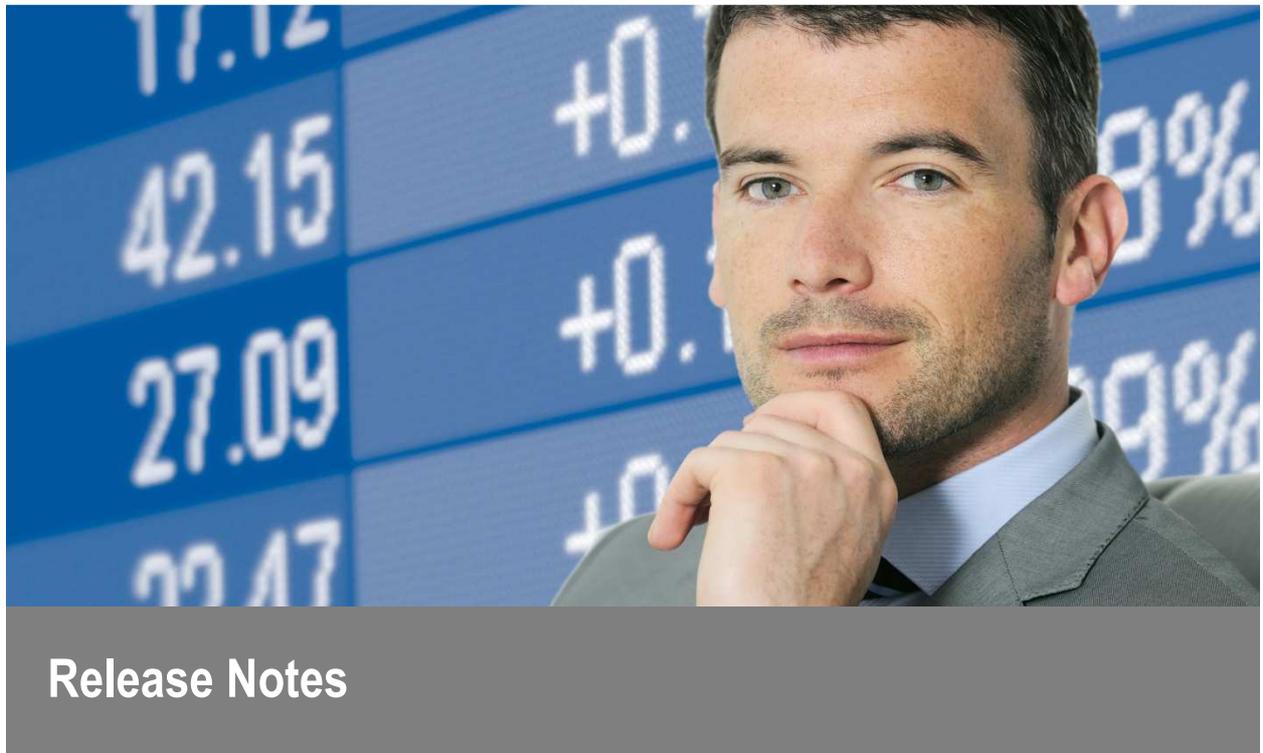


vwd market manager



vwd market manager 4.2

Release

December 2016

vwdgroup:

Preface

Thank you very much for using vwd market manager.

The vwd market manager supplies you with real-time information about the financial market and the stock exchanges, meeting the special requirements of banks, financial service providers and insurance companies. Each user has the option to personalise the vwd market manager to his individual needs. So every user can choose exactly the relevant information for his trading decisions with regard to the current market situation.

This document outlines all the new features, enhancements and visible changes included in the vwd market manager version 4.2.

Please note the following:

- All visuals displayed in this document are for illustration purposes only. Exact display and layout in vwd market manager may vary.
- The release notes are based on a fully-equipped vwd market manager with all features and content available. Therefore deviations may occur to your individual vwd market manager version.
- Some of the recently added features may not be included in the standard version. Features not included in the standard version can usually be subscribed to at an additional charge. This will be noted in the header and the text itself by Subscription details. Functions only available for specific markets will be highlighted by a note.
- This document contains confidential information and is exclusively provided for the information of the recipients. It may not be copied or distributed to any third party.
- The information contained in this document shall not be deemed as financial advice, consultancy or express warranty or warranty of fitness for a special purpose. vwd group will not be liable for any inaccuracy or incompleteness of the information or data supplied with this document.

Releases always contain country-specific requirements, strategic implementations and customer requirements. It's important for us that our customers actively participate in the design of new releases. So forward your adequately described request to your sales contact or the customer service.

Found a bug? Please submit a bug to the vwd customer service by using the contact form.

Thank you for using vwd market manager and for taking the time to send us your feedback.

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Introduction

Below you can find the release notes for the current version of vwd market manager.

With this release we have implemented the chaining, a spread calculator and the connectivity with vwd market manager mobile, our mobile app.

The release notes are divided into three chapters.

The release notes are divided into three chapters. In the first chapter we introduce all new controls available in vwd market manager. In the next chapter we present all improvements on existing controls, from small adjustments to extensive revisions. Finally the last chapter lists all new content available in vwd market manager.

1 New features and functions

1.1 Chain

A so-called chain includes the logic of linking individual symbols. By introducing the new symbol type “chain” we offer the opportunity to create a symbol chain in form of a list, or display it graphically. Another advantage is the automatic maintenance of chains by vwd. So for example when new durations for IRS EUR are added by a contributor, e.g. Tullett Prebon Information, these will automatically be added to your list or your chart. Likewise, expired futures will be removed from a chain or new maturities attached.

► Scope

Chains are available for the following vwd symbols / product types:

- LME symbols
- Symbols from sectors FX, Money and Capital Markets.
- Yield curves
- Currency pairs
- Futures

The availability of a chain is subject to the permissioning for the respective source symbols.

► Chain types

Chain types can be distinguished as follows:

- Duration Symbols with a duration, like Interest Swaps or Deposit Rates.
- Maturity Symbols with a maturity like futures.
- Lists Structured lists, like currency lists vs. EUR.

The different types are important for the representation, since a mixture of chain types is not possible in a so-called chain chart. On the other hand, several chains of the same type can be displayed. List chains can, of course, only be displayed as a list and not as a chart.

► Availability

Chains can be retrieved in vwd market manager either via direct input or via the search function (quick search).

To retrieve the chain for 'CORN', enter 'CORN' into the search dialogue of the quick search and start the search. Via the new tab “Chains” you will find the search results for your query. Now you can choose the appropriate chain and display it as a list or chart. The column “Number” provides information about the number of single symbols included in the chain.

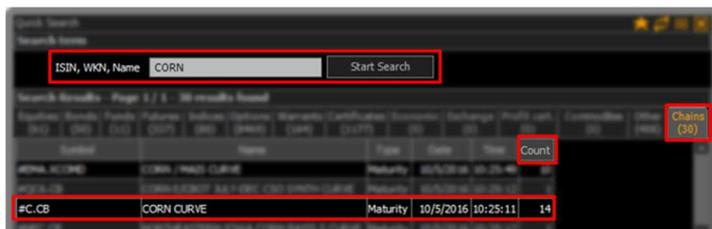


Illustration: Quick Search for Chains

► Displaying chains

Chains can be displayed in form of Charts  or Lists . The new introduced functions are very similar to the already existing list and charting functions, with the special feature that these have been specifically defined to meet the specific requirements of chains.

- Chain List 

By opening chains in the new function Chain List, you get an overview of all source symbols contained in a chain. All types of chains can be represented as a list. Please find some examples in the following screenshots:

Instrument	ISIN	Short security name	Last	Last volume	Bid	Ask
EUR1WD.FXWWD		EURO DEPOSIT RATE 1W	-0.385		-0.4	
EUR2WD.FXWWD		EURO DEPOSIT RATE 2W	-0.36		-0.4	
EUR3WD.FXWWD		EURO DEPOSIT RATE 3M	-0.335		-0.4	
EUR1M.FXWWD		EURO DEPOSIT RATE 1M	-0.375		-0.4	
EUR2M.FXWWD		EURO DEPOSIT RATE 2M	-0.34		-0.3	
EUR3M.FXWWD		EURO DEPOSIT RATE 3M	-0.325		-0.4	
EUR4M.FXWWD		EURO DEPOSIT RATE 4M	-0.285		-0.4	
EUR5M.FXWWD		EURO DEPOSIT RATE 5M	-0.24		-0.2	
EUR6M.FXWWD		EURO DEPOSIT RATE 6M	-0.21		-0.2	
EUR7M.FXWWD		EURO DEPOSIT RATE 7M	-0.225		-0.3	

Illustration: list (generated by vwd)

Instrument	ISIN	Short security name	Last	Last volume
ABT.IT	IT0005160996	ABITARE IN	0.00	
ACE.IT	IT0001220798	ACEA	11.44	
ACO.IT	IT0001469953	ACCITEL GROUP	4.088	
ACS.IT	IT0001332024	ACSM AGAM	0.00	
FR1.IT	IT0003199790	FAI CK RENEWABLES	0.00	
ADS.IT	DE000A1E0WW0	ADIDAS	0.00	
AE.IT	IT0005065849	AEDIS	0.3425	
AEF.IT	IT0001384590	AERFFI	1.04	
AGN.IT	NL0000303709	AEGON	0.00	
IRE.IT	IT0003027817	IREN	1.579	

Illustration: period (EUR Deposit Rates)

Instrument	ISIN	Short security name	Last	Last volume
BRN.LB.701		Brent Crude Futures - North Se	47.10	1
BRN.LB.702		Brent Crude Futures - North Se	47.92	1
BRN.LB.703		Brent Crude Futures - North Se	48.63	1
BRN.LB.704		Brent Crude Futures - North Se	49.22	1
BRN.LB.705		Brent Crude Futures - North Se	49.73	1
BRN.LB.706		Brent Crude Futures - North Se	50.16	1
BRN.LB.707		Brent Crude Futures - North Se	50.62	1
BRN.LB.708		Brent Crude Futures - North Se	51.24	1
BRN.LB.709		Brent Crude Futures - North Se	51.46	1
BRN.LB.710		Brent Crude Futures - North Se	0.00	0

Illustration: maturity (Brent Crude Oil Future)

A double click on a single symbol in a chain list will open a Full Quote of the respective symbol as usual.

- Chain Chart 

You can add chains to a chart using drag and drop, via the context menu “Open as” or via direct input.

Doing so you can combine for example **two Duration Chains**. In this example the Interest Rate Swaps and Deposit Rate for EUR by Tullett to obtain a holistic approach. All durations displayed on the Y-axis have the same pitch to provide a clearly structured charting independently of the actual timespan between each data point.

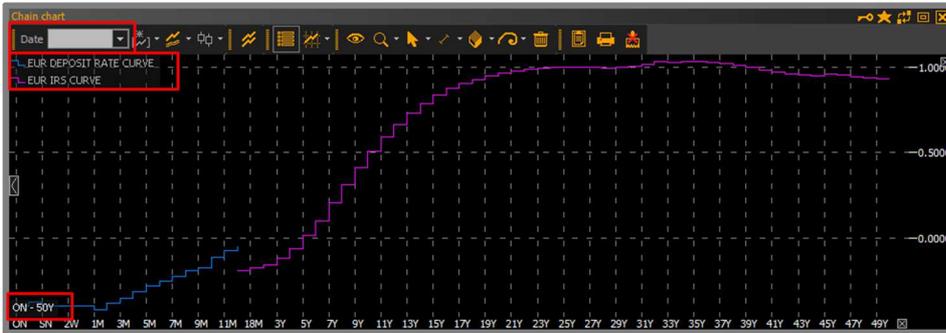


Illustration: Chain chart combination of Tullett Deposit and IRS

You can use the dialogue to select the date of a chain to retrieve and display historical chains. This is particularly interesting in the following example. Here you find the current and a historical yield curve for Germany.

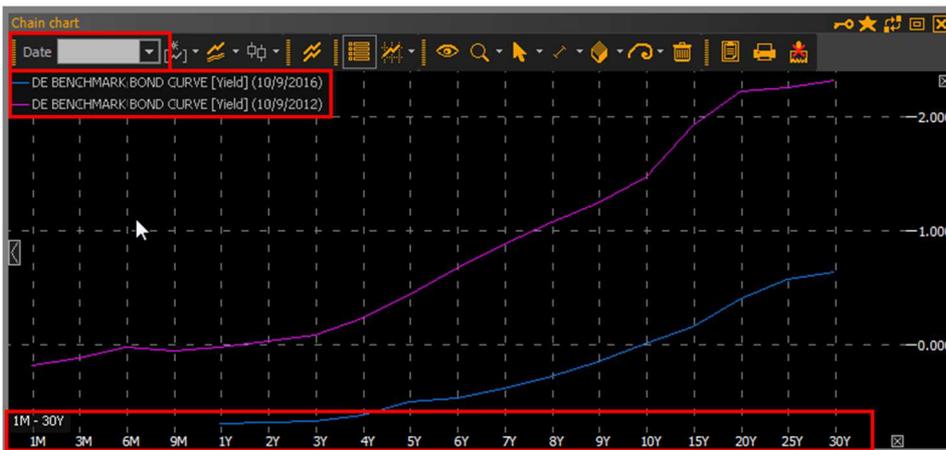


Illustration: Chain chart combination of Tullett Government Bonds Germany different dates

1.2 Spread Calculator

The Spread Calculator is a new calculator in vwd market manager with the following modules:

- Benchmark Bond Spreads
- Bond Spread Analysis and
- Commodity Forward Spreads

► Benchmark Bond Spreads

The Benchmark Bond Spreads module enables the calculation of spreads between different benchmark bonds for different durations and validities. In this way, you will receive indicator values between the respective nations - if necessary, also from historical rates.

To calculate spreads between benchmark bonds, you simply need to select the country and the appropriate period from the drop-down window. The spreads are displayed in the matrix for the corresponding date. At present there are more than 30 countries to choose from.

The results can be drag and dropped into the chart and the spread curve of the selected countries will be displayed. Furthermore, values can also be transferred into Excel (by drag-and-drop) in order to perform corresponding calculations in Excel in Realtime (DDE interface) individually.



Illustration: Benchmark Bond Spreads

To display the key figures in the Benchmark Bond Spreads module the Tullett Prebon data package is required. If necessary, ask for a free trial activation.

► Bond Spread Analysis

To calculate spreads we have extended the range of calculators by the Bond Spread Analysis calculator. This module allows to calculate credit spreads, as well as spreads on Swaps.

Using the navigation you can individually enter bonds, either by manually editing the symbol in the instrument column or by dragging a symbol / symbol list into the corresponding row. Alternatively symbol lists can also be imported. You can always choose from more than 15 countries as a benchmark.

Based on this data the Bond Spread Analysis calculator calculates the corresponding spreads, which are represented graphically and in tables. Additionally, you can display spread curves and interpolated yield curves for an individual selection of bonds, for example on Ford. This allows you to evaluate your underlying at a specific maturity. Furthermore, values can also be transferred into Excel in order to perform corresponding calculations individually.



Illustration: Bond Spread Analysis calculator

To display the key figures in the Bond Spread Analysis calculator the Tullett Prebon data package is required. If necessary, ask for a free trial activation.

► Commodity Forward Spreads

The module Commodity Forward Spreads enables the calculation of time spreads between the main commodities of the LME in different currencies.

To do so you simply select the appropriate contract, the currency and duration of the forward, to display the spreads and the corresponding forward points graphically and in tables. Furthermore, the module offers the possibility to process the results, e.g. in Excel.

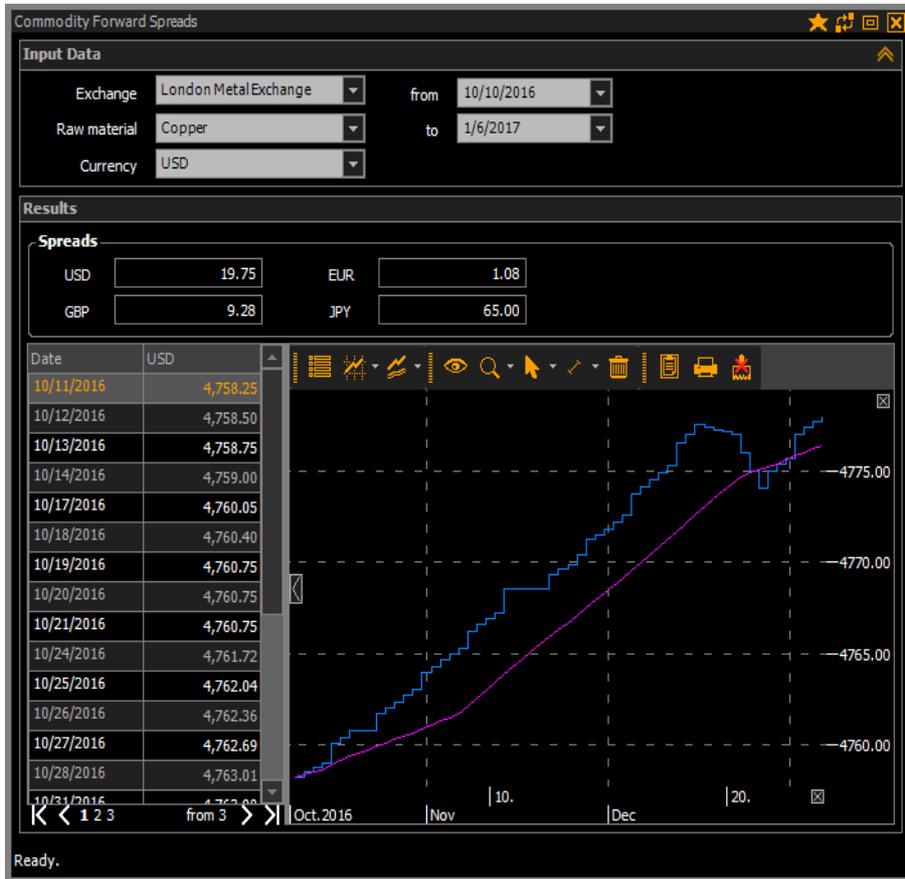


Illustration: Commodity Forward Spreads calculator

To display the key figures in the Commodity Forward Spreads calculator the Tullett Prebon data package is required. If necessary, ask for a free trial activation.

1.3 GICS

Identifying comparable companies requires an industry classification system which is detailed enough, internationally comparable and extendable by future industries (sectors, branches). A globally renowned system is the Global Industry Classification Standard (GICS) by Standard & Poors.

This classification system is based on 51,000 securities subdivided into 10 Sectors, 24 Industry Groups, 67 Industries and 156 Sub-industries.

This classification is now available for you in the vwd market manager, free of charge. You can use this to structure your portfolios and to match investments with companies of the same classification, S&P Yield Curves (vwd page 23500) or S&P CDS (vwd page 23880).



► Availability

In addition to the representation in Full Quotes the classification is available as a search criterion in the Equities detail search, to search specifically for instruments of a certain industry.

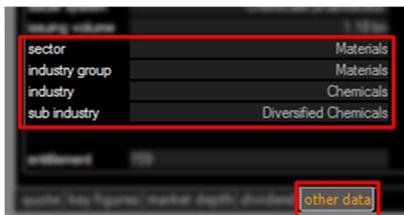


Illustration: Equities Full Quote > tab ,other data'



Illustration: Detail search > Filter parameter Equities

► Overview

On vwd pages 60ff. we have included the classification in its entire depth (4 levels) to provide an overview of the whole depth of the GICS classification.



Illustration: vwd page #60

Alternatively, you can find the original description of S&P linked in the *Navigator > Information > S&P GICS Mapbook*.



Illustration: Navigator > Information > S&P GICS Mapbook (PDF)



The GICS have been integrated into the vwd market manager as a new standard and are available to **all users** of the vwd market manager **free of charge**.

1.4 Moody's Ratings

For an optimised representation of ratings we have implemented the original appearance of Moody's for you in its entire depth. We have implemented the following types for both the bonds and the issuer ratings (both long and short term ratings):

- Standard Foreign Currency und Local Currency
- Senior Unsecured Foreign Currency und Local Currency
- Bank Deposit Rating Foreign Currency und Local Currency
- Insurance Financial Strength Foreign Currency und Local Currency

In contrast to bonds, where the rating types are displayed in a single consolidated field, all types are represented in the issuer ratings. You will find the new fields not only in Full Quotes and Detail Searches but also to use them in Quote Lists.

► Bonds

The screenshot shows a bond quote for 'APPLE INC. EO-NOTES 2014(14/22)'. It displays market data such as 'last' price at 104.04 G, 'diff' at -0.048, and 'last size' at 0. The quote also shows the exchange as 'STG' and the currency as 'EUR'. Below the market data, there are sections for 'Moody's Rating' and 'Fitch rating', each with fields for 'rating longterm', 'rating shortterm', 'rating type', and 'action'. The Moody's rating is shown as 'Aa1' on '4/27/2016' with an action code of 'AFF'. The Fitch rating is also shown as 'Aa1' on '4/27/2016' with an action code of 'AFF'. At the bottom, there are navigation options: 'quote | key figures 1 | key figures 2 | market depth | Moody's and Fitch | S&P | issue | other data'.

Illustration: Full Quote bonds ratings by Moody's

► Issuer Ratings

The screenshot shows issuer ratings for 'APPLE INC. (197800.MIR)'. It displays the issuer's name, currency as 'USD', and LEI as 'HWUPKROMPOU8FGXBT394'. The rating agency is 'Moody's'. Below this, there are sections for 'Issuer Outlook' (STA, date 4/27/2016), 'Foreign Currency Rating (CR)' (longterm Aa1, shortterm P-1, both dated 4/27/2016), and 'Local Currency Rating (CR)' (longterm and shortterm both 00.00.0000, dated 00.00.0000). At the bottom, there are tabs for 'CR', 'SU', 'BDR', and 'IFS'. The 'CR' tab is currently selected.

Illustration: Full Quote Issuer Ratings by Moody's

The screenshot shows a 'Detail Search' interface for issuer ratings by Moody's. A red box highlights the 'Issuer Ratings' tab. Below it, there is a 'Basic Information' section with a 'Rating agency' dropdown set to 'Moody's (11,676)'. There are also checkboxes for 'Issuer', 'Rating Moody's', 'Currency', and 'LT Rating CR'. The 'Rating Moody's' section has a dropdown for 'from'.

Illustration: Detail Search Issuer Ratings by Moody's



The issuer ratings are included in the following fee-based data package:
Moody's, Fitch, S&P - Rating Package

1.5 Research Reports – LBBW

With the new release we have extended the Detail Search by Research Reports to enable easy access. We are starting with the LBBW reports and will continue to expand the function or include additional providers.

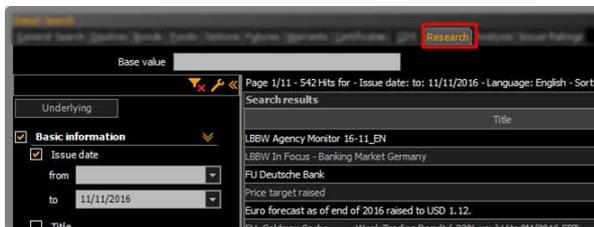


Illustration: Detail Search > Research

In addition to access the Research Reports via the Detail Search, you can also use the context menu of an instrument. By clicking the entry “Research” you directly open the last available report in PDF format. You can also reach older reports via the header of the tool, if available.



Illustration: Context menu (Equity) > Research

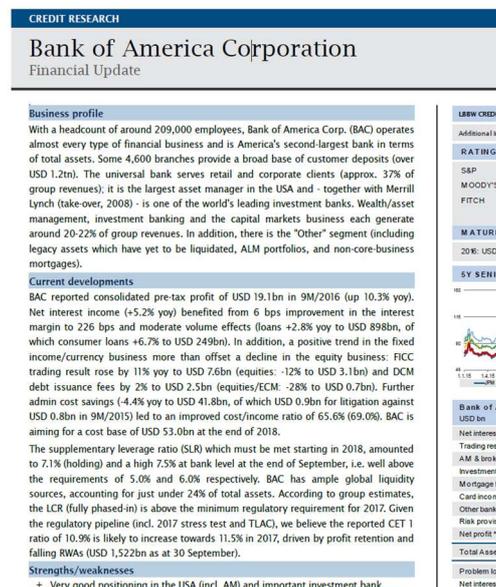


Illustration: Research Report (Bank of America Corporation)



The Research Reports are available to all vwd market manager users to a reduced extent. Only users from the saving banks sector holding a research report contract with the LBBW receive the full coverage.

1.6 Related

We have expanded the context menu function “Related” (formerly “Derivatives”) to Equities, Bonds and Issuer Ratings. With this new feature you can access all related instruments of an equity via the Detail Search.

You want to quickly and easily assign Issuer Ratings to a company in your quote list? This is now possible using the context menu. Simply right-click the respective company and open the ratings for the company (the issuer of the share) via *context menu > Related > Issuer Ratings* or the related bonds. Starting from a bond you can also access other bonds of the selected company.

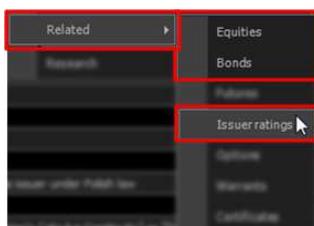


Illustration: Context menu (Bond) > Related

Clicking on a product type will open the Details Search (for the link). The corresponding instruments are displayed in the search result list.

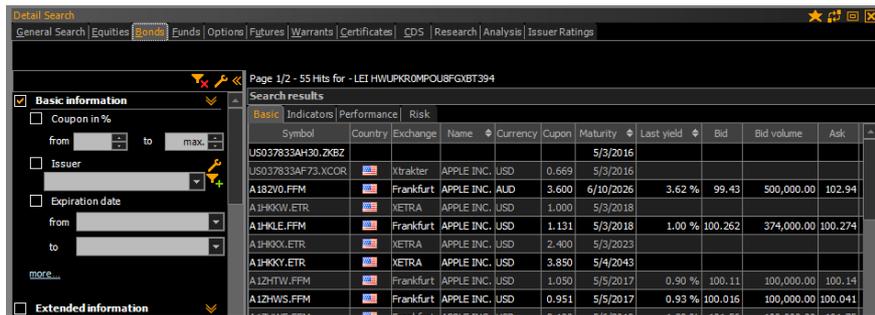


Illustration: Detail Search with the function „Related“

1.7 Watchlists

Using the new icon CW for watchlists you can create a list of the same name. By adding the first symbol to an empty watchlist, you are asked directly to assign a name, because every newly created watchlist is automatically stored on the left side of the navigator under watchlists.

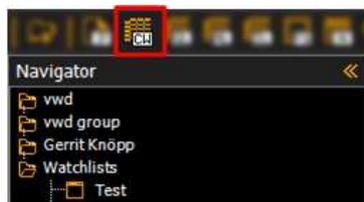


Illustration: Navigator > Watchlists



Illustration: Dialogue when creating a new Watchlist

Every generated watch list is automatically stored on a server, so that it is also available via the app “vwd market manager mobile”. So you can always access your personal lists whilst traveling, you can determine price changes, avail related information such as news or create new alerts.

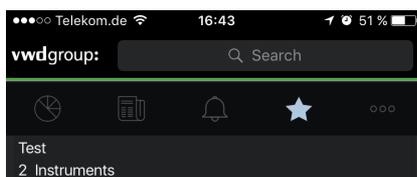


Illustration: Watchlists overview in vwd market manager

The app “**vwd market manager mobile**” for iPhone can be downloaded from the **App Store**. It is available for all vwd market manager users as an add-on. After logging in with your individual authentication, you can also access your individual data via the app.

In the next few weeks, you will receive more detailed information about the app and the exact release date.

2 Improvements

2.1 Funds portraits

The fund portraits were upgraded by vwd diamonds and the Fida rating in the form of crowns. Depending on the data package you have booked for funds, you will find the corresponding ratings in the fund profile.



Illustration: Funds portrait (Permissionig – vwd fund data)



Illustration: Funds portrait (Permissionig – Fida fund data)

Next to their display in funds portraits the newly recorded ratings are also available as a filter criterion via the detail search in the vwd market manager.

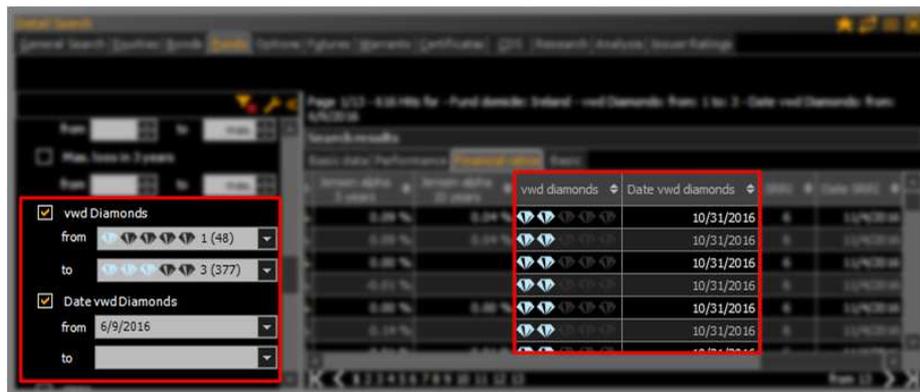


Illustration: Detail search > Funds > Search parameter vwd Diamonds

2.2 Detail Search > Funds

In order to improve the Screening by Funds via our Detail Search, we have added the ratio outperformance against the benchmark.

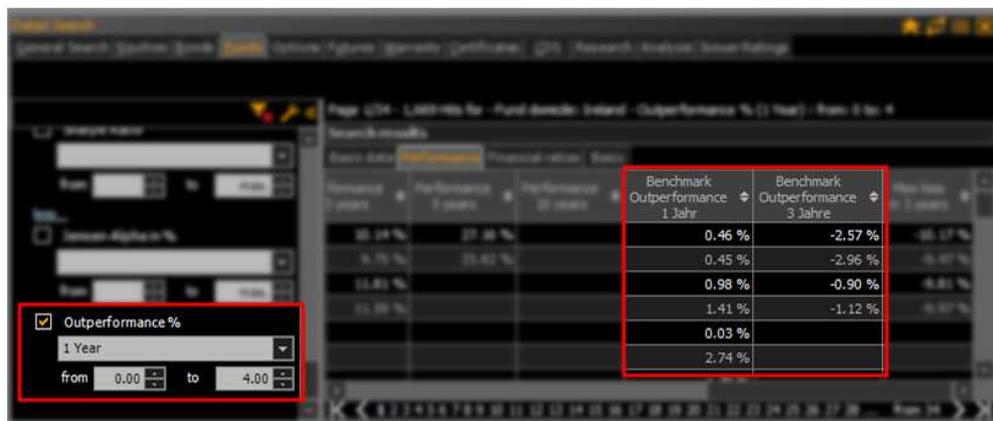


Illustration: Detail search > Funds > Outperformance Benchmark

2.3 News Search > Numerical Provider Codes

We have optimised the function to search by provider codes and added the opportunity to search by purely numeric codes. If you want to search for Malaysia palm oil for example, open the provider code overview from the *Navigator > vwd > News > news search provider codes* to display the available codes on all news agencies.

Provider Code	Provider Name	Provider Type	Provider Code	News Item
Dow Jones	Capital Markets	70281		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70282		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70283		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70284		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70285		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70286		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70287		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70288		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70289		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70290		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70291		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70292		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70293		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70294		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70295		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70296		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70297		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70298		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70299		Malaysia Monthly Palm Oil Exports-SGS
Dow Jones	Capital Markets	70300		Malaysia Monthly Palm Oil Exports-SGS

Illustration: Navigator > vwd > News > news search provider codes

Open the News Search, switch to the provider mode and enter the original provider codes you have identified before.

Selection of Search Parameters

Basic information:

Period From: [Date] To: [Date]

Extended information:

Search term

ICA, WCA

Provider

Language

Provider classification

Provider codes

70281

Example: -A+(B C) Meaning: NOT A AND (B OR C)
The ProviderCode A may not appear in the news AND additionally ProviderCode B OR C must be included.

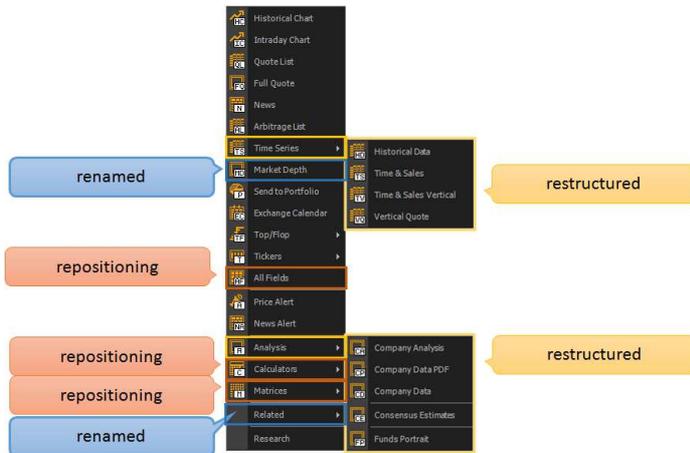
Provider classification

Create News Alert Start search Close

Illustration: News search (Providercode mode)

2.4 Context menu

In addition to the restructuring of the various entries in the context menu, we have also introduced the two new sets “time series” and “analysis” to group similar features and at the same time better structure the first level of the context menu.



2.5 Add worksheet

You can quickly add additional blank worksheets via the small “+” icon to the right of the worksheets.

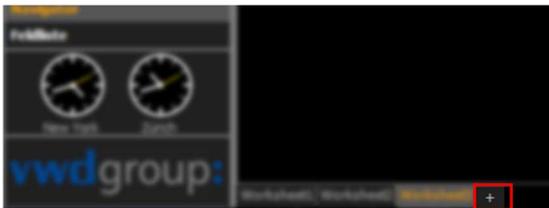


Illustration: Add worksheet

2.6 Load workspace

Up to now the entire workspace defined as standard has been loading when starting your vwd market manager. To shorten latencies we have reduced the loading of the (entire) default workspace to the open worksheet. All other worksheets are only loaded when you click on them so that the workspace is increasingly filled when you “activate” additional worksheets.

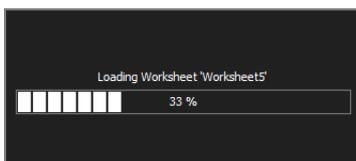


Illustration: Loading dialogue worksheet

This feature will be enabled as default, but can be disabled via *Application > User interface* using the “Workspace” button.

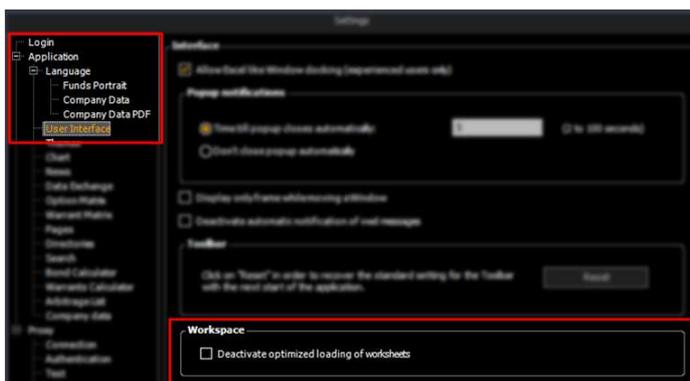


Illustration: Options > Settings > User interface > Workspace

2.7 Language selection for Company Analysis (PDF)

As of now the company analyses in PDF format are available in several languages. Open the settings dialogue and select your preferred language via *Application > Language > Company data PDF* from the respective menu. In addition to German, English, French and Italian are available.



Illustration: Options > Settings > Application > Language > Company data PDF

After confirming the new settings, the company analyses (PDF) will be opened in the selected language. Generally, all analyses are always available in several languages, so if a document is not available, this is not caused by the language selection.

Please note that this module is subject to subscription.

2.8 Chart > Chart types

With the update, there are new functions in chart, which can further influence the intraday display.



Rolling

Assign the time period (a to b) you would like observe to your intraday chart. Assuming that you do this in the morning of the day, the chart will be filled up with data for the selected period (in our example an hour).

As soon as an hour is displayed as a data series in your chart, data points will simultaneously be cut off at the beginning of the time frame for all new data points added. This process ensures that always the selected period is displayed.



Illustration: Chart > Type rolling



Fillup

If the filling is set as a switch, the X axis is filled with points according to the selected aggregation, without the actual data points of a participating series being necessary.

Example: Day view with minute compaction on a stock that is traded only 5 times a day leads to an X axis, which displays a point for each minute, the series is stretched accordingly.



Illustration: Chart > Type fillup



Jump to front

After defining a starting time, your chart will grow by new data points. If you for example set an hour at 15:43 (no start time as timestamp) so the data for one hour is loaded from the past, all new data will be loaded additionally.

If you run your vwd market manager overnight and thus the intraday chart, too, then the start date for the new day is the time stamp of the first data delivery.

This model is quite similar to the classic intraday chart, with the distinction that the data of the last day are cut off with the change of day.



You can make changes to a chart via *Properties > Compression/Period*.

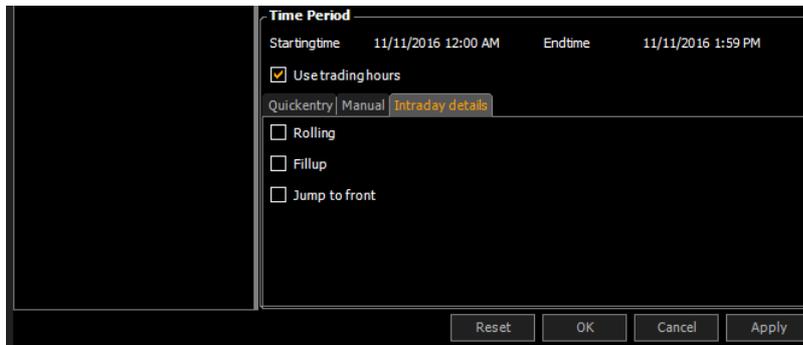


Illustration: Chart > Intraday details

3 Content

3.1 vwd diamond rating



To analyse and value the investment funds, vwd group created a new fund rating, the vwd diamond rating, with the following characteristics:

- **History** All funds in the vwd group fund universe with a quote history of 5 years are possible candidates
- **Peer group** The peer group for each fund's rating is its category according to the rules of the European Fund Classification Forum

The rating is based on five criteria as follows:

1. Consistency (1 year performance over the previous 5 years)
2. Performance (5 year overall performance)
3. Risk (5 year volatility)
4. Alpha (monthly performance versus peer group over previous 5 years)
5. Capital preservation (monthly underperformance towards risk free rate over previous 5 years)

► Data universe

All funds within the vwd group fund universe with a quote history of 5 years are possible candidates for receiving a rating. The funds data base includes all funds with a marketing authorisation in the respective country.

► Categories

The usefulness of a rating essentially depends on the comparability of the products in question. The relative ratings of two funds should be affected more by manager skill than by market circumstances or events that lie beyond the fund managers' control.

Therefore, only funds that belong to an identical peer group (funds category) can be compared. Consequently, the classification is an important aspect of the fund rating. It should reflect the investment opportunities for investors. They also should be consistent and understood by every-body. At the same time, the classification will have to develop continuously in order to ensure it remains relevant.

Investment tastes change, often in response to market developments, and such changes need to be reflected within the classification system.

That's why the rating follows the classification of the European Fund Classification Forum (EFCF), a working group of the European Fund and Asset Management Association (EFAMA). Their specific goal was to search for a classification system capable of grouping together similar funds for comparison purposes. The growth of cross-border fund distribution heightens the need for a true pan-European classification system to provide consistent peer group analysis across European markets. EFCF came up with well-defined fund categories, subjected to robust criteria, on a mutually agreed basis.

► Rating criteria

The rating is purely quantitative, there is no subjective component. It is a descriptive, backward-looking measure of historical performance as well as the respective risk taken by the funds management. Therefore, funds cannot be considered when:

- the fund is less than five years old
- the category is not meaningful or homogeneous enough
- less than 10 funds are in the respective category

The rating is based on 5 criteria, which each have an equal weight in the final rating:

1. Consistency (20%)
2. Performance (20%)
3. Volatility (20%)

4. Alpha (20%)
5. Capital preservation (20%)

► Consistency

Consistency is a measure that tracks the nature of a fund's overall return. It is used to address whether the returns were achieved steadily over time, or whether the fund had an abnormal gain over a short period that has skewed performance up. Within each investment category, the yearly performance of the fund is compared to the other funds in that category during each of the five previous years. For each of these five years, the funds are ranked on their 1-year return. The consistency score is based on the average of these 5 rankings.

► Performance

Performance is a measure that tracks the overall return of the fund. Each fund is ranked within its category on the basis of its 5-year return.

► Volatility

Volatility is a measure of the degree to which the fund's periodic returns vary either side of its mean return. The larger the fluctuation, the riskier the fund is.

► Alpha

Alpha is a measure of the fund's returns against its benchmark. This measure is used to see if the fund can provide superior excess returns to that of the benchmark, hence a key input in evaluating whether the fund has outperformed

► Capital preservation

Capital Preservation refers to absolute losses at periods when the fund underperforms a risk-free guaranteed investment. The rationale: you can always get a guaranteed return by investing in a risk-free guaranteed investment like a bank term-deposit. The risk of investing in a mutual fund not only includes the possibility of losing money, but also the chance of earning less than you would have on a guaranteed investment. Monthly fund returns are compared against the monthly risk-free return. Risk-free return is defined as the one month Euribor. For all months the fund has underperformed the risk-free return, the magnitude of underperformance is added.

► Score calculation

Within each category, the best and worst raw scoring fund for each of the above described measure is assigned a value of 100 and 0 respectively, and all intervening raw scores for that constituent are proportionately rescaled into this range. The rescaled scores for each fund's 5 constituents are then averaged to form an overall score which is given along the following distribution:

- 5 vwd diamonds – Top 10%
- 4 vwd diamonds – Next 22.5%
- 3 vwd diamonds – Middle 35%
- 2 vwd diamonds – Next 22,5%
- 1 vwd diamonds – Bottom 10%

The rating will be calculated on the basis of end-of-month data.

3.1 Legal Entity Identifier (LEI)

We have added the Legal Entity Identifier (LEI) to the vwd market manager, Field ID 2575. You can find it for example in Full Quotes via the tab "Other data". The LEI is available for stocks, bonds and issuer ratings (for Moody's and Fitch).

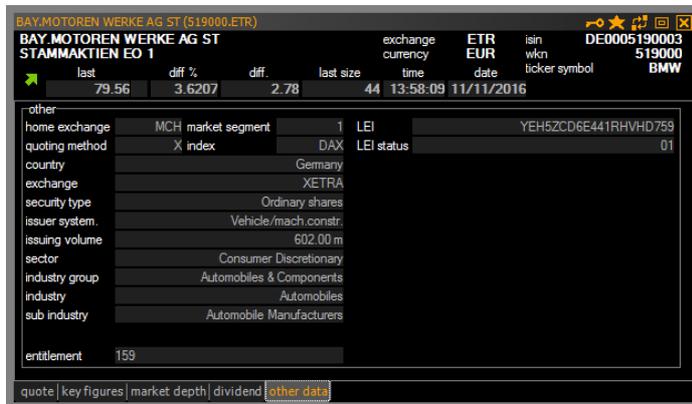


Illustration: Full Quote (Equity) > Other data

3.2 Credit Default Swaps - Ratings and Industries

The package contains the Credit Default Swaps (CDS) for industries from Standard & Poors. This can be used to monitor changing market conditions and their impact on industries and to enrich analyses with intelligently aggregated data based on industries and ratings. It can be very decisive information comparing credit ratings.

3.3 Itraxx Indices

The Markit iTraxx indices (CDS indices) include the most liquid titles in Europe and Asia. The selection methodology ensures that the indices are replicable and represent the largest and most traded part of the market. The indices are based on data contributed by top banks with strict quality controls. Markit iTraxx indices enable a better assessment of the development of corresponding credit derivatives markets better and offer an opportunity to actively control credit risks in the portfolio management.

3.4 Macroeconomic data

This package gives you access to economic indicators from more than 90 countries. With an optimised presentation of the content you can easily analyse and compare them.

You can analyse for example the export rate in several countries simultaneously using the standardised database, or get a detailed breakdown of the most important data of the country of your choice. In addition, you have the opportunity to evaluate the historical development of indicators

Test the new data package free of charge and without obligation. Simply contact our Customer Service.

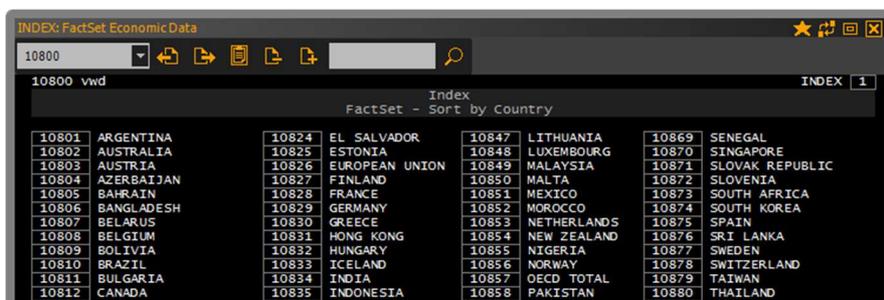


Illustration: vwd page #10800 > Index FactSet – Sort by Country

3.5 Macroeconomic estimations and currency quotations

Get the full range of economic forecasts by leading economists with FocusEconomics.

You get access to reliable data and analysis on the most important macroeconomic indicators from a total of 127 countries from Asia, Europe, North and South America, the Middle East, North Africa and Africa. At a glance you will find important information on past, current and possible future developments.

Using FocusEconomics forecast, you can easily assess the relevant business environment, analyse trends, and plan the future of your company.

Test the new data package free of charge and without obligation. Simply contact our Customer Service.

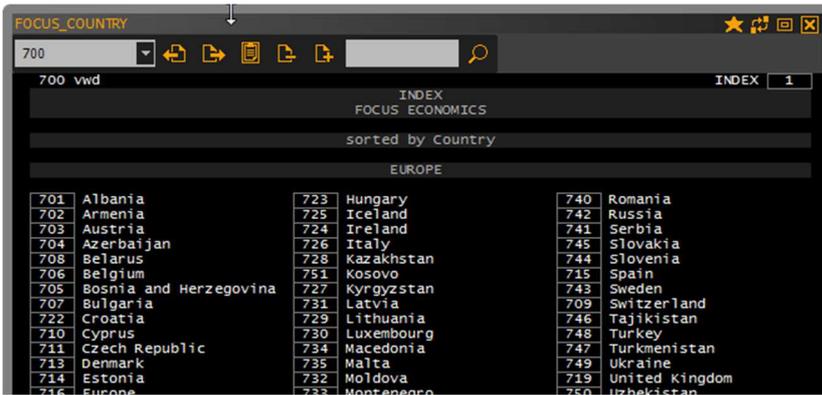


Illustration: vwd page #700 > Index Focus Economics

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