

NOPREN Monthly Call – February 13, 2017

Presenters: Jennifer Otten, PhD, RD and James Buszkiewicz, MPH

Presentation: The effects of Seattle's Minimum Wage Ordinance on supermarket food prices and the early care and education workforce

Bios: Jennifer Otten is an Assistant Professor in the University of Washington School of Public Health. Her research looks at the impacts of policy on diet-related health behaviors and outcomes; food systems, as it relates to food and nutrition policy; and, on understanding and improving the ways in which research gets to the public policy table. She is a co-investigator on the Seattle Minimum Wage Study and Co-Director of the UW Applied Public Policy Lab and of UW Livable City Year.

James Buszkiewicz is second year doctoral student at the University of Washington School of Public Health. He also serves as a research assistant on the Seattle Minimum Wage Study where he works on a number of projects related to how for-profit firms, nonprofit firms, and grocery store prices respond to the ordinance roll out. Prior to joining the Minimum Wage Study team, James worked for the Massachusetts Department of Public Health as the Commonwealth's Nutrition, Physical Activity, and Obesity epidemiologist where he was responsible for analyzing the impact of a number of community-based programs, such as the *Mass in Motion* and the *Childhood Obesity Research Demonstration*, and the Commonwealth's School Body Mass Index Surveillance program.

Funding:

- Laura and John Arnold Foundation
- City of Seattle
- Start-up funds
- Funders had no role in study
- No conflicts of interest

Background:

- Minimum wage increase schedule was enacted in 2015
- Different types of employers have/will need to increase wages on different schedules, with larger employers increasing minimum wages to \$15/hour sooner than smaller employers
 - Differences in benefits requirements

Study components:

- 1) Administrative data – employer services data on jobs, hours worked, types of jobs
- 2) Surveying employers
- 3) Talking to employees
- 4) Looking at prices

Preliminary Seattle Minimum Wage Study (SMWS) findings:

- Analyses conducted using data to the end of 2015 – \$10/11 from \$9.47:
 - Wages: significant positive increase for low-wage workers – in late 2015, average was 73 cents per hour higher for low-wage workers
 - Employment and hours: slight negative effects, but this was very sensitive to model choice – slight reductions in number of low-wage jobs and hours/employee.
 - Earnings: Decreased hours meant that positive effects of increased wages may have been somewhat offset, but this is dependent on the model used. Overall, study estimates that employees are gaining a few dollars per week.
- Caution against conclusions or generalizations since these findings are preliminary and there is much more collection and analysis to be done.

Supermarket food pricing research overview:

- One concern regarding increasing minimum wage is that positive impacts of increased wages will be offset by corresponding increases in food prices. Supermarket food pricing analysis looks at whether Seattle's minimum wage ordinance does impact food prices.
- Many states and localities have adopted increased minimum wages and the concern regarding food prices is common. To date, no studies have looked at the effects of local-level minimum wage increases on supermarket food prices.
- Research aim: to compare the early effects of Seattle's \$15 minimum wage ordinance on Seattle supermarket food prices compared to King County supermarkets unaffected by the ordinance.

Research design:

- Looked at Schedule 1 employers, who were required to increase wages early on after policy enactment. These are primarily large supermarkets.
- Data collection time points: collected food prices at one month pre- and one month post-policy enactment. Then conducted a second follow-up 1 year later to seasonally match to follow-up 1 and conduct analyses on \$13 phase-in on January 1st of 2016.
- Store selection: 12 stores total; 6 in Seattle and 6 in King County, matched by chain. Selection based on:
 - 65% of residents named these stores as primary food shopping location
 - Wide variability in total market basket cost from low (\$218) to high (\$406)
 - The chains represent 65% (50 of 78) Seattle stores impacted by the ordinance

Market basket price analysis:

- CPHN Market Basket tool that contains 106 food items
- Food item selections based on CPI and Thrifty Food Plan market baskets
- Commonly eaten and nutrient-rich foods
- Assigned to 8 food groups based on USDA guidelines
- Collection: a trained researcher enters the supermarket with a defined list of foods and records the price of each item on the list, using the lowest-priced version of the item (often the store brand)

Analysis:

- Multi-level, mixed effects linear model with an unstructured covariant matrix, clustered at the store level.
- Difference-in-difference estimator to compare regions across any two time points.
- T-tests to compare different stores at single time point

Results:

- Overall, across the three time points, there was a slight decline in Seattle market basket cost but stability in King County market basket cost
- No significant difference in overall market basket cost or individual item cost between regions over time
- Within single time points (baseline, follow-up 1, follow-up 2), there were no significant differences between Seattle and King County for a given supermarket chain
- By food group: using same linear mixed effects model, found no significant differences by food group strata over time (in any of 8 food groups)
 - Largest share of market basket costs were meats, followed-by vegetables, cereals/grains and dairy (tied)
- By level of processing: Minimally processed versus ultra-processed foods – hypothesized that ultra-processed foods would have greater price increase, since more employees are involved in their production. Overall, the team did not find differences across time points or within time points. These results held when examined at chain level as well.

Alternate explanations:

- Grocery stores may have adjusted prices ahead of time, before ordinance went into effect. Stores were aware of the ordinance before it went into effect, so may have prepared accordingly.

- \$11/hr and \$13/hr may not be large enough to impact consumer food prices
- Wages may have already been at the \$11/hr or \$13/hr at large chains (due to union contracts, etc, rather than ordinance)
 - Based on ESD data for year preceding SMWO, 18% of grocery jobs in Seattle and 34% in King County earned less than \$11/hr
- Food prices may be more sensitive to national and global trends rather than local trends, as much of Seattle's food comes from outside the region

Limitations:

- No metrics on food quality
- Recorded only lowest priced version of food each food item
- Did not account for changes in sales, coupons, discounts, which may have been adjusted in response to the ordinance
- Did not include food retailers such as bulk retailers, specialty stores, ethnic stores, farmers' markets, online delivery services

Conclusions:

- No evidence of changes in supermarket food prices in response to early implementation of SMWO
- Future data collection after longer duration (and further wage increases) of policy will provide further information
- How ECE centers are responding to SMWO:
- ECE group may be especially sensitive to changes in minimum wage, although these impacts will be heterogeneous
- ECE settings are forced to provide quality care on very limited budgets – as a result, this is an area where there are a lot of low-wage workers

How this connects with health:

- ECE providers often earn poverty-level wages and may not be able to afford adequate housing, food, healthcare
 - 2014 average WA state wages: \$10.67/hr for assistants and \$12.82 for teachers
 - 2014 state minimum wage: \$9.32/hr
 - 1/3 of providers enrolled in public assistance – concern that as wages increased, these providers might no longer be eligible for these programs
- High turnover due to low wages
 - Trickle down effects on childcare quality

Research aim:

- To understand how minimum wage ordinance might impact childcare
- To understand how these impacts trickle down to health of providers and children

Methods:

- Conducted qualitative interviews after first two wage increases
 - Semi-structured interviews (n = 15)
 - Transcribed and double-coded using Dedoose
- Most of the ECE providers will be Schedule 2 employers, meaning their wage requirements increase at a slower rate than the larger employers
 - Estimated that minimum wage in these settings had reached \$12/hour during this research

Sample characteristics:

- Participant level: All were female; all were directors or executive directors of centers, average time in position was 22 years (range = 5-40 years)

- Center level: 13 non-profit and 2 for-profit; 5 multisite; all served children under the age of 6, with variation in specific ages served; average number of employees was 24 (range = 9-50); wages were slightly higher than state average, but similar
 - Minimum hourly wage: \$12.60 (range = \$12-15)
 - Average hourly wage: \$15.13 (range = \$13=17)
- Benefits provided: all provided sick leave and paid time off, but variation around insurance and retirement benefits provided

Interview topics:

- Budgets, specifically what percentage of total budget was labor wages
- How will centers compensate for the wage changes? What will happen at different levels?
 - Center-level: compensatory practices
 - Provider-level: wages, wage compression, recruitment, spillover
 - Child-level: quality of care
 - Other system factors: subsidy policies, CACFP

Monthly income – center-level:

- Tuition and parent fees were largest sources of income
- Other income sources were subsidies from CACFP, state, and city; fundraising; and donations/grants

Monthly expenses – center-level:

- Largest percentage of expenses were for payroll, followed by benefits and rent/utilities
- Food and other expenses were very small in comparison to other expenses

How will centers compensate for the minimum wage change?

- Top response was to increase tuition and pass cost to families
 - Concern regarding losing low-income families
- Changes to employee schedules
- Cut certain expenses such as professional development, childcare supplies, enrichment activities
- Enroll in programs such as CACFP and Seattle Preschool Program

How will wage increases affect ECE staff?

- Wage compression – concern around increasing wages for low end of pay scale but not for high end, which might lead to turnover of higher wage staff
- Recruitment challenges – may be harder to recruit if less taxing jobs now pay the same wages as ECE work
- Staff training – may have to reduce money spent on this, despite increasing qualification requirements for new hires

State and city subsidies:

- DSHS subsidy to support ECE costs for families under 200% FPL had not risen at same rate as rise in tuition
- Some centers reported having to reduce the number of families enrolled who were receiving DSHS subsidy
- City of Seattle subsidy (families below 300% FPL) recently increase in response to new minimum wage requirements
 - Example of offsetting unintended consequences of one policy with another to help low-wage workers and families

Health outcomes:

- Plan to look at the health outcomes that might be associated with study findings
 - At center-level and provider-level, and for both providers and children served
 - Short-term and long-term outcomes

Future planned analyses:

- Now have access to restricted data from NHIS and will do an analysis on state variation in minimum wage from 2006 to 2013
- Will examine relationship between min wages and:
 - Health care access
 - Diet-related health outcomes
 - Material hardship and food insecurity
 - Subjective well-being and life satisfaction
 - How do these outcomes vary based on demographic factors?

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Question and answer:

- **QUESTION:** You discussed how prices may have increased pre-implementation of the policy. But is it possible that price increase is just lagging behind data collection?
ANSWER: The short answer is that it is possible. It is important to remember that of the three data points we worked with, one is one month pre- and one is one month post-implementation, so it spans two months. The third data point is one year later, so this will definitely be something we can address in our future analyses. As of now, we have not seen any initial shock in prices. However, wages will continue to increase further, so it will be interesting to see how this and state-level minimum wage increases impact food prices.
- **QUESTION:** It seems that the higher wages would impact store expenses in two ways: one is store costs, or increased wages of people working at the stores, and the other is cost of production, which is really only going to impact the locally produced food. Do you have a plan to look at how these two mechanisms might differentially impact food prices?
ANSWER: I think that is exactly right that those are the two mechanisms that would impact prices. That is the actual staff at the supermarket and also the food production costs. In terms of being able to look at that, it is something we have discussed but we do not have specific plans to do this right now. In the future we could potentially look at food items and look specifically at items that have been produced locally. The other piece is that we could potentially do qualitative interviews with staff to see where these prices might be affected. We have a little of that data with the employer data we have, but should look into this area further.
- **QUESTION:** Could national supermarket chains have the ability to smooth out the impact of higher wages in Seattle by balancing these costs across their Washington stores or nationally? If so, do you think the impact might be felt first by local stores that are not chains and do you have plans to do work as the minimum wage law goes into effect in very small stores?
ANSWER: We do not currently have plans to do that but some of our research staff and students are interested in potentially looking into smaller stores. I agree that smaller grocers might have more issues with being flexible and being able to absorb these extra costs, perhaps similarly to the ECE providers.
- **QUESTION:** Regarding the increase in subsidies from the City of Seattle. Can you give us an idea of the process by which this happened? How did this data get back to policy makers and how did the response happen at the local level?
ANSWER: It was initiated at the city level, and they reached out to us. Before we had collected our data, the city went out and collected data from the ECE centers to see what the tuition rate was going to be and used the new rate, rather than the old one, to establish cutoffs. I did not see the backend of their model but I know they went out to both family home and larger centers. A lot of the concern initiated from our group, who highlighted concerns and thought through different pieces of how the city could help offset these added costs. Overall, the collaboration and flow of information between our study and the city has been very helpful.