

Expanding Formula Retail Controls: Economic Impact Report

Item #130788

Office of Economic Analysis

February 12, 2014



Main Conclusions

- This economic impact report was prepared in response to a proposed ordinance (item #130788), introduced by Supervisor Mar in the Summer of 2013, which would expand formula retail controls in San Francisco. Formula retail controls limit the growth of chain stores within San Francisco.
- The proposed legislation would both expand the definition of formula retail, and require the Planning Commission to consider an independent economic impact report detailing how a proposed chain store would affect existing businesses.
- Formula retail controls primarily affect the economy by changing the retail prices paid by consumers, the amount of local spending by retail businesses, commercial rents and vacancy rates, and perceptions of neighborhood quality.
- In general, chain stores charge lower prices, but may spend less within the local economy, and can be unpopular with some residents because they can be seen to diminish the character of the neighborhood. On the other hand, limiting chain stores can reduce commercial rents and raise vacancy rates.
- Research by the Office of Economic Analysis suggests that local retailers may spend up to 9.5% more within the local economy than chain stores, but charge prices that average 17% more. On balance, the economic benefits of greater local spending by non-formula retailers are outweighed by higher consumer prices.
- Accordingly, the report concludes that expanding the definition of formula retail in the city will not expand the local economy. Moreover, while the proposed independent report would document the impact of chain stores on existing businesses, a new store could benefit the economy without benefitting existing businesses, by offering lower prices to consumers, for example.
- The OEA therefore recommends that the report instead consider the relative prices and local spending by proposed chain stores and existing businesses. In addition, the report recommends the Planning Commission explicitly consider the views of residents, and whether a proposed store could prevent blight.

Introduction

- Formula retail controls are intended to limit the growth of chain stores within San Francisco. The City has adopted a number of formula retail controls, ranging from the prohibition of new formula retail, to requirements for a conditional use authorization.
- For example, Proposition G, in 2006, which requires a conditional use authorization for new formula retail use in a neighborhood commercial district.
- This economic impact report was prepared in response to a proposed ordinance, introduced by Supervisor Mar, which would expand formula retail controls.
- The Office of Economic Analysis (OEA) determined that the proposed legislation could have a material effect on San Francisco's economy.

Background

- Section 303(i) of the Planning Code defines a "formula retail use" as type of retail sales establishment with more than eleven other establishments in the United States, along with two or more of the following characteristics:
 - A standardized array of merchandise
 - A standardized facade
 - A standardized decor and color scheme
 - Uniform apparel
 - Standardized signage
 - A trademark or servicemark
- Most chain stores possess, at a minimum, a trademark or servicemark and sell standardized merchandise, regardless of the physical appearance of the store or its facade. Such stores would qualify as formula retail uses if there were eleven or more other stores in the United States.
- Other sections of the Planning Code impose land use controls on formula retail uses, which vary across neighborhoods in the city.
- The proposed legislation leaves these existing neighborhood controls intact, and only changes the underlying, city-wide definition of a "formula retail use".

Effects of the Legislation

The legislation has three major effects, which are described in the following pages:

1. Broadening the industries subject to formula retail controls
2. Extending the definition and geography of ownership
3. Modifying direction to the Planning Commission when considering a Conditional Use Application

Effects of the Legislation: Broadening the Industries Subject to Formula Retail Controls

- At present, 12 industries (or commercial land uses) are covered by formula retail controls, such as retail sales and services, restaurants and bars, financial services, and movie theaters.
- The proposed legislation would extend the controls to an additional 27 types of business activity, including business and professional services, wholesaling and light industry, and administrative services.

Effects of the Legislation: Extending the Definition and Geography of Ownership

- Formula retail controls currently only apply to the legal entity that owns the eleven establishments.
- In other words, a wholly-owned, but legally-distinct, subsidiary of a formula retail would not be subject to formula retail if it had less than eleven establishments of its own.
- The proposed legislation would change this. Any subsidiary, affiliate, or parent of a formula retail use would, itself, be considered a formula retail use.
- In addition, the current code requires a retailer to have eleven establishments within the United States to qualify as a formula retail use.
- The proposed legislation would broaden this to the entire world, meaning international chain stores just opening in the United States would be covered by formula retail controls for the first time.

Effects of the Legislation: Modifying Direction to the Planning Commission Regarding Conditional Use Authorization

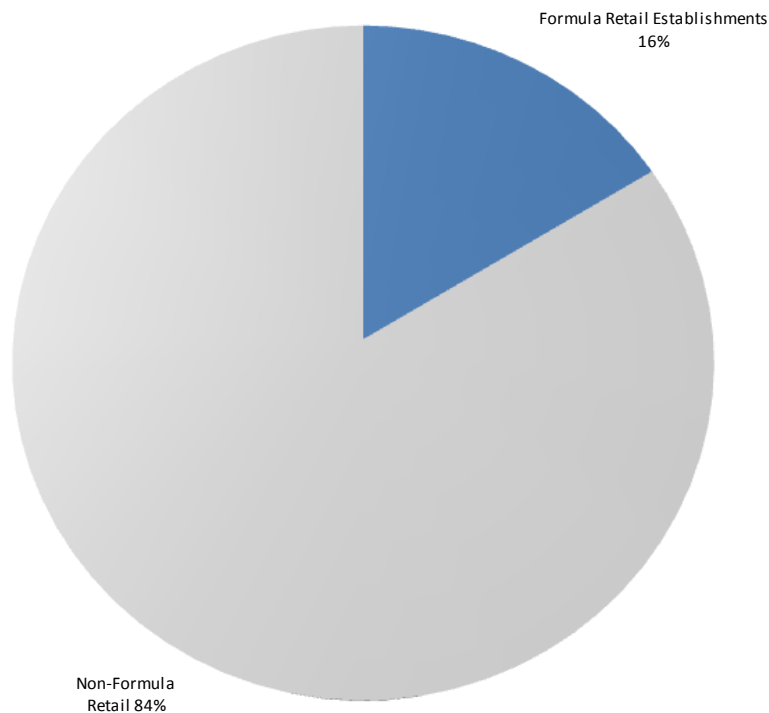
- A conditional use authorization from the Planning Commission is required for a formula retail use to open, in most of the city.
- The Planning Code currently directs the Commission to consider several things when evaluating such an application for a conditional use, including:
 - The existing concentration of formula retail uses in the neighborhood.
 - The availability of similar retail uses (to the applicant) already existing in the neighborhood.
 - Existing retail vacancy rates.
 - The existing mix of city-wide and neighborhood-serving retail uses in the neighborhood.
- The proposed legislation would make two additions:
 1. Directing the Commission to consider the percentage of formula retail uses within a 300-foot radius of the applicant's proposed address.
 2. Adding a requirement that the Planning Commission consider the impact of the proposed use on existing businesses in the area, as indicated by an independent economic impact report.

Understanding Formula Retail Trends in San Francisco

- Because the definition of formula retail is unique to San Francisco, no state or federal economic statistics are available for this economic category.
- However, the Controller's Office has access to individual sales tax payer information from the State Board of Equalization.
- This data allowed the OEA to identify businesses with over 11 establishments within California. These would qualify as formula retail under the City's rules.
- The data set also allowed us to identify businesses that have only one store in San Francisco. A examination of a random sample of 50 of these revealed 98% of were not formula retail.
- These two sets of businesses were therefore used to examine growth trends for both types of retail business in the city.
- However, only businesses subject to the Sales Tax are covered by these samples, which exclude other businesses that are subject to formula retail control, in particular, business and personal service providers.

Formula Retail – Percentage of Businesses

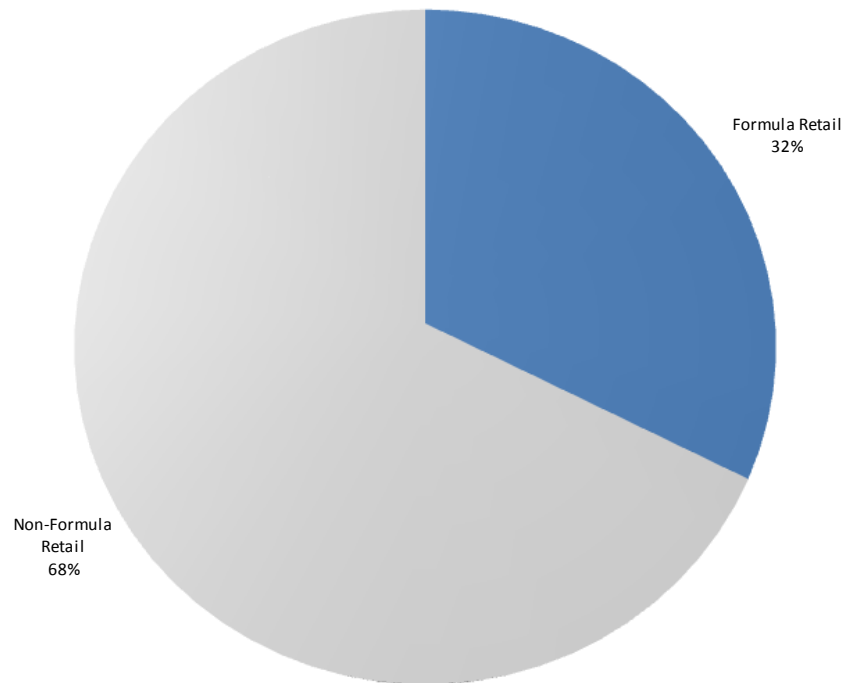
**Formula Retail Percentage of All
San Francisco Retail Establishments, 2012**



Formula retailers represent a fairly small share of San Francisco's 28,000 sales tax payers. In 2012 only 1 out of 6 retailers was potentially subject to the City's formula retail controls.

Formula Retail – Percentage of Sales

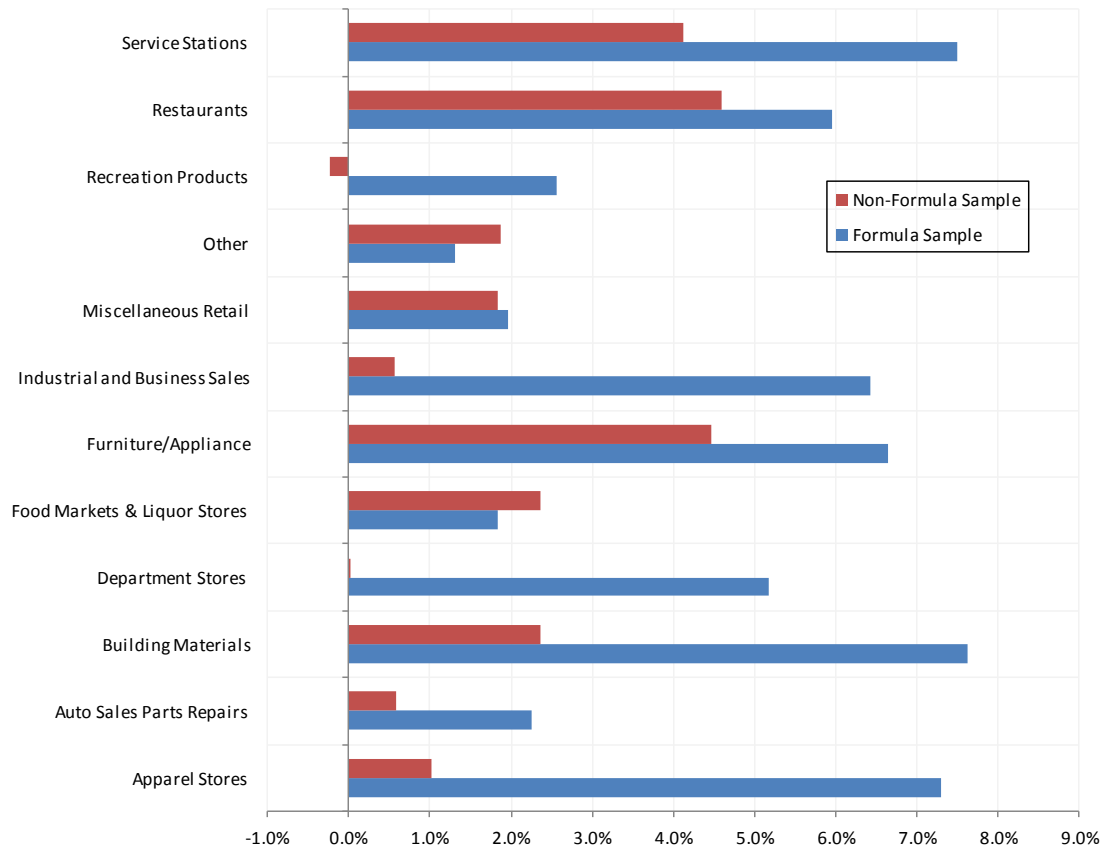
**Formula Retail Percentage of All
San Francisco Retail Sales, 2012**



Formula retailers account for a larger share of taxable sales made in San Francisco. 32%, or \$4.4 billion, of San Francisco's \$13.8 billion in retail sales occur at stores that are potentially subject to formula retail controls.

Growth Trends in Formula and Non-Formula Retail Sales

**Average Annual Growth in San Francisco Retail Sales, 1993-2012:
Formula and Non-Formula Retail Samples**



In virtually every type of taxable retail activity in San Francisco, sales at formula retailers have grown more rapidly than non-formula retail, over the past twenty years.

The difference in growth rates is most pronounced for apparel stores, industrial and business sales, and building materials.

Food markets and liquor stores were the only retail category for which local sales have expanded more quickly than formula retail sales.

These categories derive from the Sales Tax database and do not align with the categories used in formula retail controls.

Economic Impact of Formula Retail Controls

- Formula and non-formula retailers are likely to have different effects on the local economy.
- Controls on formula retail uses could potentially affect the city's economy in the following five ways, discussed on the following pages:
 1. Impacts on the cost of retail distribution, retail prices, and consumer spending
 2. Impacts on spending by retail businesses in the local economy
 3. Impact on employment
 4. Impact on commercial vacancy rates and rents
 5. Impacts on neighborhood quality

Economic Impact Factors: Distribution Costs, Retail Prices, and Consumer Spending

- On average, the sample of non-formula retailers examined by the OEA were smaller than the formula retailers, as measured by sales per establishment within San Francisco.
- Smaller stores generally lack economies of scale, which can lead these stores to have higher costs than chain stores, per unit of item sold.
- Restricting chain stores will therefore likely increase the average cost of retail distribution in the city. Higher costs usually have two effects on markets: higher prices and reduced sales. Businesses pass their higher costs on to consumers in the form of higher prices, who react by spending less in the local economy.
- Higher prices harm consumers, and reductions in sales harm other businesses.

Economic Impact Factors: Business Spending

- Anecdotal evidence suggests that local, non-formula retailers are more likely to locally source their business services, such as accounting, advertising, and legal services.
- Formula retailers, it is often claimed, rely on their corporate offices for these services, and therefore have less reliance on local suppliers of these services.
- This higher spending by local, non-formula retailers, generates positive multiplier effects as it circulates throughout the local economy, expanding spending and employment.

Trade-off Between Higher Prices and Higher Local Spending

- An economic trade-off exists between local spending and consumer prices.
- If consumer price differences between formula and non-formula retailers are sufficiently small, then formula retail controls could expand economic activity in the city by shifting spending to retailers with a higher local multiplier.
- If, on the other hand, there are wide differences in prices, then the negative economic harm of higher consumer prices could outweigh the economic benefit of greater local spending, and overall spending in the city would contract.

Economic Impact Factors: Commercial Vacancy Rates and Rents

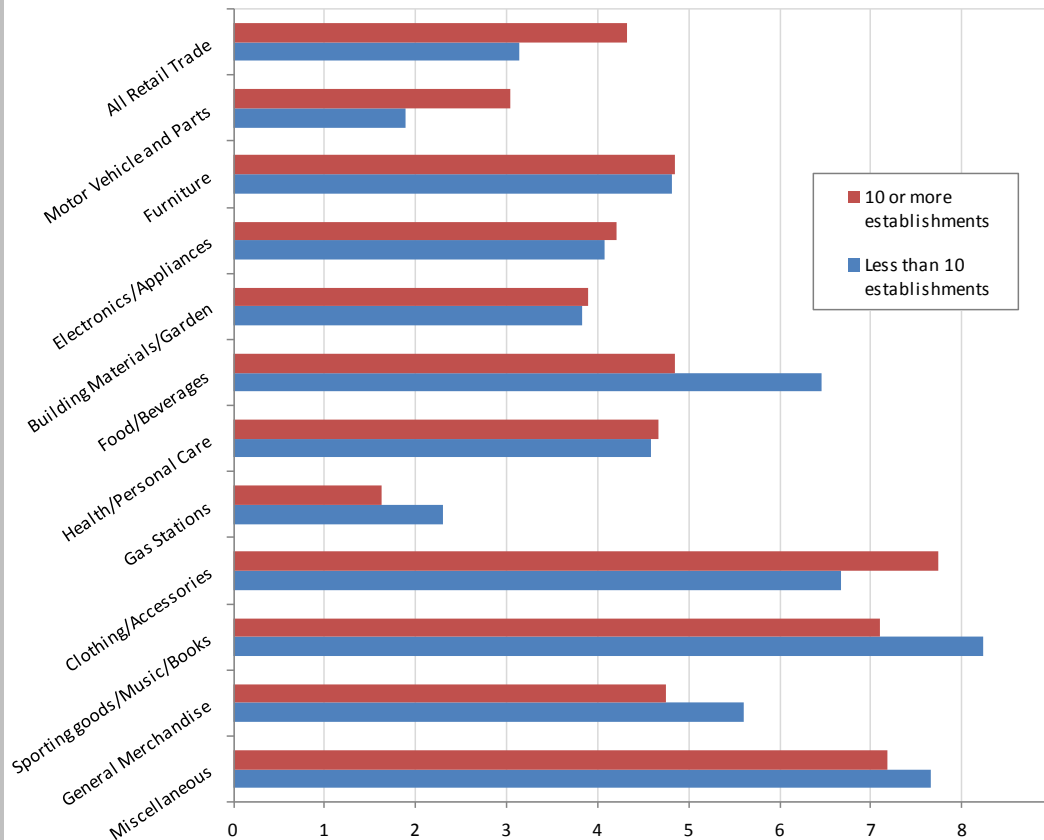
- Current city policy recognizes that formula retail restrictions may increase commercial vacancy rates. The Planning Commission considers vacancy rates in the neighborhood when evaluating a conditional use application.
- Higher commercial vacancy rates, and/or lower rents, primarily harm commercial property owners, reducing the rate of return on their investment.
- Lower rates of return in real estate normally affect the broader economy by reducing the incentive to maintain existing and develop new commercial property. However, the legal ability to develop new commercial space in most San Francisco neighborhoods is already severely restricted by the Planning Code.
- In addition, growth in consumer spending is generally strong in San Francisco, reducing the incentive to leave existing property vacant or under-maintained.
- Therefore, the broader economic impact of higher vacancy rates and lower rents is generally quite limited in most San Francisco neighborhoods.
- However, neighborhoods at risk of commercial decline due to blight conditions would be an exception. In such neighborhoods, policies that discourage formula retail tenants could have negative consequences on the surrounding neighborhood and the city's economy.

Economic Impact Factors: Employment

- If smaller local businesses are generally less efficient, it is reasonable to expect them to employ more people to distribute the same amount of goods to consumers.
- In effect, local businesses may produce more jobs per dollar spent by consumers.
- Formula retail restrictions could then be seen as having an employment benefit. By protecting smaller businesses from competition from larger, more efficient retailers, the city would experience higher retail employment.

Employment and Sales at Small and Large Retailers

**Employees per Million Dollars in Revenue:
U.S. Retail Trade Businesses, by Number of Establishments and Type of Store**



The available evidence, from the Census Bureau, suggests that employment per million dollars of sales is not higher at retail businesses with 10 or fewer establishments.

On the contrary, across all retail types, larger retail establishments employ 4.3 workers per million dollars in sales, while smaller retailers employed 3.2.

The pattern is different across different types of retail trade: smaller food stores do tend employ more people per million dollars in sales, for example.

However, across the breadth of business activities subject to the proposed ordinance, there appears to be no clear employment gain from promoting smaller retail at the expense of larger retail.

Economic Impact Factors: Perceived Impacts on Neighborhood Quality

- Formula retail controls may also have an effect on the city's economy, through their effect on the city's neighborhoods.
- Proposition G in 2006, which required a conditional use authorization for formula retail uses in most of the city, was passed by a wide majority. This can be read as evidence that many residents do not favor the unrestricted growth of formula retail in their neighborhoods.
- Neighborhood quality is priced into rents and housing prices. Analysis of the Bay Area housing market suggests that San Francisco residents do pay a premium to live in the city. At this point, the OEA is unable to quantify the impact of the presence of formula retailers on this neighborhood premium, if any.
- Consequently, we cannot estimate the relative importance of any effect of formula retail on rents and housing values within neighborhoods, or how it might compare with the impacts of prices and local business spending.
- However, there could be cases in which some neighborhood residents prefer to pay higher prices at local, non-formula retailers to the presence of formula retailers. A decision to limit formula retail in such a circumstance need not necessarily be harmful to the city's economy.

Economic Impact Assessment

- The OEA is able to produce quantitative estimates of two of the economic impact factors just discussed:
 - Estimate of the difference in consumer prices at formula and non-formula retailers.
 - Estimate of the difference in local spending at formula and non-formula retailers.
- As discussed earlier, the available evidence does not suggest that formula retail controls can be expected to increase employment in the city's retail trade industry.
- At this time, the OEA is unable to estimate the impact of formula retailers on commercial or residential property values, or perceptions of neighborhood quality. Recommendations on how these issues may be weighed and considered are provided in the conclusion to this report.

OEA Research on Price Differences at Formula and Non-Formula Retailers

- To assess the extent of price differences at formula and non-formula retailers, OEA economists surveyed prices for a standardized basket of commodities at a range of over 30 formula and non-formula retailers in San Francisco.
- Over 500 individual price points were created over 3 weeks of research.
- Prices of individual commodities were weighted according to how frequently they are purchased, following guidelines established by the Bureau of Labor Statistics when creating Consumer Price Indices.
- Because the research had to be focused on branded, common commodities that can be found in both formula and non-formula retail stores, the research did not consider major retail categories in the city, including restaurants, apparel stores, and industrial sales. Establishing price differences at restaurants, for example, would require adjusting for service and food quality, which is very difficult.
- The research concluded that, on average, prices were 17% higher at the non-formula retailers than at the formula retailers that were surveyed^[1].

Estimating Differences in Local Spending by Formula and Non-Formula Retailers

- The table on the following page relies on U.S. Census to derive an estimate of the percentage of consumer dollars that are spent within the local economy by formula and non-formula retailers.
- On average, U.S. retailers spend 73% of every dollar on the goods they sell, with the remaining 27% going to labor costs, rent, purchased supplies, taxes, and net income.
- Some of these spending categories, such as labor and purchased supplies, generate local multiplier effects. Others, such as cost of goods, do not. Net income for non-formula retailers was presumed to benefit the local economy, while net income from formula retailers was presumed not to.
- The data suggest that, at maximum, non-formula retailer could spend 24% of every dollar received in ways that benefit the local economy, while an estimated 14.5% of formula retail revenue would.
- Accordingly, the estimated difference in spending between formula and non-formula revenue would be a maximum of 9.5%.

Operating Expenses and Local Economic Impacts for Formula and Non-Formula Retailers (as a percent of revenue)

Expense	Formula Retail	Non-Formula Retail	Local Economic Impact?
Cost of goods ^[2]	73%	73%	No
Labor ^[3]	9%	10%	Yes
Rent ^[4]	2%	2%	Yes
Purchased Services/Supplies – Local ^[5]	3.5%	7%	Yes
Purchased Services/Supplies – Non-Local ^[5]	6.5%	3%	No
State/Federal Taxes, other expenses ^[5]	2%	2%	No
Net Income ^[6]	6%	5%	Yes for Non-Formula
Local Spending	14.5%	24%	Maximum 9.5% difference

Notes at end of report.

Net Economic Impact of Consumer Price and Local Spending Differences

- Based on Census data, the OEA's maximum estimate is that non-formula retailers could spend, on average, 9.5% more of their revenue on local goods and services than formula retailers.
- On the other hand, the OEA's research suggests that prices at non-formula retailers are 17% higher than they are at formula retailers.
- This price difference means that, even though policies that effectively divert spending to non-formula retailers do lead to higher levels of spending on local factors of production such as business suppliers, consumers that shift their purchases to non-formula retailers will have less to spend at other businesses.
- As the table on the next page illustrates, the economic cost of higher prices on local consumers outweighs the potential benefit of greater local spending by non-formula retailers, and the net local spending impact is somewhat negative.

Net Spending Impact Illustration

	Formula Retail	Non-Formula Retail
Retail Price (as share of Formula Retail) ^[7]	\$1.00	\$1.17
a. Spending on local factors, per \$ of formula retail spending ^[8]	\$0.145	\$0.29
b. Spending on non-local factors, per \$ of formula retail spending ^[9]	\$0.855	\$0.88
c. Change in local consumer spending, relative to formula retail per \$ of formula retail spending ^[10]	\$0.00	-\$0.17
Spending on local factors plus change in local consumer spending ^[11]	\$0.145	\$0.12

Higher prices reduce the local spending impact of non-formula retail

Conclusions and Recommendations

- Notwithstanding the fact that formula retail controls, in general, raise consumer prices and reduce the overall level of economic activity in the city, situations may arise in which limiting formula retail can be beneficial to the economy.
- This could happen when price differences between a proposed formula retailer and existing retailers are low, when local spending differences between them are high, and when residents believe the presence of the formula retailer, or the loss of an existing business, would have a negative impact on the quality of the neighborhood.
- Because individual circumstances are important, the case-by-case conditional use authorization may be the appropriate policy tool to deal with the issue.
- The proposed legislation changes both the definition of formula retail, and what the Planning Commission must consider in a conditional use application.
- The recommendations that follow from this analysis therefore address these proposed definitional and procedural changes.

Conclusions and Recommendations

- As this analysis suggests that, in general, limiting formula retail in the city would not expand the local economy, expanding formula retail controls to cover non-U.S. establishments would also not expand the local economy.
- Similarly, there is no reason to believe that expanding the definition of formula retail to include companies that are owned by, or are affiliates of formula retailers, would expand spending in the city.
- The proposed economic impact report to the Planning Commission is required to consider the impact of the proposed formula retailer on existing businesses. However, a new formula retailer could be beneficial to the economy as a whole without benefitting existing businesses—by charging lower prices to consumers, for example.
- Requiring the report to consider the prices and local spending of the proposed and existing businesses would provide better information to the Planning Commission on the overall economic impact of the proposal.
- In addition, the impact of formula retailers on neighborhood quality can be weighed by directing the Commission to consider both the opinions of neighborhood residents, and whether a proposed store could prevent blight.

End Notes

1. In August, 2013, OEA staff priced 25 different commodities at 11 different formula retailers and 20 different non-formula retailers across San Francisco, gathering 366 prices in all. The establishments were chosen at random from the City's database of sales tax payers, and were geographically spread across the city. For each of the 25 commodities, each observed price was expressed as a percentage of the minimum price observed for that commodity at any store. This approach allowed prices to be standardized across commodities. The standardized prices were then weighted according to the weights used by the Bureau of Labor Statistics in calculating the Consumer Price Index, reflecting the fact that some commodities are purchased more frequently than others. Average weighted prices at formula and non-formula retailers were then compared. The weighted average price at non-formula retailers was found to be 17% higher. Based on the number of observations, the 90% confidence interval is a price premium for non-formula retail between 2% and 32%.
2. Source: U.S. Census, *2011 Annual Retail Trade Survey*, "Gross Margin as a Percentage of Sales (1993-2011)", <http://www2.census.gov/retail/releases/current/arts/gmper.xls>. Figure cited in the table is based on 2011 data. Gross margin is defined as is defined as sales less cost of goods sold, so cost of goods sold as a percentage of sales equals one minus the percentage shown the in table (27.1%). Detailed data on costs of good sold is not available by number of establishments within a firm. Since virtually none of the goods sold at retail in San Francisco are manufactured in the city, this is a business expense that leaks out of the city's economy and generates no local multiplier effect. The assumption that both formula and non-formula retailers spend 73% of every revenue dollar on goods sold is unrealistic. Formula retailers are often vertically-integrated or buy in bulk from wholesalers, and hence benefit from lower wholesale prices than non-formula. Our assumption therefore under-estimates the spending leakage associated with non-formula retail, leading to a generous estimate of their overall local spending impact.

End Notes

3. Source: U.S. Census Bureau, *2007 Economic Census*, "Retail Trade: Subject Series - Establishment and Firm Size: Summary Statistics for Single Unit and Multiunit Firms for the United States: 2007" The Census reports payroll and sales data for retailers having differing numbers of establishments, allowing the comparison presented here between firms with fewer than ten U.S. establishments and those with ten or more. This closely approximates the City's formula retail definition. The data is for the U.S. as a whole.
4. Source: U.S. Census, *2009 Annual Retail Trade Survey*, "2007 Detailed Operating Expenses Table", http://www2.census.gov/retail/releases/historical/arts/2009_ARTS_detailed_operating_expenses.xls. Data is provided as a percentage of retail operating expenses, which on average is 21.6% of sales in the retail trade industry. (For this calculation, see "Sales 1992-2011" and "Total Operating Expenses 2006-11" in the same publication. Multiplying the figure from this source, 9.5%, by 21.6% yields the 2% figure in the table. Data is not available by number of establishments in the firm. Given that formula and non-formula retailers generally compete in the same market for the same spaces, this figure will probably be similar for both types.
5. The detailed operating expenses source cited in Note 4 was used to determine local and non-local expenses for formula and non-formula retailers. For formula retailers, local expenses (in addition to rent and payroll as already discussed) included labor fringe benefits, contract labor, repairs and maintenance to machinery, lease and rental payments for machinery and equipment, purchased electricity, purchased fuels (except motor fuels), water and sewer, and local taxes and license fees. In addition to this list, for non-formula retailers, local expenses were also assumed to include: expensed equipment; packaging materials and containers; purchases of other materials, parts, and supplies; data processing and other purchased computer services; commissions; purchased communication services; purchased transportation, shipping, and warehousing services; purchased advertising and promotional services; purchased professional and technical services. All other expenses were presumed to be non-local for both formula and non-formula retailers.

End Notes

6. Net income here refers to the residual percentage of sales remaining after all of the above categories of expenses are deducted. Again, in an assumption that is extremely generous to the local spending impact of non-formula retailers, it is assumed that 0% of the net income earned by the formula retailer is spent within the city, while 100% of non-formula spending is spent within the city. The latter assumption is unrealistic because it assumes that all owners of the non-formula business either spend or invest all of the earnings only within San Francisco. If either assumption is violated, the local economic impact of these earnings will be less than what is assumed here.
7. This illustration is based on a hypothetical commodity with a price of \$1.00 at a formula retail store. Based on the research presented earlier, that commodity would cost \$1.17 at a non-formula retail store in the city.
8. If a consumer purchased the commodity at a formula retailer, 14.5 cents of that dollar would flow to local factors of production such as labor, rent, and local suppliers, based on the analysis on page 24. On the other hand, if the consumer purchased the commodity at a non-formula retailer, the cost would be \$1.17 and 24% of that, or \$0.29, would flow to local factors of production, again based on the page 24 analysis.
9. Whatever is not spent on local factors of production flows to non-local factors like manufacturers not based in the city. This equals 85.5 cents for a formula retailer, or 88 cents ($\$1.17 \times 76\%$) for a non-formula retailer.
10. The purchase of the same commodity at a non-formula retailer entails a loss of consumer spending to the local economy of \$0.17, relative to formula retail.
11. The net impact on local spending is the amount that flows to local factors of production plus the relative impact on consumer spending. This equals 14.5 cents for formula retail, and $\$0.29 - \0.17 or \$0.12 for non-formula retail.

Staff Contacts

Ted Egan, Ph.D., Chief Economist

ted.egan@sfgov.org

Asim Khan, Ph.D., Principal Economist

asim.khan@sfgov.org

Jay Liao, Economist

jay.liao@sfgov.org

The OEA would like to acknowledge the assistance of Mary Hom and Lily Conover of the Controller's Office in the preparation of this report.