

**Using Excel to calculate investments**

**This guide is in two parts.**

**Part one explains how an existing example spread sheet, functions.**

**Part two how to create a spread sheet.**

**This is part of a spread sheet showing the calculated values of various investments.**

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3					of fund £	places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8								
9	<b>Total Values of all Unit trust Funds</b>	500			1088.5	1088.5	588.5	117.7

**Looking at the first line of values;**  
**Original Cost £100, is in cell (B4)**  
**Number of shares 200, is in cell (C4)**

**Share Price is expressed in pounds to simplify the calculations, i.e. 75 pence is £ 0.75, in cell (D4)**

**Current Value of Fund = 200 x .75 = £150 (C4 x D4)**

**Formula for cell E4 =PRODUCT(C4:D4)**

**Notice the formulae . The blue arrows have been added to show the line of the calculation.**

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fx Insert Function AutoSum Recently Used Financial Logical Text Date & Time Lookup & Reference Math More Functions Name Manager Define Name Use in Formula Create from Selection Trace Precedent Trace Dependents Remove Arr

Function Library

E4 =PRODUCT(C4:D4)

	A	B	C	D	E	F	G	H	I
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on	
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original	
3					of fund £	places £	price £	price as a %	
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50	
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35	

**The profit to date is the current value £150 (E4) minus the original cost £100 (B4) = £50 (G4)**

**n.b The column F is put in to help avoid excessive decimal place numbers appearing in some calculations.**

**The formulae is simple in this case;  
G4 = E4 minus B4**

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3					of fund £	places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8								
9	<b>Total Values of all Unit trust Funds</b>	500			1088.5	1088.5	588.5	117.7

**The Profit for this fund as a percentage = £50 / £100 x 100 % = 50 %**

**This is a multiplication formulae so it referred to as the sum of G4/B4 X 100.**

**The value is placed in cell H4**

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3					of fund £	places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8								
9	<b>Total Values of all Unit trust Funds</b>	500			1088.5	1088.5	588.5	117.7

**Row 9 has the total of the 4 funds examples.**

**So Cell B9 is the sum of B4 to B7**

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Function Library

B9    fx    =SUM(B4:B7)

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3					of fund £	places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8								
9	<b>Total Values of all Unit trust Funds</b>	<b>500</b>			1088.5	1088.5	588.5	117.7

**Cell E9 is the total of all the current values**

E9    fx    =SUM(E4:E7)

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3					of fund £	places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8								
9	<b>Total Values of all Unit trust Funds</b>	500			<b>1088.5</b>	1088.5	588.5	117.7

**Column E does not have any decimal numbers beyond one, but if there had been they would have been rounded down to 2 only in column F.**

F4    fx    =ROUND(E4,2)

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number of	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	200	0.75	150	150	50	50
5	The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
6	The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
7	The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
8						0		
9	<b>Total Values of all Unit trust Funds</b>	500			1088.5	1088.5	588.5	117.7

**The display shows similar entries for Stock market Shares.**

**Sub totals for both Units trust and Stock market shares are shown.**

**The blue arrows shows the addition of the subtotal columns**

Function Library Defined Names

G19  $\sum$  =SUM(G17,G9)

A	B	C	D	E	F	G	H
Name of Fund ( and Stock Market Code )	Original cost £	number of Shares	Share Price £'s	Current value	Value to 2 decimal places £	profit on original price £	profit on original price as a %
The 1st British Unit trust fund	100	200	0.75	150	150	50	50
The 2nd British Unit trust fund	200	300	0.9	270	270	70	35
The 3rd British Unit trust fund	100	400	0.855	342	342	242	242
The 4th British Unit trust fund	100	500	0.653	326.5	326.5	226.5	226.5
					0		
<b>Total Values of all Unit trust Funds</b>	500			1088.5	1088.5	588.5	117.7
<b>Stockmarket Shares</b>							
Glencore (GLEN)	350	200	3.5	700	700	350	100
B T (BT.A)	340	200	3.329	665.8	665.8	325.8	95.823529
Transco (NG.)	400	300	2.1233	636.99	636.99	236.99	59.2475
Centrica (CNA)	900	250	9.5	2375	2375	1475	163.88889
<b>Total Value of all Stock market shares</b>	1990			4377.79	4377.79	2387.79	119.98945
<b>Grand total value</b>	2490			5466.29	5466.29	2976.29	120
					Date	3.6.17	

**The Rounding down of the total percentages is illustrated in H17 & H19. To update the calculations, just re-enter the new values in Column D and the spreadsheet will all update all the values. When entering a new set of unit trust and share prices save the document as a new title "a name" with a new date, which will not destroy the existing sheet.**

Function Library Defined Names

H19  $\text{ROUND}$  =ROUND(H17,1)

A	B	C	D	E	F	G	H
13 B T (BT.A)	340	200	3.329	665.8	665.8	325.8	95.823529
14 Transco (NG.)	400	300	2.1233	636.99	636.99	236.99	59.2475
15 Centrica (CNA)	900	250	9.5	2375	2375	1475	163.88889
16							
17 Total Value of all Stock market shares	1990			4377.79	4377.79	2387.79	119.98945
18							
19 Grand total value	2490			5466.29	5466.29	2976.29	120
20							
21					Date	3.6.17	



**Type in the original cost in pounds.**  
**Type in the numbers of shares**  
**The current Value is the product of**  
**number of shares X the share price in pounds**  
**Place the cursor in cell E4, and then move the cursor to the formulae box and type in =PRODUCT(C4:D4) The word SUM will appear automatically. To complete the entry, add a closing bracket in the formulae box and press enter on the keyboard.**

The screenshot shows the Excel interface. The formula bar at the top contains the text `=PRODUCT(C4:D4)`. The spreadsheet grid below has columns A through H and rows 1 through 4. Row 1 headers are: A: Name of Fund, B: Original cost £, C: number of Shares, D: Share Price £'s, E: Current value, F: Value to 2 decimal places £, G: profit on original price £, H: profit on original price as a %. Row 4 contains: A: The 1st British Unit trust fund, B: 100, C: 50, D: 3. Cell E4 is highlighted in yellow and contains the value 150. The formula bar also shows the text `PRODUCT(C4:D4)` with a cursor at the end.

**When typing in formulae it often easier to put the caps lock key on.**  
**The blue rectangle is automatically shown during the entry. The entry for C4 will be complete, on pressing the enter key whilst the cursor is still in the formulae box.**

**This panel shows the entry complete for cell E4**

The screenshot shows the completed spreadsheet. The formula bar now shows `SUM`. The spreadsheet grid is the same as in the previous image, but now the value 150 is displayed in cell E4. The formula bar also shows the text `SUM`.

**It is useful to round down the decimal display to places to 2 only.**  
**Type in the formulae box =ROUND(E4,2) and press enter.**

The screenshot shows the Excel interface with the formula bar containing `=ROUND(E4,2)`. The spreadsheet grid is the same as in the previous image, but now the value 150 is displayed in cell E4. The formula bar also shows the text `=ROUND(E4,2)`.

**There are no additional decimal places in this entry, so just the whole number is displayed. Additional decimal places may appear when price changes are entered, subsequently.**

	A	B	C	D	E	F	G	H	I
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on	
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original	
3						places £	price £	price as a %	
4	The 1st British Unit trust fund	100	50	3	150	150			

**The profit is simply current value minus original cost. Type in the formulae =(E4-B4) and press enter whilst the cursor is still in the formulae box**

	A	B	C	D	E	F	G	H	I
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on	
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original	
3						places £	price £	price as a %	
4	The 1st British Unit trust fund	100	50	3	150	150	=(E4-B4)		
5	The 2nd British Unit trust fund								

**The green and blue rectangles appear whilst the formulae is being typed.**

**Profit calculation complete**

	A	B	C	D	E	F	G	H	I
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on	
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original	
3						places £	price £	price as a %	
4	The 1st British Unit trust fund	100	50	3	150	150	50		

**Profit expressed as a percentage is £50/£100 x 100 Enter formulae =SUM(G4/B4\*100) Blue coloured rectangles only appear during keyboard entry.**

	A	B	C	D	E	F	G	H	I
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on	
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original	
3						places £	price £	price as a %	
4	The 1st British Unit trust fund	100	50	3	150	150	50	=SUM(G4/B4*100)	

**Percentage calculation complete**

K5		fx						
	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50

**Enter values for other funds**

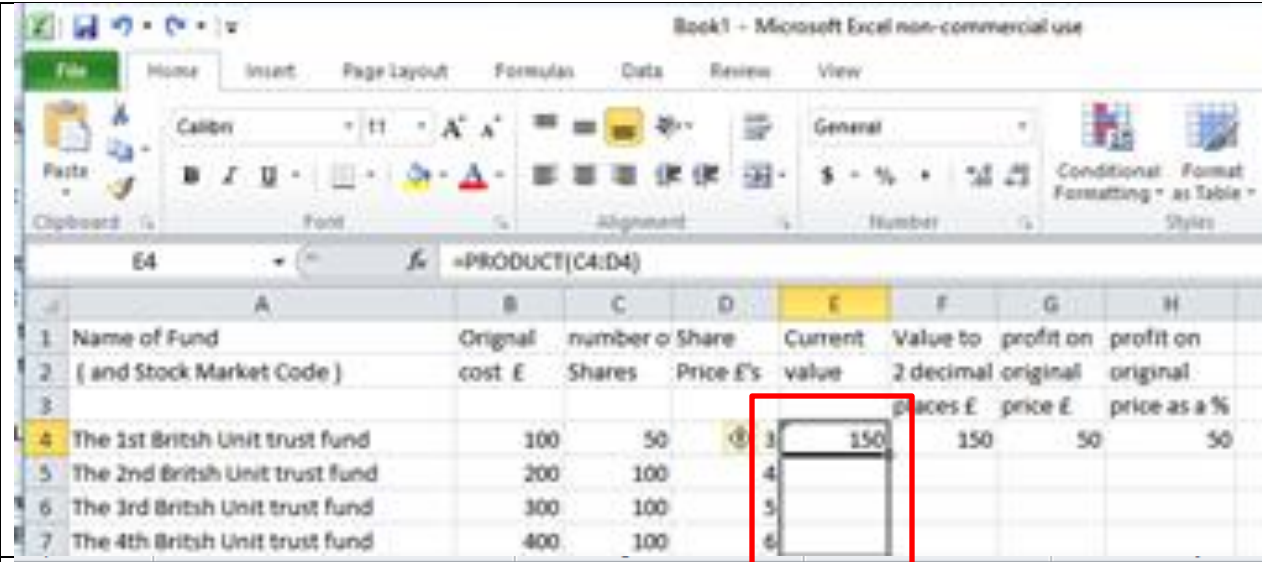
I10		fx						
	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4				
6	The 3rd British Unit trust fund	300	100	5				
7	The 4th British Unit trust fund	400	100	6				

**Repetitive calculations can be completed as follows. Left click on cell E4. Place the cursor to the bottom right corner. The cell rectangle will change colour.**

E4		fx =PRODUCT(C4:D4)						
	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4				
6	The 3rd British Unit trust fund	300	100	5				
7	The 4th British Unit trust fund	400	100	6				

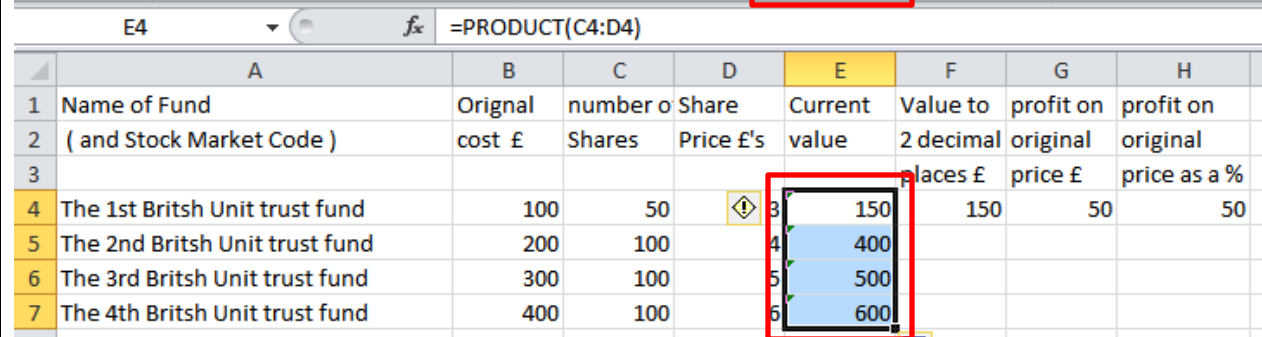


**Hold the left key down and drag the rectangle down to the bottom entry. See next page.**

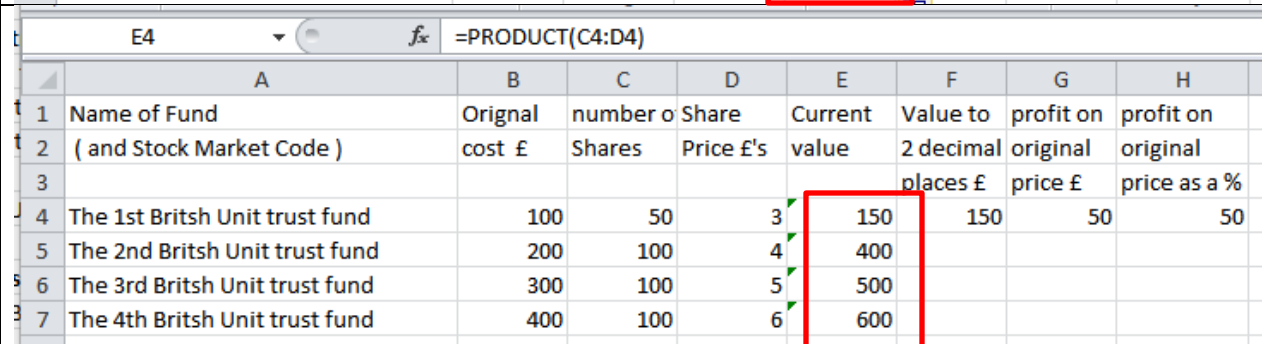


**Calculated values will appear in the required cells.**

**Make sure the closing bracket is at the end of the formulae**



**Release the left key and the calculated values remain in all the required cells.**



The values for subsequent rows in columns F G and H can be created using the method described above.

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50

The sum of the values in column B are completed as follows. Click on cell B9 Type in formulae =SUM(B4

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50
8								
9	Total Values of all Unit trust Funds	=SUM(B4						

A dotted line rectangle will appear around B4 Place the cursor on the bottom right corner of the rectangle B4

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50
8								
9	Total Values of all Unit trust Funds	=SUM(B4						

and drag down to the bottom corner of row 7

Don't forget to complete the formulae with the closing bracket.

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50

The total of column B is displayed.

The same procedure can be used for the totals in columns E F and G

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50
8								
9	Total Values of all Unit trust Funds	1000						

The percentage profit for all the funds is calculated using the totals, so the formulae is

**=SUM (G9/B9\*100)**

	A	B	C	D	E	F	G	H
1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
3						places £	price £	price as a %
4	The 1st British Unit trust fund	100	50	3	150	150	50	50
5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
7	The 4th British Unit trust fund	400	100	6	600	600	200	50
8								
9	Total Values of all Unit trust Funds	1000	350		1650	1650	650	=G9/B9*100

<p><b>The percentage profit for the total of all funds is displayed.</b></p>	H9      fx      =SUM(G9/B9*100)								
		A	B	C	D	E	F	G	H
	1	Name of Fund	Original	number o	Share	Current	Value to	profit on	profit on
	2	( and Stock Market Code )	cost £	Shares	Price £'s	value	2 decimal	original	original
	3						places £	price £	price as a %
	4	The 1st British Unit trust fund	100	50	3	150	150	50	50
	5	The 2nd British Unit trust fund	200	100	4	400	400	200	100
	6	The 3rd British Unit trust fund	300	100	5	500	500	200	66.6666667
	7	The 4th British Unit trust fund	400	100	6	600	600	200	50
	8								
9	<b>Total Values of all Unit trust Funds</b>	1000	350		1650	1650	650	<b>65</b>	
10									
<p><b>Alan Paul</b> <b>13.3.2017</b></p>	<p><b>If you want to keep the earlier copy before you change any of the shares prices, save the file as “save as”.</b></p> <p><b>This gives the opportunity to give the file a new name.</b></p> <p><b>I suggest you keep the same title but add the date on which this updated copy has been made.</b></p>								

**Market prices for Shares are available on**

<http://www.londonstockexchange.com/exchange/prices-and-markets/stocks/prices-search/stock-prices-search.html?nameCode=BATS&page=1>

**Market prices for Unit trusts are available on**

<http://webfund5.financialexpress.net/cobrand/fundlistings.wsp>