MyFAME

Original (linux)

User's GUIDE

2025

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Foreword

MyFAME is a Graphical User Interface written in FAME / 4GL. It is a generic interface that can read any FAME database, and perform ad-hoc analysis, graphing and reporting.

MyFAME original is available on the platforms: Windows, Linux and Solaris/Unix, - the versions are almost identical, and changes and/or improvements are updated on both platforms simultaneously.

All graphics in this user's guide is created in MyFAME, by cut and paste.

MyFAME is currently being used be several companies around the world.

Please feel free to comment on chapters you find documented not very well or a missing.

Erik Søberg 1994-2025

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Introduction

MyFAME is a user-friendly and flexible user interface that gives the users a good understanding of analyzing timeseries in FAME. Moreover, MyFAME is a good introduction to FAME for users who wants to take a step up as an advanced user. The combination of FAME and MyFame is powerful. You can do most of the ad-hoc not too advanced analytics in MyFame while more customized programming can be done in Fame. In 2024 the getfame json api was launched, making the Fame data easily available in Python, R, javascript and other programming languages importing standard json data. The getfame api is unique by "reporting" the famedata as epoch dates, making it possible to easily create user friendly charts with a zoomable time intelligence x-axis date, that can be expanded or collapsed dynamically.

MyFAME is not meant to be the tool for generating reports and figures for publishing, rather ad-hoc analysis, charting and reporting.

System Requirements

The display must be defined as greater than 800*600 pixels. For installation guidelines see the *install.doc* or *install.txt*. For improvements / changes from release to release see the files *release.doc* or *release.txt*.

Database-functionality

All databases listed in MyFAME are available to the user in *access read* mode. MyFAME perform the access-test when starting up. A Database may be updated by one user in access shared mode, while other users are reading the database. MyFAME reopens the databases when viewing the data, therefore MyFAME will always present the newest date there is. - Users do NOT have to exit and renter MyFAME to see the newest updates in the various databases.

MyFAME handles identical series-names in different databases. This is often the case when having several releases of a database.

Formulas and aliases are "supported" by MyFAME

MyFAME can also see databases defined as frdb-databases on a remote server.

Several FAME-databases can be opened as one logical, -however the search is only being performed and displayed in the "main" database. When reporting/graphing series formulas can be evaluated based on detailed series in other databases. (See chapter 31)

When databases are stored locally onto your disk or a network disk, the databases can have a help file .*hlp* with relevant help -information in it. This information is listed under File, DBstatus.

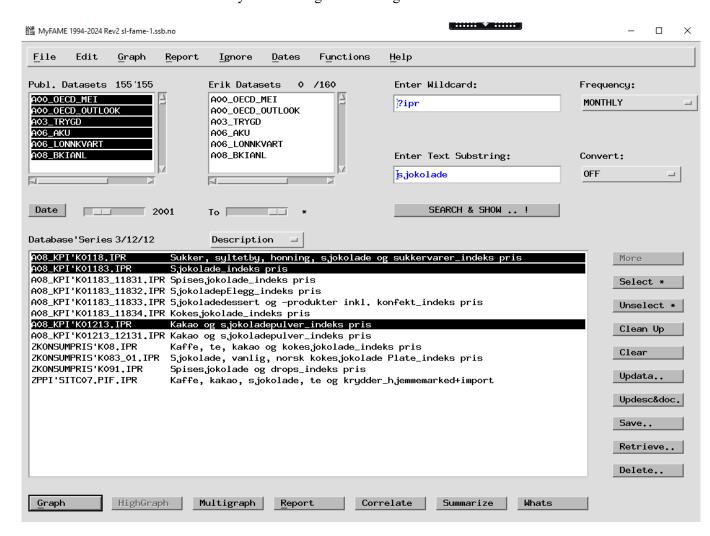
The User Interface

The leftmost field *NB. Databases* the databases available for the whole organization is listed. The field MOA databases lists the databases available to one department and/or to one specific user.

While the user is doing selections buttons will be ghosted and/or unghosted. This in order to guide the user to choose valid options. Menu-options that are default (d) are ghosted, and when selecting different options the current option(s) are ghosted.

Enter Wildcard: The user can enter a FAME wildcard expression here. MyFAME will search through all selected databases, when starting the search by clicking *Search & Show*

New: Be aware of the new functionality for selecting / unselecting all databases under the Edit menu.



Enter Text Substring: Searching through all selected databases for series/formulas having a description containing the substring entered by the user. Wildcard expressions are not legal in this field. If specifying both *Wildcard* and *Substring* MyFAME will find the series matching <u>both</u> search criteria's.

The Date sliders let users specify the annual date-range. With the **date-button** you can specify the exact start and end-date in current frequency. To change the frequency, push the frequency dropdown. Together with the convert this will decide what frequency to display the data.

Database'Series field lists the series prefixed by the database-name. In the picture above, 2 series are selected while 3 series were found. Note that selected series also will be listed after the next search.

If more than **100** series are found the *More-button* will be available. *The Clear-button* clears out the seriesfield, while *Select** selects all, and *Unselect** unselects all. *CleanUp* "remove" unselected series and sort the selected series. The *Save-button* saves the search, and can be *Retrieved* later.

Delete-button deleted a stored search, - no data is deleted!

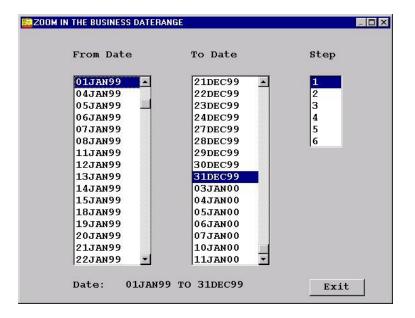
The buttons <u>Graph</u>, <u>Report</u>, <u>Correlate</u>, <u>Summarize</u> and <u>Whats</u> execute the functionality for the selected series, within the current date-range.

Dates

The *Date-button* next to the date-sliders brings up a date-picker-form in the <u>current frequency</u>. It is however recommended to use this functionality as a date-zoomer. First you should close the date range with the annual date-sliders, then specifying frequency, and then enter the Date-form. This because it will be difficult to list daily dates from 1980 to 2030, it will also be time-consuming.

If you do not find the dates you are looking for in the date-form you may select the nearest possible and reenter the *dateform*. The *dateform* is typically listing all dates in the date-range, in addition to twenty observations before and after.

The dateform below is entered in business frequency, after having limited the date-range to 1999.



Date menu

Be aware that the date-menu also might be useful if studying the observation at the end of the series and the series contain observations up to system-date. Make sure to select the proper frequency before selecting e.g. date thisday (@freq) -20 to *

If the frequency is *annual* the date-range will be set to 2004 to * (writing this in 2000), however if the frequency is set to *business* only the 20 last business days will be listed. The *thisday* functionality is using the current frequency to calculate.

Tips & Hotkeys

You can traverse in MyFAME by the **TAB-key**, There is help available for the current field by pressing the **F1-key or Help-key.** Menus marked with «_», e.g. <u>File</u> can be executed by **Alt+F.** Buttons and Menuoptions, e.g. <u>Graph</u> can be executed by **Control+G** if series selected. When using tab-key to go from one field to another you may press **spacebar** in order to execute the command.

The arrow keys can be used for sliders. In addition PageDown and PageUp can be used in listboxes where several items are listed.

If you have made "too many selections" it might be useful to set all options back to default. This functionality is placed under the File menu (Set back to default options).

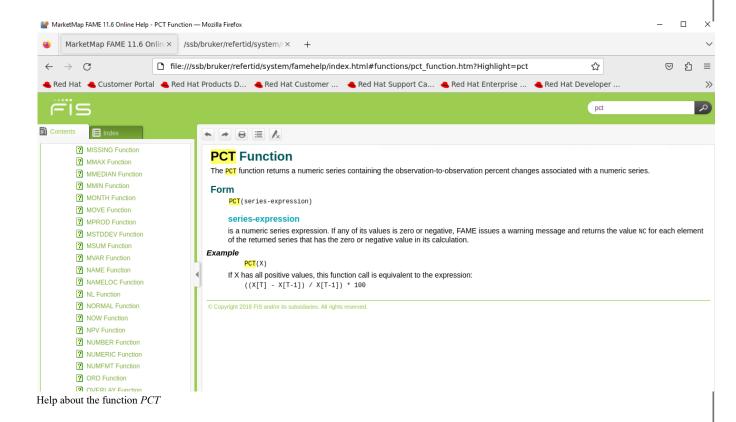
If you are performing a time-consuming operation, this can be interrupted by pressing **Control+C** for the Unix version and **Control+Break** for the NT-version.

PS The Hotkeys stopped working some years ago, but it has been promised to be fixed in newer versions of FAME, so lets upgrade to a newer version.

Be aware that the F1-key in om older Fame-installations may not be functional, this functionality is currently taken out of MyFame, but will re-occur when newer fame installations are installed in the Oslo region.

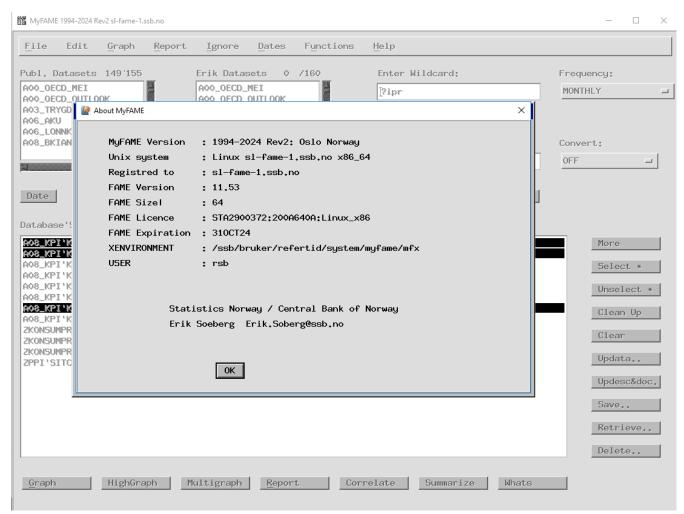
Help Hyperhelp

From the *Help-menu* the standard FAME-Help *can be started*. This is useful when figuring out the math in FAME-functions. Below the help-information for the function PCT is listed.



About MyFame

Useful information about your current MyFame installation can be explore under Help, About MyFame



Also be aware there is a link to github.com/ststisticsnorway/myfame

Dbstatus / Database-information

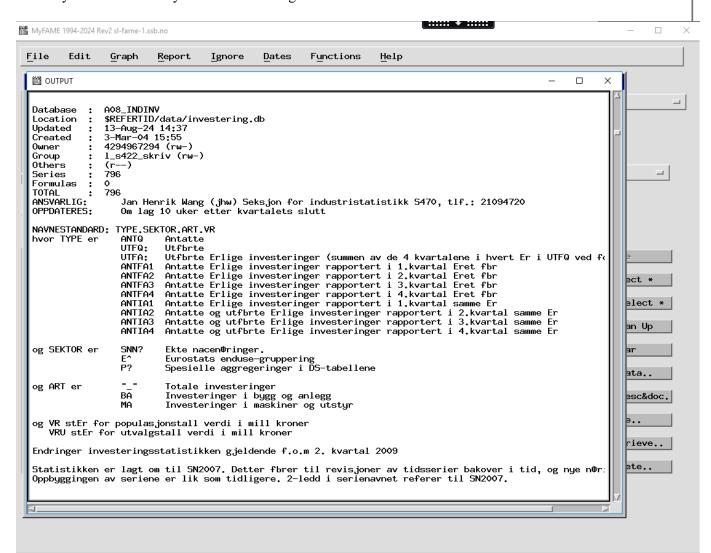
The upper part of the *Dbstatus* -information is computed by MyFAME. Number of series, formulas are listed in addition to when the database was last updated.

The output of this command is a little different on the NT version compared to the Unix version.

Below the *Dbstatus* command for the database KONSUMPRIS (CPI). The information about wildcarding and series naming are described in a hlp file. If the database is called *konsumpris.db* the help file must be called *konsumpris.hlp* and stored in the same catalog.

If describing the naming conventions, contact person, and so on there will be easier for others to find series.

There is no limitation in Fame/MyFame re metadata od descriptions, but the problem may be to get people using and updating the metadata. Metadata such as units, descriptions in other languages are currently removed from MyFame as its missing in most fame-databases/datasets.



Dbstatus information for the databases. I challenge you to create .hlp files so that other users can more easily find series and learn about the database structure.

Limitations: If accessing database through a FAME FRDB server it is not possible to have this information in separate files. Use *doc* and *desc* at the database-level inside FAME instead.

Searching for timeseries

Point and click at the databases you want to search in. The fewer databases you select the faster it goes. Do not select more databases than necessary.

It does not matter weather the letters are in uppercase or lowercase. MyFame always performs searching in the descriptions, the description that existing when the database was last indexed by \$build

Wildcard

Wildcard looks at the serie/formula name. If you know the name of the series you may just type in the name and click on **Search&Show**

The wildcard syntax used in MyFAME is standard FAME-wildcarding using the characters? and ^

- ? Replaces one or more characters.
- ^ Replaces only one character.

For the KONSUMPRIS-database the wildcard-specification:

List the following series:



Database'Series 0/3/3 Description

KONSUMPRIS'KO.IPR Matvarer_indeks pris
KONSUMPRIS'KO.IPR.A Matvarer_årsindeks
KONSUMPRIS'KO.VK Matvarer_vekt

For the KONSUMPRISdatabase the wildcardexpression: Enter Wildcard

Lists the following series:

Note that the 2 selected series also will be listed after the next search.

```
Database Series 2/9/9

Description

KONSUMPRIS KO.IPR Matvarer_indeks pris

KONSUMPRIS KI.IPR Drikkevarer og tobakk_indeks pris

KONSUMPRIS K2.IPR klær og skotøy_indeks pris

KONSUMPRIS K3.IPR Bolig. lys og brensel_indeks pris

KONSUMPRIS K4.IPR Møbler og husholdningsartikler_indeks pris

KONSUMPRIS K5.IPR Helsepleie_indeks pris

KONSUMPRIS K6.IPR Reiser og transport_indeks pris

KONSUMPRIS K7.IPR Fritidssysler og utdanning_indeks pris

KONSUMPRIS K8.IPR Andre varer og tjenester_indeks pris
```

Textsearch (substring)

When searching by Text, MyFAME looks for the information stored in the description of the series/formulas. To speed up the search MyFAME is storing the *desc* and *doc* information in parallel case-series, where the actual search is done. If updating description a *File \$Build* must be run in order to find the series, however the newest description/documentation will always be displayed-even if \$build is not run.

For textsearch the FAME wildcard characters: ? ^ can NOT be used

Selecting the KONSUMPRIS- and NORMAP-database, the search:



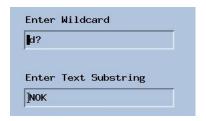
KONSUMPRIS'KO.IPR	Matvarer_indeks pris
KONSUMPRIS'KO.IPR.A	Matvarer_årsindeks
KONSUMPRIS'KO.VK	Matvarer_vekt
KONSUMPRIS'KO9.IPR	Andre matvarer_indeks pris
KONSUMPRIS'KO9.IPR.A	Andre matvarer_årsindeks
KONSUMPRIS'KO9.VK	Andre matvarer_vekt
KONSUMPRIS'K1.IPR	Drikkevarer og tobakk_indeks pris
NORMAP'EKS.PO.IPR.U	Prisindeks. Matvarer og levende dyr.
NORMAP'EKS.XO.IVL.G	Volum. Matvarer og levende dyr. Trend.
NORMAP'EKS.XO.IVL.P	Volum. Matvarer og levende dyr. Prekorr.
NORMAP'EKS.XO.IVL.S	Volum. Matvarer og levende dyr. Sesongjustert.
NORMAP'EKS.XO.IVL.U	Volum, Matvarer og levende dyr.

Gives the series:

The two selected series was "saved" from the previous search. One of them was found again but will not be displayed more than once.

Both Wildcard- and Textsearch

If specifying both wildcard and Textstring, you will find the series matching BOTH search-criterias. The search-expression below will return series starting with a **D**, and contains the substring **NOK** in the series/formula description. This gives 81 timeseries.



```
Database'Series 0/81/81
                             Description
NORGESBANK'D2001812 Spotpris Brent Blend NOK pr fat
NORGESBANK'D2002012 Terminpris 1 måned Brent Blend NOK pr fat
NORGESBANK'D862235A NOK: Eurorente 3 måneder
NORGESBANK'D862235C NOK: Eurorente 3 måneder, effektiv
NORGESBANK'D866135A Rentedifferanse 3 mnd eurorente, NOK
                                                            teoretisk E(
NORGESBANK'D866135C Rentedifferanse 3 mnd eurorente, NOK
                                                            teoretisk E(
NORGESBANK'D866235A Rentedifferanse 3 mnd eurorente, NOK
                                                            kurvland
NORGESBANK'D866235C Rentedifferanse 3 mnd eurorente, NOK
                                                            kurvland, ef
NORGESBANK'D866335A Rentedifferanse 3 mnd eurorente, NOK
                                                            markedsland
NORGESBANK'D866335C Rentedifferanse 3 mnd eurorente, NOK
                                                            markedsland.
```

Saving search results with options

If often using the same timeseries, the series names can be saved. This can be an advantage when the collection of series requires several searches to find them.

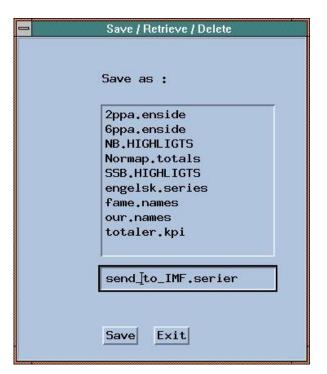
By saving, data is not stored elsewhere, - the newest data is displayed.

Options like date-range, *plot #2 left*, *show vertical* are stored along with the series.

You may find the File Set back to default useful when using this functionality.

If changing serie-names, or the name of the database-channel, you will need to find your new series again and resave your selection.

By saving search with existing names, the search will be overwritten.



Saving selected series as: send_to_IMF.serier

Retrieve stored search results with options

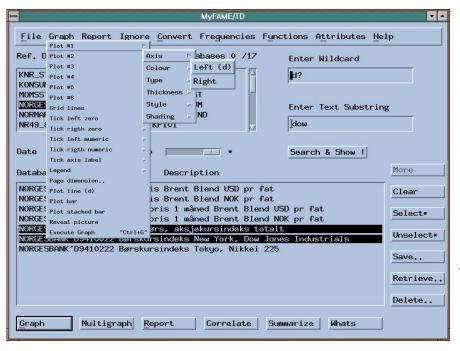
Retrieving the stored search by the *Retrieve-button*. When displaying the series by report, graph.. the timeseries is retrieved from the database. MyFAME always show the latest data!

Delete stored search result

Stored search can be deleted by the *Delete-button*. Data inside the timeseries will NOT be deleted!

Graph

Having found and selected some series the *Graph-button* becomes available. *Graph* can also be executed by pressing **Control+G**. Under the *Graph-menu* you can set Graph options like style and thickness, bar and which axis (left/right) to graph the series. If series are of different sizes it might be useful to graph series #1 at leftaxis, and series #2 at the right. The six first series can be formatted individually, however some options at the *Graph-menu* will affect all series. (Plot bar, Plot missing connect..)



Below two series are graphed- Oslo Stock Exchange at the left axis and Dow Jones at the right axis.

Limitation: You can not Graph more than 9 series The *Graph-button* is ghosted when more than 9 series are selected. If function2 is set, a maximum of 4 series can be graphed (two "lines" for each series).



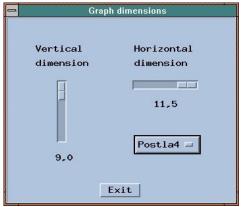
Oslo Stock Exchange and the US Dow Jones Industrials

Save graph's in variable sizes

Graphs are stored at your personal directory; for the Unix version files are stored at \$HOME, for the NT-version it is stored in the %MFHOME% catalog. The file is stored as **myfame.eps** and may be imported in Word etc. Note that the file always is named myfame.eps and will replace existing version without any warning.

Under the *Graph-menu*; *Page dimensions.*. the user can set the size of the graph. From here Select if you want landscape (*Postla4*), or portrait (*Postpa4*). If importing the graph in a document, you will most likely want to use portrait (*Postpa4*).

From MyFAME you save the graphs from the *File-menu: Save Graph* and *Save Multigraph*.



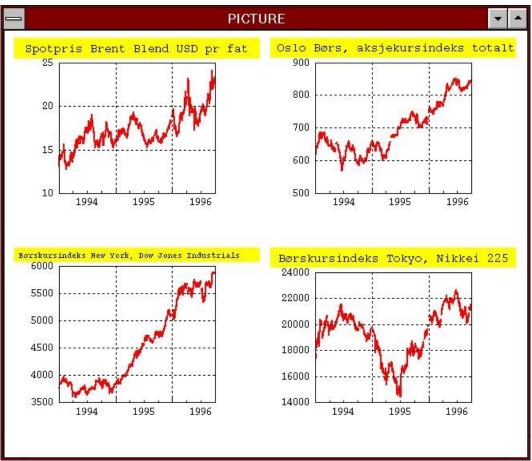
Graph dimensions-window with default values.

Limitations: Multigraph will ignore these settings. Graph dimensions are only meant for «single graph»

Multigraph

It is easy to generate several graphs in the *Picture-window* and for printouts. For each series/formula you will get one graph. If using *function2* in addition to *function1* the will be two lines inside each graph. It is not recommended to use *Outer function* when *Multigraphing*.

If multigraphing 1, or 4 series the printout will be in landscape. If the number of series are 2, 3, 5, 6 or more the printout will be in portrait.



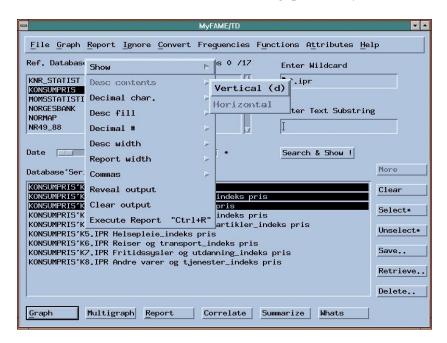
Multigraphing 4 timeseries

Series may be graphed in different frequencies, -the series original frequency - if no converting.

Series are typical being graphed in the same date-range. However if the date-range is set to * to * - the series are starting and stopping at different dates, -the series are being graphed in different date-range.

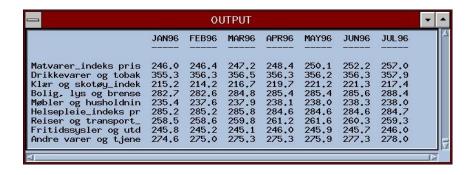
Report

The *Report-button* lists the selected series in a format according to the options selected under the Report-menu. Selected frequency, converting options, and function(s) will also be activated for the report command. Vertical reports have the dates reported vertically, while a horizontal report lists the dates horizontally. The option *desc contents* is not available for vertical reports. For vertical reports the series/formula names will be in the heading, prefixed by functions, - if selected.

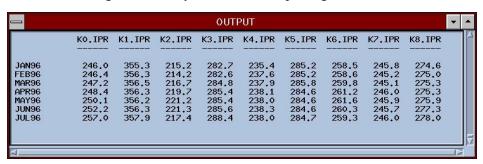


The option *Reveal Output* in the *Report-menu* brings up the *Output-window*.

Below, dates goes horizontally, a report with the options: desc contents description and desc width is set to 20 characters.



Under, the *dates* goes vertically, then vertical reporting:



Correlate

Two or more series:

Correlate, - correlates two or more series.

One series:

If only one series is selected an autocorrelation, and a partial autocorrelation is executed. Be aware that selected functions and date-range affect the result of this command. You should also specify the proper frequency in order to get the right answer, when only one series is selected.

A Rejecting limit is computed id date-range is closed and contains enough non missing observations.

Rejecting Limit = (1.96 /sqrt(lengthdate))

It is recommended to reject the correlation if *rejecting limit* is GREATER than the correlation-result for the corresponding *Lagged/Led*. (Complete correlation is 1.0)

Below is the Oil Price correlated with the Oslo Stock Exchange:

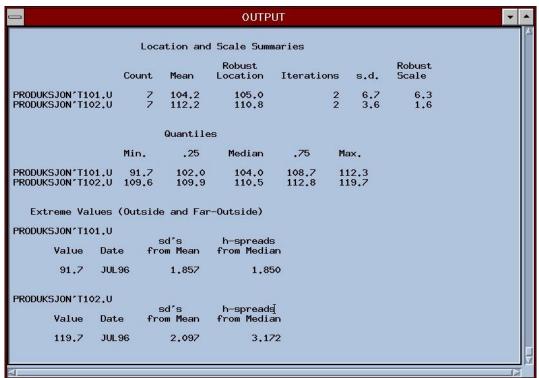
	Correlation	ons for				
1)	TROLLS 'B94		Oelo Bare	aksjekursindeks total	+	
2)	TROLLS B2		The state of the s	: Blend, NOK pr fat, s		
2)	IKOLIO BZ	001012	Oije, Bieni	. Blend, Nor pl lac, s	Pochitz	
Range :	BUSINESS	01JAN99	TO 31DEC99			
	Values	Correlat.	ion			
	of	with				
	#2	#1				
			-1	0	1+	
9						
Lagged	12		397	3.95	XXXXXXXXX	
	11	0.:			XXXXXXXXX	
	10		903	796	XXXXXXXXX 	
	9	2000-0	906		XXXXXXXXX	
	8		909	[XXXXXXXXXXXXXXXX		
	7	337070	910 914	xxxxxxxxxxxxx		
	6			xxxxxxxxxxxxxxxx		
	5 4	0.:	916			
	3		916 917	386	XXXXXXXXX	
	2	23707	916		XXXXXXXXX	
	1		918	[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
Led	ō		917			
пец	1	0.1		XXXXXXXXXXXXXXX		
	2		914			
	3	0.		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
	4		907	XXXXXXXXXXXXXXXX		
	5		902	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	6	337077	398	XXXXXXXXXXXXXXXX		
	7		395	395	xxxxxxxxx	
	8	3350-0	393		 XXXXXXXXXX	
	9	0.1		395	**********	
	10	0.1	7.7.47		*********	
	11		884	191	 XXXXXXXXX	
	12		882		*********	
				0.50		
•						

Summarize

The *Summarize-button* shows a statistical highlight for one ore more series or formulas. Also for the *summarize-command* will selected functions, convert options, and date-range be activated.

Summarize is a good "tool" to find extreme-values.

Note that in the Output-window below, -Count is the number of observations used.

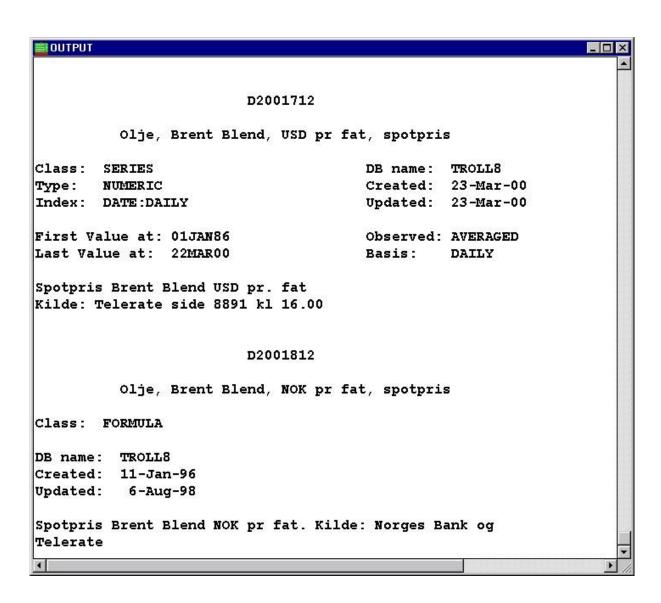


Summarize – for two timeseries.

Whats / Serie Formula Information

The *Whats-command*, another standard FAME-command is useful to get information about the timeseries. Similar information can also be obtained by selecting Series/Formula Info from the Attributes menu, however the Whats command gives more detailed information.

The result of this command as well as all information in the output-window can be printed out from the *Print Output* option under the File-menu.



Observed

Series are most often defined as *observed averaged*, *observed summed*, *or observed end*, This is important when converting the time series to other frequencies. However, if using the convert functions, *the observed attribute* on the series are ignored, and the Observed option **must be set to off.**

For more information, see FAME User Guide.

Averaged

Converting a monthly series to annual gives the average of the 12 months in a year. Converting an annual series to monthly set the monthly values to approximately the annual value, depending on the *convert technique*.

Summed

Converting a monthly series to yearly, returns the sum of the existing months during a year. Converting an annual series to monthly, - returns about 1/12 for each month, depending on the *convert technique*

High

Converting to lower frequency returns the period with the highest value.

Low

Converting to a lower frequency returns the period containing the lowest value.

Beginning

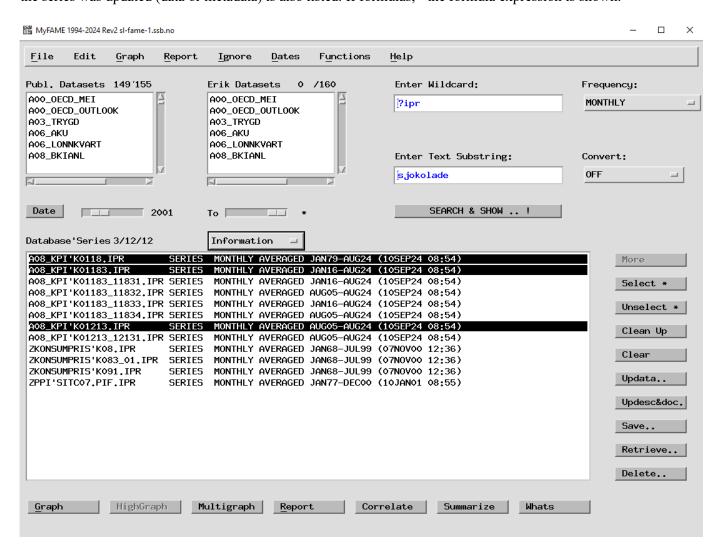
Converting to lower frequency returns the first period.

Ending

Converting to lower frequency returns the last period.

Attributes menu/ Series Information

Under the *Attributes-drop down buttom (Description Documentation or Information)* you can choose among *description*, *documentation*, *series/formula information*. If selecting *series/formula information*, a similar information to the *Whats-command* is computed real time. The date and time the series was updated (data or metadata) is also listed. If formulas, - the formula expression is shown.



Myfame will always show the newest description, documentation or information that is stored in the famedatabase. There is no need for re-indexing the database by build to see this, even after just having updated the series from the update-module in myfame.

Frequencies

Because *convert* is default *off* all series are displayed in its original frequency. When observing a series in another frequency you can specify the frequency in addition to set convert option. Setting the frequency also makes it easier to specify the date-range by the Date-menu or by the date-form.

Convert

The *Convert-menu* lists the convert tequiques. Default tequique is *off. Discrete* is typically used when converting a monthly timeseries to a lower frequency like quarterly or annual. When using *discrete* all months are weighted equally, while *constant* **puts less** weight on e.g. February because this month contain fewer observation than average.

In the *Output-window* below – the same monthly series is reported using *discrete* and *constant* convert-tequique.

Convert discrete





Convert off must be used when graphing two series in different frequency. The series are graphed in their originally frequency – no matter the frequency is specified. However, - if reporting 2 series of unequal frequency, the series have to be converted to one common frequency.



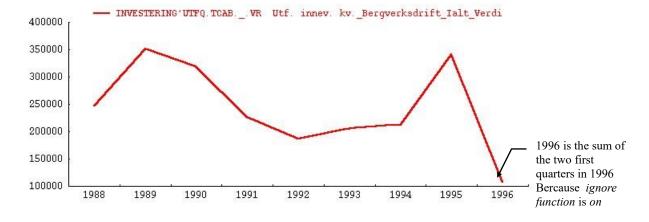
Convert off - monthly and annual CPI

More information about converting between frequencies, -see FAME User Guide.

Ignore Missing Values; ND, NA, NC

When *Ignore function* is *on*, default in MyFAME, be aware that "incomplete" (not contain all observations) series, still is converted.

If a quarterly series defined as observed *summed*, is converted to annual, and 1996 only contain 2 observations, the converted value for 1996 is the sum of the two first quarters in 1996.



If the series above had been defined as *averaged* this "error" would not be discovered easily. If *Ignore function* is set to *off,* - periods not containing all observation will be reported as ND- *Not Defined*.

Formulas contain LSUM or PROD is influenced by *ignore function*, while formulas using + (plus) will be influenced by *ignore addition*. Formulas containing * (multiplication) is set by *ignore multiplication*.

	Ignore additi	ion on, Ignor	e multi on
A	В	A+B	A*B
1 3	2 ND	3 3	2 3

	Ignore addition of	off, Ignore	multi off
A	В	A+B	A*B
1 3	2 ND	3 ND	2 ND

Above an illustration of ignore multiplication and ignore addition.

Functions

In MyFAME you can select *function1*, *function2* and/or *Outer function*. In addition, *Common basis* or *Set expression* can be set. *Function1* and *function2* contain moving functions that are evaluated based on each series historical observations in the date-range. Example: PCT(A).

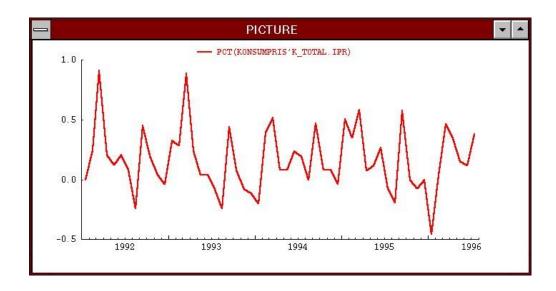
Outer functions are functions evaluating across the series. Example: LSUM(A,B,C)

Function 1

You can only select one function from the *Function1-menue*. The selected function will be ghosted. Be default no function is selected *Original (d)* means that the original data from the series are shown without any functions from the function1-list.

Selecting a *function 1-function* the selected function will be evaluated for all selected series.

Note that *Original* (*d*) in menu, is the original-series without any function1-functions. It can often be useful to see both the original series, together with a function selected from the function2-menue.



Monthly CPI Norway in percent change from month to month.

Function

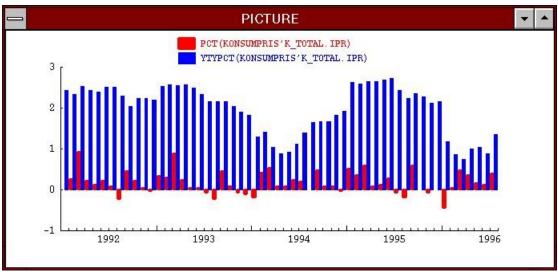
When selecting a function from the *function2-list*, you will evaluate 2 "series" for each selected series.

Below both function1 and function2 is set. The example illustrates the monthly and the annual change in percent.

No_function (d) Pct Ytypot Annpct Diff Ytydiff Shiftyr_1 Shiftyr_ytypct1 Mmedian Mstddev Mvar Mave(pct(series),3) Mavec(series),3) Mave(series),3) \$Mforecast \$Convert2

Function2-menue

Using Functions with Graph of type bar:

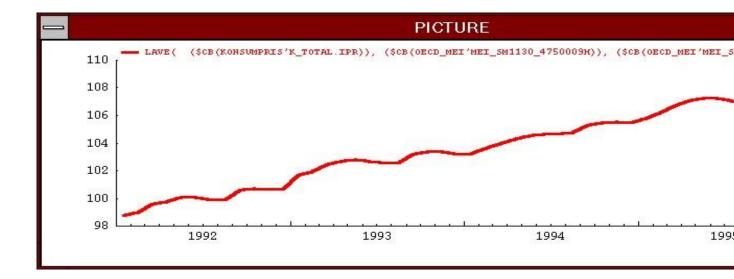


CPI Changes in percent: According to same period previous year (ytypct) and according to previous period (pct)

Outer Function

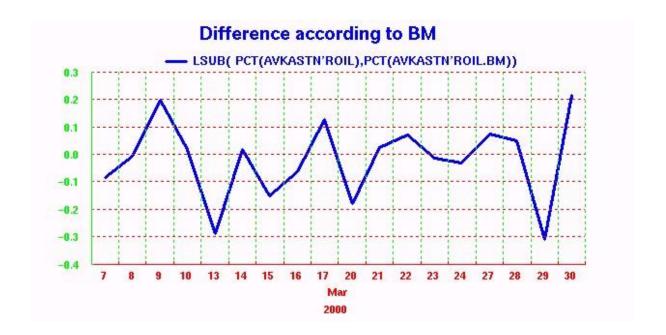
Outer function is useful taking the average of summing several series. In the example below there is created an "Nordic CPI" consisting of Norway Sweeden and Denmark, with equal weights. In addition, the series have set common basis to 1992=100 be the myfame common basis functionality.

No_function (d)
Lsum
Lprod
Lmin
Lmax
Lvar
Lmedian
Lstddev
Lave



Average (lave) of the CPI Norway Sweden and Denmark. Common basis has been set to 1992 = 100

Outer function can be combined with function1 and/or function2. The Outer function will in these cases always appear in the front of the final expression. Below is the difference of the percent changes in benchmark and the Norwegian Petroleum fund. The LSUB function is new in MyFAME and works only when two series are selected.

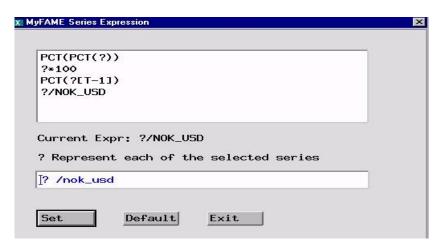


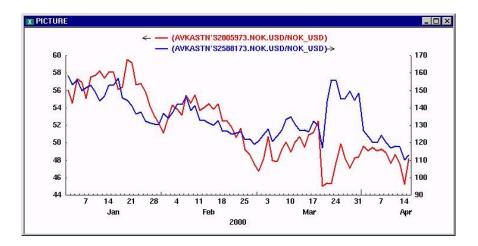
Set expressions

The set expression is a powerful "function" when doing ad-hoc analysis of time series. The expression you specify is executed for all the selected series.

The character? represent all the selected Characters. The default button set the expression back to default expression:? => no expression at all.

?/NOK_USD tells MyFAME to take all the selected series and divide on the exchange-rate series. This will give the value in U\$D currency instead of in NOK





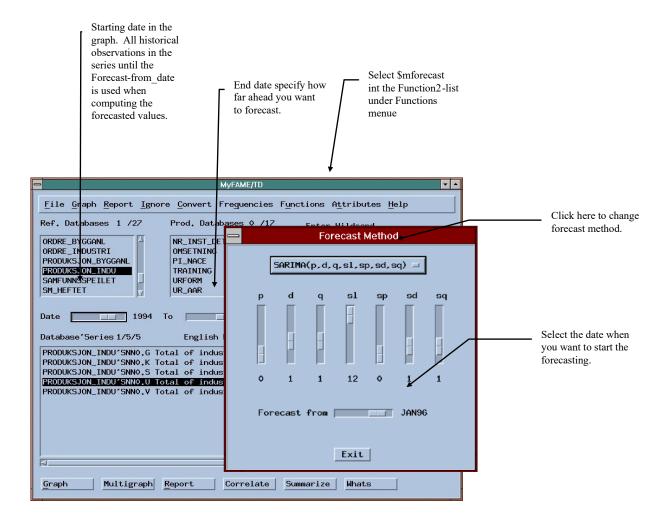
Other smart / useful expressions might be:

- ? * 100 will multiply all selected series by 100
- ?[t-1] ?[t-3] previous observation minus three observations ago and so on
- pct(diff(?)) * 100 will take pct of the difference and multiply by 100

- ? * 100 will multiply all selected series by 100
 ? * gutter/100 will multiply all selected series by the time-series: gutter/100
 - ☐ diff(?,3) takes the difference three periods ago.

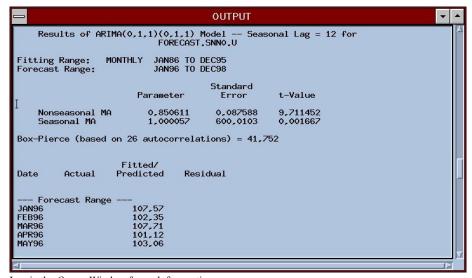
The Forecast-function \$Forecast

\$Mforecast is one of the functions listed in the *function1*-and *function2menue*. The user must set the parameters that affects this function.



Note again that by the F1-key you get some hints about the different parameters. You may have the **Forecast Method-window** open while you are graphing and reporting..

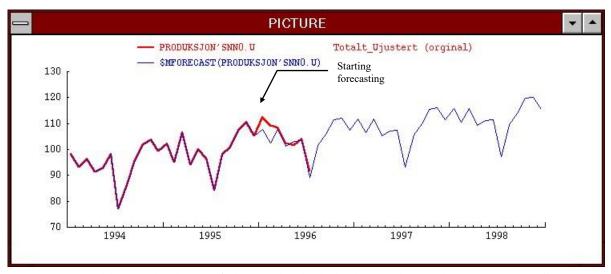
It is smart to forecast some of the history until you know you have found the correct forecasting method. By doing this, you can compare the result with the "back of the book" – the original series.



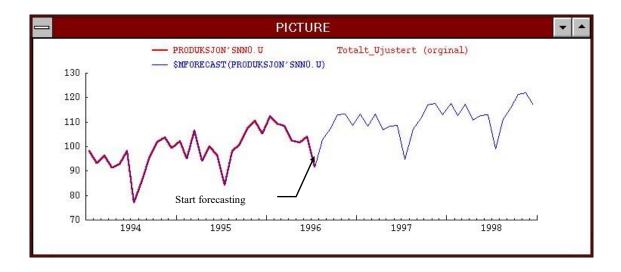
Log in the Output-Window for each forecasting

Above some of the output is shown. It will always be generated some output in the Output-window. The output-window may need to be brought in front in order to see it.

Below some of the history is forecasted. In this example the forecast starts in jan1996 even though the series contained observation up until july1996. The date in the date-range jan96 to jul96 will in this example not affect the result.



Forecasting a seasonal timeseries from jan1996. *\$Mforecast* selected under function2 in order to see the original series as well. When having found the very best forecast method, you can now tell MyFAME to start the forecasting at the end of the series. By doing this MyFAME is using all history there is in order to compute the forecasted values.



You can also select \$mforecast under function1 but then you can not compare with the original values...

Forecast-methods used by the function \$mforecast:

- SARIMA(p,d,q,sl,sp,sd,sq)
- AR(p)
- ARIMA(p,d,q) \square ARMA(p,q)
- MA(q).

Default method is SARIMA (0,1,1,12,0,1,1). The parameter Seasonal Lag (sl) for SARIMA should be 12 for monthly series, - and 4 for quarterly series.

Limitations when forecasting:

Not enough non missing data

Selected incorrect frequency, or not starting the forecasting in the beginning of the timeseries, - or the timeseries does not contain enough data

• Null model structure specified

If selected e.g. q=0 for the model MA(q) - This implies a null model than cannot be solved

• Usage of argument MSERIE of function \$mforecast

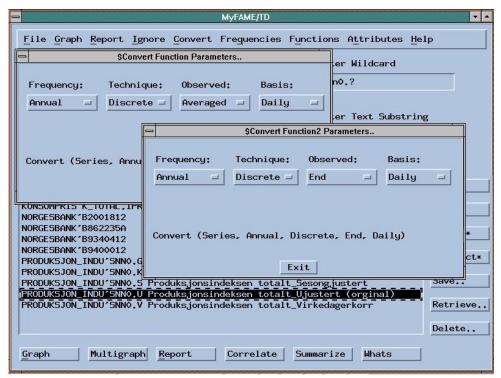
You can not combine forecasting with Common Basis, or Set expression.

The Converting functions: \$Convert and \$Convert2

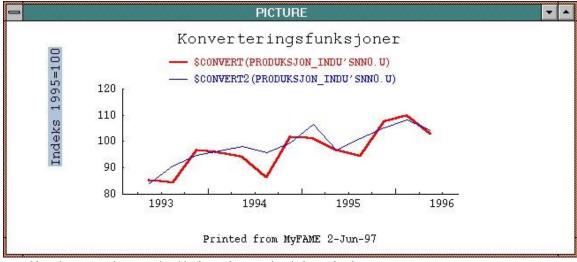
The functions \$convert\$ and \$convert\$ let you convert the timeseries independent on how the series are defined (observed). By using both \$convert\$ and \$convert\$ you can compare the output-difference computed by \$convert\$ and \$convert\$2

If selecting LSUB as the *outer function* you evaluate \$convert(A) - \$convert2(A)

You may have both converting windows in front at the same time as executing various commands in MyFAME



MyFAME with the convert-windows in front

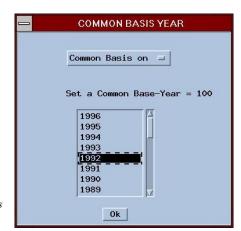


A monthly series converted to quarterly with observed averaged, and observed end

Common Basis year

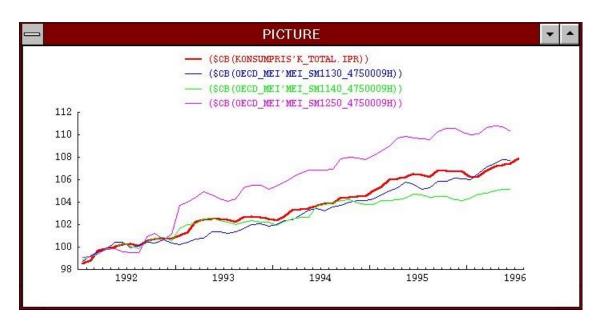
By *Common Basis* the user can turn the base-year to a common base year for all selected series. Common basis returns *A/ave(A[base_year])* * 100

This and similar formulas can easily be done by *set expression*.



Common Basis

Below are series that are defined with different base-year set to a common base-year 1992=100



CPI for different countries using different baseyear originally – Graphed by using CommonBasis (\$CB)

оитрит							<u> </u>
	1992	1993	1994	1995	1996		
(\$CB(KONSUMPRIS'K_TOTAL.IPR)) (\$CB(OECD_MEI'MEI_SM1130_4750009H)) (\$CB(OECD_MEI'MEI_SM1140_4750009H)) (\$CB(OECD_MEI'MEI_SM1250_4750009H))	100.00 100.00 100.00 100.00	102.27 101.27 102.19 104.65	103.70 103.26 103.29 106.94	106.25 105.43 104.32 109.65	107.01 107.10 104.86 110.43		
						- (

CPI converted to yearly 1992 = 100

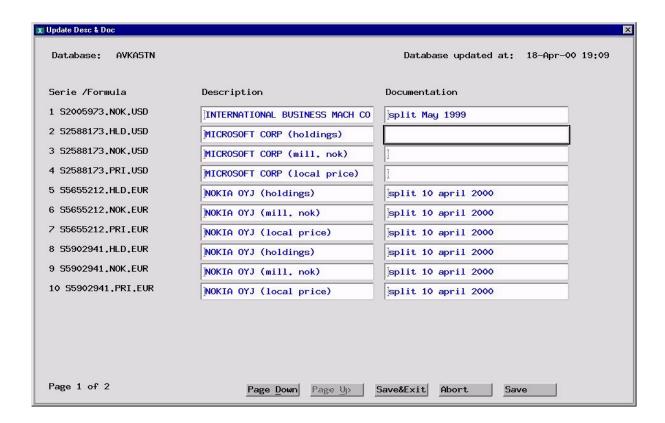
Update Desc & Doc

Users with write access may update series and formula description and documentation.

This form is hidden under the File menu. You may select many series and use the PageDown – button in the Form.

MyFAME updates the actual *desc* and *doc* information. If the new information is to be searchable, the database has to be \$build from File..

In the seriesfield in the MyFAME, the desc & doc information is shown. In theory this might be different from what is stored in the parallel timeseries used when searching.



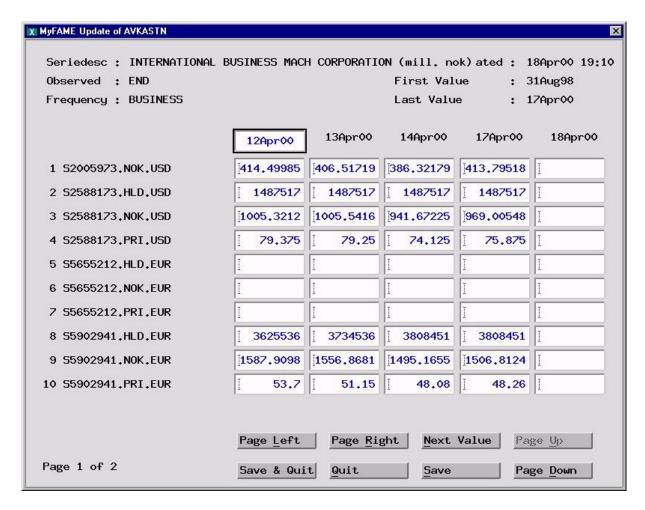
Update selected series

Users with write access to a database can update the series with this Update-form. Even though MyFAME is set up to open the databases as ace r, it opens databases in access shared. This implies that other users may read the database while its being updated. What the users see it whats saved.

Requirements:/Limitations:

- Takes real series only, not formulas and aliases...
- All series must be of the same frequency, series with different freq are ignored.
- Can only update series from one database at a time
- User must have write access to the database

- Databases are set up in fame.inp with open <acc r> which automatically are replaced with <acc shared> when entering the Update Form. (Must be exactly <acc r> (not < ACCESS READ>)
- If the Users have write access to the database(s) it can be denied from MyFAME by defining the database as eg < access read>
- Only one person at a time can update series in a given database. But others can read. (using acc shared)
- Update Form try to show desc of current series, but can only be done if previous series is changed.
- Size of numbers limited to 9999999.99



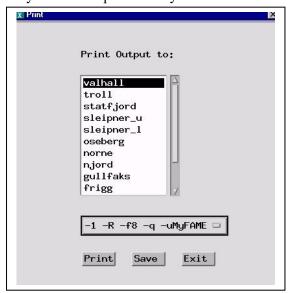
Print Output, Graph and Multigraph

All information shown in the *Output-indow* can be printed. The printout will contain only the last command executed in MyFAME. When Printing output MyFAME will print exactly the information

that was the output of the previous command. MyFAME is not recreating the output when printing. If you want a printout of both *summarize* and *whats command* -you will need to print out twice.

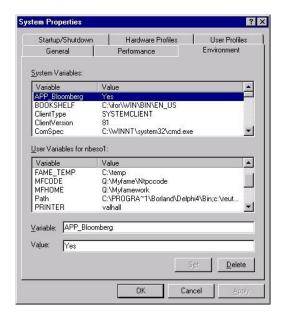
In the Unix Version there are several possibilities to print landscape, portrait and different font size. For the Unix Version I recommend using the freeware a2ps, "supported" by MyFAME

When clicking on Print Graph or Multigraph graphics are regenerated. So the printout will not be identical as shown to the screen, - if changing some options before printing.



Save-button does only exist in the Unix version. A \$PRINTER variable is added to the file **\$HOME/.cshrc**

For the Windows-version you may add a PRINTER variable; which will be default for you.



Mail Output (Linux / Unix only)

When emailing the output the same rules as for *Print Output* is valid. The last information generated in the *Output-window* will be included in the email-body.

PS this option is currently hidden as the linux environment does not have this functionality (turned off) Can be configured in fame.inp /myfamebases.inp



Mail-window where you can change to-address (default your address)

Report & save as Excel File

Linux Version

The output file *myfame.xls* is written to your \$HOME directory. In the insatll.txt it is explained how the program can be changed so that the file is saved elsewhere. Often the file is named with your userid to a mounted network disk. If doing this, just by double-clicking on the file Excel will open up the file in "pure" Excel format.

Windows version

If your network has **perl**; which can be installed for free – a perfect *comma separated file* (csv) is generated. When saving & Reporting as Excel file, MyFAME will tell you if **perl** is used or not. If **Perl** not is available you cannot assume the file will be perfect, especially for descriptions and headings. The file *myfame.csv* is written to your personal %MFHOME% catalog

Locate FAME Databases

File, Locate FAME databases list the path to all databases defined in MyFAME

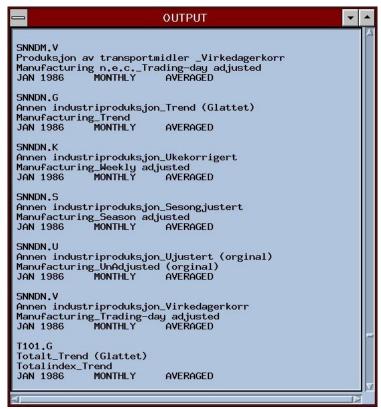


Locate FAME Databases: All databases are listed – don't have to select one or more

Create Database Documentation

Create Database Documentation lists all series an formulas in a database. Typically this command should be executed with only one database selected.

If the database contains formulas, the formula-expression is listed.



Database documentation information.

If, -by accident you are executing this command with too many "big" databases selected, the command can interrupted by pressing *Ctrl+C* on Unix or *Ctrl+Break* on NT

Report The Series Field

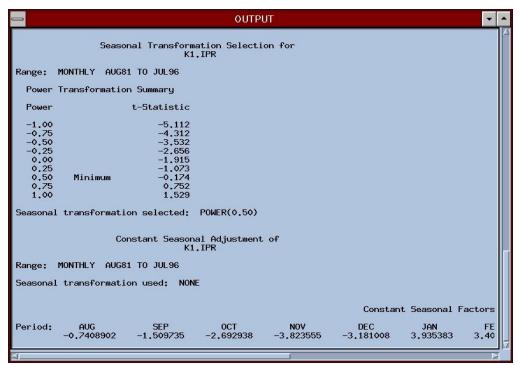
For documenting only some series in the database, the Report Series Field is reporting exactly the same information shown in the SeriesField. If Series/Formula Information is selected as Attribute this information is listed. The information can be printed by print output..

MyFAME Commands

From the *MyFAME-Commands-window* the users can enter their own commands. Note that commands that can be selected by the menu's should NOT be entered, because the ghosting of the menus may get confused when doing this manually.



Executing a Stest and setting captions and labels..



Stest command executed from MyFAME

Limitations: Graph-commands executed from MyFAME-Commands cannot be printed, however setting graph options or titles is fine as long as you are executing the Graph by the Graph-button. If "taking off" make sure you are using *BLOCK* and *END BLOCK* preventing MyFAME to do incorrect ghosting of the menus.

Defining new common databases in MyFAME?

When adding new databases to be used by several (more than one) users, - its recommended to add this to the global *fame.inp* file. MyFAME reads this file when starting up. See the install file for more information about this.

\$Build / indexing MyFAME-databases

All MyFAME databases must be indexed by File.\$Build. This, to speed up the search by using so called parallel case series. \$Build is most often run from outside MyFAME, in processes updating/creating series. The very end-users should not need to concentrate about this. But it might be helpful to be aware of it?

Must run \$Build:

- If created new series and/or formulas
- If deleted new series and/or formulas
- If descriptions and/or series-names is changed. (and you want to find them by text-search)

Not needed to run \$Build:

- When existing series have been updated (with data) e.g. added new observations \(\Bar{\text{U}} \) When formula expression has been changed.
- When changing the observed attribute on the timeseries.

\$Build is executed from MyFAME under File.. – only for users with write access to the database.

Adding your own (private) FAME databases to MyFAME

Each user may add their own \$HOME/myfamebases.inp on Unix or %MFHOME%myfame.inp on NT defining private databases. Remember to index these databases by File.\$build

In the frame below **myfamebases.inp** file adds three databases. You must have read access to the databases. Always use <acc r>, even though if it's a database that you may want to update from inside MyFAME. MyFAME handles this, so that the database is opened in *shared mode* only when needed.

The database FORMELAGG consists of two databases, however only series and formulas in the FORMELAGG database will be available when searching. The formulas in FORMELAGG can however use series in the SERIEDB to evaluate the formula-expressions. In this case it is only needed to run *\$build* for FORMELAGG-database.

```
scalar MYFAMEDB: string = "open <acc r> "+quote +&&
  "$HOME/win/myfame.db"+quote + " as MYFAMEDB"
  scalar ERIKDB: string = "open <acc r> "+quote
  +&& "$HOME/win/myfame/erik.db"+quote + " as
  ERIKDB"
  scalar FORMELAGG: string = "open <acc r> "+quote
  +&&
  "$HOME/formelagg.db"+quote + " as FORMELAGG; "+&&
  "open <acc r> "+quote + "$HOME/seriedb.db"+quote + " as
  SERIEDB; "
  set ldbn_liste = ldbn_liste UNION {MYFAMEDB, ERIKDB, FORMELAGG}
```

Mark that blanks spaces and quotes are important.

In the example above the 3 personal databases are listed in addition to the common ones.

PS. See next page for adding common databases to a section or an department.

Section or department Setup of MyFame-databases

Often several users need to update their *myfamebases.inp* files due to new databases revisions versions of dataset. If these changes are common to many, it may be smart to update the myfamebases information one common place for all users. To do this your section / department needs one common file located at a common place where the all the users have read access. One, or some users should have write-access to this file in order to make the common updates of fame database names and paths in the common file:

However, one time only all the users that wants to read the common file needs to add some lines to their personal *myfamebases.inp*, so MyFame reads the common one as well.

By doing this your team will use the same common databases.

Below 1) is your local \$HOME/myfamedatabases.inp defining the database ERIK1 to be visible in myfame. 2) The common file makes the KNR2024R1 database to pop up in MyFame, but only for those who are pointing to the common.inp file from their myfamebases.inp file AND, as always, the user need to have read-access to the database file itself. MyFame always use the file-security on your system.

Be aware, databases that are common to everybody does not need this configuration, and should be listed and defined in the fame.inp file where the application runs from.

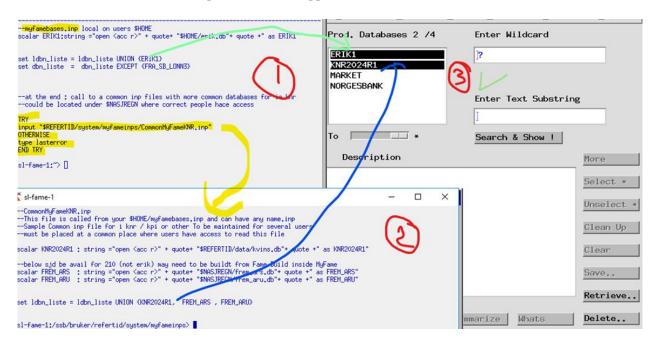


Figure above: Illustrates use of a common myfamebases.inp file for common databases for a group of users.

Source-code: "combined" functions

The functions listed below is used in MyFAME *function1*- and *function2*. They are using standard FAME-functions described in *FAME Users Guide to Functions*, and in <u>Help</u> / *hyperhelp*. Similar functions can be made by using the Set Expressions form.

mave pct 3 3 periods moving average of pct

function mave_pct_3 argument mserie return (mave(pct(mserie),3)) end function

mave_3 3 periods moving average

function mave_3 argument mserie return (mave(mserie,3)) end function

mavec_3 3 periods moving cumulative average

function mavec_3 argument mserie return (mavec(mserie,3)) end function

■ Common base year, Sets the average for a given year = 100

function \$cb --common basis argument mserie BLOCK over on;date myfame_basis local scalar mf.bas: numeric = ave(mserie) date *;return ((mserie / mf.bas) * 100) END BLOCK end function

shiftyr 1 sets previous year to this year

function shiftyr_1 argument mserie return (shiftyr(mserie,-1)) end function

• shiftyr ytypct1 sets previous years pct to this year..

function shiftyr_ytypct1 argument mserie return (shiftyr(ytypct(mserie),-1)) end function

Possible Errors and Warnings

Testing database access

If the message: *Testing Database Access Please Wait.*..is "hanging" this might imply that one ore more of the servers containing the databasefiles is not available.

BUILD.KEY not found

The selected database has never been indexed with File.. \$Build.

Somebody with write access to the database must run Build from the File-menu for the selected database. This in order to speed up text-search, by using parallel case series. Running Build is required.

Warning Re-Run \$Build

This warning implies that one ore more series have been deleted since last time Build was executed. Somebody with write access to the database must rerun Build from the File-menu for the selected database.

Window height does not fit on the screen

Your screen is not set up high enough resolution. MyFAME average screen resolution. This can be changed by: When running myfame on a terminal server, maximize the terminal server desktop window. Alternatively change the screen resolution on your local computer:

- Settings/Innstillinger
- System/System
- Screen /Skjerm
- Scaling/Skalering 100% (not 150%)
- Resolution/oppløsning 1920*1080, or recommended

Cannot get any printouts...

This is difficult because there are so many ways to set up this. Please see install files for more info. Be aware that text-printouts is stored before being printed as *myfame.txt* in you \$HOME catalog on Linux.

Database does not show up in MyFAME

If other people are able to use a database while you are not it's most likely the file access that causes the problem. If databases are accessed through a FAME frdb-server it might be a problem with this process as well. If you can read it from FAME but not from MyFAME its got to be MyFAME's setupfiles.

1. File access

Check if you have enough file access to the database you are asking for. In order to see the databases in MyFAME read-access is enough.

2. Database not defined in the common MyFAME-setupfile; fame.inp

All common databases must be defined in this file. It is also possible to add private databases in personal *myfamebases.inp* in Unix or *myfame.inp* on Windows

3. Server not available