

Egguilibrium

(Welch, Chapter 07-B)

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The Egg Approach to Finance

Vendor Choices and the Egguilibrium.

The insights of investments can apply to real products, just as they apply to financial investments.

Egg Problem

Your problem: Choose a portfolio of eggs to bring to the market for sale.

You do not know for sure which eggs will sell—but you have a good idea which will.

Some egg colors have higher likelihood of selling, others have lower (vomit-green).

For your customers, egg products could have a fashion aspect—some will be great, others not.

Eggs can be imperfect substitutes.

Eggfect Market

We assume a perfect market:

1. No differences in opinion.
2. No taxes.
3. No transaction costs.
4. Many buyers and sellers

plus uncertainty.

Assume no gains to specialization, and anyone can be a vendor (or producer or consumer).

Egg Risk

Let's presume you are a seller.

You care about your risk and reward.

Would you care about:

- ▶ overall basket risk and reward, or
- ▶ risk and reward of each egg?

Your Eggchandise Choice

Should you make/purchase just the most likely egg that will sell?

Safest Egg

Take no risk!
Go out of business.

(Maybe yes?)

Mix Eggs?

Should you come to market with a mix of different eggs?

A Vomit-Green Egg?

Consider a completely different type of product, which is very risky in itself. That is, you do not think it will sell.

If you have purchased all the-most-likely-egg, except one vomit-green, what is the risk contribution of this one vomit-green egg?

Does it increase your overall risk?

Egguilibrium

How much would you be willing to pay for the only vomit-green egg?

Eggs and Markets

You want to understand basket selection.

Given probabilities and prices, how would you optimally stock your basket?

- ▶ If an asset is very different from all other assets (it pays off when other assets do not pay off), would you be willing to pay a higher price?

Risk-Reward Of Seller

In the context of investment theory, you should like eggs that:

- ▶ a. pay off often,
- ▶ b. pay off big when other eggs do not.

This is **optimal portfolio choice** (chapter 8)

- ▶ If you are “only” an investor, you are done.

Risk-Reward of Market

But maybe. . .

Do you want to understand how the prices of eggs will adjust to the many vendors who want to stock baskets?

If more sellers want the vomit-green purple egg (because it is so different), then the price of vomit-green will increase.

Egguilibrium is about the proper prices, given optimal choices.

EAPCM

The Egg Asset Pricing Model is the model that tells us how risk and reward are related to:

- ▶ how individual products are expected to perform,
- ▶ and how individual products are different.

This is the subject of the Chapter 11 (CAPCM).

Corporate Expertise

If you are a corporate CEO making eggs, you must think about what eggs (for vendors and consumers) you want to make, i.e., what projects you want to offer to investors that like eggs that:

- ▶ a. pay off often, and
- ▶ b. pay off when other eggs do not.

Make an eggcellent choice, please!