Contingency Table

(Also referred to as cross tabulation or cross tab)

1. Definition and Rationale

In Statistics, a *Contingency Table* is a table of data used in the study of correlation of qualitative (categorical) variables. Is there a relationship between Variable A and Variable B?

Typically, the row entries tabulate the data according to one variable and the column entries tabulate it according to another variable. While two variables are common, the contingency table can have more than two variables.

Variable #1 = Type of Investment

	Stocks	Bonds	Cash	
Age 25-34	30	10	1	41
Age 35-44	35	25	2	62
Age 45-54	38	35	4	77
Age 55-70	22	30	4	56
	125	100	11	236

When the cell is expressed as a percent, it called a **Conditional Distributions**.

Column totals and row totals are called marginal totals. When expressed as a percentage they are ***Marginal Distributions.***

Fig. 1. Contingency Table. The purpose is examine relationships of qualitative variables. Is variable #1 (investment type) correlated with variable #2 (age).

2. Facts

3. Building CT

4. Examples