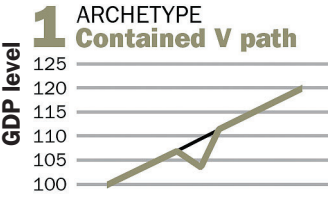


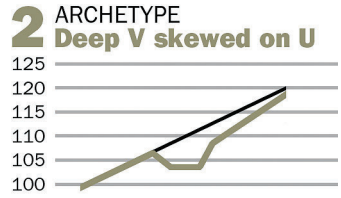
Simulation is based on 4 archetypes of the crisis



- Macroeconomic**
- Positive surprise in virus properties
 - Rapid catch-up in mitigation measures and their effectiveness
 - Significant monetary and fiscal response
 - Household and business spending stays largely intact
 - Few businesses fail; unemployment recovers from initial dip

- Automotive**
- Government-backed incentives and cheap credit spur quick recovery
 - Deferred automotive demand recovered to large extent

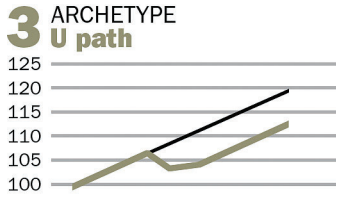
- Assumptions**
- Short-term crisis impact: **~3 months**
 - Macroeconomic impact: **~9 months**
 - GDP drawdown: **~2 percentage points**



- Virus properties stay or worsen
- Mitigation efforts are slow/unsuccessful and have to be extended
- Household and business confidence falls and remains depressed (2008-09 crisis)
- Rebound through governmental support in investments, business sector and households

- Confidence remains low, and consumers continue to defer major purchases
- Demand partly recovered, yet significant portion of sales lost in 2020

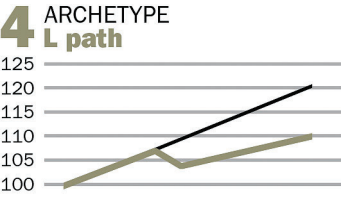
- Short-term crisis impact: **~6 months**
- Macroeconomic impact: **~18 months**
- GDP drawdown: **~5 percentage points**



- Virus properties linger into 2021 with continued fear of mutation
- Mitigation efforts are intense, yet ultimately unsuccessful
- Mitigation efforts have to be sustained for an extended period
- Household and business confidence collapses and remains depressed
- Financial system begins to show cracks

- New-vehicle sales remain depressed as market moves into prolonged economic downturn
- Significant portion of sales lost

- Short-term crisis impact: **~9 months**
- Macroeconomic impact: **~24 months**
- GDP drawdown: **~6 percentage points**



- Consistent repeated shock:
- To labor — potentially facilitated by a repeated deadly pandemic
 - To capital — potentially facilitated by an inability to invest as in the past
 - To productivity — potentially facilitated by a break in the capacity to learn

- Disruption to auto supply chains
- Continued shutdowns — e.g., manufacturing, dealerships, etc.
- Immense loss of sales

- Short-term crisis impact: **>12 months**
- Macroeconomic impact: **>24 months**
- GDP drawdown: **~7 percentage points**

← Unlikely →

← COVID-19 crisis is most likely in this range →

← Unlikely →