



## **QCA review**

# **SunWater Analysis of Working Capital**

Aug 2011

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## 1 Introduction

This note responds to Deloitte’s request for explanation as to the basis for SunWater’s proposed working capital allowance of 3.3% of revenues. Details of Working Capital calculations for each of the last ten years are provided in the table at the end of this note. The following sections discuss the volatility seen in SunWater’s Working Capital over time and the reason for continuing to support use of a Working Capital allowance based on 3.3% of revenues.

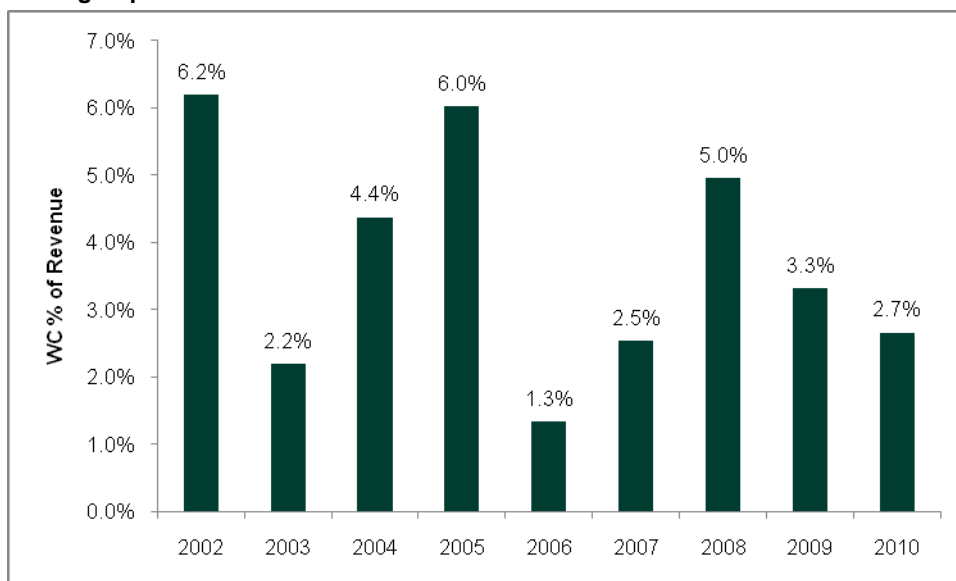
## 2 Volatility of annual Working Capital allowance

Working Capital can be defined as:

- trade debtors (accounts receivable) adjusted for any impairment allowance less trade creditors (accounts payable) plus inventories

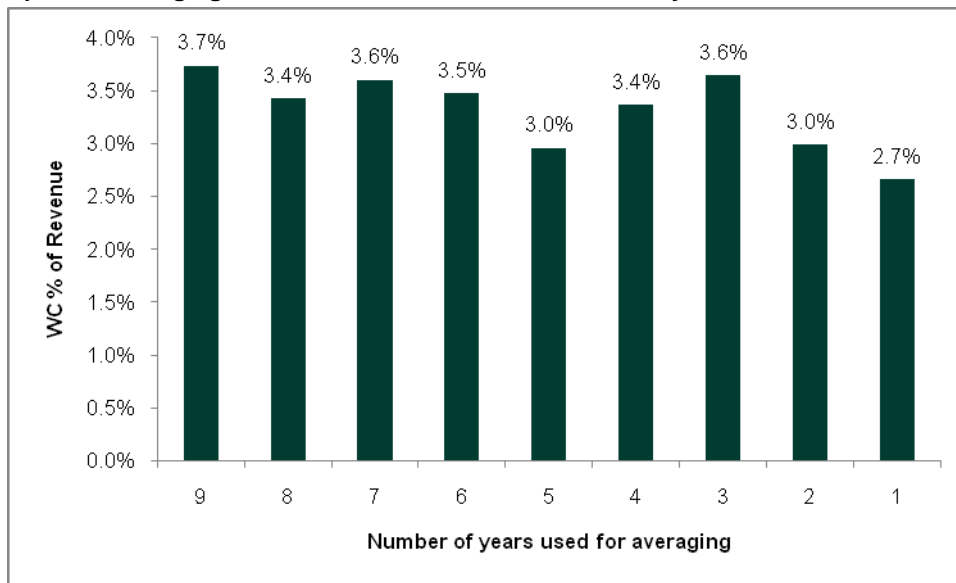
Over time, there can be significant variation in the various elements of the Working Capital calculation (particular, trade debtors and creditors) giving rise to significant variance in any annual Working Capital calculation. The impact of this volatility on SunWater’s Working Capital calculation is highlighted in the following chart.

**Figure 1 Working Capital as % of Revenue**



The above chart shows that the working capital requirement varied between 1.3% and 6.2% of revenue over the nine year period from 2002 to 2010. A simple average of these annual working capital estimates would suggest the need for working capital of 3.7% of revenue. The impact of averaging over differing periods is highlighted in the following chart.

**Figure 2 Impact of averaging WC estimate over the “N” most recent years data**



The above chart shows that selection of the averaging period can significantly alter the estimate of the required working capital allowance. Averaging period selection needs to be long enough to offset short term volatility while ensuring that longer term trends are captured. As such there is unlikely to be any single correct answer. A key concern is the period for which the working capital allowance will be set. If it is to be reviewed on an annual basis then using a relatively shorter averaging period (for example a rolling three or four year average) may be appropriate. If it is not to be revisited for a considerable period, then a longer averaging period may be best (perhaps using ten years of data thereby giving a 9 year averaging period).

### 3 Conclusion

The above analysis demonstrates that there is year-on-year volatility in SunWater’s working capital requirement. While long-term averaging can mitigate this volatility, the problem arises as to what is the appropriate period to average over.

As such, SunWater has proposed to continue to use the value of 3.3% as this value clearly lies within a reasonable historic range and is consistent with existing practice.

**Table 1 – SunWater Working Capital Calculations**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Trade Debtors	9,223	3,625	3,301	9,459	11,259	7,769	11,255	12,367	9,697	9,138
Plus Term Trade Debtors	2,550	1,797	1,340	873	648	533	210	27	49	38
Less Impairment	1,281	1,700	1,700	1,800	4,274	1,850	1,708	1,100	1,100	1,100
Total Adjusted Debtors	10,492	3,722	2,941	8,532	7,633	6,452	9,757	11,294	8,646	8,076
Trade Creditors	2,689	2,801	3,500	2,577	3,986	11,351	2,494	4,495	7,365	4,118
Inventories	2,920	3,065	2,230	2,516	2,200	2,525	2,365	2,444	2,639	2,572
Provision for obsolescence	139	519	325	254						
Net Inventories	2,781	2,546	1,905	2,262	2,200	2,525	2,365	2,444	2,639	2,572
EOY Working Capital	10,584	3,467	1,346	8,217	5,847	-2,374	9,628	9,243	3,920	6,530
Revenue	74,297	113,458	109,855	109,260	116,708	129,680	142,817	190,575	198,568	196,442
EOY WC as % of Revenue	14.2%	3.1%	1.2%	7.5%	5.0%	-1.8%	6.7%	4.9%	2.0%	3.3%
Average WC Balance		7,026	2,407	4,782	7,032	1,737	3,627	9,436	6,582	5,225
Average EOY WC Balance as % of Revenue		6.2%	2.2%	4.4%	6.0%	1.3%	2.5%	5.0%	3.3%	2.7%