Credit Benchmark[®]

Supply Chain Crisis: Chip Shortages Drive Semiconductor Credit Boost

November 2021

Recent data shows global semiconductor sales growing at nearly <u>30% YoY</u>. Covid and East-West tensions have disrupted production and trade flows in this area, and various industries have had to accept significant price hikes to ensure that supplies are maintained.

The chip shortage is permeating many aspects of daily life – for example, long lead times for new cars have driven used car prices to record levels; iPhone 13 production runs have been scaled back; and expectations for ever-faster and more realistic game graphics and TV displays will have to be scaled back.

The electronic chip shortage has pushed some auto companies to <u>seek closer partnerships</u> with semiconductor firms; good for the largest firms but squeezing supplies even further for smaller firms and other industries. With rebounding demand and ring-fenced supplies, high prices are likely to persist for the foreseeable future.

Figure 1 shows the credit trend for the 24 Semiconductor companies listed on the iShares Semiconductor ETF index.

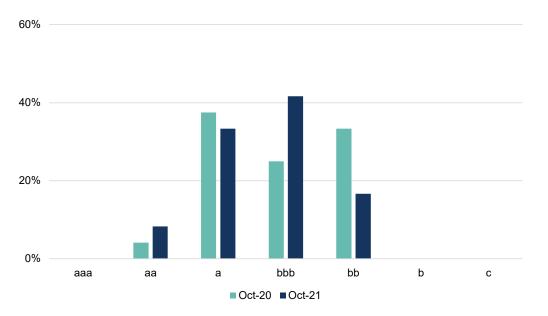


Figure 1: Credit Trend, Semiconductors, 24 constituents

Semiconductors have seen consistently improving credit since Aug-20.

Figure 2 shows the change in credit distribution over the past year for Semiconductor companies.

Figure 2: Credit Distribution, Semiconductors; Oct-20 vs Oct-21



Over the past year, the Semiconductor credit distribution has shifted towards investment grade: there has been a significant decrease in the **bb** credit category and the **bbb** credit category has expanded.

Figures 3 and 4 show detailed credit trends for two United States Semiconductor companies: Advanced Micro Devices Inc and Microchip Technology Inc.

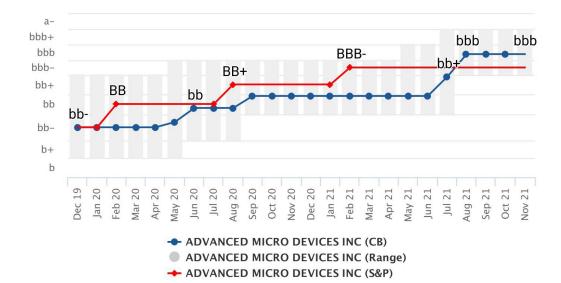
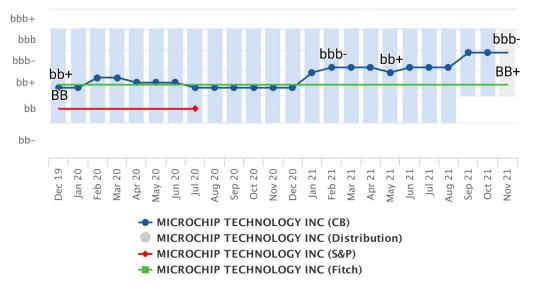


Figure 3: Advanced Micro Devices Inc

Figure 4: Microchip Technology Inc



Advanced Micro Devices Inc and Microchip Technology Inc have shifted from high yield to investment grade over the past year.

Figures 5 show upgrades vs. downgrades for Semiconductors.

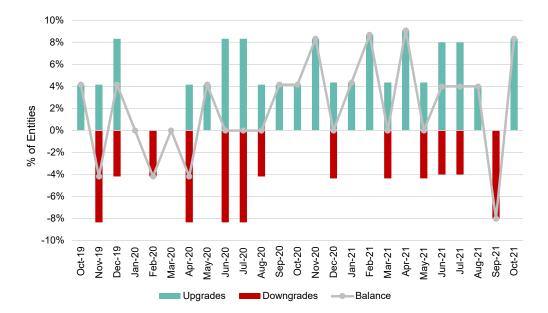


Figure 5: Upgrades vs. Downgrades, Semiconductors, 21 credit category scale

In Sep-21 Semiconductors saw more downgrades than upgrades for the first time since May-20. However, in the latest month, Oct-21, there are no downgrades and a significant number of upgrades.

Intel's CEO recently warned that the crisis could <u>last into 2023</u>. A sustained shortage is likely to lead to relocation of manufacturing, innovation, and even changes in consumer habits.

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Credit Benchmark Web App: Entity-Level Data Sample

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