

Using the FIFO Calculator

The FIFO (First In, First Out) Calculator utility reports an inventory item's asset value and cost of goods sold (COGS) in an Excel workbook. It does so by examining the inventory transactions in a QuickBooks company file, and then calculating the asset values as though the FIFO method were being used.

The FIFO Calculator utility's purpose is to help you and your accountant judge whether you should be using the average cost method of inventory valuation or FIFO. QuickBooks offers only an average cost method, which may not be appropriate for your business.

However, you should be aware that for tax purposes you cannot simply adopt FIFO just because you think you'll be better off for doing so. You must get permission from the taxing authority to use FIFO, and your accountant can use information from the FIFO Calculator utility to help decide whether to request that permission.

Using the FIFO Calculator is easy and straightforward; all you have to do is perform the following tasks:

1. Open your QuickBooks company file.
2. Open the Excel file named *FIFO Calculator.xls*, located in the folder C:\QBXL

Detailed instructions for performing these tasks are in this document.

Open the QuickBooks Company File

Before using this utility, you must start QuickBooks and open your company file. If you have multiple company files, be sure to open the file that has the inventory data you want to work with. Complete the company file login (if you login to this company file) so that your company file is completely loaded in QuickBooks before running the FIFO Calculator utility.

It doesn't matter whether the company file is on the computer you're using, or on another computer on a network (a computer working as the QuickBooks datafile host).

NOTE: *QuickBooks sometimes displays a dialog box when you start the program or when you open a company file. These dialog boxes might remind you to back up files, or download an update, or take some other action. Close those dialog boxes before you use this utility.*

What the FIFO Calculator Does

QuickBooks calculates a current asset value for each inventory item in your company file. It also calculates an average cost. Each inventory item's report appears in its own worksheet, which shows both the asset value and the average cost for each transaction that affects the value of the inventory item.

QuickBooks uses the average cost to determine the COGS for a sale: how much it cost you to acquire the inventory that you resold, or that you used to assemble a product that you sell.

The FIFO approach does not use the average cost of an item to determine COGS. Instead, it

assumes that the units you sold in a particular sale were the ones that you acquired earliest and that are still in stock – thus, first in, first out. The ones you buy first are the first ones out the door.

If the price that your suppliers charge you for inventory is constant, if it doesn't vary as time goes by, then there is no difference between figuring COGS using average cost and using FIFO. But – and this is usually the case – when your acquisition costs change, there can be dramatic differences between average cost and FIFO.

QuickBooks calculates average cost by dividing asset value by quantity on hand (QOH). This is a legitimate, if not universally appreciated, way of valuing inventory. QuickBooks calculates the COGS for a given sale by multiplying the number of units you sold by the average cost of the units you have on hand.

The FIFO Calculator takes a different tack. Suppose you bought 6 units for \$10 each, and then a few days later bought 4 more units for \$15 each. Then you sell 7 units.

QuickBooks would tell you that before the sale your Average Cost is $((6 \times \$10) + (4 \times \$15)) / (6 + 4) = \$12$. When you now sell 7 units, your COGS would be $7 \times \$12 = \84 .

FIFO would tell you that the 7 units you sell consist of the first 6 you bought for \$10 each, plus one of the next 4 at \$15 each. Your COGS would be $\$60 + \$15 = \$75$.

In this case, your profit on the sale would be \$9 more (that is, $\$84 - \75) using FIFO than using the QuickBooks average cost approach. And your asset value after the sale would be \$9 more with FIFO than with average cost.

It's important to remember that the FIFO Calculator utility does not change any data in your company file. All it does is report back to you what your COGS and your asset value would be if you were using FIFO instead of average cost.

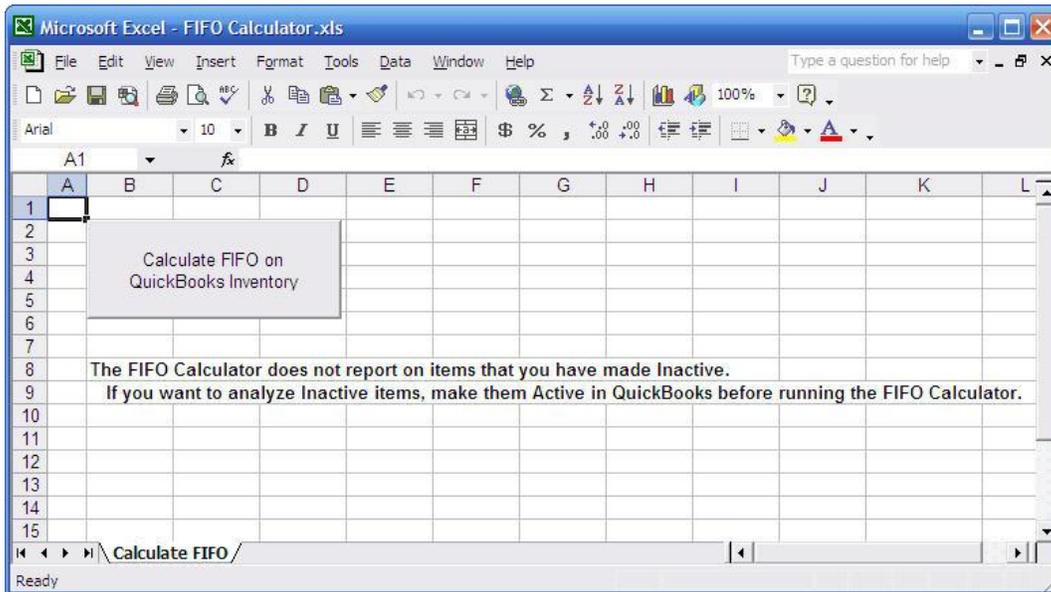
Open the Excel File

On your C: drive, navigate to the folder C:\QBXL and open the file named FIFO Calculator.xls. Because this file has macros (programming code to accomplish the required tasks), you might have to tell Excel to let the macros run. What you see depends in part on how, if at all, you have set Excel's security options.

- In Excel 2003 and earlier, you see a dialog warning you that the file contains macros before the file opens. Click Enable Macros to open the file with macros enabled.
- In Excel 2007, the file opens without a warning dialog. However, a Security Warning message bar appears below the ribbon to tell you that macros have been disabled (if you haven't changed the default Excel setting which disables all macros). Click Options and select Enable This Content.

Getting Data from the QuickBooks Company File

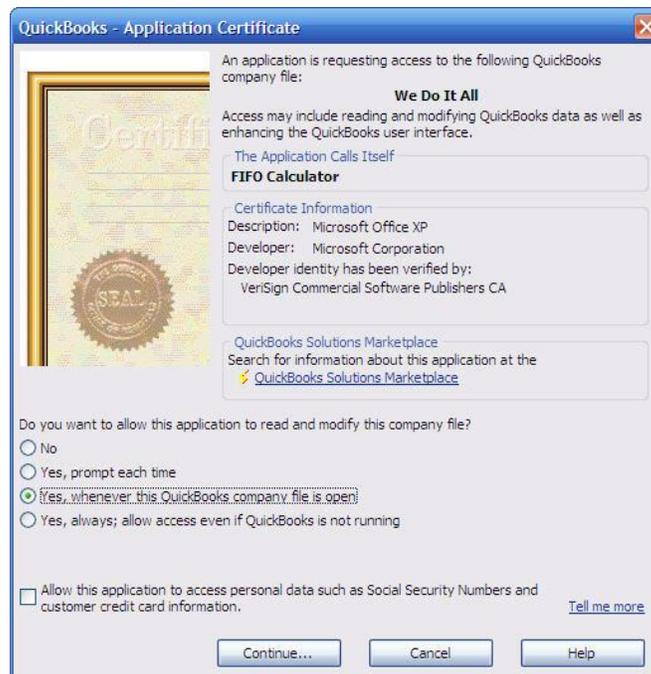
When FIFO.xls opens, the worksheet you see contains a button labeled **Calculate FIFO on QuickBooks Inventory**.



Click the button to start the utility. Notice the worksheet message regarding Inactive items. The FIFO calculator does not report on them, due to the way that QuickBooks responds to certain queries. If you want to get FIFO calculations for Inactive items, first make them Active in your company file, and then run the FIFO Calculator.

Allowing Access to QuickBooks Data

When the FIFO Calculator attempts to connect to your company file, QuickBooks asks for your permission. In the QuickBooks Application Certificate dialog, select the option you prefer.



By default, the option to deny permission to read the company file is selected. Choose the permission type you want to apply, using the following guidelines:

- The option labeled "Yes, prompt each time" means that whenever you use the FIFO Calculator for this company file, QuickBooks displays this dialog so you can give permission to access data.
- The option labeled "Yes, whenever this QuickBooks company file is open" means that the next time you open this company file and launch the FIFO Calculator utility, permissions are granted automatically.
- The option labeled "Yes, always: allow access even if QuickBooks is not running" means that you can use the FIFO Calculator whether or not this company file is open. However, the FIFO Calculator utility won't cooperate, and will insist that you start QuickBooks and open a company file first; therefore, don't select this option.
- The option to allow access to personal data can be ignored; that data isn't needed for FIFO calculations.

When you select the option you prefer, click Continue. QuickBooks displays a confirmation dialog that summarizes the permission you granted. Click Done to launch the utility. The FIFO Calculator utility searches the company file and gathers the data required for calculating COGS and asset value. This may take some time, depending on the number of inventory items in your company file and the speed of your computer.

*WARNING: If you click Continue in the QuickBooks Application Certificate dialog with the option labeled **No** selected, you cannot rerun FIFO to allow permission; permission is permanently denied. To correct this, choose Edit | Preferences | Integrated Applications and go to the Company Preferences tab. Click the listing for the FIFO Calculator and click Delete to remove the denial of permissions setting. Then run the FIFO Calculator to re-set the permissions by selecting the appropriate option in the QuickBooks Application Certificate dialog.*

Selecting the Inventory Items

After the FIFO Calculator utility has gathered data from the company file, the FIFO dialog appears, listing all of your active inventory items.



Select the items you want to target, or click Select All to select all your inventory items (you can also click Select All and then clear the checkboxes you want to skip). Note that subitems are designated using the format *Item:Subitem*; the presence of a colon indicates a subitem.

Viewing the Results

When the FIFO Calculator utility finishes its work, a new workbook opens and displays the analysis. The workbook contains one worksheet for each inventory item you selected, and the worksheet tab contains the name of the inventory item.

Type	Date	Name	Num	Units	QOH	Cost	Avg Cost	QB Asset Value	COGS	FIFO Asset Value
Bill	3/18/2002	DelValSupplies		5	5	\$295.00	\$59.00	\$295.00	\$0.00	\$295.00
Bill	12/31/2003	DelValSupplies		30	35	\$1,770.00	\$59.00	\$2,065.00	\$0.00	\$2,065.00
Invoice	1/30/2004	Bellevue Bistro:Kelly Drive	403	-1	34	\$0.00	\$59.00	\$2,006.00	\$59.00	\$2,006.00
Invoice	2/18/2004	BillsCafe	405	-1	33	\$0.00	\$59.00	\$1,947.00	\$59.00	\$1,947.00
Invoice	3/4/2004	Gotham:On-Site Wiring	407	-5	28	\$0.00	\$59.00	\$1,652.00	\$295.00	\$1,652.00
Invoice	4/13/2004	Jordan's Staffing Services: System Set-UP	411	-1	27	\$0.00	\$59.00	\$1,593.00	\$59.00	\$1,593.00
Invoice	6/15/2004	NewTrust Banking Services: Set-Up: June 04	417	-10	17	\$0.00	\$59.00	\$1,003.00	\$590.00	\$1,003.00
Invoice	7/5/2004	Real Estate Experts: Main St Office Set-UP	419	-2	15	\$0.00	\$59.00	\$885.00	\$118.00	\$885.00
Invoice	7/30/2004	Real Estate Experts: Spruce St on-site	421	-3	12	\$0.00	\$59.00	\$708.00	\$177.00	\$708.00
Invoice	9/15/2004	The Art Gallery: New System	428	-1	11	\$0.00	\$59.00	\$649.00	\$59.00	\$649.00
Invoice	10/22/2004	WeHaultt Shipping Services: Shipping software	431	-6	5	\$0.00	\$59.00	\$295.00	\$354.00	\$295.00
Invoice	2/25/2005	Accounting Systems Plus: on-site set-up	443	-1	4	\$0.00	\$59.00	\$236.00	\$59.00	\$236.00
Bill	11/1/2005	DelValSupplies	9999	2	6	\$118.00	\$59.00	\$354.00	\$0.00	\$354.00
Check	5/29/2007	Our Supplier	1516	3	9	\$204.00	\$62.00	\$558.00	\$0.00	\$558.00
Inventory Adjust	9/14/2007		1	-2	7	\$0.00	\$62.00	\$434.00	\$118.00	\$440.00
Invoice	3/14/2008	Contractor:Larry: Job01	478	-1	6	\$0.00	\$62.00	\$372.00	\$59.00	\$381.00
Invoice	5/1/2008	Bellevue Bistro: 4th Street Resaturant	482	-1	5	\$0.00	\$62.00	\$310.00	\$59.00	\$322.00
Invoice	5/1/2008	BillsCafe	483	-1	4	\$0.00	\$62.00	\$248.00	\$59.00	\$263.00

The final two columns, Column J and Column K, show you what your COGS for the transaction as well as the asset value would be using FIFO.

The amount in the Posted COGS column is the amount that would be posted to a sales transaction. For example, Row 20 shows the sale of a Monitor to the Bellevue Bistro. Using QuickBooks' average cost, the COGS for that sale is \$62 (cell H20). Using FIFO, the COGS is \$59 (cell J20).

Column K, which shows the current Asset Value using FIFO, always has a value, which changes when you buy and sell items, as well as when you make a manual inventory quantity adjustment. The asset value responds to both increases and decreases entered with a purchase or an inventory adjustment, whereas COGS responds only to decreases (either by sales or by quantity adjustments).

Negative Quantity on Hand

If the FIFO Calculator utility finds an inventory item with a current QOH that's negative, it backfills that sale with units that are acquired later. This can mean that a sale has a different COGS, and thus a different profit, than you think it will when you enter the sale. Your supplier pricing might change between the time that you sell too many items and when you replenish your inventory.

Remember, though, that the FIFO Calculator makes no changes to your company file – it just tells you what your COGS and asset values would be if you were using FIFO.

You should never sell an inventory item into negative quantity. In fact, most accounting software won't permit you to save a sale that takes an inventory item into negative quantity, but QuickBooks does permit this action. Therefore, you need to let your common sense rule your actions and override this QuickBooks quirk.

- If you're using QuickBooks Pro, make the sales transaction a Pending Sale until you receive more inventory.
- If you're using QuickBooks Premier/Enterprise, use a Sales Order instead of an Invoice or Sales Receipt, and don't convert it to a sale until you receive more inventory.

Finishing Up

You can print all or some of the worksheets in the new Excel workbook. If you want to save the report, use the File | Save As menu command to name the file appropriately (e.g. FIFO Calculations August 2008).

Financial Impact of the Cost of Inventory

The value of your inventory has an impact on the worth of your business. The value of the inventory currently in stock is an asset that appears on your Balance Sheet. (In QuickBooks, the account is named Inventory Asset and it is an account of the type Other Current Asset). Your balance sheet is a statement of the financial health of your business, and is important when you apply for credit, or for approval to be a vendor for government agencies or some large businesses.

The value of the inventory you sold is an expense, called Costs of Goods Sold or COGS, and appears on your Profit & Loss Statement. The value of COGS therefore has a direct bearing on your net profit or loss, which in turn has a direct bearing on your taxes. If your inventory isn't valued appropriately, you may be over-reporting or under-reporting your COGS expenses (which means you can't trust your profit/loss number). In addition, an inaccurate profit/loss means you may be over-paying or under-paying your taxes.