Financing

Content

This indicator is a new development for the monitoring of financing of companies from the metals and mining sector in the 2018 Raw Materials Scoreboard. The document presents additional figures that were elaborated during the data analysis. The final version of the Scoreboard retains figures 2 and 4, whereas figures 1 and 3 were not included since they provided relevant, yet correlated information.

Why considering this topic?

- **Relevance**: Most companies from the raw materials sector operate globally and attract investments from the global capital market. Understanding how these companies finance their operations and project development is an essential part of assessing their economic performance.

  Well-established financial indicators in corporate finance, such as share of equity in total assets and return on average equity, help understand the magnitude of the contribution of shareholders' equity to the value of a company's assets. This provides insight into how attractive the sector is to investors. Two other relevant financial indicators closely related to them, i.e., debt-to-equity ratio and returns on invested capital, are helpful in understanding the structure and performance of company's assets.

- **Indicator**: Global financial indicators generally provide relevant insight into the sector's average performance. The information presented here gives an overview of the broad financing sources of a selection of raw materials companies worldwide and specifically in the EU.

- **Data source**: S&P Global Market Intelligence, which provides data on these four financial indicators for several global company aggregates (e.g., base metals).

- **Limitations**: The raw materials' sector coverage is not comprehensive due to limited data availability. Data disaggregated by commodity are not available.

Key points

- Equity share in total assets, profitability of the invested capital and returns on equities of companies from the metals and mining sector declined over the 2010-2015 period, for both EU-based and world companies. Two of the numerous factors that may explain this investment downtrend are lower profitability of invested capital and lower values of returns on average equity.

- The trend in these financial indicators for the metals and mining sector reversed in 2016, and this was accompanied by a price revival for most metals. Debt-to-equity ratio decreased in 2016 compared with 2015, driven by improvements in the underlying financial indicators on invested capital profitability and equity returns.

- Based on the below analysis of how the financial indicators developed over time, it can be inferred that the investment attractiveness of the metal and mining sector declined over the 2010-2015 period, both in the EU and worldwide. A revival in the metals and mining sector took place in 2016, accompanied by a price revival for minerals and metals.

Facts and figures

- Figure 1 shows the evolution of debt-to-equity ratio in the companies operating in metals and mining sector (total) and two sub-sectors, i.e., precious metals and base metals. For the three company aggregates, debt-to-equity ratio more than doubled in 2016 compared with 2010. This ratio's uptrend indicates companies' increasing reliance on debts for securing their finance and a smaller proportion of equity to the companies' assets.
- This upward debt-to-equity ratio trend reversed in 2016 for all company aggregates (except base metals), partly driven by the increasing share of equity in companies' total assets.

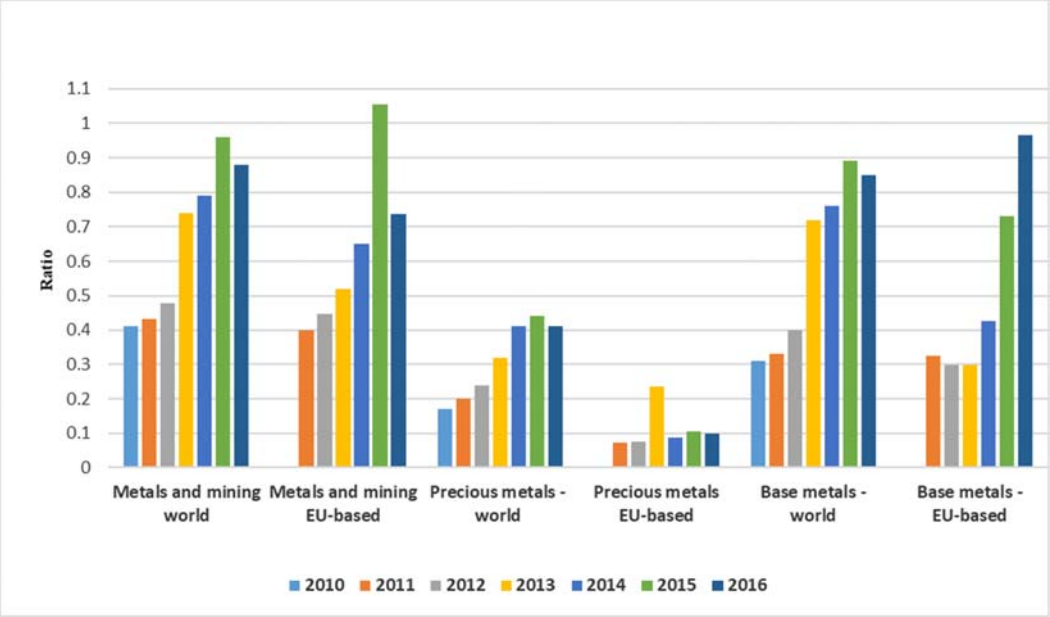

Figure 1: Debt-to-equity ratio of companies from the metals and mining sector and its two sub-sectors (world and EU-28-based company aggregates, 2010-2016)[1].

- Figure 2 shows the decline of the equity share in total assets for both world and EU-based companies operating in the metals and mining sector over the 2010-2015 period. This decreasing trend applies to the two sub-sectors, base metals and precious metals, and indicates a reduction in their attractiveness to investors. The determinants of this downtrend could be: i) the significantly diminishing profitability of the invested capital (Figure 3) and thus ii) the smaller returns on equities (Figure 4). This reduced investment

[1] Source: JRC elaboration based on S&P GMI Platform, Industry Trends & Statistics. The number of worldwide companies covered by S&P GMI's database is as follows: i) Base Metals – 540; Precious Metals – 1160; Metals & Mining – 2545. Data extracted in March 2018.

profitability might have failed to attract potential investors, and have forced companies to give up on additional loans or on using alternative financing sources.

- The overall decreasing trend for equity share reversed in 2016, both for world and EU-based companies. This can be interpreted as a sign of investors regaining interest in the sector. However, the downtrend in the share of equities in total assets continued for EU-based companies in the base metals and precious metals sub-sectors.

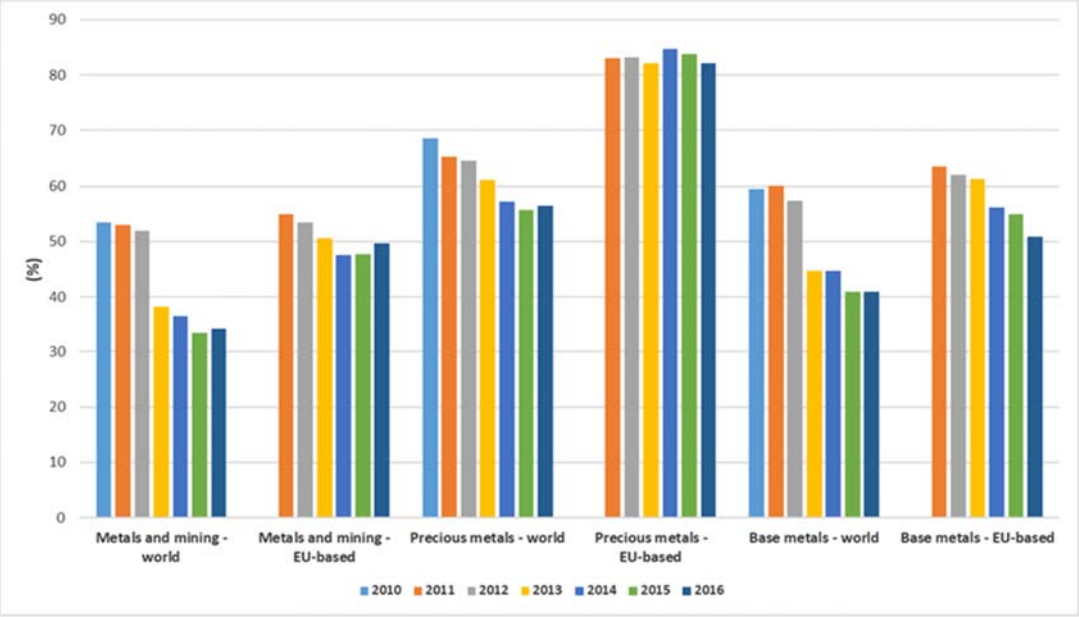

Figure 2: Share of total equity in total assets of companies from the metals and mining sector and its two sub-sectors (world and EU-28-based company aggregates, 2010-2016)[2].

- Figure 3 presents the significant decline of the returns on invested capital for both world and EU-based companies operating in the metals and mining sector over the period 2010-2015. This indicator is relevant for capital-intensive sectors as it shows to capital providers the quality of companies' investments and thus their attractiveness.
- The downtrend reversed in 2016, both for world and EU-based company aggregates.

[2] Source: JRC elaboration based on S&P GMI Platform, Industry Trends & Statistics.

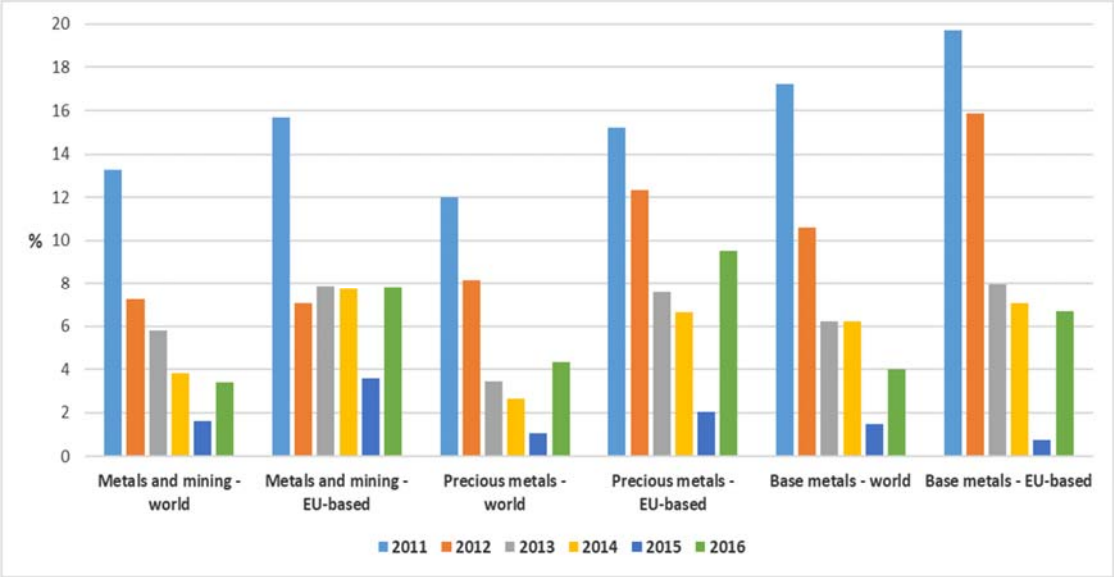

Figure 3: Return on invested capital of companies from the metals and mining sector and its two sub-sectors (world and EU-28-based company aggregates, 2010-2016[3].

- Figure 4 presents the evolution of equity profitability in metals and mining sector (total) and other two sub-sectors, i.e., precious metals and base metals. While returns on investments (Figure 3) takes into account all types of capital invested and needs to be compared with the investments cost, return on equity only focuses on shareholders' earnings. These data show the investors' earnings, and may be one of the explanatory factors behind decreasing trends observed in shareholders' contribution to companies' financing between 2011 and 2015.
- The trend of equity profitability is in line with that of returns on overall capital investments, and could be a consequence of it. Similarly to the previous financial indicator, the declining trend reversed in 2016 for all sub-sectors, which indicates an improvement of investment profitability in the metals and mining sector.
- One explanation of the developments in the financial indicators presented in Figure 3 and Figure 4 is the trend in returns on investment, which decreased until 2015 and started to rise in 2016 for both EU-based and world companies and the two sub-sectors. This indicator shows companies' capacity to turn invested capital — from equity but also from debt — into profit. The 2016 trend reversal of all these financial indicators for the metals and mining sector was accompanied by a price revival for minerals and metals[4].

[3] Source: JRC elaboration, based on S&P GMI Platform, Industry Trends & Statistics.
[4] See data on price evolution of precious and industrial metals provided by Bloomberg, Price of Precious and Industrial Metals, https://www.bloomberg.com/markets/commodities/futures/metals, and UNCTAD Data Center, Commodity price long term trends, Free market commodity prices, annual, 1960-2016, http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx;.

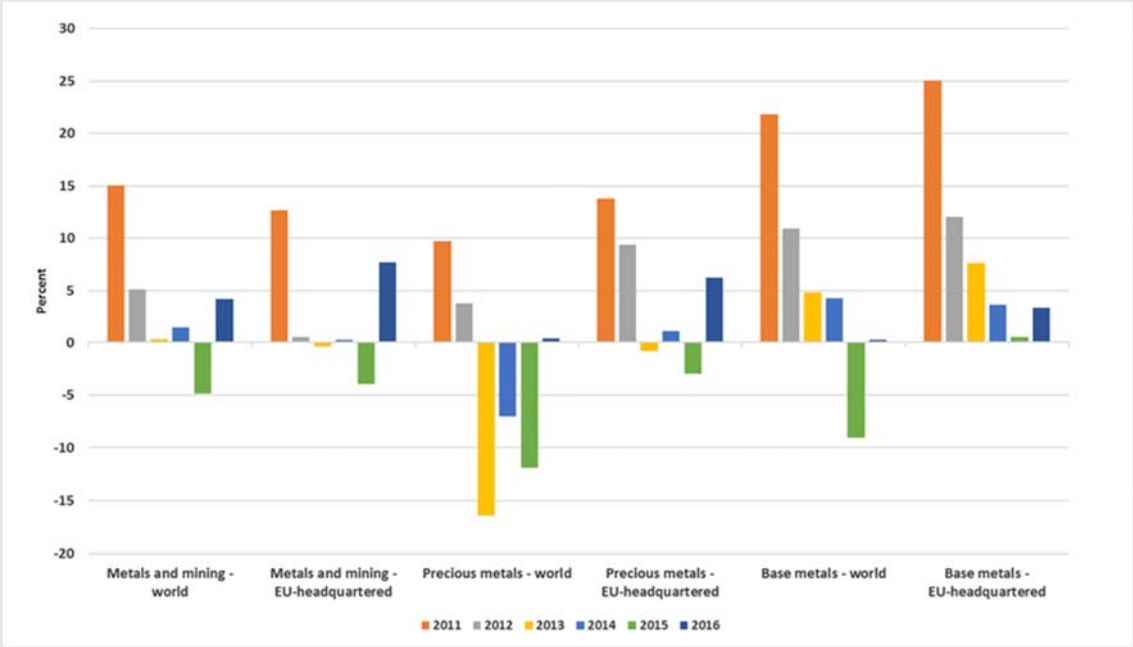

Figure 4: Return on average equity in metals and mining sector and its two sub-sectors (world and EU-28-based company aggregates, 2011-2016)[5].

The search for suitable data…

- S&P GMI constructs the sectoral financial indicators by aggregating all the data at company-level into a single entity, using a weighting algorithm based on companies' size. For example, the *metals and mining* sector aggregate includes the companies operating worldwide in the metals and mining sector that are covered by the S&P GMI database. This sectoral aggregation is global and thus it does not allow for regional breakdown.
- Concerning data availability, the S&P GMI database has limited company coverage, as follows: Metals & Mining – 2545; Base Metals – 540; Precious Metals – 1160. However, most of these companies are major players in their respective sectors of activity.

Summary of other options that were considered

- **Option 1 – Use of Eurostat's Structural Business Statistics dedicated dataset, "Access to finance"**
  - This option proposed using the Eurostat's Structural Business Statistics data for the provision of information on EU companies' financing sources, aggregated by economic sector.
  - It was considered unfit for the Scoreboard since it does not provide disaggregated data for specific raw materials-related sectors. In addition, country coverage is limited (only 20 Member States).

[5] Source: JRC elaboration based on S&P GMI Platform, Industry Trends & Statistics.

- **Option 2 – Use of data from *Survey on the access to finance of enterprises* (SAFE), conducted by the European Central Bank**
  - The Survey on the access to finance of enterprises (SAFE), run jointly by the European Central Bank and the European Commission every six months, examines the access to financing of companies from the Euro area. It covers micro, small, medium-sized and large firms from some broad sectors – i.e., industry, construction, trade and services. It also provides data for the EU as a whole.
  - This option was found unfit for the Scoreboard since it does not provide disaggregated data for any of the raw materials sectors. The EU member states coverage is also limited to the Euro area.

Methodological notes

- **Name of indicator:** Financing.
- **Organization (data provider):** S&P Global, Market Intelligence Platform, Industry Trends & Statistics
- **Website (URL)** https://platform.marketintelligence.spglobal.com (access webpage that requires subscription)
- **Definition and description of data:**

  Definitions

  - *Equity* means the value of assets a company attracts from shareholders. The sum of equity and debts equals the company's financial assets.
  - *Share of total equity in total assets* is calculated by dividing a company's equity by its total assets. In general, the lower the share of total equity in total assets, the higher the company's reliance on debt. This may be the result of diminishing investor interest, possibly due to a downtrend in companies' performance or higher financial risk.
  - *Debt-to-equity* ratio is calculated by dividing a company's total debt by total shareholders' equity. This financial indicator sheds light on a company's broad sources of financing.
  - The share of equity in companies' total assets, i.e. *Total Equity/Total Assets*, is a financial indicator closely related to the debt-to-equity ratio, and gives the proportion of company's assets financed by stockholders' equity.
  - *Return on average equity* measures a company's efficiency in turning capital from equity into profit.
  - *Returns on invested capital* measures a company's efficiency in turning capital from both debt and equity into profit.

  Company classification

  Company classification is in line with the original data source, e.g. S&P Global, Market Intelligence, which provides these financial indicators aggregated by sector and subsector. The aggregation is size-weighted and calculated by consolidating all the global and EU28-based companies within it into a single entity.

  Sector aggregates

  The sector aggregates (both for the EU and for the world) are constructed by S&P Global, Market Intelligence through aggregation of all companies into a single entity, using a weighting algorithm by company size. Thus, *Metals and mining* world sector aggregate includes all companies operating worldwide in the metals and mining sector that are covered by the S&P Global, Market Intelligence database.

- **Update frequency:** Regular.
- **Data format:** Online, also downloadable in .xls format.
- **Geographic coverage:** World and EU 28-based company aggregates
- **JRC processing methodology for the indicator:**

- The three sector aggregates selected from the database comprise the following number of companies: i) Base Metals – 540; Precious Metals – 1160; Metals & Mining – 2545.
- Indicators were calculated for the EU28 company aggregates, using the same weighting algorithm that S&P Global, Market Intelligence uses (see description of the data above).-based company aggregates constructed by S&P GMI data analysts for mining and metals sector and its two sub-sectors, JRC calculated the EU28-specific indicators using the same weighting algorithm by company size.