TOO MUCH CHOCOLATE?

UNDERSTANDING AND MANAGING THE CASH CONVERSION CYCLE IS VITAL FOR ALL ORGANISATIONS, AND AN ESSENTIAL SKILL FOR TREASURERS. DOUG WILLIAMSON SHOWS HOW EFFECTIVE MANAGEMENT CAN RELEASE MUCH-NEEDED CASH AND BOOST LIQUIDITY

As a treasurer you are not only responsible for investing cash safely. You also need to understand the cash conversion cycle (CCC), and its fundamentally important role in operations. In simple terms, the CCC reflects our efficiency in managing inventory (stock), receivables and payables. We'll start with inventory, as it's the easiest to visualise.

Chox Group

Let's take a simple example. Say we all work for Chox Group. Our business is buying and selling chocolate. We also hold inventories of chocolate.

We'll have to pay for the chocolate, of course. The more cash we invest into chocolate, the larger our inventories, and the smaller our cash balances.

Good management includes holding appropriate levels of working capital, not too much and not too little. To develop this idea further, let's define some key concepts.

Successful working capital management (WCM) includes identifying an appropriate safe level of inventory to minimise stock outs, as well as managing supplier, customer and internal operational relationships.

To do that, we need some key numbers to compare and discuss. First, let's quantify inventory days for Chox Group.

Inventory management terms

Inventory days
How long would our inventory last if we didn't replace it? This is our investment in inventory, measured in days.
Stock out
A situation in which levels of inventory (stock) are too low to meet demand. Stock outs can lead to delays, loss of revenue, additional costs and loss of goodwill. Clearly, we want to avoid stock outs.

Financial data

We have the following information from Chox Group's management accounts:

Profit and loss account extracts (£m)	
Revenue	180
Cost of sales	100

Balance sheet extracts (£m)	
Inventory	35
Receivables	9
Payables	11

Inventory days

A simple formula for inventory days is:

Inventory / cost of sales x 365
= 35 / 100 x 365
= 128 days

This seems a very high level of inventory, likely to be too high. We will return to this.

Continuing to focus on key numbers for now, let's extend our understanding into the broader operating cycle.

Operating cycle terms

Receivables days
The credit period we're giving our customers. Our investment in receivables, in days.
Operating cycle
Our total investment in inventory and receivables, in days.

Now let's quantify receivables days and the operating cycle for Chox Group.

Receivables days

A formula for receivables days is:

Receivables / revenue x 365
= 9 / 180 x 365
= 18 days

Operating cycle

A simple formula for the operating cycle is:

Inventory days + receivables days
= 128 + 18
= 146 days

The operating cycle quantifies our total investment in inventory and receivables, which we need to fund. The good news is, the operating cycle is offset, and partly funded by, our suppliers. Our net position is measured by the CCC.

Cash conversion cycle terms

Payables days	The credit period we're taking from our suppliers. Offsets and funds part of our investment in the operating cycle.
Cash conversion cycle	This is the number of days it takes us to convert cash outflows into cash inflows. It is also the amount of liquidity, measured in days, to which we need access.

Let's quantify the payables days and CCC for Chox Group.

Payables days

A formula for payables days is:

Payables / cost of sales x 365
= 11 / 100 x 365
= 40 days

Cash conversion cycle

A formula for the CCC is:

Inventory days + receivables days *less* payables days
= 128 + 18 - 40
= 106 days

Limited information health warning

These calculations are a simple starting point for WCM.

In practice, as we will see shortly, we would go into the figures and operational dimensions in much more detail, and refine our analysis. Areas for further detailed investigation will depend on the sector and business model we're working with, and the findings of our initial review.

But in the absence of more information, we need to work with whatever we've got, suitably qualifying our recommendations based on the amount and quality of available data. Exams, by definition, will always present you with limited simplified information.

Too much inventory?

Returning to Chox Group briefly, in theory, it should consider reducing its inventory levels.

Before we do that, let's turn to a real-life case study.

£21m cash release

As a student you learn a lot of theory. When you get to the workplace, you can spend a lot of time working out how to put that theory into practice. This is another set of skills.

Putting theory into practice occurred in a European subsidiary group of a global fast-moving consumer goods brand. The group's finance team had not been questioned on its working capital practices and, in particular, its inventory management system.

Asking operational teams questions to understand what was happening at a detailed level revealed a potential huge cash-generation opportunity. The inventory levels needed were analysed on a product-by-product basis against forecast demand. This confirmed a large overinvestment in inventory.

The management team was persuaded there was a cash opportunity and that stock outs would not result from careful reduction in a number of, but not all, product lines. Coordination with sales, marketing and inventory management teams to reduce inventory levels step by step demonstrated that it was 'safe' to do so.

A more active and joined-up inventory management process, aligned more closely to the sales forecast, was put in place.

The result was more than £21m in cash from working capital that year for a £180m turnover group. There were no stock outs. A fantastic result for the business.

Jess Coles FCA AMCT, director, Emerson Nash

Your turn now

Remember we previously calculated Chox Group's CCC as 106 days, and believed inventory levels might be too high. Let's assume we've investigated, and concluded that it would be safe and appropriate to reduce inventory by £21m.

(a) Assuming we've now successfully reduced inventory by £21m, and all other amounts are unchanged, recalculate the CCC.

(b) Is the CCC better or worse now?

(a) New cash conversion cycle

Inventory is now £14m (35 – 21).

Inventory days:
= 14 / 100 x 365
= 51 days

CCC:
= 51 + 18 - 40
= 29 days

(b) Is this better?

Yes. In this simplified situation we've also investigated and identified that the reduction in inventory appears safe and appropriate.

Based on this information, the reduction in CCC is indeed a good thing.

ARE YOU EXAM READY?

Specimen exam papers, tips on exam preparation and details of online and face-to-face learning workshops are available to all ACT students on the Learning Academy website: learning.treasurers.org

For more on WCM, turn to page 32

With thanks to Jess Coles, Michèle Allman-Ward and John Mardle for their valued suggestions and guidance.

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