Mdse\_item\_i-loc-week level (historical data only)

New additional price fields: selling\_reg\_retail, selling\_price

1. Only use reg\_retail and current\_retail.
2. Create reg\_retail\_clean:
   1. For each mdse\_item\_i-loc-future-day combination, check to see if reg\_retail <= 0 for a certain date. If it is true, then for the same date, find other stores that have reg\_retail > 0. Take the median of these values and substitute for the poor value of reg\_retail.
3. Do same step as 2a) but use current\_retail instead to create current\_retail\_clean.
4. To get selling\_reg\_retail, use cleaned reg\_retail price. When it is NULL, use the last good value and carry forward.
5. To get selling\_price, use current\_retail\_clean and reg\_retail\_clean. If current\_retail\_clean is missing and was not populated previously, use reg\_retail\_clean. Once current\_retail\_clean is populated, use current\_retail for all price\_clean.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| expr\_d | eff\_d | p\_act\_v | reg retail | current retail |
| 5/29/17 | 10/1/15 | N | 6.99 | NULL |
| 6/29/17 | 5/30/17 | N | NULL | 3.48 |
| 12/31/99 | 6/30/17 | Y | NULL | 2.08 |

Selling\_reg\_retail should be 6.99 from 10/1/2015 - present, selling\_price should be 6.99 from 5/29/2017-10/1/2015, 3.48 from 5/30/2017 – 6/29/2017, and 2.08 from 6/3/2017 to the present.

1. To aggregate to week level, take average of selling\_reg\_retail and selling\_price at mdse\_item\_i-loc-day level up to the mdse\_item\_i-loc-week level

CHECKS: No price should be NULL or non-negative.

Mdse\_item\_i-chain-week level (historical data only)

Final schema: mdse\_item\_i, week, selling\_reg\_retail, selling\_price

Using mdse\_item\_i-loc-week dataset, use the straight average selling\_reg\_retail and selling\_price fields to calculate chain level selling\_reg\_retail and selling\_price. We will not take volume into account (for now) because volume is reflected in the transaction prices.

CHECKS: No price should be NULL or non-negative.