### **DAX Equivalent**

DAX does not support direct member creation like MDX, so we need to use calculated columns or measures. Below is the equivalent DAX:

#### **Measure: Vega Across Rates Slide +/-200bps Temp1**

DAX

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Vega Across Rates Slide +/-200bps Temp1 =  
VAR ScenarioFilter = MAX('Scenario'[Scenario Name])  
VAR StressMagnitude = MAX('Scenario'[Stress Magnitude])  
RETURN  
IF (   
 StressMagnitude = 200,   
 MAXX(ALL('Scenario'), [IR Normal Vega – Rate]),   
 BLANK()  
)

#### **Measure: Vega Across Rates Slide +/-200bps Temp2**

DAX

CopyEdit

Vega Across Rates Slide +/-200bps Temp2 =  
VAR ScenarioFilter = MAX('Scenario'[Scenario Name])  
VAR StressMagnitude = MAX('Scenario'[Stress Magnitude])  
RETURN  
IF (   
 StressMagnitude = 200,   
 MINX(ALL('Scenario'), [IR Normal Vega – Rate]),   
 BLANK()  
)

#### **Measure: Vega Across Rates Slide +/-200bps**

DAX

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Vega Across Rates Slide +/-200bps =  
VAR Temp1 = [Vega Across Rates Slide +/-200bps Temp1]  
VAR Temp2 = [Vega Across Rates Slide +/-200bps Temp2]  
RETURN  
SWITCH(  
 TRUE(),  
 ISBLANK(Temp1) && ISBLANK(Temp2), BLANK(),  
 ISBLANK(Temp2), Temp1,  
 ISBLANK(Temp1), Temp2,  
 ABS(Temp1) > ABS(Temp2), Temp1,  
 Temp2  
)

#### **Applying Scope Filters**

DAX does not have SCOPE in the same way as MDX, but you can handle it using IF and CALCULATE.

##### **Filter for All Stress Magnitude Children**

DAX

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Vega Across Rates Slide +/-200bps =  
VAR BaseMeasure = [Vega Across Rates Slide +/-200bps]  
RETURN  
IF(   
 SELECTEDVALUE('Scenario'[Stress Magnitude]) IN {200, -200},   
 [IR Normal Vega Rate],   
 BLANK()  
)

This DAX translation should work within a Power BI model to replicate the logic from MDX. Let me know if you need any modifications!

4o

##### **You said:**

Where are these values coming from: IN {200, -200}

###### **ChatGPT said:**

The values {200, -200} come from the **Stress Magnitude** dimension in the MDX code, where the SCOPE statement defines special logic for those specific values:

mdx

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SCOPE({[Scenario].[Stress Magnitude].[200 bps], [Scenario].[Stress Magnitude].[-200 bps]});  
 THIS = [Measures].[IR Normal Vega Rate];  
END SCOPE;

In DAX, the equivalent logic must be implemented using IF and SELECTEDVALUE (or CALCULATE with FILTER if needed). The {200, -200} values represent the stress scenarios applied to interest rate movements (e.g., +200 basis points or -200 basis points).

If your dataset does not contain exactly 200 and -200 as values in the **Scenario[Stress Magnitude]** column, you'll need to check how this field is stored in your Power BI data model. You can do so by looking at the **Scenario** table in Power BI or running a simple measure:

DAX

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DISTINCTCOUNT('Scenario'[Stress Magnitude])

If the stress magnitude values have a different naming format (e.g., "200 bps" instead of 200), you'll need to adjust the condition accordingly:

DAX

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Vega Across Rates Slide +/-200bps =  
VAR BaseMeasure = [Vega Across Rates Slide +/-200bps]  
RETURN  
IF(   
 SELECTEDVALUE('Scenario'[Stress Magnitude]) IN {"200 bps", "-200 bps"},   
 [IR Normal Vega Rate],   
 BLANK()  
)