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Training Guide for the GPARTS EU Profit Analyzer

Ford

GPARTS
Global Price And Revenue Targeting System

September 2015

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Chapter 1 - Introduction to Profit Analyzer

1.1 Purpose of this User Guide

This document is an extensive training reference for the GPARTS Profit Analyzer, and explains how Profit Analyzer module helps you rapidly identify margin improvement opportunities, the features you use as part of these processes, and the instructions to use these features.

This document is written for pricing analysts, pricing managers, and any business user who conducts or engages in analytical pricing processes through use of the Profit Analyzer.

1.2 What is Profit Analyzer?

Profit Analyzer (PA) is a tool that the FCSD business uses for analyzing revenue and profitability of the different product lines and also for identifying profitability and pricing improvement opportunities. The main components of PA are:

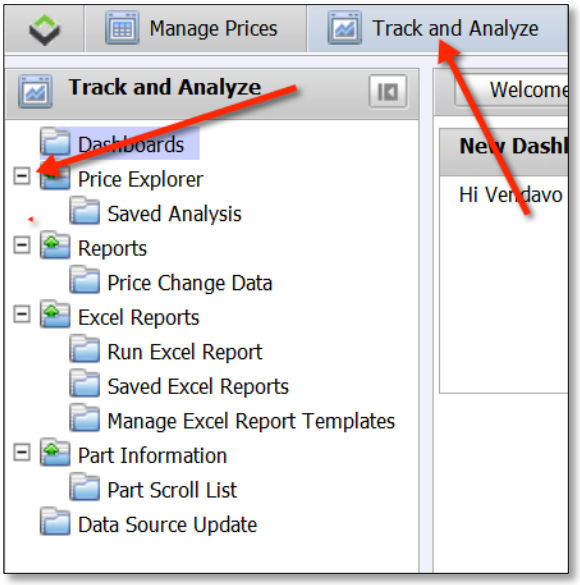
- **Dashboards** – The typical starting point for analytics. Dashboards provide a quick summary of the state of the business according to key performance indicators, and allow for easy identification of business areas that require attention.
- **Price Explorer** - Price Explorer is a tool for precise analysis of specific product lines. Price Explorer charts offer extensive ability for performing detail analysis of profitability drivers—including costs, discounts, and other adjustments. There is an array of nine (9) standard charts, which enable pricing analysis exercises across a wide variety of measures and attributes.
- **Reports** - There are several reports that provide users with a variety of information. After choosing or configuring a report, it is downloadable as an Excel/CSV file.
- **Part Information** – This feature is useful for quickly finding information on a specific part—including part hierarchy, part attributes, and corresponding price

attributes. Also, for parts having any business-defined linkages (such as *new-reman* or *left-right*) or supersession chain, this feature will also indicate the linkage and supersession groups to which the part belongs.

- **Tables** – Throughout Profit Analyzer, you'll find tables containing data that originates from both internal and external sources. These tables feed the different areas of the Profit Analyzer application—including the **Dashboards**, **Price Explorer** and **Reports**. You can search these tables for specific terms, filter the data on each column, save a view of their preference, and export the data to an Excel/CSV file.

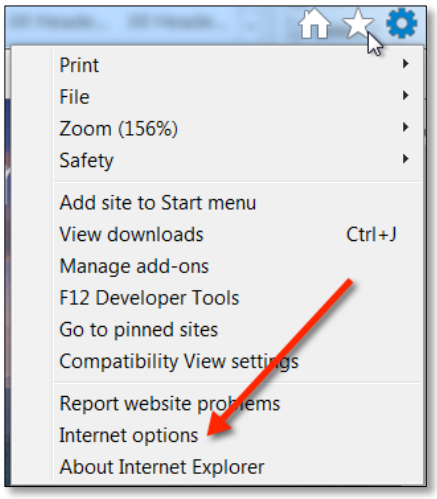
1.3 Locating Components in Profit Analyzer

As we depict in the figure, click the **Track & Analyze** button to display the top-level elements of the folder tree. Then, click the + sign next to a folder to expand it and reveal the elements within.

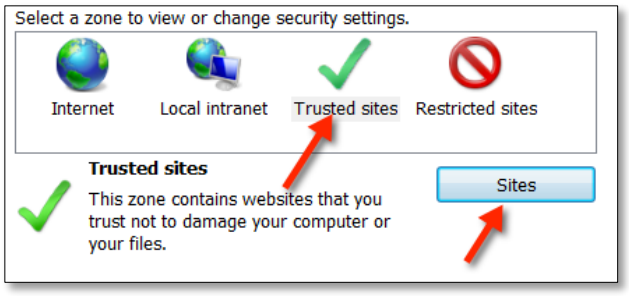


1.4 Browser Settings to run PA

To properly run the PA application and download reports, you'll need to change your **Internet Explorer** browser settings by following these steps:



1. From the Settings menu, choose **Internet Options**, and then choose the **Security** tab in the pop-up window.



2. Select the **Trusted sites** option, and then click **Sites** to display the **Trusted sites** pop-up.

3. Uncheck the box for **Require Server Verification**, and then click **OK**.
4. In the **Add this Web site to the zone** field, type the GPARTS URL:

   http://wwweu.fcsdpa.ford.com/

5. Back on the **Security** pop-up, click **Custom Level** button to display the **Security Settings** pop-up and then scroll down to set these options:

   - Set **Initialize and script ActiveX controls not marked as** safe to ***Enable.***
   - Set **Run ActiveX controls and plug-ins** to ***Enable.***

6. Click the **OK** button to close the **Security Settings** pop-up.
7. Restart **Internet Explorer** to commit your changes and begin using GPARTS system.

1.5 Printing, Copying, and Pasting

1.5.1 Taking screen shots

Use the browser print function will often produce an incomplete image. The best way to achieve a good print—especially for a chart—is to use the print screen (**PrtScn**) function by doing the following:

1. On the keyboard, simply hold down function key (fn) then the select print screen key (**PrtScn**). This will take a snapshot of your screen.
2. Open the Windows application **Paint** and paste the image into **Paint** using Ctrl + V on the keyboard. Optionally, crop the image.
3. Locate the **Print** item in the **Paint** menus.

1.5.2 Transfer Your Data by Copying and Pasting

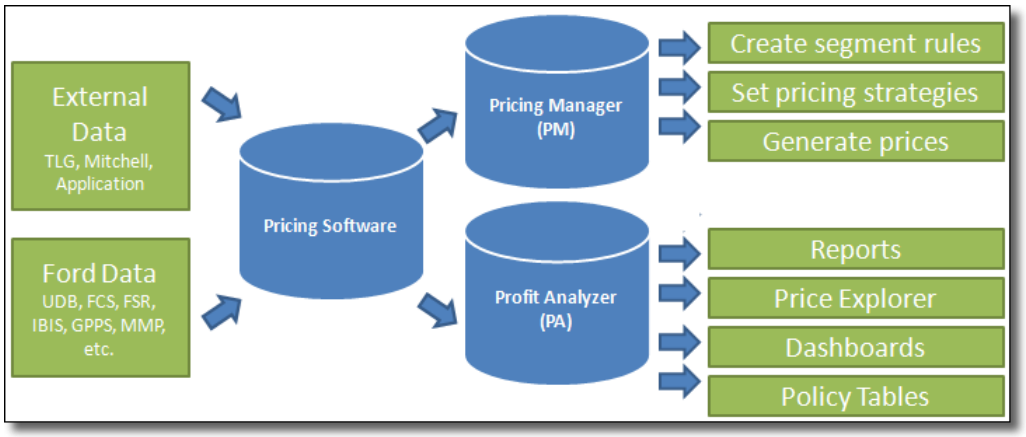
You may want to copy data from IBIS or Excel and paste it into GPARTS (or conversely). Follow these steps:

1. With your mouse, click-hold-and-move with your mouse to select the data you want to copy.
2. To copy, select Ctrl + C on the keyboard.
3. Place your cursor where you want to paste the data and choose Ctrl + V on the keyboard.

Chapter 2 - Systems and Data Overview

2.1 Future State Pricing Process for FCSD

This training manual focuses on the PA module. FCSD will also be using the GPARTS pricing software to accomplish the to-be pricing process with margin analysis, segmentation, strategy setting, and price setting activities. Please refer to the Price Manager training manual for use of PM features.



2.2 Data Available in PA

Profit Analyzer (PA) is used for historical data analysis, and presents useful information that can serve as input for creating pricing strategies in Price Manager.

2.3 Data Source and Frequency

The different data sources will be updated at different times. Refer to the following table to identify the frequency at which the different data sources will be updated. This table is a useful resource when identifying the frequency at which to run a specific report. (This will be explained in detail in Section 9)

Data Source	Internal/ External	Frequency	Timing
Sales Transactions (IBIS)	Internal	Weekly, with complete monthly refresh	Sunday 6AM
Allocations (IBIS)	Internal	Weekly, with complete monthly refresh	Sunday 6AM
Price List (GPPS)	Internal	Monthly	1st Sunday 6AM
Cost (GPPS)	Internal	Daily	2AM
Part Master (PC)	Internal	Daily	6 AM
Part Attributes (GPPS)	Internal	Daily	6 AM
Product Hierarchies (Excluding Part Master) (GPPS)	Internal	Weekly	Sunday 2AM
Region Hierarchies (IBIS)	Internal	Weekly	Sunday 6 AM
Customer Hierarchies (GOLDD)	Internal	Weekly	Sunday 2AM
Price Attributes (GPPS)	Internal	Weekly	Sunday 2AM
Supersession (MMP)	Internal	Weekly	Sunday 2AM
Promotion (CIW)	Internal	Monthly	Sunday 2AM
Competitive Information (UDB, FSR, FCS)	Internal	Monthly	Sunday 2AM
Competitive Information (TLG)	External	Weekly	Sunday 2AM
Market Share (Mitchell)	External	Monthly	1st Sunday 2AM
Application Data (Clifford Thames)	External	Monthly	2nd Sunday 2AM
Lifecycle (UDB)	Internal	Annually	2nd Sunday 2AM

Chapter 3 - Profit Analyzer – General Usage

The Profit Analyzer module of the GPARTS solution helps you identify margin improvement opportunities rapidly.

The module provides in-depth profitability insight to enable informed decision making across the organization.

- Price and Margin Analytics
    - Track Key Pricing Performance Metrics
    - Ad Hoc Analysis of Pricing Performance
- Features
    - Profit Analyzer Data Model

3.1 Price and Margin Analytics

Pricing analytic processes are managed within the Profit Analyzer module and include monitoring key pricing performance metrics and doing ad hoc, stand-alone analysis to discover problems and opportunities.

The traditional way to do this involves periodic reports, dashboards, and business intelligence tools. Alas, the required pricing information is rarely in one place and is not in a form that enables good analysis. Simple tasks can take days to sort out unless a price management system with powerful ad-hoc analytics is available.

Here are three examples of tasks easy to formulate but hard to solve:

- How does the current revenue and margin of the parts I'm responsible of compare to last year's performance?
- How do our prices compare to our competition?
- How do prices of a dependent country compare to the lead country?

3.2 Track Key Pricing Performance Metrics

Companies define a set of pricing metrics or key performance indicators (KPI), and then set processes to measure and track them to continually improve pricing performance.

Examples of KPIs are:

- Revenue growth for specific parts/MLIs
- Bottom line PBT growth

The process requires that you capture, publish, and monitor key pricing performance metrics at some regular frequency – as often as daily. The goal of tracking is to uncover any major anomaly, such as price leakage, so you can quickly fix the problems that precipitated the anomaly.

3.3 Ad Hoc Analysis of Pricing Performance

The ad hoc analysis of pricing performance is comprised of the following sub-processes:

- Executing root cause analysis of pricing performance, and
- Identifying opportunities for improvement.

For example, your analysis may lead you to realize that pocket margins are low in some region. You narrow down the cause to the fact that a new sales person joined who had not been trained on the right method to charge for freight (allowing recovery of estimated freight cost). This process assumes the availability of a data warehouse with good, clean transaction (line item) level data.

3.4 Features

Thanks to Profit Analyzer your pricing analytics organization can conduct deal life cycle and customer compliance analytics, as well as revenue and margin causality analytics.

Profit Analyzer also provides visualization capabilities via interactive charts (price waterfall, scatters, and box plots) and rich, role-specific dashboards.

Finally, Profit Analyzer supports a robust alert notification system that allows you to define thresholds for any measure.

The following features are introduced here and explained in depth in further chapters:

- Dashboards
- Price Explorer
- Reports

3.5 Profit Analyzer Concepts

This section describes the key concepts you should understand to use Profit Analyzer.

- Dimensions
- Dimension-Based Queries
- Measures
- Measure-Based Queries
- Key Performance Indicators
- Business Calendar
- Time-Based Prorating
- Currency and Units of Measure
- Number Formatting Rules
- Pricemart Views

3.5.1 Dimensions

Dimensions are properties of deals or transactions, such as the date of sale, the customer segment, and so on. Every organization tracks a different set of dimensions, and no two organizations use the exact same names for these dimensions.

Dimensions can be related hierarchically. For example, a dimension hierarchy for the product dimension can be **product family > product line > product**. GPARTS uses dimension hierarchies to allow users to filter data by drilling up and down a hierarchy, or by rolling up data for a selected level in a hierarchy.

3.5.2 Dimension-Based Queries

Dimension-based queries use the values of a dimension to filter transactions, such as "Show the transactions for only one product family". Dimension-based queries summarize measures within the transactions in the group defined by the filter, such as "Show the sum of revenue for each product family".

Dimension-based queries support moving between dimension levels:

- **Rollup** – Moving up to a higher dimension level,
- **Drill-down** – Moving to a lower dimension level.

Examples of dimension-based queries include:

- Revenue for product ICP-1023 in the month: June 2002,
- Net margin % for sales region: western,
- Table of revenue summarized by customer and quarter.

3.5.3 Measures

A measure is an attribute of a transaction that has a numeric value, for example, Invoice Price. A measure is often associated with a waterfall element. For example, the Cost of Payment Terms is a unit amount associated with the corresponding cost adjustment in the waterfall. A measure is also called a metric in some organizations.

3.5.4 Measure-Based Queries

Measure-based queries use the values of a measure to filter transactions, such as "All transactions where profit was between 5% and 10%." Measure-based queries involve comparing measures/numbers via numeric operators, such as equality, less than, and greater than. Measure-based queries are also used in histogram-like charts such as price bands where transactions are organized into intervals.

Examples of measure-based queries include:

- Sum the revenue of transactions where net margin < 0,
- Band the transactions where invoice price falls between $100,000 and $500,000,
- A scatter chart of transactions where net price falls between 0 and 2%.

3.5.5 Key Performance Indicators

A key performance indicator (KPI) is an aggregate measure, for example, net margin or volume. Each organization defines their own set of KPIs that constitute the vital signs used to track the health of the business. KPIs can be set at any level of detail across any of the business dimensions.

In Profit Analyzer, you use KPIs in two ways: in dashboards that present a high-level summary of the health of your business, and in interactive charts to aid in core pricing analysis.

3.5.6 Business Calendar

A business calendar contains the business and fiscal calendar that is used in the GPARTS application. For example, if your fiscal year begins on October 1 and ends on September 30, then your business calendar definition will reflect this. In the application, users may select 2008, but the application could use October 1, 2007 to September 30, 2008 as the definition of the relevant year.

> **NOTE:** In **Price Explorer**, if you select a previous year to compare to the current year, the months not closed in the current year will not be automatically filtered out from the previous year's selection. Therefore, you should filter a specific date range that captures only the months of the previous year, which have been closed in the current year.

3.5.7 Currency and Units of Measure

A fundamental consideration of any GPARTS implementation involves determining the currency and the unit of measure (UOM) you need. The following table lists the units of measure (UOM) that are configured and certified. You can also add additional UOMs.

Units of Measure
Gallons
Liter
Ounces
Pounds
Quarts

Chapter 4 - Price Explorer

4.1 Overview

The **Price Explorer** is tool for price analysis of specific product lines. It is a dynamic charting engine which provides the flexibility for the user to analyze all the measures available in the system and filter the data to any specific time range—or to any of the dimensions available in the system. The selection of charts in **Price Explorer** allows you to conduct a detailed analysis of the drivers of profitability including costs, discounts, and other adjustments. You can also compare Ford prices to competitive prices. Within the **Price Explorer**, there are ten standard charts with which you can perform pricing analyses across a wide variety of measures and dimensions. You can always export all supporting chart data to Microsoft Excel.

Using **Price Explorer**, you can identify both business problem areas and unexpected trends. You can also diagnose symptoms and determine the root cause of problems impacting your profitability.

Price Explorer is a tool to visualize data that represents a meaningful slice of your business using interactive charts. You can use the charts to compare selected data to other business slice or to incrementally refine the selected business slice directly by interacting with charts or by adding more refined filters. When you create a chart, you can save and share it, or export it as reports to Microsoft Excel and Adobe PDF for further analysis.

In **Price Explorer**, you perform ad hoc analysis using a variety of charts, data tables, and filtering tools to display data. The charts and data tables define your pricing waterfall in a visual and tabular format.

In the sections below, we cover these features of Price Explorer:

- Price Explorer Tools
- Price Explorer Charts
- Managing Charts
- Managing Filters

4.2 Price Explorer Tools

Price Explorer is a tool for detail analysis of specific product lines, and consists of tools for configuring, filtering, viewing, and analyzing data. Many of the visual elements are interactive, so that you can navigate the data by drilling in or out of the business dimensions that you can use to track your business.

4.2.1 Control Panel

You can use the control panel to select and define charts, set filters, save charts, and create, define, run, and export tables and graphics. The options that are available on the control panel depend on the chart you select.

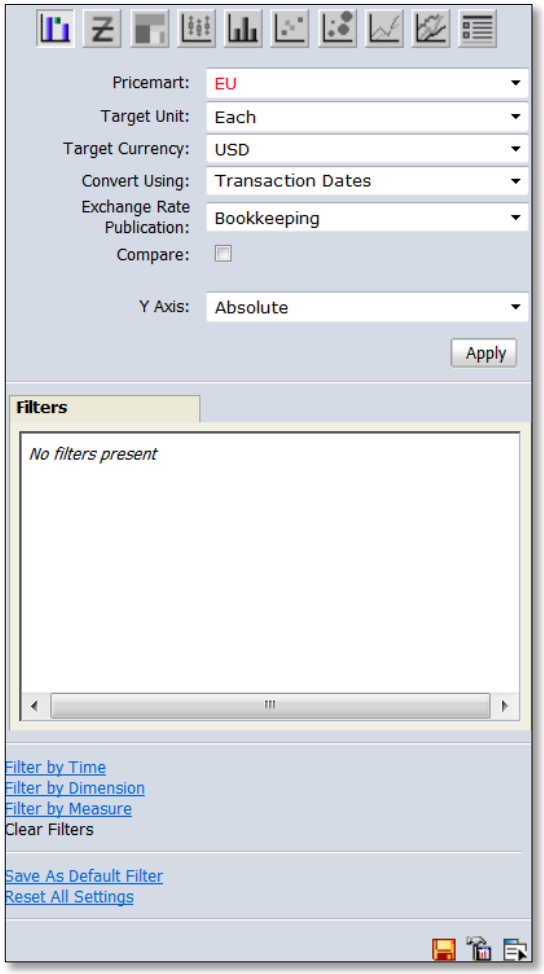


Chart types icons – Choose from 9 types of charts. For more details, see **Price Explorer Charts**.

- **Chart options** – for defining chart properties. See **Creating Charts**.
- **Filters pane** – Displays the list of filters that you have chosen with the Filter links (below the pane).
- **Filter by Time, Dimension, or Measure** – Sets a corresponding filter.
- **Save As Default Filter** – Click this link to set a default filter.
- **Reset All Settings** – Reset the Price Explorer to the default configuration.

Also, there are several small icons in the lower right corner of the control panel. You can hover over each icon to see its function:

- **Save chart** – click the left icon to save the chart.
- **Select Excel report template** – click to choose an Excel template for a report. For more details see the Error! Reference source not found..
- **Analyze Data with Rich Excel Report** – Generates an Excel report. For more details see the Error! Reference source not found..

4.2.2 Chart Panel

Price Explorer, depicts data graphically in the chart panel and in the data view below the chart. You choose a chart type according to the type of analysis you need to perform. After mastering the effective use of the control panel to choose and configure a chart, you can research and uncover the following:

- Sales profitability
- Price and margin leakages

For more details, see these sections:

Price Explorer Charts and **Managing Price Explorer Charts**.

4.2.3 Data View

After configuring a chart, you can find a corresponding data view below the **Chart Panel**. These listings are interactive, so that you can configure useful views to conduct pricing analysis. As with other listings throughout **Price Analyzer**, you can hide or show columns, sort data in ascending/descending order, create/reuse personalized views that show only the columns you choose, and export the records shown in the data table to a CSV (comma separated value) file.

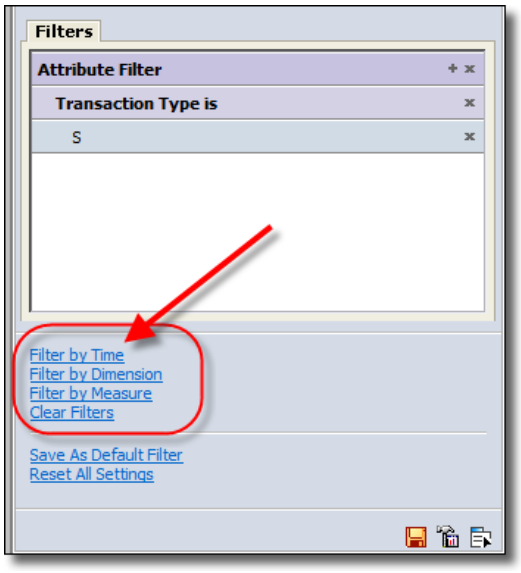
Scroll down below the chart to examine, filter and sort the data view. You can also export the data to a Microsoft Excel spreadsheet by doing the following:

1. Configure the waterfall to meet your needs.
2. Click the **Actions** drop-down and select **Export**.
3. Click the **Open** or **Save** button on the Internet Explorer bar. The data will export and appear as a table in Microsoft Excel.

	Element	Absolute	Comparison Absolute	Difference
1	**Price - Proposed G[illegible]f**	0 EUR	0 EUR	0 EUR
2	Factor-LRP Harmonization	0 EUR	0 EUR	0 EUR
3	**Price - Proposed Lead Ref**	0 EUR	0 EUR	0 EUR
4	Factor-CRP Harmonization	0 EUR	0 EUR	0 EUR
5	**Price - Proposed Country Ref**	0 EUR	0 EUR	0 EUR
6	**Price - Global Ref (GRP)**	0 EUR	0 EUR	0 EUR
7	Adj-Lead Ref Actual Corridor	0 EUR	0 EUR	0 EUR
8	**Price - Lead Country Ref**	0 EUR	0 EUR	0 EUR
9	Adj-Country Actual Corridor	5,065,742 EUR	1,388,652,288 EUR	1,383,586,546 EUR
10	**Price - Country Ref (CRP)**	5,065,742 EUR	1,388,652,288 EUR	1,383,586,546 EUR

4.2.4 Filters

You can set filters on the **Control Panel** to configure a chart and its corresponding **Data View** to meet your needs. You can set one or more filters—time, dimension, and/or measure—to build a complex filter, then save the filter (as shown in the **Filters** pane within the control panel), and choose to make it the default filter.

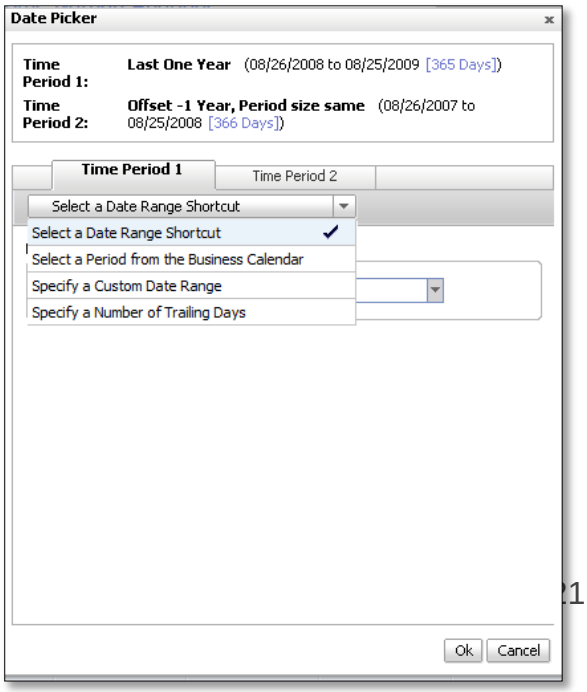


> **NOTE:** When you save a chart, the filters you set for the chart are also saved.

For more information about transaction measures, including a list of the optional measures that you can add on and use with waterfall elements, see the chapter on Error! Reference source not found..

Filter by Time

When you click on the **Filter by Time** link, the a popup will appear similar to the figure to the right. This is much like the **Time Period** selector in the dashboards. Here, there is only one (1) period available unless a particular chart has a **Compare** option (which enables the **Time Period 2**).

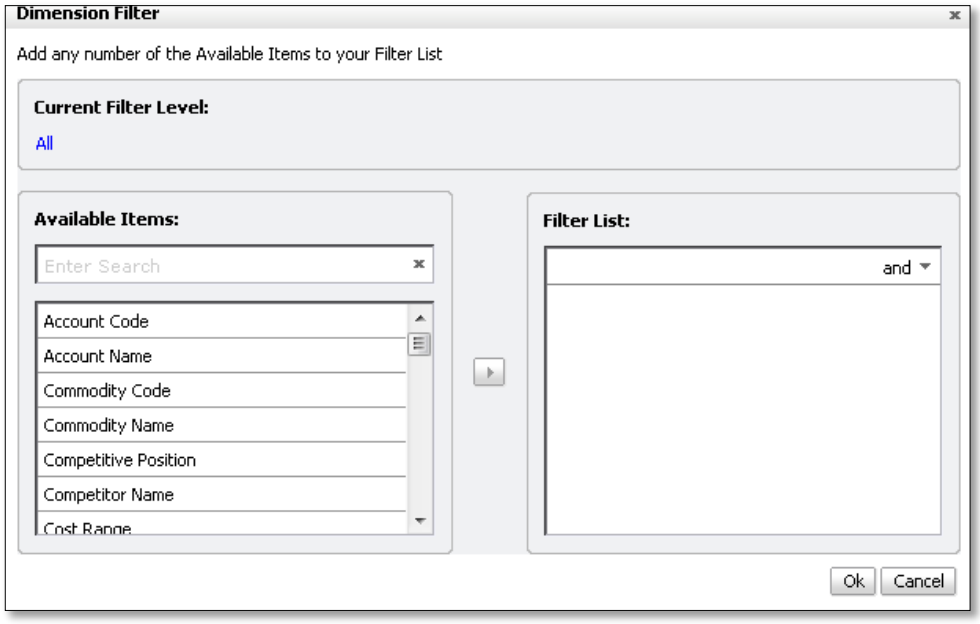


Click the **Select a Data Range** dropdown to choose from four different types of date ranges, as we describe in detail in the table below.

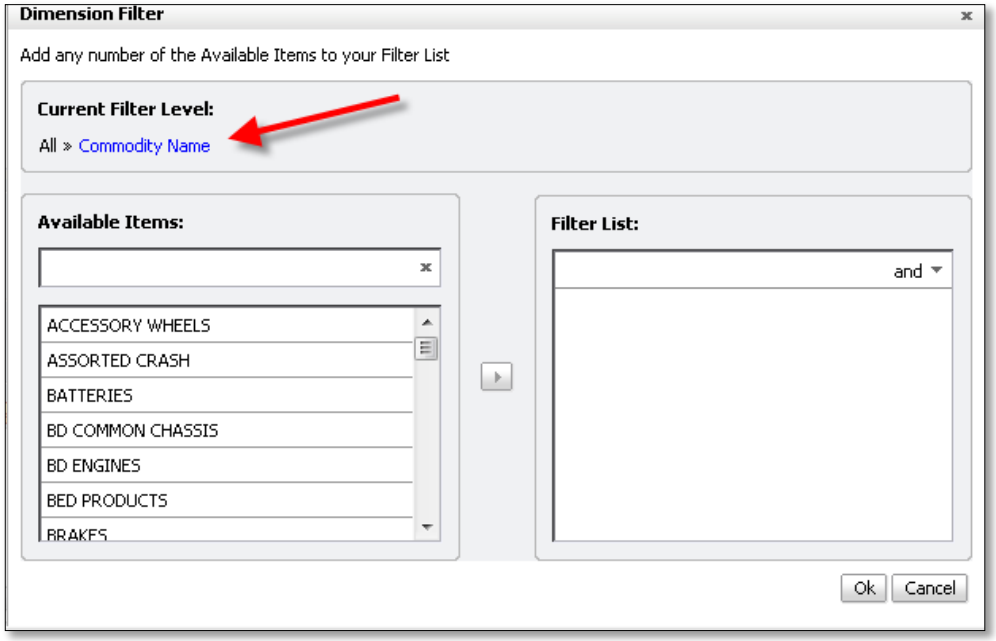
Selection	Description
Select a Date Range Shortcut	A drop down menu will appear that will allow you to quickly filter by: • Fiscal Year • Last One Month • Last One Year • Month to Date • Quarter to Date • Year to Date
Select From the Business Calendar	Allows user to filter through years, quarters, and months
Specify a Custom Date Range	Allows you to select specific date ranges on the calendar
Specify a Trailing Number of Days	Allows you to select a specific number of days leading up to today.

Filter by Dimension

With this feature, you can filter the charts according to a list of attributes. Filter by Dimension is located under Filter by Time. When you click *Filter by Dimension,* the following screen appears.



Drill down by double clicking on one of the attributes. For example, double-click on **Commodity Name** to populate a list of commodities.

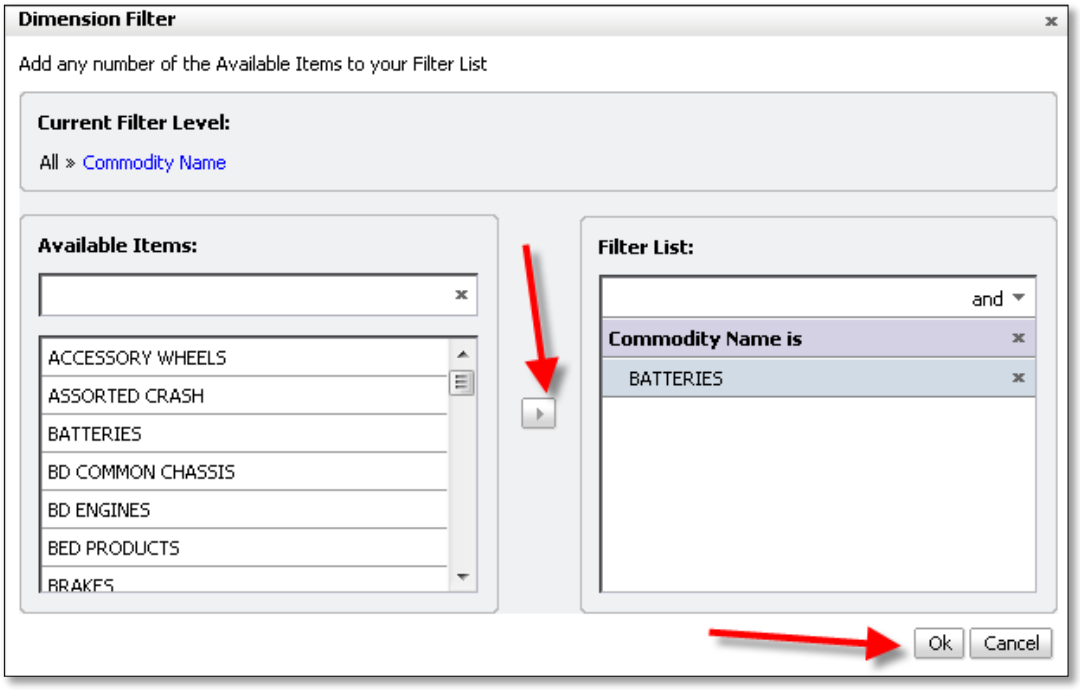


NOTE: Whenever filtering by MLI, it is recommended to use the MLI Code Description Concat (concatenation of name and code) instead

of MLI Code so that you can see both the code and description together, as you are used to seeing today.

As shown in the figure above, there is a menu path in the top left corner of the screen which shows the current level of filtering. Return to the main selection screen by simply clicking the **All** link.

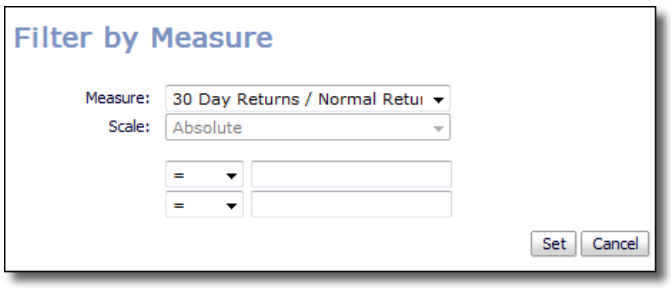
Suppose, for example, that you need to filter on batteries. As we indicate in the figure below, select ***Batteries***, click on the arrow to add it to the **Filter List**, and then click **OK**.



This would produce a filtered data view containing only those transactions for the batteries commodity.

Filter by Measure

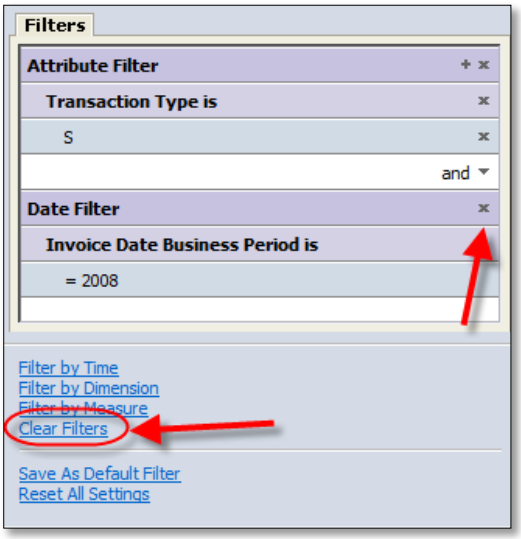
This feature will filter the charts according to specific measures. You can find the **Filter by Measure** link beneath the **Filters** panel, below the **Filter by Dimension** link. Click that link to display this popup window:



In the dropdown, choose the **Measure** on which you want to filter. You can also enter values for the measure to compare against (equal, greater than, less than) your chosen value. For example, to filter the transaction to see only high warranty transactions, you'll need to filter on **Warranty Percentage >** 65%.

Clearing or resetting filters

The **Filters** panel will display all of the filters that you've set. In the figure to the right, we see a case in which we have set a filter on the year 2008.

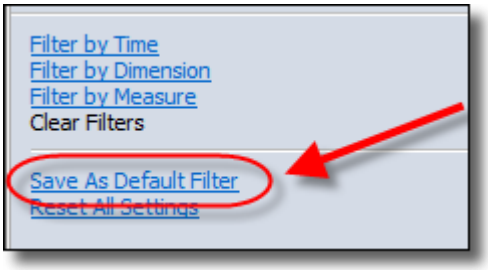


To clear a specific filter, either click on the small **x** for that filter or click on the **Clear Filters** link (below the panel).

Resetting filters – to reset filters to the defaults, click the **Reset All Settings** link.

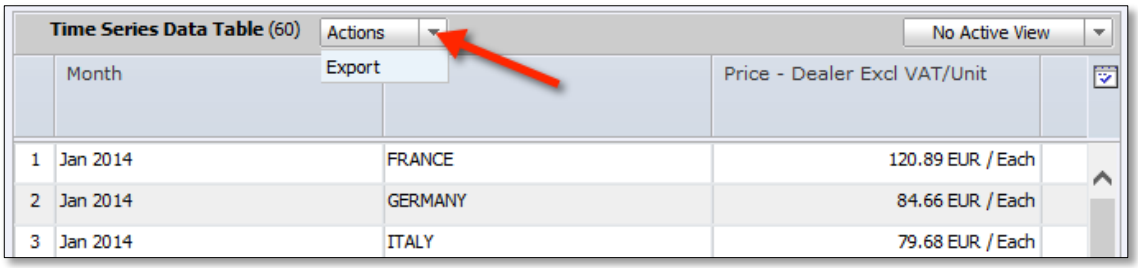
Saving a Default Filter

To save a filter configuration as the new default, click the **Save As Default Filter** link.



4.2.5 Exporting a Data View to Excel

Scroll down and, immediately below the chart, simply click the **Actions** drop-down button and choose **Export**. Then, choose a location for the file and give it a name.



4.3 Price Explorer Charts

Price Explorer charts help you gain visual insights from pricing data. Price Explorer offers nine standard chart types, and you can access each chart by clicking the appropriate chart icon in the **Control Panel**. You can use the default chart types or customize them to meet your requirements, and configure some of the charts to setup comparisons from two time periods. We explain each of the chart types in the sections below.

Icon	Description	Analysis
	**Waterfall Chart**: Shows the income statement elements from Gross Revenue to PBT for the user-selected cut of the business. A Price Waterfall Comparison is also available to compare waterfalls of any specified dimensions.	Margin leakage analysis for specific customer-product combination. For example, Dealer channel for a specific MLI for 1st quarter, 2009
	**Zebra Chart**: Provides a snapshot of contributors to a selected measure across different dimensions. A Zebra Comparison is also available to compare contributions of specific dimensions between different products or for the same product in different time periods	Analysis of top contributing products, segments, customers etc to revenue or profitability. For example, MLI's that contribute 50% of PBT $ in a Commodity or MPL
	**Boxplot Chart:** Summarizes the distribution of data within a data set based on the selected dimension and measure.	Analysis of variability within transactions and enables to spot outliers and identify opportunities. E.g. Analysis of PBT $ within a specific MLI across the different channels helps in identifying profitable and unprofitable distribution channels within the specific MLI
	**Price Band Chart**: Shows the range of the selected measure in the transaction data set. Each 'band' represents a range	Analysis of variability within each price or cost range. For example, analysis of Retail Revenue in each Cost Range within an MLI
	**Scatter Chart**: Provides a powerful, visual, and interactive analysis of the data by mapping transactions on X and Y-Axes. Users can zoom into low margin/ revenue transactions and find the transaction details by clicking on the transaction dots. Additionally, users will be able to group and color code transactions based on a specific dimension via the 'Band By' option. User will be able to aggregate transactions based on a specific dimension via the 'Roll up By' option	Useful for spotting outliers and variation in transactions. For example, identify negative PBT $ transactions within a specific MLI for year 2008. Additionally, the Band By/ Group By features are useful in analyzing transactions within a specific supersession group or reman group. Additionally, this chart is useful for analyzing competitive price against Ford prices for all parts within an MLI
	**Bubble Chart**: Shows three dimensions of data in a two-dimensional chart with points plotted on the X Axis and Y Axis and their size proportional to a third set of values on the Z Axis. Users will be able to group and color code transactions based on a specific dimension via the 'Band By' option. User will	Useful for spotting outliers and variation in transactions. For example, identify Service Part Numbers with less than 500 units in Gross Volume or less than $1000 Gross Revenue and negative PBT $ within a specific

	be able to aggregate transactions based on a specific dimension via the 'Roll up By' option	MLI for year 2008
	**Time Series Chart:** Shows the trends of a specific measure (revenue, volume, cost, discount, etc.) in a user specified time period. Additionally, the Band By feature is useful in analyzing transactions within a specific supersession group, reman group or a specific competitor	Useful for conducting trend analysis over 12 months or 24 months on Ford prices against competitor prices for specific service parts. Additionally, also useful for trending market share, volume, margins, cost etc.
	**Multiple Time Series Chart**: An extension of the Time Series Chart. A user can specify up to 32 measures, including a moving average and difference of two measures.	Useful for conducting simultaneous trend analysis over 12 months or 24 months on Ford prices, costs, market share, volume, margins, cost etc for a specific service part
	**Summary Report**: Shows Statistical data about each waterfall element including Total, Average, Min and Max Values of transactions. Also displays Dimension Summary contribution to the Summary Focus	Useful for seeing a tabular view of the waterfall

4.3.1 Waterfall Chart

The waterfall chart is the default chart type that appears when you click the **Price Explorer** folder (in the folder panel on the left side of the **Price Analyzer**).

This chart has two major aspects-the *left side* and *right side*.

- The left side shows the build up from **Total Cost** to **Dealer Price**, and will contain data representation after the **Price Manager** module goes live.
- The right side of the waterfall shows the income statement elements from **Gross Revenue** through **Profit Before Tax (PBT)** of historical sales.

As whole, this chart type can help the user to analyze the various costs and discounts that are affecting profitability in the user-selected portion of the business including product, customer, and region hierarchies.

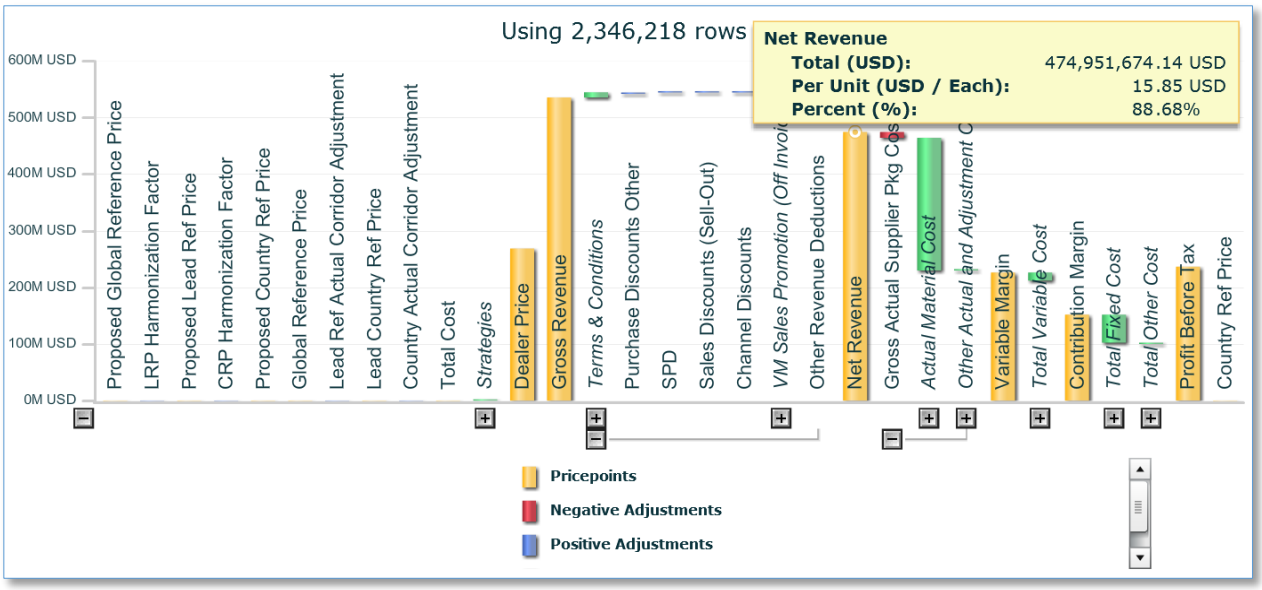
With this chart, the user can analyze the various costs and discounts that affect profitability—including product, customer, and region hierarchies. This information can

help the business quickly identify pricing opportunities. The primary usages for this chart are to:

- Highlight areas of margin leakage
- Perform metric root cause analysis through waterfall comparison, on a per-unit or percentage basis
- Better understand factors that affect margin
- Identify and eliminate profit leakage at different price points

Chart Features

Hover the mouse pointer over a data element in the waterfall chart to display a pop-up containing more information about a specific waterfall column.



For brevity or clarity, the small plus and minus sign buttons along the bottom of the waterfall chart will hide or display column groupings.

A waterfall consists of price points and adjustments. A price point is a combination of metrics that represent a specific profitability or price concept, such as list price, invoice price, or pocket margin. It is a logical and clear metric of price and/or profitability. A waterfall starts and ends with a price point. Between price points there are adjustments. An adjustment is an element that adds to or subtracts from a price point. It can be

negative or positive on standard sales transactions, such as credits or debits, manual adjustments, and regional adjustments.

By default, the **Waterfall** chart appears with all elements visible. As necessary, you can collapse the elements into groups to enhance the view and assist your analysis. For example, you can view **Revenue Deductions** as the individual country-specific elements in a roll-up to the globally aligned elements, or in another roll-up again to display the **Total Discounts**. See for the grouping options.

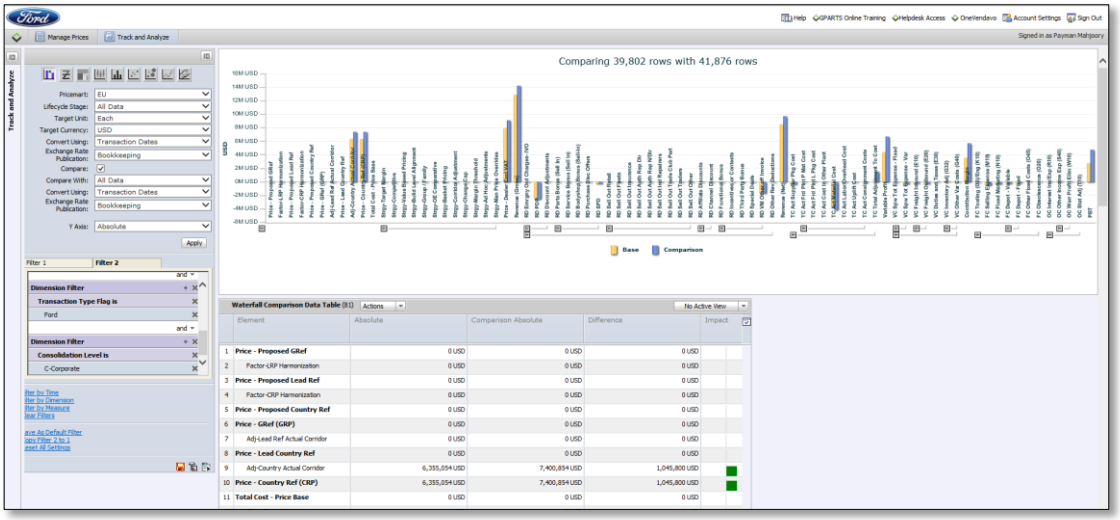
Example 1

Let's walk through an example in which the goal is to generate a waterfall for an MLI for the period for Q4 2014, and compare it against a prior period, Q3 2014. Then, we'll identify the biggest driver for change in **PBT** between the two periods

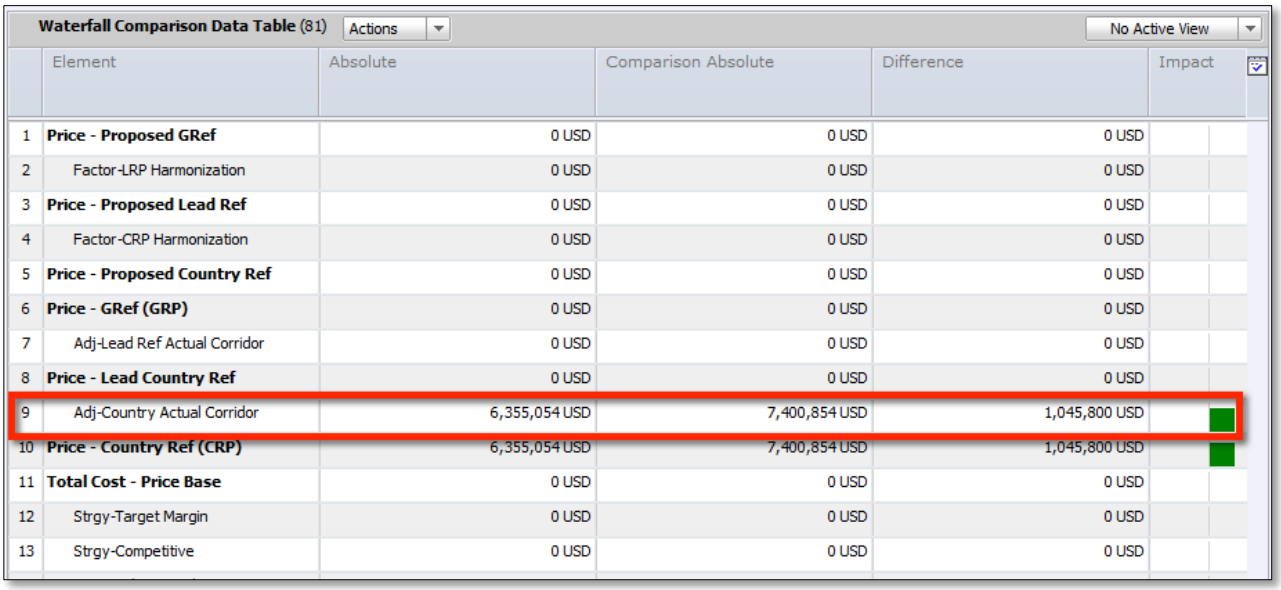
To configure the chart and data view, follow these steps:

1. Choose **Price Explorer** from the **Track and Analyze** menu.
2. Click on the **Waterfall Chart** icon at the top of the **Control Panel**.
3. Click **Reset All Settings** to return to default settings.
4. Set the **Y-axis** is set to ***Absolute***.
5. Below the **Filters** pane, select the **Filter by Time** link.
6. Choose **Select a Period** from the **Business Calendar** the drop down menu.
7. Expand the **2014** folder, select ***Q4 2014***, and then click **OK**.
8. Below the **Filters** pane, select the **Filter by Dimension** link and type "MLI Name" in the **Available Items** field.
9. Select ***0002-Brake Discs***, click on the arrow button to move your selection to the **Filter List**, and then click **OK**.
10. Set three more **Filter by Dimension**s:
    a. Transaction Type Flag = Ford
    b. Sales Type = Domestic
    c. Consolidation Level = C-Corporate

11. Check the **Compare** box and then choose ***All Data*** in the **Compare With** drop-down.
12. Click the **Apply** button.
13. Select Copy Filter 1 to Filter 2 on the Price Explorer Navigation Pane.
14. Click on the tab Filter 2, remove Q4 2014, and use Filter by Time and Select Q3 2014.
15. Examine Filter 1 and Filter 2 to ensure that the right filters are set
16. Examine the chart you have created.

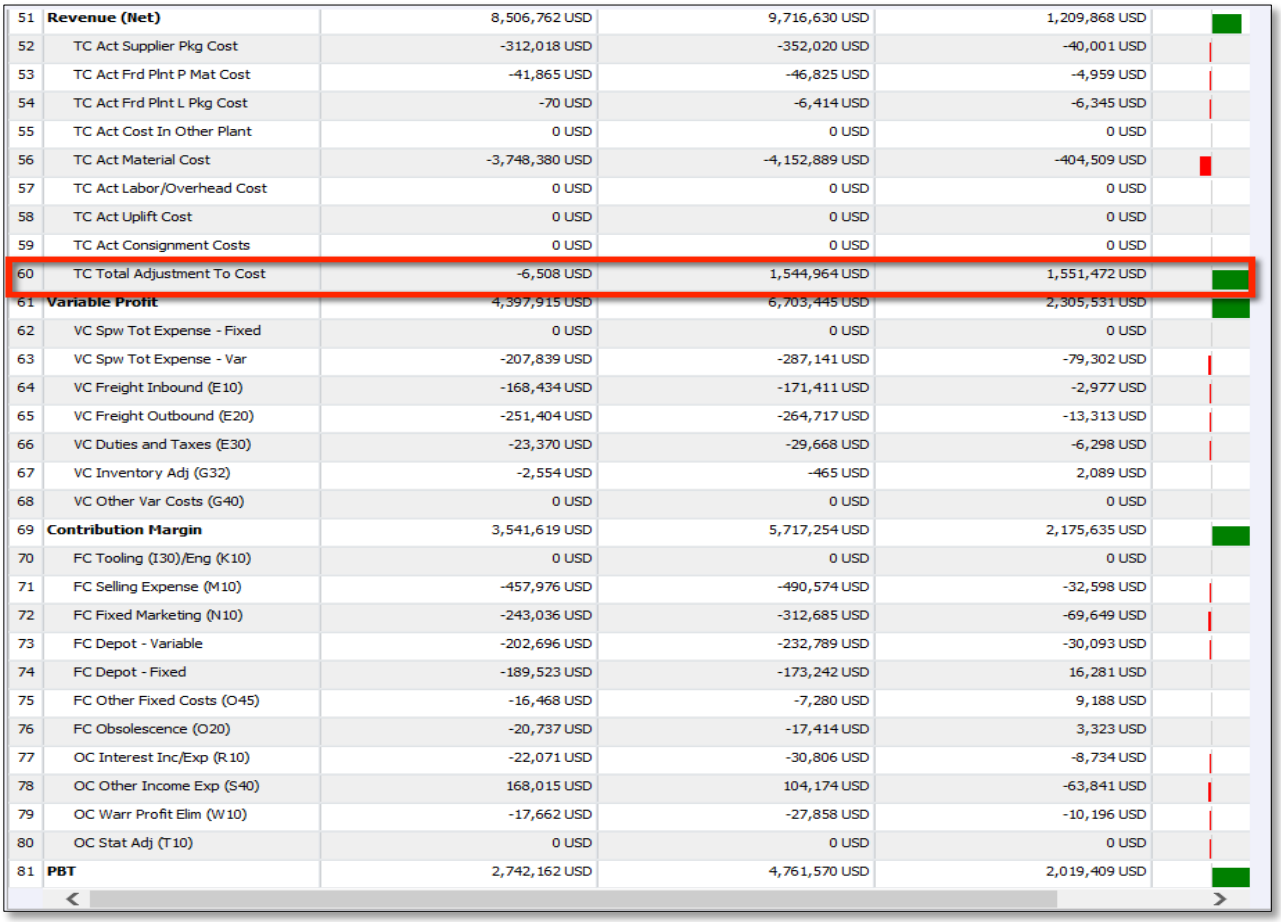


17. Then scroll through the table to identify the biggest driver for change in PBTMP $ between the two periods.



Waterfall Comparison Data Table (81) Actions — No Active View

	Element	Absolute	Comparison Absolute	Difference	Impact
1	**Price - Proposed GRef**	0 USD	0 USD	0 USD	
2	Factor-LRP Harmonization	0 USD	0 USD	0 USD	
3	**Price - Proposed Lead Ref**	0 USD	0 USD	0 USD	
4	Factor-CRP Harmonization	0 USD	0 USD	0 USD	
5	**Price - Proposed Country Ref**	0 USD	0 USD	0 USD	
6	**Price - GRef (GRP)**	0 USD	0 USD	0 USD	
7	Adj-Lead Ref Actual Corridor	0 USD	0 USD	0 USD	
8	**Price - Lead Country Ref**	0 USD	0 USD	0 USD	
9	Adj-Country Actual Corridor	6,355,054 USD	7,400,854 USD	1,045,800 USD	
10	**Price - Country Ref (CRP)**	6,355,054 USD	7,400,854 USD	1,045,800 USD	
11	**Total Cost - Price Base**	0 USD	0 USD	0 USD	
12	Strgy-Target Margin	0 USD	0 USD	0 USD	
13	Strgy-Competitive	0 USD	0 USD	0 USD	



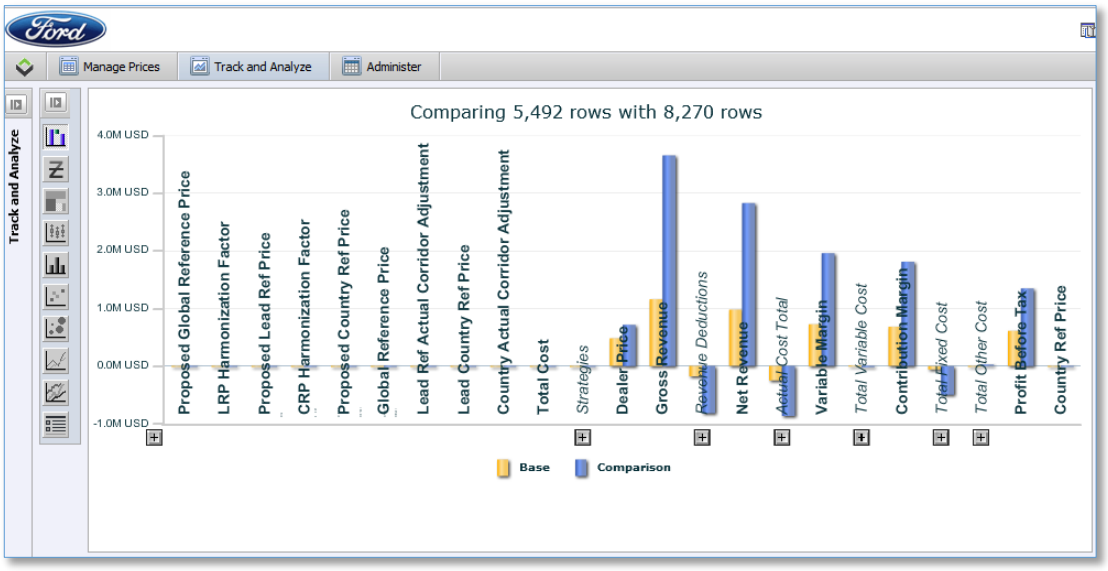
51	**Revenue (Net)**	8,506,762 USD	9,716,630 USD	1,209,868 USD	
52	TC Act Supplier Pkg Cost	-312,018 USD	-352,020 USD	-40,001 USD	
53	TC Act Frd Plnt P Mat Cost	-41,865 USD	-46,825 USD	-4,959 USD	
54	TC Act Frd Plnt L Pkg Cost	-70 USD	-6,414 USD	-6,345 USD	
55	TC Act Cost In Other Plant	0 USD	0 USD	0 USD	
56	TC Act Material Cost	-3,748,380 USD	-4,152,889 USD	-404,509 USD	
57	TC Act Labor/Overhead Cost	0 USD	0 USD	0 USD	
58	TC Act Uplift Cost	0 USD	0 USD	0 USD	
59	TC Act Consignment Costs	0 USD	0 USD	0 USD	
60	TC Total Adjustment To Cost	-6,508 USD	1,544,964 USD	1,551,472 USD	
61	**Variable Profit**	4,397,915 USD	6,703,445 USD	2,305,531 USD	
62	VC Spw Tot Expense - Fixed	0 USD	0 USD	0 USD	
63	VC Spw Tot Expense - Var	-207,839 USD	-287,141 USD	-79,302 USD	
64	VC Freight Inbound (E10)	-168,434 USD	-171,411 USD	-2,977 USD	
65	VC Freight Outbound (E20)	-251,404 USD	-264,717 USD	-13,313 USD	
66	VC Duties and Taxes (E30)	-23,370 USD	-29,668 USD	-6,298 USD	
67	VC Inventory Adj (G32)	-2,554 USD	-465 USD	2,089 USD	
68	VC Other Var Costs (G40)	0 USD	0 USD	0 USD	
69	**Contribution Margin**	3,541,619 USD	5,717,254 USD	2,175,635 USD	
70	FC Tooling (I30)/Eng (K10)	0 USD	0 USD	0 USD	
71	FC Selling Expense (M10)	-457,976 USD	-490,574 USD	-32,598 USD	
72	FC Fixed Marketing (N10)	-243,036 USD	-312,685 USD	-69,649 USD	
73	FC Depot - Variable	-202,696 USD	-232,789 USD	-30,093 USD	
74	FC Depot - Fixed	-189,523 USD	-173,242 USD	16,281 USD	
75	FC Other Fixed Costs (O45)	-16,468 USD	-7,280 USD	9,188 USD	
76	FC Obsolescence (O20)	-20,737 USD	-17,414 USD	3,323 USD	
77	OC Interest Inc/Exp (R10)	-22,071 USD	-30,806 USD	-8,734 USD	
78	OC Other Income Exp (S40)	168,015 USD	104,174 USD	-63,841 USD	
79	OC Warr Profit Elim (W10)	-17,662 USD	-27,858 USD	-10,196 USD	
80	OC Stat Adj (T10)	0 USD	0 USD	0 USD	
81	**PBT**	2,742,162 USD	4,761,570 USD	2,019,409 USD	

Example – Waterfall Comparison

The comparative waterfall identifies the cause of performance variation in a graphic format. Users can compare data by any combination of dimension, measures, or time. In this example, we'll compare pricing between Germany and United Kingdom for the ***Brakes & Exhaust PCT***. Let's extend the previous example and configure it for comparative analysis by taking these additional steps:

1. In the control panel, click the **Compare** checkbox, and then click the **Apply** button (page refreshes to display the Filter 1 and Filter 2 tabs).
2. Click ***Filter 1*** and configure this filter as in the example above (***BE-Brakes & Exhaust PCT***).
3. Click the **Filter by Dimension** link, enter "Country Name" for **Available Items**, then choose ***Germany*** from the list, and then click the **OK** button.
4. In the filter pane, click ***Filter 2*** and configure this filter to be the same as ***Filter 1***.
5. Click the **Filter by Dimension** link, enter "Country Name" for **Available Items**, then choose ***United Kingdom*** from the list, and then click the **OK** button.
6. Click the collapse buttons on the chart, and then hover the mouse pointer over the yellow and blue columns to display the pop-up information.

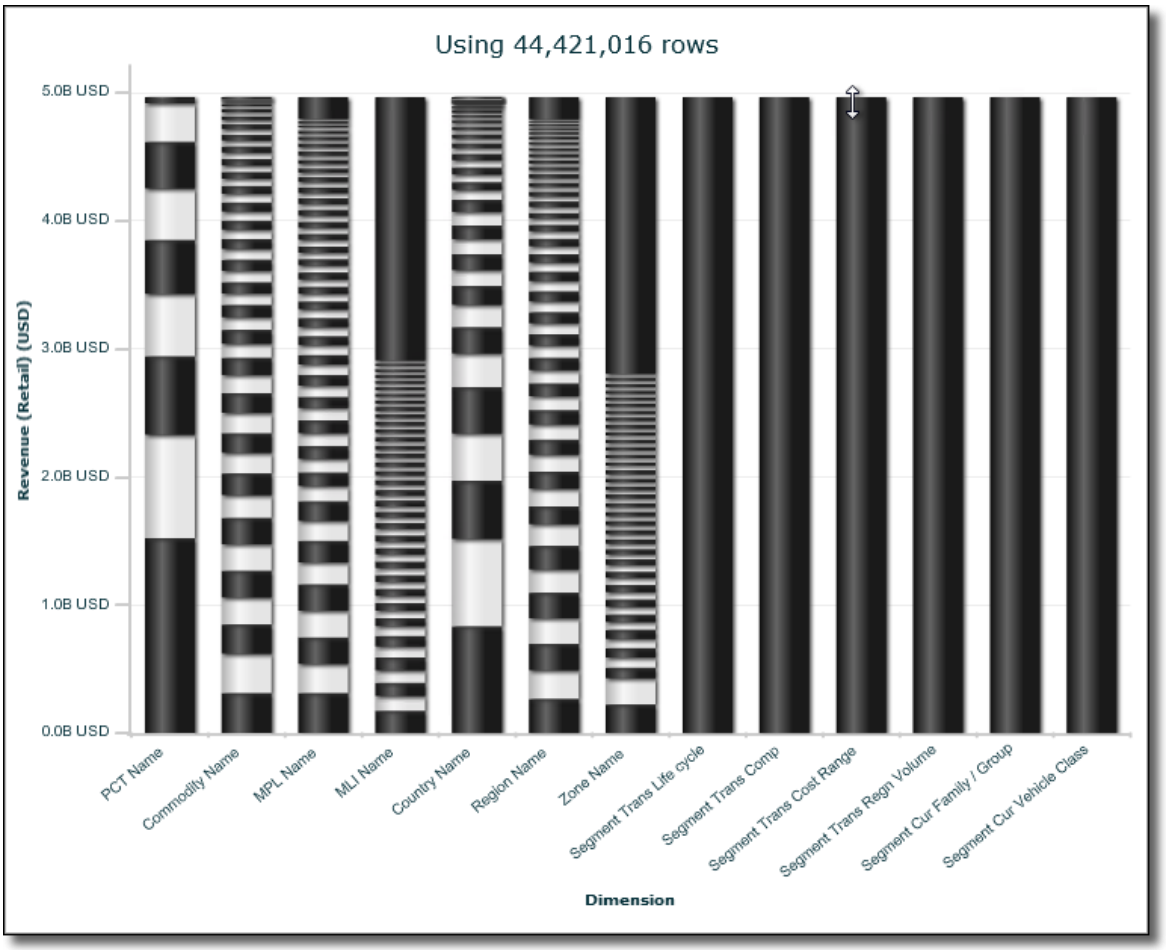
The waterfall chart would appear as we show in the figure below.


Manage Prices
Track and Analyze
Administer
Track and Analyze
Comparing 5,492 rows with 8,270 rows
4.0M USD
3.0M USD
2.0M USD
1.0M USD
0.0M USD
-1.0M USD
Proposed Global Reference Price
LRP Harmonization Factor
Proposed Lead Ref Price
CRP Harmonization Factor
Proposed Country Ref Price
Global Reference Price
Lead Ref Actual Corridor Adjustment
Lead Country Ref Price
Country Actual Corridor Adjustment
Total Cost
Strategies
Dealer Price
Gross Revenue
Revenue Deductions
Net Revenue
Actual Cost Total
Variable Margin
Total Variable Cost
Contribution Margin
Total Fixed Cost
Total Other Cost
Profit Before Tax
Country Ref Price
Base
Comparison

4.3.2 Zebra Chart

A **Zebra** chart shows the contribution of various dimensions to a particular measure. For example, the contribution of different **MLI**'s to **Gross Revenue**. Or, the contribution of different methods of distribution—such as dealer channel, special markets—to **Gross Revenue**. The **Zebra** chart contains multiple bars that represent the dimensions of the data. Think of a **Zebra** chart as ten different pie charts in one page: each bar is one pie chart, and each section of the bar represents the different slices of the pie. The different X-axis dimensions are fixed.

The Zebra chart displays multiple bars representing set business dimensions on the X axis and a selected focus measure on the Y Axis. Think of each bar as a pie chart that shows how the focus is divided among the values of that dimension. Each section of the bar represents the different "slices of pie".



The values in the x-axis are pre-set and cannot be modified. The first dimensions on the x-axis are the top four levels of the Product Hierarchy:

- Product Commodity Team
- Commodity Name
- MPL Name
- MLI Name

Next, regional hierarchy values are available:

- Country Name
- Region Name
- Zone Name

Lastly, segmentation transactional data is available:

- Lifecycle
- Competitive
- Cost Range
- Regional Volume
- Current Family/Group
- Current Vehicle Class

> **NOTE:** Note that all dimensions are current with the exception of the last six—which are known as *Transacted*. Transacted dimensions correspond to sales transaction data in the pricemart.

Zebra chart controls are identical to the **Waterfall** chart, except for the addition of the **Focus** drop-down field—which sets the y-axis value.

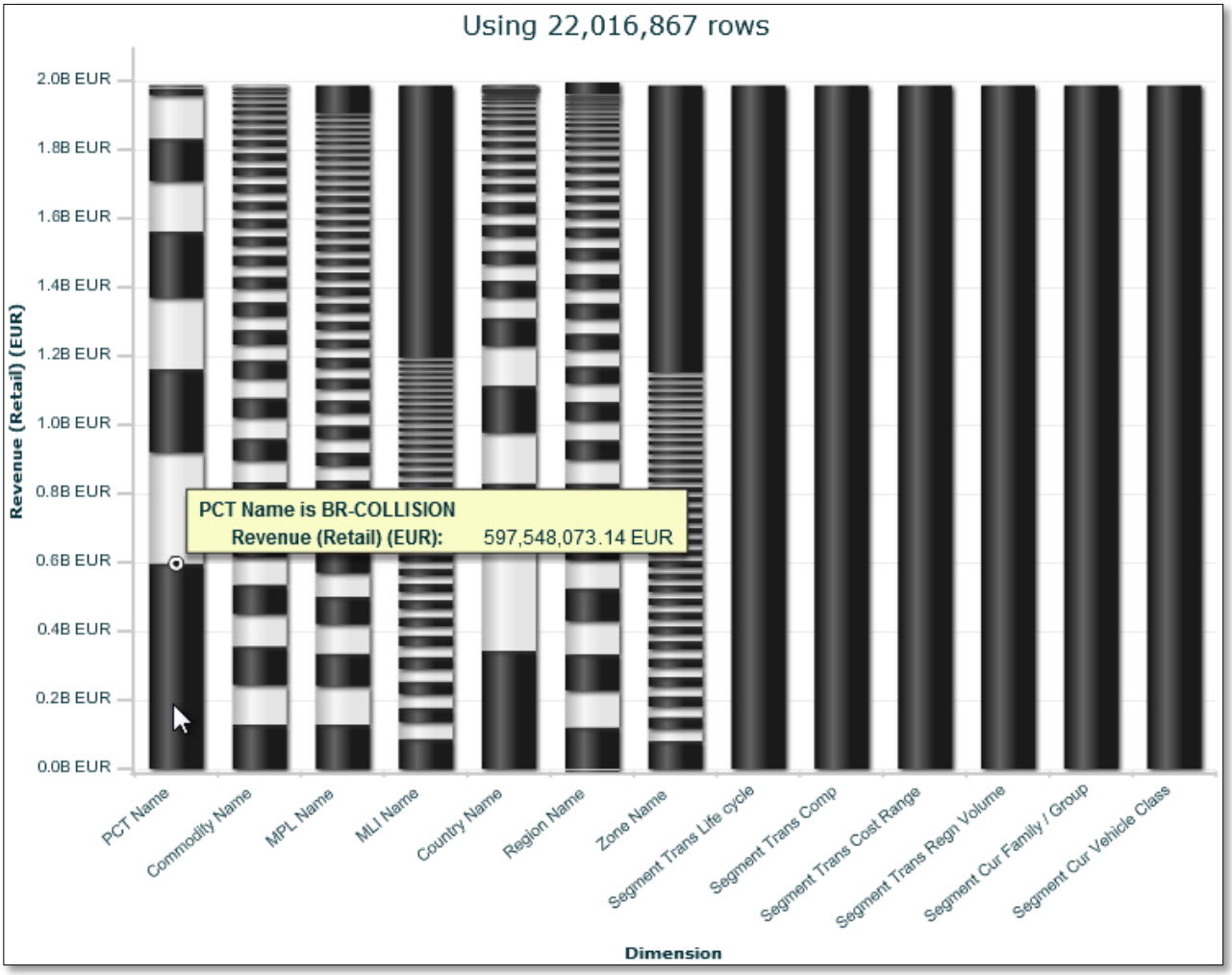
Example

Let's work through an example by following these steps:

1. Click the **Zebra** chart icon.

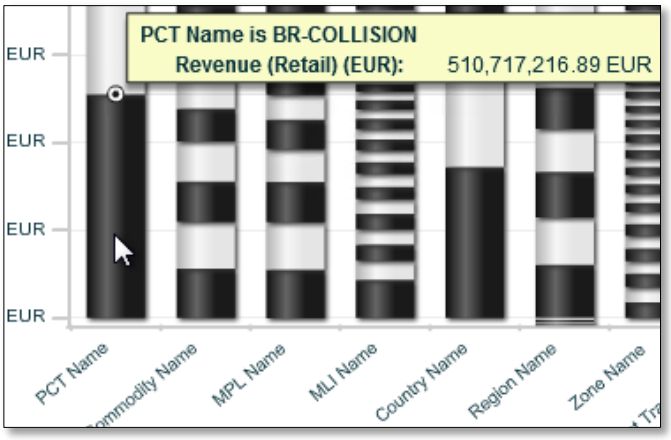
2. Leave the **Focus** = ***Revenue***, and leave **Scale** = ***Absolute***.
3. Set the **Target Currency** to ***EUR***.
4. Configure a **Time** filter with a **Custom Date Range** of 1/1/2014 to 9/30/2014.
5. Apply a **Dimension** filter, setting **Transaction Type Flag** = ***Ford***.
6. Apply another **Dimension** filter, setting **Consolidation Level** = ***C-Corporate***.

After a few moments, you will see this chart:

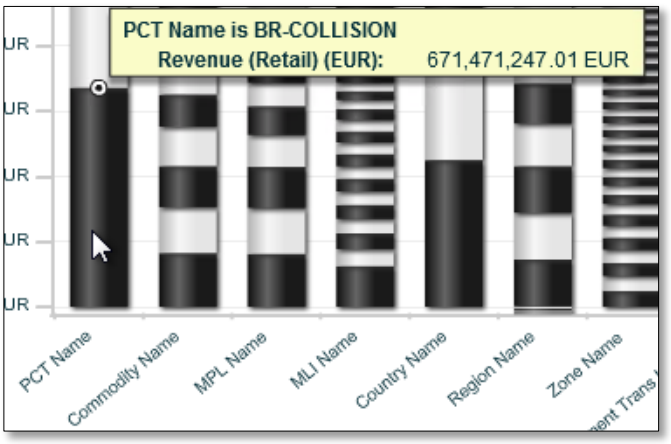


When you hover over the bottommost segment in the **PCT Name** column, you'll see that **BR-Collision** contributes nearly $600 million Euros.

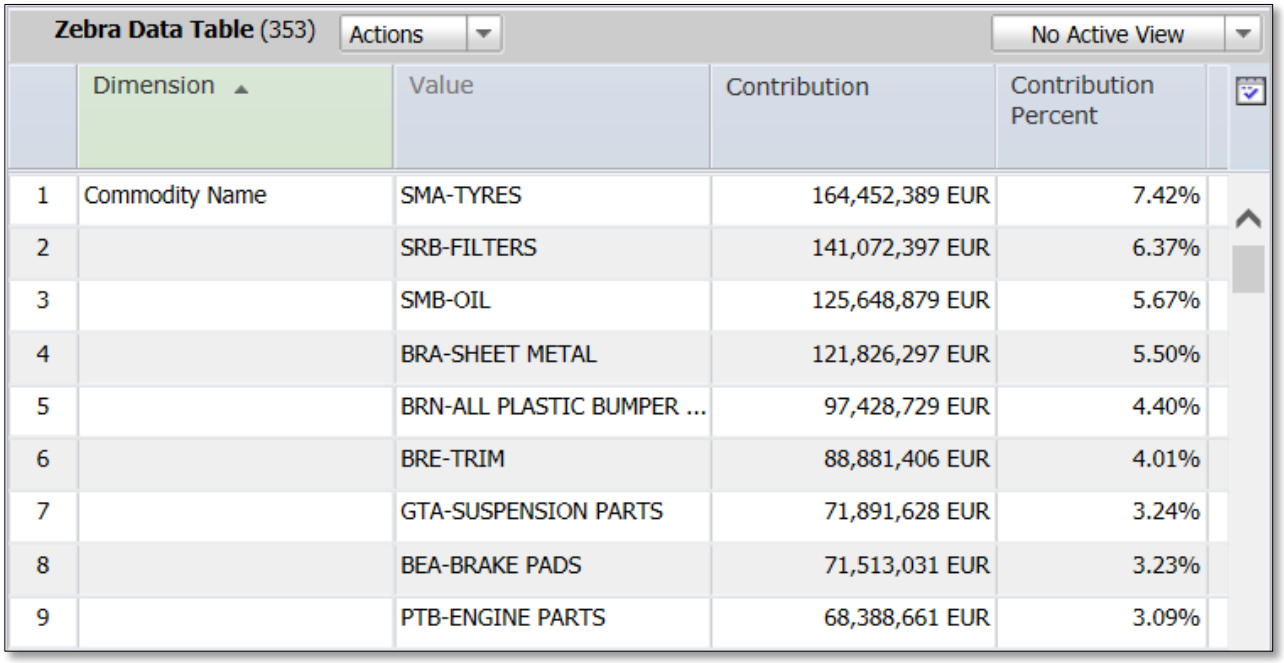
Now let's look at domestic sales. Add another **Dimension** filter, restricting to **Sales Type** = ***Domestic***. Doing so reduces the BR-Collision contribution down to about $510 million Euros.



Next, let's change the **Date Filter**. First, we remove the existing **Date** filter entirely by checking the small **x** in the **Filter** pane. Next, let's set another **Date** filter by choosing **Date Range Shortcut > Rolling 12 Months**. This will automatically restrict the time filtering to the last 12 whole months. In our case, we get May 2014 through April 2015. This increases the **BR-Collision** segment of PCT Name to about $671 million Euros.



4.3.3 Scroll down below the chart to see the corresponding data view:



Zebra Data Table (353) Actions — No Active View

	Dimension	Value	Contribution	Contribution Percent
1	Commodity Name	SMA-TYRES	164,452,389 EUR	7.42%
2		SRB-FILTERS	141,072,397 EUR	6.37%
3		SMB-OIL	125,648,879 EUR	5.67%
4		BRA-SHEET METAL	121,826,297 EUR	5.50%
5		BRN-ALL PLASTIC BUMPER ...	97,428,729 EUR	4.40%
6		BRE-TRIM	88,881,406 EUR	4.01%
7		GTA-SUSPENSION PARTS	71,891,628 EUR	3.24%
8		BEA-BRAKE PADS	71,513,031 EUR	3.23%
9		PTB-ENGINE PARTS	68,388,661 EUR	3.09%

Treemap Chart

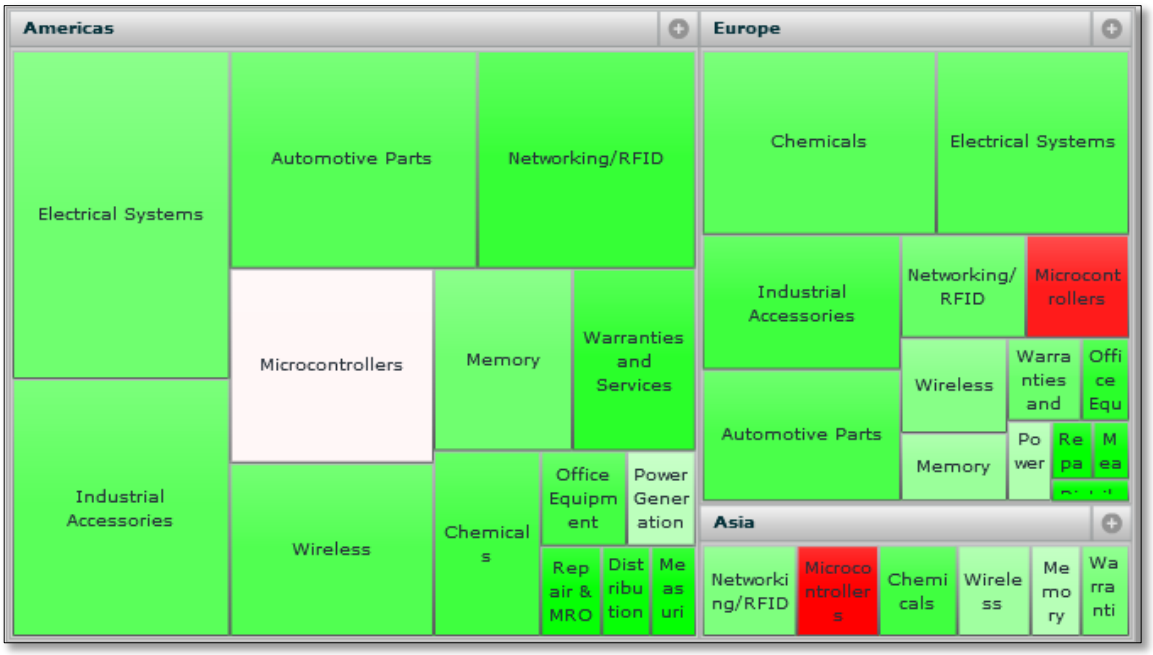
This chart type displays an iterative breakdown of a measure, using up to three dimensions. You can view a second metric using a different color. For example, a green color would indicate positive metrics and a red color would indicate negative metrics.

This chart type is useful for simultaneously identifying core contributors to the chosen metrics. For example, you can identify which regions, markets, and business units contribute the largest amount of **Gross Revenue** while maintaining high margin.

Tree Map charts help pricing analysts to do the following:

- Determine the largest contributor of revenue in a particular sales region.
- Identify the single largest product-sales region contributing to total revenue.
- Identify the products where pocket margin is lowest (or even negative).

The figure below is an example of a tree map chart that uses dimension hierarchies. Multiple dimensions are shown as nested rectangles, which show how the total measure value at each level is broken down across dimension values.



If you are interested in performing comparison analysis to uncover outliers, the tree map is a great place to start. The tree map chart is a hierarchy of rectangles arranged by relative sizes and color gradients.

When using the Tree Map chart, the 1st level grouping must be populated. The user may choose to select the 'none' option for the second and third level grouping if desired. As with the previous chart, hovering your mouse over a box in the chart will allow you to view the size and color measure values.

It's important to know that a best practice when using this chart is to ensure that you have filtered your data to focus on those areas of the business you want to analyze. If we add additional filters to limit the data to France, Germany, and the United Kingdom; and add a filter to limit the data to two PCTs, Breaks and Exhaust and Government Test Related Parts, the chart becomes a more useful tool for analysis.

Another way to use this chart type is to display the contribution of different **Regions**, **Markets**, and **Business Units** to **Gross Revenue**. The extent of the contribution is shown by the relative size of the individual elements, and the contribution of each piece to **Profit Before Tax** through the shade of the color.

Example

Let's work through an example by following these steps:

1. Click the **Treemap** chart icon.
2. Set **Target Currency** to ***EUR***.
3. Set **1st Level Grouping** to ***MPL Name***,
4. Set **2nd Level Grouping** to ***MLI Name***.
5. Set **Size Measure** to ***Revenue Gross***.
6. Set **Color Measure** to ***Gross Margin***.
7. Set a **Time** filter having a **Custom Date Range** of 1/1/2014 through 9/30/2014.
8. Apply these **Dimension** filters:
    a. Set **Transaction Type Flag** = ***Ford***.
    b. Set **Consolidation Level** = ***C-Corporate***.
    c. Set **PCT Name** = ***SM-Tyres & Oil***.

After a few moments, you will see this chart:

Understanding the Size and Color Measures

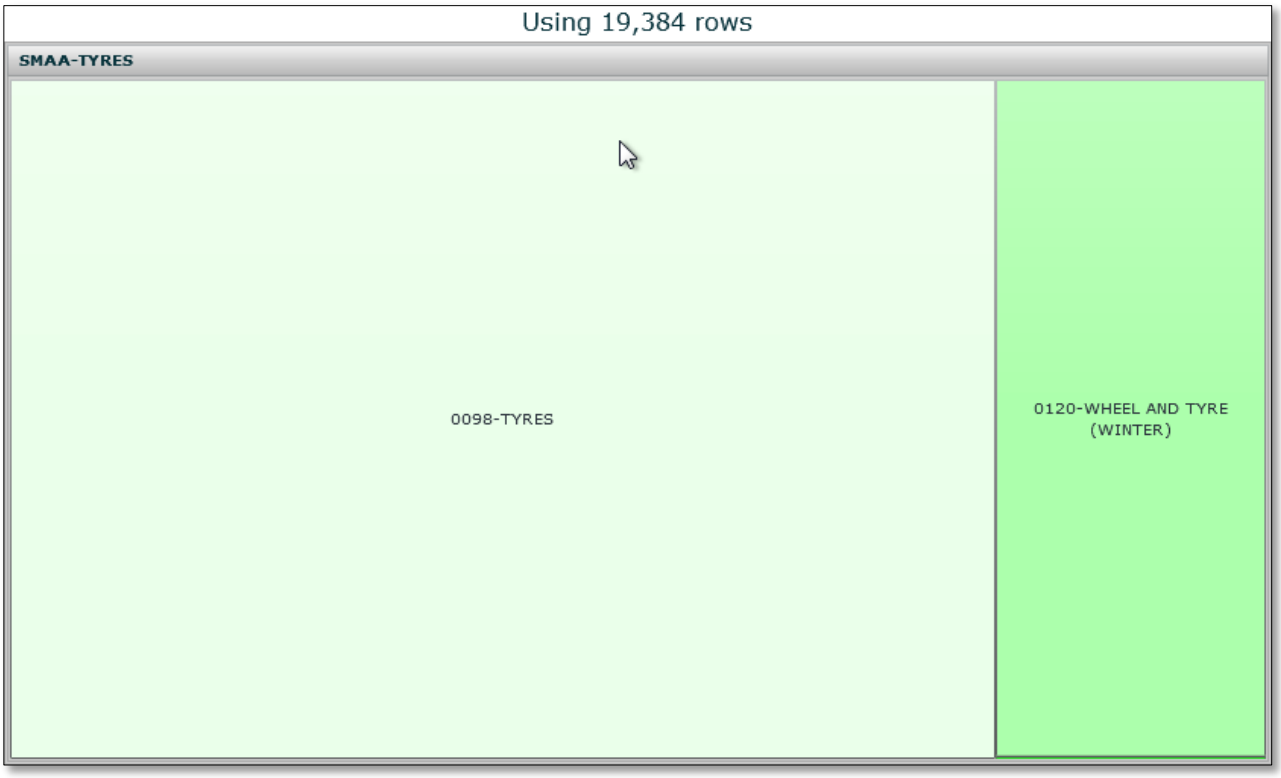
Each rectangle in a tree map indicates the following pieces of information:

- **Size** – magnitude for a particular measure. Bigger rectangles indicate to larger relative values.
- **Color** – magnitude and sign for a particular measure. Green indicates a positive value, red indicates a negative value. Darker colors indicate larger relative magnitudes.

While the size measure selects the metric that dictates rectangle size; the color measure sets the metric that determines the color of each rectangle. Positive values are represented with the color green and negative values are represented with the color red. The color gradient displays the relative magnitude; darker colors represent bigger relative values where lighter colors represented smaller relative values. For example, SG Ford Engine Oil is a darker shade of green than Wheel and Tyre, owing to its significantly higher gross Revenue.

Additional Tree Map Features

You can click the small plus signs (**+**) in the upper corner of some quadrants to drill further into the data. For example, clicking on the the plus sign for SMAA-Tyres, the chart will refresh and display the only the representation of the data for SMAA-Tyres. The data view below the chart will also change accordingly.


Using 19,384 rows
SMAA-TYRES
0098-TYRES
0120-WHEEL AND TYRE (WINTER)

4.3.4 Box Plot Chart

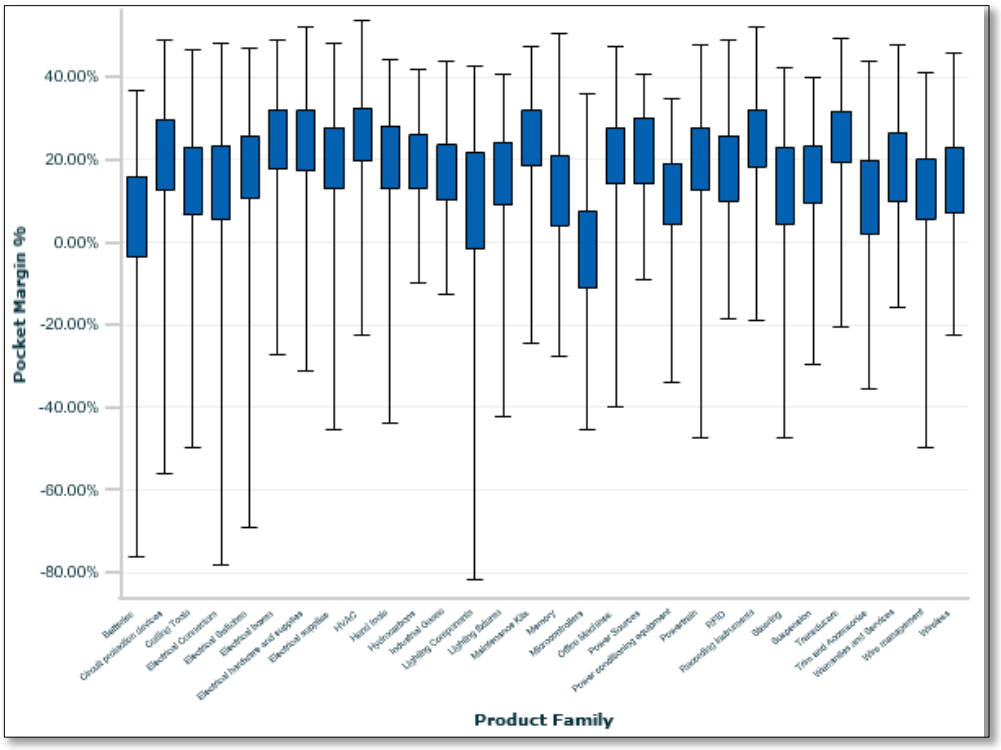
This chart type depicts data in groupings that are defined by a chosen dimension, and the chart gives a summary of minimum, maximum, average, lower percentile, and upper percentile values. This presentation indicates the distribution of transactions within each dimension and also highlights where most of the variation lies. Use the **Boxplot** chart to identify and summarize the variation across a single dimension.

Typical usage of the **Boxplot** chart includes the following:

- **Min-max analysis** – What is the range of negotiated discounts across different sales regions?
- **Variance analysis** – Which product families have consistent margins, and which have a larger variation?
- **Outlier analysis** – Which product families have bottom-heavy price distributions?

The x-axis includes all dimensions—the default is **Product Family**. The y-axis includes all measures—the default is **Pocket Margin**.

Here's a typical boxplot chart. Continue reading below to learn more and walk through an example.



Box Boundaries

The dark rectangles on this chart indicate where 50% of the data lies, according to an upper percentile of .75 and a lower percentile of .25. You can specify the length of these rectangles by specifying a value between 0 and 1. The top of the upper line-whisker shows the maximum value and the lower line shows the minimum value. Small rectangles within long whiskers indicate more variation in price; larger rectangles between shorter whiskers indicate less variation.

Defaults

Like all other charts, the **Boxplot** chart opens with following default filters: a transaction type = “Ford” and consolidation level = “Corporate”. This means that Ford transaction data is shown—not Market Intelligence data—and the data consolidation is at the Corporate level (not Inter-company, Intra-company, or Local).

In the control panel, the **Dimension** drop-down specifies the x-axis dimension and the **Focus** drop-down specifies the measure on the y-axis. Choose which **Scale** you want for the values: absolute, per-unit, or percentage basis. Though you can change them, the

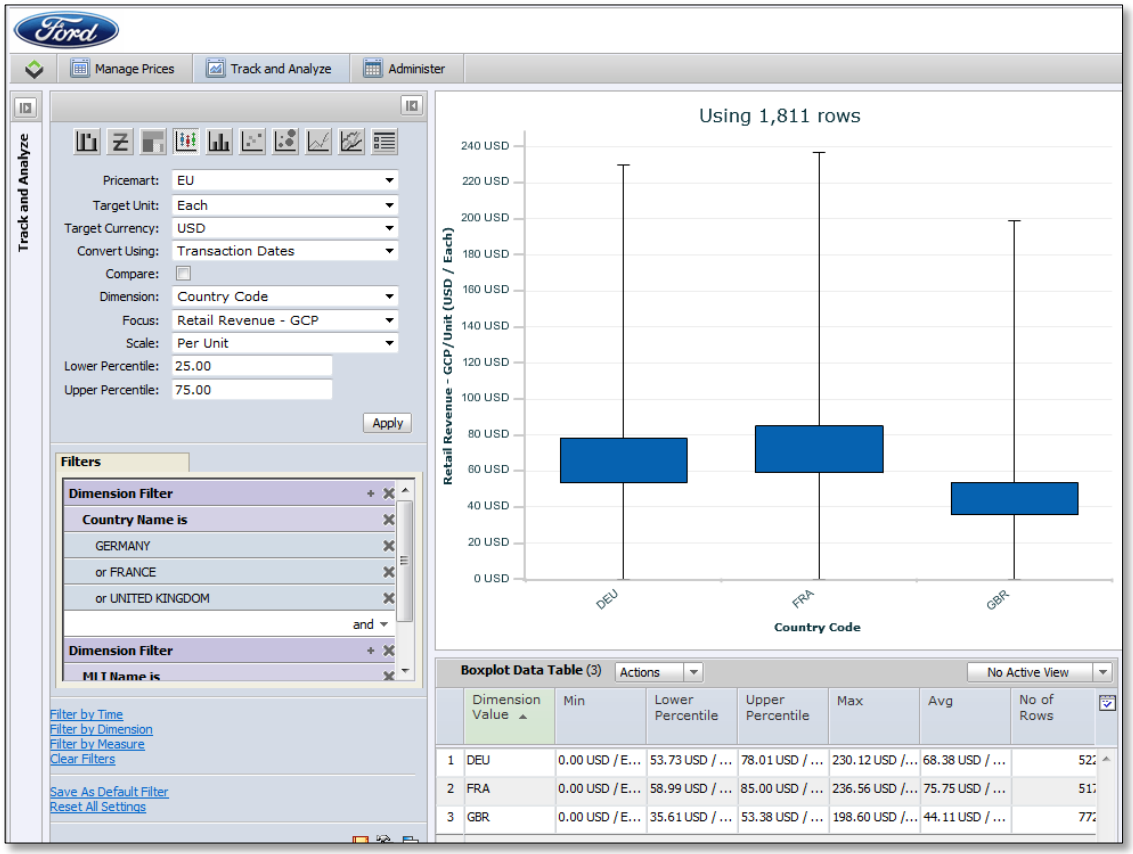
default lower percentile is 25% and the upper percentile is 75%, and these settings constrain blue boxes to the middle 50% of the transactions.

Example

Let's consider an example by taking the following steps:

1. Set the **Dimension** = ***Country Code***.
2. Set **Focus** = ***Retail Revenue***
3. Set the **Scale** = ***Per-unit***.
4. Apply a **Dimension** filter for Germany, France and the United Kingdom.
5. Also, apply a **Dimension** filter with **MLI** = both ***0001-Brake Drums*** and ***0002-Brake Discs***.

The resulting chart will be as shown in this figure:



With these settings, the chart is showing a graphical representation of the retail revenue for the three countries and the two MLIs. You can hover your mouse over each box to view the detail information for each product group to see the average retail revenue per part, along with other statistics.

Additionally, the Box Plot chart can help you quickly visualize outliers within a data set. If we look at Germany, the blue box informs us that 50% of the transactions for parts within these 2 MLIs yield a retail revenue amount between about $50 and $74. The chart also reveals that the maximum retail revenue amount yield is over $230. By quickly being able to identify outliers, you can determine if further investigation is needed to assess the validity of the variation within the specified product group.

> **NOTE:** the **Row Count** that appears in the detail pop-up does not represent gross quantity and should not be used for any analysis.

As with all Price Explorer charts, there is a data table beneath the boxplot that summarizes the data displayed in the chart. This data table retains all standard data table functionality such as sorting, exporting, and the ability to manage your views.

4.3.5 Price Band Chart

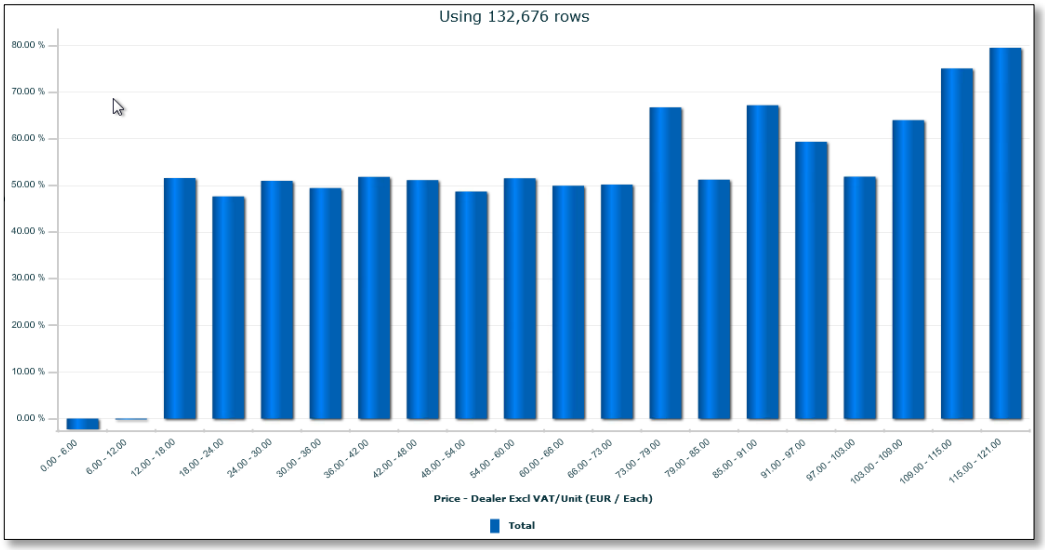
The **Price Band** chart represents data as bands showing the range and variability of a metric for the defined business slice. This chart type displays the range for the chosen measure in the transaction data set. Each band in the chart represents a range.

Example

Let's consider an example by taking the following steps:

1. Set the **Target Currency** = ***EUR***.
2. Set **Y-Axis** = ***Contribution Margin.***
3. Set the **Scale** = ***Percent***.
4. Apply a **Time** filter for January 1 to September 30, 2014.
5. Apply these **Dimension** filters:
    a. **Transaction Type Flag** = ***Ford***.
    b. **Consolidation Level** = ***C-Corporate***.
    c. **MLI** = ***0002-Brake Discs***.

The resulting chart will be as shown in this figure:



The following figure shows an example of a price band chart in which each band shows the variability in price (or margin) for the sales of one product or a group of similar products. Each band represents a range of prices that have been achieved on that product. The height of each band corresponds the quantity sold for that range of prices. Larger-quantity bands indicate where more sales are occurring.

Gaps in the Price Band chart indicate where little or no volume has been sold. A general goal is to increase the pocket price per unit at the higher volumes so that the price bands move to the right. It is common to see variation in the pocket price.

The x-axis includes all measures with the default being True Supported Price.
If you select pocket margin as the x-axis, the variations in price band ranges will be much larger and help indicate the volumes where discounting and rebates occur.
The y-axis includes all measures with the default being Quantity.

You may also specify the number of bars to display on the chart by choosing ***number of bars*** in the **Bar Units** drop-down and entering a value in the **Bars** field. Or, dictate the range covered by each bar by selecting “width of bars” in the Bar Units field and entering a value in the Bars field. Notice how the number and size of the bars change based on your selection.

Zooming In and Out

You can move the pointer over a band to see the absolute, percentage, or per unit amount of all transactions within that band in a tool tip. You can zoom in on a set of bars by drawing a box around the set. The chart refreshes to show only the data contained in the box, using the full set of bars. You can change the number of bars to increase/decrease the range defined by each of the bars. The more bars displayed, the more narrow the range of each bar.

Compare

Using the compare feature to showcase a comparison between two date sets is also a useful analysis tool when using the Price Band Chart. Check the **Compare** box to enable the compare feature. Notice you are given the option to select whether you want to perform currency conversions on the compared data using transaction dates or a fixed date; as well the option to make a publication type selection..

Click the **Apply** button and to display a second filter tab. When configuring your comparative data set, it's also important to mirror all of the filters you have set for your first data set—except for the metric that you want to compare. This will prevent the original data set from being altered from its intended state as it is here. Comparing data in this way is a valuable method for revealing areas that may require further analysis and investigation.

4.3.6 Scatter Chart

The **Scatter Chart** is a plotting tool for visualizing patterns and variation across dimensions, metrics, and measures. After configuring the control panel, it's often easy to see patterns, clusters and outliers for further analysis.

In particular, the **Scatter Chart** is one of the most useful charts for analyzing price and margin variability, so it can be an excellent tool for assisting the FCSD business unit in identifying pricing and profit improvement opportunities for specific parts within each **MLI**. Additionally, the **Scatter Chart** will also enable FCSD to perform competitive price analysis against Ford prices.

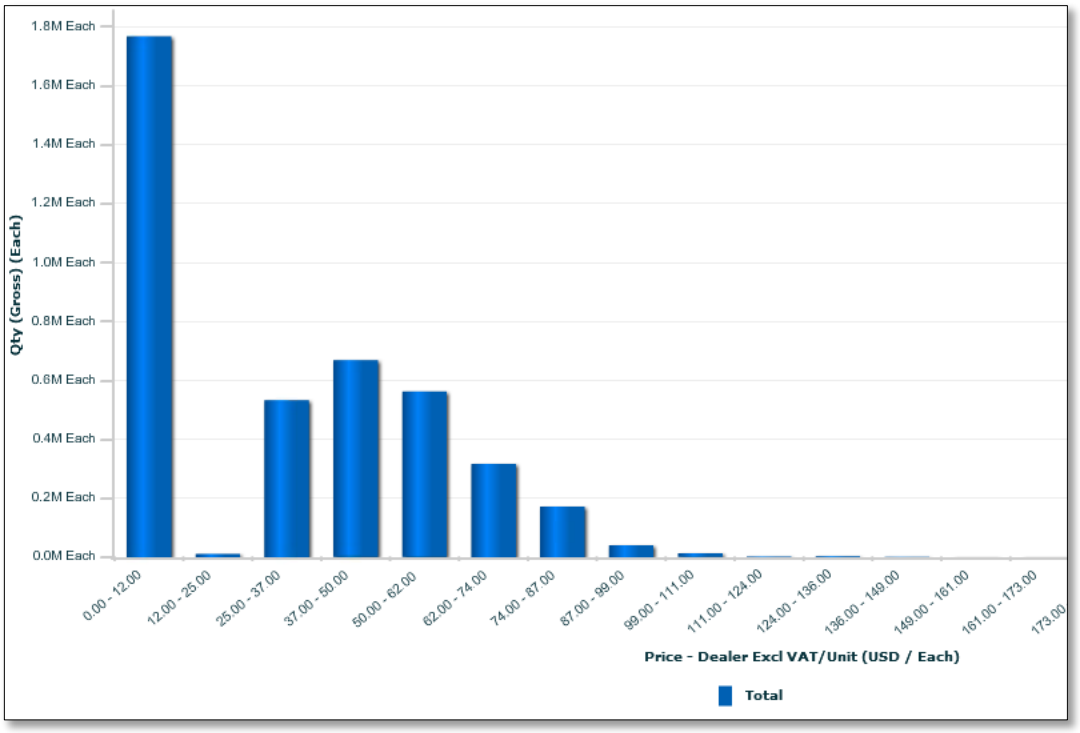
You can zoom into low margin or low-revenue transactions and find the transaction details by clicking on the dots on the chart—each of which represents a transaction. With the **Band By** option, you can also group and color-code transactions according to a specific dimension, or aggregate transactions by dimension with the **Roll up By** option.

The same options are available for this chart, including choices for the **Pricemart** and **Currency** conversion—along with filters for time, dimensions, and measures. The **Scatter Chart** has additional controls:

- X and Y Axis settings
- Rollup and Band By settings
- Regression and Reference Line settings

X & Y Axis Settings

The user can choose the measure from the **X Axis** drop-down. For example, the chart below is currently set to ***Price – Dealer Excl VAT*** in the drop-down. This is also the measure displayed on the chart's X-axis.



If we change the value to Gross Margin and click the Apply button, the chart will update to display the selected data element. Note that the data table below the chart is revised to display the new selection.

The Y Axis drop-down permits the user to select the measure to be displayed on the y-axis of the chart. The chart is currently set to the Contribution Margin dimension.

If we change the value in the Y axis and click the Apply button, the chart will update to display the selected data element. As with the X-axis selection, the data table updates to reflect the new Y axis value.

Associated with the X- and Y-axis controls is the Scale drop-down. There are three options in this drop-down. Here you can select whether you would like to display data on an absolute, per unit or percent basis.

Rollup & Band By Settings

The roll-up drop down field will group and aggregate data based on the selection. In this case, the scatter chart data is rolled up to MLI Code. This means that each individual plot

on the chart corresponds to an MLI. All of the part information on the chart has been grouped within each MLI Code and the aggregate totals are displayed for reference.

If we change Rollup to PCT Code, we now see that each individual plot corresponds to a specific PCT code. The scatter chart data can be rolled up by any dimension in the system.

The Band By drop-down sets the dimension that corresponds to the color of the dots on the chart. The color of the dots on the chart is defined in the legend below the chart area. Notice that while each individual dot corresponds to a different MLI, all of the Blue colored dots correspond to the Service and Related Parts PCT. As with the Rollup feature, the scatter chart data can be banded by any dimension in the system.

Hovering the mouse over a dot will display the specifics of the plotted data element. For instance, this dot is representing the MLI 0102 which is a member of the Service and Related Parts PCT plotted by retail revenue on the x-axis and contribution margin on the y axis.

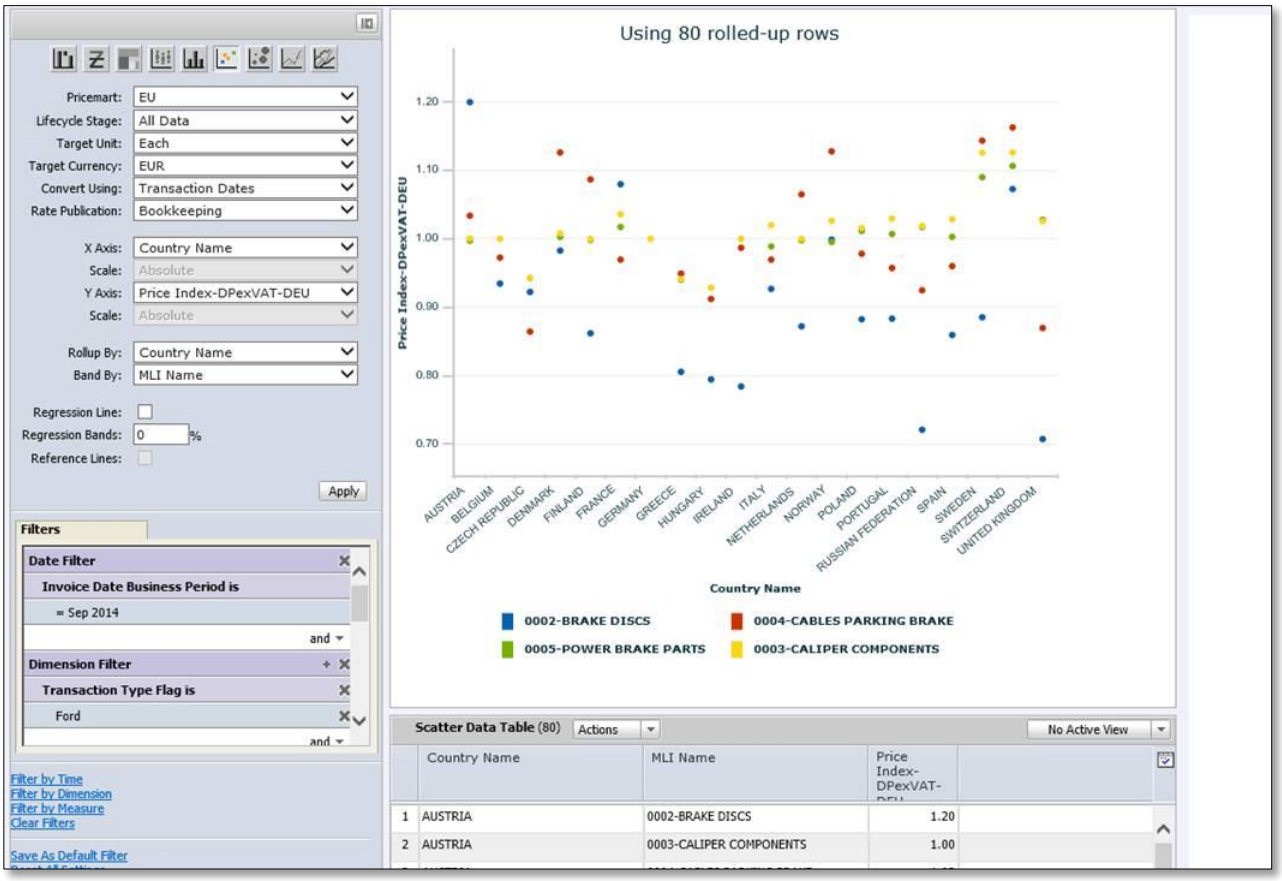
Regression & Reference Line Settings

Click the Regression Line checkbox if you want to add a regression line. This will add a line representing the calculated average of the x- and y-axis values. It can help you understand how each point on the chart relates to the average.

This field is used in conjunction with the regression line appending upper and lower bound lines based on the percentage entered. For example, if you enter 10%, lines will be plotted on the chart showing a 10% upper and lower bound from the regression line. This will help the user identify the plotted points on the scatter chart within the upper and lower bounds.

Important Additional Settings Features

There are cases in which it will be valuable to display select dimensions as X and Y axis values as opposed to the available measures. The dimensions that can be made available as X and Y axis selections are: **Country Code**, **Country Name**, and **Service Part Number**. Doing so would produce the chart as given in the figure below:



However, these dimensions will not be made available as selections until all Rollup and Band By settings have been removed. You can see that with current Rollup and Band By settings, Country Code, Country Name, and Service Part number are not available as X and Y axis selections. But, by removing the Rollup and Band By settings and clicking apply, these dimensions become available as settings for the X and Y axis.

The roll-up and band by fields exclude these dimensions because the data is being aggregated at a level higher than service part number and country name. GPARTS excludes the values from the drop-downs as a result.

Scatter Chart Zoom Feature

As noted previously, you can hover the mouse over a dot in the chart and view a pop-up that displays additional detail information about the plotted point. You can also double click the dot to open an expanded view of all the detailed information for the point in a right side panel.

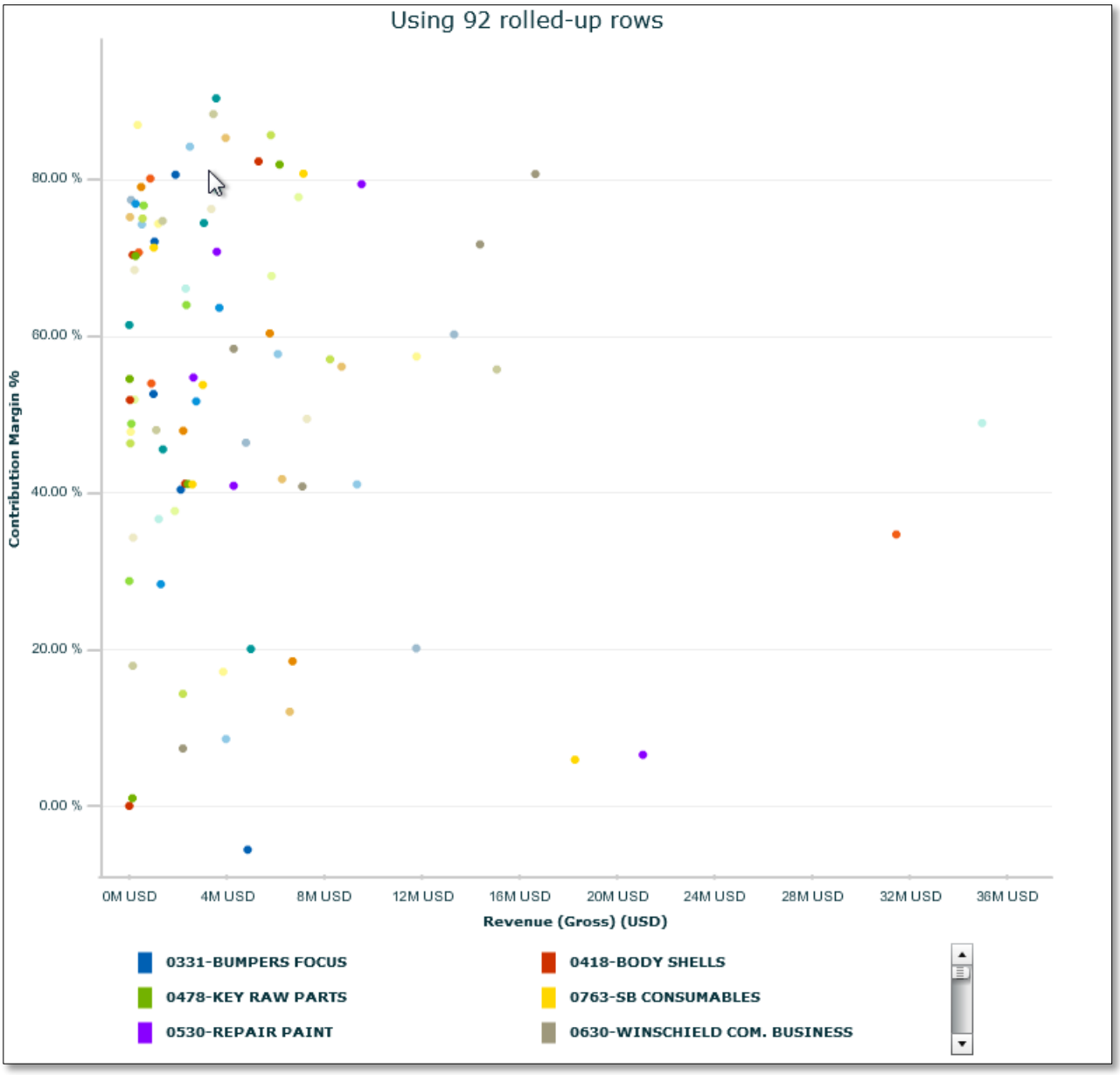
The expanded view displays the transactions details used to calculate and plot the point on the scatter graph as well as the Waterfall details for reference.

Example

Let’s consider an example by taking the following steps:

1. Set the **Target Currency** = ***EUR***.
2. Set **Y-Axis** = ***Contribution Margin.***
3. Set the **Scale** = ***Percent***.
4. Apply a **Time** filter for January 1 to September 30, 2014.
5. Set **Rollup By** = ***MLI Name***.
6. Apply these **Dimension** filters:
    a. **PCT Name** = ***BR Collision***
    b. **Transaction Type Flag** = ***Ford***.
    c. **Consolidation Level** = ***C-Corporate***.
    d. **Country Name = *Austria* + *Belgium* + *Czech Republic* + *France* + *Germany* + *Ireland* + *United Kingdom***

The resulting chart will be as shown in the figure below.



Hover the mouse over any bubble to see the underlying values, or scroll down to see the data view that corresponds to the chart.

4.3.7 Bubble Chart

This chart type is especially suitable for spotting outliers and variation in transactions. It presents three dimensions of data in a two-dimensional chart and plots data points on an x-y coordinate and represents the size of each data point according to a third set of values. The Bubble Chart is similar to a Scatter Chart in that it represents data as points on an x- and y-axis, and it also has a third dimension-the size of the bubbles. This dimension is known as the z-axis.

The figure below is an example of a **Bubble** chart with ***Quantity*** on the x-axis and ***Pocket Margin*** on the y-axis. Each bubble represents a customer industry, and the bubble diameter represents the total pocket margin. Bubbles in which the z-axis is negative are will have a red border.
Users can group and color-code transactions according to a specific dimension by use of the **Band By** drop-down, and aggregate transactions according to a specific dimension through the **Roll up By** drop-down.

It is mandatory to make selections from both the **Rollup** and **Band By** drop-downs, so these are automatically set to default dimensions. There is a bubble for each **Rollup** dimension and each **Band By** dimension that fits the filter criteria. The **Band By** determines the colors of the bubbles. For example, if **Rollup** by is set to ***Product Family*** and **Band By** is set to ***Customer Type***, then there is a bubble for each **Customer Type**. The X-Axis, Y-Axis and Z-Axis will aggregate by **Product Family** for each customer type. The user must make a choice for either **Band By** or **Rollup By**.

A Bubble chart displays three dimensions of data in a two dimensional chart. Each bubble represents a dimension and are plotted on the x-axis. The bubble size is proportional to a third set of values on the z-axis. The x-axis can be any measure, and the default is ***Quantity***. The y-axis can also be any measure, and the default ***Pocket Margin***. The z-axis can also be any measures, and ***Invoice Price*** is the default.

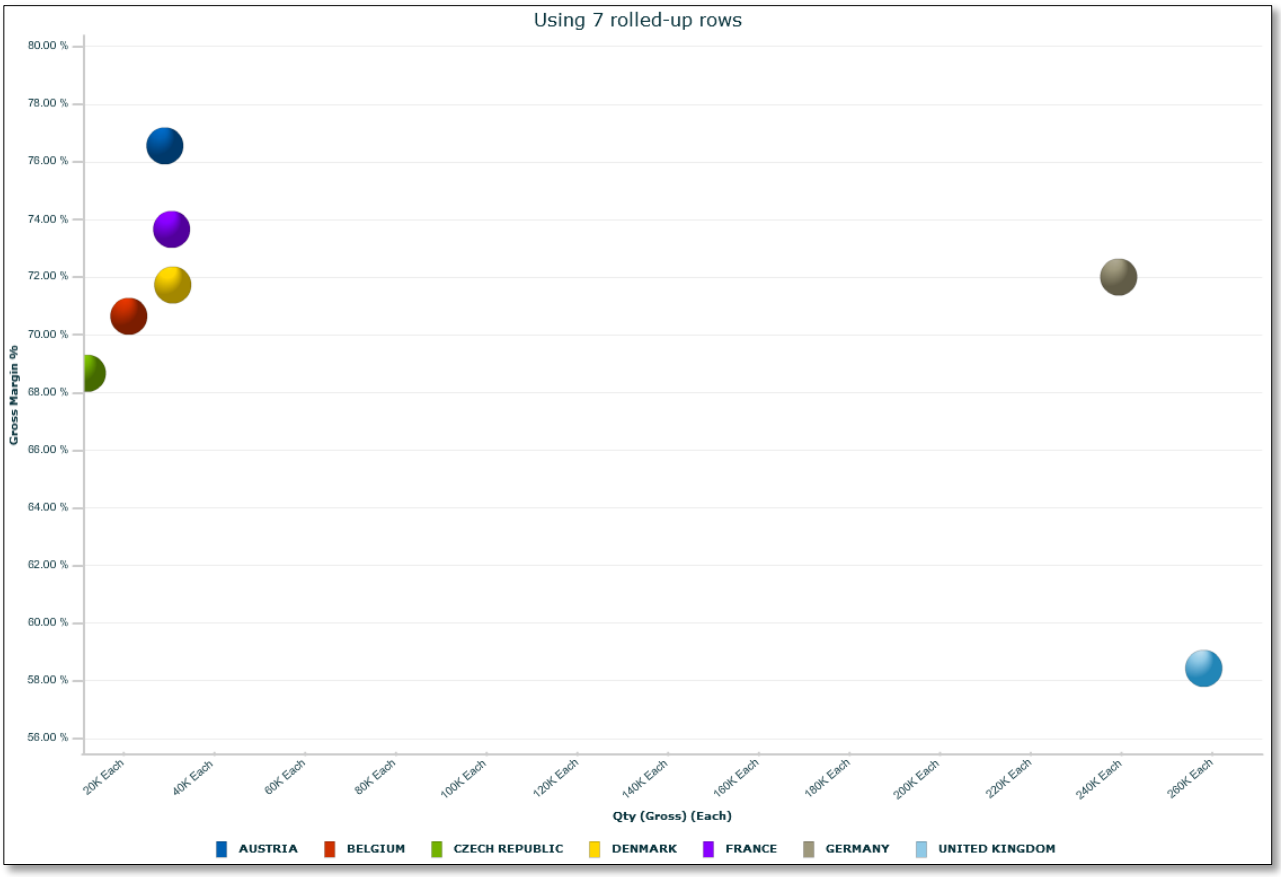
Example

Let’s consider an example of this chart type by taking the following steps:

1. Set the **Target Currency** = ***EUR***.
2. Set **X-Axis** = ***Qty (Gross).***
3. Set the X-Axis **Scale** = ***Percent***.

4. Set **Y-Axis** = ***Contribution Margin.***
5. Set the Y-Axis **Scale** = ***Percent***.
6. Apply a **Time** filter for January 1 to September 30, 2014.
7. Set **Rollup By** = ***MLI Name***.
8. Apply these **Dimension** filters:
    a. **MLI** = ***0002-Brake Discs.***
    b. **Transaction Type Flag** = ***Ford***.
    c. **Consolidation Level** = ***C-Corporate***.
    d. **Sales Type = *Domestic*.**
    e. **Country Name = *Austria* + *Belgium* + *Czech Republic* + *France* + *Germany* + *Ireland* + *United Kingdom***

The resulting chart will be as shown in this figure:



Hover the mouse over any bubble to see the underlying values, or scroll down to see the data view that corresponds to the chart.

4.3.8 Time Series Chart

The chart type shows the direction and pattern of selected price points and measures, presenting the trends of a specific measure (such as revenue, volume, cost, or discount) in a user-specific time range. Additionally, the **Band By** feature is useful for analyzing transactions within a specific supersession group, reman group, or a specific competitor. A user can also perform trend analysis over 12 months or 24 months on Ford prices against competitor prices for specific service parts. Additionally, also useful for trending market share, volume, margins, or cost.

A Time Series chart displays trend lines to help you see the direction and trajectory of a specific data element. For example, you can see how the net margin (or an index) of a specific product progresses over time, or configure a time series chart to show the average net margin over time alongside a moving average to the performance trends.

The x-axis indicates a specific time, such as month, quarter, or year and the y-axis is the selected data element, with Invoice Price being the default Y Axis. The x-axis range is determined by the minimum and maximum dates of transactions defined by the set filters, with Month being the default X Axis. The line chart is displayed by plotting a value for each x-axis value, then connecting them via a smoothed line.

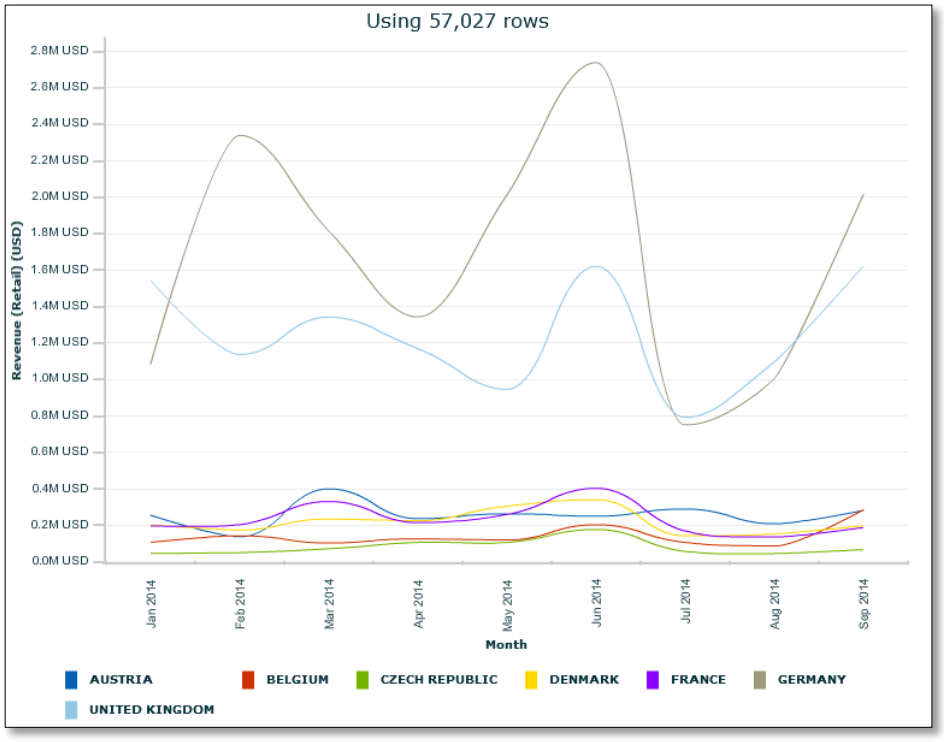
Example

Let’s consider an example of this chart type by taking the following steps:

1. Set the **Target Currency** = ***EUR***.
2. Set **X-Axis** = ***Month***, and set **Y-Axis** = ***Revenue (Retail).***
3. Set **Band By** = ***Country Name***.
4. Apply a **Time** filter for January 1 to September 30, 2014.
5. Apply these **Dimension** filters:
    a. **MLI** = ***0002-Brake Discs.***
    b. **Transaction Type Flag** = ***Ford***.
    c. **Consolidation Level** = ***C-Corporate***.
    d. **Sales Type = *Domestic*.**

e. **Country Name = *Austria* + *Belgium* + *Czech Republic* + *France* + *Germany* + *Ireland* + *United Kingdom***

The resulting chart will be as shown in this figure:



4.3.9 Multiple Time Series Chart

A **Multiple Time Series** chart has more than one y-axis to display multiple measures of different price elements. You can plot multiple time-series data on the same chart. This chart type is an extension of the single **Time Series Chart** that we describe in the previous section. Though these measures can only span two axes, a user can specify up to 32 measures—including a moving average and difference of two measures. You can perform simultaneous trend analysis over 12 months or 24 months on Ford prices, costs, market share, volume, margins, or cost for a specific service part.

The Multiple Time Series chart displays the trend of multiple measures. It is much like the time series chart, but it also gives the user the ability to trend more than one measure simultaneously. The user can also display a choice of measures, plus a moving average and difference of two measures.

> **NOTE:** You can select many measures but, for clarity, we recommend that you avoid configuring a chart with indistinguishable features.

Two y-axes

You can compare the invoice price and the net margin together on two y-axes to see the progression over time. You can add filters and, optionally, choose an option to show the delta line (difference between invoice price and net margin). Here's an example of a chart containing two y-axes:

Example

Let's consider an example of this chart type by taking the following steps:

1. Set the **Target Currency** = ***EUR***.
2. Set **X-Axis** = ***Month***, and set **Y-Axis** = ***Revenue (Retail).***
3. Set **Band By** = ***Svc Part Number***.
4. Apply a **Time** filter for January 1 to September 30, 2014.
5. Apply these **Dimension** filters:
    a. **Svc Part Number** = ***1566234.***

b. **Transaction Type Flag** = ***Ford***.

c. **Consolidation Level** = ***C-Corporate***.

d. **Country Name = *Germany.***

6. Now, let's add the y-axes:

    a. Click the **Timeseries** tab.

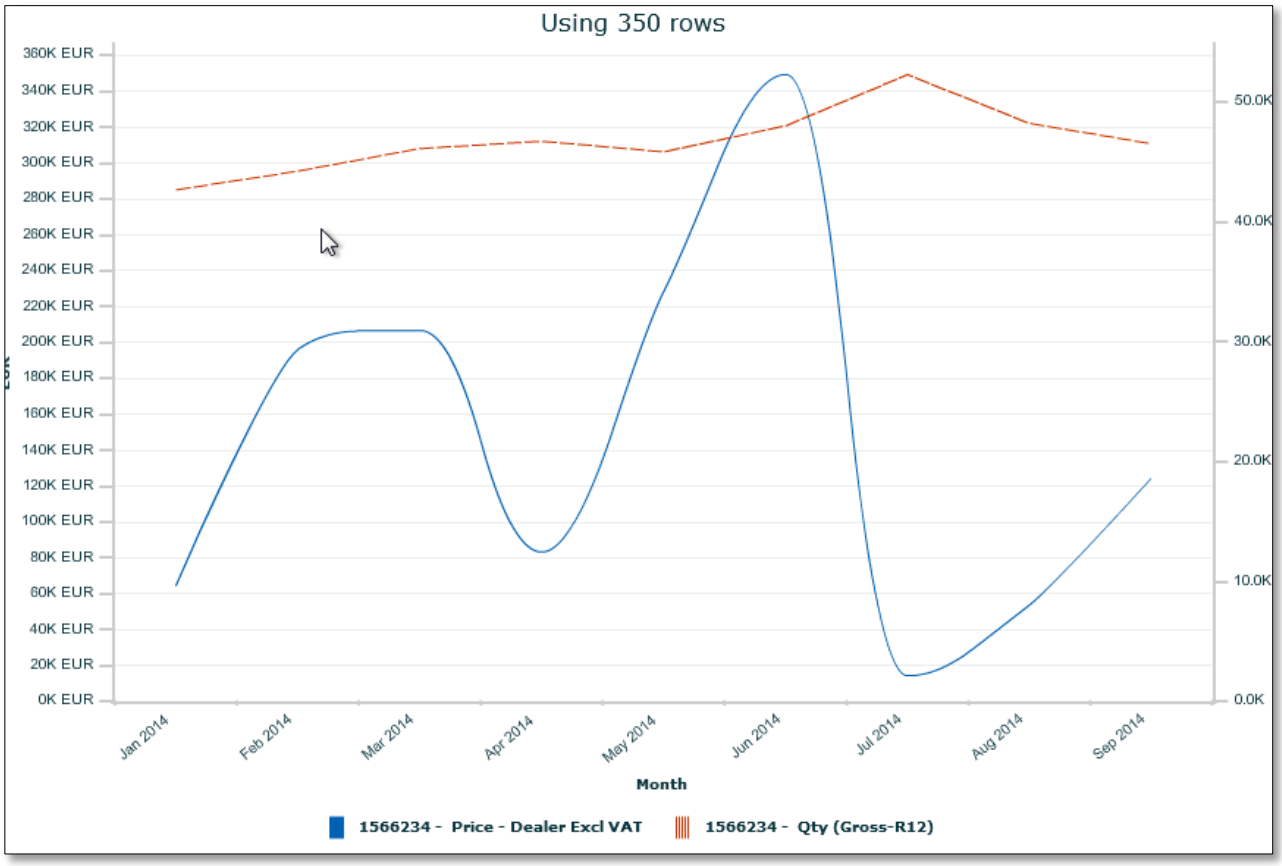
    b. Just below the **Timeseries** tab, click the **Add Measure** link.

    c. In the pop-up window, click the **Measure** drop-down and choose ***Price Dealer Excl Vat***, and leave the **Scale** as ***Absolute***. Click **OK** and after a moment, you'll see the first timeseries appear in the tab.

    d. Just below the **Timeseries** tab, click the **Add Measure** link again.

    e. In the pop-up window, click the **Measure** drop-down and choose ***Qty Gross R12***, and leave the **Scale** as ***Absolute***. Click **OK** and after a moment, you'll see the second timeseries appear in the tab.

The resulting chart will be as shown in the figure below:


Using 350 rows
360K EUR
340K EUR
320K EUR
300K EUR
280K EUR
260K EUR
240K EUR
220K EUR
200K EUR
180K EUR
160K EUR
140K EUR
120K EUR
100K EUR
80K EUR
60K EUR
40K EUR
20K EUR
0K EUR
50.0K
40.0K
30.0K
20.0K
10.0K
0.0K
Jan 2014
Feb 2014
Mar 2014
Apr 2014
May 2014
Jun 2014
Jul 2014
Aug 2014
Sep 2014
Month
1566234 - Price - Dealer Excl VAT
1566234 - Qty (Gross-R12)

4.4 Managing Price Explorer Charts

4.4.1 Creating Charts

To create any of the configured interactive chart types, do the following:

1. Navigate to **Track and Analyze > Price Explorer**.
2. In the control panel, click the chart icon for the type of chart you want to create.
3. Complete the fields in the Control Panel. For details on settings and default values, see the section on **Control Panel**.
4. Click **Apply** to update the chart panel.
5. Save the chart, as we explain in the next section.

4.4.2 Saving Charts for Future Analysis

After you interact with a chart to define a useful view of data, you can save the chart. The charts you save as well as the charts that are configured with Accelerate are displayed in the list in the Saved Analysis folder.

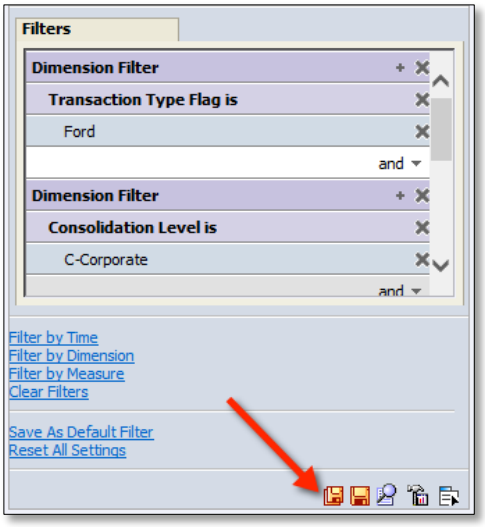
A saved chart is not static. It contains filter settings, as well as selected currency, UOM, axes, measures, and attributes; but not a particular data set. Executing the filters again may produce different results if new data has been loaded into Profit Analyzer.

For example, suppose you define a chart that displays all transactions for the sold-to customer, Johnston Industries, for the year to date. If you view the chart one month later and additional sales transactions were loaded during that interval, the data displayed in the charts could differ.

Another advantage of saving charts is to reduce the time and effort necessary to generate similar charts. Consider the case in which you need to have charts for several MLIs. You can create one chart having all of your dimensions and measures for a particular MLI and save a chart for that MLI. Repeat this for each MLI. Then, each time you need to create a new chart for a different MLI, you can simply access your saved chart and make slight modifications to achieve the results that you seek.

To save a chart:

1. Navigate to **Track and Analyze** > **Price Explorer**.
2. Below the **Filters** pane in the control panel, click the small **Save current chart** icon (hover over the icons to see the label for each). The **Save Chart** window appears.
3. Enter a chart **Name**, **Description**, chart's visibility to a group, and the playbook.
4. Click the **Save** button.



4.4.3 Accessing, Modifying and Deleting Saved Charts

You can access all Price Explorer charts from Profit Analyzer. You can access the default Price Explorer chart, the Scatter chart, from the KPI Drill table in Dashboards. Accessing the chart from the KPI Drill table adds some of the selections from the dashboard as filters for the chart.

To access a saved chart, do the following:

1. Navigate to **Track and Analyze > Price Explorer > Saved Analysis**.
2. Click the link having the name of the chart you want to access.

You can change the chart name, description, notes, or visibility. To modify a chart, do the following:

1. Navigate to **Track and Analyze > Price Explorer**.
2. In the Control Panel, below the Filters pane, click the **Save the current chart** icon. To display the **Save Chart** window appears.
3. Edit the chart name and description, chart's visibility to a group and to which playbook it is associated.
4. Click **Save**.

To delete a chart:

1. Navigate to **Track and Analyze** > **Saved Analysis**.
2. Scroll to the right in the listing, scroll to the right, and in the **Delete** column for the chart you want to delete, click the **x** icon.
3. Click **OK**.

4.4.4 Exporting Charts

You can export chart's raw data into Microsoft Excel format for further analysis. For such export an Excel template is needed. It is configured by a system administrator who defines what columns should be included in the export.

> **NOTE:** When exporting Scatter or Treemap charts to .xls files, the charts do not display in the output file because those chart types are not supported.

To select an Excel template:

1. In the Chart Control Panel, below the Filters pane, click the **Select Excel template** icon. The Select Excel template window opens.
2. Choose a template for export or for comparison export.
3. In this step, you can also choose to upload an Excel template by clicking **Upload**.
4. Click **OK**.

To export raw data to Excel:

1. Navigate to **Track and Analyze** > **Price Explorer** > **Saved Analysis**. A list of charts displays in the folder's list view.
2. Click the name of the chart in the list view. The saved chart opens.
3. In the Control Panel, below the Filters pane, click the **Analyze Data with Rich Excel Report** icon. The
4. Exporting Analysis to Excel window opens and the download begins.
5. The exported chart opens in Excel.
6. Click **Close** to close the progress window.

4.4.5 Drilling In and Out of Charts

You can drill in and out of data when using the Scatter chart or Price Band chart. For example, you can select one or more bands in the Price Band chart to see the details of

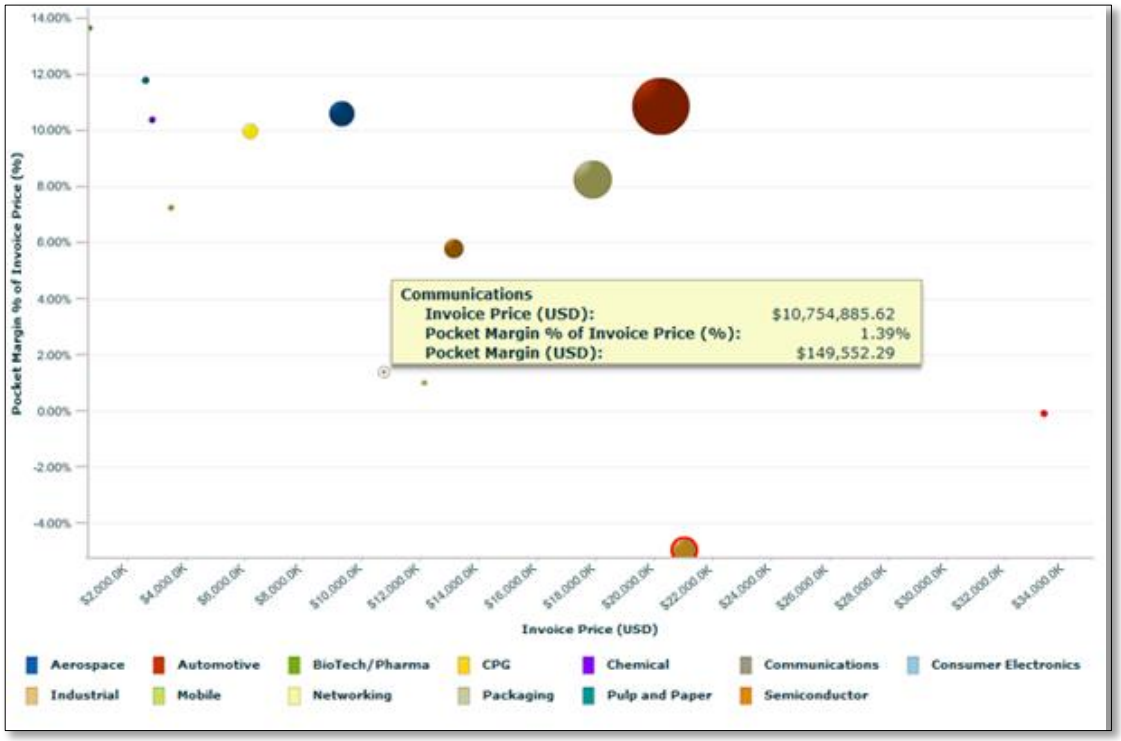
the data in the selected bands. Note that the number of rows changes as you drill in or out.

As you interact with a chart, filters are set and added to the Filters pane on the Control Panel. For example, if you double-click a band that represents Pocket Price $2--$4, a measure filter is added that defines Pocket Price =>$2 AND Pocket Price <=$4.
To drill out, you delete the filter.

4.4.6 Viewing Summary ToolTips

Charts contain graphical elements, such as bars, bubbles, and dots. When you move the pointer over a graphical element, a ToolTip displays with the numerical data that the element represents.

In the figure below, the ToolTip in the Price Band chart indicates that the selected customer industry represents that the pocket margin is 1.39% of the invoice price. You can view the actual amount in the supporting data table.



4.4.7 Chart Options

The Price Explorer Chart Control Panel has the following options, some of which are not available in all charts:

Pricemart – Defines the source file used for the data. This file contains all of the historical deal and order pricing data you want to include in the chart.

- **Values** – Pricemart Transactions
- **Default** – Pricemart Transactions
- **Chart Type** – Waterfall, Zebra, Tree Map, Boxplot, Price Band, Scatter, Bubble, Timeseries, Multiple Timeseries, and Summary

Lifecycle Stage – Defines the source for the lifecycle stage. For more details see Deal Lifecycle Metrics.

- **Values** – Deal, Distributor and Direct, and POS and Direct
- **Default** – POS and Direct
- **Chart Type** – Waterfall, Zebra, Tree Map, Boxplot, Price Band, Scatter, Bubble, Timeseries, and Summary

Target Unit – Specifies the unit of measure.

- **Values** – Don’t Care, Each, KG, LB, Metric Tonnes, and PCE
- **Default** – Each
- **Chart Type** – Waterfall, Zebra, Tree Map, Boxplot, Price Band, Scatter, Bubble, Timeseries, Multiple Timeseries, and Summary

Don't Care vs. Specific UOMs

Using the **Don't Care** value here halts the UOM conversion on Pricemart rows. This allows you to select items in the original UOMs as well as to display rows which are otherwise not convertible to your selected UOM.

A typical usage might be that you want to see a total invoiced amount for a given period. By selecting **Don't Care** for the UOM, you'll be able to

display the invoiced amount for all transactions in a given period.

Selecting a specific UOM, e.g. **KG**, allows to see only the rows with UOMs convertible to the given UOM.

Target Currency – Defines the currency.

- **Values** – CHF, CZK, DKK, EUR, GBP, HUF, NOK, PLN, RUB, SEK, and USD
- **Default** – EUR
- **Chart Type** – Waterfall, Zebra, Tree Map, Boxplot, Price Band, Scatter, Bubble, Timeseries, Multiple Timeseries, and Summary

Convert Using – Specifies the date to use for currency conversion.

- **Values** – Transaction Dates and Fixed Date
- **Default** – Transaction Dates
- **Chart Type** – Waterfall, Zebra, Tree Map, Boxplot, Price Band, Scatter, Bubble, Timeseries, Multiple Timeseries, and Summary

Compare – Specifies whether to compare two different data sets. You can compare the data by applying filters of different dimension attributes. A dimension is a non-numeric attribute of a transaction, such as the product hierarchy, Sold To Customer, or customer segment. An attribute is a specific value of a dimension.

- **Default** – Cleared
- **Chart Type** – Waterfall, Zebra, Boxplot, Price Band, and Timeseries

Compare With – This field displays if you select the Compare check box. Specifies which lifecycle stage to compare with the lifecycle stage defined in the Lifecycle Stage field.

- **Values** – Corporate View (Ford Data), Market Intelligence View, and All Data.
- **Default** – Deal
- **Chart Type** – Waterfall, Zebra, Boxplot, Price Band, and Timeseries

X Axis – Specifies the measure to use as the X axis.

- **Default**
    - Price Band – True Supported Price
    - Scatter, Bubble – Quantity
    - Timeseries and Multiple Timeseries – Month
- **Chart Type** – Price Band, Scatter, Bubble, Timeseries, and Multiple Timeseries

Scale – Specifies the scale by which to display data for the x-axis in the chart.

- **Values**
    - **Absolute** – Displays an absolute value in the chart.
    - **Per Unit** – Displays data on a per unit basis.
    - **Percent** – Displays data as a percent in the chart. Market price is used as the basis of percent calculation.

- **Default**
    - Price Band – Per Unit
    - Scatter, Bubble – Absolute
    - Chart Type – Price Band, Scatter, and Bubble

Y Axis – Specifies the measure to use as the Y axis.

- **Default**
    - Waterfall – Absolute
    - Price Band – Quantity
    - Scatter, Bubble – Pocket Margin
    - Timeseries – Invoice Price

- **Chart Type –** Waterfall, Price Band, Scatter, Bubble, and Timeseries

Chapter 5 - Self Service Reports & Dashboards

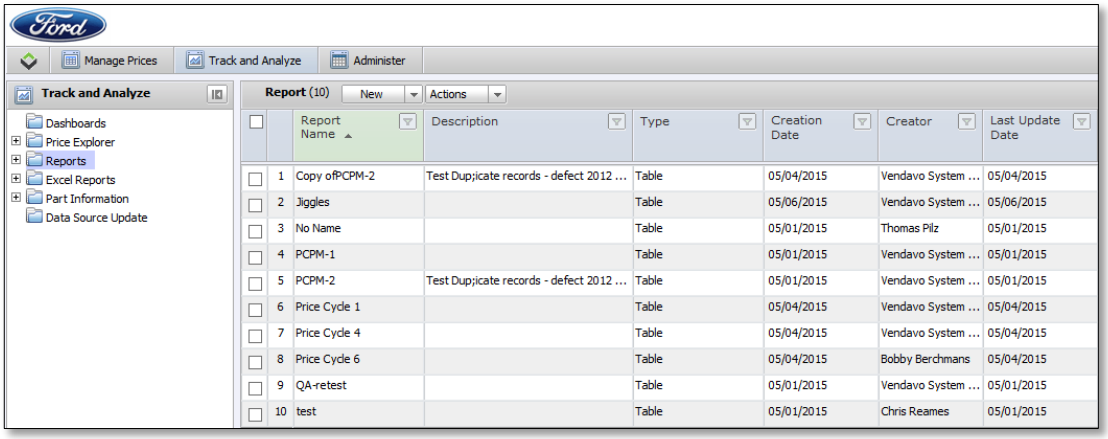
Self-service reports are user-friendly, customizable reports that you can create on the fly and tailor to our specific requirements. This includes the ability to download any cut of data through any of the hierarchies or defined superset elements. These reports can also be saved by a user (either privately or for public use) so that they may come back at a later point in time and replicate the report as needed. These are the main advantages:

- Very flexible and easy to use
- Organize data in tables, matrix, or charts
- You can create reports for yourself or share with others
- You can export using to either a .pdf or .xls format

You can run Self-Service reports separately, or add them to self-service **Dashboards** for easy report and chart creation (see the section later in this chapter).

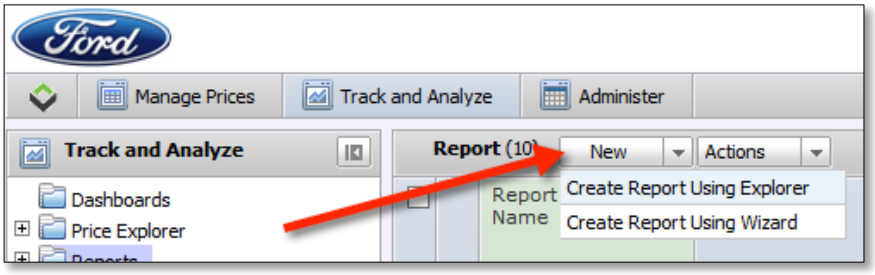
Running the reports separately is good for ad-hoc analysis and creating simple formal reports that don't require the complexity of a dashboard. It's also suitable for simple report management, since you can display the report in the application.

To access Self-Service Report, login to the tool and then click **Track and Analyze > Reports**. You will see a list of reports from previous users.

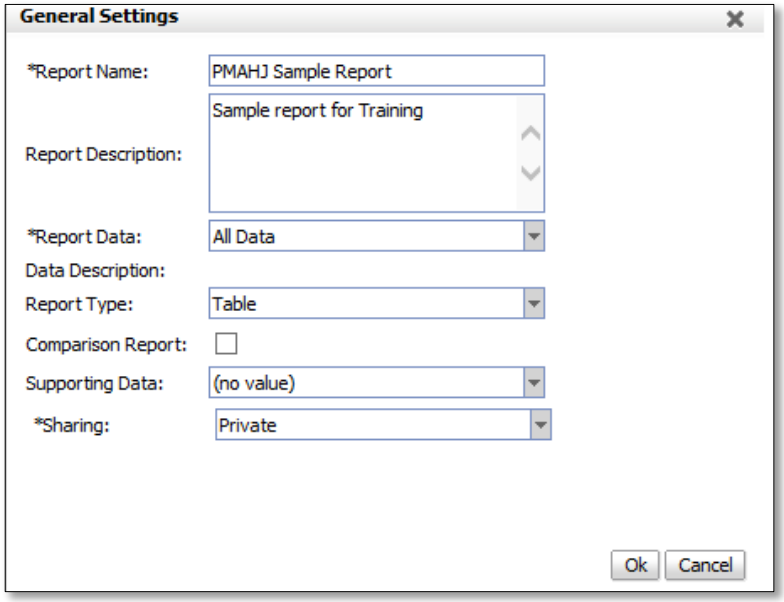


5.1 Create Report Using Explorer

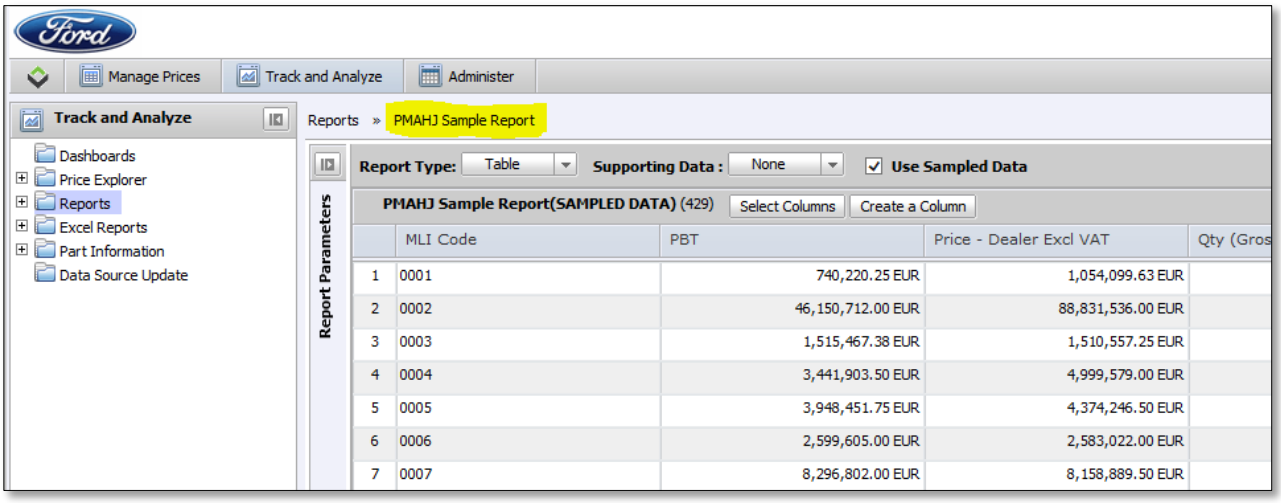
To begin creating a report through this method, click **New > Create Report Using Explorer.**



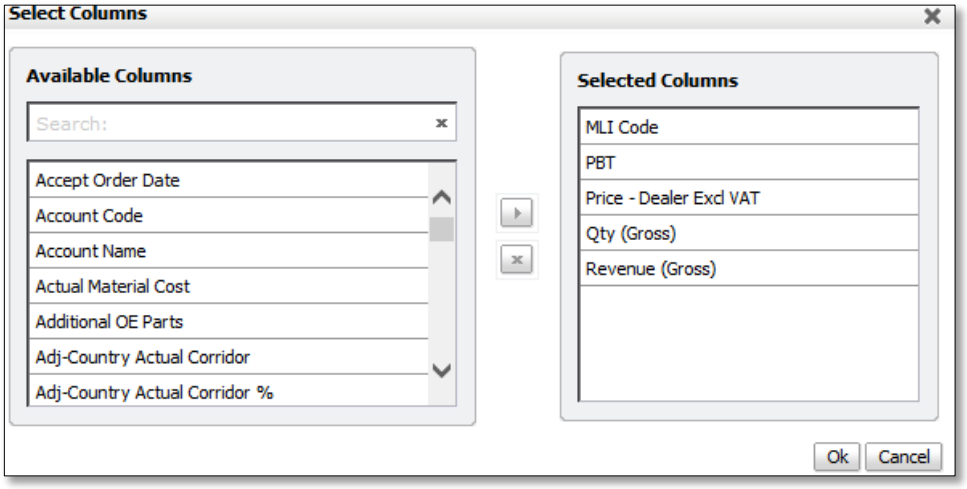
The **General Settings** pop-up window will appear (similar to **Saved Analysis**):



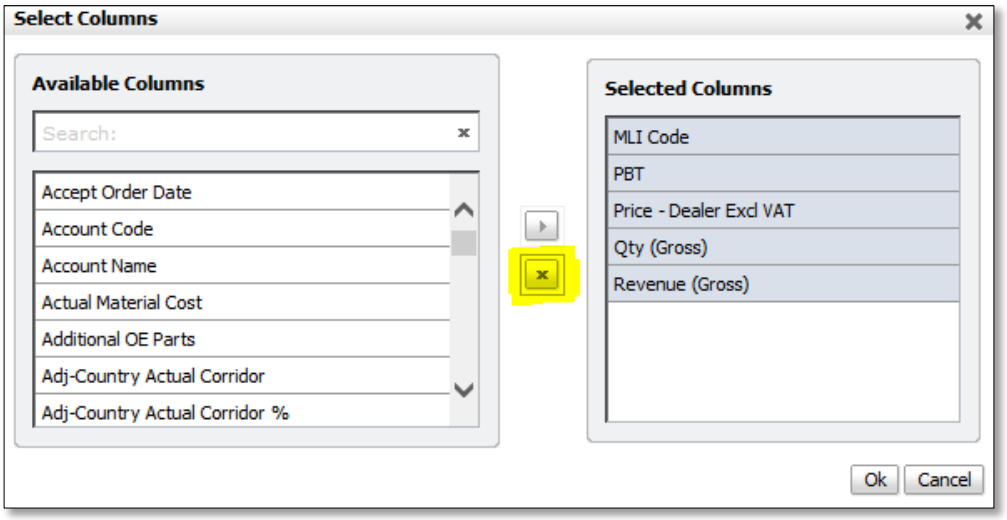
Enter a **Report Name** and, optionally, a **Report Description**. In the **Report Type** drop-down, you have the option of different types of reports such as ***Table***, ***Matrix***, ***Bar chart***, and ***Column Chart***. Many of these choices are similar to the charts in the **Price Explorer** section. In this example, we will select ***Table*** to start. Click the **OK** button to return to the main reports landing page. The report name that you gave will be shown at the top. The columns and their data values will populate according to default dimensions. As with other data views in **GPARTS**, you can edit the columns and choose the dimensions for your report.



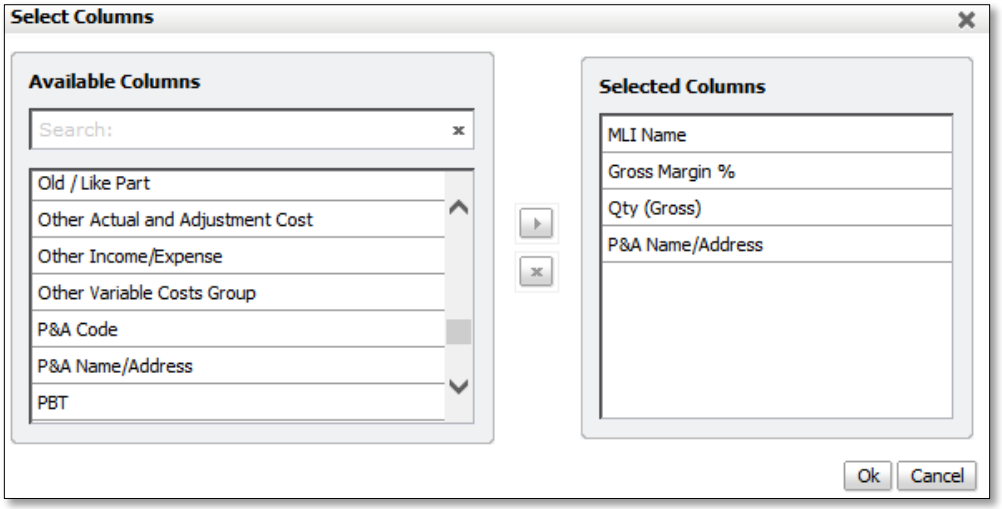
You can edit the columns and choose the dimensions for your report by clicking on **Select Columns** and removing the dimensions you do not need from the right-hand side. Then, select the dimensions that you do need from the left-hand side and move it over to the right hand side.



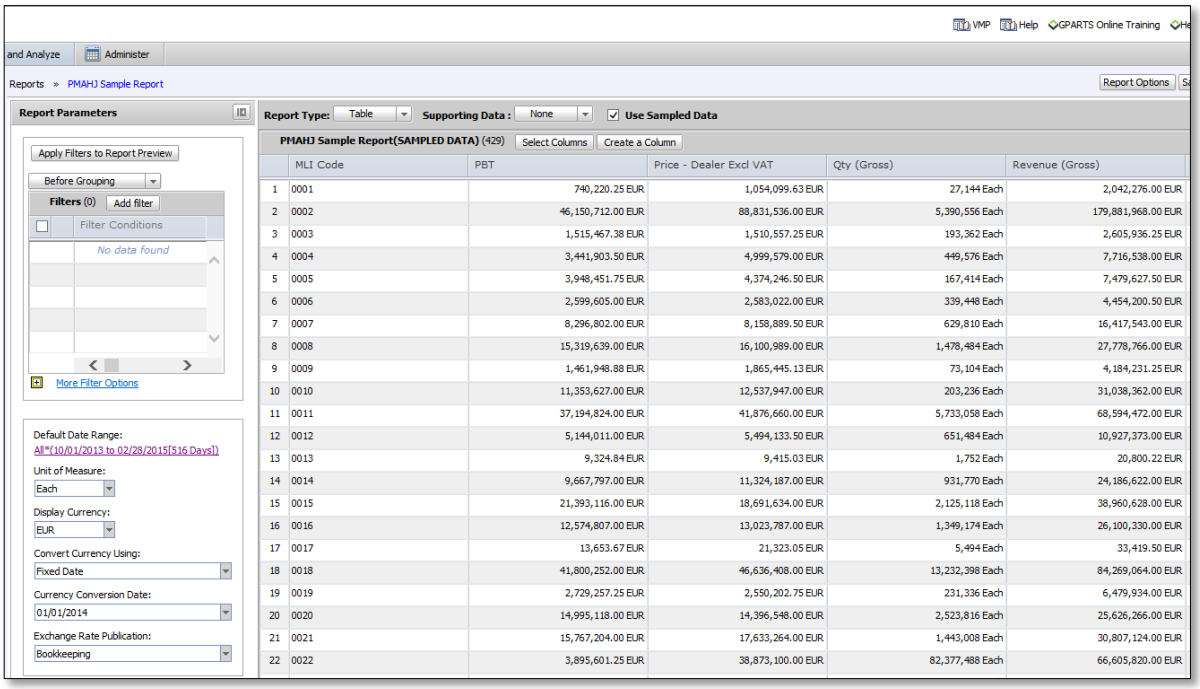
TIP: You can select one dimension or multiple dimensions from the **Selected Columns** by holding down the Shift key and then selecting all the dimensions that you want. Then, click on the  icon to delete the entire field.



You can now choose the dimensions that you want to feature in your report by entering the dimension in the **Available Columns** field and then clicking on the  icon.



Click OK to display your report with the new dimensions.



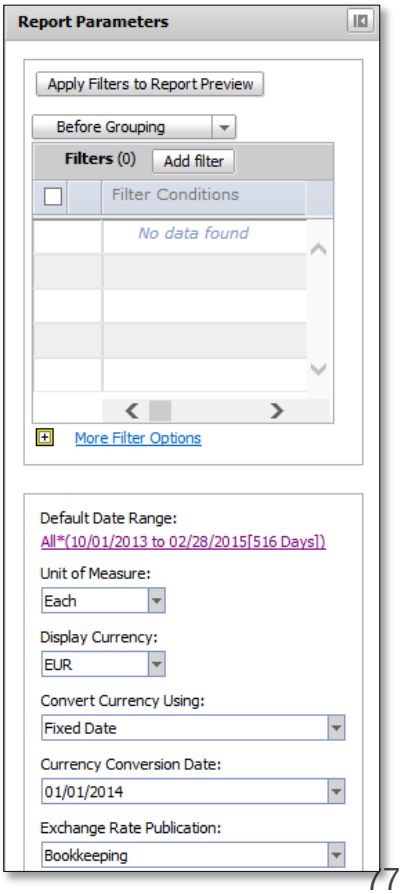
	MLI Code	PBT	Price - Dealer Excl VAT	Qty (Gross)	Revenue (Gross)
1	0001	740,220.25 EUR	1,054,099.63 EUR	27,144 Each	2,042,276.00 EUR
2	0002	46,150,712.00 EUR	88,831,536.00 EUR	5,390,556 Each	179,881,968.00 EUR
3	0003	1,515,467.38 EUR	1,510,557.25 EUR	193,362 Each	2,605,936.25 EUR
4	0004	3,441,903.50 EUR	4,999,579.00 EUR	449,576 Each	7,716,538.00 EUR
5	0005	3,948,451.75 EUR	4,374,246.50 EUR	167,414 Each	7,479,627.50 EUR
6	0006	2,599,605.00 EUR	2,583,022.00 EUR	339,448 Each	4,454,200.50 EUR
7	0007	8,296,802.00 EUR	8,158,889.50 EUR	629,810 Each	16,417,543.00 EUR
8	0008	15,319,639.00 EUR	16,100,989.00 EUR	1,478,484 Each	27,778,766.00 EUR
9	0009	1,461,948.88 EUR	1,865,445.13 EUR	73,104 Each	4,184,231.25 EUR
10	0010	11,353,627.00 EUR	12,537,947.00 EUR	203,236 Each	31,038,362.00 EUR
11	0011	37,194,824.00 EUR	41,876,660.00 EUR	5,733,058 Each	68,594,472.00 EUR
12	0012	5,144,011.00 EUR	5,494,133.50 EUR	651,484 Each	10,927,373.00 EUR
13	0013	9,324.84 EUR	9,415.03 EUR	1,752 Each	20,800.22 EUR
14	0014	9,667,797.00 EUR	11,324,187.00 EUR	931,770 Each	24,186,622.00 EUR
15	0015	21,393,116.00 EUR	18,691,634.00 EUR	2,125,118 Each	38,960,628.00 EUR
16	0016	12,574,807.00 EUR	13,023,787.00 EUR	1,349,174 Each	26,100,330.00 EUR
17	0017	13,653.67 EUR	21,323.05 EUR	5,494 Each	33,419.50 EUR
18	0018	41,800,252.00 EUR	46,636,408.00 EUR	13,232,398 Each	84,269,064.00 EUR
19	0019	2,729,257.25 EUR	2,550,202.75 EUR	231,336 Each	6,479,934.00 EUR
20	0020	14,995,118.00 EUR	14,396,548.00 EUR	2,523,816 Each	25,626,266.00 EUR
21	0021	15,767,204.00 EUR	17,633,264.00 EUR	1,443,008 Each	30,807,124.00 EUR
22	0022	3,895,601.25 EUR	38,873,100.00 EUR	82,377,488 Each	66,605,820.00 EUR

5.1.1 Report Parameters

Top panel – Apply filters to your report by choosing from a drop down list of dimensions and measures

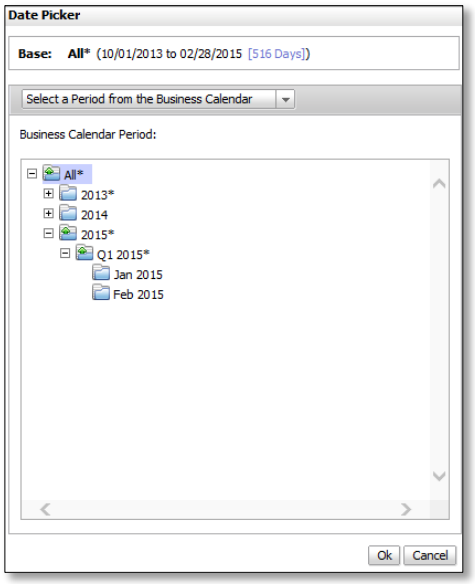
Bottom panel – Make choices for these parameters:

- Date Range – Select a date range of your report
- Unit of Measure – Each, Liter, Gallons, Quarts, Pounds, Ounces, Don't Care
- Display Currency – A list of available currencies will be shown to select
- Convert Currency Using – Either a Fixed Date or Transaction Dates
- Currency Conversion Date – Gives user the option to select a date
- Exchange Rate Publication – Bookkeeping, Budget, Budget Constant, Harmo



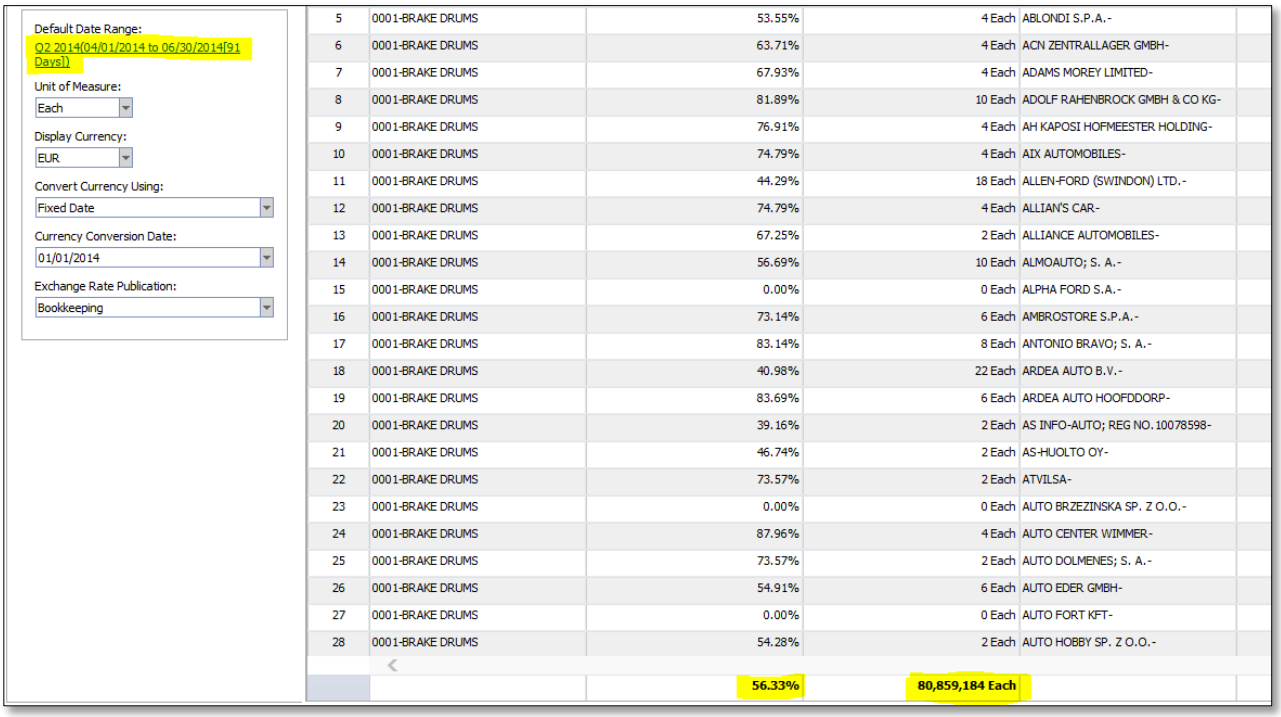
Selecting a date range

Click the link below **Default Date Range** to display a date selection pop-up.



Any dates with an ***** indicate an incomplete data set. For example, selecting 2015 will expand to Q1 2015, which shows data for only Jan 2015 and Feb 2015. After March 2015 data becomes available in the data set, then Q1 2015 will no longer show an ***.**

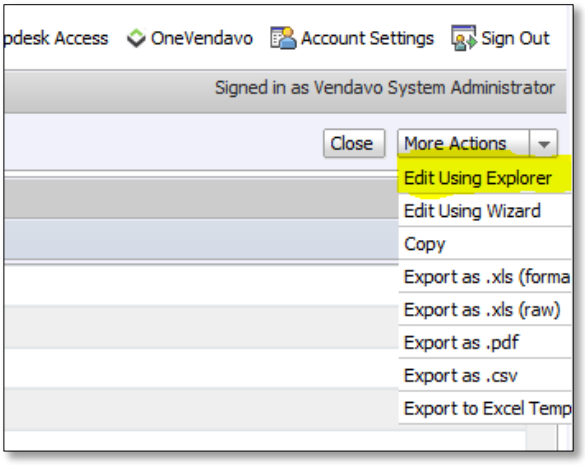
Let's continue through our example: we select Q2 2014 and then click **OK**. You can see that the date range only contains Q2 2014. The **Gross Margin %** and **Qty (Gross)** dimensions have changed so that they only reflect data for this period.



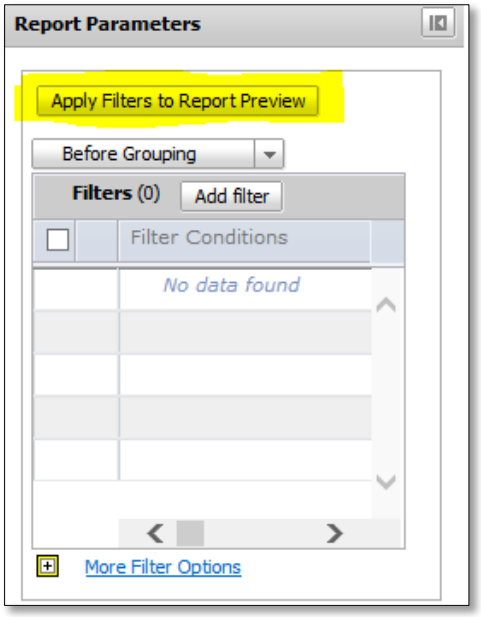
5	0001-BRAKE DRUMS	53.55%	4 Each	ABLONDI S.P.A.-
6	0001-BRAKE DRUMS	63.71%	4 Each	ACN ZENTRALLAGER GMBH-
7	0001-BRAKE DRUMS	67.93%	4 Each	ADAMS MOREY LIMITED-
8	0001-BRAKE DRUMS	81.89%	10 Each	ADOLF RAHENBROCK GMBH & CO KG-
9	0001-BRAKE DRUMS	76.91%	4 Each	AH KAPOSI HOFMEESTER HOLDING-
10	0001-BRAKE DRUMS	74.79%	4 Each	AIX AUTOMOBILES-
11	0001-BRAKE DRUMS	44.29%	18 Each	ALLEN-FORD (SWINDON) LTD.-
12	0001-BRAKE DRUMS	74.79%	4 Each	ALLIAN'S CAR-
13	0001-BRAKE DRUMS	67.25%	2 Each	ALLIANCE AUTOMOBILES-
14	0001-BRAKE DRUMS	56.69%	10 Each	ALMOAUTO; S. A.-
15	0001-BRAKE DRUMS	0.00%	0 Each	ALPHA FORD S.A.-
16	0001-BRAKE DRUMS	73.14%	6 Each	AMBROSTORE S.P.A.-
17	0001-BRAKE DRUMS	83.14%	8 Each	ANTONIO BRAVO; S. A.-
18	0001-BRAKE DRUMS	40.98%	22 Each	ARDEA AUTO B.V.-
19	0001-BRAKE DRUMS	83.69%	6 Each	ARDEA AUTO HOOFDDORP-
20	0001-BRAKE DRUMS	39.16%	2 Each	AS INFO-AUTO; REG NO. 10078598-
21	0001-BRAKE DRUMS	46.74%	2 Each	AS-HUOLTO OY-
22	0001-BRAKE DRUMS	73.57%	2 Each	ATVILSA-
23	0001-BRAKE DRUMS	0.00%	0 Each	AUTO BRZEZINSKA SP. Z O.O.-
24	0001-BRAKE DRUMS	87.96%	4 Each	AUTO CENTER WIMMER-
25	0001-BRAKE DRUMS	73.57%	2 Each	AUTO DOLMENES; S. A.-
26	0001-BRAKE DRUMS	54.91%	6 Each	AUTO EDER GMBH-
27	0001-BRAKE DRUMS	0.00%	0 Each	AUTO FORT KFT-
28	0001-BRAKE DRUMS	54.28%	2 Each	AUTO HOBBY SP. Z O.O.-
		56.33%	80,859,184 Each	

5.2 Adding Filters to your report

To add filters, locate the **More Actions** drop-down in the upper right corner of the landing page, click it and then choose ***Edit Using Explorer***.

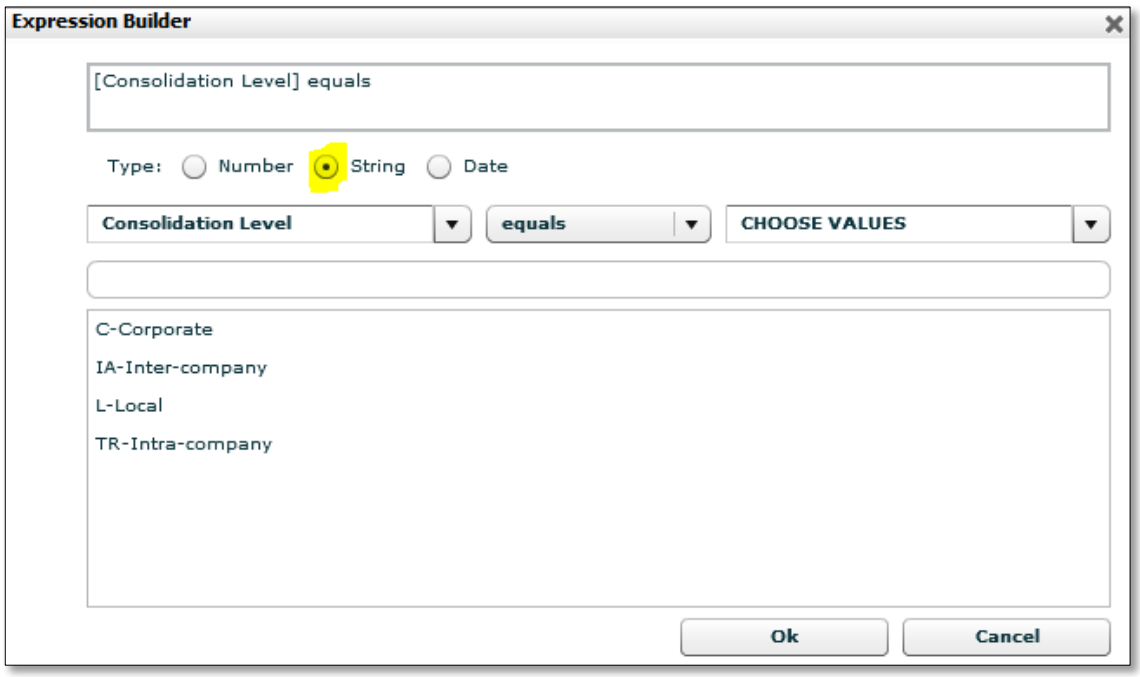


By doing so, you'll ensure that you see the **Apply Filters to Report Preview** pane (see figure below).



To apply filters to your report, click the **Add Filter** button to display an **Expression Builder** pop-up. The filter types available are:

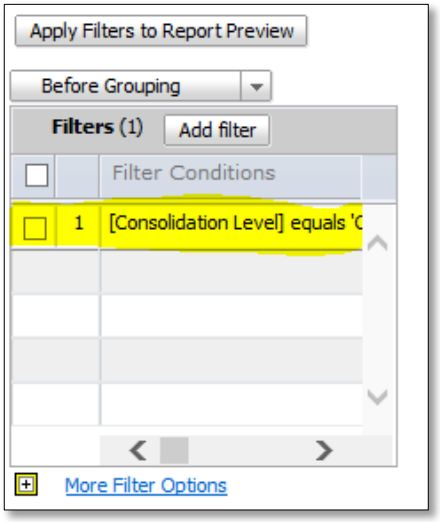
- **Number** – This will be any measure (revenue, quantity, gross margin, material cost, etc.)
- **String** – A dimension such as transaction type, consolidation level, etc.
- **Date** – End Date, Invoice Date, Price Effective Date, etc.This is any date



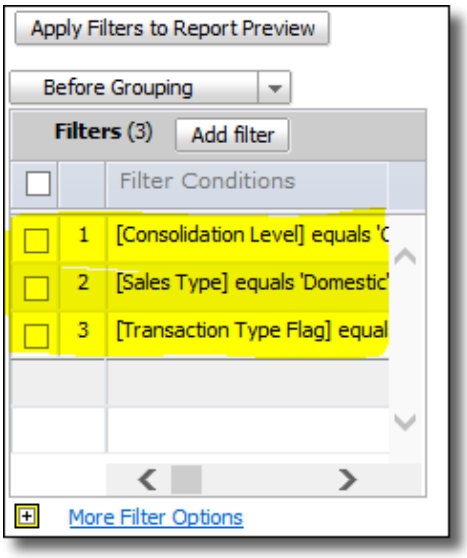
To continue our example, let's add three filters to our report:

- **Consolidation Level** – C-Corporate
- **Sales Type** – Domestic
- **Transaction Type** – Ford

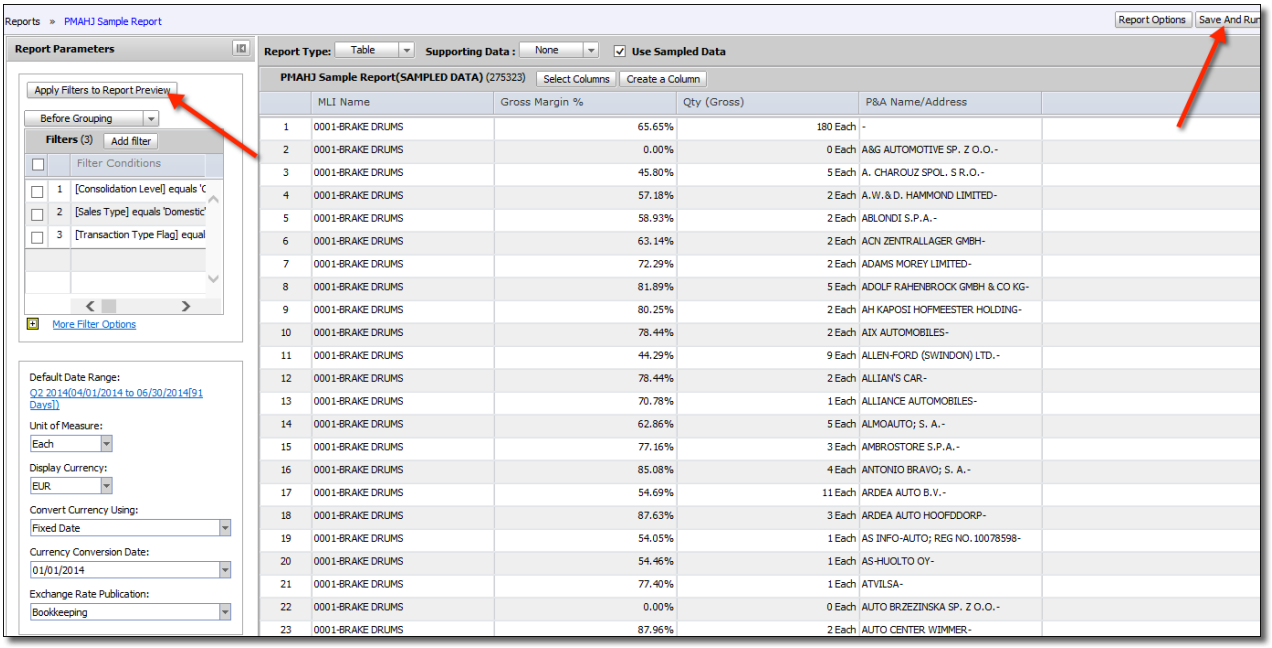
Since **C-Corporate** is not a numerical value, you will need to first select String and then begin typing in the first drop down menu. As you start to type the word ***Consolidation***, a number of matches will appear in the list—from which you can choose ***Consolidation Level***. Click on the drop-down button immediately adjacent and choose ***equals***. The available choices will appear in the listing. You should see **C-Corporate** in the listing. Click that item and then click **OK**. You will now see the filter that you configured.



Simply repeat the same process to add the other two filters, **[Sales Type] equals 'Domestic'** and **[Transaction Type] equals 'Ford'**. See the figure to the right to see what the result should be in the **Filters** pane.



The apply the filters to the data view, click **Apply Filters to Report Preview**. Click **Save And Run** to run the report. The list view should be similar to the figure below.



	MLI Name	Gross Margin %	Qty (Gross)	P&A Name/Address
1	0001-BRAKE DRUMS	65.65%	180 Each	-
2	0001-BRAKE DRUMS	0.00%	0 Each	A&G AUTOMOTIVE SP. Z O.O.-
3	0001-BRAKE DRUMS	45.80%	5 Each	A. CHAROUZ SPOL. S R.O.-
4	0001-BRAKE DRUMS	57.18%	2 Each	A.W.&D. HAMMOND LIMITED-
5	0001-BRAKE DRUMS	58.93%	2 Each	ABLONDI S.P.A.-
6	0001-BRAKE DRUMS	63.14%	2 Each	ACN ZENTRALLAGER GMBH-
7	0001-BRAKE DRUMS	72.29%	2 Each	ADAMS MOREY LIMITED-
8	0001-BRAKE DRUMS	81.89%	5 Each	ADOLF RAHENBROCK GMBH & CO KG-
9	0001-BRAKE DRUMS	80.25%	2 Each	AH KAPOSI HOFMEESTER HOLDING-
10	0001-BRAKE DRUMS	78.44%	2 Each	AIX AUTOMOBILES-
11	0001-BRAKE DRUMS	44.29%	9 Each	ALLEN-FORD (SWINDON) LTD.-
12	0001-BRAKE DRUMS	78.44%	2 Each	ALLIAN'S CAR-
13	0001-BRAKE DRUMS	70.78%	1 Each	ALLIANCE AUTOMOBILES-
14	0001-BRAKE DRUMS	62.86%	5 Each	ALMOAUTO; S. A.-
15	0001-BRAKE DRUMS	77.16%	3 Each	AMBROSTORE S.P.A.-
16	0001-BRAKE DRUMS	85.08%	4 Each	ANTONIO BRAVO; S. A.-
17	0001-BRAKE DRUMS	54.69%	11 Each	ARDEA AUTO B.V.-
18	0001-BRAKE DRUMS	87.63%	3 Each	ARDEA AUTO HOOFDDORP-
19	0001-BRAKE DRUMS	54.05%	1 Each	AS INFO-AUTO; REG NO. 10078598-
20	0001-BRAKE DRUMS	54.46%	1 Each	AS-HUOLTO OY-
21	0001-BRAKE DRUMS	77.40%	1 Each	ATVILSA-
22	0001-BRAKE DRUMS	0.00%	0 Each	AUTO BRZEZINSKA SP. Z O.O.-
23	0001-BRAKE DRUMS	87.96%	2 Each	AUTO CENTER WIMMER-

5.3 Options for Creating Custom Reports

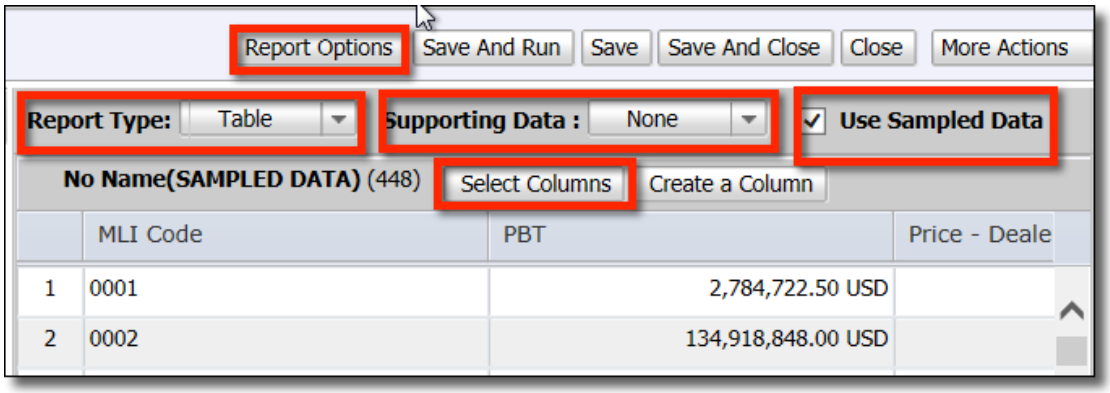
There are a number of options available for creating customized reports:

Report Options – Click this button to open the **General Settings** pop-up, where you can re-name your report or modify the **Report Description**.

Report Type – Click the drop-down to select a new report type, such as column, bubble, matrix, area, or waterfall.

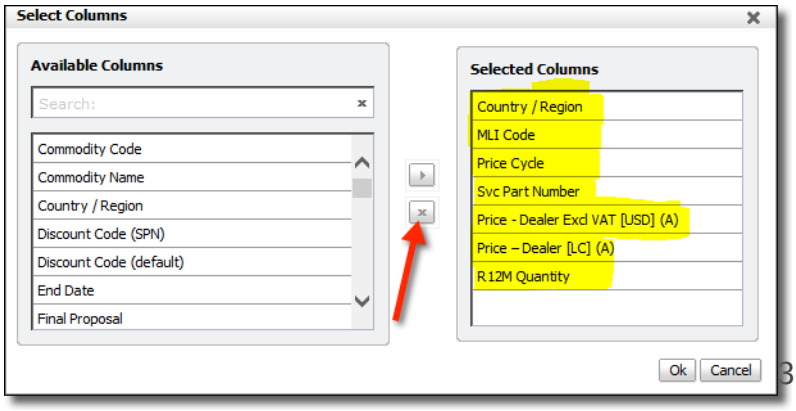
Supporting Data – Use this option to choose a table report with supporting charts.

Use Sampled Data – Check this box (the default) to load only the first 10,000 rows of data during the report setup—to reduce the time necessary to generate the report. When you complete setup of the report, you can uncheck this box and then run your report for the entire data set.

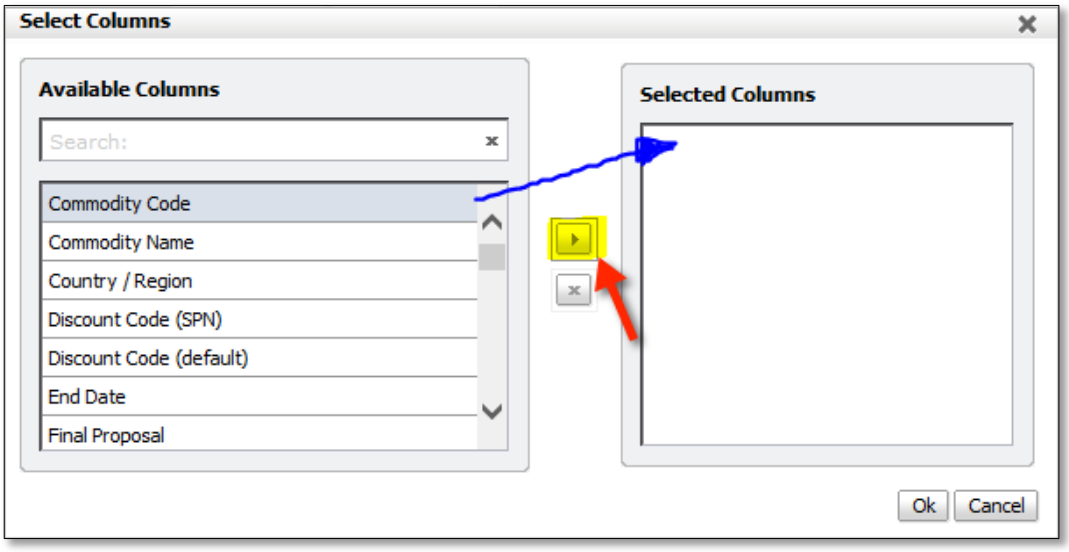


Select Columns – Click this button to add specific columns to your report. There are several pre-populated dimensions as part of the Vendavo feature (see highlighted section below). You can remove all of these by selecting one of the dimensions and clicking on the **X** button.

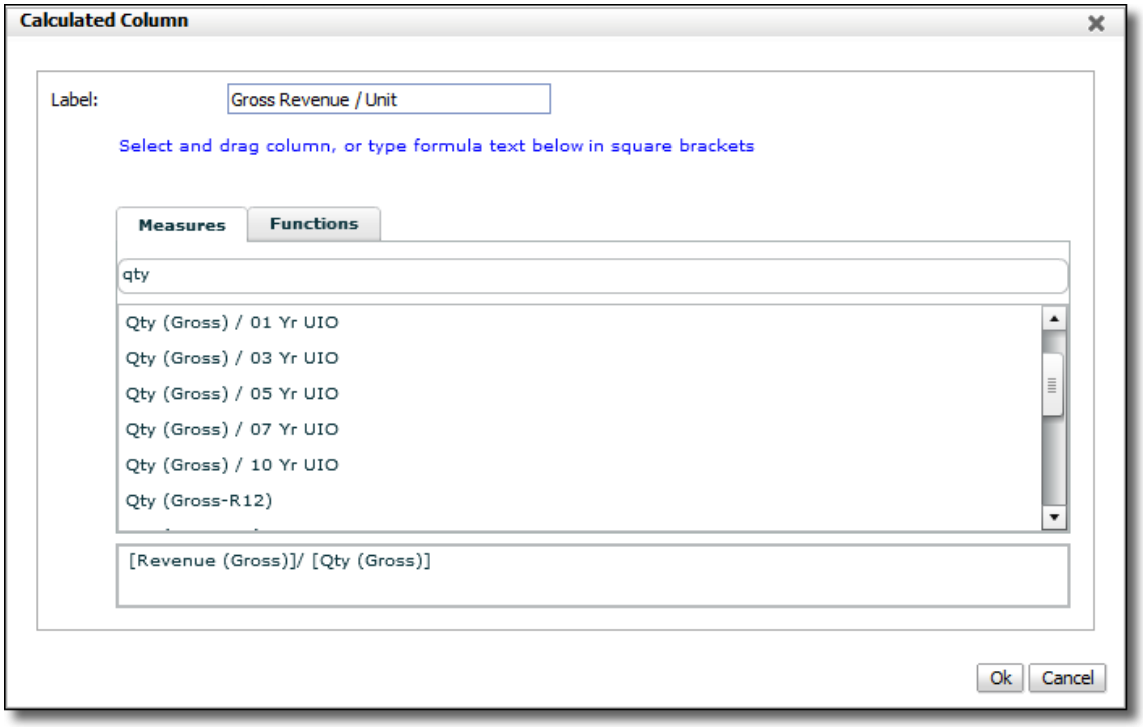
To delete several dimensions at once, simply hold down the keyboard **Shift** key and then choose the dimensions you want to remove, then click on the **X** button.



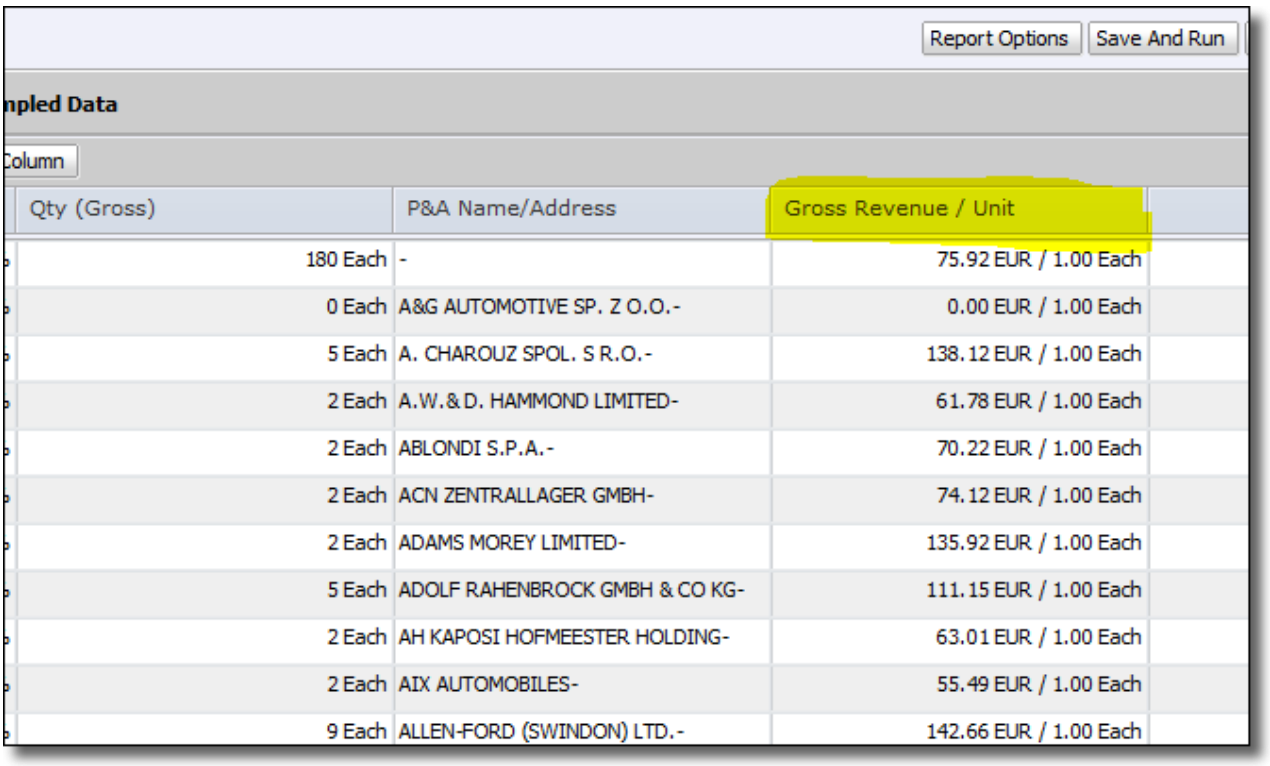
You can add dimensions—each of which will be a column in the report—by selecting a dimension and then pressing the **>** button.



Create a Column – This feature allows you to create your own calculated column that doesn't correspond to one of the dimensions. For example, as we depict in the figure below, you can create a column for **Gross Revenue / Unit** by selecting **Gross Unit**,then using the **/** function, and then selecting **Quantity** to produce the result.



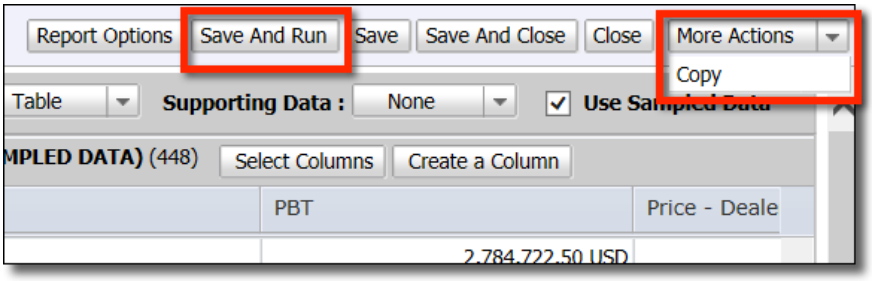
Click **OK** to complete the step and view the new column on the far right of the data view.



Qty (Gross)	P&A Name/Address	Gross Revenue / Unit
180 Each	-	75.92 EUR / 1.00 Each
0 Each	A&G AUTOMOTIVE SP. Z O.O.-	0.00 EUR / 1.00 Each
5 Each	A. CHAROUZ SPOL. S R.O.-	138.12 EUR / 1.00 Each
2 Each	A.W.& D. HAMMOND LIMITED-	61.78 EUR / 1.00 Each
2 Each	ABLONDI S.P.A.-	70.22 EUR / 1.00 Each
2 Each	ACN ZENTRALLAGER GMBH-	74.12 EUR / 1.00 Each
2 Each	ADAMS MOREY LIMITED-	135.92 EUR / 1.00 Each
5 Each	ADOLF RAHENBROCK GMBH & CO KG-	111.15 EUR / 1.00 Each
2 Each	AH KAPOSI HOFMEESTER HOLDING-	63.01 EUR / 1.00 Each
2 Each	AIX AUTOMOBILES-	55.49 EUR / 1.00 Each
9 Each	ALLEN-FORD (SWINDON) LTD.-	142.66 EUR / 1.00 Each

Save and Run – After selecting your columns, click this button to save and then run your report.

More Actions – Click this drop-down to edit your report, copy your report, export as .xls or .pdf.



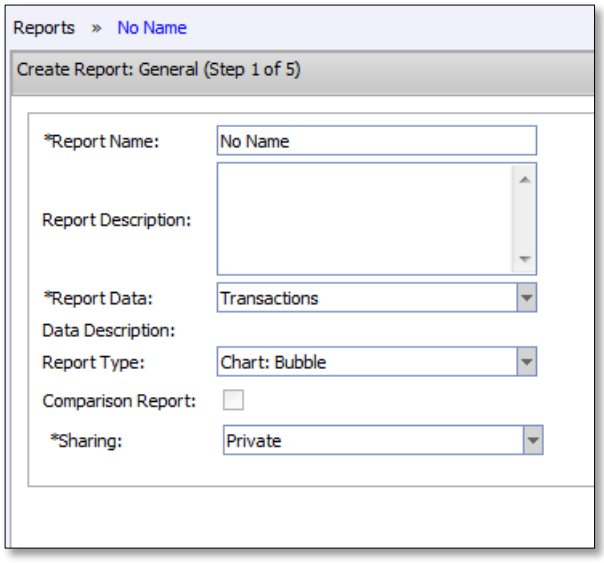
5.4 Create Report Using Wizard

Selecting **Create Report Using Wizard** will initiate either a 5 or 6 step report creation process. The process is 5 steps when a chart is being used and 6 steps when it uses a table. The extra step is related to the column formatting of the table. This process will guide the user in creating a customized report. Below, we outline the steps using an example scenario.

Step 1: General

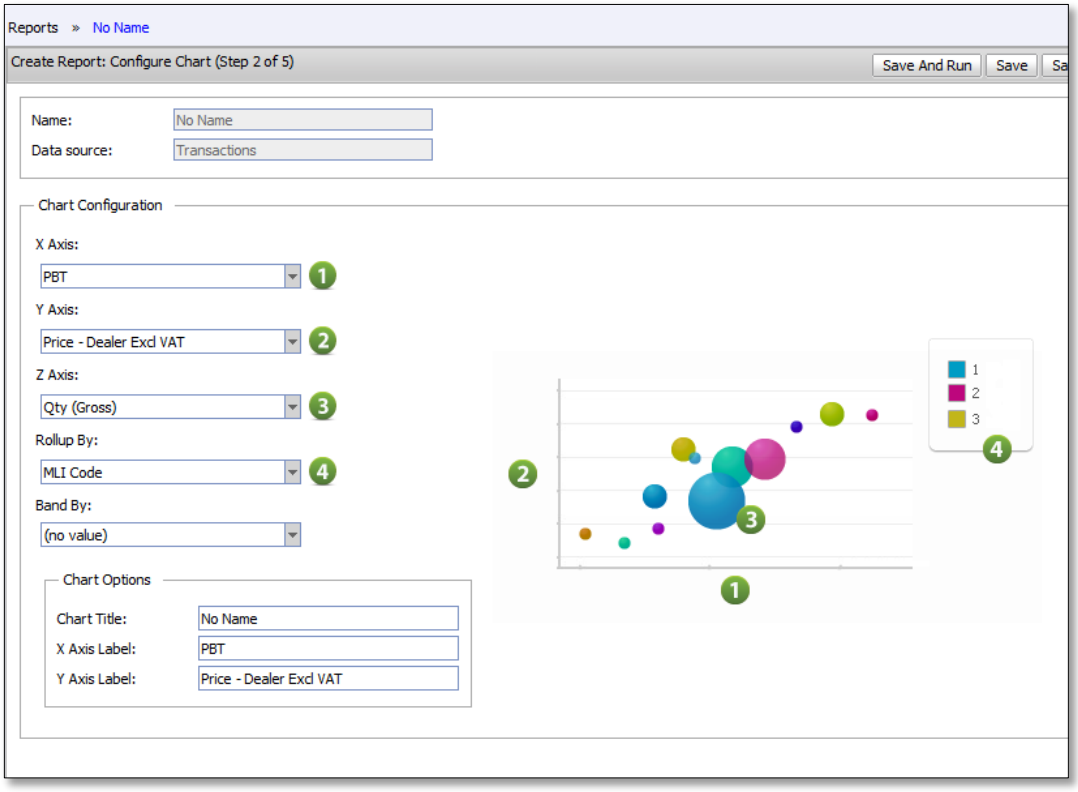
This step requires the following general report information:

- Report name / description: free to choose
- Report data: this is the data source. With the PA go-live, the only available option is the transaction set
- Report type: there are two main options: a report layout (simpler) or matrix (for more complex reports) layout.
- Sharing: this determines whether you want to have the report private or share it with others.



Step 2: Configuration

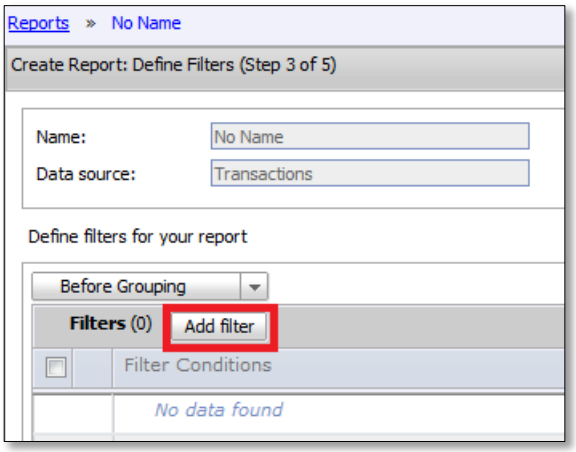
The user then configures the report. In this case, a bubble chart was selected so **GPARTS** will then prompt the user with configuration options for that particular chart. These options will vary based on the type of report selected in step 1.



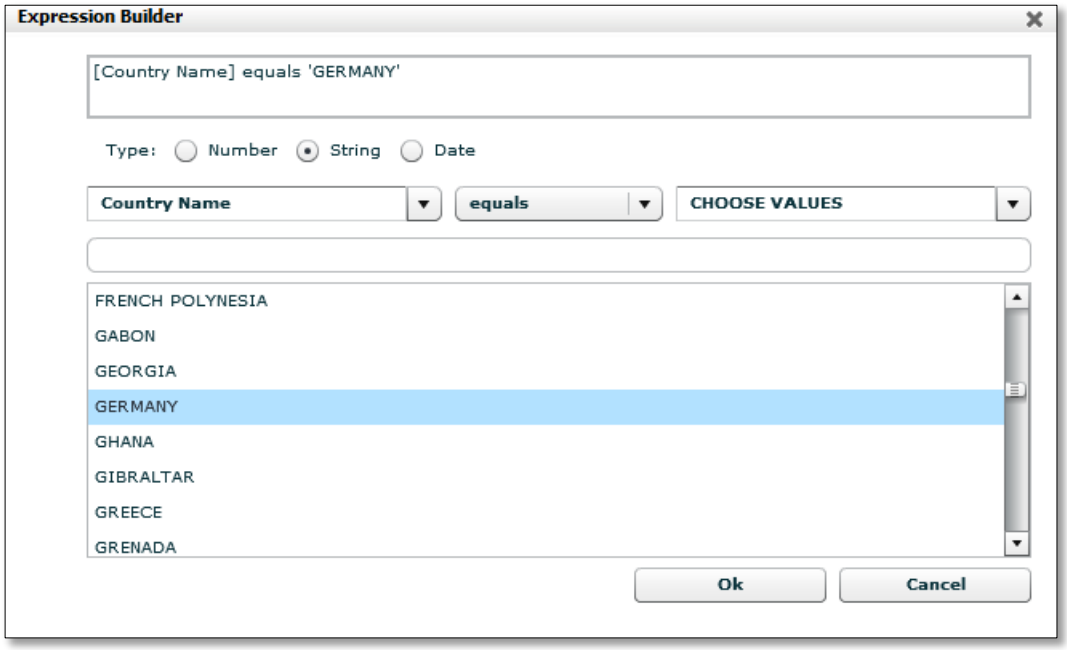
Each chart's configuration options are outlined in detail in the Price Explorer section.

Step 3: Define Filters

This screen allows you to define filters via "Add filter".

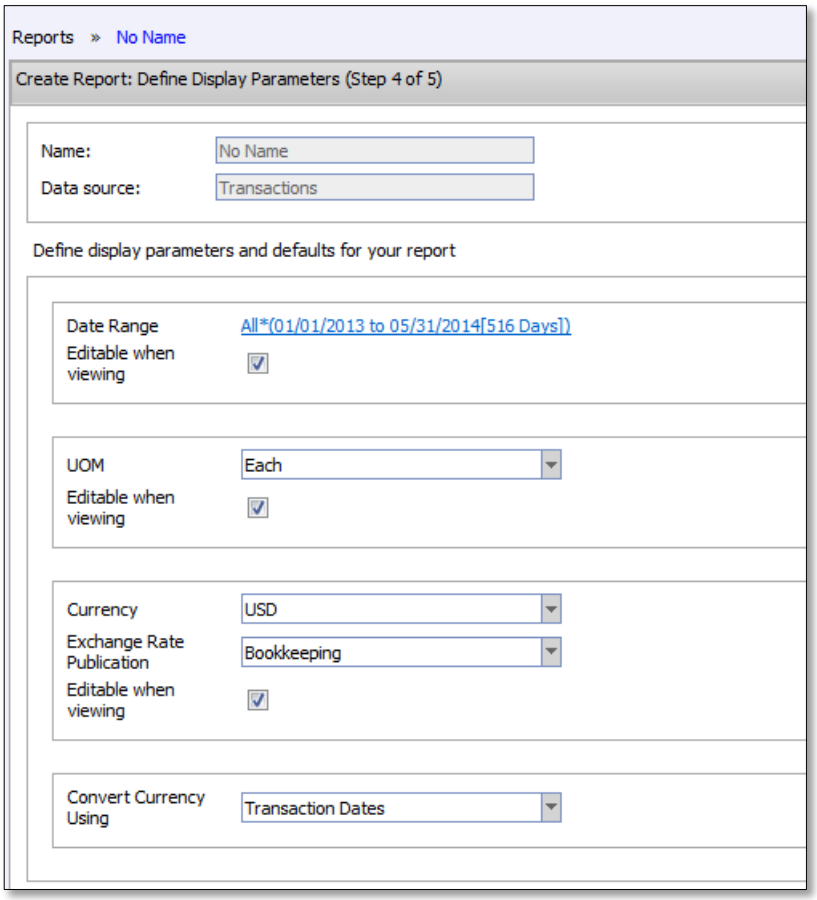


The expression builder then opens where you select your filters. The number, string, and date types allow you to select and add Measures, Dimensions, and Time filters respectively.



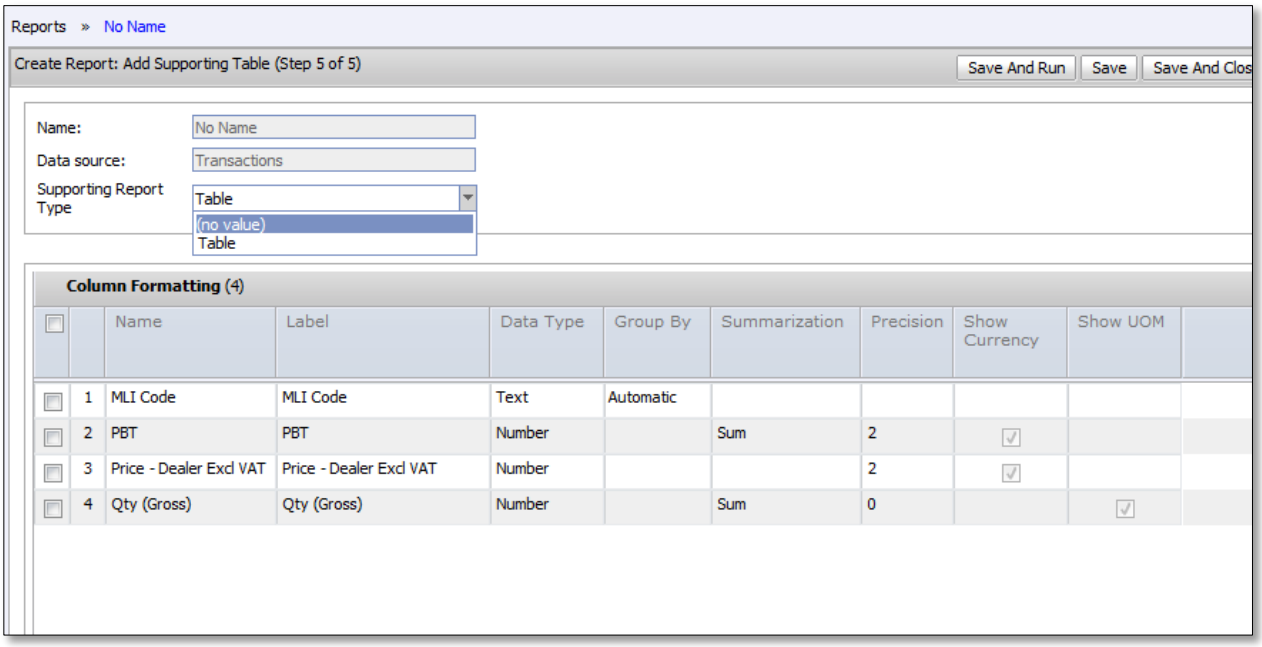
Step 4: Define Display Parameters

You will then be prompted to select a date range, UOM, currency, and currency conversion and determine which parameters are editable when view the report.

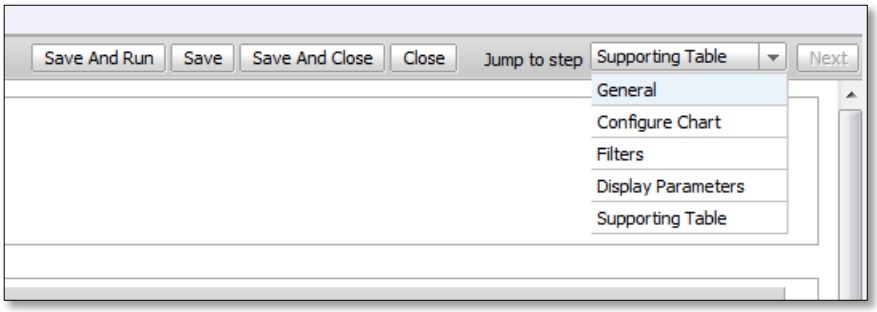


Step 5: Add Supporting Table

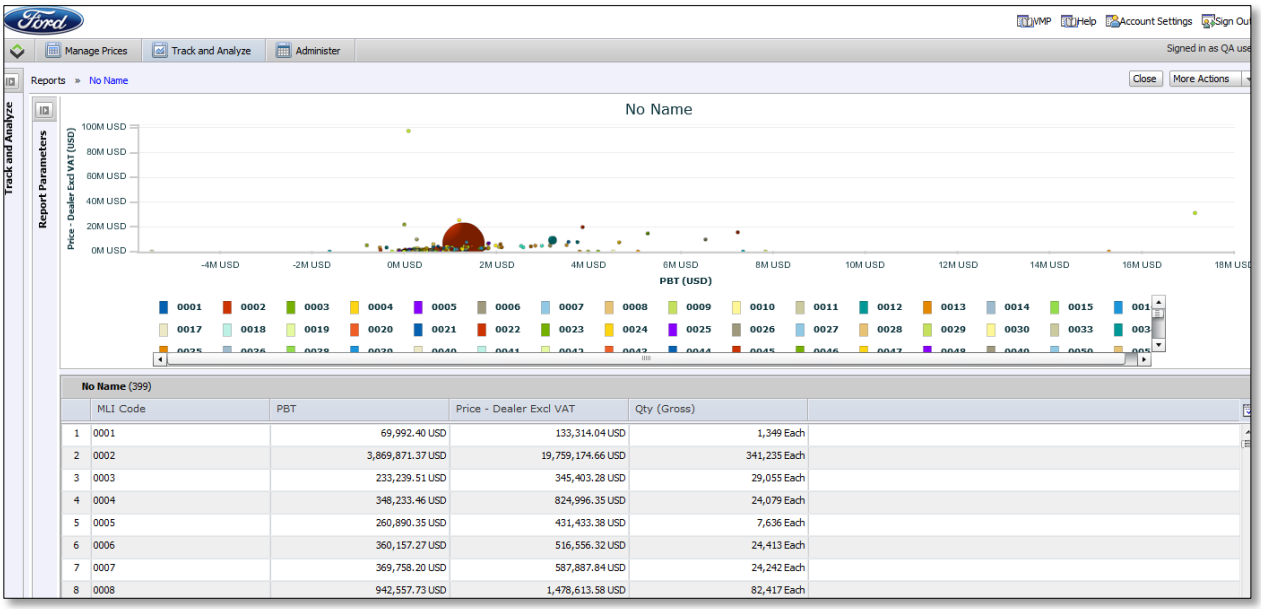
The final step allows you to select the option to add a data table in support of the chart in your report.



After completing step 5, select from “Save and Run”, “Save”, and Save and Close in the upper right hand corner of the window. Additionally, you can navigate and modify the information in any of the previous steps.



Selecting the “Save and Run” option causes a screen to open that displays your custom report based on your selections in the previous steps.



No Name (399)

	MLI Code	PBT	Price - Dealer Excl VAT	Qty (Gross)
1	0001	69,992.40 USD	133,314.04 USD	1,349 Each
2	0002	3,869,871.37 USD	19,759,174.66 USD	341,235 Each
3	0003	233,239.51 USD	345,403.28 USD	29,055 Each
4	0004	348,233.46 USD	824,996.35 USD	24,079 Each
5	0005	260,890.35 USD	431,433.38 USD	7,636 Each
6	0006	360,157.27 USD	516,556.32 USD	24,413 Each
7	0007	369,758.20 USD	587,887.84 USD	24,242 Each
8	0008	942,557.73 USD	1,478,613.58 USD	82,417 Each

5.5 Dashboards

5.5.1 Overview

Dashboards provides a means for users to monitor:

- Allows you to create a drill table of data; display key performance metrics in a comprehensive drill table
- Track key metric values with time-based charts
- Drill in to dimensions to identify more specific business slices

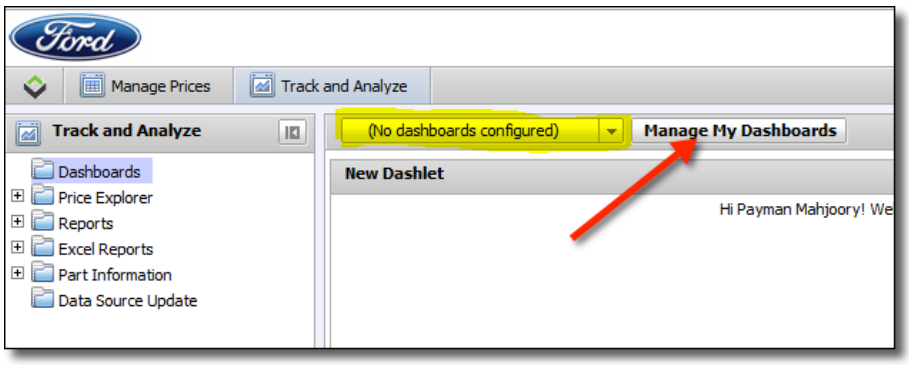
Dashboards help users:

- Identify areas requiring attention with Top/Bottom performers list
- View data series, discover patterns/trends with supporting charts

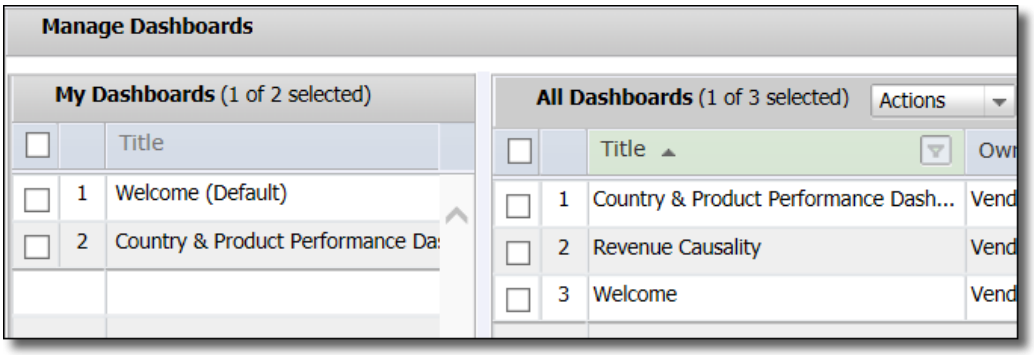
To access this feature, click **Track and Analyze** and then choose **Dashboards** from the left-hand menu.

5.5.2 Adding Dashboards

If you do not see any dashboards in the **My Dashboards** section, click the **Manage My Dashboards** button.



In the **All Dashboards** pane, double-click on any of the available dashboards that you want (or right-click and select **Add to my Dashboards**) to move it into the **My Dashboards** pane.



You can do the same for the other dashboards, and they will appear in **My Dashboards** pane. In the figure, you can see that we also added the ***Country & Product Performance Dashboard***. After adding all of the dashboards you want, click the **Done** button (to the far right).

[END OF DOCUMENT]