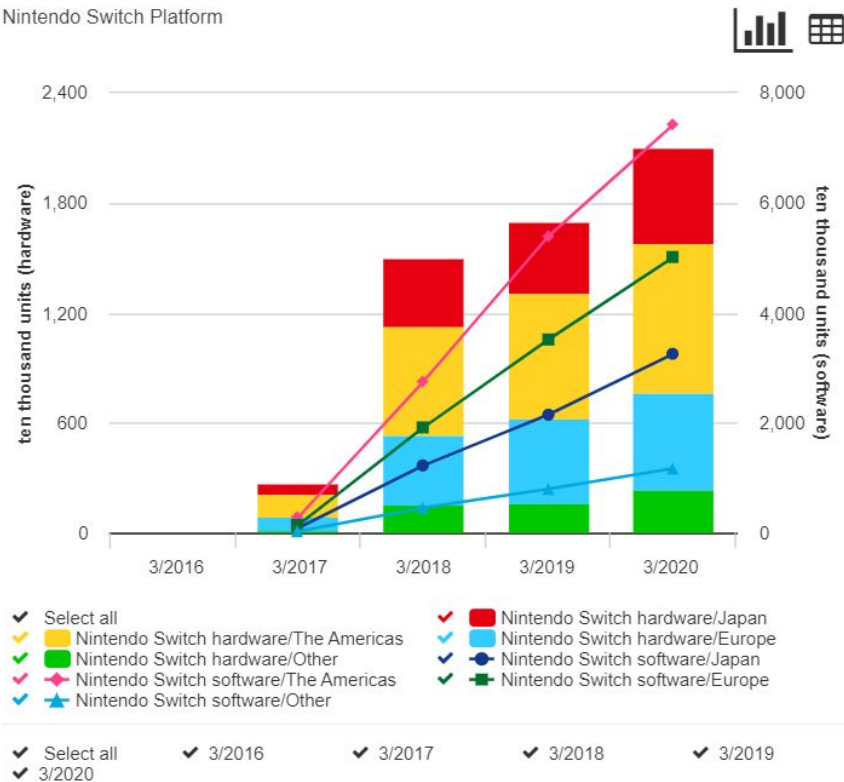

Effects of COVID-19 Shelter-In-Place on Nintendo Switch Resale Pricing on eBay - Spring 2020

John Cho
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Introduction - History

- **Mar 2017:** Nintendo Switch release at retail cost \$299.99
- **Sep 2018:** Switch Online service launch (\$3.99/month, \$19.99/year)
- **Nov 2018:** available games crosses 1000
- **Aug 2019:** updated console release (increased battery life)
- **Sep 2019:** Switch Lite release at retail cost \$199.99
- **Jan 2020:** 50M units sold
- **Mar 20, 2020:** release date for Animal Crossings: New Horizon

Nintendo Switch Platform

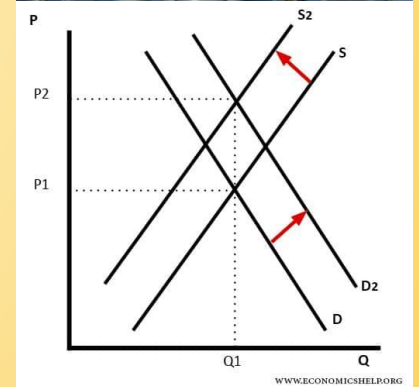


Notes

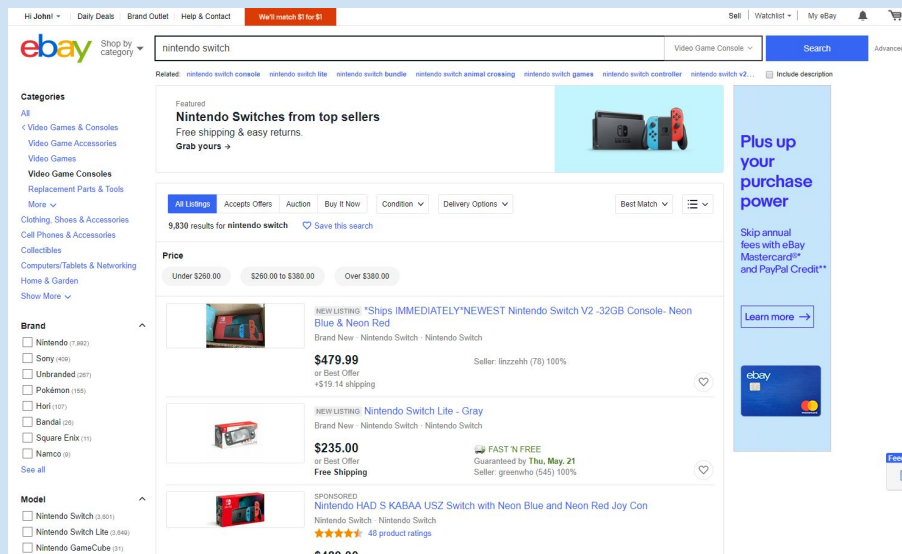
1. Nintendo Switch hardware means Nintendo Switch and Nintendo Switch Lite.
2. The figures above are rounded to the nearest ten thousands.
3. Nintendo Switch software includes the downloadable version of Nintendo Switch card software.

A Perfect Storm Brewing

1. Sales continuing to increase after 3rd year anniversary - March 2020 YoY sales doubled (**new monthly record**)
2. Revised 2020 sales forecast from 18M → 22M units
3. **Coronavirus** (COVID-19) beginning to spread worldwide in 2020 Q1, **disrupting factory production**
4. Flagship title **Animal Crossing: New Horizons** anticipation building pending release date of **March 20**
5. Panicked consumer buying causing shortages in hand sanitizer, toilet paper, face masks
6. **March 16, 2020**: California becomes first US state to announce Shelter-In-Place mandate, forcing businesses to close and people to stay at home



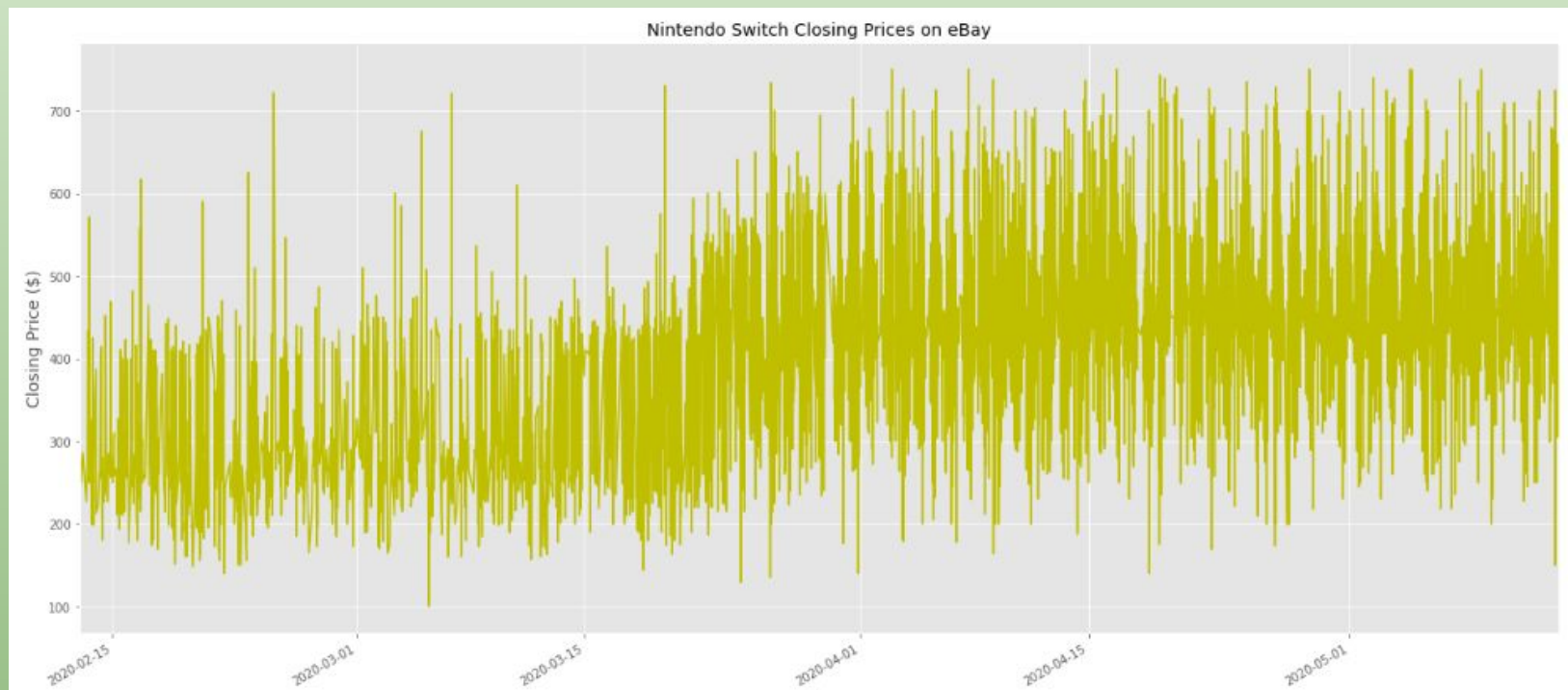
Data Collection - Web Scraping



- ❖ **Python - BeautifulSoup:** chose to manually scrape listings data instead of using eBay API
- ❖ Great learning experience, wouldn't want to do it again



EDA: Exploratory Data Analysis - Price Movement

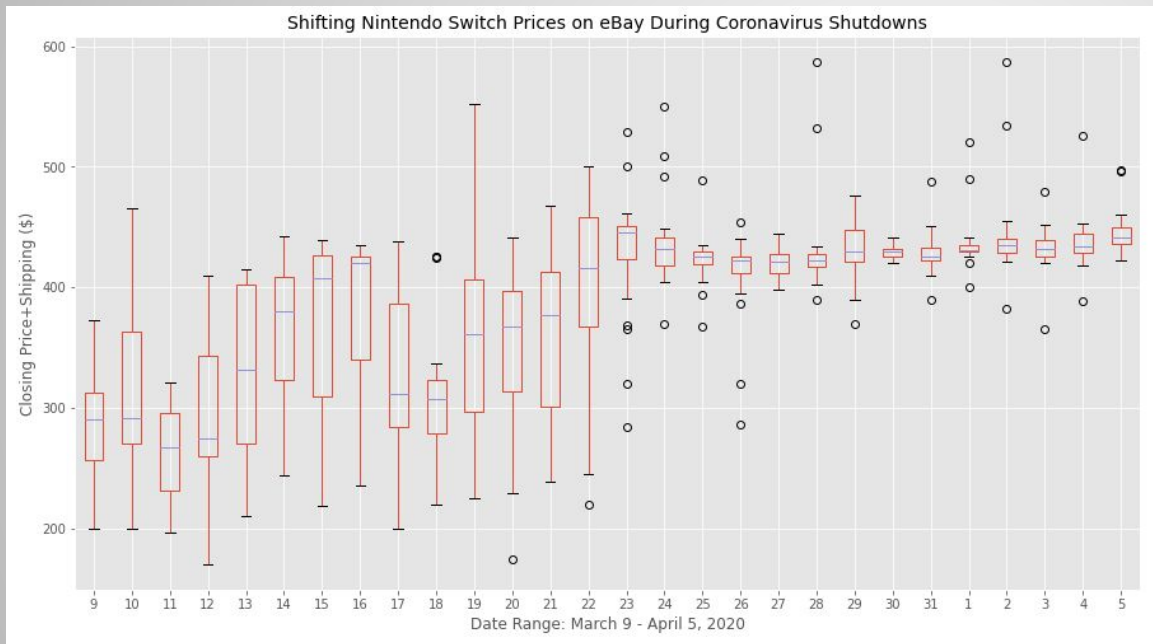


CA Shutdown Begins



Timeframe: Feb 13 - May 13, 2020

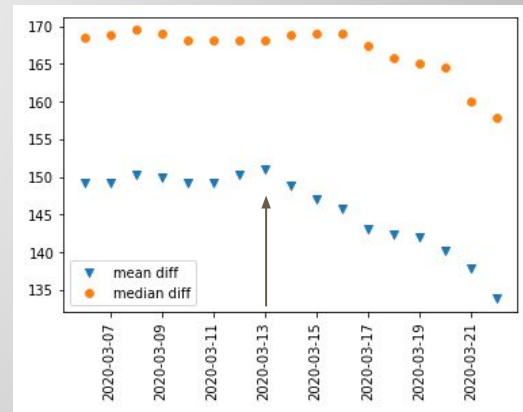
EDA: Zooming in on the SIP Transition



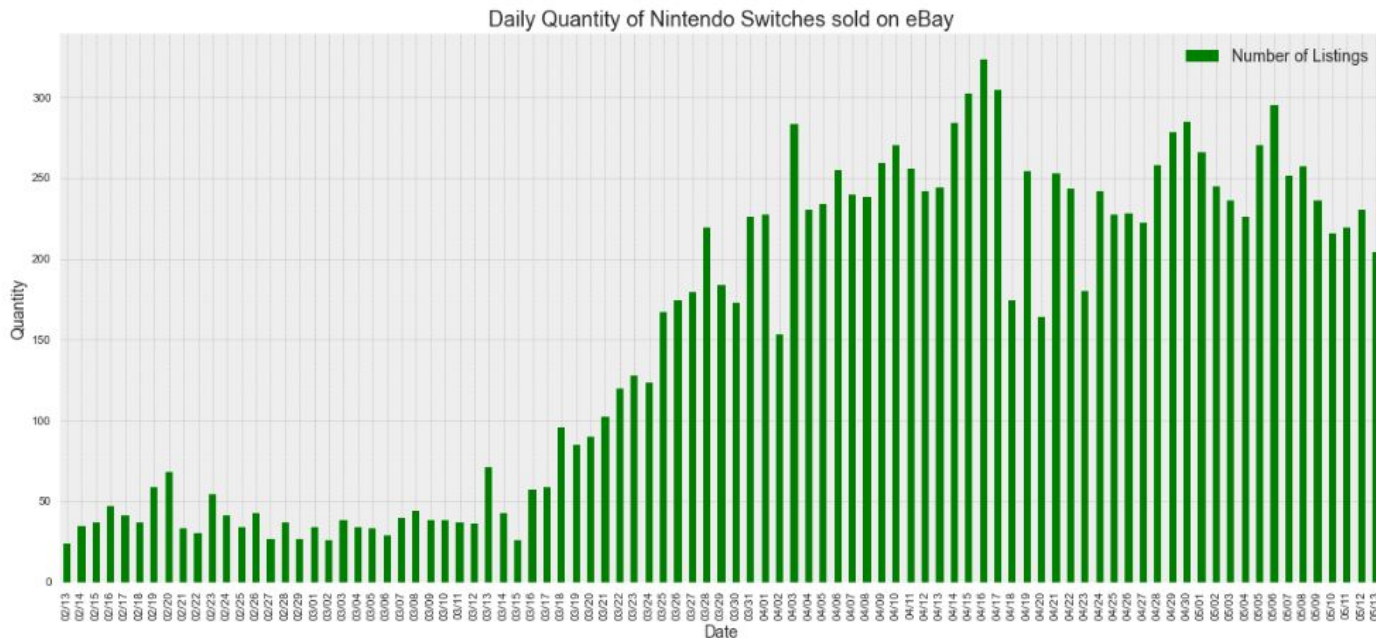
- Daily selling prices averaged per hour shows the price floor increasing by ~\$150 exactly 7 days after SIP began on March 16.

→ Consolidation of prices at \$125-150 above \$299.99 retail price

Average Closing Price
Difference Peak:
Friday the 13th

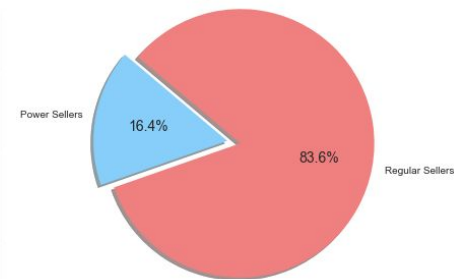


EDA: Scramble to Buy and Resell

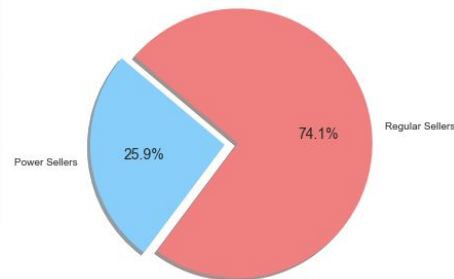


Almost 2000 people sold their pre-owned Switch for an average of **\$420**.

Power Sellers vs Regular Sellers PRIOR to SIP



Power Sellers vs Regular Sellers AFTER SIP



*Power Seller (at least 5 units)

What If I Want One?

Results from Linear Regression Price Prediction Model (as of 5/14/20)

Average price differences for differing features:
YMMV (Your Mileage May Vary)

Price Floor (Brand New)	\$443
Condition: New (Other)	(-\$16)
Condition: Open Box, Refurbished	(-\$44)
Condition: Pre-Owned	(-\$50)
Extra SD Card:	+\$30
Animal Crossing:	+\$28
Additional Games:	+\$41
Carrying Case:	+\$8
Additional Controller(s):	+\$32
Special/Limited Edition:	+\$57



Final Thoughts, Conclusions

- ★ Nintendo is aware of situation - announced increased factory production with experts weighing in that a surge of US shipments should arrive by **late May / June**.
- ★ Supply / demand imbalance will 'hopefully' be gone by then. (Who knows?)
- ★ Buyer Recommendations: be willing to pay the **premium** or invest a lot of time searching for one at retail price. Purchasing a new bundle on eBay may be worth it as our model found certain add-ons that end up costing less than if purchased separately.
- ★ Befriend your neighborhood Target electronics section manager for inside tips on store shipments and deliveries.
- ★ Look into utilizing a **bot** to assist in the search.

MOTHERBOARD
TECH BY VICE

Resellers Using Checkout Bots Are Driving the Nintendo Switch Shortage



**Thank You
So Much!**