

# Reflections

June 2023

## ***All things trend towards disorder – The Second Law of Thermodynamics***

The law states: “As one goes forward in time, the degree of disorder of any isolated or closed system will always increase (or at least stay the same). Left unchecked, disorder increases over time. Energy disperses, and systems dissolve into chaos.”

The complexity of software systems is no exception. As organisations add more tools, scale their systems and create more apps, in turn, their environments can become sprawling and unwieldy.

Step in Datadog.

Datadog is a monitoring and security platform for cloud applications – software run over a network of remote internet servers – to help businesses secure their systems and avoid downtime.

Think of Datadog as a thermometer for computer systems. It continually monitors the performance of web servers, databases and other infrastructure to quickly diagnose problems when they arise. Like a thermometer helping you keep a watchful eye on your body, Datadog allows for intervention before things get too hot.

The company is a direct beneficiary of the exploding complexity arising from cloud computing. Over the last few years, we have seen organisations adopt and emerge from cloud-native applications and infrastructure services that run on the cloud, such as Amazon Web Services (AWS), Azure and Google. This adoption is expected to continue at pace, and by the end of the decade, spending is expected to reach \$1tn.

However, it becomes difficult for businesses to see exactly how applications and code run within cloud environments. These tracing issues become unwieldy, as tracking across cloud systems requires thousands of processes running in parallel – on-cloud, on-premises, or both. Conventional techniques and tools struggle with interdependencies in these distributed designs.

Datadog is designed to manage these complexities. It collates intricate data sets across a network and interprets them into a digestible cloud-run dashboard. Once Datadog is adopted, users want to maximise utility and integrate Datadog deeper into their products and systems, creating a network effect. This is a challenging position to replicate.



With an R&D spend of 40 per cent of revenue, Datadog stays ahead of the competition by developing new tools to manage new complexities within the business. Olivier Pomel, the CEO, states, “When we [Datadog] grow up, what we want to be is a total platform for everyone who writes, runs and monitors applications. The idea is to get us to the point at which anyone who touches the technology should be logging into Datadog first thing in the morning and logging out last at night.”

With such ambitions, we expect Datadog’s revenues to grow at around 40 per cent compound annual growth rate, from a run rate of circa 80 per cent since 2017.

This is a company that has always lived within its means. As a private company, Datadog grew the business to \$330m in annual recurring revenue with just \$30m invested. Returns continue to be good and are likely to rise. The company has increased its free cash flow (FCF) margin from 22 per cent to 36 per cent over the last year and is currently operating at 80 per cent gross margin. We expect earnings before interest and taxes (EBIT) and FCF margins to benefit from leverage in sales and marketing as they embed in more customers, expanding EBIT margins to mid-20 per cent. At the same time, the business continues to invest in growth aggressively.

Datadog is well-positioned to capitalise on the burgeoning cloud computing market by addressing the growing complexities of an ever-expanding cloud infrastructure. It has all the ingredients of an LTGG holding – a focused management team, significant investment in research and development and a clear route to profitability.

Datadog looks to defy the second law of thermodynamics by bringing order to the chaos of digital complexity.





# Important information and risk factors

## Annual past performance to 30 June each year (net %)

	2019	2020	2021	2022	2023
LTGG Composite	0.1	56.4	61.7	-48.9	24.2
MSCI ACWI Index	6.3	2.6	39.9	-15.4	17.1

## Annualised returns to 30 June 2023 (net %)

	1 Year	5 Years	10 Years	Since Inception*
LTGG Composite	24.2	9.9	15.9	11.6
MSCI ACWI Index	17.1	8.6	9.3	7.8

\*Inception date 29 February 2004.

Source: Baillie Gifford & Co and MSCI. US Dollars.

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Calton Square, 1 Greenside Row, Edinburgh EH1 3AN  
Telephone +44 (0)131 275 2000 / [bailliegifford.com](http://bailliegifford.com)