The VIEW *from* BURGUNDY

STRENGTH IN ADVERSITY

On a recent trip to Japan, Burgundy's Asian equity team travelled to what is possibly the country's sleepiest prefecture in order to meet a manufacturer of niche construction equipment. The trip was four hours from Osaka by bus, and that says a lot – when you can't get somewhere by bullet train in Japan, you know you're really off the beaten path. Following a tour of the company's factory, we sat in a modest room in the adjacent headquarters to learn more about its business, which was an international success story.

> We believe that many of these companies became great because of the adversity in their environment, not in spite of it.

The company, once an almost entirely domestic business, had transformed over the last decade to become an international leader in its industry. What's more, it was able to take market share from overseas competitors in their home markets while charging significantly more for its products!

The reason for this was a brand synonymous with product quality – the company's machines lasted longer, broke down less and had a reputation for reliability even under extreme conditions. With this in mind, when sitting down to talk to management we had one main question: "How did you manage to make your products so much better than your competitors?" With an amused look on his face, the manager replied, "Early on we didn't actually know our products were better. We just had built up our business in Japan's tough economic environment with demanding customers who wouldn't tolerate equipment failure. Trying to succeed in the difficult domestic market eventually made us stronger overseas."

Our investors sometimes ask us why we invest in Japan, a country that has faced a weak economy over the last 30 years. Our first answer is that, as bottom-up investors, we look at companies rather than economies – and the simple truth is that Japan is home to a lot of great companies. But, more than this, we believe that many of these companies became great because of the adversity in their environment, not in spite of it.

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While it might seem counterintuitive, Japan's prolonged economic malaise has actually served in some cases as a whetting stone for companies to hone their strengths into fierce competitive advantages, and in others presented a unique opportunity to create innovative solutions. In all cases, a unifying characteristic of success has been an unrelenting willingness to invest and re-invest into the business in the form of better products and technology. In this issue of *The View from Burgundy*, we present three examples of how the difficult external environment in Japan, including deflation, aging demographics and scarcity of resources, has proven to be a breeding ground for great companies.

DEFLATION

Japan is the world's poster child for persistently difficult economic conditions. Since its bubble-era economy peaked in 1989 and subsequently crashed, the country has experienced "lost decades" of practically zero economic growth. Despite massive fiscal and monetary stimulus, Japan has experienced continually falling prices, otherwise known as deflation.

A lack of economic growth is difficult for businesses because it turns company growth into a zero-sum game – when the pie isn't growing, in order for me to grow my slice I must take some of yours. This creates high levels of competition, which is inevitably bad for profitability. Deflation, meanwhile, wreaks havoc on businesses in two ways. First, because labour costs are mostly fixed, falling prices of goods and services cut into corporate profits. Second, it gives rise to a "paradox of thrift" in which consumers realize prices are falling and react by waiting for prices to fall further. This has a negative effect on demand and actually *causes* further price declines. Altogether, these factors make deflationary periods tremendously difficult for businesses.[i] Truly, this is the type of adversity most investors and managers hope never to face – especially not for decades at a time!

However, some of our core holdings have honed their strengths in the depths of Japan's extended deflation. Take, for example, Kao Corporation, a Japanese manufacturer of cosmetics, personal care products and diapers. Imagine Kao's position 20 years ago in Japan's deflationary economy – demand was low and the prices of goods were falling. These difficult conditions made it necessary for Kao to meaningfully improve its products through continual research and development (R&D), just to keep its prices flat! This was inevitably a drag on profitability, because the company had to spend resources in order to stand still, which in turn necessitated adopting a strict cost discipline. While painful during this period, Kao's focus on product development and R&D would become one of its most distinct advantages on the global stage, while its attention to costs has persisted to the benefit of shareholders.

Today, Kao is a strong regional competitor due mainly to the strengths developed during its difficult years. The obsessive focus on research and product development that was once necessary to survive in deflation-era Japan is now its competitive weapon abroad. We see this in much of Kao's success in overseas markets; for instance, the company has seen great success in high-end diapers in China because its products are high quality, differentiated and provide value that consumers appreciate.

AGING DEMOGRAPHICS

It is a well-known fact that Japan has a rapidly aging society. According to 2014 estimates, 33.0% of the Japanese population is above age 60, 25.9% is age 65 or above and 12.5% is age 75 or above. What's more, the 65+ cohort is estimated to reach one-third of the population by the year 2050.[ii] This issue is as much due to Japan's post-war baby boom as it is to recent low birth rates, which are at 1.5 births per woman (compared to 1.8 in the U.S.).[iii] The aging of Japan's society presents a number of problematic issues for its economy, one of which is the shrinking of the country's labour force.

JOBS APLENTY

Most positions available per applicant in 25 years

FIGURE 2

Source: Bloomberg.com

Komatsu, a Japanese manufacturer of construction and mining equipment (and a Burgundy holding), is a business that acutely feels the effects of Japan's shrinking labour force. The company's Japanese customers, mainly construction companies, have difficulty finding enough skilled operators for its equipment – largely excavators, bulldozers and dump trucks. On our trips to Japan, we frequently see this dynamic at work around Tokyo's construction sites, where it is more common to see a construction worker in his 50s than in his 20s. Statistical evidence of the severity of this problem is visible in Japan's jobs/applicants ratio recently reaching a 25-year high (see Figure 1). Whereas in the mid-2000s there was just over one job open for each applicant, today the figure is 1.4.[iv]

What's a construction equipment maker to do when there aren't enough skilled workers to operate its equipment? Komatsu's answer has been to innovate. Japan's labour shortage has spurred the company to invest heavily in automation technology that removes the need for a human operator, an area in which it is now a global leader. Today, Komatsu's technology allows work sites to operate with a lower number of personnel, with automated bulldozers and dump trucks operating based on 3D images uploaded via drone.

We believe that Komatsu's response to this domestic issue, which stemmed from a challenge and required significant investment and resources on the part of the company, has positioned it to thrive globally as more of the world's developed economies continue to age. For companies like Komatsu who are willing to invest the resources in a solution, we can see that Japan's difficult environment has actually provided an opportunity to innovate and develop new strengths.

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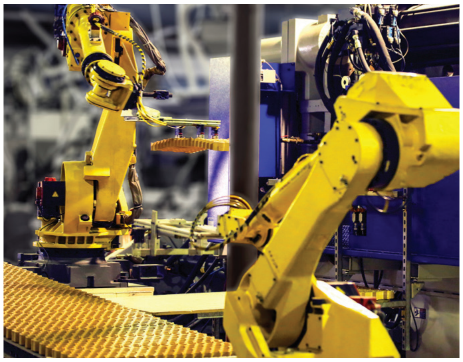
STRUCTURAL SCARCITY OF RESOURCES

If our investors have ever wondered why we own so few natural resource companies in our Asian portfolio, the answer is as much about our investment process as it is about scarcity. While we tend to avoid commodity businesses, Japan actually has very little in natural resources to speak of in the first place. Across metals, food and especially oil and gas, Japan has a deficit of the natural endowments we enjoy so abundantly in North America. As a result, Japan's population of nearly 130 million people relies heavily on imports for these key inputs into daily human life and industrial activity. This is a source of much adversity for many Japanese manufacturers, because it means that they are at a structural cost disadvantage compared to many of their international peers.

Take, for instance, the price of natural gas, a key source of electric power, which in 2015 cost on average $10.31 per Million British Thermal Units (MMBtu) in Japan versus $2.60 in the U.S.[v]

When you consider the fact that Japan's natural gas has to be sent in liquid form by ship across the ocean, it's no surprise that it is much more costly than Canadian natural gas received by pipeline. This is only one example. Other important manufacturing inputs like iron ore, copper and aluminum are all costly to procure in Japan because they must be imported. But despite its structural cost disadvantages, Japanese manufacturing activity has actually remained significant both on the world stage and as a proportion of the country's GDP. How has this been achieved?



Source: Assembly Magazine

Japan's structural cost disadvantage has essentially tied the hands of its manufacturers. With high natural resources and labour costs, efficiency is the sole lever with which they can control costs and improve profitability. Over time this persistent need has spurred Japan to develop homegrown solutions to its intractable problem. Take Fanuc for instance, a Japanese Dream Team company[vi] and world leader in factory automation equipment. From its beginnings in the 1950s manufacturing computer numerical control (CNC) devices, the company is now the global leader in both CNC and industrial robots that help factories lower costs and improve operational efficiency. High Japanese costs were the problem that Fanuc's equipment was initially designed to solve. Unsurprisingly, as the company has expanded globally, its products have become famous for their efficiency and cost savings. And, much like Burgundy, Fanuc "eats its own cooking" in a big way by putting its robots to work in its own factories – robots making other robots – which has helped the company become one of the most profitable industrial companies in the world on a per-employee basis. Fanuc makes more profit per employee than any of the industrial companies in the S&P 500 Index, nearly two times more than the next highest per-employee earner in that group, Union Pacific Corporation (a Burgundy holding).[vii]

ROBOT DENSITY

Robots per 10,000 employees

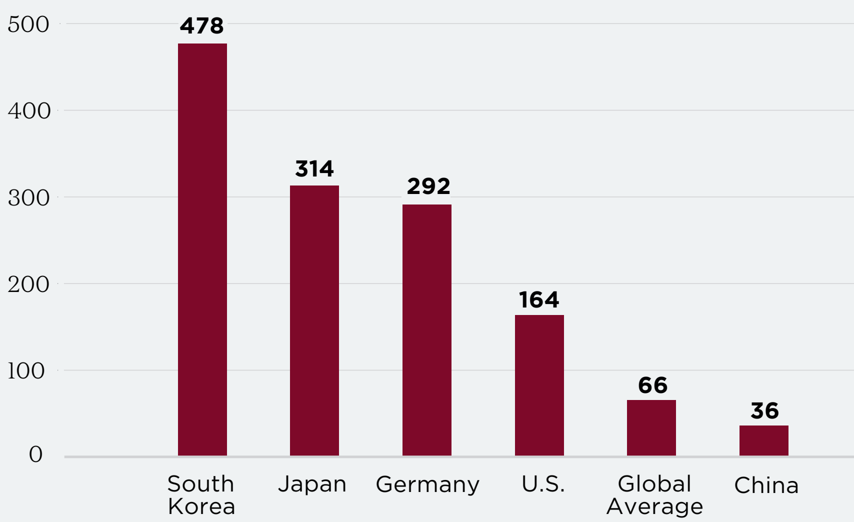


FIGURE 1

Source: International Federation of Robotics

Today, Japan is one of the world's highest adopters of factory automation technology made by Fanuc and its Japanese peers. This is visible in the country having one of the world's highest robot densities (the number of industrial robots in use per 10,000 manufacturing workers), which is roughly double that of the U.S. and five times the global average (see Figure 2). Altogether, Japan's disadvantages in manufacturing made it fertile ground for developing some of the world's best companies in the space of factory automation – another example of an economic challenge breeding success.

> While these are all attractive characteristics in a business, it is important to note that not all strengths are built in times of prosperity.

CONCLUSION

Japan's macroeconomic issues have presented a veritable minefield of challenges for domestic businesses. While many of these challenges differ by industry, the blueprint for success in a difficult environment frequently comes back to one common factor: consistent reinvestment into the business. This often takes the form of a relentlessly high amount of R&D spending, which over long periods of time results in the improved products and new technologies that make many of our Japanese holdings and Dream Team companies fierce global competitors.

At Burgundy, we strive to invest in quality companies that have strong competitive positions, attractive economics and generative high returns on capital invested. What's more, we insist on having a competitive moat[viii] to protect said returns. While these are all attractive characteristics in a business, it is important to note that not all strengths are built in times of prosperity. For Japan, many seeds of success have been sown in times of difficulty. The examples discussed in this issue of *The View from Burgundy* are just a few that have become stronger through adversity.

This issue of The View from Burgundy *was written by Jeff Musial, Investment Analyst for Asian equities.*

ENDNOTES

i. Pho, Craig. "Is Japan our Future? Investing in Deflationary Times." *The View from Burgundy*, 2012.

ii. Ministry of Internal Affairs and Communication, Statistics Bureau. "Japan Statistical Yearbook, Chapter 2: Population and Households." (https://en.wikipedia.org/wiki/Aging_of_Japan)

iii. World Bank figures, 2015. (http://data.worldbank.org/indicator/SP.DYN.TFRT.IN?name_desc=false)

iv. Oda, Shoko and Isabel Reynolds. "Tokyo Has More Than Two Job Openings for Every Applicant." Bloomberg.com. March 16, 2017. (https://www.bloomberg.com/news/articles/2017-03-16/japan-s-matrix-like-dilemma-too-many-jobs-too-few-immigrants)

v. BP website: natural gas prices. (http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/natural-gas/natural-gas-prices.html)

vi. Dream Team: a list of companies that embody the business, financial and management characteristics that Burgundy deems high quality, but their current market prices do not offer enough of a margin of safety to warrant investing at this time.

vii. Bloomberg, Burgundy research.

viii. Moat: likened to a physical moat around a castle, an economic moat is a term to describe the advantages a company possesses over its competitors. The more competitive advantages, the wider the moat.

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We strive to achieve strong, long-term absolute results, while providing outstanding client service.

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