Production capacity

Introduction

1. This appendix assesses the current level of production capacity and spare capacity at the major own-label CSD suppliers.

Capacity by manufacturer

2. Table 1 shows nameplate capacity for each manufacturer by type of soft drink. Nameplate capacity is a hypothetical figure defined as the production that would be achieved by a production line operating 24 hours a day, 365 days a year. Lines that can produce CSDs are either dual lines, which are capable of producing CSDs and other products such as DTT drinks, or dedicated CSD lines.

TABLE 1 **Nameplate capacity by manufacturer**

Company	*Dual lines (capable of CSD and/or DTT/still/water production)*		*CSDs*		*DTT drinks*		*Still drinks*		*Bottled water*		*Total*	
	Lines	*Capacity m litres*	*Lines*	*Capacity m litres*	*Lines*	*Capacity m litres*	*Lines*	*Capacity m litres*	*Lines*	*Capacity m litres*	*Lines*	*Capacity m litres*
Cott												
Macaw												
Princes												
Silver Spring												
Villa												
Total												

Source: Staff communications with own label CSD manufacturers

Capacity utilization

3. The available capacity of a CSD production line is generally significantly below its nameplate capacity.[1] The factors that cause this reduction are:

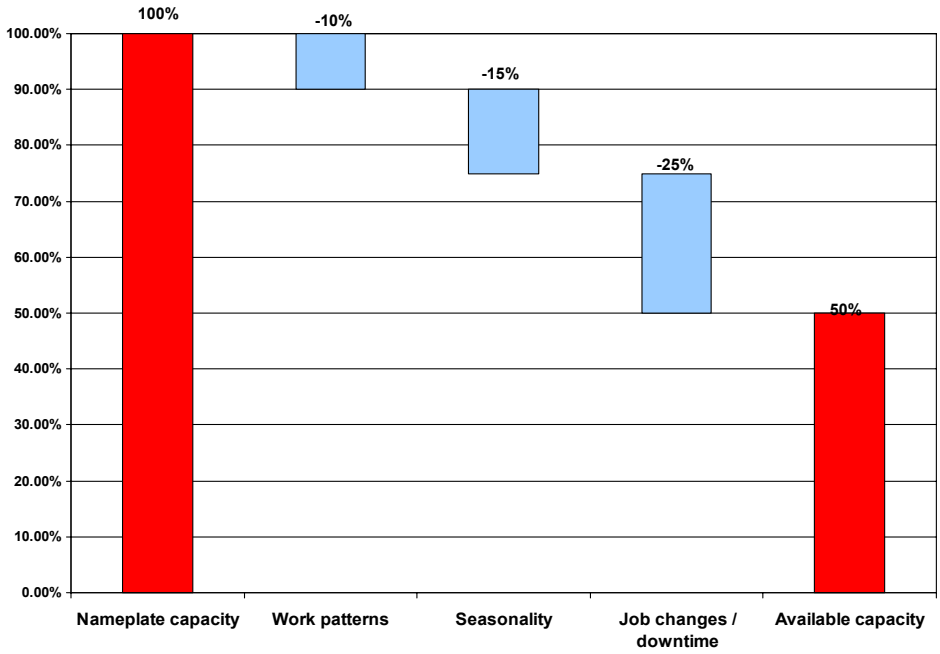
- *work patterns:* 24x7 working is not the standard working pattern across the year;

[1]Nameplate capacity is based on a production line running continuously throughout the year.

- *seasonality:* factors such as retailer shelf life requirements mean that a factory can rarely produce at its maximum output across the year even if stock management is used to balance seasonality as much as possible;
- *job changes:* to allow for downtime when switching between different flavours, packaging formats, bottle shapes etc; and
- downtime for planned and unplanned maintenance.

FIGURE 1

Available capacity and its relationship to nameplate capacity



Source: CC Analysis
Note: Individual reductions from nameplate capacity are shown for illustrative purposes.

Cott capacity definition

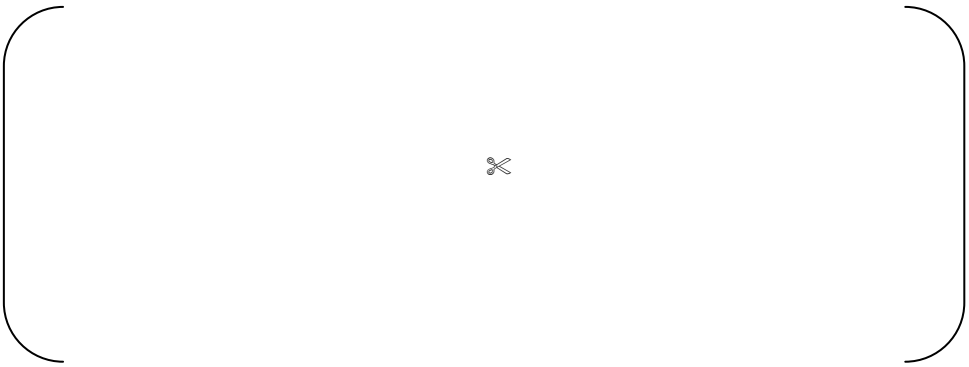
4. Cott defines capacity slightly differently to the method illustrated in Figure 1. Figure 2 shows a worked example from Cott for Kegworth. The Cott definition of capacity assumes:

- production lines operate in 24x7 mode throughout the year and so no reduction is necessary for shift patterns; and
- no reduction is necessary for seasonality because Cott believes that seasonality can be managed through stock build up and run down during the year.

5. The only reduction from Figure 1 that is considered relevant by Cott is the reduction due to job changes.

FIGURE 2

Cott's definition of capacity



Source: CC analysis

Capacity estimates from other major own-label CSD producers

6. Each of the major own-label CSD producers was asked to produce estimates of capacity for their PET bottled[2] CSD, DTT, still drinks and bottled water lines, showing the reductions in capacity caused by work patterns, seasonality and product changes or breakdowns. The figures for only those production lines that are currently able to produce CSDs are shown in Table 2 and subsequent tables. This is consistent with Table 5 in the provisional findings.

[2]Canning lines are excluded from the analysis.

TABLE 2 **Manufacturers' capacity estimates**

	% reduction due to work patterns	*% reduction due to seasonality*	*% reduction due to product or line changes or breakdowns*	*Total % reduction*	*Nameplate capacity million litres*	*Target maximum (ie usable) capacity*	*Spare capacity million litres*	*2006 Estimated sales million litres*
Cott Macaw Princes Silver Spring Villa	[redacted]							

Source: Staff Communications with own-label CSD producers.

Note: [redacted]

7. Key points from Table 1 are:

- [redacted] suggest that the figures should be reduced by a significant amount to reflect work patterns;
- all the producers except Cott believe that the figures should be reduced to reflect the impact of seasonality of sales;
- while [redacted] are more conservative, the [redacted] capacity figures overall are similar to the Cott figures; and
- the Cott figure for reductions due to line changes and breakdowns is considerably higher than that for other producers.

8. [redacted] Cott also suggested that it would not always be practical or economic to operate in a 24x7 manner, and we have assumed a 10 per cent reduction to reflect this.

9. Table 3 shows a set of revised capacity estimates taking into account the variations set out in paragraph 7. The adjusted figures look more consistent, with reductions at Cott, Macaw [redacted] between 50 and 51 per cent, [redacted]. This suggests that as producers get larger, the operation becomes more efficient.

TABLE 3 **Adjusted capacity estimates**

	% reduction due to work patterns	*% reduction due to seasonality*	*% reduction due to product or line changes or breakdowns*	*Total % reduction*	*Nameplate capacity million litres*	*Target maximum (ie usable) capacity*	*Spare capacity million litres*	*2006 Estimated sales million litres*
Cott								
Macaw								
Princes								
Silver Spring								
Villa								

Source: Staff Communications with own-label CSD producers.

10. A more conservative approach to estimating capacity, and spare capacity, compared with the adjusted estimates included in Table 3 is to base these estimates on existing work patterns at each own-label CSD producer, rather than a 24x7 working pattern. Table 4 shows our capacity estimates on this basis.[3,4]

TABLE 4 **Adjusted capacity estimates under existing work patterns**

	% reduction due to work patterns	*% reduction due to seasonality*	*% reduction due to product or line changes or breakdowns*	*Total % reduction*	*Nameplate capacity million litres*	*Target maximum (ie usable) capacity*	*Spare capacity million litres*	*2006 Estimated Sales million litres*
Cott								
Macaw								
Princes								
Silver Spring								
Villa								

Source: Staff Communications with own-label CSD producers.

[3] [✂]
[4] [✂]