

# Business Transaction Marketplace

**Information about Transition Planning, Business Valuations and M&A June 2016**

## Working Capital (W/C) in Business Transactions

In a business transaction, buyers are likely purchasing the Enterprise Value (EV) of the target company. Here's the formula:  $EV = W/C + \text{Fixed Assets} + \text{Intangible Assets}$ . Fixed assets are relatively easy to quantify. Intangible Assets (e.g. Goodwill) are typically residual amounts. This leaves the W/C to quantify – I call it the *gas* (see [Article](#)).



**Key Question.** How much *gas* is enough to power the business (*car*) to produce the operating cash flows that a buyer is ultimately purchasing? This amount of *gas* (we'll now call it Target W/C) is one of the most disputed issues between the buyer and seller in a business transaction. Dealing with the issue of Target W/C early in negotiations – even at the LOI stage – will help mitigate potential disputes and increase the chances of a successful Closing.

In this article, we will define W/C for transaction purposes, describe three methods to quantify Target W/C, list special situations involving W/C, and describe how W/C is documented in definitive agreements.

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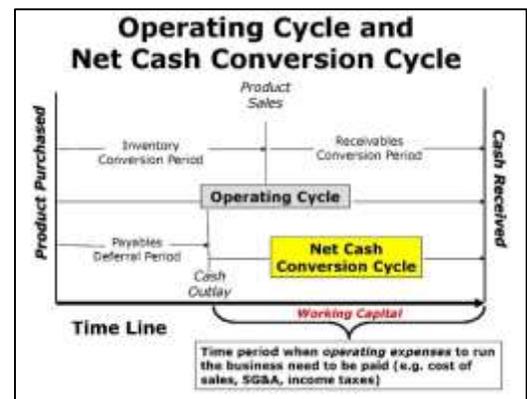
## Definition

W/C is the amount of money a business needs to operate on a day-to-day basis. It's the available cash flows necessary to pay its bills as it awaits collection of its revenues. From an "M&A Definition" perspective (not accounting) the W/C formula is:

$$\text{Current Operating Assets} - \text{Current Operating Liabilities}$$

**Example:** A manufacturing or distribution business most times does not receive payment for the products they sell, so they need to finance the purchase, production/storage, sale and collection costs prior to when payment is received from customer.

From a Time Line standpoint, this is the business's *Operating Cycle* as shown on the schematic. However, a business benefits by using other people's money (e.g. accounts payable) which reduces the time and associated required W/C. Again referring to the schematic, this is the *Net Cash Conversion Cycle*. This is the period of time when W/C is needed to finance operating expenses.



## Methods to Quantify Target W/C

**Average W/C.** This is simply the average of current operating assets less current operating liabilities over a 12-month period – often the trailing twelve months. Accurate monthly balance sheets are required under this method. It becomes difficult to apply when inventory (if material) is not adjusted on a monthly basis.

**Sales to Working Capital Turnover.** A computed ratio often published by RMA and trade associations. This computation is easy to apply but comparing the computed ratio for the subject business to published ratios can be problematic. This is because published ratios typically follow the accounting definition of W/C – not the M&A Definition noted above.

## Methods to Quantify Target W/C (cont)

**Bardahl Method.** This method is an outgrowth of a U.S. Tax Court Case dealing with the assessment of accumulated earnings tax in a C Corporation. The Case provided a methodology in determining an acceptable level of W/C to meet the operating needs of a company (see [Article](#)). Here are the Steps in calculating Target W/C under the Bardahl Method:

Step 1. Determine ongoing annual operating expenses (i.e. COGS, SG&A Expenses, income taxes)

Step 2. Calculate the Net Cash Conversion Cycle:

Inventory Cycle:	$\text{Inventory} \div \text{COGS (\%)} + \text{Accounts Receivable} \div \text{Sales (\%)} - \text{Accounts Payable} \div \text{Purchases (\%)} = \text{Net Cash Conversion Cycle (\% of a Year)}$
Accounts Receivable Cycle:	
Accounts Payable Cycle:	

Step 3. Calculate Target W/C: Step 1. [Operating Expenses] X Step 2. [Percentage of a Year]

## Special Situations

Here are special situations affecting the amount of W/C certain businesses require:

- Service businesses with no inventory, but carry receivables
- Service businesses that earn income on a contingent basis
- Cash businesses with no receivables but carry inventory
- Construction companies with various operating cycles with the ability to progress bill
- Special W/C levels to meet bonding and lending requirements
- Differing company credit policies with customers and suppliers for various products and services
- The company's philosophy and capabilities regarding debt in general (e.g. use of bank revolver)
- Seasonal businesses with a buildup of W/C during a particular period of the year
- High growth companies, particularly when the EV was determined based upon future growth
- The profitability of the company and ability to reinvest back into W/C
- Dividend and distribution policies and the effect on retaining profits to reinvest back into W/C
- Raw material and commodity price fluctuations and the desire to stockpile goods when prices are low
- General efficiency by Management in controlling W/C levels



## Documenting W/C in Agreements

There are three categories of W/C that are often described in a definitive purchase agreement (DPA): 1) Target W/C, 2) Estimated W/C, and 3) Trued-up W/C.

### 1. Target W/C

This is what the parties agree to ahead of Closing; again, preferably at the LOI stage. If the Estimated W/C is more or less than the Target W/C at Closing, the LOI and DPA describes how the transaction price and associated consideration will be adjusted (e.g. Cash or Seller Note is increased or decreased accordingly).

### 2. Estimated W/C

It is normally impossible to precisely know the actual amount of W/C at Closing. This is due to the time it takes for the accounting department to cut off customer billings (accounts receivable) and accounts payable; also, to physically count, extend and price inventory. Therefore, the parties must reasonably estimate and agree to what the W/C components were at Closing. In some cases, the parties may not arrive at an Estimated W/C but wait to make any adjustment in the transaction price when the W/C is Trued-up.

### 3. Trued-up W/C

The post transaction truing-up period is often 30 to 60 days, but sometimes longer or shorter depending upon the nature of the business. This allows the accounting departments (buyer and seller) to accurately account for the W/C components as of the Closing date. Again, the parties may adjust the difference through Cash or the Seller Note – increase or decrease accordingly. At the DPA stage, the parties may also agree not to adjust the transaction price (and consideration) if the Trued-up W/C is within a certain percentage (+/-) of the Estimated W/C.