# Relative Rotation Graphs RRG <go> A new tool to visualize Relative Strength

MTA symposium May 2011

Julius de Kempenaer



- -1987 black Monday
- -1990 gorby crash
- -2000 .com bubble
- -2008 credit crunch



Today's youth loves luxury. They are bad mannered, despise all authority, show no respect and talk when they should be working. The youngsters do not rise from their seats when elderly people enter, they go against their parents, chat in company, gobble down their food and tyrannize their teachers.

Socrates 400 bC











```
PRICES
         THEN
                              FALL
       UP HERE
                              A POINT
    STOCKS
                                OR TWO
  BACK
                                     IN A
 AND BUYS
                                    DAY OR
BULLISH
                                   TWO AND
TURNS
                                      EVERY
TRADER
                                     TRADER
AND EVERY
                                      TURNS
 OR TWO
                                   BEARISH
  IN A DAY
                                    ON THE
   OR TWO
                                  MARKET
     A POINT
                                    AND
       THEY RISE
                               SELLS
          THEN
                          STOCKS
                DOWN HERE
```





It does make sense to look at history.....

You might learn something



# John Wayne

Tomorrow is the most important thing in life. Comes into us at midnight very clean. It's perfect when it arrives and puts itself in our hands. It hopes we've learned something from yesterday.



# Choice, From Wikipedia, the free encyclopedia

**Choice** consists of the <u>mental process</u> of <u>thinking</u> involved with the process of <u>judging</u> the merits of multiple <u>options</u> and <u>selecting</u> one of them for action. Some simple examples include deciding whether to get up in the morning or go back to sleep, or selecting a given route for a journey. More complex examples (often decisions that affect what a person thinks or their core beliefs) include choosing a lifestyle, religious affiliation, or political position.

Most people regard having choices as a good thing, though a severely limited or artificially restricted choice can lead to discomfort with choosing and possibly, an unsatisfactory outcome. In contrast, unlimited choice may lead to confusion, regret of the alternatives not taken, and indifference in an unstructured existence; and the illusion that choosing an object or a course leads necessarily to control of that object or course can cause <u>psychological</u> problems.



# A difficult choice......



Some choices are more difficult than others





# A choice made by someone else.....





# Their own choice ......



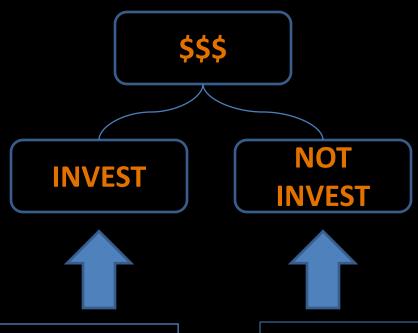






#### Investors face many, many choices!

- First big question to answer is to invest or not to invest?
- For private investors it's a real choice



If the choice is TO INVEST then the fun starts now

If the choice is NOT TO INVEST the added value of this presentation stops here



What if your business card looks like this:

# johnny goodtimes

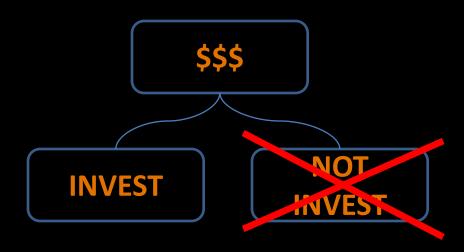
Portfolio manager

Mike Devine | 4.30.08



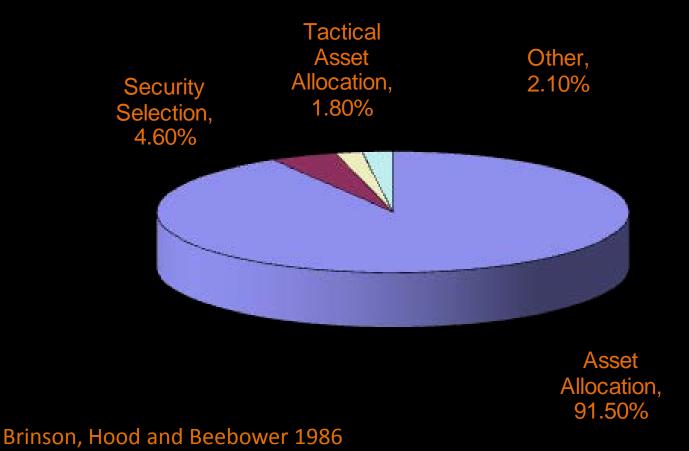
#### To invest or not to invest....?

- Pension fund or comparable institutions with long-term liabilities have no real choice.... they have to invest
- Serious risk of not being able to see the forest from the trees.
- Structured approach is needed





# Where does your return come from?





# Simple Asset Allocation choice.



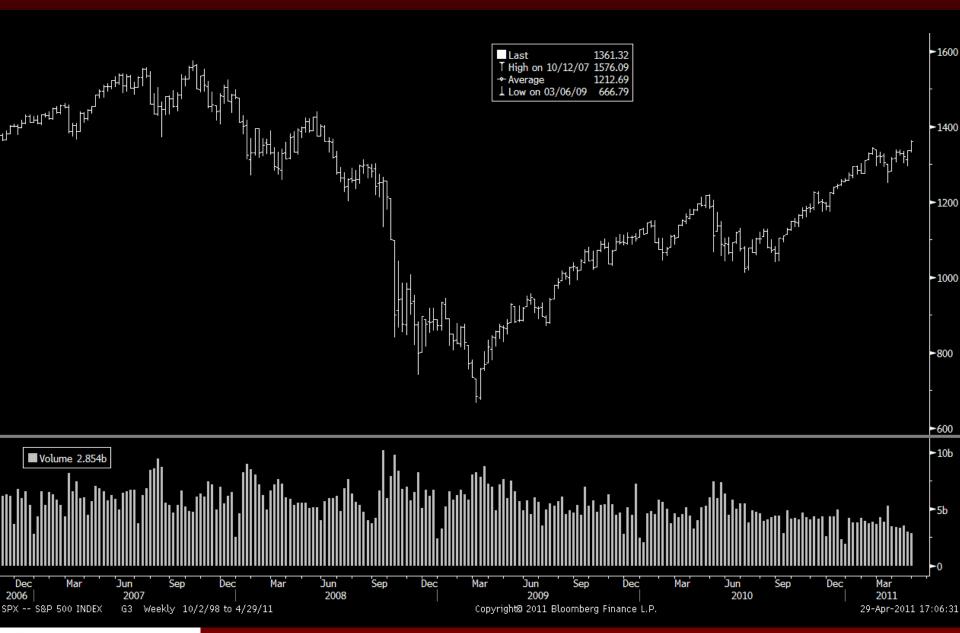


# What do we (technicians) have in our toolbox?

- Graphs , many different graphs
- Ranging from very simple to very complex

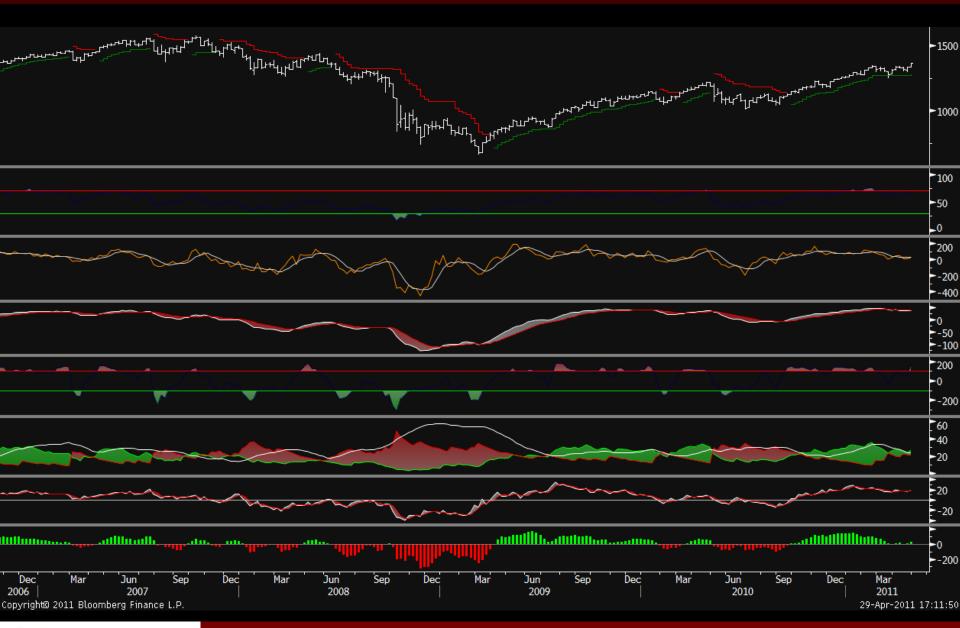


# Simple graph of S&P 500 index





# Same S&P 500, a bit more complex.









# **German Bund Future**





#### **Euro STOXX 50 index**





- Problem with single security graphs is that the only answer you will get is to invest or not to invest in that one security
- To view things in a broader context is more difficult
- In our technicians toolbox there is one single technique that helps you to make choices, distinguish between 2 securities.



Everything is Relative strength is Everything

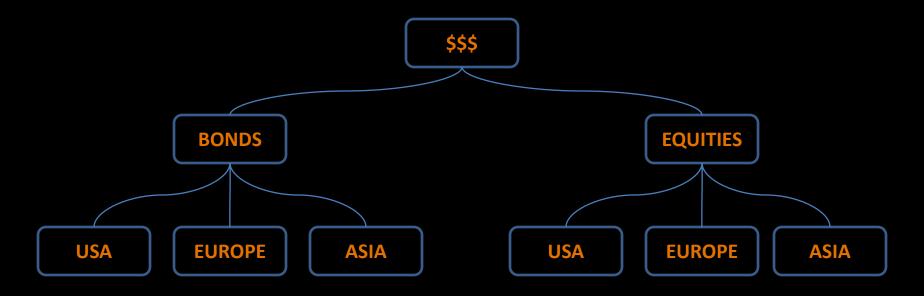


#### Euro STOXX 50 index vs. Bund future





- Stock/bond question can (easily) be answered using RS
- Next step down the pyramid / decision tree



$$3 \times 3 = 9 - 3 = 6 / 2 = 3$$
 choices

3 we can handle by looking at 3 RS graphs



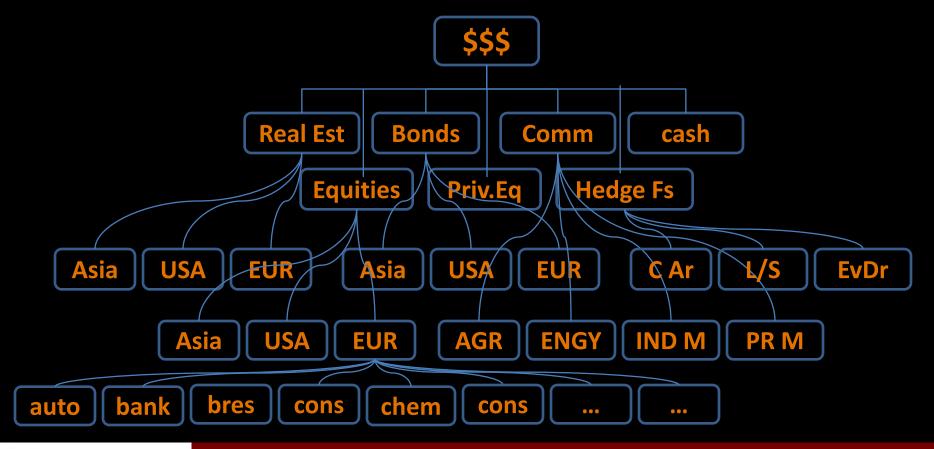
	Α	В	С	D	Ε							
Α												
В												
С												
D												
Ε												
F												
G												



- In AC equities next step could be to look at sectors.
- In europe 19 Stoxx sectors
- In US for example 10 GICS L1 sectors or 24 GICS L2 industry groups etc.
- 19x19=361-19=342/2=171
- 10x10=100-10=90/2=45
- 24x24=576-24=552/2=276
- Now that's more of a challenge



- Back to being Johnny Goodtimes
- And your decision tree looks something like this, you may need something else





# Sector comparison: Banks vs. STOXX 600





#### Sector comparison: Utilities vs. STOXX 600





#### JdK RS-Ratio

- The individual RS lines once again give pretty good clue about indivdual comparisons vs benchmark
- The RS lines answer "good" or "bad"
- They do not answer "how good" or "how bad"
- Or "best" and "worst"
- Raw RS values (sec A/sec B) are like apples and oranges they cannot be compared
- Normalizing the RS values enables "ranking"
  - JdK RS-Ratio



#### JdK RS-Ratio

	JdK RS-ratio
INSU	103.63
OILG	103.42
CONS	103.40
TECH	103.19
REAL	102.10
CHEM	101.64
IGSV	101.47
FISV	100.75
UTIL	99.74
TELE	99.29
MEDA	99.29
BRES	99.10
AUTO	98.94
FBEV	98.84
HTHC	98.48
BANK	98.22
PHHG	98.03
TRLS	95.75
RETL	95.48

- STOXX sectors (19) ranked by JdK RS-Ratio vs STOXX 600
- High values are "good"
- Low values are "bad"
- How does this look over time?



#### Retail with JdK RS-Ratio vs. STOXX 600





#### Insurance with JdK RS-Ratio vs. STOXX 600





## Retail with JdK RS-Ratio vs. STOXX 600 + trigger line





# Insurance with JdK RS-Ratio vs. STOXX 600 + trigger line





### Retail with JdK RS-Ratio vs. STOXX 600 + JdK RS-momentum





#### Insurance with JdK RS-Ratio vs. STOXX 600 + JdK RS-Momentum

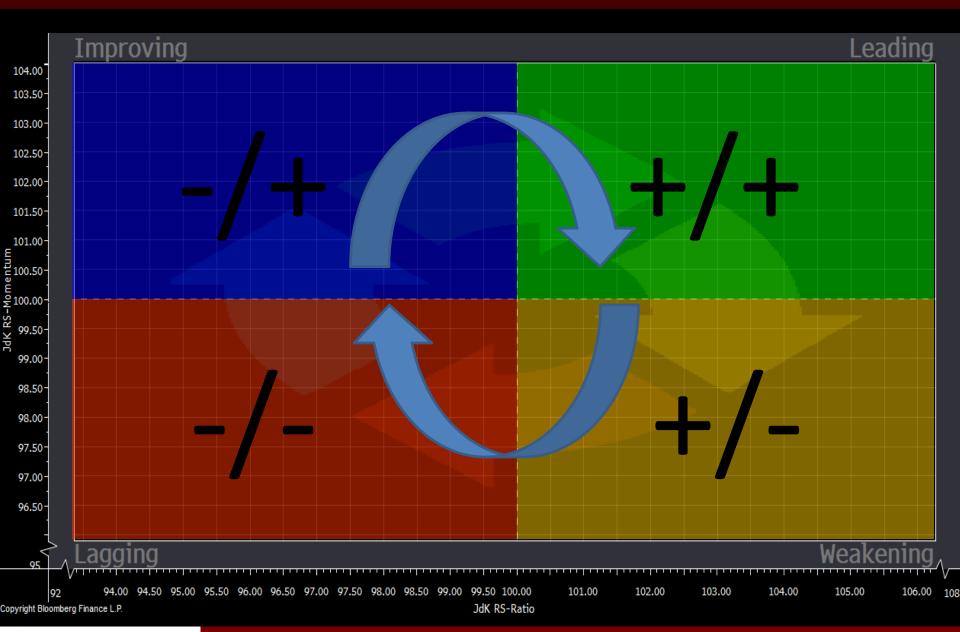




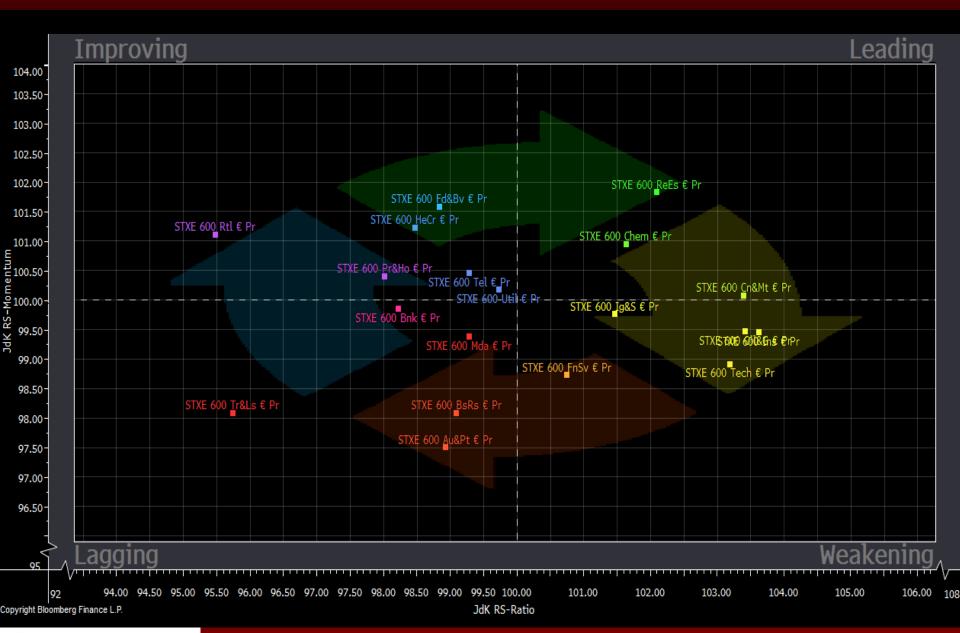
## Putting it all together.

- We have a lot of information now; comparable across the universe
- The RS approach in general adds value to the investment process
- But we still have to flip thru charts to get an idea about what's going on in the universe as a whole
- Add another Johnny Goodtimes problem :
  - This week is "technology" week
- Wouldn't it be nice if we could put all this information together in one screen / graph ?









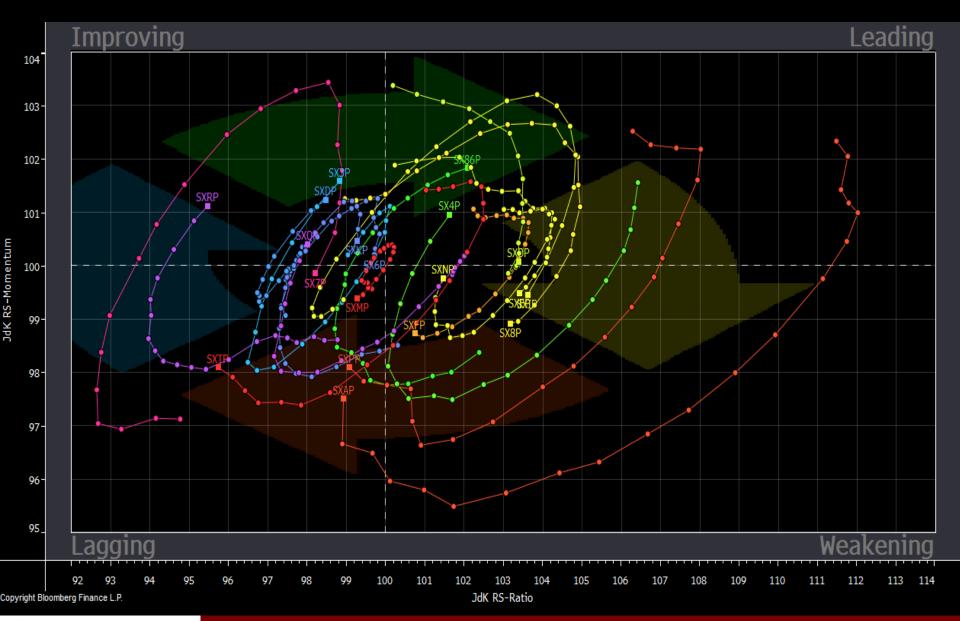






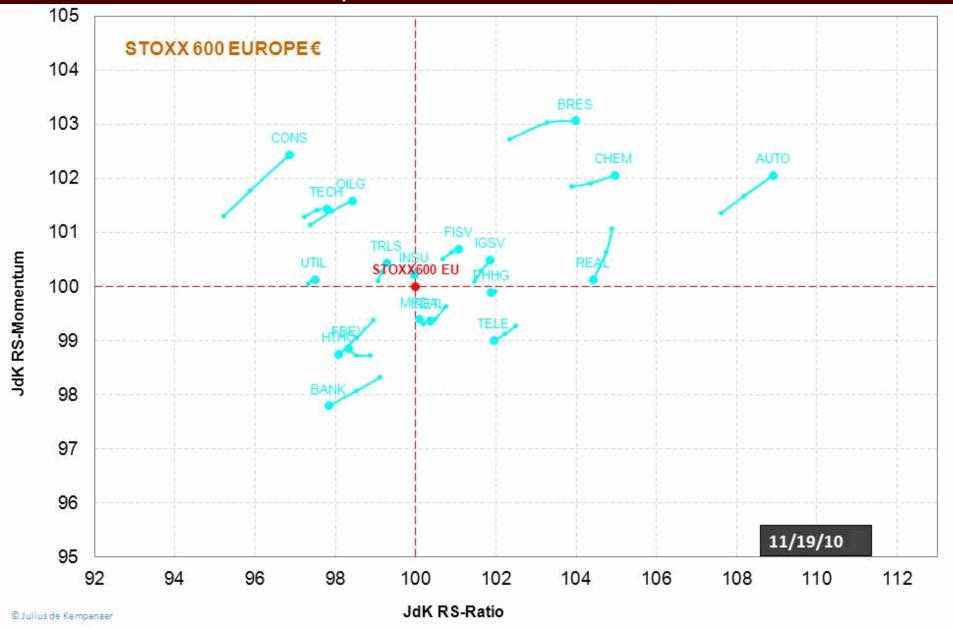






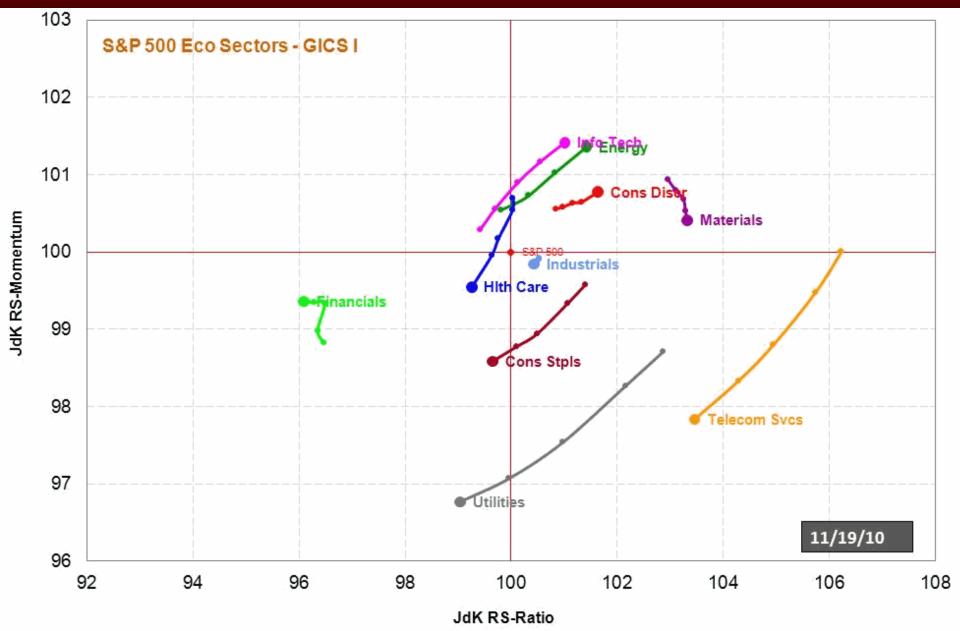


# RRG: STOXX 600 Europe



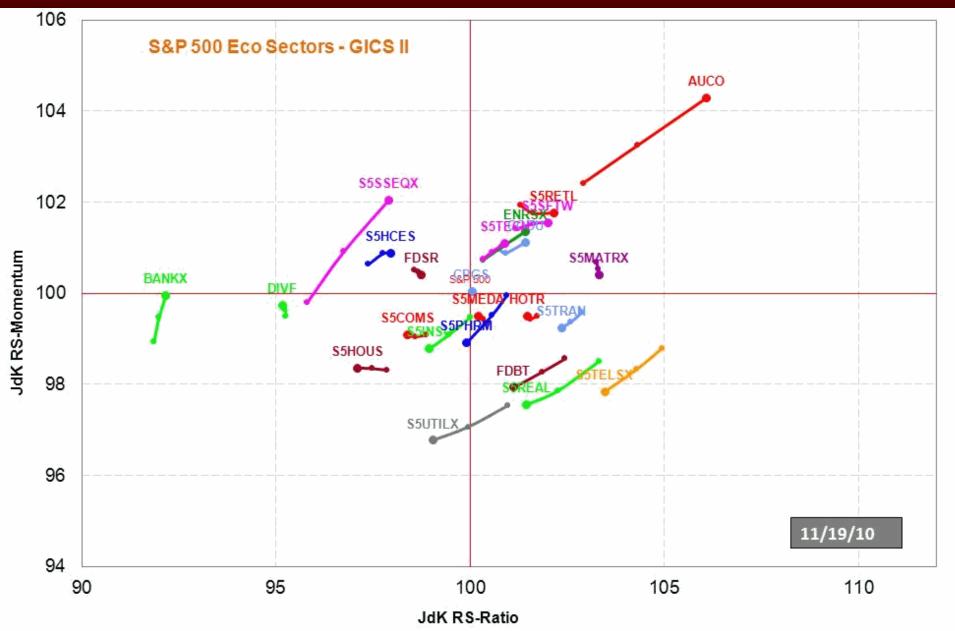


## RRG: S&P 500 GICS Level I



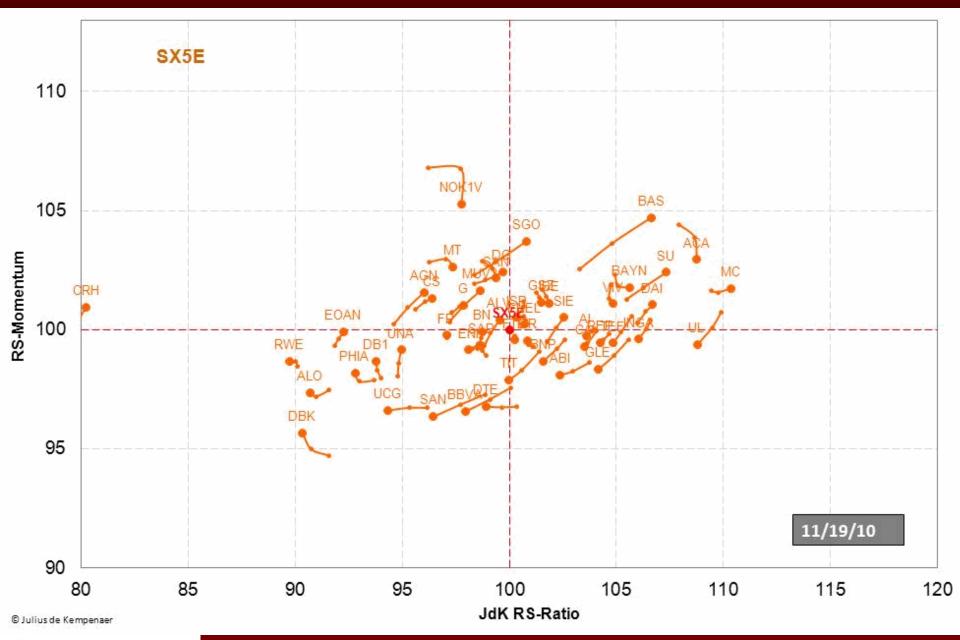


## RRG: S&P 500 GICS Level II



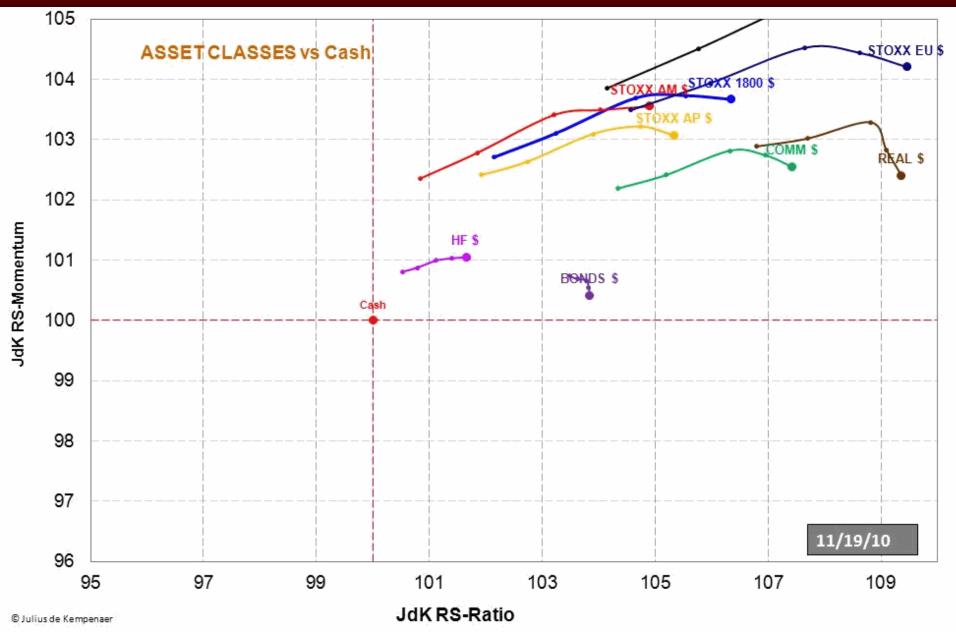


# RRG: Euro STOXX 50 index



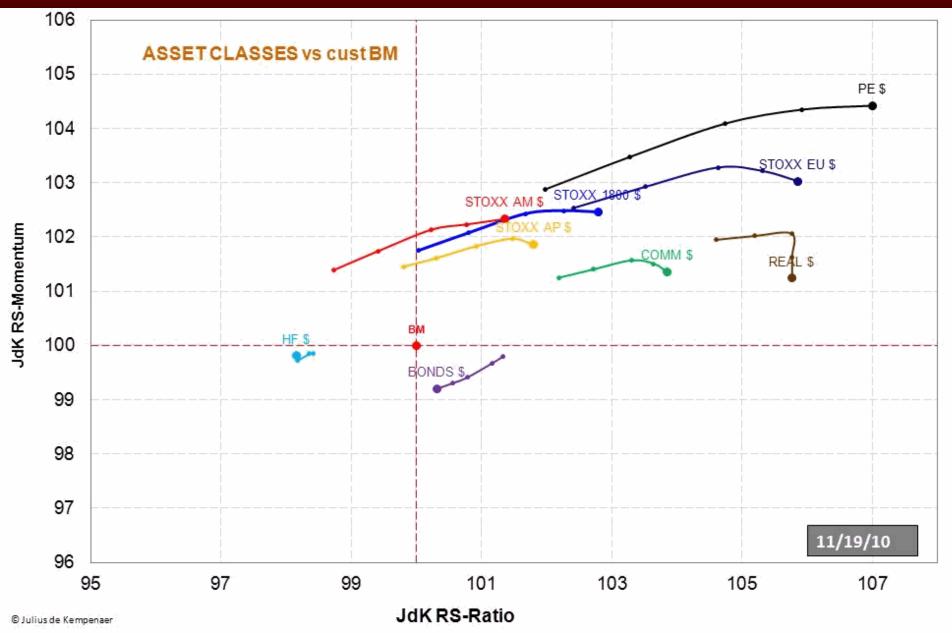


## RRG: Asset Classes vs. Cash index



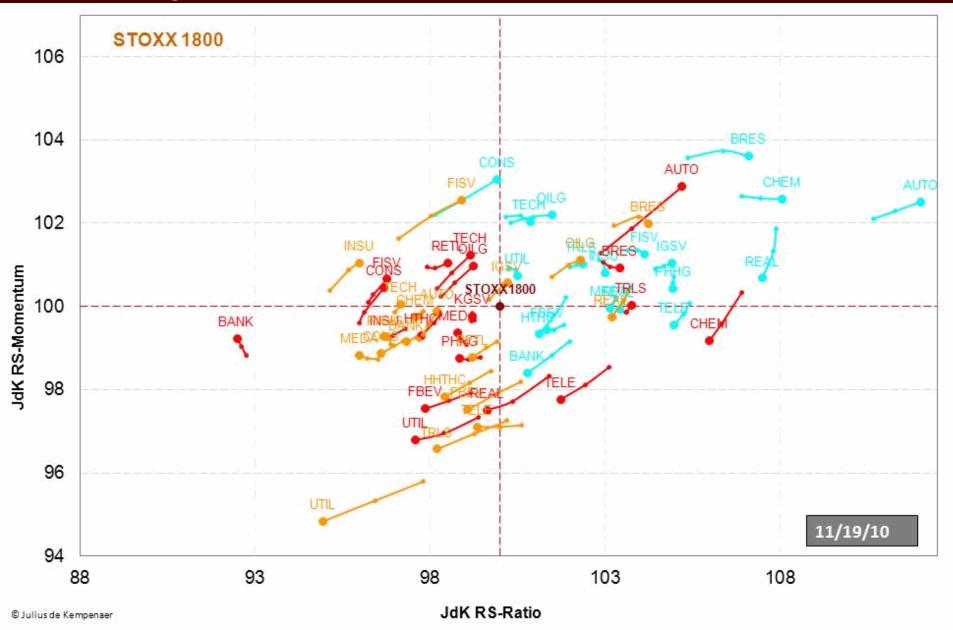


# RRG: Asset Classes vs. Custom benchmark



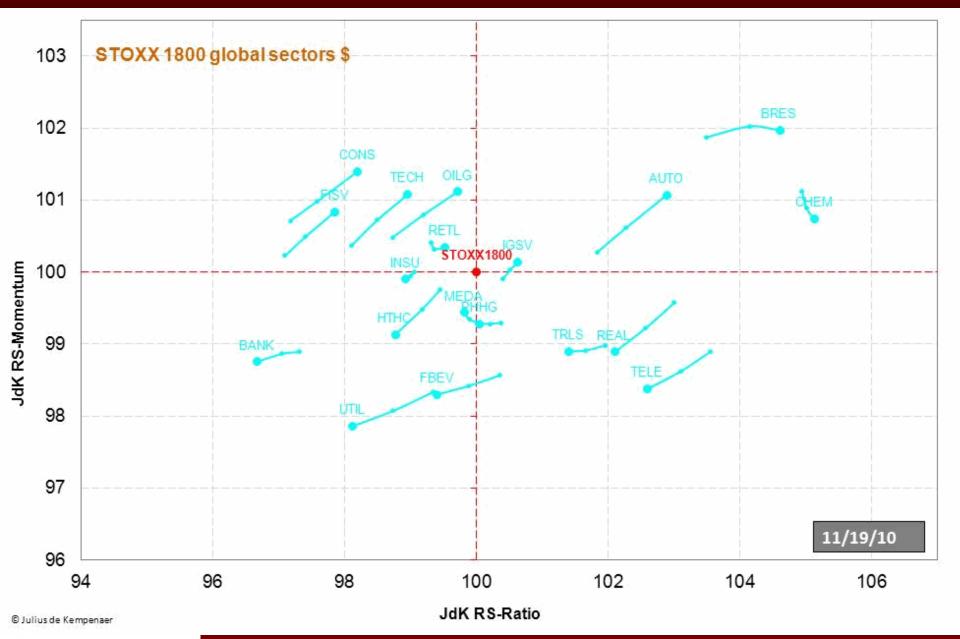


# RRG: Regional sectors STOXX 1800



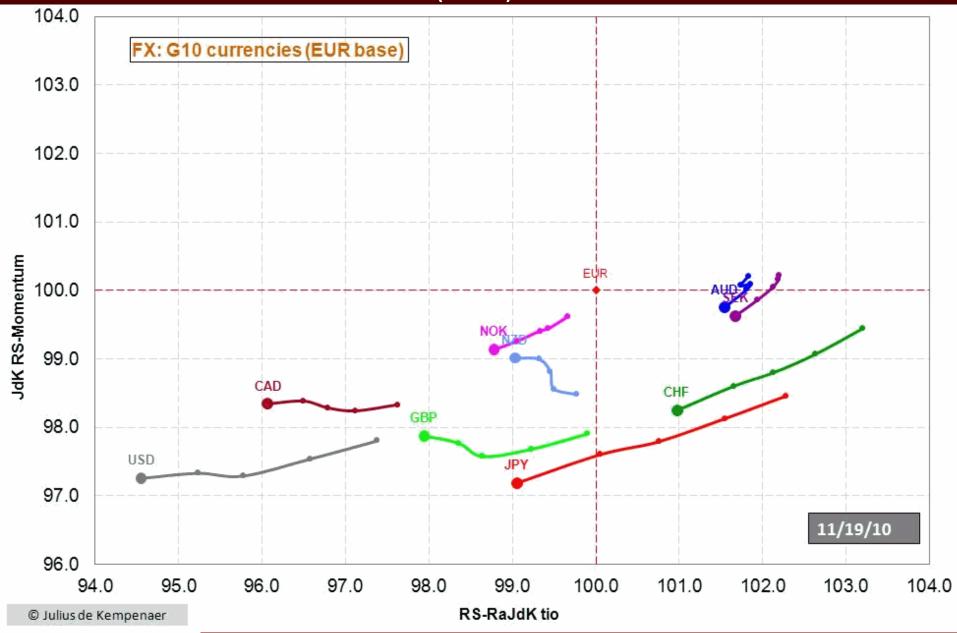


# RRG: STOXX 1800 Global sectors





# RRG: G10 Currencies vs EUR (base)





- Visualize the relative positions of the elements in a universe in a unique way
- Not a trading system per se but a valuable tool to monitor what's going on in a universe
- Shows that markets actually "rotate"
- Markets did that 100 years ago, 50 years ago, last year and they still do it at this very moment
- History is repeating itself! And it does that in circles...
- With this tool we can actually see it happening and possible make better informed choices.
- Hopefully make Johnny Goodtimes' life a little easier!!





Julius de Kempenaer Taler Asset Management Ltd.

dekempenaer@talergroup.com
MSG de kempenaer<GO>

<u>www.TAMresearch.com</u> <u>www.RelativeRotationGraphs.com</u> (not active yet)



DISCLAIMER: The material contained herein is subject to change without notice and is provided for informational purposes only. It should not be construed as a solicitation or offer to buy or sell any securities or other financial instrument. We make no representation or warranty of any kind, either express or implied as to the accuracy, reliability, up-to-dateness or completeness of the information contained herein. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be relied on in any investment decision. You should obtain relevant and specific professional advice before making any investment decision. The value of investments may go up or down due to various factors including but not limited to changes in rates of foreign exchange and you may not get back the amount invested. Past performance is not necessarily a guide to the future. We disclaim any responsibility and liability whatsoever in this respect.

Taler Asset Management Ltd is authorized and regulated by the Financial Services Commission Gibraltar in the conduct of investment business.

Taler Investment Consulting BV is authorized and regulated by the AFM (Dutch regulator) in the conduct of investment advise.

#### Please note:

Personal use of the graphing techniques presented is allowed and encouraged, but the RRG Ltd. explicitly claims the intellectual property and copyright of these materials.

Use in commercial documents or making the graphs available in commercial software or systems or for any other commercial use is only permitted after written permission from RRG Ltd.

