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Durable, Sustainable, Adaptable: Identifying Potential "Transition Winners"

In our view, we no longer live in an era of short-lived industrial cycles driven by the dynamics of manufacturing and the management of tangible capital. Today, we live in an era of long-term transitions in the key value chains of the modern economy, usually starting with a disruption that has an impact across several different industries.

We think that means investors need to look across traditional industry boundaries to identify the potential "Transition Winners" in modern value chains. We also believe Transition Winners are likely to be characterized by strengths built on intangible rather than tangible capital: they will be companies that have a durable competitive position in their markets, do little to no harm to society or the environment, and can adapt to change.

In this paper, we consider in detail what these three characteristics mean to us and why we believe they reinforce one another to create the economy's sustainable, durable and adaptable Transition Winners.

Executive Summary

- **As investors in a modern economy driven by intangible rather than tangible capital, we seek out companies that have a durable competitive position, do little to no harm, and can adapt to change.**
- **Durable Competitive Position: Quality Compounders Widening Their Moats**
  - In our view, the two most important indicators for identifying companies that are likely to have durable competitive positions are Cash Flow Return on Investment (CFROI) and Asset Growth.
  - We seek out companies with high CFROI and structural Asset Growth: these are highly profitable and able to compound those profits by reinvesting internally generated cash flows into their core business and attractive opportunities; we regard them as potential "Transition Winners."
- **Do Little to No Harm: Materiality and a Forward-Looking View on ESG**
  - We believe that good performance on environmental, social and governance (ESG) factors can have a direct relationship with a company's broader financial performance—but only when the ESG-related questions we ask are materially relevant to its specific business, and relevant to its future rather than its past.
  - We also believe a forward-looking view on ESG helps companies and investors identify how changing regulation, consumer preferences and investor priorities might change a business's ESG risks and opportunities; it may also indicate a general ability to innovate and adapt to changing circumstances.
- **Adapt to Change: Transition Winners in an Age of Disruption**
  - We try to identify business areas and companies that could be Transition Winners in the key value chains of Energy Transition, Access to Health Care, Conscious Consumer, Fintech and Financial Inclusion, and Digital Enterprise.
  - These Transition Winners may be leading change in these value chains, or they may be companies whose high CFROI gives them the flexibility to re-allocate capital with a view to adapting to external change.
- **We define a Transition Winner as being marked out by a combination of a durable competitive position (including environmental and social sustainability) with the ability to adapt to change.**
- **In today's environment of Transition Winners and Losers in modern value chains, we believe that top-down sector- or style-based allocations will be much less important drivers of excess returns than in the past. Instead, we think fundamental insights, gleaned from the value chain perspective through bottom-up research and company engagement, are likely to gain importance.**

When we seek out companies to invest with, we are guided by two important principles.

First, our research starts with a deliberately broad, value-chain lens: we think about companies as potential winners and losers from disruptions and long-term transitions in the key value chains of the modern economy. For example, we believe companies that enable or are set to benefit from digitalization or renewable energy will be the winners in what we call the Digital Enterprise and Energy Transition value chains.

Second, we believe the likely "Transition Winners" in those value chains are often characterized by strengths built on hard-to-replicate intangible capital rather than easier-to-replicate tangible capital. For us, innovative technology, human capital, research and development, brand and platform reputation, and good corporate citizenship are important markers of potential success.

We think the strengths built on this intangible capital can be summed up in three characteristics.

We look for companies that **Have a Durable Competitive Position**. You may have a great business, but if competitors can easily replicate what you do, possibly better or at a lower price, it may not be *your* great business for very long.

We want them to **Do Little to No Harm**. Many companies ignore their potential for negative social and environmental impact, or fail to build on their potential for positive impact, or do not respect the rights of their providers of capital. Eventually, we believe those negative externalities are likely to be internalized in the shape of lost customers, lost investors, reputational scandals, civil or regulatory penalties or "stranded assets."

Finally, we want companies to be able to **Adapt to Change**. A competitive position providing a product or service that customers want is great, but laws, regulations, economies, social attitudes and consumer preferences change. For durability, we look for companies that can change with them.

FIGURE 1. LOOKING FOR COMPANIES THAT…

Source: Neuberger Berman. For illustrative purposes only.

We think this approach is quite different from traditional investment management, which tends to think in terms of industrial sectors and investment styles. Much foundational investment theory was developed during the age of industrial and manufacturing cycles, and identified the major determinants of performance as asset, sector and style allocation through those cycles. Over the past 30 years, however, the growth of information technology and services has reduced the relative importance of heavy industry, manufacturing and tangible assets in the economy, and all but smoothed out the traditional industrial cycles.

That is why we believe a focus on disruptions and far-reaching transitions in broad value chains offers a more realistic view of what's going on in today's economy. Think of the commercialization of the internet in the early 1990s, the arrival of the smartphone and social media in the mid-2000s, the shift to sustainable energy over the past decade or the beginnings of 5G connectivity and the Internet of Things today. Events like these seed multi-decade transformations that touch almost every corner of the economy—every industry and every company.

Similarly, companies at the forefront of these transitions often do not fit comfortably into the traditional industry categorizations. Under the traditional lens, Amazon would look like an internet and logistics company, but its disruption has so far mainly been felt in the bricks-and-mortar retail sector. Food-delivery apps would look like technology companies, but they are changing the restaurant sector. And nowadays, the performance of an industrials-sector stock is more likely to be determined by its differentiating exposures to transitions in its value chains, rather than what it has in common with other industrials stocks: in simple terms, is it making things for the renewable energy industry or the extractive commodity industry?

It is this understanding of the modern economy that informs our search for potential Transition Winners that **have a durable competitive position** in a key value chain, **do little to no harm** to society and the environment, and can **adapt to change**. Let's consider these characteristics and the way they reinforce one another in more detail.

Durable Competitive Position: Quality Compounders Widening Their Moats

In an open market economy, companies can be rewarded with high profits by providing desirable products or services in new, untested or hard-to-address markets. Those high profits are usually short-lived, however, because profits attract competition.

We think the most socially sustainable way to maintain high profits is through "economic moats." These moats can be built from tangible capital—Amazon has expanded its warehouses at a pace that competitors are unable to match, for example. Nowadays, however, moats are more likely to be built from intangible capital: a lead in a particular technology, a unique consumer offering, protected intellectual property, an unassailable cost advantage or a hard-to-replicate platform, network or ability to scale. The moat around Netflix, for example, is its huge, hard-to-replicate content library.

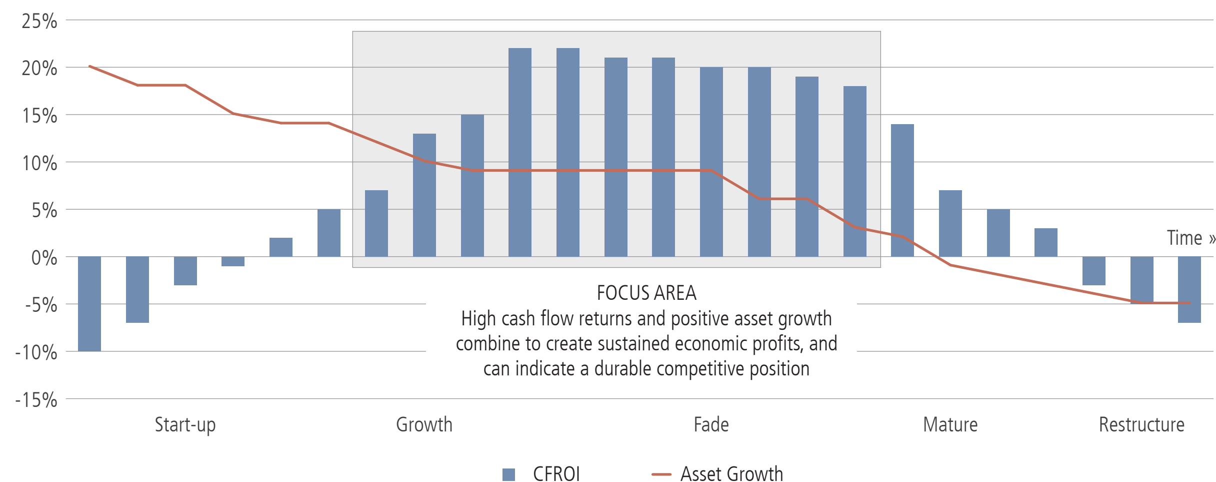
Where can we start our search for companies with economic moats?

In our view, the two most important indicators of quality companies with **durable competitive positions** are Cash Flow Return on Investment (our preferred indicator of economic profitability) and Asset Growth (our preferred indicator of life-cycle phase and competitive position).

Cash Flow Return on Investment (CFROI) is a ratio that compares a company's cash flows with its operational capital base. It tells us how efficiently a company generates cash flow from the capital invested in its business compared with its peers. It denotes economic returns, primarily—but also the level of cash a company generates for reinvestment, to strengthen its current position or **adapt to change**.

Asset Growth tells us whether or not a company is operating in a growing addressable market and finding opportunities to invest. A new company, or a company that is trying to take advantage of a new market, will often exhibit high Asset Growth—it will be building new factories or wind farms, buying new machines, adding computer processing power. But in our view, the long-term success of those investments depends largely on economic moats: a company that builds them quickly and wide is much more capable of achieving the compounding effect of high, stable CFROI reinvested for persistent Asset Growth over a sustained period. This corporate life cycle from high Asset Growth and low profits to persistent Asset Growth and high profits is illustrated in figure 2: in our view, companies in our "Focus Area" are highly likely to have established a **durable competitive position** in their value chains.

FIGURE 2. IDENTIFYING POTENTIAL QUALITY COMPOUNDERS: THE CORPORATE LIFE CYCLE

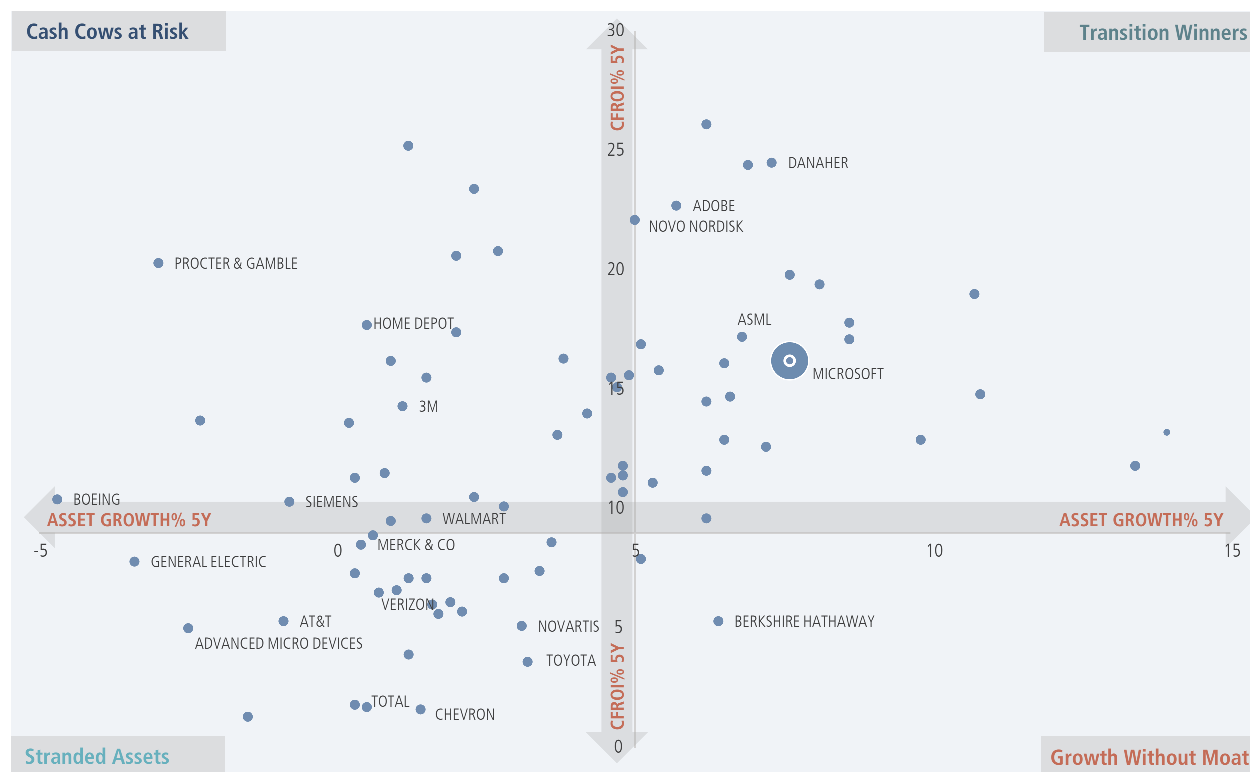


Source: Neuberger Berman. For illustrative purposes only.

Another way to visualize this is to think of CFROI and Asset Growth as the two sides of a quadrant, splitting the universe of stocks into four groups. Figure 3 does this for the 100 largest global listed companies by market capitalization. We think this quadrant can tell us useful things about a company's future potential.

FIGURE 3. CASH FLOW RETURN ON INVESTMENT AND ASSET GROWTH: FOUR TYPES OF COMPANY

Companies with five-year trailing Cash Flow Return on Investment between 0% and 30% and Asset Growth between -5% and 15%, from the 100 largest global listed stocks



Source: Neuberger Berman, Credit Suisse HOLT®. Data as of November 6, 2020. For illustrative purposes only. This material is not intended as a formal research report and should not be relied upon as a basis for making an investment decision. The firm, its employees and advisory accounts may hold positions of any companies discussed. It should not be assumed that any investments in securities, companies, sectors or markets identified and described were or will be profitable. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

We seek companies with a high CFROI and high, stable Asset Growth—the ones in the top-right quadrant. These businesses are already profitable and can still deploy the majority of their cash flow into new investments and new market opportunities. In addition to these two metrics, we find that these businesses also tend to exhibit other signs of "quality," such as higher than average sales growth and margins, lower financial leverage, and less cyclicality and earnings volatility. We call these "quality compounders" because of this ability to constantly reinvest returns in profitable new assets. But we also think of them as potential Transition Winners, because their high cash flow supports the flexibility needed to **adapt to change**, and, in some cases, they are the disruptive companies leading change.

A high CFROI combined with low Asset Growth suggests a company whose past investments remain profitable but which is struggling to find new opportunities. We call these Cash Cows At Risk: their enviable market may be ripe for disruption by competitors who are better able to envisage the next investment opportunity, or a change in the environment could drag them down into the bottom-left quadrant, with unprofitable Stranded Assets. The future of this company is bright only if management finds a way to invest its high cash flow to **adapt to change**—possible, but in our view quite rare.

A low CFROI combined with high asset growth is not necessarily positive, either. We call this Growth Without a Moat: this company is investing a lot in new assets but its low profitability may indicate that it has not established **a durable competitive position**—other companies are eating the same lunch. The future of this company could be eventual dominance of its market, or failure as another firm establishes dominance, or persistent low profitability in a highly competitive market. LG recently fully exited the smartphone market after getting caught in this position, for example. It may be possible to take a view on the prospects of a Growth-Without-a-Moat company based on fundamental research, but we believe the risk here is high.

A low CFROI combined with low Asset Growth may indicate that a company is neither profitable nor able to invest in its asset base to become profitable. The likelihood is that it has Stranded Assets, which used to be profitable but now act as a costly deadweight on the business: the classic example is an extractive fossil fuel business whose rigs, wells or mines produce commodities that are being regulated out of use. The future of this company is likely either a gradual wind-down or a lengthy and expensive restructuring and reorientation.

Do Little to No Harm: Materiality and a Forward-Looking View on ESG

In addition to screening for the financial metrics that describe a company's competitive position, we also filter out the most negative outliers on environmental, social and governance (ESG) criteria—and for much the same reason. These are companies that we regard as having a substantial ESG tail risk against their valuation or business model: they may have a competitive position in today's economy, but if it is not sustainable, we do not believe it can be durable.

For us, this means the exclusion of nuclear and thermal coal-based energy generators, weapons manufacturers and military contractors, tobacco manufacturers, fur and specialty leather manufacturers, private prison operators and gambling businesses. In addition, we set aside any companies that are or have in recent years been involved in major controversies, or are in breach of U.N. Global Compact principles. Finally, we exclude the worst-scoring companies on transparency indicators and on our basic ESG assessment, which is grounded on a proprietary framework augmented by third-party data and scoring. All in all, we generally exclude the bottom 20% of our universe on these ESG grounds.

As well as excluding the bottom 20%, we could simply select from the top 20%—the best scoring companies. A basic, top-down, quantitative ESG assessment is a blunt instrument, however, and in our view really only useful for weeding out the very riskiest businesses. We see it as much less useful for differentiating between businesses that pose similar levels of risk, or identifying the most attractive investment opportunities, for two reasons: it is unable to assess the materiality of certain factors to specific companies; and it is backward-looking.

An individual company may score quite poorly on a certain ESG factor, but that factor may not pose a significant risk to its business. Therefore, it may not be appropriate for management to focus resources on improving performance on that factor. For that reason, very few companies have uniformly strong performance across all the factors considered by ESG scoring frameworks from third-party data providers. This, in turn, makes companies' aggregate ESG scores bunch closely around the average, regardless of how well or badly they perform on the factors that are most material to them.

In addition, quantitative ESG scores are necessarily based on historical data, and that does not fit well with our focus, as investors, on businesses that are making marginal ESG improvements that are yet to be priced into securities. Historical data series can tell us a little about "ESG momentum" by showing how certain metrics have improved over time. But they offer no insight into a company's sustainability action plans, let alone the credibility of those plans. They tell us nothing about the likelihood of changes in regulation or consumer attitudes, which could alter a company's material exposure to certain ESG risks and opportunities.

For us, low current ESG risk is a plus, but high forward-looking ESG momentum is more significant: we see the most attractive opportunities to generate alpha in companies' active efforts to manage their existing and potential ESG exposures. This is why we believe top-down ESG scores are no substitute for bottom-up analysis and the proprietary insights that come from company dialogue and engagement. We have seen that "Doing Little to No Harm" and "Doing Good" can have a direct relationship with sales, margins, cost of capital and ultimately risk and return—but only when the ESG-related questions we ask are materially relevant to specific businesses, and relevant to their future rather than their past.

As well as being important in themselves, our ESG insights also relate to our search for companies that have a **durable competitive position** and can **adapt to change**. A forward-looking view on ESG helps an investor appreciate how changing regulation, consumer preferences and investor priorities can make what were once immaterial ESG factors into potentially material threats or opportunities. A forward-looking plan of action on ESG could also indicate a general adaptability in a company's stance to new practices and changing circumstances.

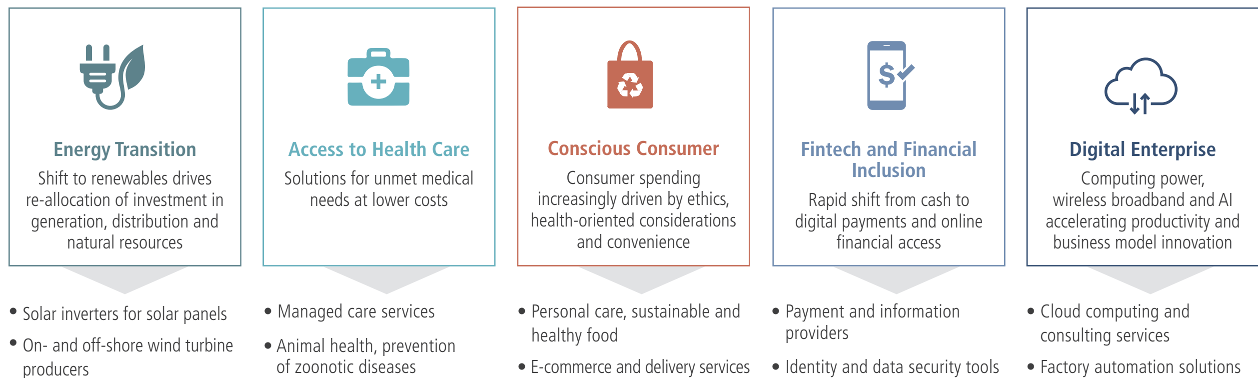
Adapt to Change: Transition Winners in an Age of Disruption

At the start of this paper, we mentioned how we think about companies as potential winners and losers from disruptions and long-term transitions in the key value chains of the modern economy.

We currently identify five value chain lenses as particularly important. They are shown in figure 4, together with the business areas in each one where we believe Transition Winners are most likely to be found. Also in figure 4, we show CFROI and Asset Growth in the various business areas of our "Energy Transition" value chain. This reveals to us the extent of dispersion between different players in the same value chain, and also how fundamental analysis based on these indicators leads us to identify particular business areas as potential Transition Winners.

FIGURE 4. FROM TRADITIONAL INDUSTRIES TO A BROADER VALUE-CHAIN LENS

Our five value chains and the key business areas we identify as potential "Transition Winners"



- Solar inverters for solar panels
- On- and off-shore wind turbine producers

- Managed care services
- Animal health, prevention of zoonotic diseases

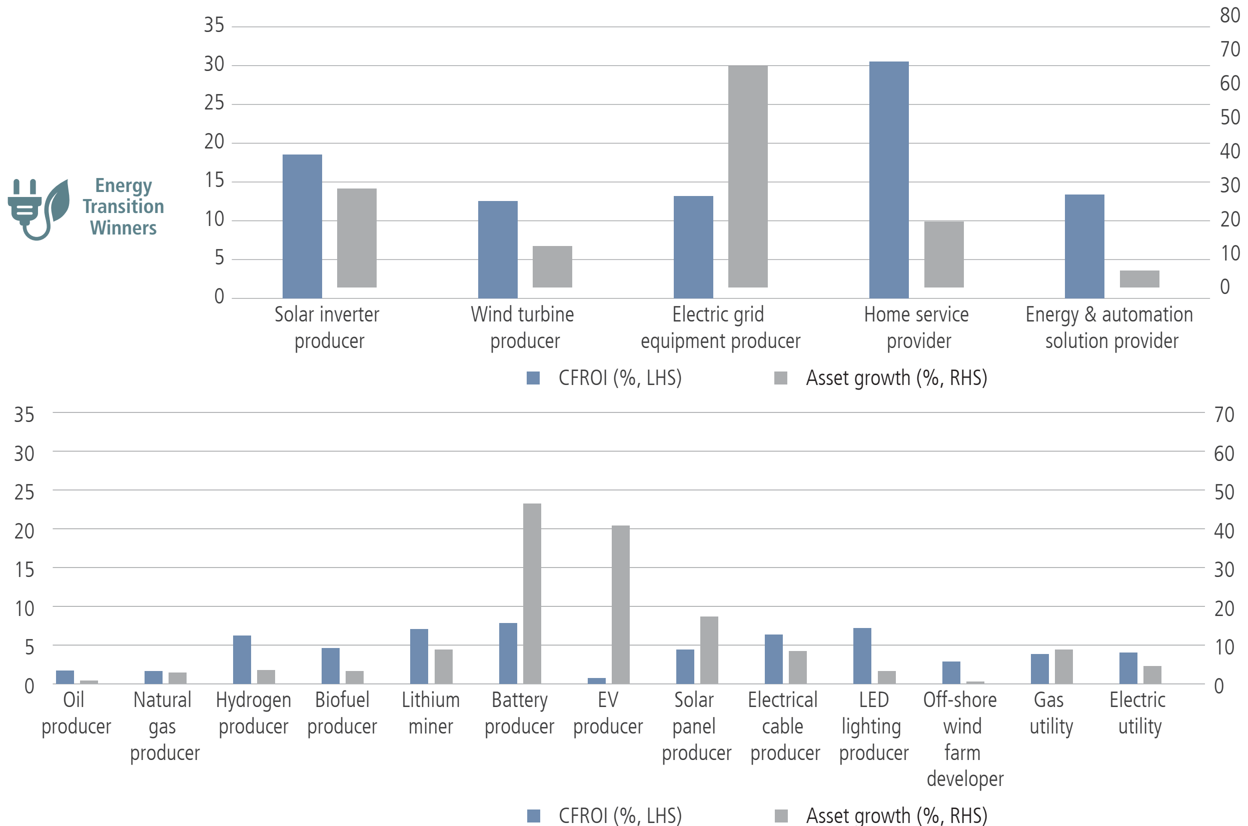
- Personal care, sustainable and healthy food
- E-commerce and delivery services

- Payment and information providers
- Identity and data security tools

- Cloud computing and consulting services
- Factory automation solutions

Source: Neuberger Berman. As of March 31, 2021. For illustrative purposes only.

Identifying the potential "Energy Transition Winners" through our fundamental analysis of profitability and asset growth



Source: Neuberger Berman, Credit Suisse HOLT. Data as of March 31, 2021, based on medians over the past five years. For illustrative purposes only. Nothing herein constitutes a prediction of future economic or market environments. Due to a variety of factors, actual events, including the characteristic of economic or market environments may vary significantly from any views expressed. **Past performance is no guarantee of future results.**

Recall that companies with high CFROI and persistent Asset Growth are already highly profitable, but are also able to deploy the majority of their cash flow into new investments and new market opportunities. In the Energy Transition value chain, we find these attributes, among others, in the producers of solar inverters and off-shore wind turbines. These are still nascent markets with a lot of room for growth and differentiation, where companies can potentially achieve a **durable competitive position** because they require a specific technological edge, offer scale advantages, and reward early movers with high brand recognition or good corporate reputations for **doing little to no harm**. We have picked these business areas out in the top chart in figure 4.

Companies in these areas are the most likely to be found in the upper-right, Transition Winner quadrant in figure 3. In the other quadrants, we find business models where, for example, competition is fierce and products are easily commoditized (such as battery, electric vehicle and solar panel manufacturing), or are being replaced by cheaper and more sustainable alternatives (such as fossil fuels). You can see these business areas in the bottom chart in figure 4.

As we mentioned above, while some of the companies in the Transition Winner business areas are leading the change, we see others that have successfully **adapted to changes** originating externally.

We believe the ability to adapt is linked to the ability to generate high CFROI. Businesses with high CFROI are profitable, which usually means that they have established brands and reputations which they can bring to new markets. High CFROI also enables them to be self-financing: it removes the necessity to borrow or sell more equity, which means they can likely continue to invest even in a downturn, or when competitors are retrenching due to external disruption.

Combined with a culture of flexibility, an outward-looking perspective, and a management team able to identify the important transitions in its value chains, this self-financing can enable a company to adapt to change and emerge as a potential Transition Winner. As we mentioned above, in our view businesses that **do little to no harm** because they manage ESG issues well tend to embody these qualities, as they are more likely to be thinking ahead and taking a holistic view of their position in society and the wider environment. The intangible capital that helps to support a **durable competitive position**—innovative technology and research, talented human capital and brand reputation—can also lend a company the adaptability it needs to manage change.

One company that exemplifies many of the themes we have covered is Microsoft (highlighted in the Transition Winner quadrant of the chart in figure 3).

In the early 1990s, Microsoft was a Transition Winner in the personal computing revolution, building a **durable competitive position** in PC-based operating systems and software. By the mid-2000s, however, that position was beginning to be disrupted by the commercialization of cloud computing by the likes of Amazon, Google, IBM and Salesforce. Microsoft was arguably on its way to becoming a Cash Cow At Risk. Though far from a cloud computing pioneer, Microsoft nonetheless had the managerial flexibility and the high cash flow to **adapt to change** with new investments in cloud-enabled productivity solutions. In 2014, the head of its cloud and enterprise group, Satya Nadella, took over as CEO and decisively pivoted the company away from its Windows legacy toward becoming a Transition Winner in cloud computing. Moreover, it differentiates itself in this value chain with a clear objective to help its customers **do little to no harm** environmentally. Microsoft believes that cloud computing can make businesses up to 93% more energy efficient, and in 2020 it showed it was possible to power its Azure cloud infrastructure with zero-carbon hydrogen fuel cells. The company claims to have been carbon neutral since 2012 through the purchase of offsets, and in 2020 it pledged to become carbon negative by 2030 and remove all its historic emissions by 2050. Today, Azure is one of the three largest cloud service providers worldwide, alongside Amazon Web Services and Google Cloud Platform, and one of the fastest-growing, especially in Enterprise Software as a Service (SaaS)—from our point of view, a true Transition Winner.

Conclusion: Quality Markers, ESG Factors and Idiosyncratic Characteristics

In our new economy, we believe the success of most companies now depends less on management of tangible capital through the manufacturing cycle, and more on the development of intangible capital—innovative technology, research and development, human capital, brand reputation and good corporate citizenship.

Today, it is usually intangible capital that builds durable competitive positions; durable competitive positions are what support cash-generative businesses; and cash-generative businesses can self-finance growth and adapt to the disruptive change and long-term transitions that characterize the modern world.

This leads us to believe that a combination of high CFROI, persistent Asset Growth and good performance on material ESG metrics can be markers of a successful company. We believe that positive momentum in these three metrics can be just as important as current performance, as a marker of a company that is successfully adapting to change. And we also conclude that the traditional industry lens does not focus in the right place: disruptions to industries increasingly come from outside those industries; and the relative strength of competitors' intangible capital is becoming a more important determinant of stock performance than common industry characteristics.

We think that forward-looking analysis of this combination of quality markers, ESG factors and idiosyncratic characteristics is key to identifying the likely Transition Winners of the new economy. In our view, that also suggests that bottom-up, fundamental insights, including proprietary insights gleaned from dialogue and engagement with company management teams, will continue to gain importance as a key driver of potential excess returns.

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