

# Getting started

## Time Series & Curves

Nordea Analytics



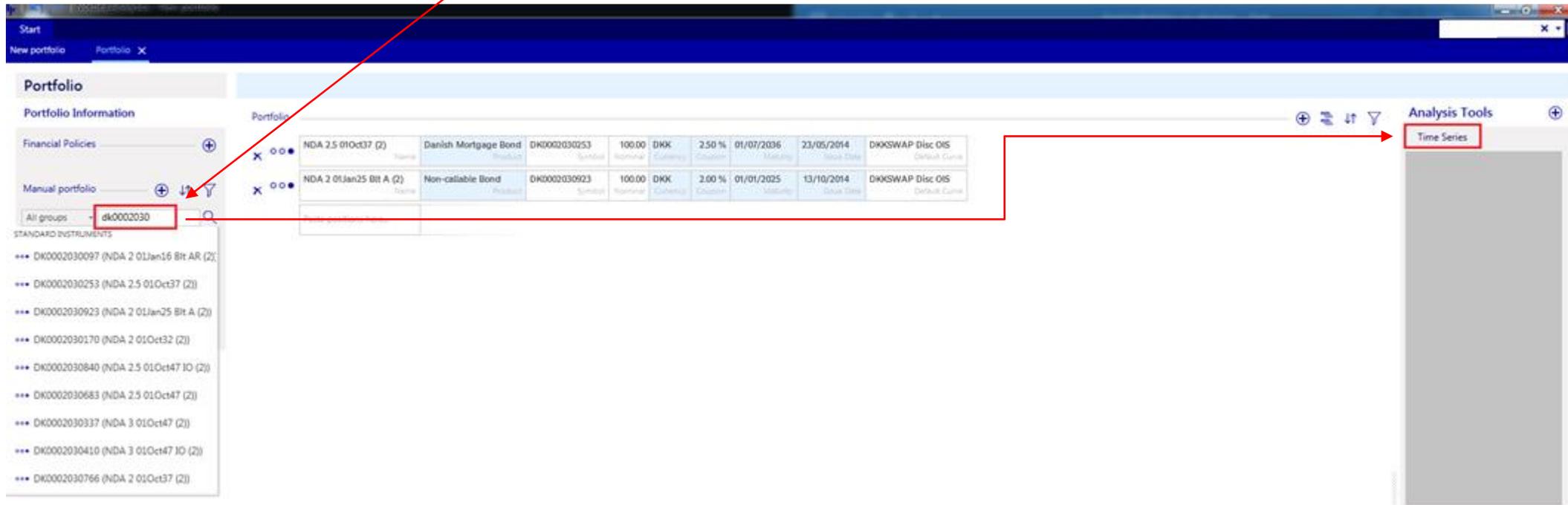
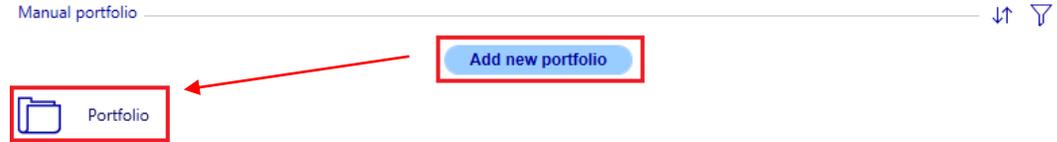
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# Creating a portfolio

If you have not yet read the guide Portfolio creation and saving, consider doing so before continuing.

Create a portfolio, add instruments and select Time Series under Analytics Tools. If you already had a portfolio created, drag and drop it on to Time Series.



## General settings

To run Time Series, press the big play-icon ▶.

By default, data for the past year will be retrieved and all series will be displayed in the same chart.

Series-specific settings can be changed from Edit Time Series. This includes among others

- Key figure
- Chart to show each series in
- Axis-settings
- Functionality to create custom series

1. Change dates to suit the analysis

2. Table settings

The screenshot displays the 'Time Series' configuration interface. At the top, there's a navigation bar with 'Start', 'My workspace', 'Portfolio', and 'Time Series'. Below this, the 'Time Series' panel is visible, featuring a 'Portfolio' section. The 'From' and 'To' date fields are set to '08-07-2019' and '08-07-2020' respectively, and are highlighted with a red box. To the right of these fields, there are three checkboxes: 'Include Data' (checked), 'Include Statistics' (checked), and 'Minimize Statistics' (unchecked), also highlighted with a red box. Below the 'Portfolio' section, there are two series listed: 'NDA 2.5 01Oct37 (2)' and 'NDA 2 01Jan25 Bit A (2)'. At the bottom of the 'Portfolio' section, there is a blue button labeled 'Edit Time Series Settings', which is highlighted with a red box.

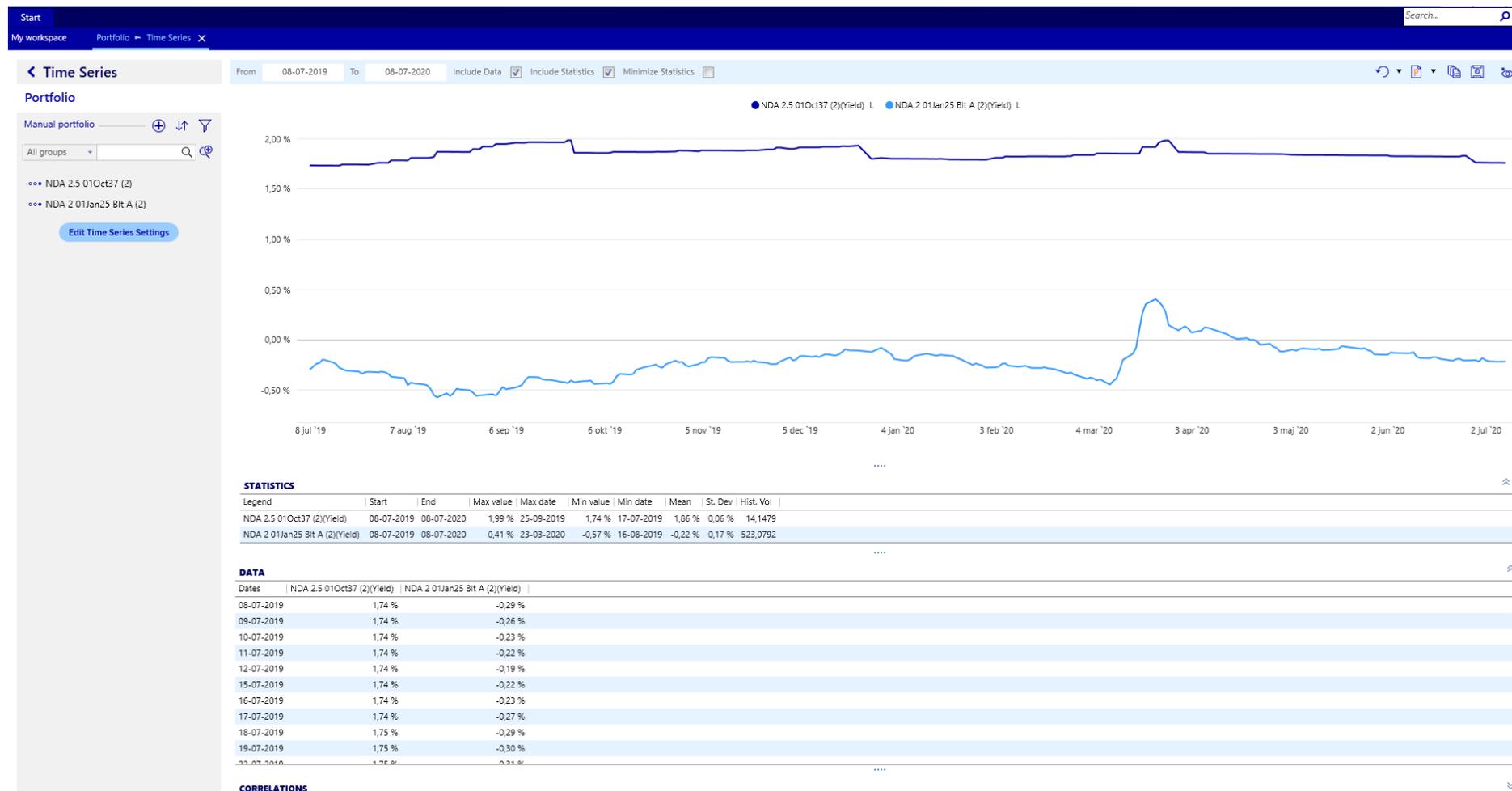
3. Series-specific settings for each series.



# Output – Time Series

The output is split into three parts

1. Chart
2. Statistical measures
3. Data
4. Correlations



# Custom Series

Select Edit Time Series Settings and press Add Custom Series to create a new custom series.

Instrument 1 and 2 defines the instruments in the custom series.

Adding NDA 2.5 01Oct37 to Instrument 1 and NDA 2 01Jan25 to Instrument 2 creates a spread series.

Edit Time Series Settings

Input series, chart settings and key figure selection

Disable all

<input checked="" type="checkbox"/>	NDA 2.5 01Oct37 (2) Instrument 1	-	Spread vs.	None	Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2.5 01Oct37 (2)
<input checked="" type="checkbox"/>	NDA 2 01Jan25 Bit A (2) Instrument 1	-	Spread vs.	None	Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2 01Jan25 Bit A (2)

+ Add Custom Series

Input series, chart settings and key figure selection

Disable all

<input checked="" type="checkbox"/>	NDA 2.5 01Oct37 (2) Instrument 1	-	Spread vs.	None	Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2.5 01Oct37 (2)
<input checked="" type="checkbox"/>	NDA 2 01Jan25 Bit A (2) Instrument 1	-	Spread vs.	None	Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2 01Jan25 Bit A (2)
<input checked="" type="checkbox"/>	None	-	Spread vs.	None	Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2 01Jan25 Bit A (2)

<input checked="" type="checkbox"/>	NDA 2.5 01Oct37 (2) Instrument 1	-	Spread vs.	NDA 2 01Jan25 Bit A (2) Instrument 2	1	Left	Axis	Axis interval	1	Scale	Yield	NDA 2.5 01Oct37 (2)	Yield	NDA 2 01Jan25 Bit A (2)
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## Adding curves to portfolio

Curves have a separate section since they are more customizable.

Start by searching for and adding the curve you want.

1. Create a portfolio and double-click on it

2. Search for the curve

3. Select the relevant curves

4. Open the portfolio in Time Series from the upper-right corner

The screenshot displays the 'Manual portfolio' section of the Nordea system. At the top, there is a 'Manual portfolio' header with a search icon and a filter icon. Below this, a 'Portfolio' folder icon is visible. To the right, there is a blue button labeled 'Add new portfolio'. Below the 'Portfolio' folder, there is a search bar with the text 'dkkswap' entered. Below the search bar, there is a list of curves under the heading 'CURVES'. The first curve, 'DKKSWAP', is highlighted with a red box. Below the list of curves, there is an 'Analysis Tools' section with a plus sign icon. The 'Time Series' button in this section is also highlighted with a red box. Red arrows point from the numbered instructions to these specific UI elements.

# Curves in Time Series application

**Forward:** Used for Forward Spot and Implied Forward curves (x)

**Tenor:** The point on the curve to retrieve data for

Series settings →

**Input series, chart settings and key figure selection**

Disable all

<input checked="" type="checkbox"/>	DKKSWAP	-	None	1	Left		1	Forward DKKSWAP	Tenor DKKSWAP	1
	Instrument 1	Spread vs.	Instrument 2	Chart	Axis	Axis interval	Scale			

+ Add Custom Series

**Instrument details of input series**

DKKSWAP	Curve	DKKSWAP	Spot	Bootstrap	30360	Discrete
Name	Product	Yield Curve	Spot/Forward	Model	Time Convention	IR Convention

Curve settings →

Use drop-down to change curve type

Spot	Boots
Forward Spot	
Impl Fwd	
Spot	

Spot: Zero coupon yields

Forward Spot: Zero coupon curve forwarded x years

Implied Forward: Implicit forward rate, which begins at t and matures at x+t years

# Curves in Curves application

**Date:** When the data for the curve is retrieved

**Forward:** Used for Forward Spot and Implied Forward curves (x)

**To and From:** The start and end point of the curve

Series settings →

**Curve and chart settings**

Disable all

<input checked="" type="checkbox"/>	DKKSWAP	-	None	1	Left		1	03-09-2020	Forward	0	30
<input type="checkbox"/>	Curve 1	Spread vs.	Curve 2	Chart	Axis	Axis interval	Scale	Date		From (Year)	To (Year)

+ Add Custom Series

**Instrument details of input series**

DKKSWAP	Curve	DKKSWAP	Spot	Bootstrap	30360	Discrete
Name	Product	Yield Curve	Spot/Forward	Model	Time Convention	IR Convention

Curve settings →

Use drop-down to change curve type

Spot

Forward Spot

Impl Fwd

Spot

Spot: Zero coupon yields

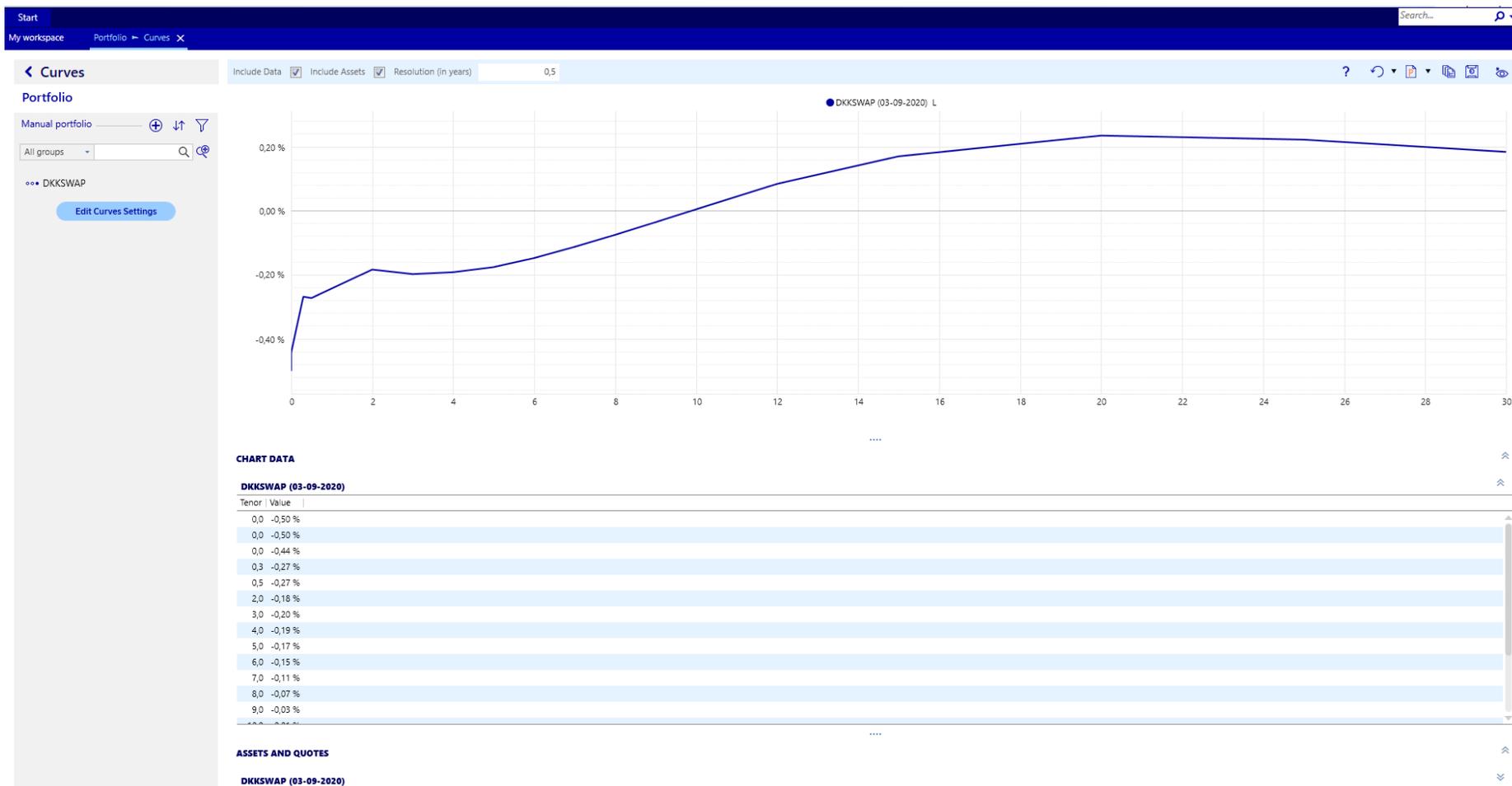
Forward Spot: Zero coupon curve forwarded x years

Implied Forward: Implicit forward rate, which begins at t and matures at x+t years

# Output - Curves

The output is split into three parts

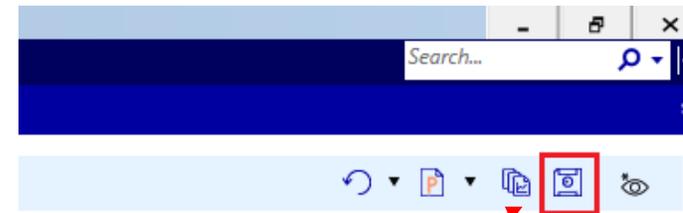
1. Chart
2. Output data
3. Input data for generating the curve (press double arrows, ⇅, to show)



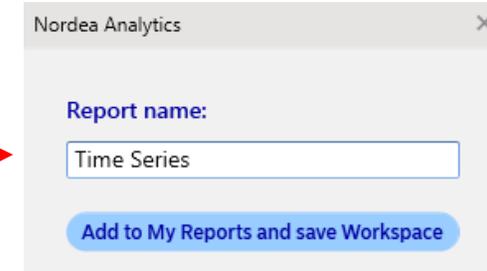
## Saving a Time Series report

When the portfolio, key figures and settings have been set up, it can be saved to be easily accessed again.

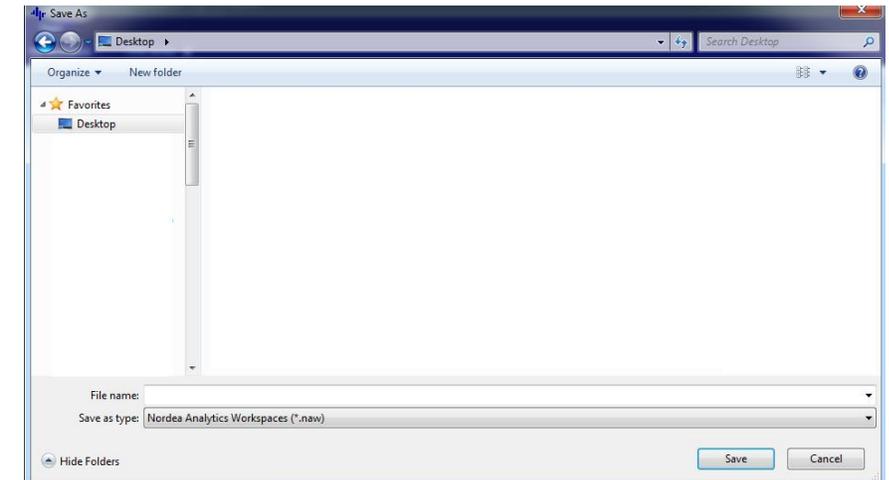
**Add to My Reports:** Press the save-icon



**Report name:** You will be prompted to name the report containing your portfolio and selection of key figures.



**Save workspace:** If you have not saved the workspace yet, you will be asked to do so now. This is the step that saves your settings, so they can be opened later after closing Nordea Analytics.



## Opening a saved Time Series report

There are two ways of opening a saved report (workspace).

1) Select Start, Open and then find the (workspace) file saved on the previous slide

2) Alternative, the most recently used workspaces will be shown in the bottom right of the front page

In the bottom right corner, the title My Reports will show up with the saved Time Series report (or the name chosen on the previous slide).

