

## GIAM Macro & Market Research - Market Commentary

April 23, 2021

### Equity sector models and strategy: “milder” rotation phase two. OW Value and Cyclical

- We provide an assessment of European sectors and styles judging from the signals produced by our quant models, further enriched by our qualitative analysis.
- Undervalued based on quant: energy, HPP, and software. Overvalued: autos, retail, comm. & prof. services, cons. services, telecoms, materials, and semiconductors.
- Among European styles, undervaluation is indicated for defensive, small cap and min volatility. Low leverage, large cap value and cyclical look expensive.
- Incorporating also our qualitative analyses, we maintain a tilt to cyclical and value - with higher selectivity (more financials and energy) and lower UW on defensive.
- The rotation into value (higher OW) and cyclical (lower OW) sectors is well advanced but not exhausted as GDP, yield and M1 momentum remain sanguine, together with policy support. Value stocks, in particular, are a hedge against a surprise spike in bond yields, and likely to benefit from the cyclical upswing and rising inflation expectations.
- OW: financials, energy, materials, and software. Underweight cons. services (new), media, real estate (new), and telecoms. We bring household & personal products to neutral from UW.

At the end of 2019 we introduced our proprietary equity valuation tool “[Quant signals for EU equity sectors and styles](#)” to yield indications of over- or undervaluation for different sectors and styles of European equities. The regression-based models use macro- and financial variables to produce fair value estimates of the ratio between the MSCI Europe Sector/Style index and the broad MSCI Europe index.

With this publication, we want to provide an update of current models’ indications of over- and undervaluation for the sectors and styles covered.

In and of itself these indications of relative over- or undervaluation are not sufficient to make investment decisions, as the models use current inputs of the macro- and financial variables, without making considerations of how they can develop going forward. Still, the results are useful as they allow limiting the number of sectors/styles to be further analysed, using a more qualitative assessment and bottom-up analysis.

The table below summarizes current signals for all sectors/styles covered along with some additional descriptive statistics of how they have performed (in total return terms) over the recent past. The 2<sup>nd</sup> and 3<sup>rd</sup> columns in the table show numbers from a different approach to modelling, **leveraging on a genetic algorithms process based on machine learning (ML) principles (i.e. evolutionary learning module)**. Of course, even this approach is based on historical series of data and is influenced by the big drawdown and volatility experienced this year.

The signals are taken from both types of **quant models**:

- **Undervalued (UV)**: energy, HPP, and software services
- **Overvalued (OV)**: autos, retail, commercial & professional services, consumer services, telecoms, materials, and semiconductors

In terms of weight, the undervalued sectors represent around 15% of the MSCI Europe, while the overvalued ones 25%. However, **the weighted average of the signal** (represented by standard deviations from the corresponding fair value) is **rather balanced**: -1.59 for UV sectors versus 1.55 for OV ones.

## Equity Quant Models Signals

| Index                      | ML Approach      |                        | Classic Approach |                        | Performances |                         |
|----------------------------|------------------|------------------------|------------------|------------------------|--------------|-------------------------|
|                            | Current ST. DEV. | Over/Undervalued OV/UV | Current ST. DEV. | Over/Undervalued OV/UV | %TR YTD      | %TR From Peak (Feb. 19) |
| <b>MSCI Europe</b>         | -                | -                      | -                | -                      | <b>9.8</b>   | <b>2.4</b>              |
| Banks                      | -0.97            | N                      | -0.65            | N                      | 17.5         | -16.3                   |
| Insurance                  | 1.26             | OV                     | -0.86            | N                      | 11.1         | -3.7                    |
| Div. Financials            | -0.75            | N                      | -                | -                      | 8.5          | 5.9                     |
| Capital Goods              | 1.18             | OV                     | 0.47             | N                      | 12.4         | 13.3                    |
| Transportation             | -0.96            | N                      | -                | -                      | 16.6         | 29.3                    |
| Comm. & Prof. Services     | 2.29             | Strong OV              | -                | -                      | 9.8          | 0.6                     |
| Pharma                     | -0.86            | N                      | 0.88             | N                      | 3.3          | -6.5                    |
| HC Equip. & Services       | -0.35            | N                      | -                | -                      | 10.5         | 5.9                     |
| Energy                     | 0.15             | N                      | -2.12            | Strong UV              | 10.3         | -21.8                   |
| Telecom. Services          | 1.70             | OV                     | -                | -                      | 9.7          | -9.1                    |
| Media & Entertainment      | 0.04             | N                      | -                | -                      | 9.8          | -4.7                    |
| Utilities                  | -1.07            | UV                     | 3.82             | Strong OV              | 1.3          | -3.5                    |
| Materials                  | 1.18             | OV                     | 1.22             | OV                     | 14.1         | 26.6                    |
| Food & Staples Retailing   | 0.85             | N                      | -                | -                      | 4.9          | -2.6                    |
| Food, Beverages & Tobacco  | 0.97             | N                      | -                | -                      | 4.9          | -5.1                    |
| Household & Pers. Products | -1.69            | UV                     | -                | -                      | 3.2          | 0.8                     |
| Cons. Durables and Apparel | -0.51            | N                      | -                | -                      | 10.8         | 19.8                    |
| Cons. Services             | 2.75             | Strong OV              | -                | -                      | 20.6         | 0.0                     |
| Retailing                  | 1.71             | OV                     | -                | -                      | 6.8          | 17.4                    |
| Automobiles & Components   | 3.05             | Strong OV              | 0.11             | N                      | 22.4         | 37.6                    |
| Software                   | -2.46            | Strong UV              | -1.46            | UV                     | 8.5          | -9.0                    |
| Tech. Hardware & Equipment | -0.45            | N                      | -                | -                      | 13.6         | 26.4                    |
| Semiconductors             | 1.46             | OV                     | -                | -                      | 22.8         | 57.2                    |
| Cyclicals                  | 2.87             | Strong OV              | 1.67             | OV                     | 12.8         | 8.2                     |
| Defensive                  | -3.49            | Strong UV              | -2.08            | Strong UV              | 4.8          | -6.7                    |
| Value                      | 0.24             | N                      | 1.96             | OV                     | 11.3         | -4.1                    |
| Growth                     | 0.14             | N                      | 0.29             | N                      | 8.3          | 7.9                     |
| Quality                    | -0.27            | N                      | 2.86             | Strong OV              | 8.7          | 8.7                     |
| Momentum                   | -2.28            | Strong UV              | 0.12             | N                      | 9.2          | 11.5                    |
| Large Cap                  | 0.12             | N                      | -0.90            | N                      | 9.8          | 0.6                     |
| Large Cap Value            | 1.72             | OV                     | -1.17            | UV                     | 11.2         | -5.6                    |
| Small Cap                  | -1.64            | UV                     | -0.10            | N                      | 12.2         | 13.1                    |
| Small Cap Growth           | -3.29            | -                      | 0.97             | N                      | 10.1         | 20.8                    |
| Low Leverage               | 3.27             | Strong OV              | 3.86             | Strong OV              | 10.3         | 9.3                     |
| Minimum Volatility         | -2.07            | Strong UV              | -2.18            | Strong UV              | 5.4          | -4.8                    |

UV = Undervaluation OV = Overvaluation

Last Update: 20/04/2021

Source: Eikon, own calculations

## Qualitative analysis.

Expectation of a strong macro recovery is reinforced by a **reaffirmed policy support for the mid-term**. We expect EMU earnings to recover to 2019 levels in H2 2022 (24 months would be the norm according to past recoveries after recessions but this time the policy support makes the difference), while those for the US at the end of 2021 (a more resilient index).

A lower US weight in energy and financials and a higher one in tech explains a faster recovery in US earnings. Higher yields have put pressure on long duration sectors (Growth, Defensive), supporting lower ones, Cyclical and Value.

That said, the rotation has already gone far: since 10/2020, EU Value overperformed Growth by 12% (underperforming 20% since 1/2020). Cyclicals beat Defensive by 45% since 4/2020, while outperforming by around 13% since the end of 2019.

In addition to this, **positioning and sentiment have become consensual in backing such rotation**, and lately lower yields have triggered an underperformance especially in financials and energy.

**Our quant models look stretched for Cyclical and, to a lesser extent, for Value.** That said, we think the rotation can linger, albeit two thirds of the move might be behind us, even though **value is more laggard than cyclical**: GDP and M1 momentum remains sanguine, together with yields and commodity's one. They all deserve a positive correlation with Value and Cyclical sectors and countries. We recommend keeping exposure to assets that will benefit from higher GDP and inflation expectations, e.g. value stocks and to a lesser extent cyclical ones. Value stocks, in particular, are a hedge against a surprise spike in bond yields, and likely to benefit from the cyclical upswing and rising inflation expectations.

**Total return (TR) breakdown** (year-to-date): characterized by high correlation with earnings changes, with notable differences being Energy, Materials and Transportation (lagging their earnings YTD) and Capital goods, Cons. Services, Real Estate and Telecommunications services (outpacing). Ongoing Chinese recovery should in particular benefit bottom line for **material, industrials, semiconductors and luxury**.

**Total Return decomposition, PE expansion and Risk Measures from 31/12/2020 to 20/4/2021**

| Index                    | %TR         | %PR  | %DY | %EPS        | %PE          | 5Y Beta    |
|--------------------------|-------------|------|-----|-------------|--------------|------------|
| <b>MSCI Europe</b>       | <b>9.8</b>  | 8.7  | 1.1 | <b>10.1</b> | <b>-2.8</b>  | <b>1.0</b> |
| Banks                    | <b>17.5</b> | 16.1 | 1.4 | <b>17.1</b> | <b>-2.4</b>  | <b>1.4</b> |
| Real Estate              | <b>4.2</b>  | 2.8  | 1.4 | <b>-6.9</b> | <b>8.8</b>   | <b>0.8</b> |
| Utilities                | <b>1.3</b>  | 0.7  | 0.6 | <b>1.9</b>  | <b>-2.7</b>  | <b>0.8</b> |
| Auto & Components        | <b>22.4</b> | 21.6 | 0.9 | <b>26.6</b> | <b>-5.5</b>  | <b>1.3</b> |
| Capital Goods            | <b>12.4</b> | 11.2 | 1.2 | <b>5.4</b>  | <b>3.9</b>   | <b>1.2</b> |
| Consumer Durables        | <b>10.8</b> | 10.2 | 0.5 | <b>13.8</b> | <b>-4.6</b>  | <b>1.1</b> |
| Consumer SVS             | <b>20.6</b> | 20.5 | 0.1 | <b>12.4</b> | <b>5.5</b>   | <b>1.2</b> |
| Div. Financials          | <b>8.5</b>  | 7.7  | 0.8 | <b>8.3</b>  | <b>-2.1</b>  | <b>1.2</b> |
| Energy                   | <b>10.3</b> | 8.7  | 1.6 | <b>48.8</b> | <b>-28.1</b> | <b>1.3</b> |
| Food, Bev. & Tobacco     | <b>4.9</b>  | 3.3  | 1.6 | <b>0.7</b>  | <b>1.0</b>   | <b>0.7</b> |
| Food & Staples Retailing | <b>4.9</b>  | 4.0  | 0.9 | <b>6.4</b>  | <b>-3.8</b>  | <b>0.6</b> |
| HC Equip. & Services     | <b>10.5</b> | 10.3 | 0.2 | <b>-0.2</b> | <b>8.8</b>   | <b>0.8</b> |
| Household & Pers. Prod.  | <b>3.2</b>  | 2.5  | 0.7 | <b>-1.2</b> | <b>2.1</b>   | <b>0.7</b> |
| Insurance                | <b>11.1</b> | 9.5  | 1.5 | <b>0.4</b>  | <b>7.4</b>   | <b>1.2</b> |
| Materials                | <b>14.1</b> | 12.6 | 1.5 | <b>28.9</b> | <b>-14.0</b> | <b>1.1</b> |
| Media & Entertainment    | <b>9.8</b>  | 9.5  | 0.3 | <b>2.9</b>  | <b>4.9</b>   | <b>1.0</b> |
| Pharma                   | <b>3.3</b>  | 1.4  | 1.8 | <b>-1.3</b> | <b>1.2</b>   | <b>0.7</b> |
| Retailing                | <b>6.8</b>  | 6.8  | 0.0 | <b>5.0</b>  | <b>0.2</b>   | <b>1.0</b> |
| Semiconductors           | <b>22.8</b> | 22.6 | 0.1 | <b>15.3</b> | <b>4.7</b>   | <b>1.2</b> |
| Tech Software & Serv.    | <b>4.7</b>  | 4.6  | 0.1 | <b>2.1</b>  | <b>0.8</b>   | <b>1.0</b> |
| Telecom Services         | <b>9.7</b>  | 8.3  | 1.5 | <b>1.5</b>  | <b>5.0</b>   | <b>0.9</b> |
| Tech Hardware & Equip.   | <b>13.6</b> | 13.3 | 0.3 | <b>4.8</b>  | <b>6.5</b>   | <b>1.0</b> |
| Transportation           | <b>16.6</b> | 16.1 | 0.4 | <b>32.4</b> | <b>-13.6</b> | <b>1.0</b> |
| Comm. & Prof. Services   | <b>9.8</b>  | 9.0  | 0.8 | <b>5.0</b>  | <b>2.3</b>   | <b>0.9</b> |

Earnings are 12-months forward; PE = Price/Earnings 12M forward; DY is estimated as %TR - %Price

Source: Thomson Reuters

As said, the **quantitative analysis is extended with various valuation metrics** (which are a mix of value and growth approaches to valuation), recent **historical performance** data - proxy for **potential technical reversal** - as well as the analysis of trends between earnings/sales **revisions** and sector prices (both relative to the MSCI Europe).

**Valuation:** we take into consideration **Shiller PE** discount, expected **total return** (calculated as the sum of DY and next years' earnings growth), average **PEG ratio adjusted** for RoE and cost-of-equity, gap from

three-stage earnings growth model (8-year history), **market multiples** gap vs history and current **PE** vs historical average **excluding bubble years** (1987-1996, 2003-2007, 2009-2019).

**We give weights to different methodologies in order to avoid 100% bias towards a “value” approach** (expected Total Return and PEG adjusted have more a “growth” bias, having both a weight of 64%).

#### Valuation metrics

weights used in the calculation of rank

|  | 9%                   | 32%                                   | 32%          |                   | 9%   | 9%                         | 9%             |                                       |                                       |                                       |                                      |  |                          |
|--|----------------------|---------------------------------------|--------------|-------------------|--|----------------------------|----------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|--|--------------------------|
| Sectors (Europe)                                 | Shiller PE, discount | Exp. TR = DY + next years' EPS growth | average PEG* | average PEG adj.* | LT earnings growth (3yr fwd vs current year) | LT earnings growth (3-5yr) | DY - 10Y yield | LT DEV gap (the higher = the cheaper) | ST DEV gap (the higher = the cheaper) | Market multiples, discount to history | PE vs. hist. avg. excl. bubble years | Price vs earnings performance since 1995 | Rank 1= most undervalued |
| Market   | -2%                  | 17%                                   | 1.5          | 2.2               | 18.7%  | 9.4%                       | 3.0%           |                                       |                                       | 21%                                   | 43%                                  | 23%                                      | 6                        |
| Auto and Components                              | 6%                   | 52%                                   | 0.4          | 3.2               | 76.2%  | 21.1%                      | 3.2%           | -0.7                                  | -0.8                                  | -6%                                   | 26%                                  | -36%                                     | 5                        |
| <b>Banks</b>                                     | -23%                 | 17%                                   | 2.2          | 4.3               | 21.3%  | 2.8%                       | <b>4.9%</b>    | 2.6                                   | 2.4                                   | -5%                                   | 9%                                   | 6%                                       | 21                       |
| Capital Goods                                    | 34%                  | 21%                                   | 2.1          | 2.9               | 29.6%  | 7.4%                       | 2.0%           | -3.5                                  | -5.5                                  | 47%                                   | 99%                                  | 41%                                      | 19                       |
| Commercial/Professional Services                 | 26%                  | 13%                                   | 2.5          | 2.7               | 14.1%  | 7.8%                       | 2.2%           | -1.6                                  | -1.5                                  | 42%                                   | 52%                                  | 43%                                      | 14                       |
| Consumer Durables and Apparel                    | 43%                  | 27%                                   | 1.5          | 2.3               | 31.9%  | 17.6%                      | 1.7%           | -3.3                                  | -3.6                                  | 50%                                   | 124%                                 | 53%                                      | 11                       |
| Consumer Services                                | 21%                  | 74%                                   | 1.2          | 4.0               | 105.8%                                       | 40.5%                      | 1.0%           | -3.0                                  | -2.6                                  | 95%                                   | 491%                                 | 68%                                      | 18                       |
| Diversified Financials                           | -5%                  | 12%                                   | 2.0          | 3.2               | 4.8%   | 14.5%                      | 2.4%           | 0.0                                   | -0.7                                  | 11%                                   | 3%                                   | 32%                                      | 15                       |
| <b>Energy</b>                                    | <b>-41%</b>          | <b>64%</b>                            | <b>0.3</b>   | <b>2.5</b>        | <b>118.7%</b>                                | <b>-0.9%</b>               | <b>4.8%</b>    | <b>4.8</b>                            | <b>4.1</b>                            | <b>-13%</b>                           | <b>112%</b>                          | <b>-18%</b>                              | <b>1</b>                 |
| Food and Staples Retailing                       | -22%                 | 10%                                   | 2.6          | 3.1               | 8.9%   | 3.5%                       | 3.9%           | 3.4                                   | 3.4                                   | -16%                                  | -6%                                  | -3%                                      | 9                        |
| Food, Beverages and Tobacco                      | 9%                   | 10%                                   | 3.1          | 3.4               | 8.7%   | 5.2%                       | 2.9%           | 0.1                                   | 3.0                                   | 8%                                    | 26%                                  | 35%                                      | 17                       |
| Health Care Equipment and Services               | 13%                  | 14%                                   | 2.2          | 2.7               | 14.2%  | 11.9%                      | 1.2%           | -1.2                                  | -0.5                                  | 19%                                   | 46%                                  | 50%                                      | 13                       |
| Household and Pers. Products                     | 1%                   | 7%                                    | 3.2          | 4.3               | 4.8%   | 4.5%                       | 2.5%           | -0.1                                  | 1.1                                   | 12%                                   | 2%                                   | 17%                                      | 25                       |
| Insurance  | -37%                 | 15%                                   | 1.3          | 2.3               | 11.8%  | 7.6%                       | <b>4.9%</b>    | -0.5                                  | -0.2                                  | -13%                                  | -16%                                 | -69%                                     | 3                        |
| Materials  | 23%                  | 14%                                   | 1.5          | 2.2               | 12.4%  | 8.4%                       | 4.0%           | -1.6                                  | -2.2                                  | 6%                                    | 30%                                  | 18%                                      | 8                        |
| Media  | -16%                 | 16%                                   | 2.0          | 3.0               | 19.5%  | 7.1%                       | 2.2%           | 2.1                                   | 1.3                                   | 22%                                   | -7%                                  | 20%                                      | 12                       |
| Pharmaceuticals, Biotechnology and Life Sciences | -15%                 | 12%                                   | 1.9          | 2.1               | 7.7%   | 9.5%                       | 3.0%           | 1.1                                   | 2.0                                   | 11%                                   | -3%                                  | 10%                                      | 4                        |
| Real Estate                                      | -44%                 | 8%                                    | 3.2          | 4.3               | 6.4%   | 2.7%                       | 3.1%           | 2.6                                   | 3.4                                   | 10%                                   | -3%                                  | 3%                                       | 24                       |
| Retailing  | 10%                  | 36%                                   | 1.4          | 2.3               | 37.6%  | 32.7%                      | 1.0%           | -1.2                                  | -0.8                                  | 83%                                   | 196%                                 | 59%                                      | 7                        |
| Semi-Conductor and Semi-C. Equipment             | 125%                 | 22%                                   | 1.9          | 2.4               | 22.2%  | 20.7%                      | 0.6%           | -5.7                                  | -5.1                                  | 94%                                   | 27%                                  | -  | 20                       |
| Software and Services                            | 29%                  | 11%                                   | 3.0          | 3.5               | 11.1%  | 8.6%                       | 1.0%           | -1.9                                  | -1.8                                  | 41%                                   | -6%                                  | -4%                                      | 23                       |
| Technology Hardware and Equipment                | 233%                 | 13%                                   | 2.0          | 2.4               | 8.9%   | 14.0%                      | 1.6%           | 1.3                                   | -0.5                                  | 34%                                   | -72%                                 | 28%                                      | 16                       |
| Telecommunication Services                       | -28%                 | 15%                                   | <b>1.6</b>   | <b>2.1</b>        | 7.0%   | 13.3%                      | 4.7%           | 3.3                                   | 3.4                                   | -14%                                  | -65%                                 | 0%                                       | 2                        |
| Transportation                                   | -1%                  | 93%                                   | 2.4          | 4.3               | 177.3%                                       | 5.2%                       | 2.1%           | -3.6                                  | -3.7                                  | 43%                                   | 411%                                 | 38%                                      | 10                       |
| Utilities  | -3%                  | 10%                                   | <b>3.2</b>   | <b>3.7</b>        | 7.7%   | 4.1%                       | 4.4%           | 0.3                                   | -1.2                                  | 15%                                   | 35%                                  | 29%                                      | 22                       |
| <b>Median</b>                                    | <b>1%</b>            | <b>15%</b>                            | <b>2.0</b>   | <b>2.9</b>        | <b>0.1</b>                                   | <b>8.4%</b>                | <b>2.5%</b>    | <b>-0.3</b>                           | <b>-0.6</b>                           | <b>15.4%</b>                          | <b>26.4%</b>                         | <b>22%</b>                               |                          |
| <b>Average</b>                                   | <b>13%</b>           | <b>24%</b>                            | <b>2.0</b>   | <b>3.0</b>        | <b>0.3</b>                                   | <b>11.2%</b>               | <b>2.7%</b>    | <b>-0.3</b>                           | <b>-0.3</b>                           | <b>23.9%</b>                          | <b>62.3%</b>                         | <b>19%</b>                               |                          |
| <i>st. dev.</i>                                  | 57%                  | 23%                                   | 0.8          | 0.8               | 0.4  | 9.5%                       | 1.4%           | 2.5                                   | 2.7                                   | 32%                                   | 130.7%                               | 31%                                      |                          |
| <b>a) Discretionary+Transp. average</b>          | <b>6%</b>            | <b>44%</b>                            | <b>1.6</b>   | <b>3.2</b>        | <b>0.7</b>                                   | <b>18.3%</b>               | <b>2%</b>      | <b>-0.9</b>                           | <b>-1.0</b>                           | <b>39%</b>                            | <b>177%</b>                          | <b>28%</b>                               |                          |
| <b>b) = (a) -food retail, retail and C.serv.</b> | <b>8%</b>            | <b>47%</b>                            | <b>1.6</b>   | <b>3.2</b>        | <b>0.8</b>                                   | <b>12.8%</b>               | <b>2.3%</b>    | <b>-1.4</b>                           | <b>-1.7</b>                           | <b>27.4%</b>                          | <b>138.8%</b>                        | <b>19%</b>                               |                          |

Note: The discretionary sectors = auto, consumer durables, consumer services, media, retailing.  
 fwd **PEG** is 12m fwd PE divided by expected long-term EPS growth (3-5yrs). EPS = 12m fwd earnings. **Trailing PEG** = trailing PE divided by earnings growth (3yr fwd vs current year).  
**Average PEG** is the average of fwd PEG and trailing PEG. **PEG adj.** (higher = expensive): PEG is modified by the ratio COE/ROE which signals the ability to produce a return on capital higher than the cost of it. COE = cost of equity = 10yr gov't bond rate + 6% mkt risk premium x country Beta versus MSCI WORLD (monthly returns over the last 10 yrs).

**DEV gap** = three-stage discounted earnings based valuation vs. MSCI Europe (higher positive gap = cheaper valuation).

**Mkt Multiples** (PE, PB, PCF, and DY) are based on 12m forward estimates. PEs are since 1987, the rest is since 2003.

**Shiller PE**: Price earnings ratio based on average inflation-adjusted earnings from the previous 10 years.

The rank is derived from the valuation score, which is calculated as a sum of standardized expected total return (32%), average PEG ratio adj. (for ROE and COE) (32%),

Shiller PE discount (9%), gap from 8 year three-stage earnings growth model (9%), market multiples discount taken from 2004 (9%), and PE vs. hist. avg. excl. bubble years (9%).

Starting from valuation (80%) we add then **a measure of potential technical reversal** (with a weight of 20%) which is proxied by the **relative performance** achieved in the last 6/12 months.

### Valuation + potential technical reversal

| Sectors (Europe)                        | (1) Valuation score (80%)<br>(lower=better) | (2) avg rel. performance (20%)<br>(lower=better) | rel. perf. - 6M (TR) | rel. perf. - 12M (TR) | Beta 5 yr | R2 (Beta 5y) | Style  | Rank (1) + (2) |
|---|---|--|----------------------|-----------------------|-----------|--------------|--------|----------------|
| Energy                                  | -1.1  | 1.8  | 20.7                 | -17.0                 | 1.1       | 37%          | Value  | 1              |
| Telecommunication Services              | -0.6  | -7.7   | -2.3                 | -13.0                 | 0.8       | 53%          | -      | 2              |
| Pharmaceuticals, Biotechnology and Life | -0.4  | -21.8  | -17.5                | -26.0                 | 0.5       | 30%          | -      | 3              |
| Insurance                               | -0.4  | 8.6  | 8.9                  | 8.4                   | 1.3       | 79%          | Value  | 4              |
| <b>Market</b>                           | -0.3  | 0.0  | 0.0                  | 0.0                   | 1.0       | 100%         | -      | 5              |
| Food and Staples Retailing              | -0.1  | -15.2  | -10.2                | -20.3                 | 0.5       | 28%          | -      | 6              |
| Retailing                               | -0.2  | 5.7  | -3.2                 | 14.6                  | 1.1       | 56%          | -      | 7              |
| Auto and Components                     | -0.4  | 41.5   | 27.4                 | 55.7                  | 1.6       | 77%          | -      | 8              |
| Materials                               | -0.2  | 12.0   | 5.7                  | 18.3                  | 1.1       | 77%          | -      | 9              |
| Health Care Equipment and Services      | 0.0   | -7.6   | -7.6                 | -7.6                  | 0.8       | 55%          | -      | 10             |
| Media                                   | 0.0   | 2.8  | 0.8                  | 4.9                   | 1.2       | 81%          | -      | 11             |
| Consumer Durables and Apparel           | -0.1  | 10.4   | 5.5                  | 15.3                  | 1.2       | 77%          | Growth | 12             |
| Transportation                          | -0.1  | 16.7   | 4.1                  | 29.3                  | 1.1       | 70%          | -      | 13             |
| Commercial/Professional Services        | 0.1   | -7.1   | -9.4                 | -4.7                  | 0.9       | 70%          | Growth | 14             |
| Food, Beverages and Tobacco             | 0.2   | -15.5  | -11.4                | -19.6                 | 0.6       | 46%          | -      | 15             |
| Diversified Financials                  | 0.1   | 6.4  | 1.9                  | 10.8                  | 1.2       | 80%          | -      | 16             |
| Technology Hardware and Equipment       | 0.2   | 8.1  | 0.0                  | 16.2                  | 0.8       | 33%          | -      | 17             |
| Capital Goods                           | 0.3   | 14.5   | 6.0                  | 23.0                  | 1.3       | 91%          | -      | 18             |
| Software and Services                   | 0.5   | -14.0  | -17.5                | -10.5                 | 1.2       | 73%          | Growth | 19             |
| Consumer Services                       | 0.3   | 25.4   | 20.5                 | 30.2                  | 1.4       | 77%          | Growth | 20             |
| Real Estate                             | 0.5   | -7.7   | -6.9                 | -8.5                  | 1.1       | 67%          | Value  | 21             |
| Utilities                               | 0.5   | -5.7   | -8.5                 | -2.9                  | 0.7       | 38%          | Value  | 22             |
| Banks                                   | 0.4   | 17.8   | 25.5                 | 10.1                  | 1.6       | 67%          | Value  | 23             |
| Household and Pers. Products            | 0.6   | -16.1  | -17.1                | -15.1                 | 0.5       | 33%          | Growth | 24             |
| Semi-Conductor and Semi-C. Equipment    | 0.3   | 45.2   | 32.8                 | 57.6                  | 1.4       | 53%          | Growth | 25             |

Note: Rank is derived from valuation (80%) and the average relative performance (20%) (which considers 6m and 12m relative performance of each sector vs the MSCI Europe). The valuation score is calculated as a sum of standardized expected total return (32%), average PEG ratio adj. (for ROE and COE) (32%), Shiller PE discount (9%), gap from 8 year three-stage earnings growth model (9%), market multiples discount taken from 2004 (9%), and PE vs. hist. avg. excl. bubble years (9%).

A sector is "Value" when its contribution to the MSCI EU Value index is at least 4 times higher than its contribution to the Growth index.

Most negative valuation score = cheapest = highest valuation rank (1); lowest perf. = highest perf. rank

Average PEG is the average of fwd PEG and trailing PEG. fwd PEG is 12m fwd PE divided by expected EPS long-term growth. EPS = 12m fwd earnings.

Trailing PEG = trailing PE divided by earnings growth F0-F3.

Overall, our final decision (OW/UW) is derived from:

- **quant signals and earnings/sales revisions momentum**
- **final score obtained through valuation and performance,**
- **macro view - point of the cycle considerations - tilt we want to give to sector allocation - plus policy action support expected.**

## Summary table

| Sectors (Europe)                        | Rank<br>(valuation +<br>performance)<br>(1=best) | QUANT / ML*<br>Current ST.<br>DEV.<br>(lowest = best) | QUANT / ML*<br>(Over/Under-valued<br>OV/UV) | Earnings /<br>sales<br>revisions<br>TREND | Earnings /<br>sales<br>revisions<br>GAP |
|---|--|---|---|---|---|
| <b>Market</b>                           | 5  |   |   |   |   |
| Auto and Components                     | 8  | 0.1 / 3.1   | N / Strong OV                               | -   | -                                       |
| Banks                                   | 23   | -0.6 / -1.0   | N / N                                       | +   | +                                       |
| Capital Goods                           | 18   | 0.5 / 1.2   | N / OV                                      | =   | -                                       |
| Commercial/Professional Services        | 14   | - / 2.3   | - / Strong OV                               | +   | +                                       |
| Consumer Durables and Apparel           | 12   | - / -0.5  | - / N                                       | +   | +                                       |
| Consumer Services                       | 20   | - / 2.7   | - / Strong OV                               | =/+                                       | --                                      |
| Diversified Financials                  | 16   | - / -0.7  | - / N                                       | +/=                                       | +                                       |
| Energy                                  | 1  | -2.1 / 0.1  | Strong UV / N                               | +   | =                                       |
| Food and Staples Retailing              | 6  | - / 0.9   | - / N                                       | =   | +                                       |
| Food, Beverages and Tobacco             | 15   | - / 1.0   | - / N                                       | -   | +                                       |
| Health Care Equipment and Services      | 10   | - / -0.4  | - / N                                       | +   | =                                       |
| Household and Pers. Products            | 24   | - / -1.7  | - / UV                                      | =   | =                                       |
| Insurance                               | 4  | -0.9 / 1.3  | N / OV                                      | -   | -                                       |
| Materials                               | 9  | 1.2 / 1.2   | OV / OV                                     | +   | +                                       |
| Media                                   | 11   | - / 0.0   | - / N                                       | -   | -                                       |
| Pharmaceuticals, Biotechnology and Life | 3  | 0.9 / -0.9  | N / N                                       | -   | =                                       |
| Real Estate                             | 21   | - / -   | - / -                                       | -   | -                                       |
| Retailing                               | 7  | - / 1.7   | - / OV                                      | -/=                                       | =                                       |
| Semi-Conductor and Semi-C. Equipment    | 25   | - / 1.5   | - / OV                                      | +/=                                       | =                                       |
| Software and Services                   | 19   | -1.5 / -2.5   | UV / Strong UV                              | =/+                                       | +                                       |
| Technology Hardware and Equipment       | 17   | - / -0.5  | - / N                                       | +   | =/-                                     |
| Telecommunication Services              | 2  | 1.8 / 1.7   | OV / OV                                     | +   | =                                       |
| Transportation                          | 13   | - / -1.0  | - / N                                       | +   | -                                       |
| Utilities                               | 22   | 3.8 / -1.1  | Strong OV / UV                              | -   | +                                       |

\* ML: results based on machine learning approach

**Conclusions: we continue to set on value (higher OW) and cyclicals (lower OW),** stressing that a sound degree of discrimination among value and cyclical sectors is needed. We prefer a larger tilt to value sectors and less to cyclicals as their valuation has become stretched.

So, we maintain an OW exposure to:

- ✓ **banks:** earnings momentum, Value style, Value laggard, benefit from upside pressure on yields (higher OW)
- ✓ **diversified financials:** slightly undervalued and significant positive gap to revisions,
- ✓ **energy:** undervalued, strong earnings momentum vs market (higher OW),
- ✓ **insurance:** value, good score, more defensive than banks,
- ✓ **materials:** positive gap to revisions and should benefit from GDP recovery (lower OW).
- ✓ **software:** still good positive potential indicated by quant models and gap to revisions. Below average score (lower OW).

We bring household & personal products (HPP) to **neutral from underweight** due to bottoming earnings revisions and undervalued quant signal. They should also provide a **good hedge in a more mature bullish** market (one of the lowest drawdowns in history). **Consumer services** are now on UW due to the low overall valuation score and significant negative gap between earnings revisions and sector prices. **Further underweights** are: media (lower UW), real estate (new), and telecoms.

| Sectors                          | PE    |          | PB    |          | PCF   |          | DY    |          | Avg. Discount, % | PEG adj. * |
|----------------------------------|-------|----------|-------|----------|-------|----------|-------|----------|------------------|------------|
|                                  | 12m f | Discount | 12m f | Discount | 12m f | Discount | 12m f | Discount |                  |            |
| Europe                           | 16.8  | 28.4     | 1.9   | 10.7     | 9.7   | 26.1     | 3.1   | -18.9    | 21.0             | 2.5        |
| Auto and Components              | 9.4   | -27.4    | 1.0   | -3.4     | 4.4   | 6.2      | 3.3   | -2.3     | -5.5             | 3.3        |
| Banks                            | 10.6  | 5.2      | 0.6   | -37.4    | 5.9   | 11.5     | 5.0   | 1.0      | -5.4             | 5.8        |
| Capital Goods                    | 22.4  | 52.9     | 3.4   | 49.6     | 14.6  | 53.1     | 2.1   | -30.7    | 46.6             | 3.8        |
| Commercial/Prof.Services         | 23.5  | 40.9     | 7.0   | 64.4     | 16.8  | 43.4     | 2.3   | -17.8    | 41.6             | 3.2        |
| Consumer Durables & Apparel      | 27.6  | 66.0     | 3.6   | 48.4     | 19.7  | 60.3     | 1.8   | -24.3    | 49.7             | 2.4        |
| Consumer Services                | 43.3  | 157.1    | 3.8   | 38.1     | 23.0  | 120.0    | 1.1   | -65.3    | 95.1             | 3.9        |
| Diversified Financials           | 15.0  | 33.0     | 1.1   | -6.2     | 7.1   | -12.4    | 2.5   | -31.4    | 11.4             | 2.2        |
| Energy                           | 11.8  | 3.2      | 1.1   | -28.4    | 4.1   | -25.8    | 4.9   | -0.7     | -12.6            | -10.3      |
| Food and Staples Retailing       | 12.8  | -7.4     | 1.4   | -19.4    | 5.5   | -16.7    | 4.0   | 18.8     | -15.6            | 4.1        |
| Food, Beverages and Tobacco      | 19.5  | 15.2     | 3.1   | -4.6     | 14.9  | 15.6     | 3.0   | -6.5     | 8.2              | 4.1        |
| Health Care Equip.and Services   | 26.2  | 33.5     | 3.0   | 2.1      | 16.1  | 24.1     | 1.3   | -14.7    | 18.6             | 2.7        |
| Household and Pers. Products     | 22.5  | 16.9     | 4.8   | 23.2     | 17.8  | 15.3     | 2.6   | 8.2      | 11.8             | 5.3        |
| Insurance                        | 10.8  | 13.3     | 1.1   | -3.8     | 12.5  | -57.4    | 5.0   | 2.6      | -12.6            | 2.4        |
| Materials                        | 13.9  | 7.6      | 2.1   | 25.1     | 8.4   | 16.5     | 4.1   | 25.9     | 5.8              | 2.3        |
| Media                            | 19.9  | 29.6     | 1.9   | -19.9    | 12.3  | 40.1     | 2.3   | -40.1    | 22.5             | 3.7        |
| Pharmaceuticals, Biotech. and LS | 16.1  | 10.9     | 3.7   | 10.5     | 13.8  | 15.7     | 3.1   | -8.8     | 11.5             | 1.9        |
| Real Estate                      | 19.7  | 8.4      | 0.9   | -1.2     | 16.9  | 5.7      | 3.2   | -28.6    | 10.3             | 9.0        |
| Retailing                        | 37.1  | 108.8    | 4.4   | 43.7     | 25.8  | 110.8    | 1.1   | -67.2    | 82.6             | 2.1        |
| Semis                            | 36.8  | 40.4     | 7.9   | 170.6    | 28.9  | 130.4    | 0.7   | -34.6    | 94.0             | 2.3        |
| Software and Services            | 28.3  | 51.1     | 4.5   | 32.6     | 22.5  | 47.7     | 1.1   | -34.3    | 41.4             | 3.8        |
| Tech. Hardware and Equipment     | 21.8  | 30.8     | 3.1   | 35.8     | 16.4  | 28.3     | 1.7   | -40.0    | 33.7             | 2.0        |
| Telecommunication Services       | 14.3  | -27.8    | 1.3   | -16.3    | 3.4   | -25.4    | 4.9   | -11.6    | -14.5            | 1.6        |
| Transportation                   | 22.0  | 47.5     | 2.9   | 54.2     | 9.2   | 37.4     | 2.2   | -32.5    | 42.9             | 7.1        |
| Utilities                        | 16.5  | 25.9     | 1.8   | 12.4     | 6.5   | 11.2     | 4.5   | -12.2    | 15.4             | 4.6        |

Note: Discount in % to long-run norm; 12m f = expected in 12 months. Multiples are since 2004. In case of DY, a discount means the market had a higher DY, meaning the market is at premium for this multiple.

PEG adj. (higher = expensive): PEG (12m fwd PE / earnings growth over 2-5 yrs) is modified by the ratio COE/ROE, which signals the ability to produce a return on capital higher than the cost of it. COE = cost of equity = 10yr gov't bond rate + 6% mkt risk premium x country Beta versus MSCI WORLD (monthly returns over the last 10 yrs).

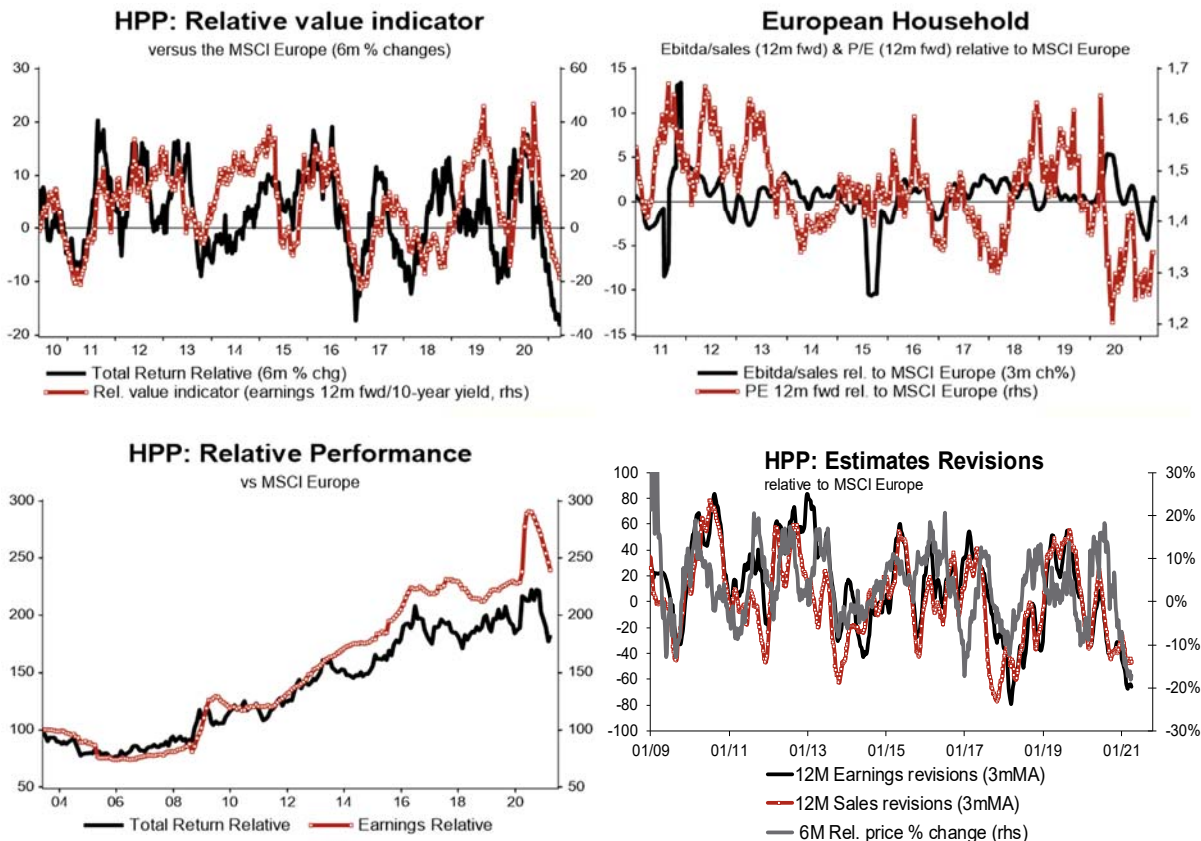
Source: Thomson Reuters Datastream, IBES estimates.



In what follows we provide insight on some selected sectors and styles.

## Household & Personal Products

The sector is characterized by a stronger earnings trend vs MSCI Europe and should provide a hedge in case of market correction, as it has shown one of the lowest drawdowns among European sectors (s. table below).



### Worst 30 day Rate of Change (ROC)

| Event   | European sectors |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
|---|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|   | MSCI Europe      | Autos        | Banks        | Cap_Goods    | Cons_Dur     | Div_Fin      | Energy       | FBT          | HPP          | Insurance    | Materials    | Pharma       | Tcm          | Utilities    | AVG SECTORS  |
| Black Monday (OCT 1987)                               | -27.8            | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         |
| Early 1990s Recession - IRAQ/KUWAIT WAR (JUL 1990)    | -13.1            | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         |
| Black Wednesday (SEP 1992)                            | -9.2             | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         | n.a.         |
| Asian Financial Crisis (JUL/OCT 1997)                 | -7.4             | -16.4        | -9.8         | -13.2        | -12.8        | -8.8         | -8.2         | -5.8         | -13.9        | -7.3         | -12.6        | -12.6        | -9.1         | -5.8         | -9.6         |
| Russian Financial Crisis - LTCM (AUG/OCT 1998)        | -13.7            | -23.7        | -24.0        | -20.1        | -17.0        | -29.9        | -16.5        | -12.6        | -23.9        | -17.6        | -17.7        | -11.5        | -16.8        | -10.0        | -18.3        |
| Dotcom Bubble (MAR 2001)                              | -15.0            | -16.2        | -18.8        | -17.3        | -22.7        | -23.6        | -11.0        | -10.5        | -16.5        | -20.5        | -13.6        | -11.3        | -23.9        | -12.3        | -18.3        |
| 9/11 World Trade Center Attack (SEP 2001)             | -21.7            | -34.0        | -27.9        | -26.1        | -38.6        | -33.4        | -20.1        | -10.1        | -16.5        | -32.7        | -22.7        | -11.3        | -23.9        | -13.9        | -25.1        |
| Jerome Kerviel - ABS Turmoil (JAN 2008)               | -15.2            | -19.5        | -17.2        | -18.9        | -19.0        | -19.2        | -17.8        | -12.7        | -19.2        | -14.7        | -18.1        | -16.1        | -12.2        | -15.9        | -17.5        |
| Global Financial Crisis - LEHMAN (SEP 2008)           | -38.6            | -45.7        | -49.9        | -49.9        | -38.7        | -49.6        | -35.3        | -26.4        | -29.1        | -49.2        | -50.2        | -23.1        | -31.7        | -35.4        | -38.5        |
| European Sov. Debt Crisis - GREECE BAILOUT (APR 2010) | -20.3            | -21.4        | -23.8        | -20.4        | -18.0        | -21.3        | -22.3        | -14.3        | -17.3        | -21.6        | -23.1        | -16.4        | -19.1        | -20.7        | -20.4        |
| BTP Crisis (AUG/NOV 2011)                             | -17.8            | -32.4        | -25.8        | -24.7        | -22.3        | -25.6        | -17.9        | -10.8        | -14.0        | -20.8        | -23.6        | -12.1        | -12.3        | -16.5        | -19.4        |
| Chinese crash (Jan 2016)                              | -12.6            | -18.5        | -24.5        | -13.0        | -14.3        | -19.7        | -13.7        | -9.4         | -13.9        | -21.1        | -15.1        | -10.3        | -17.7        | -11.5        | -15.0        |
| Brexit (June 2016)                                    | -12.6            | -18.5        | -24.5        | -13.0        | -14.3        | -19.7        | -13.4        | -11.0        | -9.1         | -21.1        | -13.4        | -10.3        | -17.7        | -12.7        | -15.2        |
| Fed and trade uncertainty (2018)                      | -11.2            | -17.8        | -15.1        | -15.6        | -15.8        | -16.8        | -11.5        | -7.1         | -7.4         | -11.5        | -14.7        | -6.6         | -12.2        | -6.7         | -12.8        |
| <b>Covid-2019 (2020)</b>                              | <b>-35.1</b>     | <b>-44.8</b> | <b>-43.8</b> | <b>-42.7</b> | <b>-35.7</b> | <b>-41.8</b> | <b>-53.0</b> | <b>-26.3</b> | <b>-22.8</b> | <b>-47.1</b> | <b>-34.8</b> | <b>-23.6</b> | <b>-30.5</b> | <b>-32.4</b> | <b>-37.1</b> |
| Current 1m change, as of 22/04/2021                   | 4.2              | -0.5         | -0.8         | 5.4          | 8.7          | 0.4          | -5.1         | 6.6          | 5.2          | 0.2          | 6.2          | 3.2          | 0.9          | 6.3          | 4.5          |

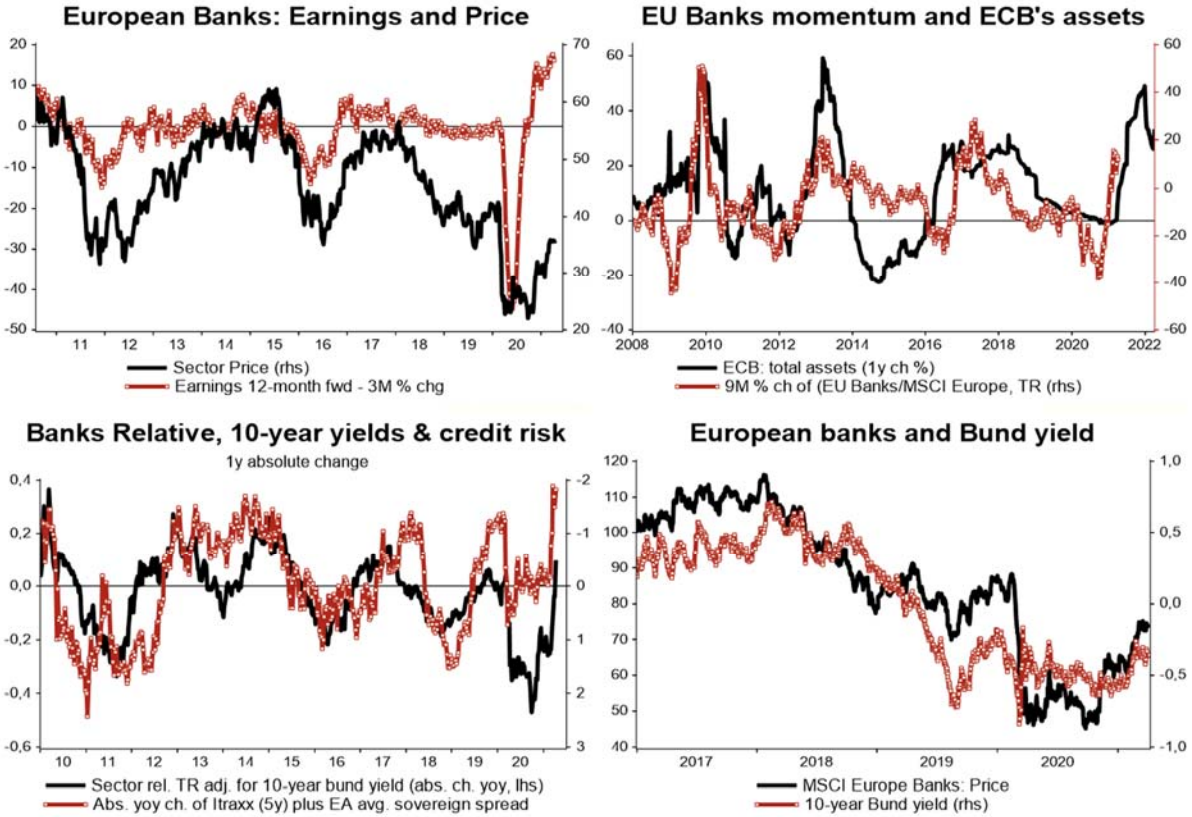
|                  | MSCI Europe | Autos | Banks | Cap_Goods | Cons_Dur | Div_Fin | Energy | FBT   | HPP   | Insurance | Materials | Pharma | Tcm   | Utilities | AVG SECTORS |
|------------------|-------------|-------|-------|-----------|----------|---------|--------|-------|-------|-----------|-----------|--------|-------|-----------|-------------|
| Min Drawdown     | -7.4        | -16.2 | -9.8  | -13.0     | -12.8    | -8.8    | -8.2   | -5.8  | -7.4  | -7.3      | -12.6     | -6.6   | -9.1  | -5.8      | -9.0        |
| Average Scenario | -16.9       | -24.0 | -23.8 | -21.1     | -21.2    | -24.3   | -17.1  | -11.9 | -16.4 | -21.7     | -20.4     | -12.9  | -17.9 | -14.7     | -19.2       |
| Max Drawdown     | -38.6       | -45.7 | -49.9 | -49.9     | -38.7    | -49.6   | -35.3  | -26.4 | -29.1 | -49.2     | -50.2     | -23.1  | -31.7 | -35.4     | -38.8       |
| Median Drawdown  | -14.3       | -19.5 | -24.0 | -18.9     | -18.0    | -21.3   | -16.5  | -10.8 | -16.5 | -20.8     | -17.7     | -11.5  | -17.7 | -12.7     | -17.5       |

Note: statistics exclude numbers for Covid-19



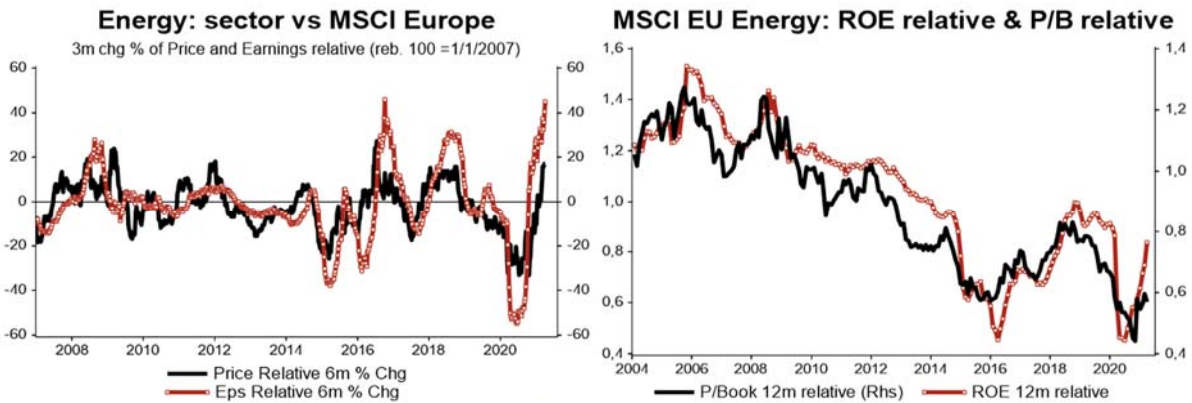
**Banks**

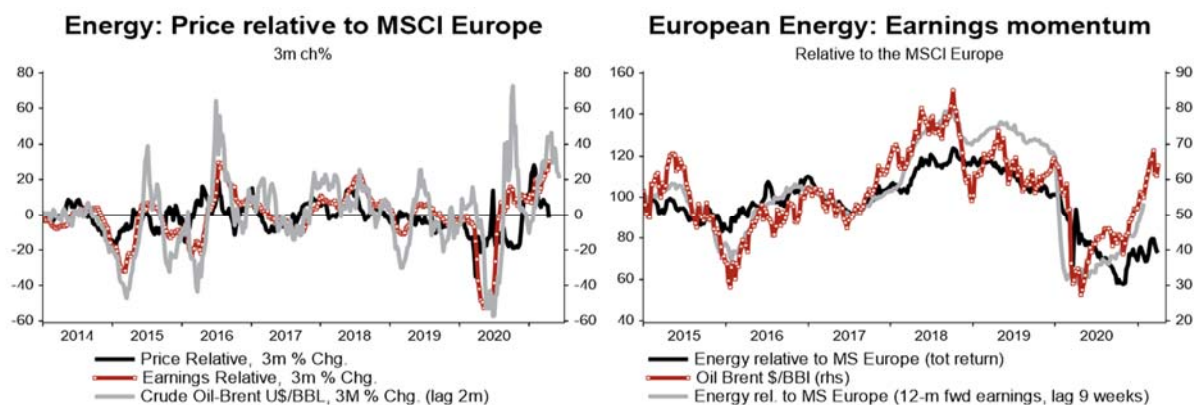
Bank's RoE is increasing and earnings revisions have improved, building a positive gap to the prices relative to the MSCI Europe. Increasing yields should be supportive, too.



**Energy sector**

The sector should benefit from rebounding ROE relative (with the large gap to P/B). The earnings momentum vs MSCI Europe remains strong as well. In terms of the aggregate valuation score, it ranks the best.





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