#### Introduction

Welcome to AutoShare, an application that will help you maximize the profits you make from stock markets around the world. The software comes pre-loaded with historical prices for the DJIA (Dow Jones) and FTSE 100 indices and their constituent shares, but once you subscribe, you can download and update share prices from a wide range of indices.

You can use share price data in the following ways.

- Display <u>graphs</u> of share price against time, which you can print, save as files, or copy to the clipboard.
- Examine prices in more detail with a <u>spreadsheet</u> of share prices.
- Set up <u>moving averages</u> for displaying on the share price graph and for producing lists of shares whose moving averages have crossed. The relative position of a share's moving averages can be an indication to buy or sell.
- Discover which shares have <u>risen or fallen</u> over a particular period of time, and by how much. A share that has risen or fallen rapidly may have become respectively overbought or oversold, due to the momentum inherent in share price movements. In combination with fundamental information about a company, you may want to consider buying an oversold share or selling an overbought one.
- Obtain lists of shares whose price is within a particular percentage of its <u>high or low</u> in the last specified period.
   Again, such shares may have been respectively overbought or oversold.
- Find out which shares have been <u>delisted</u> from their stock market index, and which have been recently added.
- Create <u>portfolios</u> of shares you have bought or are considering buying, so you can easily monitor their price movements and any profits made.
- Perform <u>backtests</u>, or simulations of trading in the past, to see how particular settings would have fared historically.

AutoShare achieves simplicity by concentrating on the most popular and successful technical analysis technique: the moving average crossover. By using the backtest facility, you will discover for example that the optimal setting for trading the DJIA over the last 107 years would have produced profits of more than 5E9% (50,000,000,000,000%), an annual average return of 18% with full re-investment of profits. Over the same period, a buy and hold strategy would have returned a profit of just 27,500% or a 5.3% annual average. At these levels, good money management is essential to ensure that profits are retained for reinvestment, making the most of the miracle of compound interest. In practice this means paying for transactions fees and capital gains taxes out of a separate pool of money.

## **Updating Prices**

When you start AutoShare for the first time, the main window appears with out-of-date prices. You can bring your price information completely up to date by clicking the <u>Update</u> <u>button</u>. Prices for all missing days and for all indices ticked on the <u>Indices tab</u> are automatically downloaded from the Internet. If you last downloaded information only yesterday, then only today's prices are retrieved, but if it has been longer since your last download then all missing days' prices are downloaded.

To ensure that you are always working with the latest information, you should endeavour to perform this download at the end of every market day. The time at which prices are available for a particular index depends on the closing time of its stock exchange.

If you connect to the internet via a proxy server, you should enter its details by Alt + Clicking the Help button in AutoShare and completing the <u>Proxy Server Settings dialog</u>.

When you click the **Update** button, the following happens:

- If you have a dialup connection to the Internet, and are not currently connected to the Internet, the usual **Dialup Connection** dialog is displayed. Complete this dialog if necessary, then click the **Connect** button to connect to the Internet.
- 2. All missing price information is automatically downloaded. This will take only a few seconds if just one day needs downloading, but will take a little longer if you have, for example, been away on holiday for a few weeks, or if you have ticked indexes for which data has never been downloaded onto your PC.
- 3. If you are using a dialup connection, upon completion of the download you are asked if you want to disconnect from the Internet.

AutoShare will now show up to date information, which you should save by clicking the <u>Save button</u>.

**Important:** It is recommended that you make frequent backups of any .mkt files in the Autoshare/Data directory. These contain price data for every index for which you have downloaded share prices.

If you are unable to update prices in the way described above, you can:

- Import a price file by clicking the Import button.
- Manually enter a day's price by right clicking the <u>Prices Grid</u> and choosing the **Insert day** option from the pop-up menu. You are prompted to enter the date for the new price, which is then inserted at the correct point on the price grid, after which you can click the new cell and enter the price.

#### **Overview of the Main Window**

The following sections describe the components (such as buttons and text boxes) of this window. When using AutoShare, you can click your right mouse button on most components to display specific help.

#### **Update button**

Updates AutoShare by downloading from the Internet all the share price information necessary to bring it to the current day.

#### Save button

Saves onto the hard drive all the share price information currently loaded. This button is disabled if no changes have been made since you last saved.

#### **Undo button**

If you click this button after changes have been made, the share price information reverts to the last-saved version, undoing all changes made since you last saved. If you click this button when no changes have been made, the information reverts to the backup, which is the version before the last-saved version.

## **Help button**

Displays the help for AutoShare. The ? button is a toggle for **What's This?** Help. When it is pressed down, you can click any control in AutoShare to display specific help. You can also display such context-sensitive help by clicking a control and pressing F1.

#### **Exit button**

Closes the application. If you have made changes since last saving, you are first asked if you want to save these changes.

#### **Averages tab**

Based on the setting of two <u>moving averages</u>, this tab displays lists of shares whose shorter moving average has risen above or fallen below their longer moving average. The moving averages also appear on the graph for each share, shown on the graph to the right.

#### Risers & Fallers tab

Displays a list of shares whose price has risen or fallen over the specified time period.

#### **New & Delisted tab**

The top half of this tab displays a list of shares that are judged to have been delisted from their stock market index, and enables you to remove them or combine them with other shares (in the event of a name change). The bottom half displays a list of shares that have been recently added to their stock exchange.

### **Highs & Lows tab**

Lists shares whose price is within the specified percentage of their year high or low.

### **Portfolio tab**

Lists the shares in your portfolio, showing their date of purchase and percentage change in value since then. You can add or remove shares by either dragging them to or from the <a href="Shares">Shares</a> list box, or by using the <a href="Add button">Add button</a> or <a href="Remove button">Remove button</a>.

### **Backtest tab**

Allows you to discover how much profit particular settings of moving averages would have produced historically.

#### **Indices tab**

Allows you to select the indices (for example, FTSE 250) you are interested in. This tab also contains options for importing and exporting price files, adding to each listed share name the symbol of the index to which they belong, and excluding shares whose price is above or below a certain level.

#### Search box

Type a search string in the box to search for the closest match in the Shares list box below.

#### Shares list box

A list of all shares belonging to the indices selected on the <a href="Indices tab">Indices tab</a> and that they are not excluded by the <a href="Exclude">Exclude</a> shares options at the bottom of the <a href="Indices">Indices</a> tab. You can <a href="Select">select</a> a share to view its historical price data on the right of the window, and to determine the other lists on which it appears (for example, on the <a href="Risers & Fallers">Risers & Fallers</a> tab).

#### **Price Information**

On the right of the AutoShare window the price information for the selected share is shown. At the top is a grid detailing the share's price on each market day of the last year, and below is a graph of price against time, along with graphs of any moving averages that you have specified on the **Averages** tab.

#### **Range list**

Changes the period covered by the graph and used during backtests.

## **Update button**

Updates AutoShare by downloading from the internet all the share price information necessary to bring it up to date. The prices of all shares belonging to each index selected on the <a href="Indices tab">Indices tab</a> are downloaded, except for indices imported from price files. This process can take some time for indices that are newly-ticked, as four years of historical prices for each share in the index must be retrieved and processed.

If you connect to the internet via a proxy server, you should enter its details by Alt + Clicking the Help button in AutoShare and completing the <u>Proxy Server Settings dialog</u>.

# **Save button**

Saves onto your hard drive all share price information and portfolios. This button is disabled if no changes have been made since you last saved.

#### **Undo button**

Undoes all changes except for those to the portfolios. If you click this button after changes have been made, the share price information reverts to the last-saved version, undoing all changes made since you last saved. If you click this button when the <u>Save button</u> is disabled because no changes have been made, the information reverts to the backup, which is the version before the last-saved version. Repeated clicking toggles between reverting to the last-saved and the backup.

# **Help button**

Displays the help for AutoShare. The ? button is a toggle for **What's This?** Help. When it is pressed down, you can click any control in AutoShare to display specific help. You can also display such context-sensitive help by clicking a control and pressing F1.

# **Exit button**

Closes the application. If you have made changes since last saving, you are first asked if you want to save these changes.

## All Shares list box

A list of all shares that belong to the indices selected on the <a href="Indices tab">Indices tab</a> and that they are not excluded by the <a href="Exclude">Exclude</a> shares options at the bottom of the <a href="Indices">Indices</a> tab. You can <a href="Select">select</a> a share to view its historical price data on the right of the window, and to determine the other lists on which it appears (for example, on the <a href="Risers & Fallers">Risers & Fallers</a> tab).

#### **Price Information Section**

This section, on the right side of the AutoShare window, displays price information about the currently selected share.

At the top is shown the name of the share, with the most recent price and percentage change-on-the-day given in brackets. If the share has been removed from their stock market index, the word **Delisted** appears in brackets.

Below this is a grid of the share's price on each day of the last year. Use the scroll bar to move back and forth through the year's prices. For days on which the share was not listed on the stock exchange (either because it had yet to be listed, or because it had been removed), a hyphen (-) appears.

At the bottom of the section is a graph of share price (in pence) against time for the selected share, along with any moving averages specified on the **Averages** tab. The time axis is divided into months (January, February, and so on) covering the range specified in the **Months** box.

To display the exact price pointed to by the mouse, press the Left mouse button. The date and the price on that date are displayed just above the mouse pointer.

By default, a reference grid is displayed on the graph. To remove it, clear the **Show Grid** check box situated on the left beneath the graph.

**Note**: If there are not enough days of price data to construct a particular moving average, the graph for that moving average will not be displayed. For example, AutoShare would not display the 20-day moving average of a share that has only been on the market for 19 days.

## **Prices grid**

Shows, for the selected share, its price on each market day of the last year. Use the scroll bar to move back and forth through the year's prices. For days on which the share did not appear in its stock market index (either because it had been removed or had yet to be listed), a hyphen (-) appears.

To add or correct any price, click on a cell, enter the price, and press Enter.

To insert a new date, right-click the grid and choose the **Insert date** option from the pop-up menu. You are prompted to enter a date, which is inserted at the correct point in the grid, enabling you to enter a price for the date as described above.

To change a date, right-click the grid, choose the **Edit date**option from the pop-up menu, and enter the new date when prompted.

## **Price graph**

Displays a graph of price against time for the selected share, along with any moving averages specified on the <u>Averages tab</u>. The time axis is divided into months (January, February, and so on) over the range specified in the **Range** box situated beneath the graph. You can click on the graph to display the exact price on a particular day.

To display the exact price pointed to by the mouse, press the Left mouse button. The date and the price on that date are displayed just above the mouse pointer. You can additionally show the values of the moving averages by pressing the Ctrl key at the same time.

Right click the mouse on the graph to display a popup menu with options to print the graph, save it as a bitmap or jpeg file, copy it to the clipboard, and to determine the price tomorrow that will have to be breached in order for the moving averages to cross over.

By default, a reference grid is displayed on the graph. To remove it, clear the **Show Grid** check box situated on the left beneath the graph.

To change the date range from the default of four years, select the required range from the **Range** box.

To change the colour of a moving average line, right click its legend, which appears beneath the graph area. From the displayed pop-up menu, choose either the **Change colour** option to select a specific new colour, or the **Return to the default colour** option to change back to red for the shorter average or blue for the higher average.

**Note**: If there are not enough days of price data to construct a particular moving average, the graph for that moving average will not be displayed. For example, AutoShare would not display

the 20-day moving average of a share that has only been on the market for 19 days.

# **Grid check box**

Tick this check box to display a reference grid on the <u>share price</u> <u>graph</u>.

## **Search box**

Type a search string in the box to search the <u>Shares list box</u> for the closest match. **Note:** This search takes into account all the letters entered. If you simply want to search for shares that begin with the letters entered, you may find it quicker to use the usual list search facility, by selecting the list box and typing.

# **Selecting a Share**

This section explains how you can use the various share lists to locate and select a share to display information about it.

# **Displaying a Share's Price History**

To display a share's price history in both spreadsheet and graph form, select it in any list box.

# **Searching for a Particular Share**

After clicking on any list box, most usefully the <u>All Shares list</u> box, you can search for a share by typing the first few letters of its name. If you make a mistake in your typing, or when you want to find another share, wait a few seconds before typing again. Otherwise, it will be assumed that you are still typing the same name.

# **Skimming Through a List**

To skim through a list of shares, select a share in the list box, then use the Up or Down arrow to move quickly through the list. The share price information on the right side of the window is updated dynamically.

# Copying a Share's Name to the Clipboard

To copy a selected share's name to the clipboard, right click it and then choose the **Copy to Clipboard** option from the popup menu. You can then paste it into another application by pressing Ctrl + V. This facility is especially useful if you want to quickly search online for information about a share.

#### **How List Boxes are Linked**

Selecting a share in one list box will automatically select the share in all other list boxes. The most useful effect of this is in enabling you to select a share in the All Shares list to determine:

- whether one of its moving averages is above or below the other (<u>Averages tab</u>)
- how its price has moved over a specified period (<u>Risers & Fallers tab</u>)
- whether its price is within a particular percentage of its high or low in the last specified number of months (<u>Highs & Lows</u> <u>tab</u>)
- whether the share has been delisted or recently added (<u>New & Delisted tab</u>).

# **Adding a Share to Your Portfolio**

To add a share to the current portfolio from any list box, simply select it and then either:

- click the right mouse button, and choose the Add to Portfolio option from the pop-up menu
- press Ctrl + A.

# Displaying Fundamental Information about a Share

To display in your default browser a web page that shows fundamental information about a share, such as Analyst Opinions, select it and then either:

- click the right mouse button, and choose the Show
   Fundamentals option from the pop-up menu
- press Ctrl + F.

**Note:** This option is not available for shares or indices imported using the **Import** button on the **Indices** tab.

## **Using the Averages Tab**

Based on the setting of two moving averages, this tab displays lists of shares whose shorter-term moving average has risen above or fallen below their longer-term moving average. The moving averages also appear on the graph to the right.

Use the **Average 1** and **Average 2** edit boxes to apply one or two moving averages to the price data. If you just want one moving average, simply set one of the averages to 1; this average in effect becomes the price of the share. In the following explanations, whichever average is the lesser of the two is referred to as the shorter moving average, with the other referred to as the longer moving average. As soon as you change an average, the **Above** and **Below** list boxes are updated.

#### Average 1

Enter the number of days over which the first moving average is to be calculated. Either enter the number directly or use the Up/Down arrows to the right to alter the existing value.

### Average 2

Enter the number of days over which the second moving average is to be calculated.

## Type option buttons

Select whether you want to use **Simple** or **Exponential** moving averages. Simple moving averages apply equal weighting to all prices in the specified period, and are therefore slower to react to recent prices changes than exponential moving averages, which apply progressively greater weight to more recent prices.

## Crossing in last given number of days

Tick the check box and specify a number in the accompanying

box if you only want shares whose averages have crossed in the given number of days to appear in the **Above** and **Below** list boxes.

#### **Above list box**

Lists shares whose shorter moving average is currently greater than their longer moving average. This may be an indication to buy. If one of the moving averages is set to 1, then this list contains shares whose price is currently greater than the other moving average.

#### **Below list box**

Lists shares whose shorter moving average is currently less than their longer moving average. This may be an indication to sell. If one of the moving averages is set to 1, then this list contains shares whose price is currently less than the other moving average.

#### **Both Averages Rising check box**

Tick this box if you want the **Above** list box to show only shares whose averages are both rising, which is often considered to be a stronger buying signal.

#### **Both Averages Falling check box**

Tick this box if you want the **Below** list box to show only shares whose averages are both falling, which is often considered to be a stronger selling signal.

## **About Moving Averages**

A moving average is applied to a share price to remove the more rapid changes in the price, revealing its underlying trend. In other words, it reveals whether the price is rising or falling over the long term.

The moving average for a particular day is calculated by adding together the prices for n previous days, and then dividing by n, where **n** is the period of the moving average. The larger n is, the smoother the result, but the greater the delay (the moving average lags the share price by n days).

Apart from showing the general trend of a price, moving averages are useful indicators at their crossing points. When a shorter term average (for example, 28 days) crosses a longer term average (for example, 90 days), this can be seen as an indication to buy or sell depending on whether the shorter term average is rising or falling, respectively. You can use the same technique using just one moving average, and treating the original share price as the shorter-term average.

There are two main types of moving average: simple and exponential. You can switch between them in AutoShare simply by clicking the appropriate option on the Averages tab. Simple moving averages apply equal weighting to all prices in the specified period, whereas exponential moving averages apply progressively greater weight to more recent prices. Exponential averages have less lag and therefore react more quickly to recent price changes, but their very responsiveness may have the downside of many 'false signals', where recently crossed averages cross back before a profit can be made; this is known as a whipsaw. Which option you use is really a matter of personal preference, but you may consider exponential moving averages to be more useful with shorter time periods and frequent trading, and simple moving averages more suited to longer time periods.

In a recent book, The Encyclopedia of Technical Market Indicators, the authors performed a test on more than one hundred indicators for analysing the stock market, including Moving Averages, Bollinger Bands, MACD, and RSI. They found that using the crossover technique with two particular periods of exponential moving averages would have outperformed all other indicators when applied to the daily closing prices of the DJIA (the Dow Jones Industrial Average index, which comprises 30 of the largest U.S. companies) over the period 1900 to 2001. According to their back-test, it would have produced profits of 78 million percent better than buy-and-hold, turning \$100 into \$16 billion (assuming zero commission and tax, and full reinvestment of profits).

# Average 1

Enter the number of days over which the first moving average is to be calculated. Either enter the number directly or use the Up/Down arrows to the right to alter the existing value.

# Average 2

Enter the number of days over which the second moving average is to be calculated.

# Type option buttons

Select whether you want to use **Simple** or **Exponential** moving averages. Simple moving averages apply equal weighting to all prices in the specified period, and are therefore slower to react to recent prices changes than exponential moving averages, which apply progressively greater weight to more recent prices.

# Crossing in last given number of days

Tick the check box and specify a number in the accompanying box if you only want shares whose averages have crossed in the given number of days to appear in the <u>Above list box</u> and <u>Below list box</u>.

## **Above list box**

Lists shares whose shorter moving average is currently greater than their longer moving average. This may be an indication to buy. If one of the moving averages is set to 1, then this list contains shares whose price is currently greater than the other moving average.

# **Below list box**

Lists shares whose shorter moving average is currently less than their longer moving average. This may be an indication to sell. If one of the moving averages is set to 1, then this list contains shares whose price is currently less than the other moving average.

# **Both Averages Falling check box**

Tick this box if you want the <u>Below list box</u> to show only shares whose averages are both falling, which is often considered to be a stronger selling signal.

# **Both Averages Rising check box**

Tick this box if you want the **Above** list box to show only shares whose averages are both rising, which is often considered to be a stronger buying signal.

### **Risers & Fallers Tab**

This tab enables you to find out which shares have fallen or risen over a specified time period.

#### From box

The start date of the period to be examined. To change the date, do one of the following:

- Click the down arrow to the right and select a date from the displayed calendar.
- Click on a part of the date (such as the month) to highlight it, and then overtype as required.
- Select a period from the **Period** box to automatically insert
   a **From** date that is a specific period (such as a week)
   before the **To** date.

#### To box

The end date of the period to be examined. To change the date, either click the box to highlight and overtype the existing date, or click the down arrow to the right and select a date from the displayed calendar.

#### **Period box**

Select a period from the drop-down list. The date in the **From** box changes to one that is the selected period before the **To** date.

#### Risers list box

Lists shares whose price has risen over the given period. The % increase appears to the right of each share.

#### Fallers list box

Lists shares whose price has fallen over the given period. The %

decrease appears to the right of each share.

## From box

The start date of the period to be examined. To change the date, do one of the following:

- Click the down arrow to the right and select a date from the displayed calendar.
- Click on a part of the date (such as the month) to highlight it, and then overtype as required.
- Select a period from the <u>Period box</u> to automatically insert a
   From date that is a selected period (such as a week) before
   the **To** date.

# To box

The end date of the period to be examined. To change the date, either click the box to highlight and overtype the existing date, or click the down arrow to the right and select a date from the displayed calendar.

# **Period box**

Select a period from the drop-down list. The date in the <u>From</u> <u>box</u> changes to one that is the selected period before the <u>To box</u> date.

# Risers list box

Lists shares whose price has risen over the given period. The % increase appears to the right of each share.

# **Fallers list box**

Lists shares whose price has fallen over the given period. The % decrease appears to the right of each share.

#### New & Delisted Tab

This tab displays lists of shares that have been recently added or removed from their stock exchange. It allows you to remove any of the latter from AutoShare, or combine them with other shares (in the event of a name change).

#### **Delisted list box**

Lists shares that are deemed to have been removed from their stock market index.

#### **Delete button**

Click this button to delete any shares you have selected in the **Delisted** list box.

#### **Combine button**

Click this button to combine two shares that you have selected: one each from the **Delisted** list box and <u>All Shares list box</u>. You can use this when a share has changed name. Price data from the old share is moved to the new. You can then delete the old share if desired.

#### **Select All button**

Selects all the shares appearing in the **Delisted** list box.

#### Recent Issues

Lists shares that have been recently added to the stock exchange. The list contains all new issues from the last n market days, where n is the number selected in the box to the right.

### Added within last n days

Select a number to specify the number of days to go back when searching for recent issues. For example, select 5 to list all shares that have been issued in the last 5 market days.

# **Delisted list box**

Lists shares that are deemed to have been removed from their stock market index.

# **Delete button**

Click this button to delete any shares you have selected in the <u>Delisted list box</u>.

# **Combine button**

Click this button to combine two shares that you have selected: one each from the <u>Delisted list box</u> and the <u>Shares list box</u>. You can use this when a share has changed name. Price data from the old share is moved to the new. You can then delete the old share if desired.

# **Select All button**

Selects all the shares appearing in the <u>Delisted list box</u>.

# **Recent Issues list box**

Lists shares that have been recently added one of indices ticked on the <u>Indices tab</u>. The list contains all new issues from the last n market days, where n is the number selected in the box to the right.

# Added within last n days

Select a number to specify the number of days to go back when searching for recent issues. For example, select 5 to list all shares that have been issued in the last 5 market days.

## **Deleting Delisted Shares**

To delete shares that have been removed from their stock market index:

- 1. Select the New & Delisted tab on the left side of the window.
- 2. In the <u>Delisted list box</u>, select the shares you want to delete. You can:
  - select a contiguous group of shares by selecting the first share in the group and then, while holding down the Shift key, selecting the last share in the group
  - select individual shares by holding down the Ctrl key while clicking on shares
  - select all shares in the list by choosing the <u>Select All</u> button.
- 3. Click the Delete button to delete the selected shares.

The shares are removed from all lists. To save your changes, click the <u>Save button</u> at the top of the window. To undo your changes, reverting to the last-saved version of the share price information, click the <u>Revert button</u>.

#### **Portfolio Tab**

This tab allows you to view and maintain lists of shares that you have purchased or wish to monitor. Click the > button on the right to expand the width of the tab to reveal the entire portfolio table. The tab is returned to its default size when you select another tab or click the < button.

#### **Portfolio list**

To display a particular portfolio, select it from the list. If you have made changes to the current portfolio, you are first asked if you want to save those changes.

To create a new portofolio, select the [Add new portfolio] entry at the bottom of the list, type a name for the portfolio, and then press Enter.

To rename a portfolio, select it, edit it, and then press Enter.

To delete a portfolio, select it and then press the Delete key.

#### Add button

Click this button to add to your portfolio the share selected in the <a href="Shares list box">Shares list box</a>. Alternatively, you can add a share by dragging it from the <a href="All Shares">All Shares</a> list box and dropping it onto the portfolio table. <a href="Note">Note</a>: To add a share from any list box, select it, and then either press <a href="Ctrl">Ctrl</a> + A or click the right mouse button and choose the <a href="Add to Portfolio">Add to Portfolio</a> option from the pop-up menu. The added share appears at the end of the table, with the <a href="Price">Price</a> Paid value defaulting to the current price and the <a href="Date of Purchase">Date of Purchase</a> defaulting to today. You change these as explained in the help for the <a href="Portfolio">Portfolio</a> table.

#### **Remove button**

Click this button to remove the currently selected share from your portfolio. To select a share, simply click anywhere on its row in the portfolio table.

### **Undo button**

Click this button to undo changes made to the currently displayed portfolio. If no changes have been made since last saving, the portfolio reverts to the backup. Repeated clicking toggles between the last-saved version and the backup.

## **Total Paid, Total Now, Total Profit**

The section beneath the portfolio sheet shows the **Total Paid** for the shares in the portfolio, their value **Now** and the total **Profit** (the Total Now divided by the Total Paid, expressed as a percentage).

### Portfolio table

This table lists the shares in your portfolio, showing for each the **Name of Share** and the details shown below. To reveal the right-most column(s), use the horizontal scroll bar at the bottom. You can change the relative position of a column by dragging and dropping the column heading to a new horizontal location. To change the position of a share in the list, drag and drop its row heading (showing the share name) to a new vertical location.

To sort the list according to the contents of a particular column, right click the column heading. Right click again to sort in reverse.

To print or export a portfolio, right click the table and select the appropriate option from the pop-up menu.

### **Change on Day**

The change in the share price in the last market day as an absolute difference and as a percentage.

## **Total % Change**

The total percentage change in the share price since purchase.

### **Average Position**

Indicates whether the share price's shorter moving average is above (+) or below (-) its higher moving average. A change from + to - may be an indication to sell.

#### **Price Now**

The current share price.

#### **Price Paid**

The amount paid for each share. When you add a new share to your portfolio, this value defaults to the share's current price. To change the value, double-click it and enter a new price (for example, 36.25).

#### **Date of Purchase**

The date on which the shares were purchased. When you add a new share to your portfolio, this defaults to today's date. To change the date, select the cell, and either directly change the figures in the cell, or click the down arrow next to the cell to display a calendar from which to select a date.

#### No. Held

The number of shares bought. Double-click the cell to enter this number.

#### **Value Paid**

The total amount paid for the shares, which equals the **Price Paid** multiplied by the **No. Held**.

#### Value Now

The amount the shares are worth now, which equals the **Price Now** multiplied by the **No. Held**.

## Portfolio drop-down list

To create a new portofolio, select the blank row at the bottom of the list, type a name for the portfolio, and then press Enter.

To display a particular portfolio, select it from the list. If you have made changes to the current portfolio, you are first asked if you want to save those changes.

Immediately after selecting a portfolio name from the list you can do any of the following.

#### Rename

Edit the portfolio name and then either press Enter or move away from the **Portfolio** drop-down list.

#### **Delete**

Press the Delete key.

#### **Print**

#### Either:

- press Ctrl + P, or
- right click the mouse and select **Print** from the pop-up menu.

The portfolio is sent to your default printer.

## **Export**

#### Either:

- press Ctrl + E, or
- right click the mouse and select **Export** from the pop-up menu.

The portfolio is saved to a csv file, which you can open in a spreadsheet application.

# **Resize button**

Click the > button to expand the width of the tab so as to reveal all columns of the portfolio table. The width returns to its default size when you select another tab or click the < button.

### Add button

Click this button to add to your portfolio the share selected in the <a href="Shares list box">Shares list box</a>. Alternatively, you can add a share by dragging it from the Shares list box and dropping it onto the portfolio table, or by right clicking it and choosing the <a href="Add to">Add to</a>
<a href="Portfolio">Portfolio</a> option from the pop-up menu. The share appears at the end of the table, with the <a href="Price Paid">Price Paid</a> value defaulting to the current price and the <a href="Date of Purchase">Date of Purchase</a> defaulting to today. You can change these values as explained in the help for the <a href="Portfolio table">Portfolio table</a>.

# **Remove button**

Click this button to remove the currently selected share from your portfolio. To select a share, simply click anywhere on its row in the portfolio table.

### Portfolio table

This table lists the shares in your portfolio, showing for each the **Name of Share** and the details shown below. To reveal the right-most column(s), use the horizontal scroll bar at the bottom. To display more columns without scrolling, click the > button to widen the table.

You can change the relative position of a column by dragging and dropping the column heading to a new horizontal location.

To resize a column, point the mouse at the right boundary of the column heading. The mouse pointer changes to a horizontal resize icon. Hold down the left mouse button while moving the mouse left or right, and then release the mouse button when the column width is as required.

To change the position of a share in the list, drag and drop its row heading (showing the share name) to a new vertical location.

To sort the list according to the contents of a particular column, right click the column heading. Right click again to sort in reverse.

To print or export a portfolio, right click the table and select the appropriate option from the pop-up menu.

## **Change on Day**

The change in the share price in the last market day, in pence and as a percentage.

## **Total % Change**

The total percentage change in the share price since purchase.

## **Average Position**

Indicates whether the share price's shorter moving average is above (+) or below (-) its higher moving average. A change from + to - may be an indication to sell.

#### **Price Now**

The current share price.

#### **Price Paid**

The amount paid for each share. When you add a new share to your portfolio, this value defaults to the share's current price. To change the value, double-click it and enter a new price (for example, 36.25).

#### **Date of Purchase**

The date on which the shares were purchased. When you add a new share to your portfolio, this defaults to today's date. To change the date, select the cell, and either directly change the figures in the cell, or click the down arrow next to the cell to display a calendar from which to select a date.

#### No. Held

The number of shares bought. Double-click the cell to enter this number.

#### Value Paid

The total amount paid for the shares, which equals the **Price Paid** multiplied by the **No. Held**.

#### Value Now

The amount the shares are worth now, which equals the **Price Now** multiplied by the **No. Held**.

# **Portfolio Undo button**

Click this button to undo changes made to the currently displayed portfolio. If no changes have been made since last saving, the portfolio reverts to the backup. Repeated clicking toggles between the last-saved version and the backup.

# **Export Portfolio dialog**

Use this dialog to export the current portfolio to a csv (comma separated values) file. Enter a name in the **File name** box and then click the **Save** button.

## **Highs & Lows Tab**

This tab lists shares whose price is within a specified percentage of their high or low for the last specified number of months. The percentage and number of months are entered in the two boxes at the top.

### Within n percent of high/low box

Determines how close a share's price must be to its period high or low in order to be included in the **Highs** or **Lows** list box.

## **Highs list box**

Lists shares whose price is within the specified percentage of their highest price in the last specified period.

#### Lows list box

Lists shares whose price is within the specified percentage of their lowest price in the last specified period.

# Within n percent of high/low box

Determines how close a share's price must be to its period high or low in order to be included in the **Highs** or **Lows** list box.

# **Highs list box**

Lists shares whose price is within the specified percentage of their highest price in the last specified period.

# **Lows list box**

Lists shares whose price is within the specified percentage of their lowest price in the last specified period.

## **Contacting us**

Please feel free to send us an e-mail on anything to do with AutoShare: what you think of it, how it has helped you, features you would like to see in future releases, technical questions, operational questions, and so on. The address to write to is **support@silvawood.co.uk**.

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## **Using the Backtest Tab**

This tab enables you to discover how much profit particular settings of moving averages would have produced in the past. It does this by performing a backtest, which simulates the trading of shares using historical data. **Note**: Although these simulations can provide general guidance as to the best settings for the immediate future, you can never assume that what has worked well in the past will work equally well in the future.

### Average 1

Enter the number of days over which the first moving average is to be calculated. Either enter the number directly or use the Up/Down arrows to the right to alter the existing value.

### **Average 2**

Enter the number of days over which the second moving average is to be calculated.

### Type option buttons

Select whether you want to use **Simple** or **Exponential** moving averages. Simple moving averages apply equal weighting to all prices in the specified period, and are therefore slower to react to recent prices changes than exponential moving averages, which apply progressively greater weight to more recent prices.

### **Spread Bet check box**

Tick this check box to backtest using simulated spread bets, where the profit or loss is made according to the points difference between the buy and sell price.

#### Min. Bet

Enter the minimum bet size per point, which is also the initial bet size. As profits are made, they are reinvested to increase the bet size, but successive losses will decrease the bet size until the minimum stake is reached. Further losses will not decrease the next stake, but will increase the margin or deposit requirement.

#### Max. Bet

Enter the maximum bet size. Reinvested profits will increase the bet size, but not beyond the maximum specified.

### **Margin Factor**

Enter the Margin Factor, also variously known as the Deposit Factor and the IMR (Initial Margin Requirement). This figure is quoted by the spread betting company to determine the deposit required to make a bet, calculated as the Margin Factor multiplied by the bet size.

### **Spread**

Enter the difference between the buying and the selling price, as quoted by the spread betting company.

### **Trade Type**

Use this list box to specify whether you want the backtest to trade long, short, or both. A long trade is the traditional kind, opened by buying and closed by selling, meaning you profit if the sell price is higher than the buy price. A short trade is opened by selling and closed by buying, so you profit if the price has fallen; the buy price is higher than the sell price. The simulation will 'go long' when the lower moving average moves above the higher moving average and 'go short' when the lower moving average moves below the higher moving average.

### **Optimize check box**

Tick this check box to find the moving average values that gave the greatest overall profit over the time period shown in the graph, using the **Type**, **Go Long**, and **Go Short** settings you have specified. This backtest may take several seconds to execute, after which the **Average 1** and **Average 2** settings on the **Backtest** tab are changed to those that produced the greatest profit, and the <u>Results box</u> will show details of trading with these settings. A <u>Profits graph</u> is displayed beneath the **Results** box. This represents as shaded dots the profit for each combination of moving average periods, with the lightest dots representing the highest profit. You may cancel the backtest at any time by clicking the **Cancel** button.

#### Clear Results check box

Tick this check box to clear the **Results** box before new results are displayed in it.

#### **List Trades check box**

Tick this check box if you want details of every position traded to be displayed in the Results box.

#### Start button

Click this button to start the backtest, displaying the results below. The backtest is performed on the share or index currently shown in the share price graph on the right, trading over the period specified in the **Range** box below the graph. The profits are compounded, meaning they are fully reinvested into subsequent trades.

#### Results box

Displays the results of each backtest. New results are appended to previous ones unless the **Clear last results** check box is ticked.

### **Profits graph**

This graph is produced upon clicking the **Start** button when

either of the Optimize options is selected for the backtest. The profit for each combination of moving average periods is represented by a dot that is lighter the higher the profit. White indicates the highest profit, whilst black indicates the lowest profit, or greatest loss. You can hold down the mouse button on the graph to reveal the profit for different moving average periods. The main share price graph changes dynamically to show the current moving averages.

## **Spread Bet check box**

Tick this check box to backtest using simulated spread bets, where the profit or loss is made according to the points difference between the opening and closing price of the bet.

## **Minimum Bet Size**

Enter the minimum bet size per point, which is also the initial bet size. As profits are made, they are reinvested to increase the bet size, but successive losses will decrease the bet size until the minimum is reached. Further losses will not reduce the size of the next bet, but will increase the margin or deposit requirement.

## **Maximum Bet Size**

Enter the maximum bet size allowed or desired. Reinvested profits will increase the bet size, but not beyond the maximum specified.

# **Spread box**

Enter the difference between the buying and the selling price, as quoted by the spread betting company.

## **Trade Type list box**

Use this list box to specify whether you want the backtest to trade long, short, or both. A long trade is the traditional kind, opened by buying and closed by selling, meaning you profit if the sell price is higher than the buy price. A short trade is opened by selling and closed by buying, so you profit if the price has fallen; the buy price is higher than the sell price. The simulation will 'go long' when the lower moving average moves above the higher moving average and 'go short' when the lower moving average moves below the higher moving average.

## **Optimize check box**

Tick this check box to find the moving average values that gave the greatest overall profit over the time period shown in the graph, using the **Type**, **Go Long**, and **Go Short** settings you have specified. This backtest may take several seconds to execute, after which the **Average 1** and **Average 2** settings on the **Backtest** tab are changed to those that produced the greatest profit, and the <u>Results box</u> will show details of trading with these settings. A <u>Profits graph</u> is displayed beneath the **Results** box. This represents as shaded dots the profit for each combination of moving average periods, with the lightest dots representing the highest profit. You may cancel the backtest at any time by clicking the **Cancel** button.

## **Margin Factor**

Enter the Margin Factor, also variously known as the Deposit Factor and the IMR (Initial Margin Requirement). This figure is quoted by the spread betting company to determine the deposit required to make a bet, calculated as the Margin Factor multiplied by the bet size.

## **Clear Results check box**

Tick this check box to clear the  $\frac{\text{Results box}}{\text{box}}$  before new results are displayed in it.

## **List Trades check box**

Tick this check box if you want details of every position traded to be displayed in the Results box.

### **Start button**

Click this button to start the backtest, displaying the results below. The backtest is performed on the share or index currently shown in the share price graph on the right, trading over the period specified in the **Range** box below the graph. The profits are compounded, meaning they are fully reinvested into subsequent trades.

## **Results box**

Displays the results of each backtest. New results are appended to previous ones unless the **Clear results** check box is ticked.

## **Profits graph**

This graph is produced upon clicking the **Start** button when the Optimize check box is ticked. The profit for each combination of moving average periods is represented by a dot that is lighter the higher the profit. White indicates the highest profit, whilst black indicates the lowest profit, or greatest loss. You can hold down the mouse button on the graph to reveal the profit for different moving average periods. The main share price graph changes dynamically to show the current moving averages.

#### **Indices Tab**

This tab allows you to select which stock market indices from around the world you want to include in AutoShare lists. It also contains buttons to import and export price files, and options to include the index symbol with each listed share, and to exclude from lists all shares whose price is lower or greater than a particular value.

#### List shares from these ticked indices

This check list box shows all the available indices from markets around the world, with a tick mark against those currently selected. To include a new index, click on its check box to tick it. You can include any number of indices, and the next time you click the Update button in the top left hand corner of the main window, the historical prices for each share in each index are downloaded from the internet. To remove a particular index, clear its check box; any shares from the index are removed from all lists.

### **Import**

Click this button to import one or more price files held on your hard drive in csv (comma separated values) format. These files can be downloaded from the <u>eoddata</u> web site after you have become a member. Membership and daily downloads are free. **Note:** In the **Data Options** section of the **Member's Area** of the eoddata site, it is best to choose a **Preferred Format** of **Standard CSV**.

The downloaded files have names that begin with the market index symbol (for example, DJI) and end with the market date for which the file holds prices.

If no index is selected in the indices list box above, then the prices are imported into the index having the same name in the indices list box. If this index does not already appear in the

indices list box, it is added to the end of the list.

If an index is selected in the indices list box, then prices are imported into that index, but only for shares that already exist; no new shares are added. This allows you to import prices into an index that was created from a different source.

#### **Export**

Click this button to export to a csv file the index currently selected in the indices list box. A save dialog is displayed to prompt you for a file name, which defaults to the index symbol. The daily prices of each share in the index are exported, such that when the file is displayed in a spreadsheet, share names are displayed in columns and dates are displayed in rows. As some spreadsheet applications cannot display more than 256 columns, if the index contains more than 255 share names it is exported to separate files of up to 255 shares each. The filenames share the same prefix of the filename you chose, but have a numeric suffix indicating their order in the save sequence. **Note:** The **Export** button is only enabled when an index is selected in the indices list box.

### **Download Index Only check box**

Tick the check box if you want only indices without their constituents to be downloaded when you click the **Update** button.

## Get adjusted closing prices

Tick the check box if you want the share prices that are downloaded when you click the **Update** button to be adjusted for splits and dividends.

### Add index symbol

Tick the check box to add to each share name the symbol of the index to which it belongs. Select from the accompanying list box

whether you want the symbol added as a Prefix or Suffix. Choosing the Suffix option will ensure that shares remain listed in alphabetical order, whilst adding as a prefix will keep together shares belonging to the same index.

#### **Exclude shares**

Tick the check box to exclude from all lists shares whose current price is above or below a specified value. Low price shares are generally considered to be riskier than those of a higher price, as their price usually has more volatility and a larger spread (the difference between the buying and selling price at any one time), and the underlying company often has a greater danger of failure.

### **Indices List**

This check list box shows all the available indices from markets around the world, with a tick mark against those currently selected. To include a new index, click on its check box to tick it. You can include any number of indices, and the next time you click the Update button in the top left hand corner of the main window, the historical prices for each share in each index are downloaded from the internet. To remove a particular index, clear its check box; any shares from the index are removed from all lists.

## **Import button**

Click this button to import one or more price files held on your hard drive in csv (comma separated values) format. These files can be downloaded from the <u>eoddata</u> web site after you have become a member. Membership and daily downloads are free. **Note:** In the **Data Options** section of the **Member's Area** of the eoddata site, it is best to choose a **Preferred Format** of **Standard CSV**.

The downloaded files have names that begin with the market index symbol (for example, LSE) and end with the market date for which the file holds prices.

If no index is selected in the indices list box above, then the prices are imported into the index having the same name in the indices list box. If this index does not already appear in the indices list box, it is added to the end of the list.

If an index is selected in the indices list box, then prices are imported into that index, but only for shares that already exist; no new shares are added. This allows you to import prices into an index that was created from a different source.

## **Export button**

Click this button to export to a csv file the index currently selected in the indices list box. A save dialog is displayed to prompt you for a file name, which defaults to the index symbol. The daily prices of each share in the index are exported, such that when the file is displayed in a spreadsheet, share names are displayed in columns and dates are displayed in rows. As some spreadsheet applications cannot display more than 256 columns, if the index contains more than 255 share names it is divided into separate files of up to 255 shares each. The filenames share the same prefix of the filename you chose, but have a numeric suffix indicating their order in the save sequence. **Note:** The **Export** button is only enabled when an index is selected in the indices list box.

## **Download Index Only check box**

Tick the check box if you want only indices without their constituents to be downloaded when you click the **Update** button. This only affects currently empty indices; for those for which price data has already been downloaded, the option assumes the setting they had when they were first downloaded.

# **Get Unadjusted Closing Prices check box**

Tick the check box if you don't want the share prices that are downloaded when you click the **Update** button to be adjusted for splits and dividends.

## **Add Index Symbol check box**

Tick the check box to add to each share name the symbol of the index to which it belongs. Select from the accompanying list box whether you want the symbol added as a Prefix or Suffix. Choosing the Suffix option will ensure that shares remain listed in alphabetical order, whilst adding as a prefix will keep together shares belonging to the same index.

## **Exclude Shares options**

Tick the check box to exclude from all lists shares whose current price is above or below a specified value. Low price shares are generally considered to be riskier than those of a higher price, as their price usually has more volatility and a larger spread (the difference between the buying and selling price at any one time), and the underlying company often has a greater danger of failure.

## Performing Fundamental Analysis of a Share

AutoShare helps you to decide which shares may be worth buying based on their price movements. This does not necessarily mean, of course, that the underlying company is a good one, with golden prospects. Share prices that rise based on false rumours or expectations can just as easily fall again when the truth is revealed. It is much safer to support the results of technical analysis with those of fundamental analysis.

To display fundamental information about a share in any of the AutoShare lists, right click the share and choose the **Show Fundamentals** option from the pop-up menu. The information is shown in your default web browser. **Note:** This option is not available for shares or indices imported with the **Import** button on the Indices tab.

You can also obtain similar information from the <u>Financial Times</u> web site, as well as from on-line stockbrokers with whom you hold an account.

The following summarizes the most useful fundamental information.

**Price to Earnings ratio (P/E)**: the share price divided by the earnings per share. A cheap share generally has a low current or prospective P/E compared to its peers (other shares in the same sector, such as Banking). If a company is loss making, its P/E is negative. Unless its future prospects are good, it is best to avoid a share with a negative or particularly high P/E.

**Broker consensus**: Buy/Sell/Hold recommendations by analysts. These provide a very quick guide to whether a share is worth buying. However, it is best to buy only shares for which the majority of a large number of analysts have a BUY recommendation.

**Broker forecasts**: Predictions by analysts about growth

prospects. These are summarised as forecast turnover, profits, and P/E for the next couple of years.

**Directors' dealings**: details of the buying and selling of the shares by the company's directors.

**Company news**: recent news concerning or released by the company.

**Company profile**: information about what the company does, the number of employees, etc.

**Financials**: details of the annual accounts submitted by the company for the last few years, including the Balance Sheet, Cash Flow Statement, and Profit and Loss.

## **Making the Most of AutoShare**

This topic lists some tips for making the most of AutoShare.

- 1. Make frequent (preferably daily) back-ups of the AutoShare data files, which are located in the Data subdirectory of the main AutoShare directory. Each mkt file contains share price information pertaining to a particular index having the same name as the filename. The dat files contain your portfolios. Every data file has a corresponding bak file which is its backup.
- 2. Check the Risers & Fallers tab to find out which shares are most in demand. As price rises or falls gather momentum, shares can become 'overbought' or 'oversold' respectively. Oversold shares of a fundamentally sound company are good value, so keep your eye on shares that have fallen dramatically recently. It is a common mistake to sell shares after they have fallen, and buy shares after they have risen. Your aim must be to anticipate the falls and rises.
- Set up one or two moving averages on the <u>Averages tab</u>. If you are interested in trading quite frequently, then experiment with fairly short periods of averages.
- 4. Before buying shares, wait for the share price to stop falling and to start rising: "don't try to catch a falling knife".
- 5. Take time to develop a system with which you are happy, which includes details of not only the averages you specify, but also what signals you use to decide when to buy or sell.
- 6. You may want to use a stop-loss system to minimise any losses should a share you have bought fall in value. Many traders decide to sell a share if its price has fallen by a particular percentage compared to their purchase price (for example, 10% or 20%). However, you could use moving averages to trigger such decisions: if you have bought a share when its shorter average has risen through its higher average, then you may decide to sell when its shorter average has fallen through its higher average. Safer still may be to use two moving averages (such as 28 days and

- 90 days), and buy when the 28-day average rises through the 90-day average, but sell when the actual share price falls through the 28-day average. This technique may reduce your potential gains, but also your potential losses. Only you can decide the risks you are willing to take.
- 7. If the list of shares in the <u>Above list box</u> on the <u>Averages</u> tab is too long, reduce it by:
  - ticking the <u>Crossing in last check box</u>, and entering a fairly small number in the accompanying box. This eliminates shares whose averages crossed more than the specified number of days ago.
  - ticking the **Both Averages Rising** check box. This eliminates all shares except those with the strongest buy signal of two averages rising after having crossed.
- 8. Use the **Backtest** tab to test how specific settings have fared historically. You will need to experiment in order to find a satisfactory profit with a reasonable number of trades.

## **Using the Proxy Server Settings dialog**

Use this dialog if you connect to the internet via a proxy server. You may need to consult your network administrator for the information required.

### **Use proxy server**

Tick this check box if you connect to the internet via a proxy server; clear it if you do not.

#### With authorization

Tick this check box if connection requires authentication with a User Name and Password, which you should enter in the boxes that appear at the bottom of the dialog.

#### Address and Port

Enter the address and port number of the proxy server.