

# Overview of Lloyd's using R and googleVis

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# Why the Google API?

- Interactive charts make data fun
- I love R for statistical analysis
- Google Visualisation API is easy to use
- Great (sexy?) tool to engage with others on data analysis



# Intro to googleVis

- googleVis provides interface to core Google API Charts
- Development started in August 2010
- First draft code was written to visualise Lloyd's data
- Charts are generated and displayed locally

# Lloyd's is a dynamic and innovative insurance market

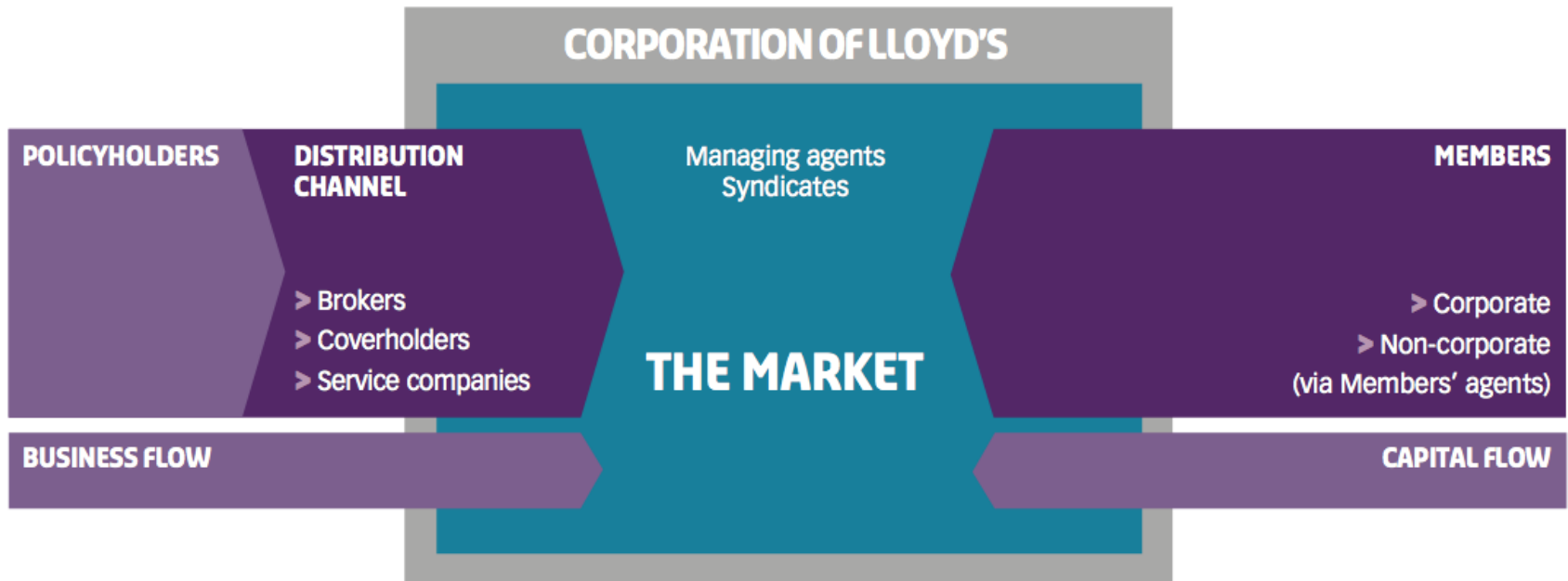


# The leading specialty property and casualty insurance market



Home of 88 syndicates, managed by 57 agents, as at 31. December 2011 (Lloyd's Annual Report)

# Lloyd's offers efficient usage of capital and expertise



## Lloyd's capacity by source and location

Worldwide insurance industry 22%  
Bermudian insurance industry 10%  
US insurance industry 17%

UK insurance industry and other corporate 39%  
Individual members (limited liability) 9%  
Individual members (unlimited liability) 3%

Source: Lloyd's Annual Report 2011



# Lloyd's writes a diversified book around the world

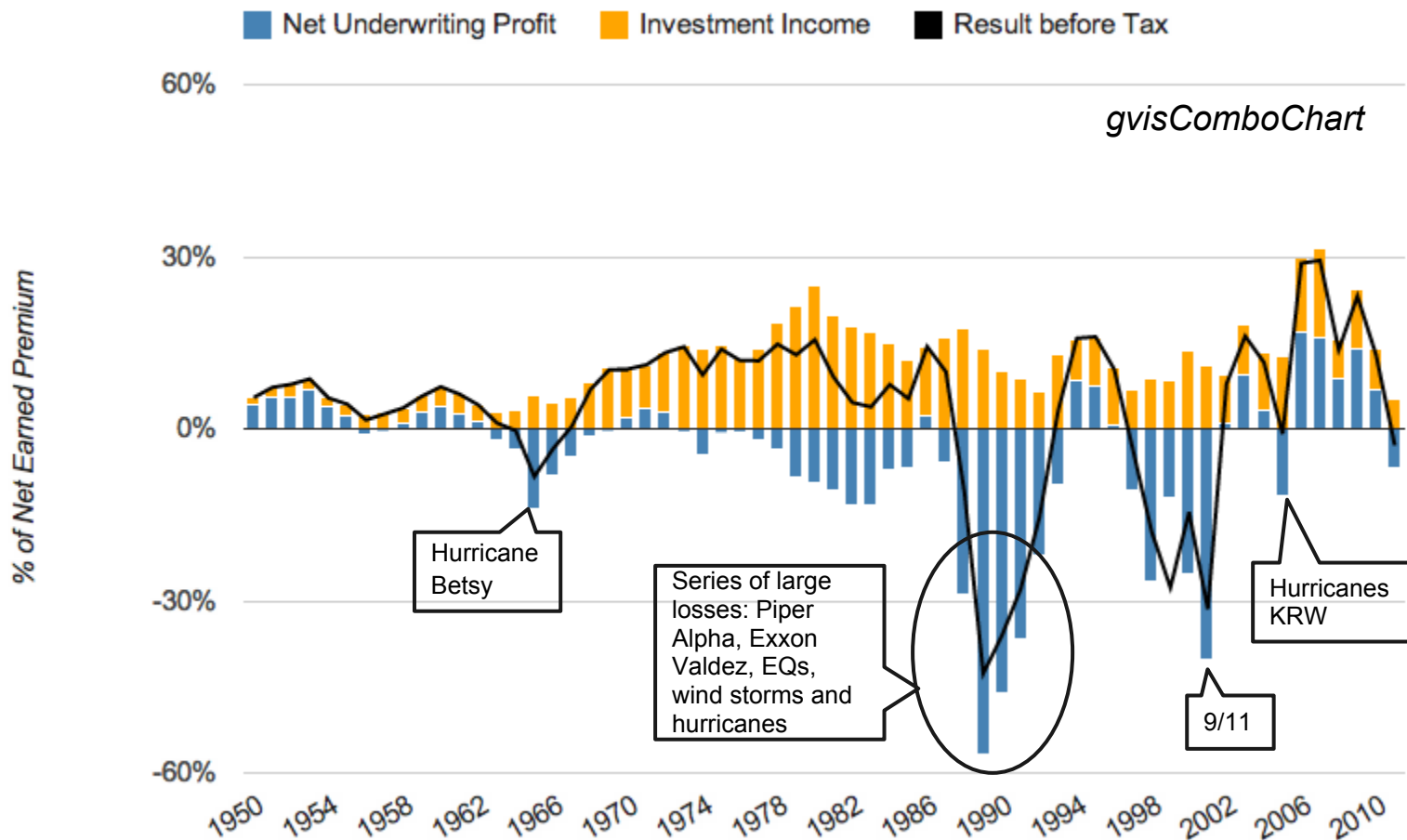
*gvisBarChart*



Source: Lloyd's Annual Report 2011

*Premium split %*

# Lloyd's has managed its crises in the past



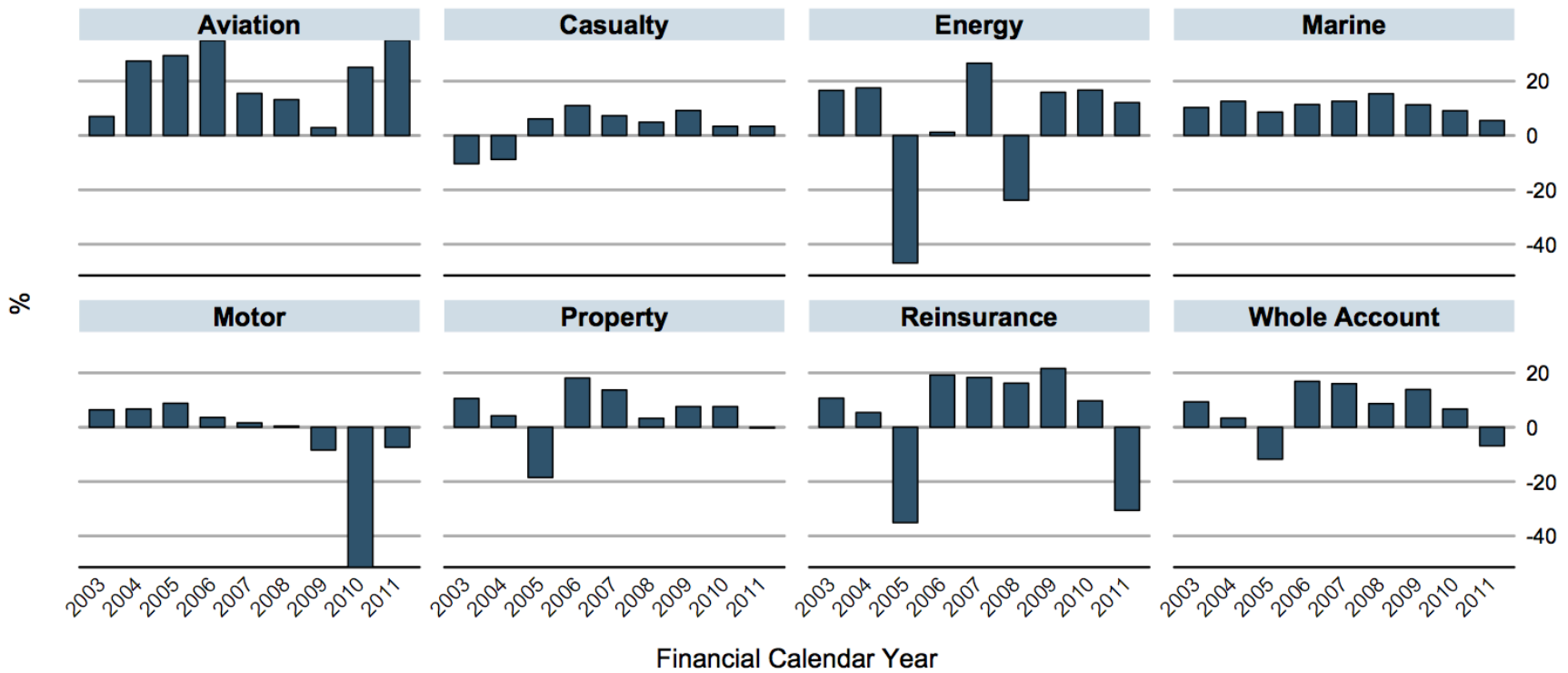
Source: Lloyd's Annual Reports, Statistics relating to Lloyd's 2001; Lloyd's data for 1950 – 1999 on three year accounting (assuming written=earned premium and 18% brokerage), and from 2000 onwards on annual accounting basis.



# Shows strong underwriting despite catastrophes

Underwriting Profit/(Loss) as % of Net Earned Premiums

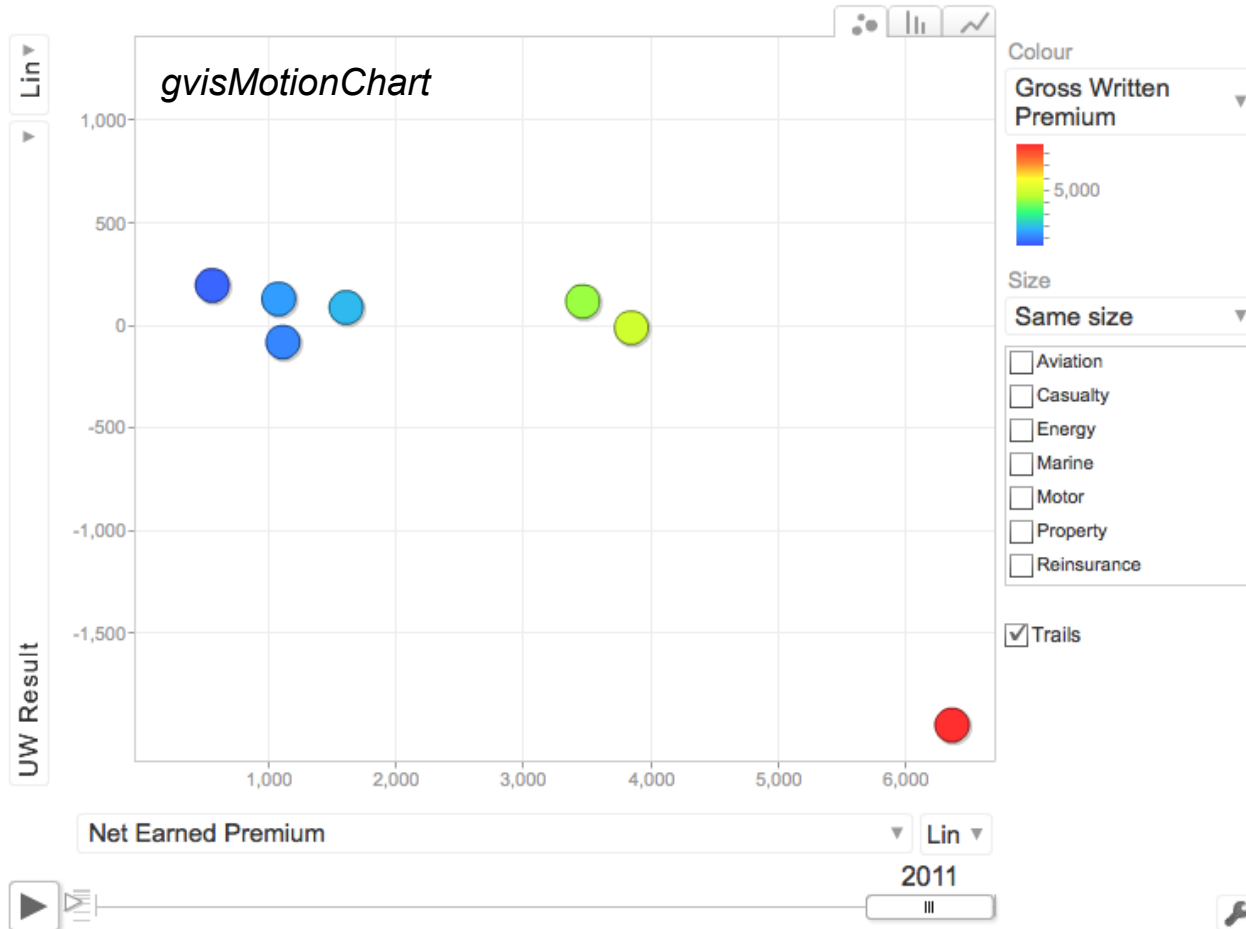
*latticeExtra, asTheEconomist*



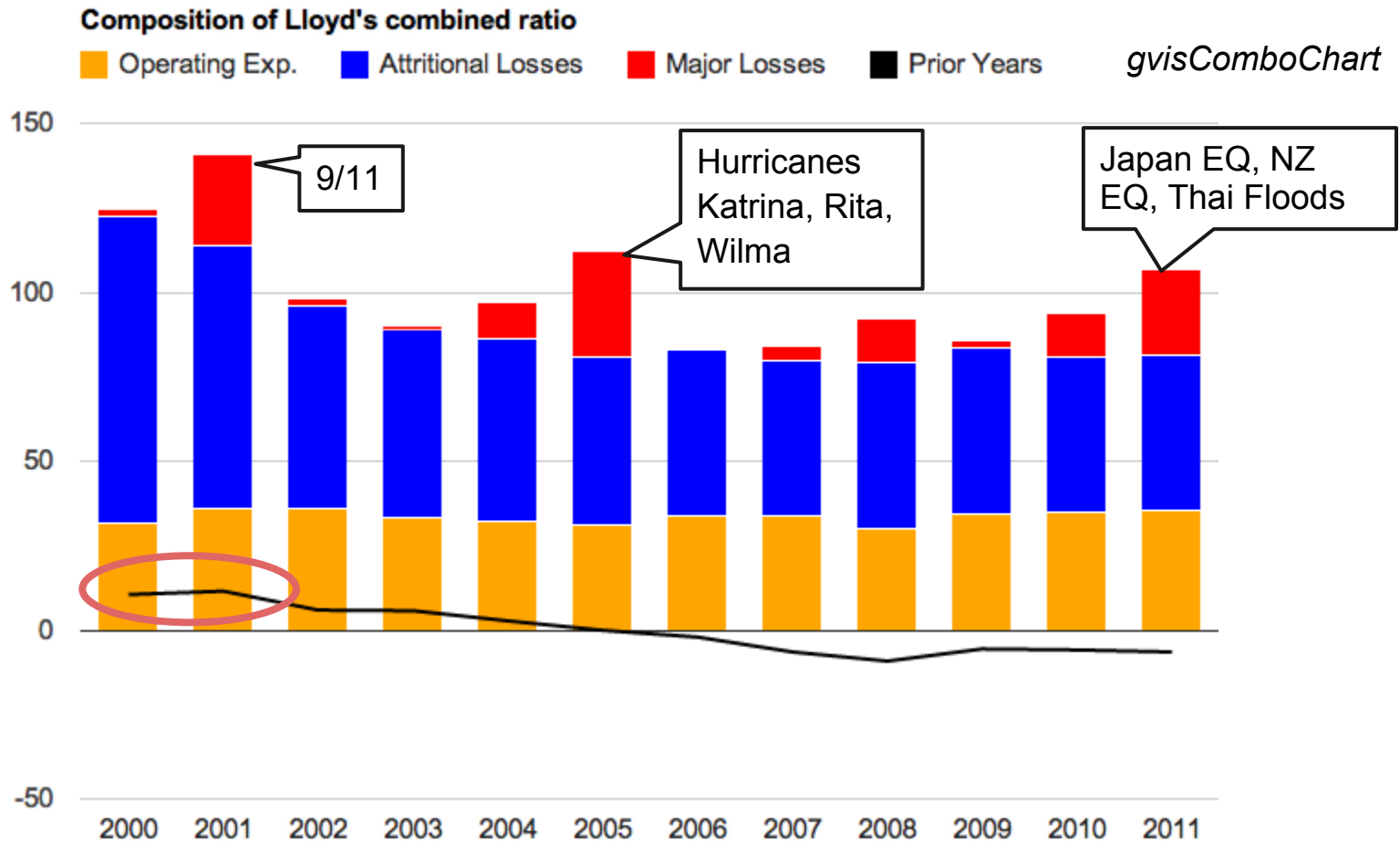
Source: Lloyd's Annual Reports

# Look at the dynamics and find stories ...

Class of business information

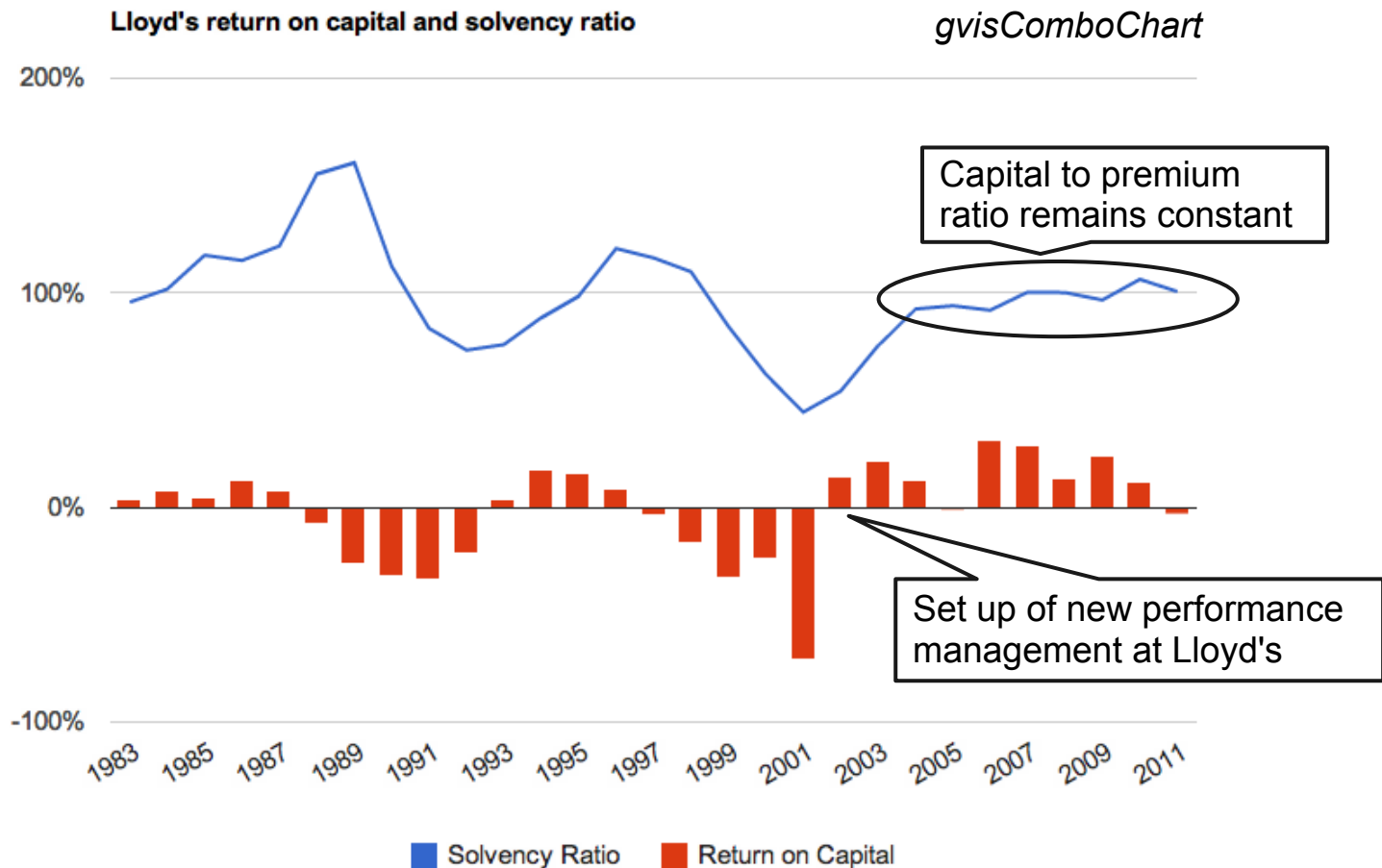


# ... watch out for the prior years when the CATs come



Source: Lloyd's Annual Reports, Prior year movements in 2000, 2001 estimated based on prior year claims movements

# Better planning pays off



Source: Lloyd's Annual Reports, Statistics relating to Lloyd's 2001; Lloyd's data for 1983 – 1999 on three year accounting (assuming written=earned premium and 18% brokerage), and from 2000 onwards on annual accounting basis.

# More data: Statistics relating to Lloyd's

## STATISTICS RELATING TO LLOYD'S

### A STATISTICAL GUIDE TO LLOYD'S INSURANCE MARKET

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- ▶ Lloyd's Premium Rate Index
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#### INTRODUCTION

Statistics Relating to Lloyd's is a statistical guide to Lloyd's of London insurance market and provides an easy to use reference for key facts and figures relating to the Lloyd's market.

The guide contains summary financial statements for all active syndicates and detailed statistics on: Lloyd's capacity, premium income, loss ratios, membership, Lloyd's agents, syndicates, brokers and all major lines of business.

The current edition of Statistics Relating to Lloyd's has been extended to include a substantial amount of new content. Most notably, a Syndicate Analysis page is now provided for each syndicate, giving a history of: net and gross premium income, combined ratios, Lloyd's market share and key performance ratios. All given by high level classes of business.

Additionally, there are new sections on Lloyd's Historical Global Accounts and Lloyd's Capital. The Aggregate Accounts section has also been extended to include a segmental analysis of the key information presented in that section. Finally, the Claims section now includes triangles showing the development of paid and incurred gross claims.

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The 2012 edition of Statistics Relating to Lloyd's is due to be published on 17 May 2012. The new edition will contain extended capacity data for all syndicates and all agents and will also contain an updated Premium Rating Index.

**Please note:** If you require a hard copy of Statistics Relating to Lloyd's, please place your order before 30 April 2012. Hard copies are £35 each. Unfortunately we will not be able to offer hardcopies after 30 April.

#### DATA VISUALISATION



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#### FEEDBACK

Lloyd's Analysis Team is keen to hear your feedback and respond to any queries you might have. If you have any questions or ideas for future editions of Statistics Relating to Lloyd's please email [Stats@Lloyds.com](mailto:Stats@Lloyds.com)

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# Conclusions

- Interactive charts help to find stories and messages to drive actions
- googleVis adds interactivity to R
- R and googleVis can foster engagement between business users and data

# Links and contact

## **googleVis**

<http://code.google.com/p/google-motion-charts-with-r/>

## **Statistics Relating to Lloyd's**

<http://www.lloyds.com/stats>

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