
White Paper

**Fundamental Growth
and Core Equity**

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Investing in Sustainable Growth

Newsletter:
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Growth Outperforms as the Risk of Recession Takes Shape



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The first quarter of 2023 marked a reversal from last year's equity market losses, especially among growth and quality stocks. Gains were ignited by expectations that inflation is cooling and rates are nearing a peak in the tightening cycle.

Notably, technology stocks recovered from the mounting pressures on profit margins, with the sector leading the first quarter rally as the market priced in resilient earnings growth, widespread cost-cutting initiatives, and disruptive innovations in the AI space.

However, the quarter was not without volatility. In March, the specter of credit risk in a rising rate environment took shape in the form of the collapse of three US banks. The subsequent stress on the regional banking and private credit systems rippled across markets as capital availability declined, driving underperformance in small and midcap stocks, and in the financials sector — specifically those most exposed to aggressive tech spend and leverage.

Following intervention by authorities to contain the banking crisis, more shock waves are likely as financial conditions tighten. Within the US regional banking system, we expect to see regulatory changes and consolidation and, on a broader level, we may see more risk aversion in terms of borrowing, consumer spending, hiring and capital deployment. However, if deteriorating credit facilities and the elevated cost of capital reach a tipping point, it may trigger an economic course correction toward disinflation, allowing central banks to unwind the tightening cycle sooner.

In this newsletter, our first article explores how the US Inflation Reduction Act is set to impact the auto industry. Our second article takes a look at one of the companies that scores well in our Confidence Quotient (CQ) framework; Cintas is a leader in the uniform rental business, an industry that is continuing to demonstrate resilience in this environment.

Inflation Reduction Act: Assessing the Impact on the Auto Industry

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The Inflation Reduction Act 2022 will have far-reaching global implications for the growth in electric vehicle production, where that manufacturing will take place, and how it will disrupt existing supply chains. The effects of the IRA are already beginning to be felt.

On August 16th 2022, President Biden signed the Inflation Reduction Act (IRA) into law. Among many other initiatives, a focus of the IRA is to help facilitate the transition from internal combustion engine (ICE) vehicles to electric vehicles (EV). Several credits were introduced: a \$7,500 credit per vehicle for customers, and a \$45 per kilowatt hour (kwh) credit, coupled with 10% critical minerals cost credit, for manufacturers. Overall, the US government plans to spend billions of dollars on this over the next ten years. In this article, we take a deeper look at the requirements for the credits, and whether automobile original equipment manufacturers (OEMs) qualify, or are making plans to qualify, for the credit.

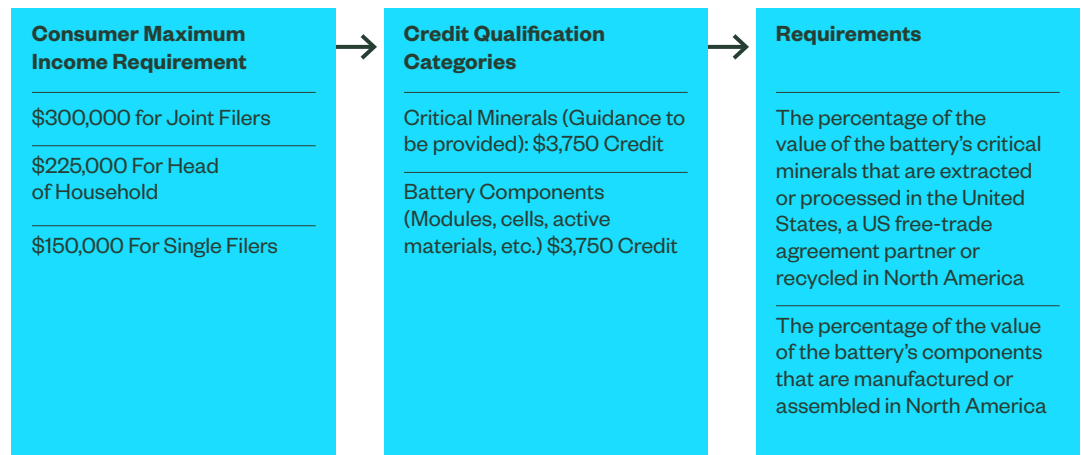
The \$7,500 Credit

The \$7,500 credit for customers comes in two parts: \$3,750 for critical materials sourcing and \$3,750 that is related to the manufacturing of the battery pack. To qualify for either credit, customers must earn a maximum of \$150,000 a year, or \$300,000 per household. In addition, the purchased vehicle must have an MSRP¹ below \$55,000 if it is a sedan, or \$80,000 if it is a truck or SUV. If those requirements are met, to qualify for the first \$3,750 credit the EV must have a significant portion of critical minerals extracted or processed either in the US or a country that the US currently has a trade agreement with. Another way to meet the requirement is to have those minerals recycled in North America. To qualify for the second \$3,750 credit, the OEM has to manufacture or assemble at least half of the EV's battery pack in North America.

Figure 1
**Qualifications for
 \$7,500 Credit**

Inflation Reduction Act Consumer Credit Requirements		
Category	Critical Minerals	Battery Components
Requirement	The percentage of the value of the battery's critical minerals that are extracted or processed in the United States, a U.S. free-trade agreement partner or recycled in North America	The percentage of the value of the battery's components that are manufactured or assembled in North America:
Year	Critical minerals minimum percent value requirement	Battery components minimum percent value requirement
2023 (%)	40	50
2024 (%)	50	60
2025 (%)	60	60
2026 (%)	70	70
2027 (%)	80	80
2028 (%)	80	90
2029 and Beyond (%)	80	100

Source: US Inflation Reduction Act 2022, Bernstein Analysis.



Source: US Inflation Reduction Act 2022.

The Incentive for Manufacturers

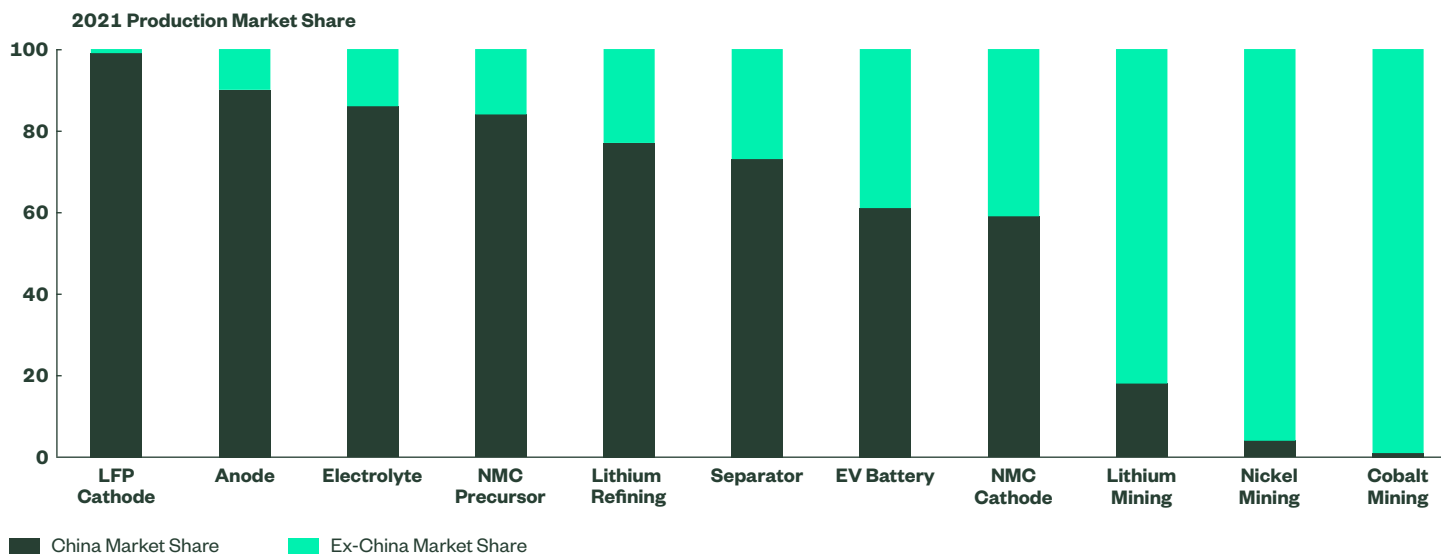
Further up the supply chain, battery manufacturers may qualify for up to \$45/kwh and 10% of their critical minerals costs. This credit is also split: \$10/kwh for the battery module and \$35/kwh for battery cells for each vehicle — for context, the average EV currently has a capacity of 60–80 kwh. Therefore, the manufacturers would qualify for an average of \$2,700 and \$3,600 per vehicle, in addition to 10% of the critical minerals costs.

Although the potential for credits is significant, there is not yet much clarity on exactly who would qualify. US-based OEMs with an electric offering, such as Tesla, GM, and Ford, will likely qualify for all of the consumer credits over time as they all have battery factories in North America. Ford and GM, through their joint ventures with SK innovation and LG, respectively, will qualify for the \$35/kwh cell credit and will also qualify for the \$10/kwh battery module credit through their own factories. However, Tesla will likely only qualify for the \$10/kwh credit because it has a direct supply agreement with Panasonic — in this case, Panasonic would receive the \$35/kwh credit for the batteries it delivers to Tesla.

EV Batteries: Manufacturers Adapting to Change

OEMs generally make two kinds of EV batteries: Nickel Manganese Cobalt (NMC) and Lithium Iron Phosphate (LFP). Because the batteries have different critical components, they have different supply chains and benefits. NMC batteries are higher quality with higher range and power and are in the vast majority of EVs sold in the US today. LFP batteries are more cost effective and in theory are safer. EVs with these batteries are mainly sold in China and Europe. Prior to the IRA's passing, major US-based OEMs planned to set up factories over the next five years to process and create NMC batteries, while securing supply of LFP batteries from companies based outside of the US to use in their mass market vehicles.

Figure 2
**China's Market Share
of EV Battery Supply
Chain (2021)**



Source: Bernstein Analysis.

In response to the passing of the IRA, several companies have announced changes or updates to their strategy:

- Volkswagen AG and Mercedes-Benz Group AG signed memorandums with the Canadian government to facilitate securing EV battery materials for their battery manufacturing in the US.
- Panasonic Holdings, which supplies EV battery cells to Tesla, began talks for a new EV battery factory in the US, in addition to a plant already scheduled to open in 2024.
- Toyota announced a \$2.5 billion investment in its US facility to expand battery production.
- Tesla halted plans for EV battery production in its German plants, and speculation has grown that the company may send its machinery to the US to increase battery supply there.
- LG Energy Solution, the world's second-largest EV battery maker, aims to increase its production footprint in North America to 45% by 2025, up from less than 10% currently. It has also set a target to localize 72% of its supply chain for critical minerals within five years.

- Other Korean EV battery makers like SK On Co. and Samsung SDI also have plans to significantly expand their operations in the US.
- General Motors, Ford, Honda, Volkswagen and Stellantis have formed joint ventures with Korean EV battery makers to produce EV batteries in the US.

The announcements align with the US government's intentions to have more of the EV supply chain in the US and to create more jobs domestically. These incentives mean that companies now view investment in the US as economically favorable, so long as they are able to qualify for the credit. The companies currently in position to benefit from the full consumer credits are Tesla, GM, and Ford for EV's. Stellantis has a plug-in hybrid that currently qualifies for the consumer credit. Companies are working with the government to determine how much their supply chain can qualify for the manufacturer's credits. GM has estimated that credits can account for \$3,500–\$5,500 of credits per EV built in the US, but these numbers have yet to be finalized across the industry.

The new cost dynamics incentivize legacy OEMs to shift strategy, leading companies to onshore production and cell battery materials in North America. The US will thus likely increase its market share of battery supply and vehicle manufacturing. By making EVs cheaper for US consumers, the domestic OEMs are the clear winners as they already have manufacturing capacity in the United States. In order to qualify for the credits, foreign OEMs have to increase their initial spend to build a supply chain in the US, a move that will take billions of dollars and several years to achieve. OEMs are increasingly relying on battery partnerships to share the cost of building the supply chain. With the IRA aimed at taking market share away from China, other Asian battery producers (particularly those from South Korea) could become the largest beneficiaries of the shifting battery supply chain backdrop. The European Green Deal has been influenced to some extent by the IRA, requiring more European content within the European EV supply chain.

Measuring the Impact on Companies

To measure the effects of the IRA on stocks, the Fundamental Growth and Core Equity team uses its proprietary Confidence Quotient (CQ) framework to score companies' fundamentals. We view the EV transition as a theme and have adjusted the CQs for companies that we cover accordingly. In particular, the transition has an effect on Market Position, Financial Condition, and Management Team scores.

For example, market position CQ scores for Chinese battery producers such as CATL have increased due to their dominance over the LFP supply chain. However, the IRA acted as a catalyst to re-shore battery supply chain to North America, slightly offsetting the initial increase. Therefore, Market Position CQ scores for Korean and Japanese producers such as LG Electronics, Samsung SDI, and SK on Co. increased due to the IRA, shifting demand from the LFP to the NMC supply chain. The EV transition caused Financial Condition CQs for OEMs to decrease due to the billions of dollars of capital expenditure and research and development costs associated with developing and scaling electrified technology. The IRA helps mitigate some of the cost, but overall there is more balance sheet stress for these companies. Finally, we look at each company's strategy to see if it is clear and effective. If a firm has a strategy that positions it well in the EV transition, their Management Team CQ score will rise, and this will continue to rise if the company successfully executes the strategy. In our view, companies like GM and Tesla have executed well in creating proprietary technology — GM with its Ultium platform and Tesla with its vertically-integrated supply chain. As these technologies were developed, we increased Management Team CQ scores, specifically on their clear and effective strategies.

The Bottom Line

The IRA has served as a catalyst to shift the cost dynamics of the NMC and LFP batteries, which has led to changes in the strategies of major OEMs. Because China has such a large market share of critical LFP components, a shift in the LFP supply chain will likely not come about until at least the end of the decade, if at all. OEMs are now shifting from using the more cost effective LFP batteries to building out local supply chains for NMC batteries in order to qualify for the IRA credits. The pace at which the companies are attempting to acquire critical materials will continue to increase as they shape their EV strategy, and we expect to see more announcements from OEMs and battery suppliers about building and acquiring EV-relevant resources in the future.

Cintas: A Circular Economy Enabler

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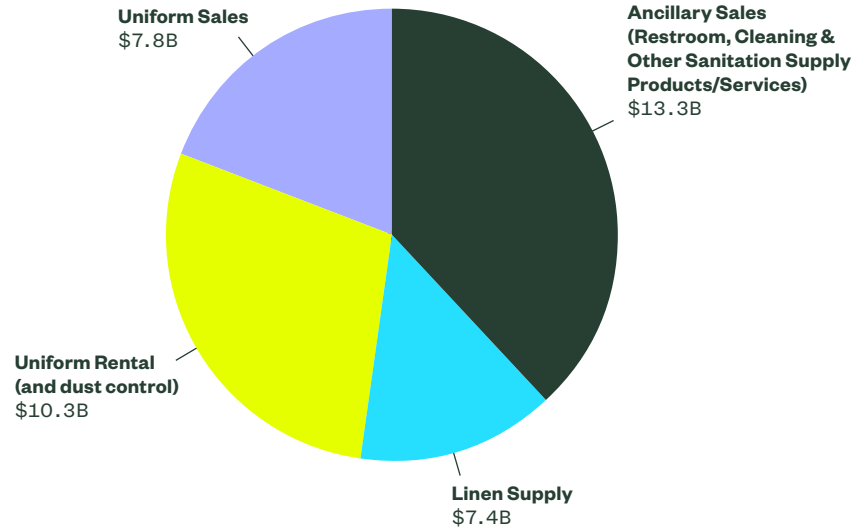
Cintas is a leading player in a growing market that caters to companies outsourcing the provision and laundry of their uniform clothing needs. As a company, it stacks up well in the Confidence Quotient framework that the Fundamental Growth and Core Equity team employs to assess potential stocks for their portfolios.

Cintas is North America leader in the work-related uniform rental industry. The company also provides mats, mops, restroom supplies, first aid and safety products, fire extinguishers and testing, and safety training. The company primarily operates in the US and Canada.

At an operational level, Cintas goes to its customer facility on a weekly basis to pick up worn garments and to drop off each worker's clean uniforms for the coming week. About 70% of customers are from the service sectors (healthcare, hospitality, foodservice, etc.) while 30% are in goods-producing sectors (manufacturing, construction, etc.).

Cintas's total addressable market (TAM) is large and offers relatively attractive external and internal growth opportunities (Figure 3).

Figure 3
Cintas's Market — Large and Attractive

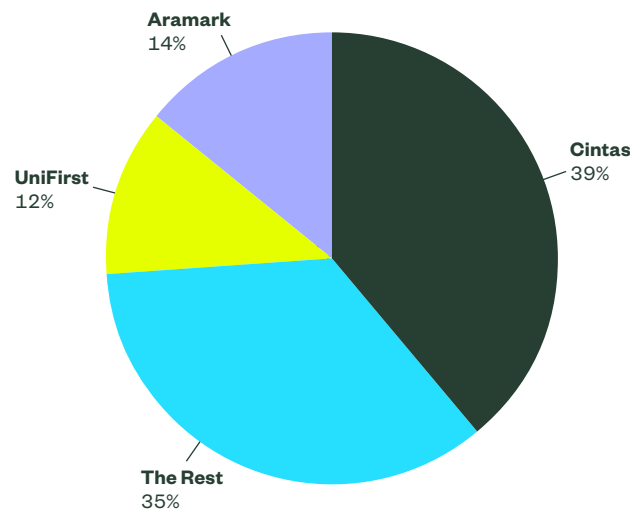


Source: Robert W. Baird & Co. September 2021.

The uniform rental market is fragmented, although the top three providers account for about two-thirds of the market. With only 20% penetration level, the uniform rental industry offers considerable opportunity for organic growth, Cintas has been able to grow in mid-to-high single digits, with 60% of new business coming from customers who were not already in a rental program. Cintas currently does business with only one million of the 16 million businesses in North America.

The company reports in three business segments: 1) Uniform Rental and Facility Services 2) First Aid and Safety Services 3) Fire Protection Services and Direct Uniform Sales. The Uniform Rental segment is by far the most profitable business line, with operating margins around 20% and it represents approximately 85% of the company's profits. The other segments are not as profitable but still command operating margins in the low double-digits to high teens level.

Figure 4
Cintas Holds Almost 40% of the Uniform Rental Market



Source: Robert W. Baird & Co. September 2021.

Cintas has a greater market share than the combined share of its two main competitors and it is that scale that drives the efficiency of the business and represents their main competitive advantage.

CQ Framework Analysis

The Fundamental Growth and Core (FGC) team uses a proprietary research process that scores the fundamental assessment of a company. The Confidence Quotients (CQs) are based on five criteria and each are scored on a scale of 1–10. The CQs are an integral part of the FGC investment philosophy to search for quality companies with sustainable growth. We have summarized the CQs for Cintas below:

- 1) Management** Excellent execution underpinned by a decentralized management structure brings greater agility to respond to client demands and drives strong accountability at the operating level
- 2) Market Position** Cintas’s “moat” is derived from its scale that allows the company to provide their services at very competitive rates
- 3) Fundamental Momentum** The pandemic has brought increased attention to the importance of sanitation and hygiene, and this has helped fuel the industry growth rate from mid-single digits to high-single digits
- 4) Financial Condition** A strong balance sheet leaves the door open to M&A. Rising operating margins combined with very healthy free cash flow generation has driven strong shareholder returns — the company has increased its annual dividend each year since 1983.
- 5) Transparency** Business is very “sticky” with a client retention rate of about 95%

Sustainability in the Cintas Business Model: Circular Economy Enabler

Sustainability has been part of Cintas since the creation of the company when the founders would collect used rags that local factories had thrown away, take them home to wash them, and then sell them back to businesses. For the company’s main uniform rental business, each garment is laundered and checked for repairs. Its laundry services significantly improves water and energy usage.

Figure 5
Cintas Laundry Services are Energy and Water Efficient

Traditional At-Home Laundering
Cintas

Traditional at-home laundry processes draw, on average:

Gallons of Water	1.90	1.03
84% more water than Cintas	Traditional At-Home Laundering	Cintas
Btu of Energy	2,143	1,530
69% more energy than Cintas	Traditional At-Home Laundering	Cintas

Source: Cintas. For illustrative purposes only.

Cintas’s laundering processes require 84% less wastewater per pound than home laundering and uses 69% less energy. The company also has initiatives that leverage water-reuse technology. In some locations they have been able to demonstrate that 30% of their water needs come from reuse capabilities.

Cintas has also made the pledge to achieve Net Zero by 2050. Cintas reduced their total CO₂e emissions from US rental operations by 7.8% in its 2021 fiscal year.

The company has other sustainability initiatives such as sourcing floor mat products made from 50% recycled content and offering more than 100 uniform styles made from sustainable materials. It has recently announced its first Sustainability Officer, appointing a VP of ESG and Chief Compliance Officer.

Doing the Right Things is
Good for Business

Cintas is a company that has thrived by doing the *right things* for its customers, employees and shareholders. Although difficult to capture in a research framework, the company culture is very strong and is key to their competitive advantage. The FGC team believes that using a robust research process that can quantify something as qualitative as culture, combined with the deep industry knowledge and experience of our research analysts, is a significant advantage in identifying what we believe to be great companies such as Cintas.

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Endnote

1 MSRP = Manufacturer's Suggested Retail Price.

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* Pensions & Investments Research Center, as of December 31, 2021.

[†] This figure is presented as of March 31, 2023 and includes approximately \$65.03 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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