06	30.91	USD
SYMC US	SYMANTEC CORP	USA	Communications	Internet	44.85	10.95	15.30	2.24	3.26	0.85	18.41	USD
TER US	TERADYNE INC	USA	Technology	Semiconductors/Microchips	77.13	10.21	23.56	2.25	1.10	1.26	21.75	USD
MTSC US	MTS SYSTEMS CORP	USA	Technology	Computers	56.02	17.10	20.73	3.60	1.94	1.09	61.74	USD
CRUS US	CIRRUS LOGIC INC	USA	Technology	Semiconductors/Microchips	65.88	16.65	19.91	2.73		0.98	37.16	USD
VRTU US	VIRTUSA CORP	USA	Technology	Computers	86.53	10.24	22.41	2.45		0.95	37.91	USD
EMR US	EMERSON ELECTRIC CO	USA	Industrial	Appliances and accessories	36.59	29.87	17.01	4.72	3.47	1.19	54.75	USD
BRCD US	BROCADE COMMUNICATIONS SYS	USA	Technology	Computers	62.74	14.01	12.92	1.71	1.69	1.40	10.64	USD
LMNX US	LUMINEX CORP	USA	Consumer, Non-cyclical	Medical supplies	91.55	10.71	20.60	2.26		0.78	19.68	USD
ENTA US	ENANTA PHARMACEUTICALS INC	USA	Consumer, Non-cyclical	Pharmaceuticals	95.99	27.59	9.08	2.11		0.86	29.68	USD
IQNT US	INTELIQUENT INC	USA	Communications	Communications	90.80	22.84	15.27	3.12	3.63	0.87	16.54	USD
INTC US	INTEL CORP	USA	Technology	Semiconductors/Microchips	60.14	19.23	13.78	2.47	3.20	1.23	32.45	USD
VMW US	VMWARE INC-CLASS A	USA	Technology	Software	50.29	12.86	18.51	2.77		0.56	52.03	USD
AIR FP	AIRBUS GROUP SE	France	Industrial	Aeronautics/ Defense industry	5.59	41.39	16.56	7.47	2.29	1.33	56.86	EUR
BA US	BOEING CO/THE	USA	Industrial	Aeronautics/ Defense industry	6.71	68.97	13.80	13.36	3.43	1.19	126.96	USD
AAPL US	APPLE INC	USA	Technology	Computers	41.09	42.71	11.73	4.75	1.89	1.16	109.99	USD
AMGN US	AMGEN INC	USA	Consumer, Non-cyclical	Biotechnology	39.24	25.77	16.82	4.14	2.59	1.36	154.16	USD
UTHR US	UNITED THERAPEUTICS CORP	USA	Consumer, Non-cyclical	Biotechnology	73.23	45.49	13.14	3.23		0.95	112.93	USD
BIIB US	BIOGEN INC	USA	Consumer, Non-cyclical	Biotechnology	48.05	35.15	16.51	6.08		1.05	260.54	USD
MSTR US	MICROSTRATEGY INC-CL A	USA	Technology	Software	69.31	27.17	19.87	4.58		1.34	182.75	USD
SMSN LI	SAMSUNG ELECTRONICS CO LTD	South Korea	Technology	Semiconductors/Microchips	71.33	9.95			0.15	1.15	564.00	USD

Data source: Bloomberg, Rietumu Asset Management

The structure and composition of the portfolio are indicative.
The actual portfolio is formed by the managers and its structure is reviewed on a regular basis.

“INDUSTRY 4.0”: HISTORICAL MODELS

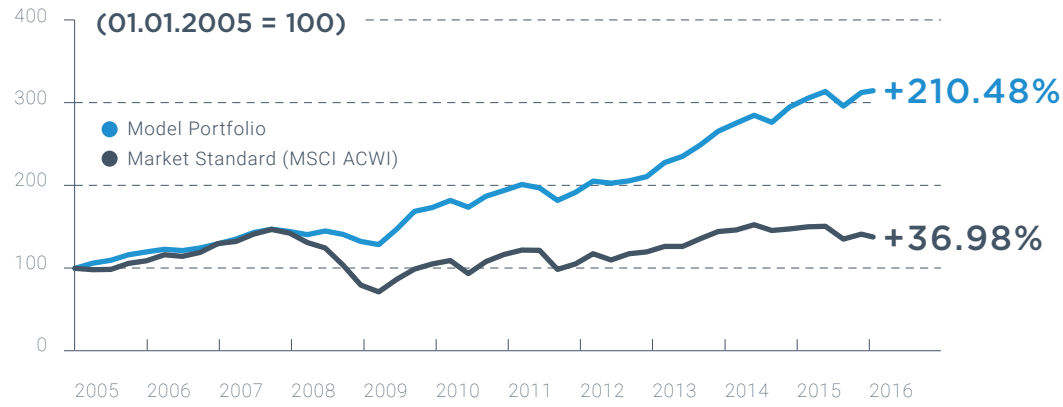
Rietumu Asset Management experts applied a simulation of the historical indicators of the model «Industry 4.0» portfolio for a 10-year period, starting from 2005.

The calculated value growth was **+10.6% per year**. Therefore, the historical portfolio yield **exceeded market standards by 5.7 times**.

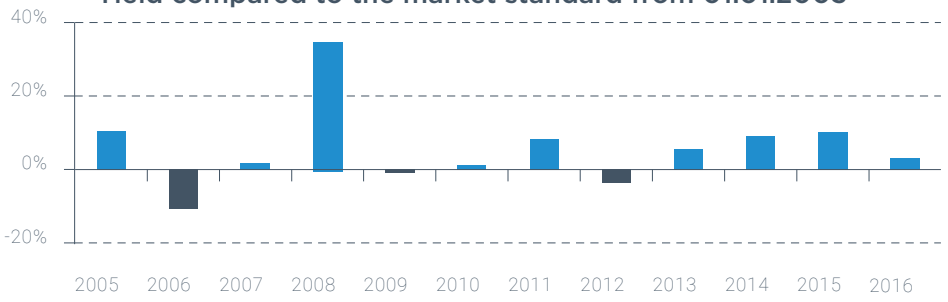
Characteristics of the Model Portfolio (01.01.2005-15.03.2016)	Model Portfolio	Market Standard (MSCI ACWI)
Average 3 month yield	2.65%	1.08%
Average 3 month yield exceeding market standard	1.57%	-
Average annual yield	10.60%	4.32%
Average annual yield exceeding market standard	6.29%	-
Yield from 01.01.2005	210.48%	36.98%
Yield exceeding market standard from 01.01.2005	173.50%	-
Average annual volatility	9.23%	17.24%
Maximum drawdown	-12.37%	-50.66%
Sharpe ratio (annual)	0.89	-
Information ratio (annual)	0.62	-
Jensen's Alpha (annual)	3.63%	-
Beta coefficient	0.47	-
Tracking error	10.21%	-
Correlation	87.44%	-
Average number of companies in the portfolio	35	-

Data source: Bloomberg, Rietumu Asset Management

Historical dynamics of the model “INDUSTRY 4.0” portfolio (01.01.2005 = 100)



Yield compared to the market standard from 01.01.2005



Historical indicators of the model «Industry 4.0» portfolio are simulated. Historical data does not guarantee future profitability.

“INDUSTRY 4.0”: DEFINITIONS OF TERMS

Volatility – statistical financial indicators, describing the variability of the price. The higher figure indicates higher variability of the price and as a result, a higher level of risk.

Correlation – statistical relation of the portfolio and market standard. The value of the correlation can vary in range from -1 (-100%) to 1 (100%). Correlation of 1 or 100% means that the price changes are fully in line with the price changes of the market standard. Correlation of -1 or -100% means that the portfolio price moves with the same dynamics as the price of the market standard, but in the opposite direction.
Correlation of 0 means that there is no interrelation between the portfolio and market standard.

Beta coefficient – an indicator describing market (or systematic) risk. The Beta coefficient shows the level of the price variability and interrelation between the asset and market standard. A Beta coefficient of 1 means that the price variability level coincides with the variability of the market standard. A Beta coefficient less than 1 means that the asset price displays lower variability than market standard (lower market risk). Therefore, a Beta coefficient higher than 1 means higher variability and higher market risk.

Information ratio – an indicator describing profitability of a portfolio with allowance for risk. The information ratio shows portfolio yield higher than the market standard yield adjusted for the volatility level of the given profitability.

Jensen's Alpha – an indicator describing profitability of a portfolio with allowance for the market risk, average yield of the market standard and risk-free interest rate. This coefficient shows the ability of the manager to receive a higher yield than the average yield of the market standard, accounting for the risk, i.e. the efficiency of the manager. The higher the coefficient, the more efficiently the portfolio is managed.

Sharpe ratio – an indicator describing the profitability of a portfolio with allowance for risk-free interest rate. The Sharpe ratio shows how well the portfolio yield compensates for the risk taken.
The Sharpe ratio is calculated as the ratio of average risk premium (portfolio profitability less risk-free interest rate) to the standard portfolio yield deviation.

Tracking error – an indicator describing how closely the portfolio repeats dynamics of the market standard. The tracking error coefficient shows the difference between portfolio yield and market standard yield. The lower the Tracking error coefficient, the less the deviation.

Equity ratio – the relation of the company's equity to its total assets.

Maximum Drawdown – the maximum portfolio value drop, in percentage terms, from the previous maximum price to the following minimum for the specified time period.

Price-to-book ratio (PB ratio) – ratio of the market capitalization of the company to its equity.

Price-to-earnings ratio (PE ratio) – ratio of the market capitalization of the company to its net income.

Return on equity ratio (ROE ratio) – ratio of the company' s net income to its equity.

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