
Correlation of Regional City Office Markets and Economic Indicators

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Brief analysis was carried out on the relationship between regional economies and office markets in major regional cities outside the three major metropolitan areas.

Regional economy is defined as the combination of the "local economy" and the "branch economy."

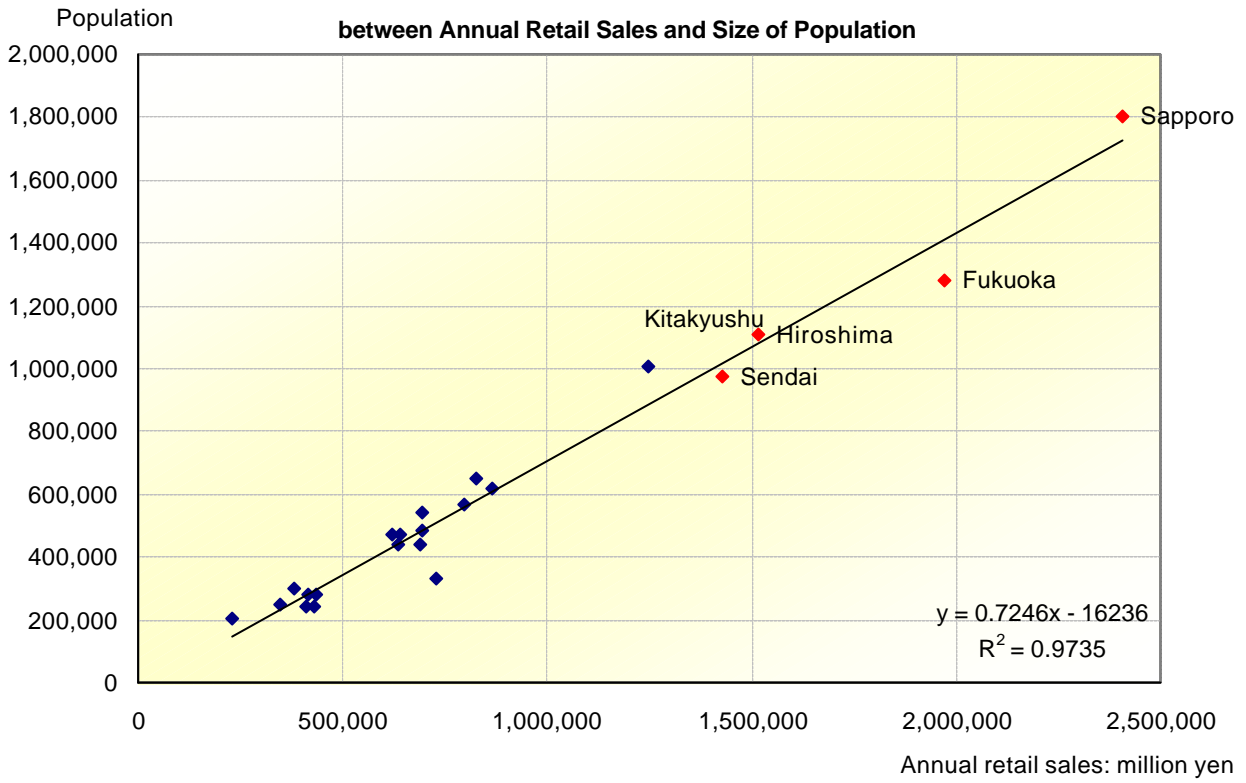
1. Local Economy and Population, Annual Retail Sales

- The local economy is economic activities based on resources in a particular region.
- Population is a resource common to its diverse economic activities.



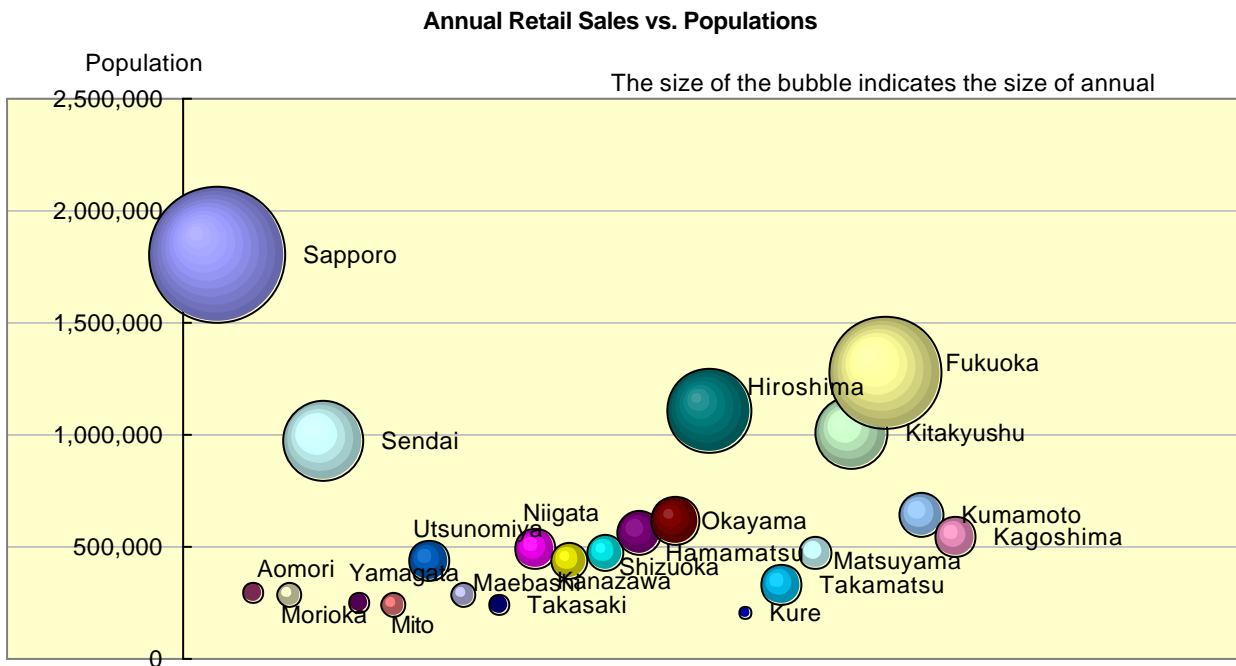
- Size and trends in population are one indicator that show trends and size of the local economy.
- The size of a local economy is proportional to the size of the population.
- The rate of fluctuation in population indicates the degree of activity of a local economy.

The graph below shows the correlation between population and "annual retail sales," an indicator of commercial activity in the local economy. The correlation coefficient between population and "annual retail sales" is 0.987, showing extremely high correlation.



The "annual retail sales" of regional cities is defined according to the size of the local economy

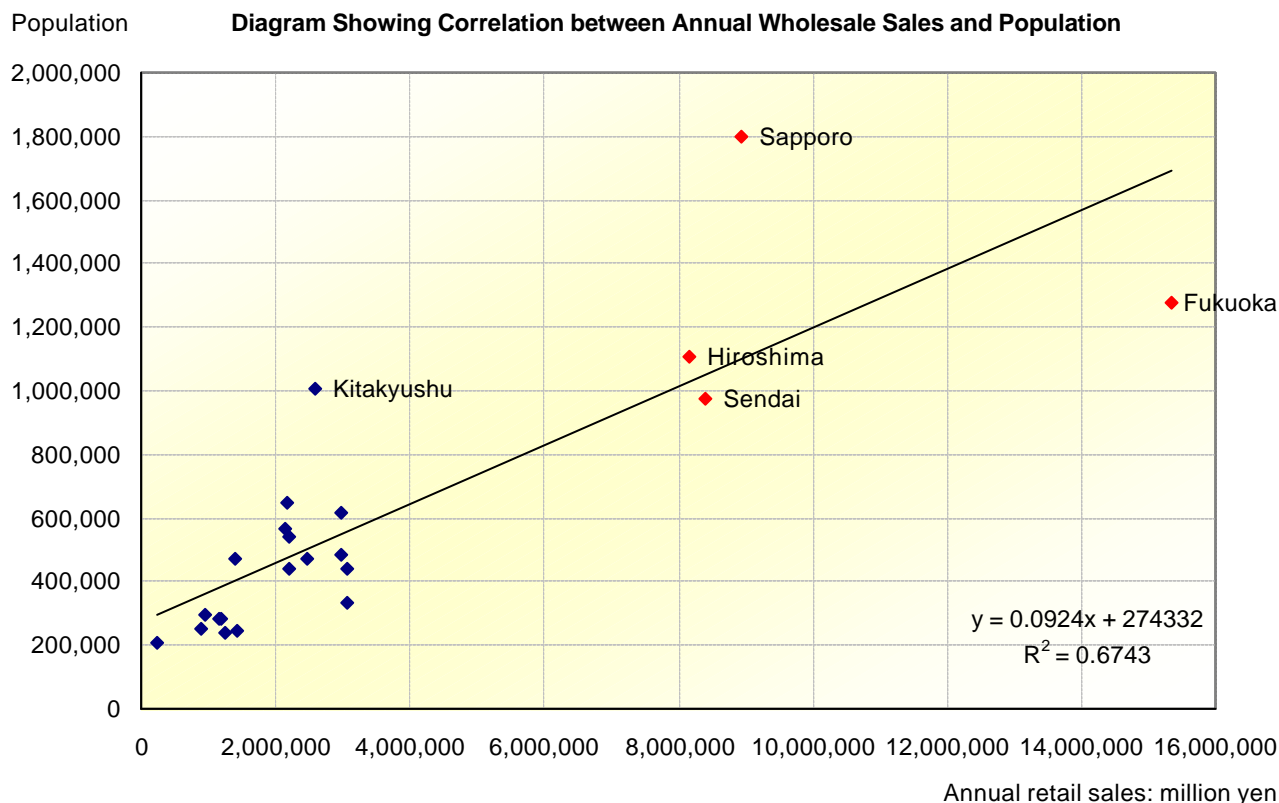
Reference



2. Branch Economy and Population, Wholesale Sales

- The branch economy refers to economic activities that are not restricted to a particular region, but which are controlled and knotted over a wider range.
 - Not based on the size of the local economy, but defined by specific factors such as location of bases, area of jurisdiction, transport access, and information communication constraints.
- Trends with the size of population of single cities is not necessarily an indicator that shows trends in the branch economy.
- "Annual wholesale sales" is an indicator that shows the strength of base properties extending across a wide area, regardless of commerce and industry.
 - The wholesale industry is a business category that plays the role of a knotting function of economic activities across wide areas, across administrative boundaries.

The graph below shows the correlation between population and "annual wholesale sales." Correlation is not very high.

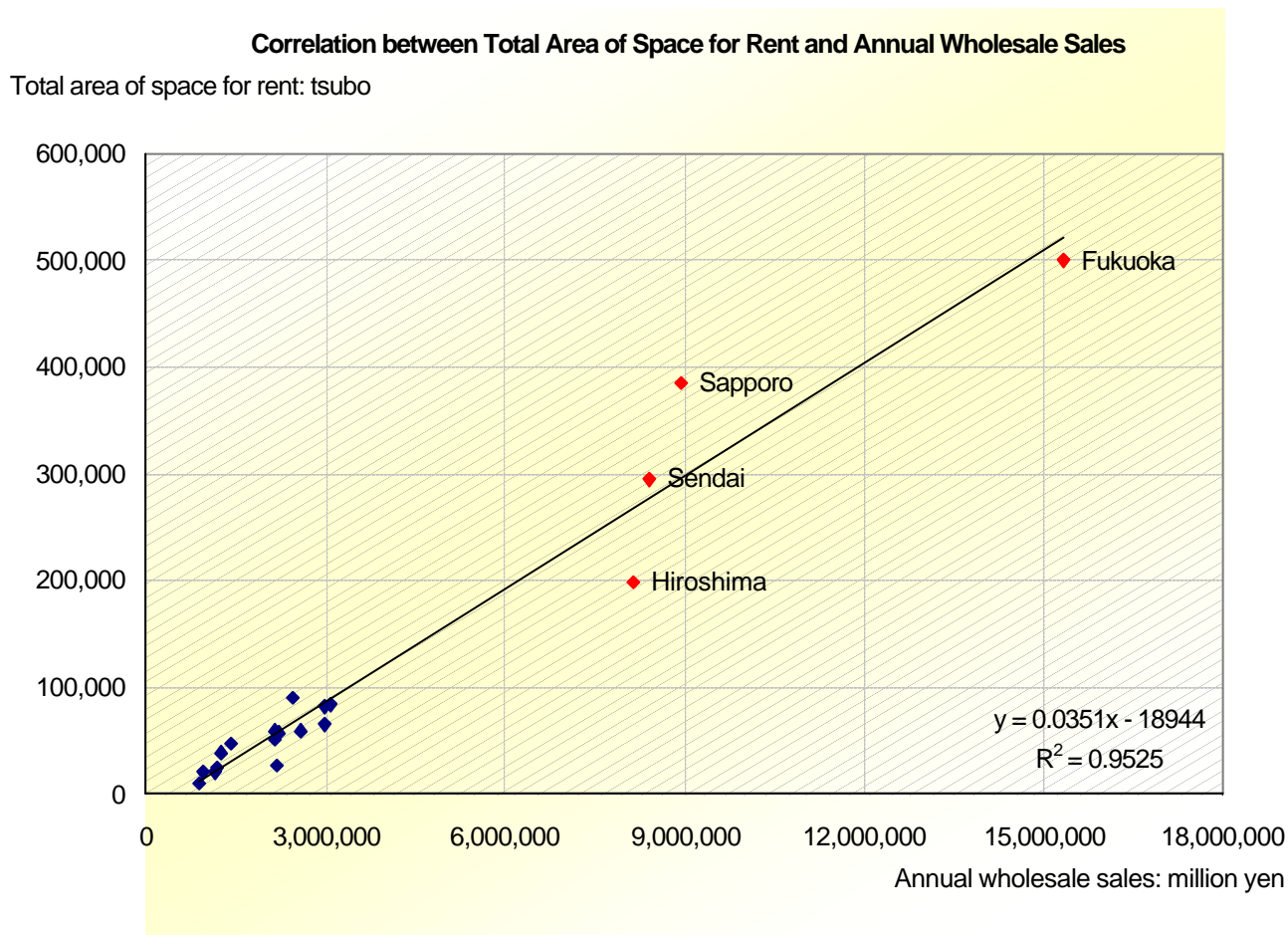


3. Correlation between Branch Economy and Office Market

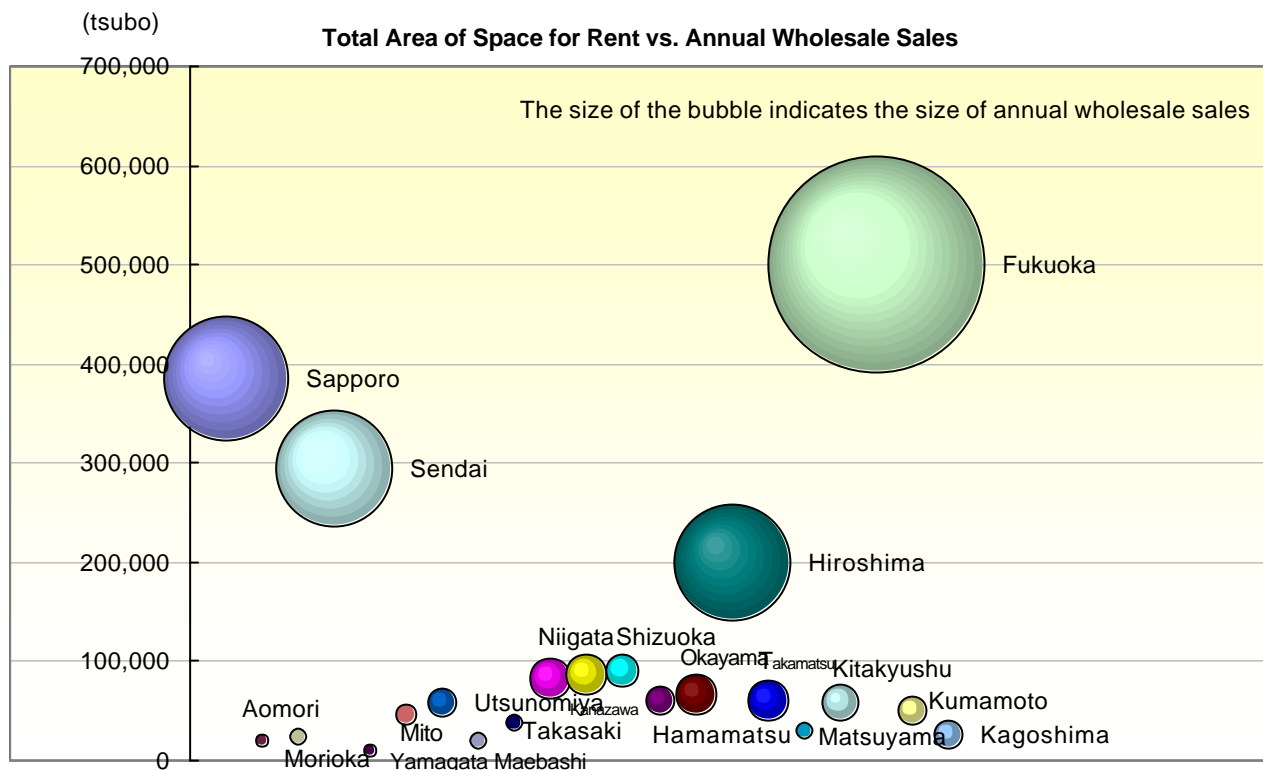
In the previous paragraph it was stated that "annual wholesale sales" can be used to gain a clear picture of the financial base of the knotting function of an economy on an amount basis, and is an indicator that reflects the size of the branch economy.

The size of the office market also has similar properties, so we made the hypothesis that "it reflects the knotting function of an economy, i.e. the size of the branch economy."

The graph shown below shows correlation between "total area of space for rent" and "annual wholesale sales." The correlation coefficient of "total area of space for rent" and "annual wholesale sales" is 0.976, which may be described as being extremely high.



Reference



The size of a branch economy is proportional to the size of the office market (stock).