ECONOMIC AND TAX IMPACTS OF THE NORTH MARKET

July 1, 2016

Bill LaFayette, Ph.D.
Owner, Regionomics® LLC

1293 S. Fourth St., Columbus, OH 43206
www.regionomicsllc.com

ECONOMIC AND TAX IMPACTS OF THE NORTH MARKET

Bill LaFayette, Ph.D., owner, Regionomics® LLC
July 1, 2016

Summary

The purpose of this study is to assess the economic value of the North Market to the Columbus Metropolitan Statistical Area (MSA) and its income tax value to the City of Columbus. Typically, the value of an entity to a local economy is measured through an economic impact analysis, but a standard analysis of this type is not appropriate here. This is because most of the food, meals, and other goods purchased at the North Market would be acquired locally whether the Market existed or not. These purchases are not adding to regional economic activity, merely relocating it from one part of the community to another.

However, there are clear economic impacts that can be assigned to the North Market. These arise from the ability of the Market's locally-owned businesses to trap a greater share of customer spending in the local economy – essentially generating impacts greater than the average retail store or restaurant. The majority of the spending at chain retailers and restaurants leaks out of the local area immediately and has no impact on the local economy. In contrast, locally-owned businesses trap a far greater share of spending because of the greater reliance of these businesses on local suppliers and the retention of wages and profits. The difference between the retention of spending by the North Market and by a typical retailer or restaurant (blockages) are the primary focus of the analysis. (The analysis finds that the share of spending trapped by North Market merchants far exceeds even the typically locally-owned business.)

There are three categories of economic impacts. Direct impacts arise from the activities of the merchants themselves, indirect impacts result from purchases from local suppliers to support the merchants' direct activities, and induced impacts are created by workers spending their wages on household goods and services. The blockage earnings and employment impacts are shown in Table S-1.

Table S-1
Earnings and Employment Blockage Impacts on the Columbus MSA Economy, 2015

	Direct	Indirect	Induced	Total
Earnings	$ 3,461,000	$ 971,000	$ 1,392,000	$ 5,824,000
Employment	104	8	12	124

The earnings impacts resulting from the ability of the North Market to generate higher levels of direct income and to trap indirect and induced activity means that the City of Columbus earns higher taxes. While the wages, salaries, and profits earned at the North Market are all subject to Columbus income tax, the blocked indirect and induced earnings are earned throughout the MSA. Total city and regional income statistics suggest that 55.3 percent of indirect and induced earnings generate taxes for Columbus. The result is that Columbus income tax was $119,200 higher in 2015 because the North Market trapped a greater-than-average share of earnings in the Central Ohio economy.

Introduction

The North Market is a Columbus landmark. The Market has been operating since 1876, and provides food, dining, and specialty goods from 35 independent merchants, and hosts a farmers' market each summer. These businesses attract a million shoppers each year, both locals and tourists from the nearby Arena District, Short North Arts District, Greater Columbus Convention Center, and hotels. The purpose of this report is to quantify the value of the North Market to the Central Ohio economy and to the finances of the City of Columbus.

Typically, the value of an entity to a local economy is measured through an economic impact analysis. The underlying premise of this analysis is that the economic effects of an activity do not stop with the activity itself but extend to other business entities and households within the region. The activity increases regional output through its operation. Business and household earnings increase and people are employed. The impacts on output, earnings, and employment are called "direct" impacts. But direct impacts are only part of the total economic value of the activity. As goods and services are purchased from local suppliers to support the business operations, the output of these suppliers increases, as does the output of their own suppliers, creating "indirect" impacts. Further, wages and salaries are paid to employees of both the operation itself and its suppliers. From these wages, employees make household purchases of all types. These third-order impacts are called "induced."

However, a standard economic impact analysis would not be appropriate for the North Market except in a limited sense. This is because most of the purchases made at the Market are of goods and services, such as foodstuffs and restaurant meals, that would be purchased locally whether the Market existed or not. These purchases are not adding to regional economic activity, merely relocating it from one part of the community to another. Purchases of the substantial number of tourists and convention visitors patronizing the market do bring dollars into the regional economy, but a tourist's purchase of a restaurant meal at the Market is in lieu of a meal that would be purchased somewhere else close by if the Market did not exist. Again, these purchases relocate economic activity; they do not create it. The only way in which the North Market generates direct, indirect, and induced impacts in the traditional sense is from the purchases of individuals traveling to Columbus from outside of the region for the primary purpose of visiting the North Market. These individuals certainly exist, but their numbers and the amount of their purchases are unknown.

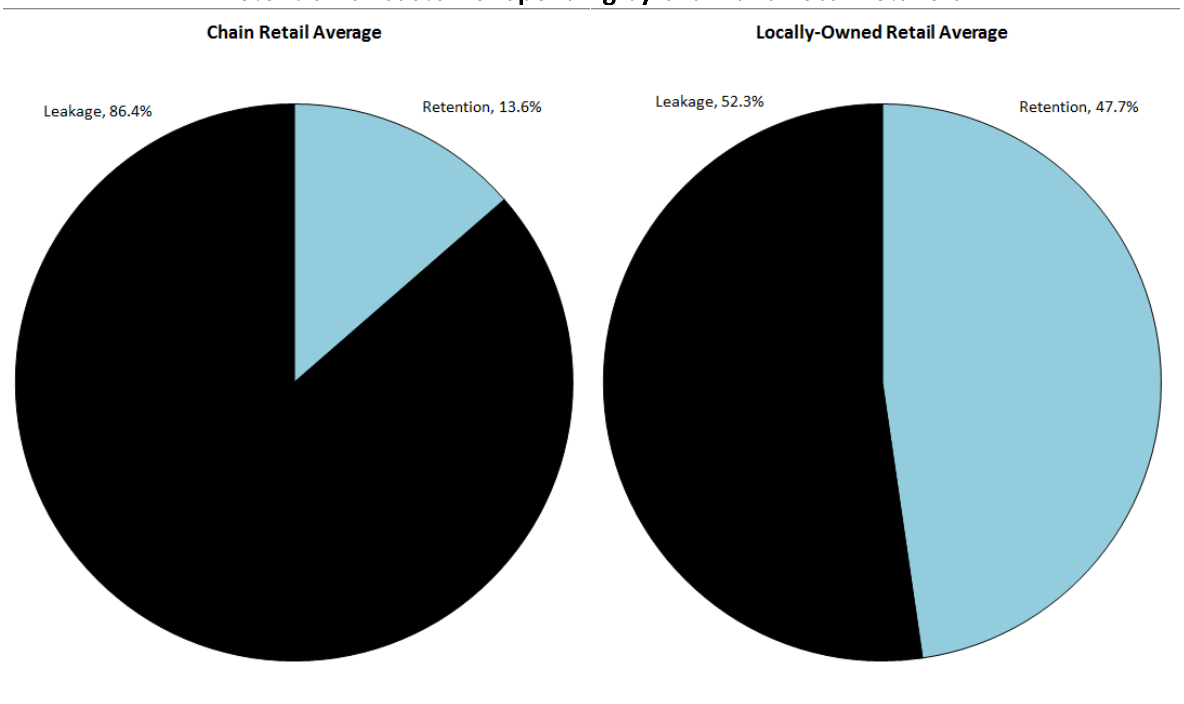
There are economic benefits that the North Market conveys, however. These arise from the ability of locally-owned, locally-serving businesses to trap a greater share of customer spending in the local economy – essentially providing indirect and induced impacts that are greater than the average retail store or restaurant. From an economic standpoint, preventing dollars from leaving the local economy is equivalent to bringing dollars into the economy. It is these "blockage impacts" – and the associated Columbus income tax benefits – that are the primary focus of this study.

Local Retention of Sales Revenues by Chains and Locally-Owned Businesses

The differences between the indirect and induced impacts of a chain establishment and those of a locally-owned establishment arise from the differences in the business operations of each of these types of businesses. Chains centralize purchasing, distribution, accounting, marketing, and other business services to maximize firm efficiency and maintain product consistency across their network. Individual establishments within the chain pay for these services with franchise fees and payments for inventory and services to distant suppliers. As a result, many of the dollars spent at these establishments leave the local economy immediately; consequently, the local impact of these payments is zero. In contrast, locally-owned businesses typically build networks of local suppliers and service providers. The expenditures of the businesses become income for their suppliers, generating larger indirect impacts and thus larger induced impacts. Profits and executive salaries stay local as well, further increasing direct, indirect, and induced earnings impacts. This additional activity supports jobs and increases output and income in Central Ohio rather than elsewhere.

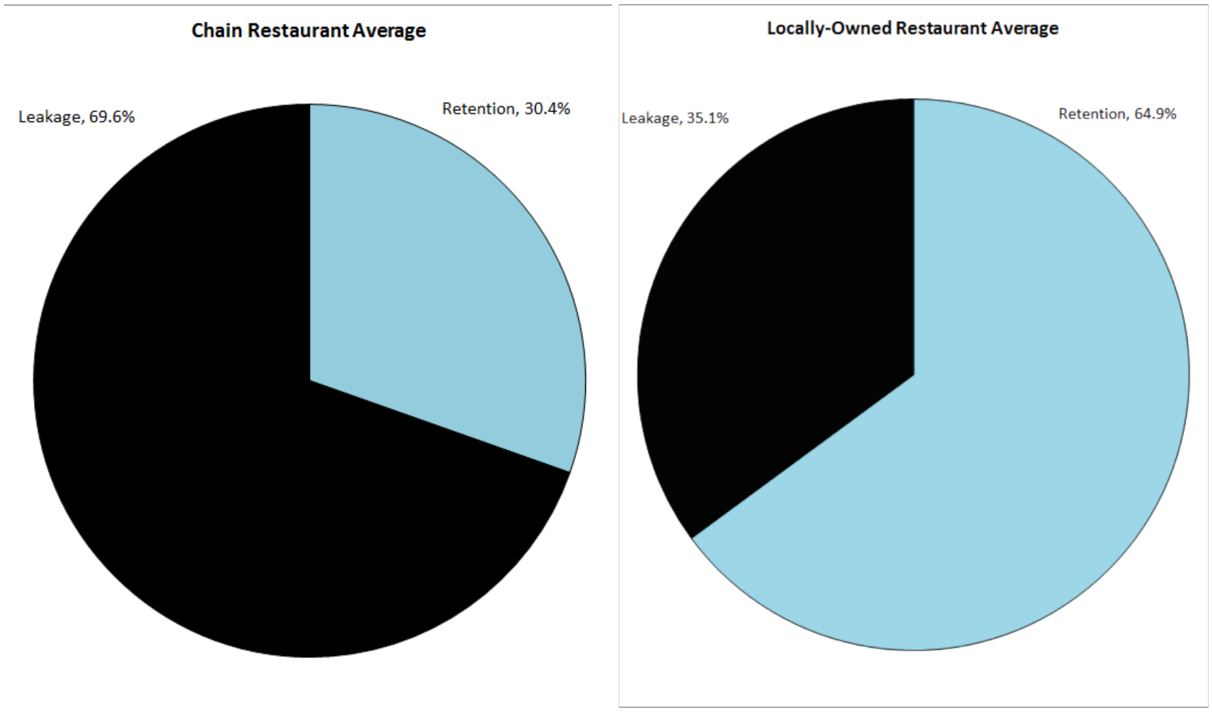
A firm called Civic Economics has measured the differences in impact of chains and locally-owned retailers and restaurants in 13 locations large and small across the U.S. Locally-owned businesses were recruited in each location and shared details of their operations to provide the data for measuring the share of expenditures that were made locally. The average share of expenditures of chain establishments retained in the local economy was obtained through analysis of the 10-K annual reports of a number of major retail and restaurant chains. As shown in Figure 1a, approximately 14 cents per dollar of sales at chain retailers are trapped through purchases from local suppliers (including labor). In contrast, locally-owned retailers trap an average of 48 cents per dollar. (The individual markets' results vary widely – from 39 cents to 66 cents per sales dollar). Figure 1b indicates that both chain and locally-owned restaurants retain on average a larger share than retailers but again, the share of consumer spending trapped by locally-owned restaurants is far greater than the share trapped by chains – 65 cents per dollar by the locals versus 30 cents by the chains. (Retention by locally-owned restaurants varied among the individual studies from 53 cents to 79 cents per dollar.)

Figure 1a
Retention of Customer Spending by Chain and Local Retailers



Source: Civic Economics.

Figure 1b
Retention of Customer Spending by Chain and Local Restaurants



Source: Civic Economics.

The blockage benefits of the North Market are especially important in Central Ohio. A variety of statistics suggest that entrepreneurship, the concentration and formation of small businesses, and the climate for independent retail in the region are well below average. The percentage of Columbus MSA workers who are self-employed ranks 88th among the 100 largest MSAs nationwide, the share of all employer firms with fewer than 20 employees ranks 85th, and the birthrate of these firms ranks 82nd. The ratio of firms with no employees to the total labor force ranks much higher: 51st. However, a 2011 study by Civic Economics and the American Booksellers Association[1] measured the climate for independent retail in all 363 MSAs in the U.S. by estimating the total sales of chain retailers in each MSA. The difference between total retail spending and this estimate of chain spending is the share of spending available to independent retailers. The Columbus MSA's share of total spending available for independent retailers ranks 350th out of the 363 MSAs – 13 spaces from the bottom. These findings suggest that the leakage of local retail spending from the Columbus MSA is greater than from the typical MSA and output, earnings, and jobs are lower than would be expected from the region's retail and restaurant spending.

---

[1] Civic Economics and the American Booksellers Association. *The Indie City Index 2011: A Measure of Independent Retail Vitality in Every American Metropolitan Area.* January 2011.

[2] Some net income is withdrawn by the business owners essentially as salary and some is retained within the business. This distinction is irrelevant for municipal tax purposes: taxes are levied on net business income whether it is withdrawn or not. It is irrelevant from an economic impact standpoint as well because retained earnings can be regarded as savings of the owners of these closely-held businesses.

Local Retention of Sales Revenue by the North Market

One objective of this study is to measure the degree to which merchant sales revenues are retained within the region, defined as the Columbus Metropolitan Statistical Area (MSA – Delaware, Fairfield, Franklin, Hocking, Licking, Madison, Morrow, Pickaway, and Union Counties). Data for this study were provided by North Market merchants (not including farmers' market vendors) and the North Market Development Authority (NMDA). Respondents provided total revenues for 2015, the average full-time and part-time employment during that year, the average number of hours per week worked by part-timers, and total purchases of supplies and business services from vendors within the MSA, within Ohio, and outside of Ohio. Rent in total for retail and restaurant merchants was supplied by the NMDA. Pre-tax wages and business profits were calculated as the difference between revenues and identified expenses.[2]

Table 1 summarizes revenues, expenditures, and net income for each class of merchant and all merchants in total. (Note that some merchants both sell goods and serve meals. These were categorized as retailers or restaurants based on the primary focus of their business.) As the table shows, combined sales of North Market merchants in 2015 totaled nearly $15.4 million. Out of each sales dollar, 79 cents are retained for at least one round of indirect impact by retailers and 83 cents of each dollar are retained by restaurants. Both are substantially more than the averages in Figures 1a and 1b. This could stem from a greater emphasis on local sourcing by North Market merchants than by typical locally-owned businesses. Indeed, local sourcing is a primary selling point for the North Market. The information in Table 1 is shown graphically in Figure 2a for retail and Figure 2b for restaurants as a complement to Figures 1a and 1b.

Table 1
Revenues and Local and Non-Local Expenditures of North Market Merchants, 2015

	Retail	Restaurants	Total
Revenue	$ 7,105,924	$ 8,260,289	$ 15,366,213
Local wages and net income	3,690,249	4,206,486	7,896,735
Rent	201,529	463,600	665,129
Local suppliers	1,724,656	2,514,904	4,239,560
Ohio suppliers	933,012	849,591	1,782,602
Non-Ohio suppliers	556,478	225,708	782,187
Share of revenues retained in the MSA	79.0%	87.0%	83.3%

Source: North Market merchants, North Market Development Authority.

[2] Some net income is withdrawn by the business owners essentially as salary and some is retained within the business. This distinction is irrelevant for municipal tax purposes: taxes are levied on net business income whether it is withdrawn or not. It is irrelevant from an economic impact standpoint as well because retained earnings can be regarded as savings of the owners of these closely-held businesses.

Figure 2a
Retention of Customer Spending by North Market Retailers, 2015

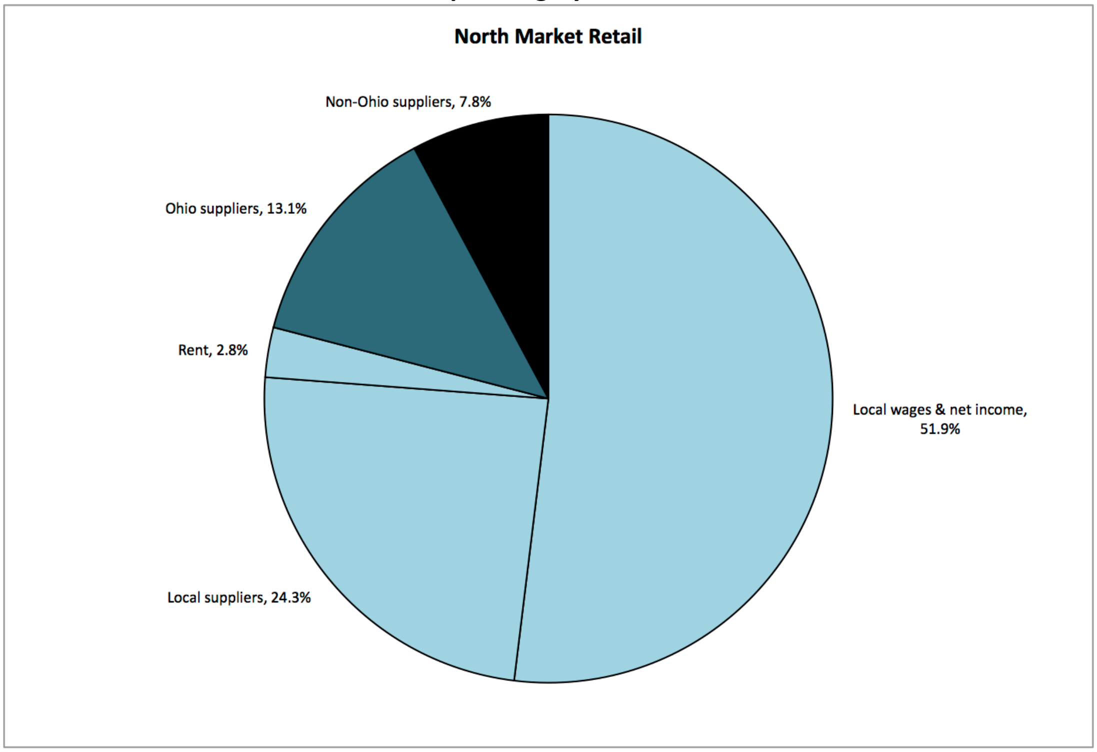
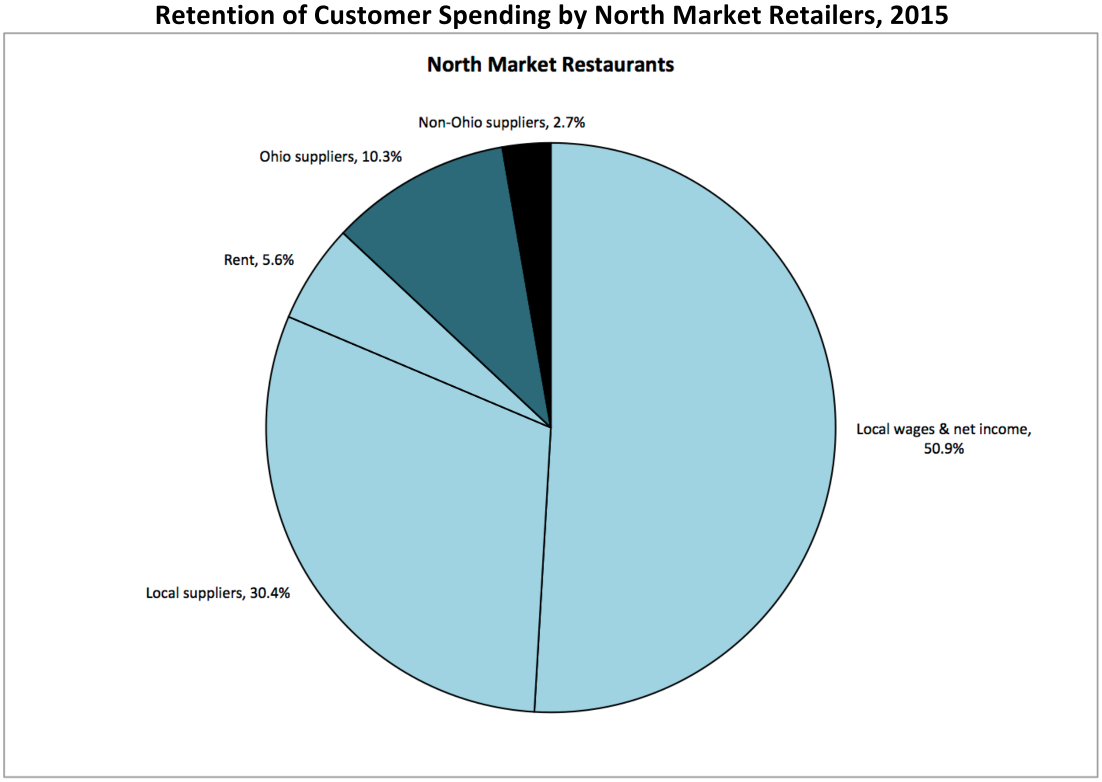


Figure 2b
Retention of Customer Spending by North Market Retailers, 2015



Source: North Market merchants, North Market Development Authority.

Table 2 reports the employment of the retailers, restaurants, and NMDA. This is shown both as the total headcount of full-time and part-time workers (including the business owners who work on-site) and the full-time equivalent. This is the sum of full-time employment and the number of workers at 40 hours per week who would produce the same number of hours as the part-time workers. The North Market and its merchants provide employment to more than 300 individuals, or 200 on a full-time equivalent basis.

Table 2
North Market Employment, 2015

	Full-time	Part-time	Total (headcount)	Full-time equivalent
Retail	54.0	67.0	121.0	82.8
Restaurants	71.5	113.0	184.5	119.3
NMDA	4.0	5.0	9.0	6.2
Total	**129.5**	**185.0**	**314.5**	**208.2**

Source: North Market merchants, North Market Development Authority.

Income and Employment Impacts of the North Market

As argued above, retail and restaurant purchases can be considered to have a regional economic impact only in limited circumstances because these impacts are relocated rather than newly created in the local economy. However, the fact that North Market merchants spend a larger-than-average number of dollars on local purchases of goods and services does create a valid impact because more dollars stay in the local economy for at least one round of indirect activity rather than leaving immediately.

It is tempting to measure the earnings and employment blockage impact of this local spending as the difference between the impacts of the North Market and those implied by the chain retention rates in Figures 1a and 1b, but this would produce unrealistic, overstated estimates because people would shop at locally-owned retailers as well as chains if the Market were unavailable. A more realistic measure can be obtained as the difference between the total regional impact of the North Market businesses as they currently operate and the impact of the same level of retail and restaurant spending at typical Central Ohio businesses.

These impacts are estimated using the 2013 I-RIMS data for the Columbus MSA from IMPLAN, Inc.[3] I-RIMS is a set of unique impact factors (multipliers) for each of 536 detailed industries within the MSA. The relevant industries are food and beverage retailers, miscellaneous store retailers, and limited-service restaurants. The reported revenues from the North Market businesses are used with the I-RIMS multipliers for these three industries to produce generic household and business earnings and employment impacts, which implicitly assume the regional mix of consumer spending at chain and locally-owned establishments in the region. The local supplier spending as reported by the North Market merchants is then used to generate the actual indirect impacts. Induced impacts are the sum of those calculated as part of the supplier impacts and from the actual direct employment and wages. An important point is that the results of this or any economic impact analysis represent only the order of magnitude of the actual impacts and cannot be regarded as precise.

[3] This is not the full IMPLAN model; rather it is a set of output, earnings, employment, and value added multipliers generated by IMPLAN, Inc., from the full model and intended to replace the RIMS-II multipliers formerly available from the U.S. Bureau of Economic Analysis.

Table 3 presents estimated household and business earnings impacts. The estimates of the earnings impacts of North Market's activities, calculated as described above, are in the top row. The middle row shows the impacts calculated from a standard run of the economic impact model using the revenues of North Market merchants and their industry mix. These are the impacts that would be expected from spending at a mix of chain and local retailers and restaurants typical for Columbus MSA consumers. The bottom row shows the difference between the totals in the top row and the middle row. These are the blockage impacts of the North Market's businesses. The implication of this analysis is that earnings of Columbus MSA households and businesses are $5.8 million higher because shoppers patronize the North Market rather than alternative retailers and restaurants. Note in particular the large difference in direct earnings. This reflects one of the largest leakages of retail and restaurant chains: executive salaries and profits. Many local employees of chain retailers and restaurants are lower-income front-line workers; the higher-paid executives are often in a remote headquarters location. Profits flow to the headquarters as well, or throughout the nation or world if the enterprise is publicly held.

Table 3
Household and Business Earnings Blockage Impacts on the Columbus MSA Economy

	Direct earnings	Indirect earnings	Induced earnings	Total earnings
North Market	$ 7,897,000	$ 2,097,000	$ 2,922,000	$ 12,916,000
Typical spending	4,436,000	1,126,000	1,530,000	7,092,000
Difference (blockage)	**$ 3,461,000**	**$ 971,000**	**$ 1,392,000**	**$ 5,824,000**

Table 4 shows the employment impacts of spending at the North Market, the impacts of typical retail and restaurant spending, and the resulting blockage. Employment in the economic impact model is measured in terms of full-time and part-time headcount rather than full-time equivalents, so the total of direct jobs at the North Market agrees with the total headcount in Table 2. The results imply that the North Market's blockage results in about 124 more full-time and part-time positions throughout the Columbus MSA than if the market did not exist. Again, this difference arises from the spending patterns of North Market merchants, which favor local suppliers and local labor to a much greater extent than those of typical Columbus MSA restaurant and retail operations.

Table 4
Employment Blockage Impacts on the Columbus MSA Economy

	Direct jobs	Indirect jobs	Induced jobs	Total jobs
North Market	315	34	51	400
Typical spending	211	26	39	276
Difference (blockage)	**104**	**8**	**12**	**124**

However, it must be noted that these estimates may be somewhat overstated. North Market customers may have a greater-than-average preference for locally-owned businesses than the typical Central Ohio shopper. Consequently, were the North Market not available, some customers might deliberately seek out other locally-owned businesses. For this reason, the increase in the leakage of revenues and decline in the impact of customers' purchases would be less than average were the North Market suddenly to close. But because of the North Market's greater-than average ability to trap spending and the fact that an unknown amount of purchases would be made at chain businesses, the regional impact of these alternative shopping patterns would still be less than those at the North Market. Because there is no way to determine the share of purchases that would be made at local businesses in the absence of the

North Market – let alone the blockage impact of those locally-owned businesses – there is no reliable way to reflect this impact.

City of Columbus Income Tax Impacts

The key message of the analysis above is that regional earnings are higher because the North Market generates higher levels of direct income and traps indirect and induced activity that would otherwise leak out of the local economy. This means that the City of Columbus earns higher taxes as a result of the Market's activity. These impacts can be measured by analyzing the earnings blockage impacts in Table 3. The first point to note is that Ohio law specifies that wages, salaries, and business net income are taxed where they are earned, and not primarily where the worker lives. While the wages, salaries, and profits earned at the North Market are all subject to Columbus income tax, the blocked indirect and induced earnings are earned throughout the MSA, so only a fraction of these earnings generate taxes for Columbus.

The first task is to obtain an estimate of the fraction of MSA income that is earned in Columbus. The U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) provides employment and payroll information for the nation, states, MSAs, and counties. Each year, the Ohio Labor Market Information Bureau (Ohio LMI) analyzes data from the first quarter to obtain city-level employment and income estimates for the cities of Cleveland and Columbus. Ohio LMI reports that wages earned within Columbus during the first quarter of 2014 totaled $6,600,306,000, while total MSA wages during that quarter from the QCEW totaled $11,933,671,000. Thus, 55.3 percent of MSA wages are earned in Columbus; this percentage is applied to the indirect and induced earnings in the bottom panel of Table 3 to estimate Columbus income and taxes, while the total direct difference is assumed to impact Columbus taxes.[4]

The result of this analysis is displayed in Table 5. The top line reproduces the bottom line of Table 3, and is the North Market's total earnings blockage (i.e., the difference between the North Market's earnings impacts and the typical impacts). The second row is the share of this blocked income earned in Columbus, calculated as the total amount of direct earnings and 55.3 percent of indirect and induced earnings. The bottom panel shows the resulting income tax benefits for Columbus at the City's 2.5 percent tax rate. The result is that because the North Market blocks earnings that would otherwise leak out of the Columbus MSA economy, the income tax receipts of the City of Columbus during 2015 were $119,200 higher than they would have been if the North Market did not exist.

Table 5
City of Columbus Income Tax Impacts from the North Market's Earnings Blockage, 2015

	Direct earnings	Indirect earnings	Induced earnings	Total earnings
Total blockage	$ 3,461,000	$ 971,000	$ 1,392,000	$ 5,824,000
Columbus earnings	3,461,000	537,000	770,000	4,768,000
Columbus income tax	**$ 86,500**	**$ 13,400**	**$ 19,300**	**$ 119,200**

[4] There would potentially be an additional blockage impact on Columbus taxes from the reallocation of direct purchases. This impact would arise from customers shifting their purchases to merchants outside of city limits were the North Market not available. To the extent that this would occur, the typical spending in the top panel of Table 3 would partly be outside of Columbus. This means that the difference in Columbus earnings and the tax benefits are larger than those calculated here, but there is no reliable way to estimate the size of this impact.