

# Views of Risk



**David Ingram, CERA, FRM, PRM**

**Willis**

© Stanhope by Hufton + Crow

This material represents the views of the author. It does not necessarily represent the views of his employer nor the sponsors of this program.

# Views of Risk

Different Views of Risk & their impact

## **Cultural Theory**

- Four Views of Risk

## **Ingram's Law of Risk & Light**

- Views of Risk impact on your Risk Choices

## **Gresham's Law of Risk**

- Views of risk of the other market players impact on your risk opportunities

# People are not all the same

But can be seen to fall into some groupings

- Economic Man of classical economics
- Emotional Man of behavioral finance
- Four groups from Cultural Theory





# Cultural Theory

“Groups form because people share the same concept of risk!”

First proposed by Mary Douglas in 1983

Extended discussion in 1990 book

- Subsequent applications to many social/public policy risk discussions

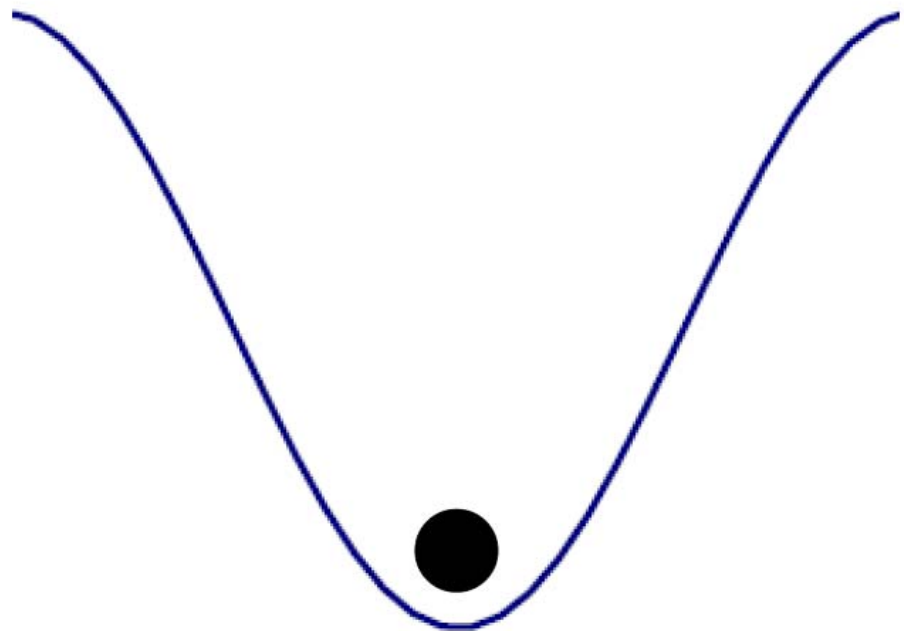


# Individualists

World is self correcting.

No need to be overly  
concerned by risks.

Grow the pie



# Individualists

- Unfettered Capitalism - self correcting Markets
  - Raw Materials infinite
    - People with more ability should be paid more
    - Give Companies the chance to prosper
    - Life sorts out those who work harder
  - Insurance - Social Security
  - Strong/informal relationships - low responsibility
  - Disagreements ok - right idea will prevail
  - Growth of the company/markets/world

# Egalitarians

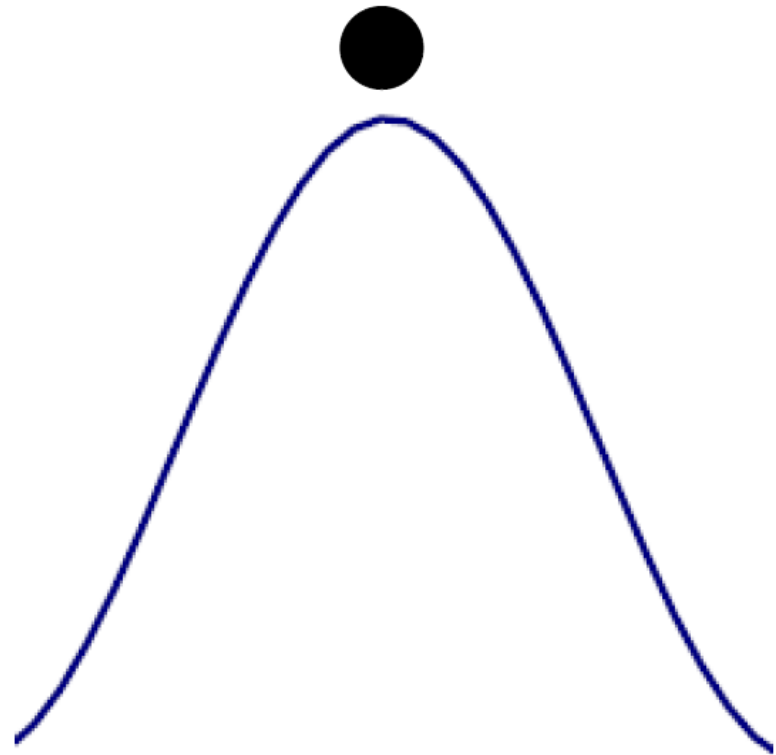
World is in a delicate balance.

Any major change could send things into ruin

Need to tightly limit risks

Divide the pie

Fairness

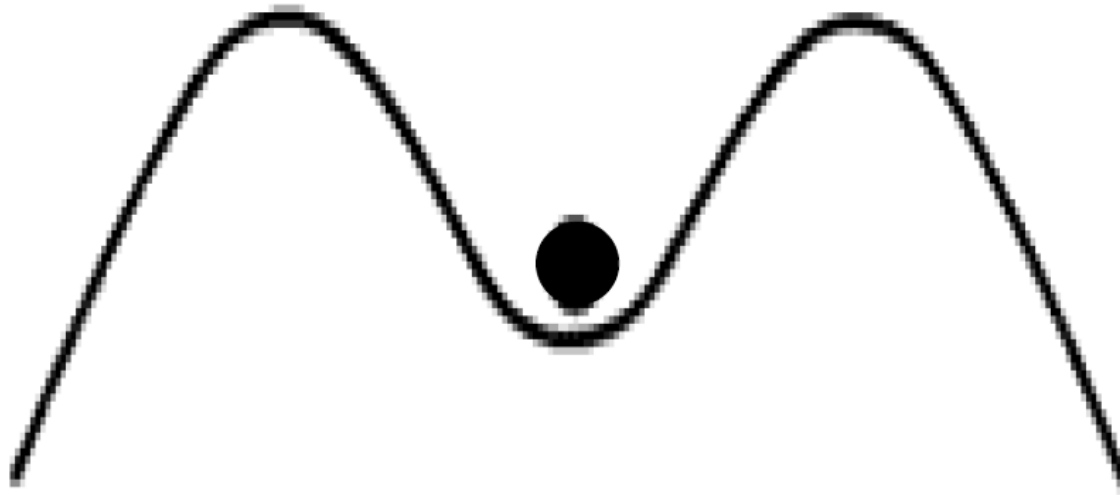




# Egalitarians

- Resources finite - must be frugal
  - If people were treated more equally would have less problems
  - Govt should make sure everyone has good standard of living
  - Those how get ahead should be taxed more to support the less fortunate
- Insurance - Social Security
- Strong relationships & Strong Responsibility
- Doctrinaire and uncompromizing
- Disagreement - split group

# Authoritarian



There are risks but they are controllable.

Need to rely on experts to control them.

Need rules & laws – keep things under control

# Authoritarian

- One problem with people is that they challenge authority too often
  - I value tradition & timeliness
  - I research what the experts recommend before I make any important decision
  - Insurance - Social Security
  - Weak & formal relationships with high accountability
  - Believe in controlled growth

# Fatalists

Who knows what is coming next. Might be good, might be bad. Cannot control risk.



# Fatalists

- Will not conform to rules of Authoritarians
  - Cannot muster the fervor of Egalitarians
  - Do not have the ambition to strike out on their own as Individualists
    - Cooperating rarely works
    - I am often treated unfairly
    - Even if you work hard - it might not help you to do better
  - Insurance - Social Security
  - Weak Relationships and weak responsibility
  - Majority of people in the world - small minority of those in control

# People within Companies

## Individualists - Sales/Underwriting/Traders

- Incentive Compensation
- Argue with bean counters

## Fatalists - Operations, IT

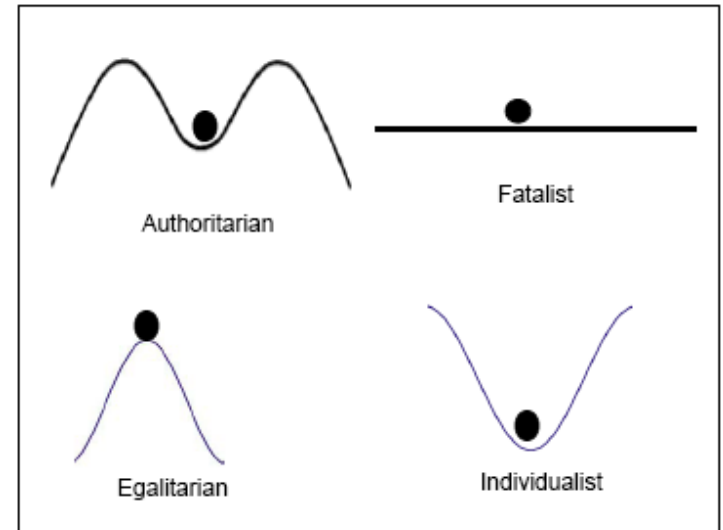
- Constantly changing priorities
- Help Desk

## Egalitarian - Traditional Risk Management

- Compliance, Audit, Insurance Buyers, Legal, Actuarial

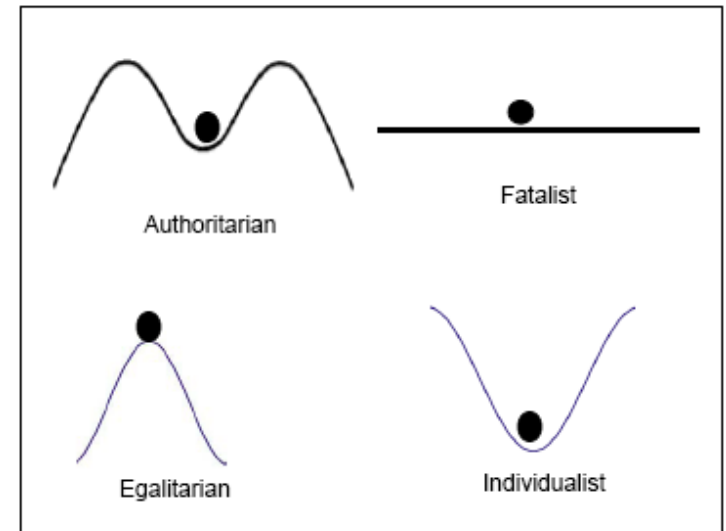
## Authoritarian - CFO, ERM

- If top officer - Heavy Planning emphasis - Goals vs. Actual



# ERM is Authoritarian

- Risk Limits, Policies, Balancing & Optimizing risk
  - Risk Tolerance & Appetite
  - Org charts, policy statements, Reports



## Insights

Authoritarian ERM will conflict with the other three risk views!

- CFO vs CRO

Traditional Risk Managers will often be Egalitarians.

- Will often be opponents of ERM!
- Or if they lead ERM –it will not be the same

# Key Insights from Cultural Theory

- FIRST INSIGHT – Authoritarian ERM will conflict with all the other risk views!
- SECOND INSIGHT – traditional risk management folks with Egalitarian point of view will not easily be converted to supporting ERM!
- THIRD INSIGHT – Allegiances to these four risk views shift over time.
- FOURTH INSIGHT –People do have their own facts.
- FIFTH INSIGHT – Invite all four risk views into the Cycle Management discussion and learn to value the continual challenges and differing sets of facts that they will bring to the discussions.



# Risk & Light

# Some views of Risk

Eyes Shut

Quick Look

One Eye

Two Eyes

360 View

# Eyes Shut



Taking Risk =

Choosing to do something when you cannot know whether it will work out or not

If it works out - - - HERO

If not - - - Zero

**Survivor Bias**

# Eyes Shut Risk View

Disdain for analysis

“Knows” that the risks that will really reward - cannot be analyzed

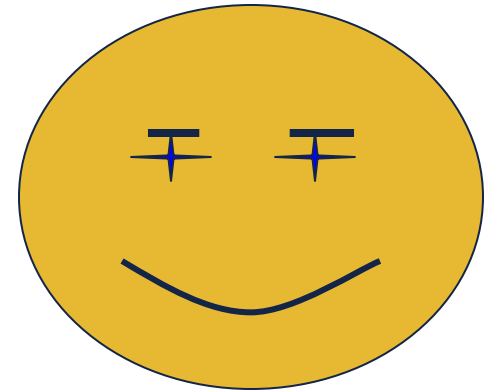
Bean counters will stymie any innovation with excess pessimism and/or analysis paralysis

# Quick Look

Seen this before?

If no, Reject

If yes, fit into an existing structure of levels of acceptability

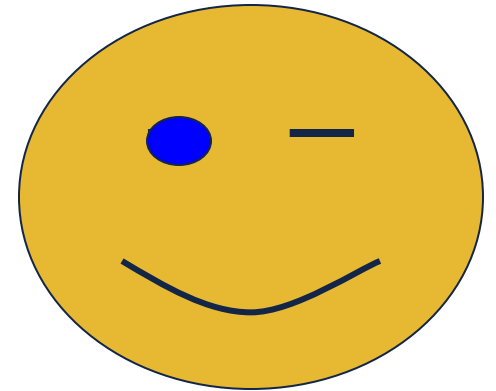


# One Eye View

Critical Quantitative Review of Risk

Risk has a single, clear, widely accepted definition

Risk is one of VaR, CTE, Volatility, Earnings at Risk,  
Economic Capital



# One Eye Views

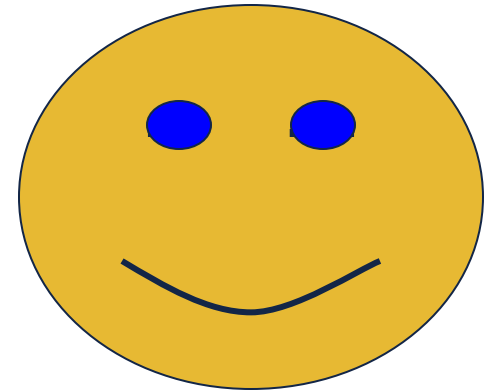
Short Term	Long Term	Intermediate Term
Volatility Oriented	Ruin/Capital Oriented	Earnings Oriented
Calibrated to Market	Calibrated to History	Calibrated to Future View

# Two Eyes

Critical Quantitative view of risks

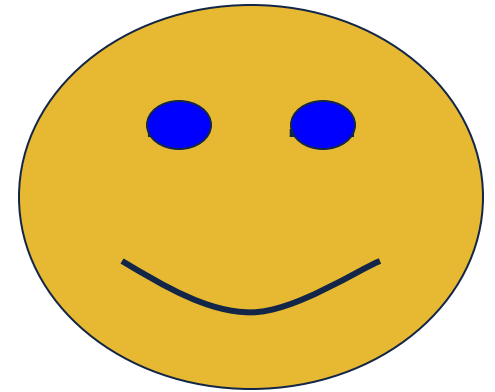
Risk has two aspects

Might be short term & long term, or ruin & earnings





# 360 View



Tries to look at all aspects of risk

Full Loss Distribution

Multiple Time Frames

Impact of degree of certainty/confidence

Market vs. Fundamental Analysis

Impact of others' actions

# Advantages

Eyes Shut	Low cost. High Reward
Quick Look	It works. Low Cost.
One Eye	Can readily develop & explain risk reward trade-offs
Two Eyes	<i>((Will get back to this))</i>
360 View	Never have to say you're sorry.

# Disadvantages

Eyes Shut	Low predictability. High Failure Rate.
Quick Look	Declining Returns. Tendency to sometimes ignore non-traditional risks.
One Eye	Expensive. Risks selection will tend towards concentration in risks aspects not measured.
Two Eyes	<i>((Will get back to this))</i>
360 View	Very Expensive. Can tend towards finding a reason not to do anything.

# Ingram's Law of Risk & Light

Risks in the light shrink, Risks in the dark grow

Return for Risks in the light shrinks faster than the Risk

Return for Risks in the dark does not grow as fast as Risk

# Eyes Shut

May Choose Anything

No specific view of appropriate level of Return for Risk

May gravitate to areas with high risk margins

Often disrupt markets by accepting lower risk margins

# Quick Look

Usually stay with the same risks

Margins may decrease over time

May not notice deterioration of risk quality or

May ignore new aspects of risk and convince self that this is the same old same old

May be subject to “pile on the chump” by competitors / counterparties

# One Eye

Analysis will allow ranking of risk reward, setting minimums, allocating resources to achieve max risk reward

But risks chosen will tend to have higher and higher risks in areas not measured

- Risk margins from those risks will make them look like smart winners

Will tend to under-price some risks in the marketplace and drive out those who recognize those risks

# Both Eyes

Will have risk reward program of One Eyed

- With protection against an additional dimension

May end up choosing risks that look fine on two measures, but that have a problem in a third area



# 360 View

In theory will see all aspects of risk

- And look to get paid appropriately for all

Will tend to be opportunistic

- Looking for risks where there are few takers willing to be underpaid

May make mistakes

- But 360 view will make them fast recoverers

# Sample Aspects of Risk For 360 view

Type A Risk – Short Term Volatility of cash flows in 1 year

Type B Risk - Short Term Tail Risk of cash flows in 1 year

Type C Risk – Uncertainty Risk (also known as parameter risk)

Type D Risk – Inexperience Risk relative to full multiple market cycles

Type E Risk - Correlation to a top 10

Type F Risk - Market value volatility in 1 year

Type G Risk – Execution Risk regarding difficulty of controlling operational losses

Type H Risk – Long Term Volatility of cash flows over 5 or more years

Type J Risk - Long Term Tail Risk of cash flows over 5 years or more

Type K Risk – Pricing Risk (cycle risk)

Type L Risk – Market Liquidity Risk

Type M Risk – Instability Risk regarding the degree that the risk parameters are stable

# Gresham's Law

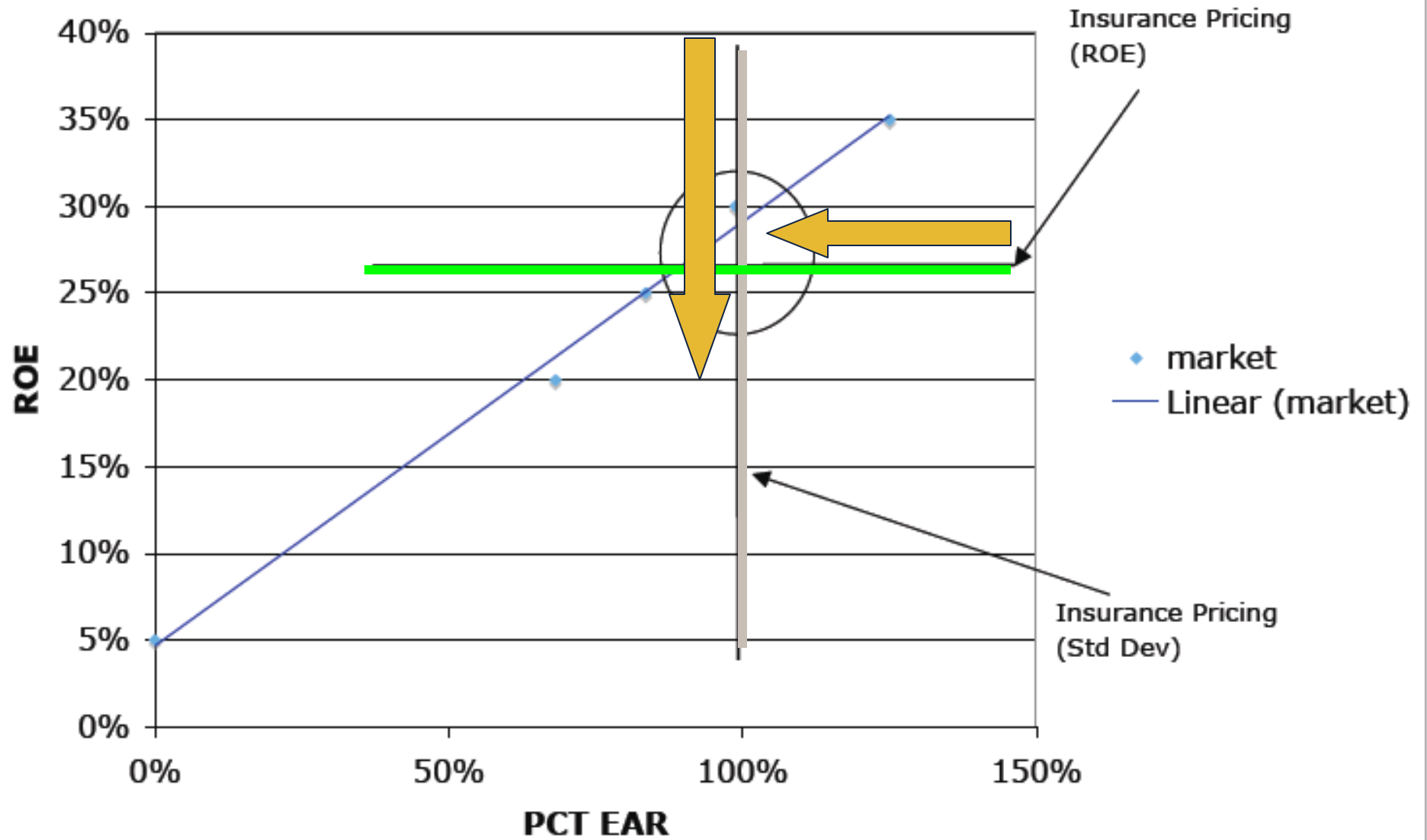
*Bad Money Drives Out Good*

Sir Thomas Gresham 1500's English Financier

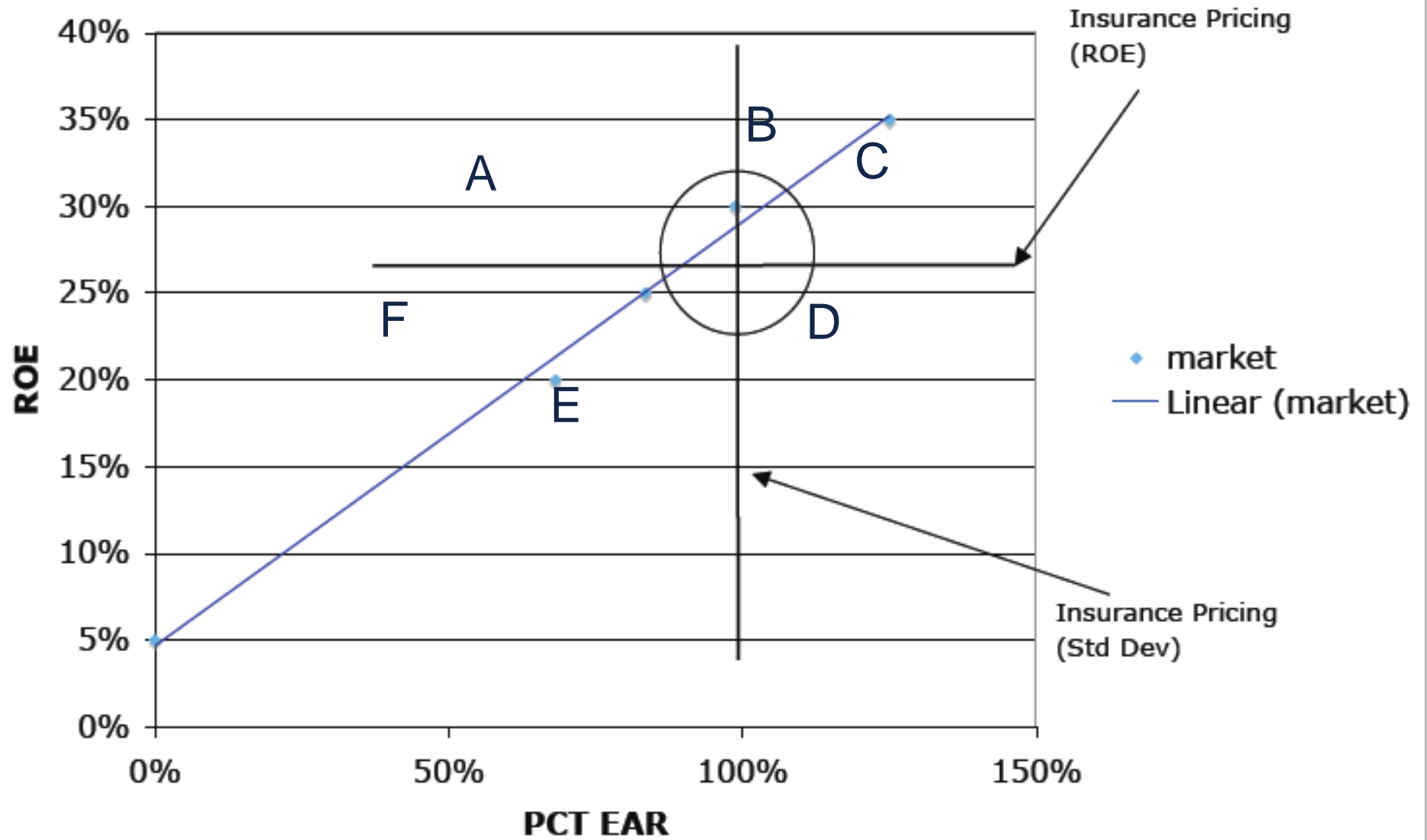
# Gresham's Law of Risk

*Bad Risk Management will drive out good*

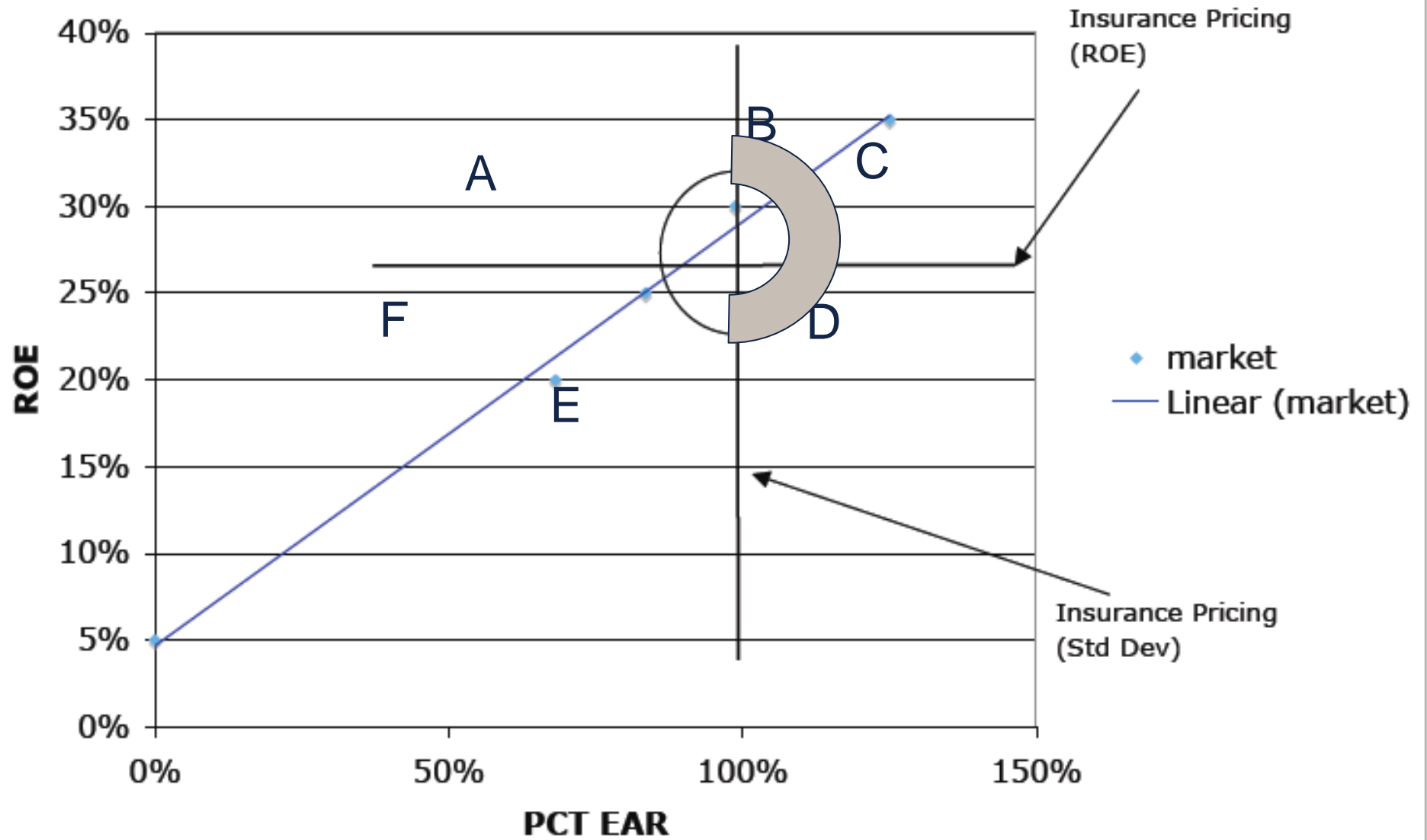
# Risk & Reward



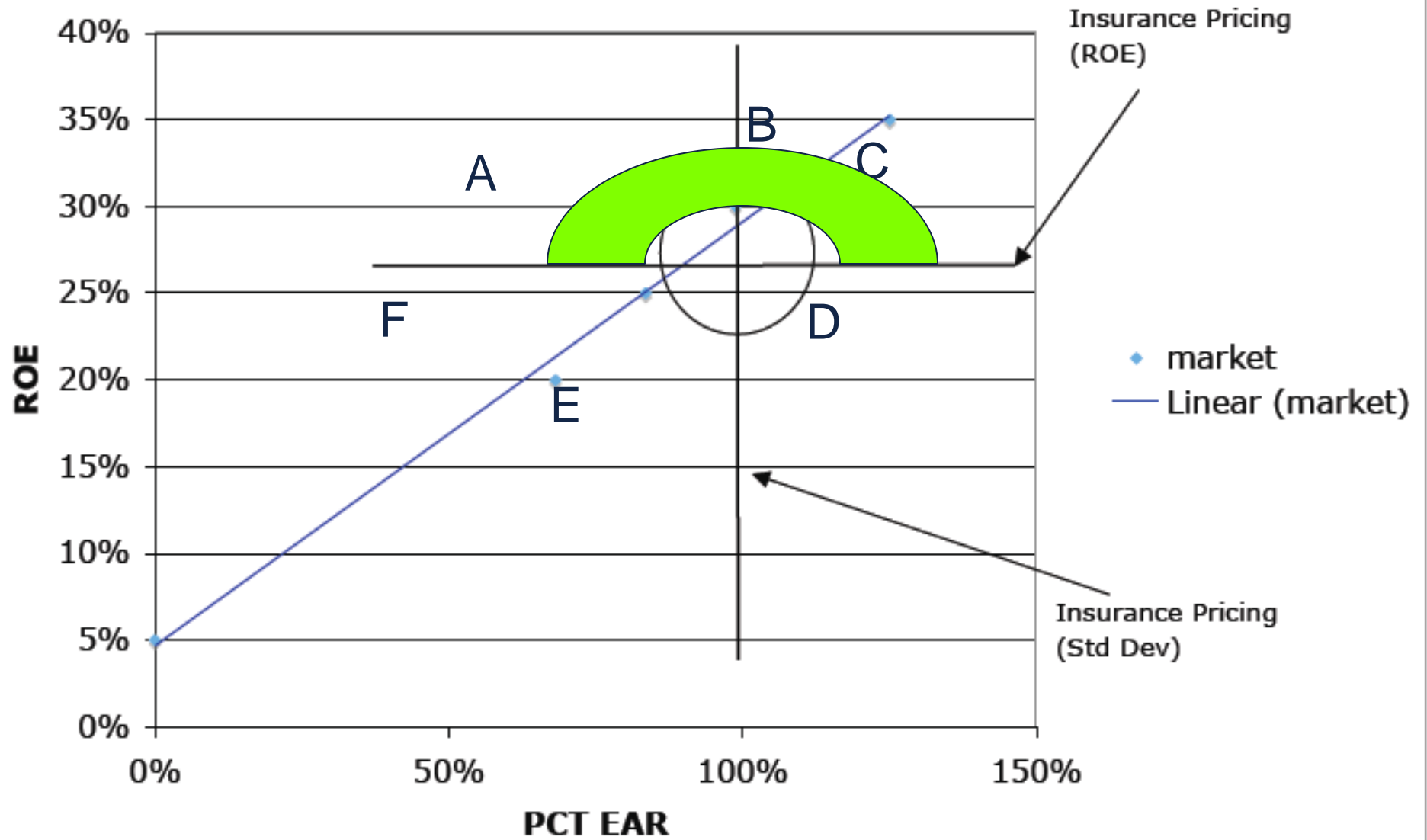
# Risk & Reward



# Risk & Reward

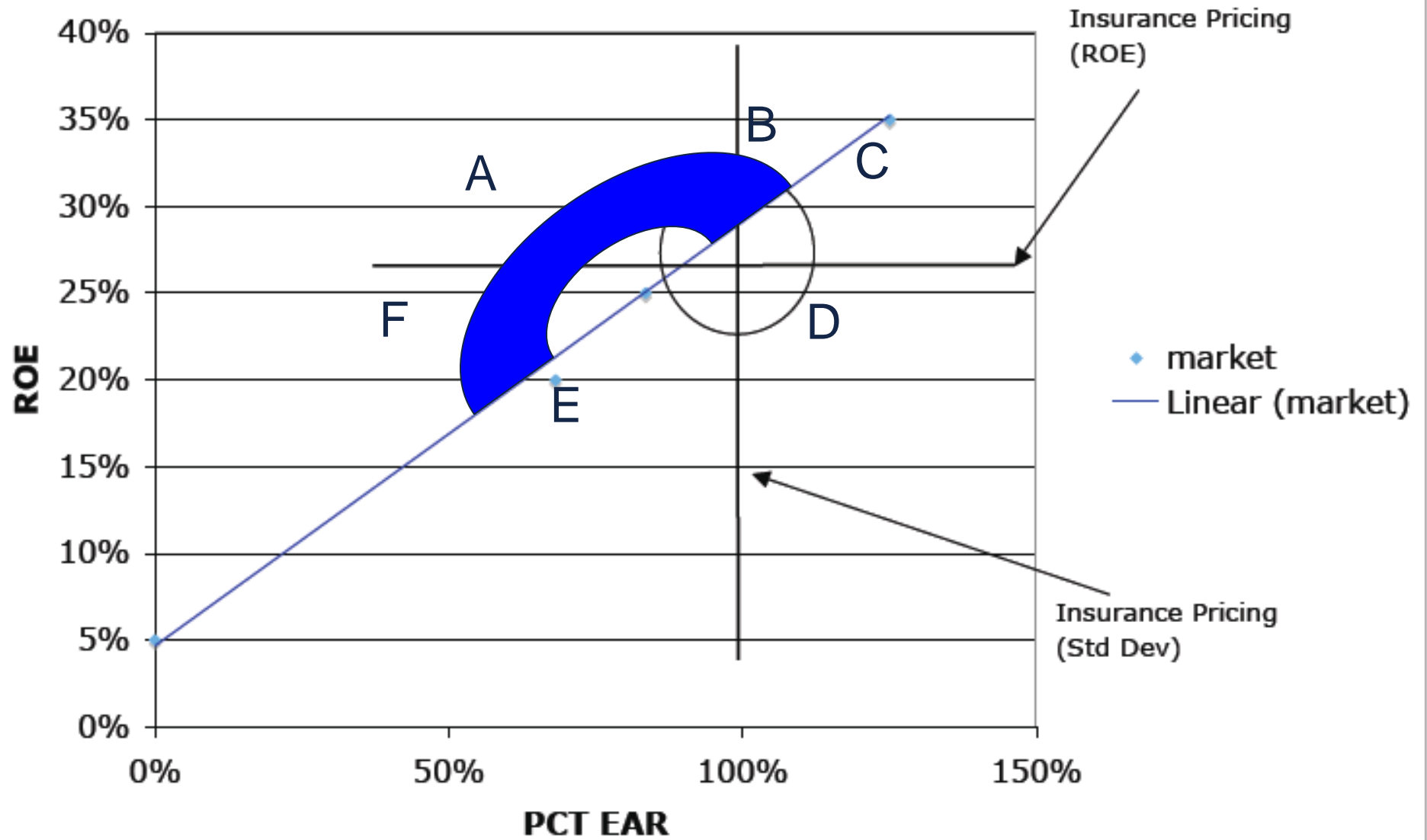


# Risk & Reward





# Risk & Reward



# What can you DO with this?

Examine your organization's risk view.

- Self knowledge is always a good starting place
- Use principal component analysis to decide need to expand view

Can you id your competitor's risk view?

Can you id the place where the market is on a 2 D risk chart?

Set your strategy to deal with the expected risk & risk reward drift

Thanks for your attention.

Watch your step on the way out...

The light is a little dim....