

GA-COURTENAY SPECIAL SITUATIONS FUND

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HOTEL CHOCOLAT: BARS ON COCOA, FOR SEE'S UPLIFT

August 30, 2023

See's Candy, Warren Buffett's chocolate investment, achieved its highest gradient of shareholder return during a period of increases in the cocoa price

[A closer look at Warren Buffett's investment returns from See's Candy](#)

"Charlie and I have many reasons to be thankful for our association with See's. The obvious ones are that we've earned exceptional returns and had a good time in the process."

Warren Buffett, Berkshire Hathaway shareholder letter, 1991¹

"Neither Warren and I deserve any real credit for it. My partner – I had wonderful partners all my life, it was a petroleum engineer. He just said to Warren and me, 'you guys are all wrong on this. This is a wonderful company and you're being way too chancy. There aren't many companies like this.' And with that he changed our minds. So now you know how we were smart enough to buy See's, barely."

Charlie Munger, speaking in 2020¹

See's Candy, whose typical product is illustrated by Figure 1, has been the market leader in boxed chocolates in the United States for more than 50 years, and was acquired by Warren Buffett's Berkshire Hathaway in 1972. The business model of See's compares today to the UK's Hotel Chocolat, which launched in 1993² and which is also detailed as a primary subject of this white paper. However, and first, we review just how high were – and why were – the returns that Berkshire Hathaway realised on its investment in See's Candy so unusual.

Figure 1: See's Candy, a US business acquired in 1972 by Warren Buffett's Berkshire Hathaway³, focuses on premium boxed chocolates for gifting occasions



Figure 2: In the UK, AIM-listed Hotel Chocolat, which launched in 1993, pursues a similar business model, although is expanding into premium hot chocolate drinks and adding cafés within selected stores



The returns realised by Warren Buffett from his investment in See's Candy were partly a function of the conservative price paid for the investment – \$25m, relative to the revenues of See's at the time of \$30m and its net income at \$2m – a valuation of 0.83x EV/Sales and 12.5x PE⁴.

“The nominal price that the sellers [of See's Candy] were asking was \$40 million, but the company had \$10 million of excess cash, and therefore the true offering price was \$30 million.”

“Charlie and I, not yet fully appreciative of the value of an economic franchise, looked at the mere \$7 million of tangible net worth and said \$25 million was as high as we would go (and we meant it). Fortunately, the sellers accepted our offer.”

Warren Buffett, Berkshire Hathaway letter to shareholders 1991⁵

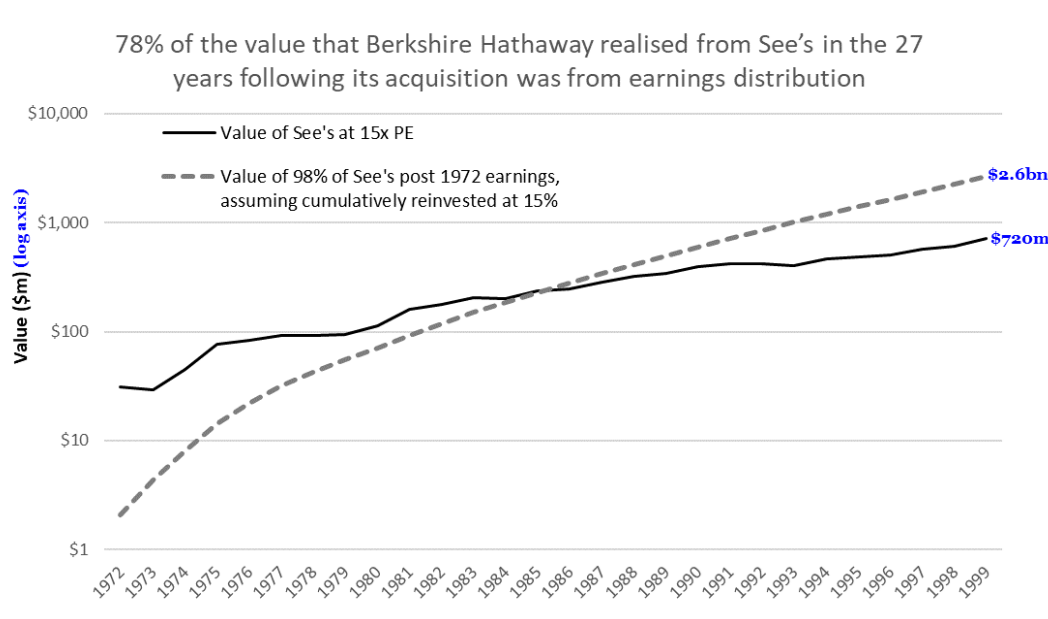
An additional feature of See's was its lack of requirement to retain earnings in order to deliver attractive organic growth. See's paid almost 98% of its earnings, as per figure 3, in cash to Berkshire Hathaway⁶, and still achieved well above average earnings growth rates⁷. As these cash returns from See's to Berkshire Hathaway were also invested into new opportunities, an amplification of the total economic productivity arose from Buffett's investment in See's.

To date, See's has earned \$1.9 billion pre-tax, with its growth having required added investment of only \$40 million. See's has thus been able to distribute huge sums that have helped Berkshire buy other businesses.

Warren Buffett, Berkshire Hathaway shareholder letter, 2014⁸

To estimate the return that Berkshire Hathaway realised from See’s we must therefore include both a valuation for See’s as a multiple of its ongoing earnings, as well as a return on investment from the cumulative cash that was redistributed back to Berkshire Hathaway. Assuming See’s is valued at 15x PE, and Berkshire Hathaway achieved a return of 15% annualised on the cumulative cash that was redistributed to it, both conservative inputs, the return realised from See’s by 1977 at which time See’s was 28% of the operating earnings of Berkshire Hathaway was as high as 31% annualised. By 1991, when Buffett described the return as exceptional, the return from See’s remained as high as 21% annualised.

Figure 3: Assuming See’s is valued at 15x PE, and Berkshire Hathaway achieved a return of 15% annualised on the cash that was redistributed to it, the return that Warren Buffett had realised on See’s by 1991, at the time he described the return as exceptional, was 21% annualised⁹



Buffett’s returns from See’s Candy arose not solely from its business model; the returns were also the result of the price rises successfully implemented by See’s, coincident with a sustained period of increases in the cocoa price

The highest gradient period (1972-1984) of investment success of Warren Buffett’s investment in See’s Candy was co-incident with increases in the cocoa price, matched by price rises by See’s Candy

As per Figure 3, as high as 78% of the value realisation that Berkshire Hathaway received from See’s in the three decades following its acquisition was from the distribution of its earnings to Berkshire Hathaway combined with their assumed reinvestment at the 15% return assumption. By contrast, the continuing business value of See’s, at 15x PE, represented just 22% of the total value realised by 1999.

Buffett in 2007 identified See’s Candy as his archetype of a business which offered this quality – the ability to pay out the vast majority of its earnings whilst still providing shareholders with rapid organic growth.

“Long-term competitive advantage in a stable industry is what we seek in a business. If that comes with rapid organic growth, great. The prototype of a dream business: our own See’s Candy.. See’s has given birth to multiple new streams of cash for us.”

Warren Buffett, Berkshire Hathaway shareholder letter, 2007¹⁰

A closer look at the disclosures relating to See's profit growth per annum, which also drove the distribution of earnings back to Berkshire Hathaway, is instructive: See's profit growth annualised at 17% per annum from 1972-1984⁹. However, this profit growth was not primarily driven by See's increasing the volume of chocolates sold. As per Figure 4, volume growth was just 2% per year¹¹. Instead, it was the price rises by See's that drove profitability growth. See's price/lb rose by 9.4% per annum over the period, and yet this was not – as might be expected – due to a premiumisation strategy. Instead, the price rises occurred only to match the same price rises of cocoa.

The cocoa price rose at a similar rate during the 1972-1984 period: in 1972, when Buffett purchased See's Candy, the cocoa price was \$720/ton, yet by 1984 the cocoa price had increased by 185% to \$2,050/ton¹², an increase of 9.1% per annum. The rate of increase was well above the longer-term average cocoa price increase of 2.7% per annum over 1960-2021¹³. By implication, other measures to increase profitability at See's added 6% per annum over the period¹⁴.

Figure 4: Berkshire Hathaway's 1984 annual report disclosed See's volume growth at 2% per annum 1972-1984; over the same period, See's price per lb can also be calculated, and rose by 9.4% per annum 1972-1984¹⁵

52-53 Week Year Ended About December 31	Sales Revenues	Operating Profits After Taxes	Number of Pounds of Candy Sold	Number of Stores Open at Year End	Price /lb
1984	\$135,946,000	\$13,380,000	24,759,000	214	\$5.49
1983 (53 weeks) ...	133,531,000	13,699,000	24,651,000	207	\$5.42
1982	123,662,000	11,875,000	24,216,000	202	\$5.11
1981	112,578,000	10,779,000	24,052,000	199	\$4.68
1980	97,715,000	7,547,000	24,065,000	191	\$4.06
1979	87,314,000	6,330,000	23,985,000	188	\$3.64
1978	73,653,000	6,178,000	22,407,000	182	\$3.29
1977	62,886,000	6,154,000	20,921,000	179	\$3.01
1976 (53 weeks) ...	56,333,000	5,569,000	20,553,000	173	\$2.74
1975	50,492,000	5,132,000	19,134,000	172	\$2.64
1974	41,248,000	3,021,000	17,883,000	170	\$2.31
1973	35,050,000	1,940,000	17,813,000	169	\$1.97
1972	31,337,000	2,083,000	16,954,000	167	\$1.85

By contrast, in the subsequent period (1985-1999), in which increases in the cocoa price no longer occurred, the profitability growth of See's Candy halved

The annual reports of Berkshire Hathaway also disclose the profitability of See's Candy from 1985 to 1999¹⁶, and in this period the profit growth of See's progressed at a considerably more modest 8% per annum. Notably, this was also a period where increases in the cocoa price no longer occurred¹⁷. All else equal this would match the profitability growth rate implied from the prior period, albeit absent the price increases: i.e. the same 2% volume growth, plus 6% from other measures.

In conclusion, Buffett's allocation to See's was at its optimal when an increasing cocoa price was matched by the company's own price rises. This was combined with modest volume growth, and surplus capital redistribution to Berkshire Hathaway

Buffett's investment in See's was at its optimal when an increasing cocoa price was matched by the company's own price rises. However, when the price increases were also co-incident with successful capital investment by See's to also achieve volume growth, this did furthermore (in See's case, modestly) proportionately improve profitability.

In the case of Buffett and See's Candy, volume growth was however low, and Berkshire Hathaway primarily amplified the profits from See's by surplus capital being distributed back to Berkshire, and thereon re-allocation of the distributed capital at high rates of return¹⁸. Nevertheless, to the extent that most investors may face challenges in matching the historic compounding rates of Buffett's capital allocations, this redistribution scenario may be less attractive.

Today, bars on non-sustainable farming are precipitating upward cocoa repricing

Cocoa’s history shows price rises at up to 5x the percentage magnitude of production declines

In the context of relatively stable and recessionary resilient demand for chocolate (see Figure 26), cocoa price developments that result from changes in the cocoa supply/demand balance will primarily be attributable to changes in cocoa supply.

A related observation is that cocoa’s elasticity of demand appears extremely low. Or, to put it another way, a significant cocoa price squeeze would first have to occur before a resulting reduction in cocoa demand resulted.

A quantification of the historical relationship between cocoa supply and price is provided in Figure 5. The year-on-year change in the cocoa price has not only shown inverse correlation with the change in cocoa production, but in years where cocoa production declined in the region of 10% there have been relatively high cocoa price outcomes, at +50% or higher. Figure 6 reveals a similar relationship by reviewing the cocoa production surplus (defined as cocoa production less cocoa consumption), relative to the cocoa price – and implies the same inverse relationship and multiplier in the region of 5x.

Figure 5: The year-on-year change in the cocoa price has shown inverse correlation with the corresponding change in cocoa production. A best fit line shows that in the region of 10% declines in cocoa production have led to relatively high price outcomes, at +50% or higher¹⁹

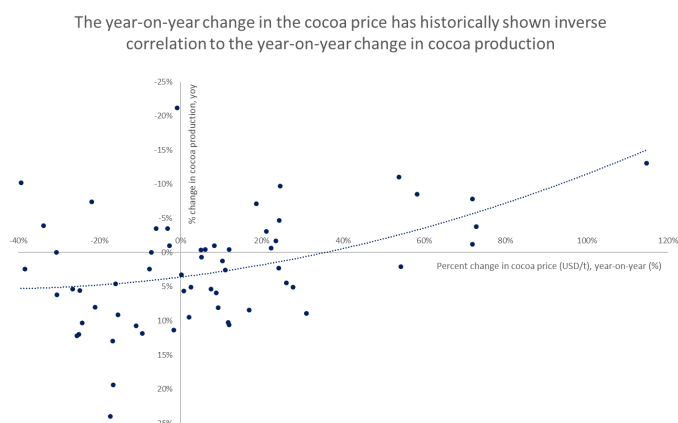
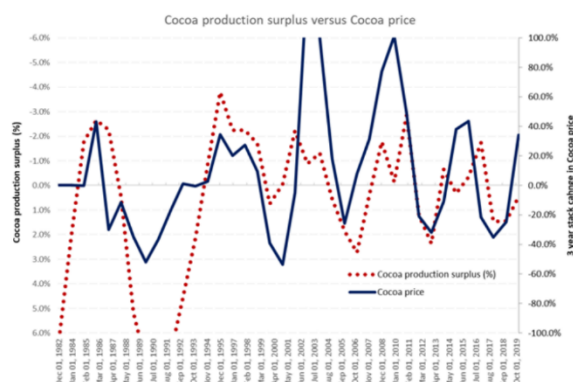


Figure 6: The cocoa production surplus (defined as cocoa production less cocoa consumption), relative to the cocoa price – also implies an inverse relationship and a multiplier in the region of 5x²⁰

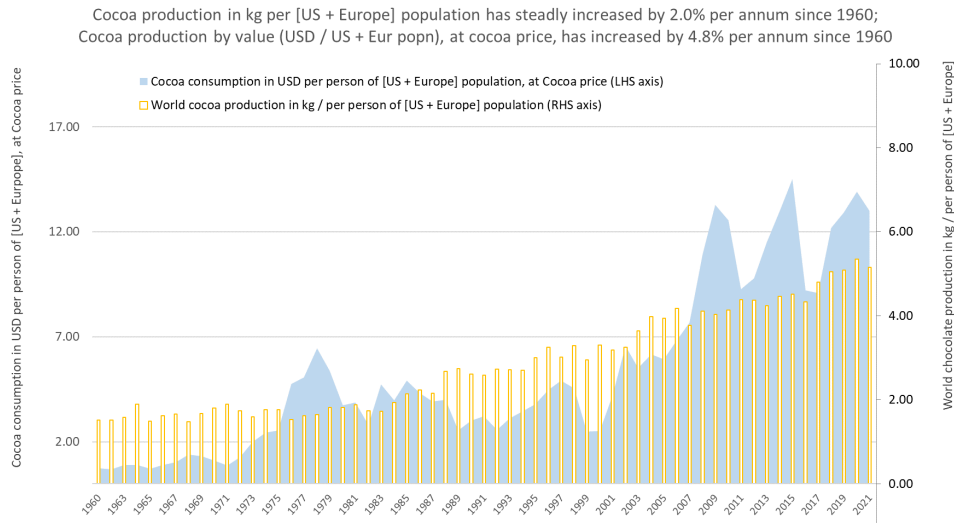


Over the long-term, per capita cocoa consumption by volume has increased at 2% per annum

In the context of the potentially high sensitivity of the cocoa price to changes in the supply/demand balance, it is also notable that, as per Figure 7, demand over the long-term for cocoa, as indicated by the per capita volume of consumption, has increased at 2% per annum. Adjusting for the change in price of cocoa, the value of cocoa consumption per capita has increased at 4.8% per annum.

There may be several reasons for increasing cocoa consumption. The health benefits of modest chocolate consumption have become more widely recognised²¹, including its benefits in reducing cholesterol²². At the same time, premium chocolate volumes have grown into a larger segment of consumer demand²³. Chocolate also may have mildly addictive qualities²⁴, and as such, increasing consumption trends possess an element of positive feedback.

Figure 7: Since 1960, the volume per capita cocoa consumption has increased at 2% per annum. Adjusting for the change in price of cocoa, the value of cocoa consumption per capita has increased at 4.8% per annum since 1960²⁵



However, cocoa farming yields have shown no improvement in 30 years; production has kept up with consumption only by land area increase which has been commensurate with an acceleration in deforestation

Cocoa farming yields have shown no improvement in more than 30 years

The lack of improvement in cocoa yields compares to an average improvement of 35% in yields of most agricultural crops over the last 30 years, or an approximately 1% improvement in yield per annum, as per Figure 9. To the extent that these yield improvements are a partial offset to inflation for most agricultural commodities, this has not been the case with cocoa, enhancing cocoa’s attributes as an inflation-protected commodity.

As per Figure 8, cocoa yields per hectare (blue line) are now back to below their level in 1989. The result is that the continuing production increases of cocoa, up by more than 110% since 1989²⁶, instead has necessitated farming area increase.

Figure 8: Cocoa yields per hectare (blue line) are now back to below their level in 1989. With no yield improvement, the continuing production increases of cocoa are a function of farming area increase (deforestation)²⁷

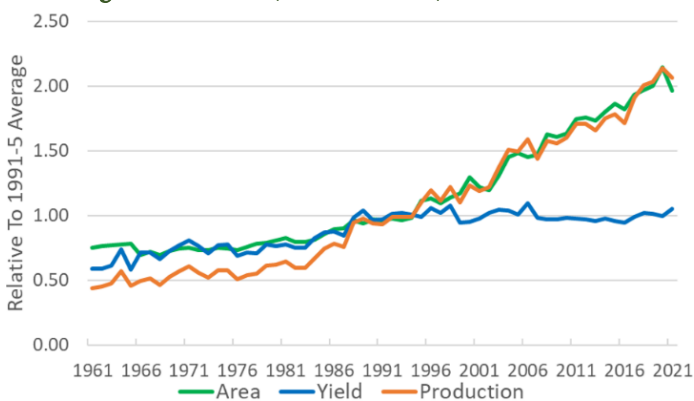


Figure 9: The lack of improvement in cocoa yields compares to an average improvement of 35% in yields of most agricultural crops²⁸

Yield in tons per hectare farmed

	1989	2021	% chng
Potatoes	15.35	23.42	52.6%
Bananas	13.66	20.74	51.8%
Cassava	9.96	10.62	6.6%
Maize	3.62	5.88	62.4%
Rice	3.45	4.76	38.0%
Wheat	2.37	3.49	47.3%
Barley	2.23	2.98	33.6%
Soybeans	1.83	2.87	56.8%
Peas	1.64	1.76	7.3%
Beans	0.60	0.77	28.3%
Cocoa beans	0.48	0.48	0.0%
Average			35.0%

The farming area increase necessary to enable growth in cocoa production has been commensurate with deforestation

Half of all cocoa farming in the Cote d'Ivoire and Ghana, which combined produce 60% of the world's cocoa, occurs on recently deforested land²⁹, and it is estimated that close to 40% of the now extensive deforestation in both countries has resulted from land clearance for cocoa farming³⁰.

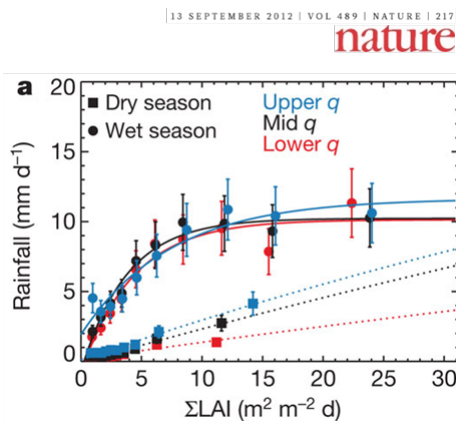
Simplistically, that cocoa-driven land area increase has necessitated deforestation is a function of economics. Farmers have engaged in deforestation in the Cote d'Ivoire and Ghana as a result of both the low cost of clearing natural forests due to a lack of well-defined property rights³¹, and to meet essential livelihood needs that have been disrupted due to declining productivity, as well as instances of civil disruption³³.

However, deforestation outcomes have also been subject to acceleration due to an error in the understanding of the optimal conditions for cocoa farming

There is however an additional factor that has driven deforestation. Originally deforestation was as an accepted policy goal, backed by academic research, in cocoa farming nations³⁴. This resulted from research work in the 1950s which showed that cocoa trees grew more vigorously and produced more crop in the full sunlight of a deforested plantation, compared to their natural habitat under rainforest shade³⁵. As such, deforestation was originally perceived as a rational path to both raise cocoa farming yield per hectare as a result of increased sunlight, and at the same time reduce poverty by eliminating the lower yield achieved by within-rainforest farming of cocoa. This finding resulted in decades of subsequent rainforest deforestation across the Cote d'Ivoire, Ghana, Nigeria and Cameroon.

Nevertheless, there was a price to pay. It has begun to be understood in the last decade that the post-deforestation, high production phase of cocoa is of short-term duration compared with the life-span of the cocoa tree. After a number of years, there is a marked decline in tree vigour due to a number of factors including dehydration and disease. The primary cause: rainforest deforestation, by reducing evapotranspiration³⁶, over longer time periods also intensifies drought, as per Figure 11, and the related dehydration stress suffered by cocoa ultimately leads to lower yield outcomes³⁷, as per Figure 12.

Figure 11: Deforestation reduces 'leaf area index' or LAI, which, due to lower evapotranspiration, reduces humidity and inland rainfall³⁸



Plot for air masses arriving in Minas Gerais, Brazil. Data binned into deciles of LAI and stratified by initial specific humidity (q). Lines show fit to data (solid, wet season; dotted, dry season), error bars indicate estimation of error in precipitation.

Figure 10: Core cocoa production countries Cote d'Ivoire, and Ghana, are reported to be so far 50% compliant with sustainability (VSS) standards³²

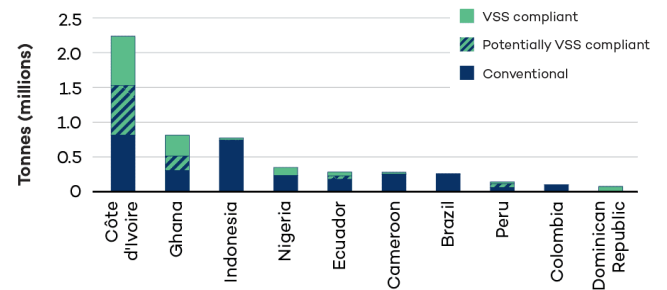
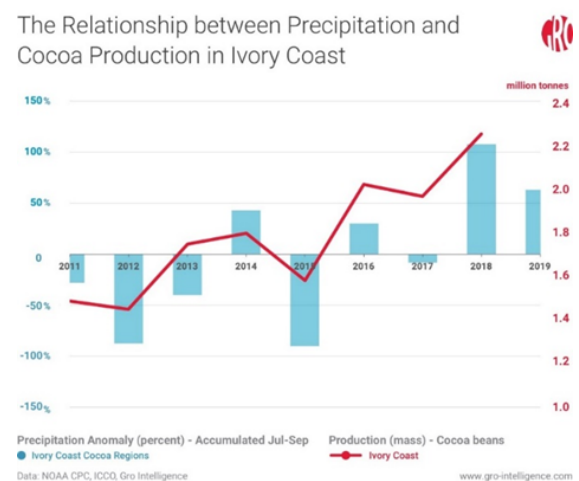
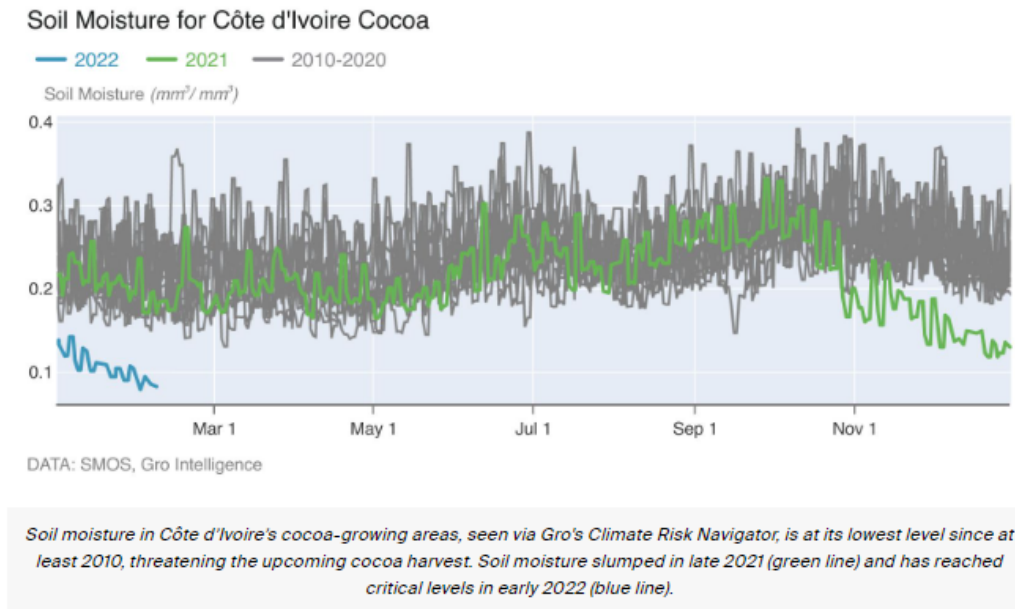


Figure 12: Cocoa production has an inversely proportional relationship to reduced rainfall (precipitation) levels³⁹



Today, in what appears to be the result, soil moisture levels in the Cote d'Ivoire are well below even prior decade lows, as per Figure 13.

Figure 13: Soil moisture levels in Cote d'Ivoire in 2022 are well below prior decade lows⁴⁰



In other words, similar to a driver attempting to slow down a car by hitting the brakes yet not knowing that the brake and accelerator pedals had been switched, cocoa farmers have attempted to select a path to grow cocoa at the same time as achieving a decelerating deforestation impetus (because their path was meant to raise yield per deforested hectare as a result of increased sunlight) yet instead selected a path that results in an accelerating deforestation trajectory (because deforestation ultimately over time lowers cocoa yield per deforested hectare by the inducement of drought and other factors, thereby demanding additional and accelerating deforestation to meet supply).

The introduction of regulatory tariffs on cocoa exports, from 2019, appear suggestive of government recognition that a breaking point had been reached

African tariffs from 2019, to supplement farmer incomes, sought to alleviate farmers from the poverty induced by lower cocoa yields and that may otherwise have incentivised a further acceleration in deforestation

The first regulatory indication that deforestation was reaching crisis levels came from governments in the Cote d'Ivoire and Ghana, which combined produce 60% of the world's cocoa⁴¹, when they announced in 2019 a form of cartel, the Côte d'Ivoire–Ghana Cocoa Initiative (CIGCI)⁴², which demanded that cocoa buyers paid a premium of \$400 a tonne over the going rate⁴³. Nigeria and Cameroon are reported to be considering joining CIGCI, which would raise the cartel's share of production to 75%⁴⁴.

“This partnership with other countries will reduce the ability for the private sector to go elsewhere and also for us to consolidate and have more bargaining power in the landscape.”

“We are building for sustainable and rewarding cocoa in which prosperity is shared.”

Alex Assanvo, CEO, Côte d'Ivoire – Ghana Cocoa Initiative (CIGCI)⁴⁵

The extent to which deforestation ultimately, though not initially, is lowering cocoa yields as a result of the sunlight stress by growing the cocoa out of its natural habitat, as well as reducing the rainforest-induced rainfall that cocoa normally benefits from as a result of evapotranspiration, is perhaps less well understood. However, the consequence of the ultimate path of yield reduction is that either additional deforestation is incentivised or that farmer incomes require supplementation, as the CIGCI tariffs attempt. In this manner the CIGCI tariff design attempts to remove extreme scenarios of farmer poverty – and therefore to indirectly lower the need for further deforestation.

Nevertheless, it is not clear that the cartelisation approach will succeed. In favour of cartelisation cocoa is homogenous, there are a limited number of producers, climatic requirements act as a barrier to entry, and there are no substitutes.

However, cocoa is not like oil, and not just in the sense that it tastes nicer. Cocoa-led deforestation within still considerable and dense rainforest does not have the location specificity, nor dollar-density, of an oil well. Absent a path to impose efficient enforcement on production quotas, cartels fail. As such, whilst tariff-induced higher cocoa prices may make-whole farmer incomes, this only removes the *need* for deforestation, but to the extent that tariffs also raise cocoa prices, an opposing force is created – *higher cocoa prices also increase the economic incentive for deforestation*.

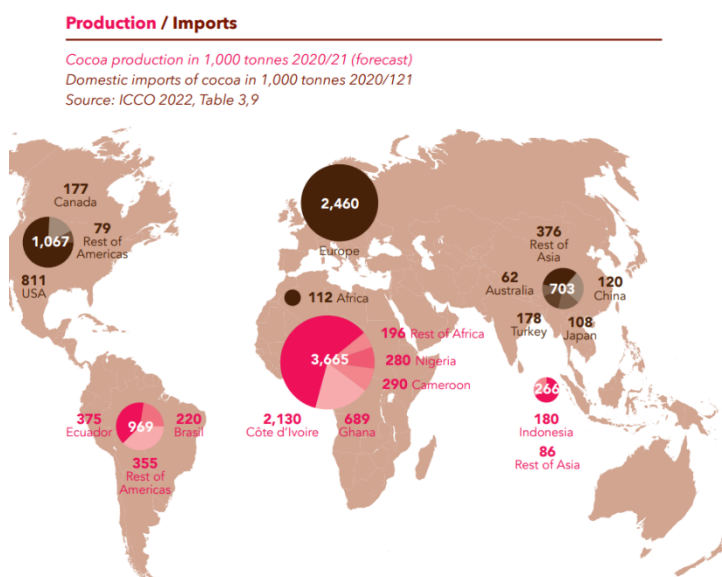
In April 2023 the European Parliament approved a new deforestation law banning cocoa imports from any land that was deforested after 31 December 2020

Potentially sensing that not enough has been achieved by the African tariffs, in April this year, the European Parliament approved a new deforestation law banning cocoa imports from any land that was deforested after 31 December 2020⁴⁶.

Companies that fail to comply will face fines of up to 4% of a turnover. Both the European tariff, and those of Cote d’Ivoire and Ghana, have the same ultimate rationale – the prevention of further deforestation. However, the wording of the European legislation more explicitly makes the linkage clear.

As such, government regulation has now been imposed across the value chain with the aim of enforcing sustainable farming of cocoa: by the governments of the Cote d’Ivoire and Ghana, which combined produce 60% of the world’s cocoa, and by the combined governments of Europe, regions which account for 76% of global chocolate consumption by value⁴⁷.

Figure 14: Europe, which this year has banned cocoa imports from deforested land, accounts for 76% of global chocolate consumption by value (58% by weight); additionally, the Cote d’Ivoire and Ghana, which combined produce 60% of the world’s cocoa, in 2019 formed a cartel and introduced tariffs on cocoa exports⁴⁸



The European and African regulations are likely a contributing factor to the cocoa price uplift now occurring

“The conclusion here is that cocoa beans will get more expensive. [But] the big question is by a bit, or how much more expensive?”

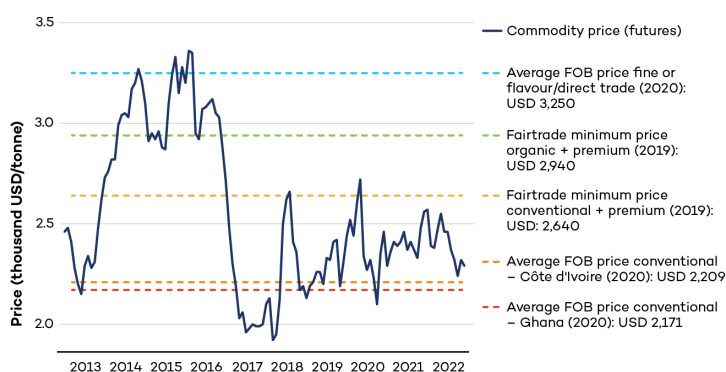
Martin Hug, Lindt CFO, Lindt H1 2019 earnings call, July 2019⁴⁹

The successive government regulations appear to imply that deforestation has been appraised as at a breaking point, and as such that increasingly direct restrictions are required. Demand for cocoa has continued to increase at the same time as there has been no increase in farming yields, and this has meant that cocoa-driven land area increase has otherwise continued to necessitate an unsustainable rate of deforestation, as a function of the higher yield initially available from deforested land.

However, to the extent a stoppage of the deforestation trajectory is successfully enforced, there is likely to be a cocoa price consequence. It is notable that even if no cocoa production declines occur, and simply, that deforestation stoppage also means that cocoa production stops growing, the price consequence exists. For example, if cocoa demand continues to increase by 2.1% per year, and deforestation – and therefore supply growth – ceases, the 5x multiplier detailed in Figure 5 implies an additional 10.5% inflation in the cocoa price per year, a similar figure to the 9% annualised cocoa price inflation in the decade following the acquisition by Berkshire Hathaway of See’s Candy.

In 2022, growing and selling cocoa which adheres to the EU’s sustainability protocols was estimated to lead to cocoa pricing at up to 30% higher, as per Figure 15. Since the EU legislation was approved in April this year (the legislation will be effective from Dec 2024)⁵¹, the cocoa price has increased by 27% to \$3,600⁵². The same price shift occurred at the longer durations of the cocoa futures curve, with 2025 cocoa prices at \$3,450⁵³.

Figure 15: According to the IISD and SSI, growing and selling cocoa which adheres to the EU’s sustainability protocols leads to pricing at up to 30% higher⁵⁰



Furthermore, over longer-term periods, it is not clear that a more sustained return to the mean can be ruled out: today’s ratio between Cocoa (in USD per ton) and Gold (in USD per Troy Ounce), at 1.78x, remains at a significant discount to its level at in excess of 15x prior to 1980⁵⁴.

The extent of the deforestation which has already occurred, combined with the continuing growth in cocoa demand, most likely removes scenarios of tariff removal

The rate of deforestation in the Cote d’Ivoire and Ghana, if not addressed, threatened to almost entirely remove rainforest from the countries

Since 1960, when Cote d’Ivoire gained independence, the country has lost 90% of its forests⁵⁵. According to the National Forest and Wildlife Inventory (IFFN), the forest cover decreased from 7.9 million hectares in 1990 to 2.97 million hectares in 2020⁵⁶. The rainforest today represents just 9% of the national territory, down from the nearly 50% in 1960⁵⁷.

Over the same 80 year period, Ghana has incurred forest losses of more than 65%⁵⁸. From 2001 to 2022, Ghana lost 1.53 Mha of tree cover, equivalent to a 22% decrease in tree cover since 2000⁵⁹. The pace of declines in Cote d'Ivoire and Ghana put them on a path, assuming no countervailing action, to lose all remaining forests outside their national parks in the next decade.

Figure 16: Between 1990 and 2020, Côte d'Ivoire's forest cover, according to the National Forest and Wildlife Inventory (IFFN), decreased from 7.9 million hectares in 1990 to 2.97 million hectares in 2020. Rainforest now represents just 9% of the national territory, down from the nearly 50% in 1960⁶⁰

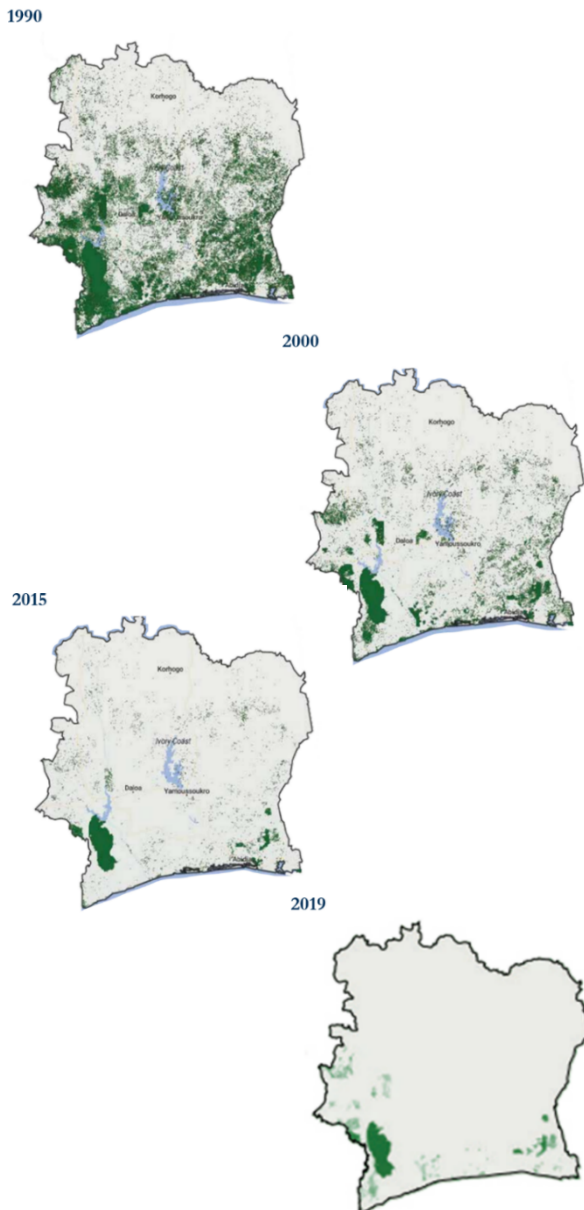


Figure 17: from 2001 to 2022, Cote d'Ivoire has lost 3.63 Mha of tree cover, equivalent to a 24% decrease in tree cover since 2000⁶¹

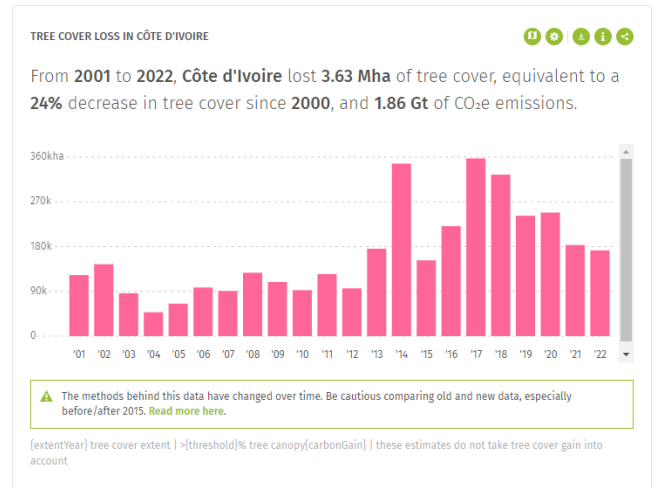
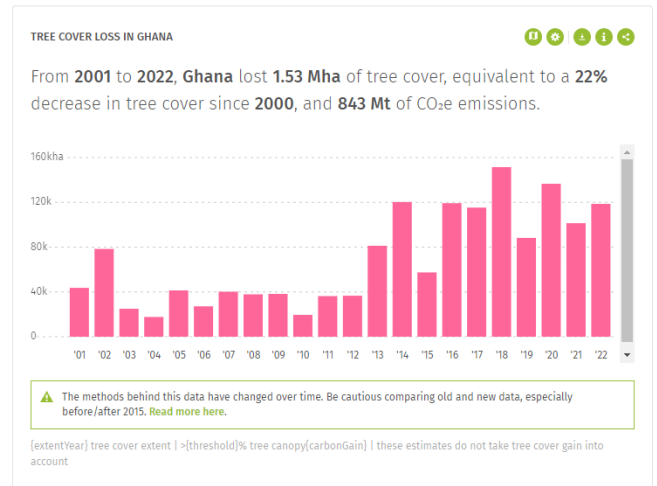


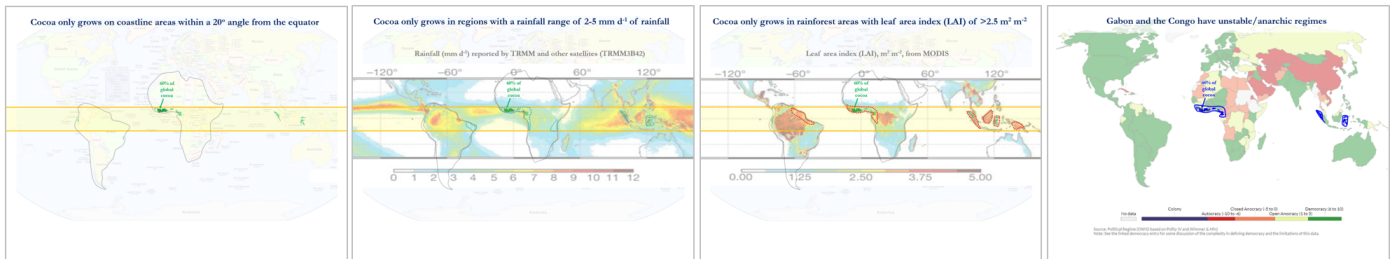
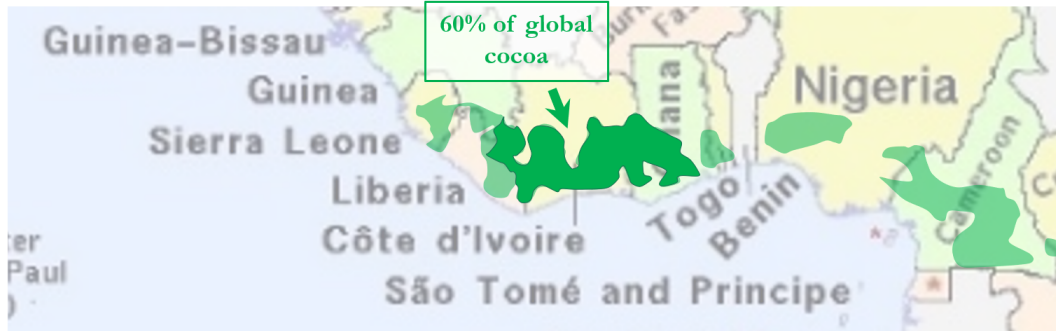
Figure 18: from 2001 to 2022, Ghana lost 1.53 Mha of tree cover, equivalent to a 22% decrease in tree cover since 2000⁶²



Alternative regions for scaled production of cocoa may not be readily achievable

Scaled cocoa production has only been successful in coastal regions⁶³, locations within a 20° angle from the equator⁶⁴, in regions with a rainfall range of 2-5 mm d⁻¹ of rainfall⁶⁵, and in rainforest areas with a leaf area index >2.5 m² m⁻².⁶⁶ Cocoa farming also requires areas with stable government regimes for robust long term international export arrangements⁶⁷. In other words, that 74% of global cocoa production remains concentrated in the four neighbouring countries of Cote d'Ivoire, Ghana, Nigeria and Cameroon⁶⁸, may remain an unavoidable path.

Figure 19: 60% of cocoa is produced in the Cote d'Ivoire and Ghana; climatic requirements act as a barrier to entry and result in lack of alternative regions for scaled production⁶⁹



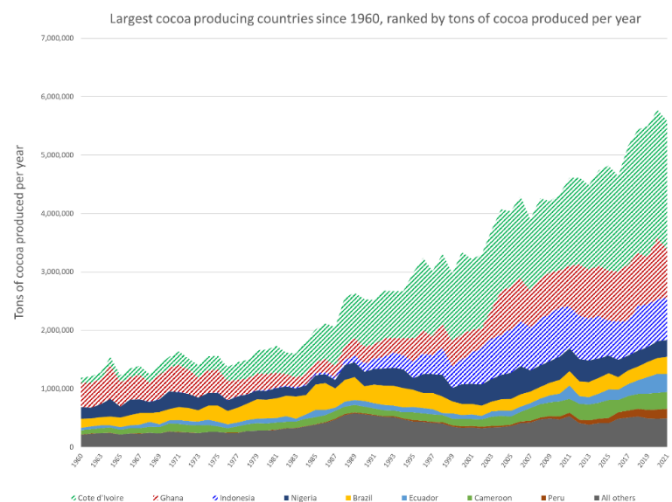
Today's relatively low-cost production of cocoa is also threatened by the same concentration of supply factors that has led to the prevailing trajectory of supply growth.

Cocoa production has grown since the 1980s from Cote d'Ivoire, Ghana and Indonesia which today produce 67% of the world's cocoa, relative to 42% in 1980⁷¹.

These regions produce 3.8m tonnes of cocoa per annum today, relative to 0.7m tonnes in 1980⁷². Should the supply growth from these regions change, it is questionable whether there are regions at present of comparable scale that are candidates for making up the balance.

It is also not clear that replanting programmes are cost effective, or even successful. Whilst companies such as Nestle have announced a spending programme of \$110m to replant cocoa trees, academic studies reveal that only 13% of replanted trees survive, and rainforest cover returns only – and eventually – as a result of natural growth from remnant trees⁷³.

Figure 20: Should the supply growth from Cote d'Ivoire and Ghana reverse, it is not clear that there are other regions capable of re-balancing supply⁷⁰



Deforestation, corresponding to lower rainfall precipitation, also correlates with increased disease, further threatening future cocoa production

Cocoa farming has also had susceptibility to disease vectors, leading to production impairments. In the early 1700s a disease known as “blast” collapsed the industry in Trinidad⁷⁴ and the “Frosty Pod” disease in the 1960s decimated the industry in Venezuela and Ecuador⁷⁵. In the 1980s, following a comparable deforestation policy error to that occurring in Africa today, Witches Broom disease wiped out more than 70% of Brazilian cacao plants⁷⁶. Today, subsequent to disease impairment, South and Central America constitute less than 20% of global cocoa production⁷⁷.

Recently, the African crop has become threatened by cacao swollen shoot virus “CSSV” and an insect pest called mirid⁷⁸. The CSSV disease trajectory, as per Figure 21, also correlates with deforestation. CSSV is now detected in 20% of Ghanaian cocoa plants⁷⁹ and is also prevalent throughout the Cote d’Ivoire⁸⁰.

“Cocoa is an understorey forest tree, it has been grown traditionally under the shade of smaller trees. The deforestation of Ghana has been associated with changes in the insect fauna of cocoa farms, which resulted in an increased rate of spread of Swollen Shoot Virus Disease (CSSV). Cocoa farms tend to have less pest problems when the conditions reflect those of the natural habitat, the multi-storeyed tropical high forest.”

Source: Disease and Sustainability in the Cocoa Agroecosystem, CABI Bioscience⁸¹

As per Figure 21, CSSV disease correlates with the drought stress from lower rainfall, and as such, deforestation is a primary disease driver, by reducing evapotranspiration. This year, there has also been a re-emergence of cocoa blackpod disease⁸². It cannot be ruled out that the increasing instances of disease seen today in cocoa are not one-offs, but are now an ongoing feature of the higher deforestation trajectory that has occurred.

Figure 21: Cote d’Ivoire and Ghana, subject to deforestation, which also corresponds to lower rainfall precipitation, now exhibit increasingly diseased cocoa, additionally lowering farming yield⁸³

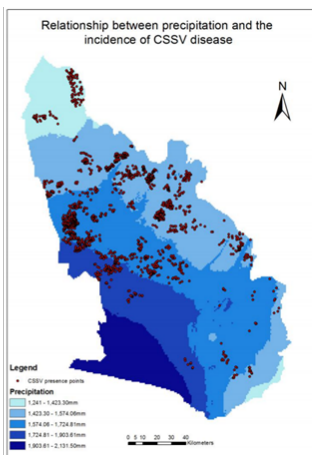
Geographical Distribution of Cacao swollen shoot virus Molecular Variability in Ghana

Abrokwah, F., Dzahini-Obiatey, H., Galyuon, I., Osae-Awuku, F., and Muller, E. 2016. Geographical distribution of cacao swollen shoot virus molecular variability in Ghana. Plant Dis. 100:2011-2017.

Table 1. Total number of cacao leaf samples collected from each region, percentage of detection, Cacao swollen shoot virus (CSSV) groups identified, and number of leaves labeled as suspects

Region	No. of positive samples/ total no. of samples	Detection (%)	Farms with positive samples (%) ^a	No. of suspected samples ^b	CSSV groups identified after sequencing
Ashanti	40/87	45.9	63.3 (7/11)	20	A and B
Brong-Ahafo	93/144	64.6	76.9 (10/13)	15	E and B
Central	82/139	58.9	100 (9/9)	15	B and L
Eastern	180/211	85.3	100 (14/14)	-	B
Volta	23/55	41.8	63.6 (7/11)	5	A, B, and C
Western	97/210	46.2	100 (18/18)	-	B, E, J, K, and A
Total	515/846	60.9	85.5 (65/76)	55	A, B, C, E, J, K, and L

^a In parentheses: number of farms containing positive samples/total number of farms.
^b Leaves collected from plants showing shoot and stem swellings (asymptomatic leaves) CSSV symptoms and from plants with indistinct leaf symptoms (colorations).



Cocoa surges to 13-year high as disease ravages West Africa crop

Ivory Coast, Ghana and Nigeria output affected as heavy rain hastens spread of blackpod disease

BL PREMIUM

03 JULY 2023 - 19:36

by MUMBI GITAU, TOLANI AWERE AND BAUDELAIRE MIEU

Cocoa soared to a 13-year high on Monday as heavy rain across West Africa accelerated the spread of a rot-causing disease, threatening output in some of the world’s biggest producers.

Farmers in Ivory Coast, Ghana and Nigeria have reported signs of blackpod disease, which causes cocoa pods to turn black and rot. That may the quality or curb output of beans. The disease can be catastrophic for supply, according to Fuad Mohammed Abubakar, head of Ghana Cocoa Marketing...

However, chocolate companies with durable competitive advantage pass on cocoa price rises, and more generally achieve inflation resilience and recession resilience

Chocolate company valuations cheapen when the cocoa price rises; chocolate company EBIT tracks cocoa prices

The success with which chocolate companies pass on price rises in cocoa to their customers can be observed in Figure 22, which tracks the historic year-on-year percentage change in the aggregate EBIT of Lindt and Hershey, matched to changes in the cocoa price.

Figure 22: Chocolate company EBIT progression broadly follows cocoa progression; close tracking between the two is observed in periods 2013-2016, and 2017-18 (2020-21 was disrupted by covid lockdowns)⁹¹

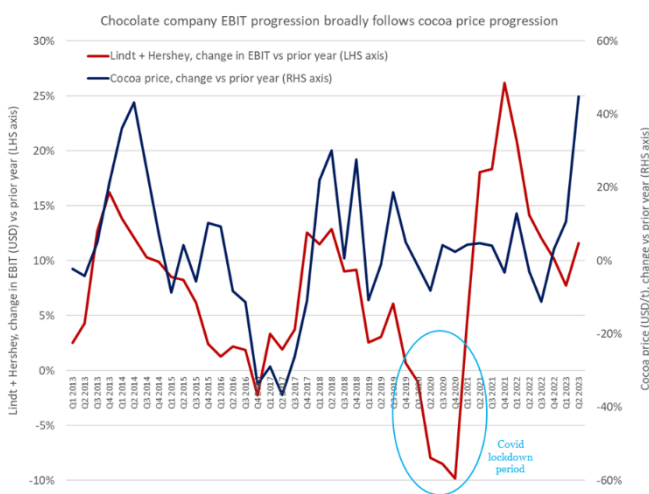
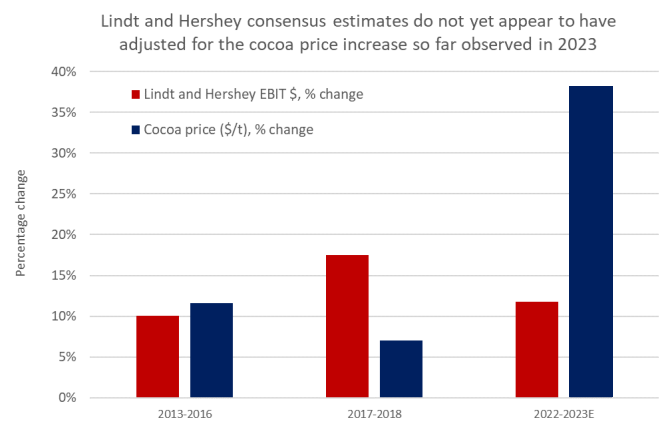
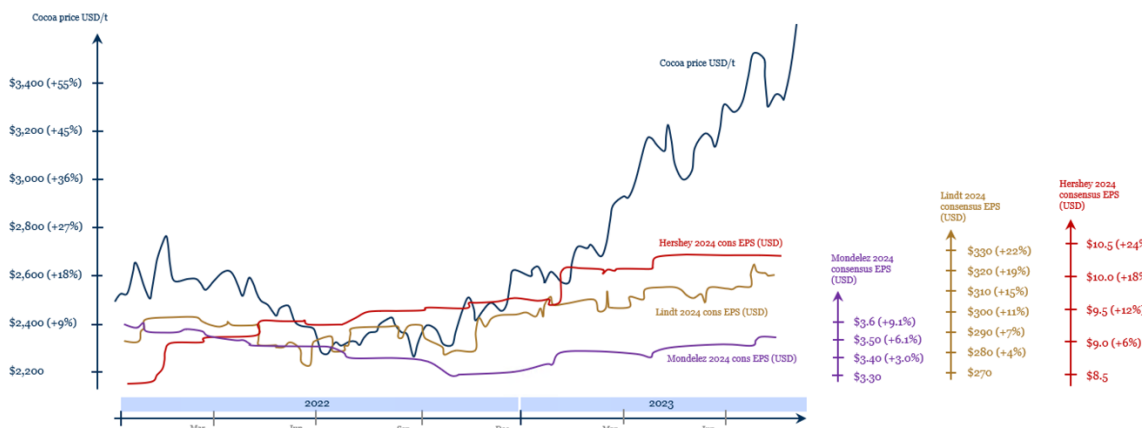


Figure 23: Lindt and Hershey estimates do not yet appear to have adjusted for the cocoa price increase so far observed in 2023⁹²



It is interesting however that the recent rise in the cocoa price since 2022 has not yet been meaningfully embedded into consensus earnings estimates for the chocolate companies. As per Figures 23 and 24, over last year consensus EPS estimates (2024) for Mondelez, Lindt and Hershey have risen by an average of just 9%, relative to the cocoa price increase of 38%.

Figure 24: In comparison to the average cocoa price level in 2022, the cocoa price has risen by 38% in 2023. The cocoa price increase is also more than 50% above its price level in H2 2022. By comparison, since H2 2022, the consensus EPS estimates (2024) for Mondelez, Lindt and Hershey have risen by an average of just 9%⁹³



As such, chocolate company valuations may not have yet priced in their improving economics

“With a brand like Lindt, we have possibility to increase prices.. we have put a lot of money behind our advertising, and that gives us more power to increase prices with the consumer, [and] with the trade”

Martin Hug, Lindt CFO, Lindt H1 2019 earnings call, July 2019⁹⁴

On consensus estimates 2024, US market leader Hershey trades at 20.7x PE with a 2.2% dividend yield, Mondelez trades at 19.9x PE with a 2.4% dividend yield, and premium chocolatier Lindt trades at 36.6x PE with a 1.3% dividend yield⁹⁵.

However, assuming earnings and dividend payouts increase linearly with the cocoa price level since H2 2022, less the average 9% earnings increase already incorporated by consensus estimates since, Hershey’s 2024 PE is cheapened to 14.6x with a 3.1% dividend yield, Mondelez to 14.1x PE with a 3.4% dividend yield and Lindt to 25.9x PE with a 1.8% dividend yield⁹⁶.

Chocolate companies with durable competitive advantage in general also achieve inflation resilience

As per Figure 25 below, well run chocolate companies have more generally delivered economic progress in excess of inflation. Hershey has grown long term revenue per share at 8.1% per annum, Lindt at 7.8% per annum, and Mondelez at 4.0% per annum. Hotel Chocolat since 2004 has grown revenue per share at more than 10% per annum⁸⁴. As such, these companies have all offered per shareholder economics well in excess the rate of inflation, further accreted by their profitability growth exceeding revenue growth⁸⁵ – and with shareholders also benefitting from dividend distributions.

Figure 25: Well run chocolate companies, by their properties of gaining market share from economics of scale and bundling advantages over time, have offered earnings growth above coca price inflation⁸⁶

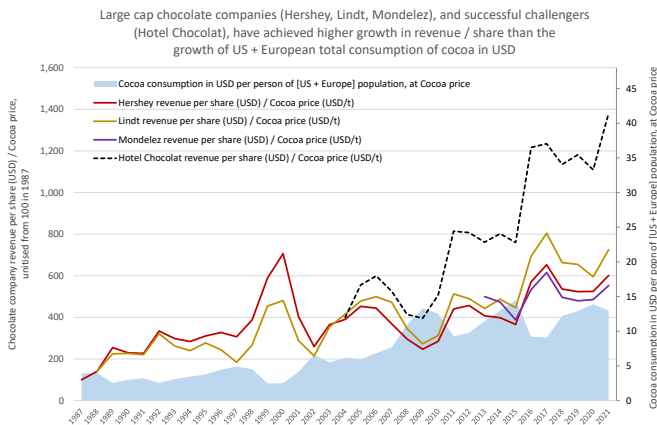
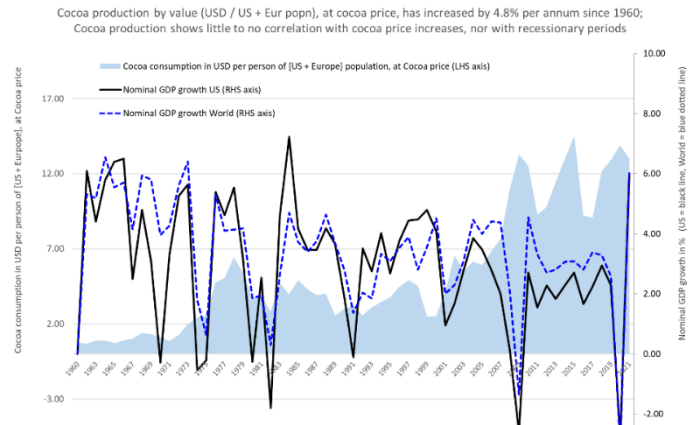


Figure 26: Recession resilience is also a characteristic of chocolate companies – consumers historically have consumed broadly the same volumes of chocolate irrespective of economic conditions⁸⁷



Chocolate companies with durable competitive advantage also possess recession resilience

It is also a characteristic of chocolate investments that they tend to be recession resilient – consumers historically have consumed broadly the same volumes of chocolate irrespective of economic conditions. This can be observed from Figure 26, where the light blue shaded area is the value of the volume of cocoa consumed per year, and the dark black and blue lines US and World GDP respectively. In the early 1970s recession (when Buffett acquired See’s Candy), in the early 1990’s recession, and in the 2008 financial crisis, as well as during the covid period, the per capita value of chocolate consumption rose.

Figure 27: Chocolate companies with durable competitive advantage also possess recession resilience

“In a recession, we should be able to grow volume” Lindt CEO, July 26, 2022⁸⁸

“In 1991, See’s sales volume, measured in dollars, matched that of 1990. [However] almost 80% of See’s sales come from California and our business [growth] was hurt by the recession.. despite the weakness, profits last year grew 7%, and our pre-tax profit margin was a record 21.6%.”

Warren Buffett, Berkshire Hathaway shareholder letter, 1991⁸⁹

“Families are looking for uplifting things in a tough environment, things that make you feel good.. people need chocolate.. we’ve seen this in other recessionary times before, for example 2008, we were very resilient.”

Angus Thirwell, Hotel Chocolat CEO, 2023⁹⁰

White paper case study: the economics of Hotel Chocolat, its UK growth plans, and comparison to See’s Candy

Market participants appear to be expressing scepticism with regard to the prospects of Hotel Chocolat, which trades at a deeply discounted valuation, following announcing a moderation of its revenue and profitability growth in 2022

Owner-managed Hotel Chocolat, listed on UK’s AIM market, is valued at 0.53x EV/Sales, an almost 90% discount relative to larger peers such as Lindt at 4.9x EV/Sales and Hershey at 4.4x⁹⁷. Furthermore, the company trades at a 37% discount to the 0.83x EV/Sales that Berkshire Hathaway paid for See’s Candy in 1973.

In the year ending June 2022, excluding exceptionals, Hotel Chocolat reported an 18% EBITDA margin and net income of £17.6m⁹⁸. As such, the market capitalisation of the company today, at £141m, implies a valuation at 8x trailing earnings, cheapening to 7x when an adjustment is made for the net cash position of the company. The valuation compares to the 12.5x multiple of earnings that Warren Buffett paid for See’s Candy in 1973.

A review of Hotel Chocolat’s 2022 guidance of near-term moderation of its revenue and profitability may suggest a more positive conclusion

In July 2022, Hotel Chocolat guided a moderation in its near-term revenue growth, at the same time as cost base increases⁹⁹. The announcement included, as per Figure 28, a pre-emptive recognition of higher prices to secure sustainable cocoa production, inflation in other cost base items, and as such may have surprised some investors. Prior to this guidance revenue growth had averaged 14% per annum for the trailing 8 years, and EBITDA growth had averaged 22%¹⁰⁸.

However, the guidance from Hotel Chocolat also included upward guidance from its longer-term growth investments, including a more than double in distribution centre capacity¹⁰⁰. Furthermore, medium term margin guidance, by June 2025, by taking out £5m of salaried overheads and creating a lower cost operating base¹⁰¹, was increased to a new high of a 20% EBITDA margin, as per Figure 34.

The guidance also included an assessment by the company that its UK addressable market size – or revenue potential – had significantly increased¹⁰².

Figure 28: The 2022 reset in Hotel Chocolat’s profitability guidance included higher prices for sustainable cocoa production and inflation in other cost base items. However, the company’s disclosures also included growth investments, including a more than double in distribution centre capacity¹⁰³

Category	Items	Assumed Duration (headwind)/opportunity	
Ongoing Op-Ex investments to support brand health and sustainability	<ul style="list-style-type: none"> Gentle Farming programme: paying higher prices for cacao to support farmer living incomes Paying living wage in UK, partly offset by productivity gains 	(300bps) headwind in FY23 and ongoing	Hotel Chocolat’s voluntary investments in brand ethics will come through in future economic growth through premium pricing
Opex investments now to support future profits via lower unit costs	<ul style="list-style-type: none"> New 10-year lease on a 2nd UK Distribution Centre in Northampton, operational H1 FY23. 	(300bps) headwind in FY23, diluting to flat vs FY22 by FY25 as volumes and operating efficiency increase	Hotel Chocolat’s distribution centre expansions are also a feature of its accelerating revenue growth trajectory
External inflation	<ul style="list-style-type: none"> Utilities and materials, partly mitigated by better buying and improved production efficiency (lower unit cost of goods and fulfilment cost per unit) Full reinstatement of UK property rates 	(>300bps) headwind in FY23, realistic objective for self-help to materially exceed inflation by FY25	Cost inflation headwinds are temporary, and will be fully offset over time by the pricing power of Hotel Chocolat’s premium brand

Figure 29: The guidance also included increase in EBITDA margin guidance (2025) to 20%, an all-time high. The company also guided that its addressable market size had significantly increased, likely due to the recognition by the company of the prospects for its Velvetiser Café and the Velvetiser hot chocolate product and refill sachets¹⁰⁴

Angus Thirlwell, Co-Founder and Chief Executive Officer, said:

“A year of exceptional sales growth following two years of reactionary tactics to the pandemic has left clear opportunities for us to proactively streamline overheads and improve gross margins. We have set ourselves the target of becoming a 20% EBITDA margin business within three years by applying systemisation, automation, and capacity investments to our 70% larger scale (FY22 vs FY19). **20% EBITDA margins achievable by 2025**

“While we expect a temporary lower sales growth rate and profit margin for FY23 as we carry through our adjustments, the result will be a business delivering greater results, with less risk and an even stronger balance sheet with a higher profit percentage growth in FY24 and FY25. **higher profit growth trajectory**

larger addressable market sizes

“We have discovered that our UK market can be a lot bigger for us than we thought a year ago, thanks to the new drinkable chocolate products (Velvetiser & Velvetised Cream alcohol) and the way our digital and stores businesses are performing.”

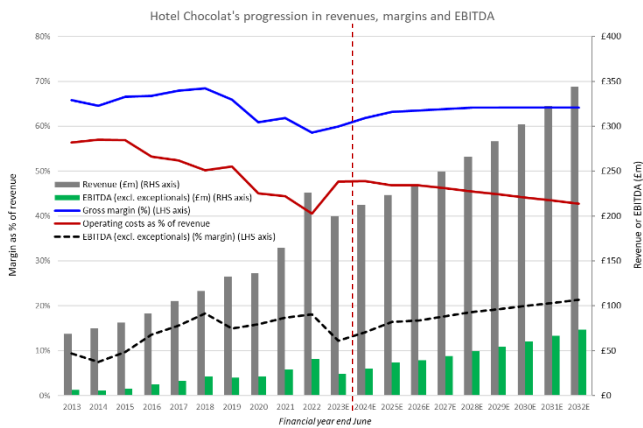
Hotel Chocolat’s longer term track record is also indicative as to the potential for future progress

Hotel Chocolat’s shares are listed on London’s Alternative Investment Market “AIM”, and it may be the case that this market has lower efficiency in pricing securities than the main London indices. In this context it is helpful to consider the company’s recent guidance in the context of its longer-term overall progress, combined with the publically disclosed economic forecasts from consensus analysts, as per Figure 30.

In the period from 2018-2022, Hotel Chocolat appeared to put its revenue growth ambitions (the period saw revenue double) ahead of profitability (gross margin declined by 10% of revenue, and EBITDA margin by 6% of revenue, over the four years)¹⁰⁵. As such, it does not appear unreasonable that the company should today have refocused on profitability, and in line with its presumption of success to have put forward guidance of an EBITDA margin exceeding 20% by June 2025, yet with a near term moderation in revenue growth whilst the cost base rationalisation is imposed.

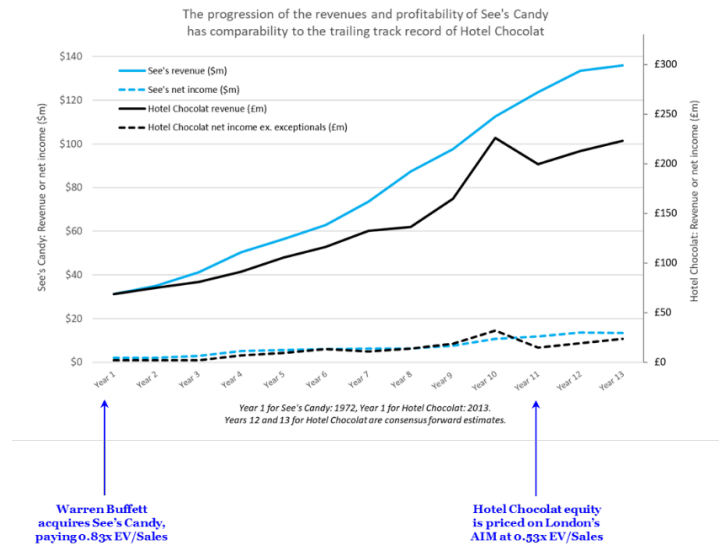
That these announcements were combined with investments for a continuation in a well above average volume growth rate over the medium term¹⁰⁶, is also not inconsistent with Hotel Chocolat’s longer term record¹⁰⁷. The implicit dismissal by market participants that medium term revenue growth and profitability recovery is the most probable outcome may be overly harsh in the context of this track record which suggests, overall, a business managed in line with a pleasing rate of shareholder value creation over most time periods.

Figure 30: The market’s implicit dismissal that Hotel Chocolat’s medium term growth and profitability recovery is realistic may be overly harsh in the context of its longer-term track record¹⁰⁸



Note: forecast period is publicly disclosed consensus estimates

Figure 31: Hotel Chocolat trades at a more than 37% discount to the 0.83x EV/Sales that Berkshire Hathaway paid for See’s Candy in 1973. The companies have delivered similar business performance KPIs despite no increase in the cocoa price over the trailing 10 year period for Hotel Chocolat¹⁰⁹



It is also notable that Hotel Chocolat appears to be delivering business performance KPIs comparable or superior to that historically achieved by See’s Candy. Hotel Chocolat is producing 300m units of chocolate per year¹¹⁰, and assuming the 100g per unit (of its boxed chocolate ranges¹¹¹ as representative for the group average, this implies a production of 66m lbs of chocolate per annum. Hotel Chocolat has 126 stores¹¹², as such, Hotel Chocolat is achieving an annual sales density of 0.5m lbs of chocolate per store, significantly higher than the 0.12m lbs per store achieved by See’s Candy in 1984¹¹³.

A further differentiation between Hotel Chocolat and See’s is that Hotel Chocolat has elected to reinvest its surplus capital into new store openings to drive volume growth, whereas See’s – under Buffett – distributed 98% of its profitability to Berkshire Hathaway. As per Figure 31, the progression of revenues and profitability at Hotel Chocolat over the last 10 years (to June 2022) matched that achieved by See’s Candy in the decade following Berkshire Hathaway’s investment, despite the cocoa price showing no increase over the 10 year period for Hotel Chocolat¹¹⁴, versus a 9% average increase in the cocoa price for See’s Candy, matched by its own price rises, from 1973-1984.

Hotel Chocolat has achieved this trailing growth rate by volume increases. In 2013, Hotel Chocolat’s volume was 100m pieces per year¹¹⁵, yet by 2022, this had increased to 300m pieces per year, an annual rate of increase of 12% per year. Over the same period, the coca price showed no increase, and as such the company’s revenue growth, at 14% per year, was primarily driven by this increase in volume.

Hotel Chocolat continues to invest surplus capital to meet its volume growth aspirations

In July 2021 Hotel Chocolat announced, alongside a £40m equity placing transaction, that the company’s factory footprint would be increased to 160,000 square feet, sufficient to increase revenues, assuming no inflation, to £500m¹¹⁶. Given Hotel Chocolat’s revenues for the year to June 2024 are estimated by consensus at £211m¹¹⁷, there exists a wide gap between capacity and current revenues.

More recently, as per Figure 32 below, Hotel Chocolat has communicated to its investors that it has built capacity sufficient for 1bn pieces of chocolate annually, implying revenue potential has increased to £750m (£0.75 per chocolate piece sold).

Figure 32: Hotel Chocolat has communicated to its investors that it has capacity in place to take production volumes to 1bn chocolate pieces per annum, implying the potential for, given the company charges c. £0.75 per chocolate piece sold, close to £750m in revenues¹¹⁸

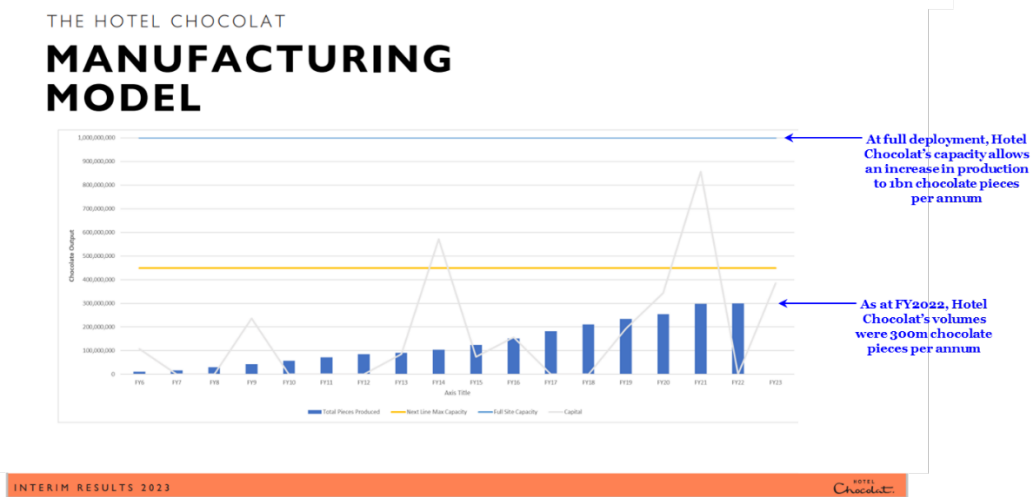


Figure 33: Hotel Chocolat’s factory expansion plans increase square footage from 80,000 square feet in 2022 to 195,000 square feet by 2026¹¹⁹

Hotel Chocolat Hadley Park Huntingdon factory
45k sq ft, 2020

Hotel Chocolat Huntingdon factory
80k sq ft, 2022

Hotel Chocolat Huntingdon factory
195k sq ft, by 2026

Figure 34: Hotel Chocolat’s distribution capacity is also expanding, from 336,000 square feet in 2021 to an additional 429,000 square feet from 2023¹²⁰

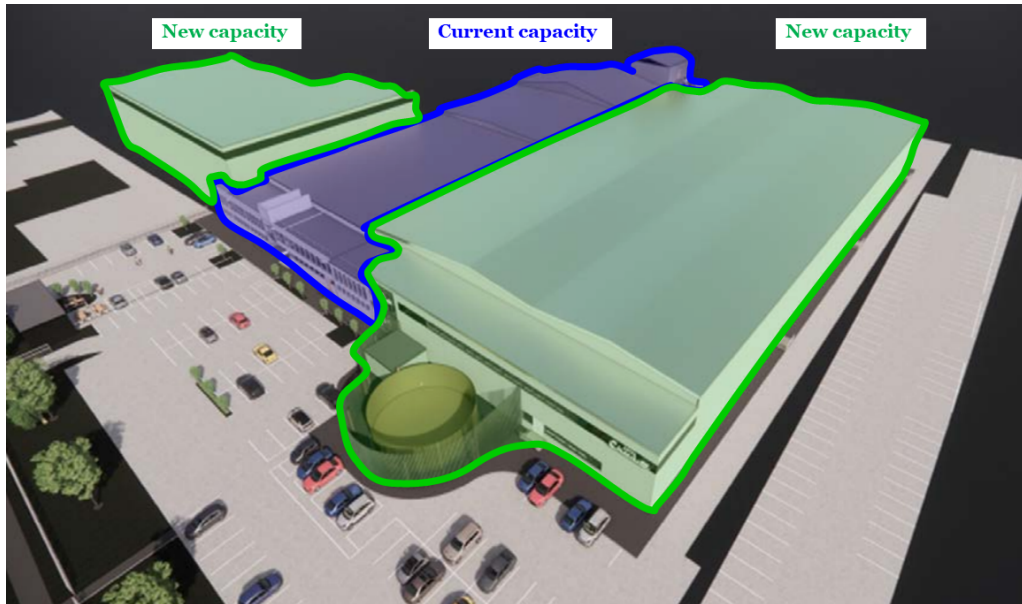
Hotel Chocolat St Neots DC had 114k sq ft in 2019, expanded to 336k sq ft, from 2021

Hotel Chocolat Northampton DC, adds 429k sq feet, from 2023 onward

* rental cost £2.5m a year

As per Figures 32, 33, 34 and 35, Hotel Chocolat’s capacity expansion disclosures can be triangulated with other public domain disclosures relating to the company’s factory expansion planning permissions, as well as permissions to increase factory worker shifts by 50%, from 16 hours a day to 24 hours a day¹²¹.

Figure 35: A higher resolution view of Hotel Chocolat’s factory expansion plans reveal two new building constructions adjacent to their current capacity¹²²



(white paper continues on next page)

Hotel Chocolat is deploying its capacity surplus with a new store design incorporating the Velvetiser Café, combined with volume growth from its Velvetiser-for-the-home product, and associated orders for refill sachets

Enhanced store design and new store openings, incorporating Velvetiser Café

In order to deploy its surplus capacity, Hotel Chocolat is focusing on its store model, from which it derives 55% of its revenue (the remainder online orders).

Hotel Chocolat has 126 stores, and generates approximately £1.0m in net retail revenue per store (if online revenue is also attributed on a per store basis, the per store revenue rises to £1.6m, resulting in group revenue at £211m)¹²³.

Hotel Chocolat has installed its Velvetiser Café so far in 40 of its existing stores¹²⁴. The concept, broadly a “Hot chocolate Starbucks”, generates surplus footfall to the stores as well offering chocolate beverages to order, either for in-store consumption or take away. Velvetiser Cafés generated £7.1m of within-store revenue in the last 12 months¹²⁵, or £0.18m per store.

Hotel Chocolat has disclosed plans to increase its total store count to 174 stores by over the next four years¹²⁶, and, assuming each new store includes a Velvetiser Café, the expansion should contribute an additional £60m in retail revenue to Hotel Chocolat. Assuming the same per store incremental online growth, an additional £95m total revenue would be added at group level, an increase of +48%.

Velvetiser-for-the-home chocolate sachet re-orders also to drive per store revenue


In 2018, Hotel Chocolat also launched a for-home version of its Velvetiser¹²⁷, a drinking chocolate equivalent of a Nespresso machine, designed to heat and mix (Velvetise) milk combined with Hotel Chocolat’s speciality chocolate shavings (separately purchased as refill sachets) to offer a premium coffee shop type beverage prepared in the home.



Sarah Butler
 @whatbutlersaw
 Fri 23 Dec 2022 11:32 GMT

How expanding its vegan range is helping Hotel Chocolat grow - with a little help from robots

Additional technology - and potential extension to factory - could help raise production to up to 1bn chocolates a year



Shiny tanks of molten chocolate stand guard over a factory floor where three production lines squirt, chill and fill festive treats into existence.

Production of Hotel Chocolat’s Christmas selection starts in June at its factory in Huntingdon, Cambridgeshire, and finishes several weeks before Christmas, when it switches to making Valentine’s Day and Easter delicacies.

Christmas is by far the busiest time of year for Hotel Chocolat’s shops, where sales easily outstrip Easter, the traditional time for a chocolate binge.

This year, robots have been shouldering a bigger share of the work in making peanut butter and jelly confectionery and batons of dark chocolate as the company copes with rising costs that led it to report an annual loss this year, after a bumper time during the coronavirus pandemic, when sales jumped by two-thirds over two years.

On one production line, workers in hairnets and white coats sprinkle florentine and biscuit pieces into moulds for chocolate Christmas wreaths. The process requires only six people, down from 36 previously, as new robots lift the chocolates from their moulds using suction.

An additional gadget will place chocolates into their presentation box, a process currently done by hand, to save more time and labour costs. It means employees’ efforts can be concentrated on giving a hand-finish to chocolate treats.

Angus Thirlwell, a co-founder and the chief executive of Hotel Chocolat, says: “We now have the scale and stability in the ranges that we can use automation to become a smarter manufacturer.”

Melted chocolate is poured into a large metal vat at Hotel Chocolat’s factory in Huntingdon. Photograph: Antonio Olmos

1a. Hotel Chocolat is investing in automation to increase efficiency of production in its factories

Hotel Chocolat’s factory employs about 250 people across three shifts 24 hours a day, five days a week

He says a machine that puts the card cushion on top of a finished box of chocolates, for example, has paid for itself in only six months.

Hotel Chocolat’s factory employs about 250 people across three shifts 24 hours a day, five days a week, with only a handful of extra agency staff required at peak times, thanks to automation.

2a. Hotel Chocolat is also increasing production from 300m chocolates a year to 1bn

Additional technology - and a potential extension to the factory complex - could also help extend production to up to 1bn chocolates a year from up to 300m at present.

Automation has been important in meeting demand for Hotel Chocolat’s hot chocolate drink sachets - created for its Velvetiser drinks maker - another rapid growth area.

Production of the sachets started in 2019 with an adapted herb grater processing solid chocolate to create 5m sachets of chocolate flakes a year. That process was gradually improved to get to 15m.

Now a new system creates flakes from piped strips of chocolate that are then chilled and broken into flakes by rollers able to create 55m sachets a year at present and, eventually, up to 180m.

2b. Hotel Chocolat is also increasing Velvetiser flake production from 15m flakes a year to 180m

A many-pronged automated rotating packing machine then ensures each sachet has the right amount of flakes and is sealed up before sending on each packet to be automatically slipped into the cartons of 10 they are sold in.

The newest stage of automation is a machine that builds a packing box for six cartons and delivers the box on to a pallet - meaning that 16 fewer people are required in the packing process.

“The stereotype of our type of manufacturer is legions of low-paid people doing menial work,” Thirlwell says, adding that technology allows it to concentrate on better-paid full-time roles with people who can quickly adapt to help test new ideas rather than spending time making up boxes.

“We have got the opportunity as a British manufacturer to step up to the next level,” he says.

1b. Hotel Chocolat is investing in automation to increase efficiency

Velvetiser's business model is installed base + refills, that is, the Velvetiser is offered to prospective customers at relatively low cost (currently £69.95), with Hotel Chocolat predominantly making money on a subscription model basis from the re-ordering of the refill sachets which cost £13.50 for each box of 10¹²⁸.

Over the last 12 months, Hotel Chocolat's retail revenues from Velvetiser-for-the-home (that is, Velvetiser and refill sachets) has risen to £24m¹²⁹, from £2m in 2019¹³⁰, a growth rate of 86% annualised. As such, this element of Hotel Chocolat's retail business has also contributed £22m in like-for-like sales growth, or a 24% sales uplift.

Recently, Hotel Chocolat has launched new hot chocolate flavours, including coconut milk chocolate, chocolate latte, and chilli chocolate, and in total now has more than 20 different flavours¹³¹. Assuming continuing innovation is successful in further growing the Velvetiser installed base, it seems reasonable to contend that Velvetiser can help drive an additional 20% like-for-like retail sales uplift over the next four years, which would be an additional £25m of revenue, and which assuming the same percentage growth for online orders, would be +20% at group level.

Conservative guidance, relative to capacity potential, can be a strategic business advantage

As such, with the new store roll out and increasing growth from Velvetiser and refill sachets combined, the implication from the guidance provided by Hotel Chocolat is that the company can target over the next four years in the region of 80% volume uplift in the UK (i.e. + 48% followed by +20%). Such a volume increase, even when excluding any further increases in the cocoa price to output the revenue implication, still implies 16% annualised volume growth – well in excess of the 2% volume growth per annum achieved by See's Candy in the period following the acquisition by Berkshire Hathaway.

However, it is notable that the capacity built by Hotel Chocolat, as per the Guardian article on the prior page, allows for a far higher increase in volumes, from 300m chocolate pieces per year to 1bn. Over the same four year period, this would imply volume growth at up to 35% annualised.

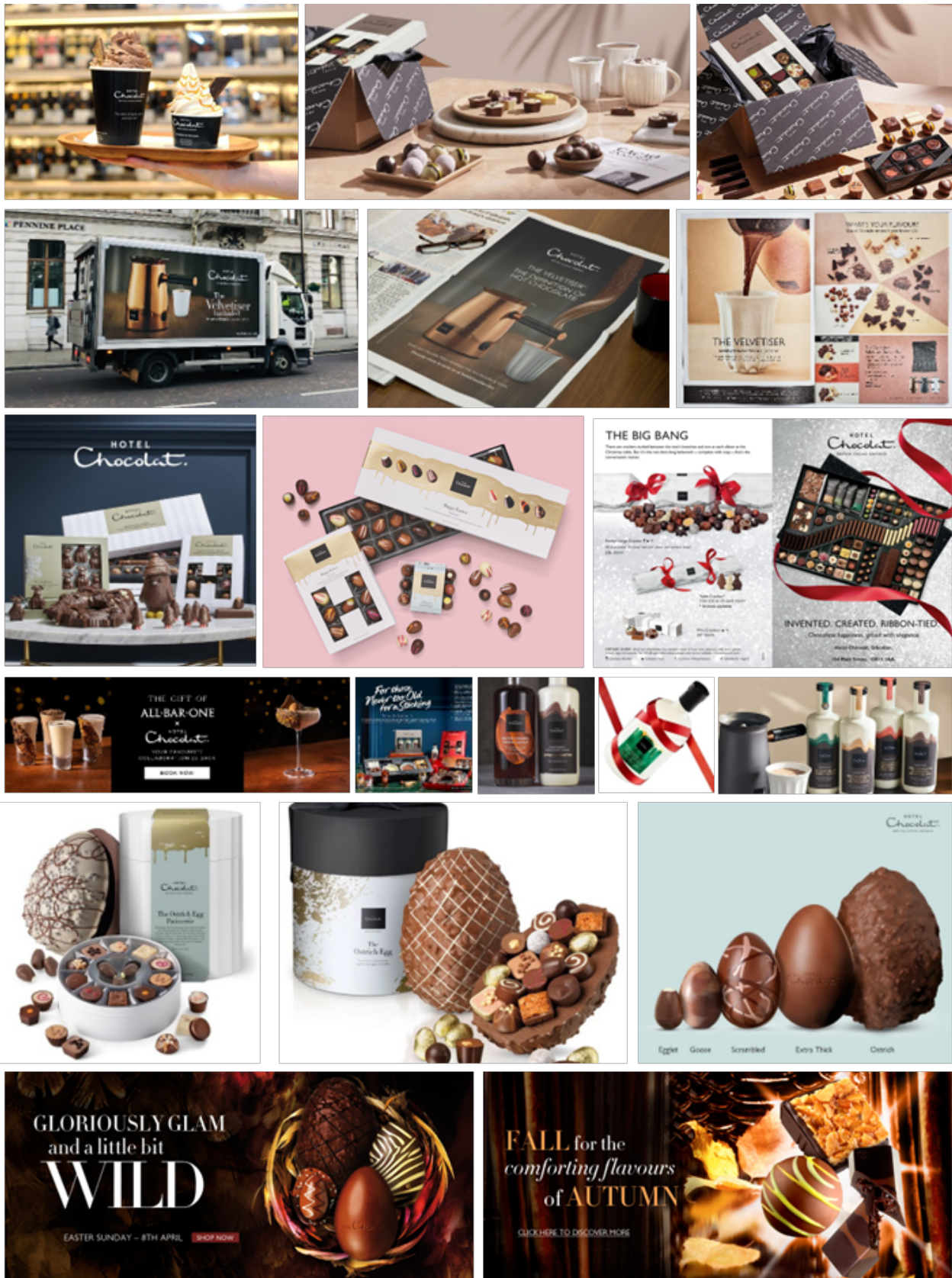
Also disclosed from the article – matching other Hotel Chocolat disclosures – is that for the Velvetiser refill flakes, the capacity build will allow an increase in production from 15m flakes per year to 180m flakes¹³², a growth in Velvetiser refill volumes of 86% annualised. At £1.13 a Velvetiser sachet, the increase of 165m sachets alone implies £186m of incremental Velvetiser refill revenue, relative to the £49m in our estimates above.

Whether this volume can be deployed into UK market alone is not within Hotel Chocolat's disclosures. However, to the extent the Velvetiser Café format becomes a success, the reasonable answer is yes. At Hotel Chocolat's publically disclosed target of 50 new stores, if all have the Velvetiser Café installed, and adding to this the 40 stores already with the Velvetiser Café, this would still sum to 90 Velvetiser Cafés in the UK. This is in comparison to Costa Coffee with 2,800 stores and 300 drive-thru sites in the UK¹³³ and Starbucks with 1,200 stores and 280 drive-thru sites in the UK¹³⁴. Comparably, an alternative is to assume the Velvetiser-at-home product is purchased by 10% of the UK's 26m homes: 165m flakes per annum would require each home ordering 10 refill sachets (one per drink) monthly.

Generally speaking, it is not necessarily disadvantageous for a potentially aggressive business plan to downplay its ambitions in the public domain, because the superior business outcome may also require concealment from competitors. Hotel Chocolat's product quality, branding and advertising, combined with its combination of physical stores and online ordering, have already made the company a force to be reckoned with in the UK confectionary market, as per Figure 36, and the company may rightly be sensitive to unnecessarily provoking competitive responses to its prospective growth.

Another avenue in which Hotel Chocolat has the optionality to use its surplus Velvetiser capacity is as a "Trojan Horse" to further penetrate adjacent geographic regions. Hotel Chocolat already has joint venture partners for Japan and the US, although growth in these regions was stated by the company in 2022 as having been de-prioritised¹³⁵.

Figure 36: Hotel Chocolat’s product quality, branding and advertising, combined with its combination of physical stores and online ordering, have made the company a force to be reckoned with in the UK confectionery market



Hotel Chocolat has recently recommenced its store opening programme with a focus on larger, out of town stores incorporating the Velvetiser Café

Regarding Hotel Chocolat’s plans to increase its total store count to by an additional 50 stores over the next four years, new store openings have commenced in recent months. In June, the company announced a focus on its out-of-town format, with plans to open a further five new stores in retail parks before Christmas¹³⁶. In August, Hotel Chocolat announced three new store openings: in Sevenoaks, Glasgow Fort, and Leeds¹³⁷.

Figure 37: site visits to Hotel Chocolat stores generally reveal promising levels of footfall, combined with well trained and positive store staff¹³⁸

Traditional Hotel Chocolat store design



Hotel Chocolat is rolling out Velvetiser Café to an increasing number of stores, driving footfall

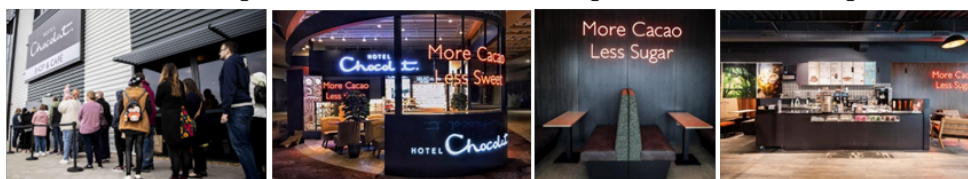


Figure 38: Similarly, the stores of See’s candy reveal attractive overall footfall and professionally managed retail units, however, they lack Hotel Chocolat’s additional footfall driver from an equivalent of the Velvetiser Café¹³⁹

See’s Candy stores have no equivalent Café concept



Whilst the new stores include within them the traditional Hotel Chocolat format, there is also a clear focus on incorporating the Velvetiser Café. For example, the Leeds store opening spans 3,550 feet, and can seat in its café up to 48 guests¹⁴⁰. Similarly, the Glasgow store opening spans 1,900 feet, and can seat in its café up to 38 guests¹⁴¹. The square footages of the new store openings are hardly bite-sized: the average area of an existing Hotel Chocolat store is 700 square feet¹⁴² and the average Starbucks square footage is 1,750¹⁴³.

“ Whether you’re after a relaxing drink in our Velvetiser Café or would like to explore our range of top-quality chocolate, our new concept store at Glasgow Fort offers guests the opportunity to shop at a more leisurely pace. This latest opening is part of our plans to launch many more stores across the country in the next 3-5 years.”

Hotel Chocolat co-founder Peter Harris, August 2023¹⁴⁴

“ We’re making retail park experiences that much more enjoyable with the opening of Hotel Chocolat at The Springs Leeds. Physical stores are extremely attractive and the beauty of being out-of-town is that we have good accessibility and parking so people can visit with ease.”

Hotel Chocolat co-founder Peter Harris, August 2023¹⁴⁵

To the extent there is also an out-of-town focus for Hotel Chocolat’s new store destinations, this dictates a product and retail experience that consumers explicitly drive to, rather than walk past as part of a general high street experience which already offers high footfall. The result – assuming success – will be that Hotel Chocolat benefits from lower rent per square foot, and as such, lower financial risk.

The apparent scepticism of fund managers regarding prospects of Hotel Chocolat may also be because of the lack of success of Thornton’s Chocolates, a UK high street chocolatier which fell into revenue stagnation¹⁴⁶ albeit ultimately was purchased by Ferrero in 2015 for £112m¹⁴⁷. However, it is still notable, despite the challenges faced by Thorntons, that its shareholders in the sale to Ferrero achieved a valuation of 0.65x EV/Sales¹⁴⁸, or a 28% premium to the valuation multiple that Hotel Chocolat trades at today.

By further comparison, whilst the financial risk possessed by an equity investment in Thornton’s was amplified by the company’s net debt position¹⁴⁹, Hotel Chocolat has a net cash position¹⁵⁰. Additionally, and unlike both Thorntons and See’s Candy, Hotel Chocolat is overseen by two owner managers – Angus Thirwell and Peter Harris – with significant skin-in-the-game shareholdings of 27% each¹⁵¹.

As noted, Thorntons also had a different operating model in terms of store locations, in that Thorntons targeted high footfall locations, the best streets in each catchment area¹⁵². This led to onerous rental burdens and is in comparison to the Hotel Chocolat aspiration to target a more long-term sustainable model. As such, the lack of “destination” concept to both the Thornton’s product and store concept led to gross margins as low as 43% and store rental payments as high as 32% of retail revenue¹⁵³. By comparison, and despite some moderation in margin recently at Hotel Chocolat, its last reported gross margin remained at 62%, with its store rental payments below 15% of retail revenue¹⁵⁴.

Footnotes

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