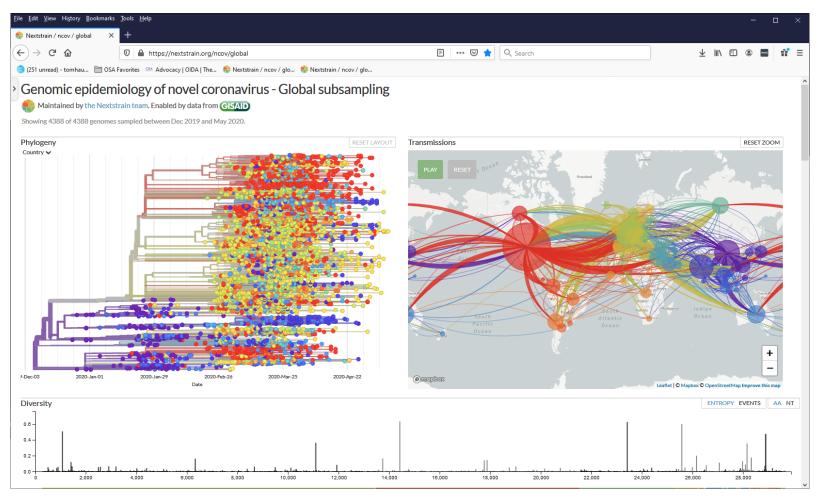


21 March 2020

Florida Photonics Cluster meeting



#### Viral mapping and ancestry





Source: nextstrain.org

#### Photonics is fighting the virus

Equipment	Diagnostic
Infrared thermometers and imagers	Body temperature
Pulse oximeters	Blood oxygenation
CT radiography	Lung damage
RT-PCR molecular analysis instruments	Presence of genetic material
ELISA	Presence of antibodies
Gene sequencing instruments	Mapping viral genomes

Key:

RT-PCR Reverse transcription polymerase chain reaction

ELISE Enzyme-linked immunosorbent assay
CT Computed tomography (scanning x-ray)

See: Optics & Photonics—Critical Tools in the Fight Against COVID-19 (OSA's Optics & Photonics News magazine and May 8 webinar).

#### osa-opn.org







Room temperature RT-PCR instrument. Credit: Cepheid



#### **UV** sterilization







Top: Germicidal lamps up to 30 Watts. Credit: Biolux Inc.

Bottom: Prototype LED decontamination lamp. Credit: Wikimedia commons

Right: Puro's Sentry Portable UV disinfection unit. Source: Puro.

See also: Optics & Photonics—Critical Tools in the Fight Against COVID-19 (OPN magazine and webinar). osa-opn.org



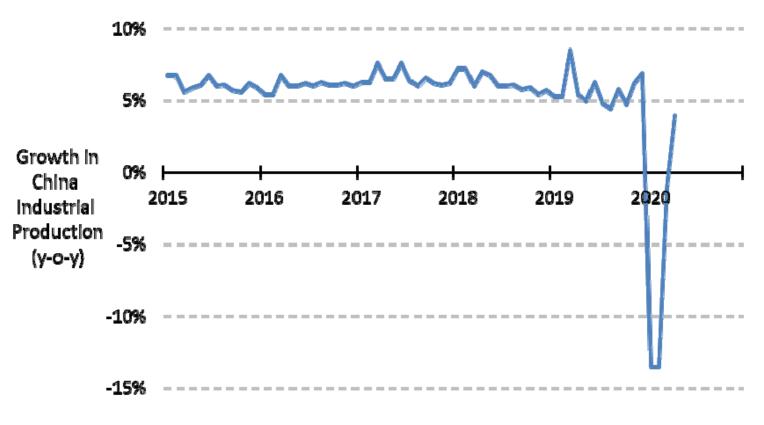
#### We are in a Black Swan





Source: Office Guy Cartoons.

#### V-shaped supply side shock





Source:

Right: National Bureau of Statistics of China (May 2020). Representing industry value-add year-over-year growth rate. January and February are combined.

#### V-shaped supply side shock





Source: OIDA (May 2020) 7/16

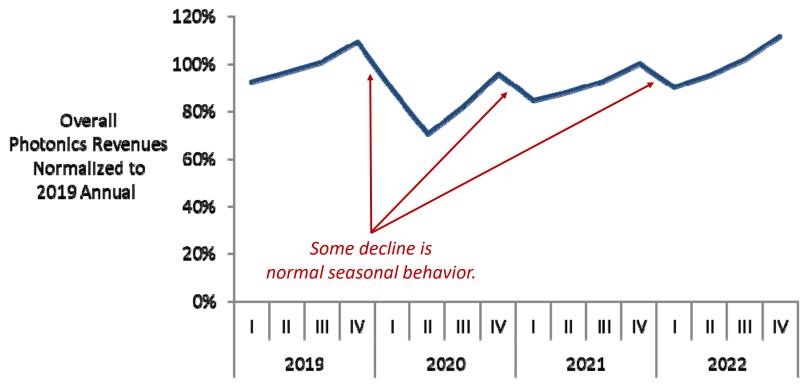
### "Yes, there will be growth in the spring."





Chauncey Gardiner, from *Being There*. Source: Everett Collection.

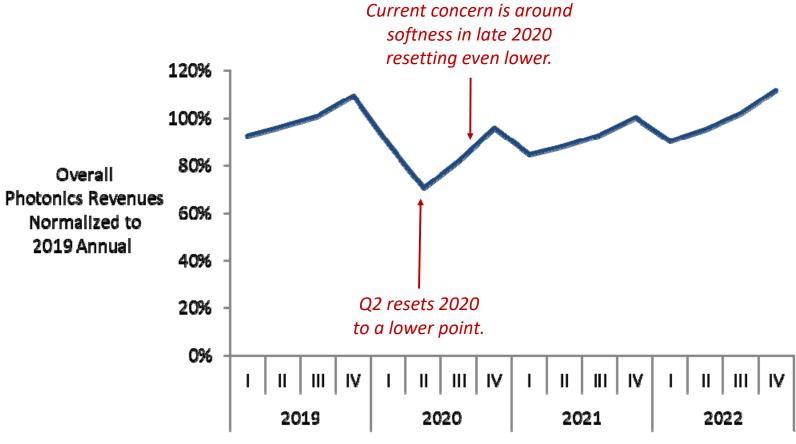
### Sawtooth demand-side recovery



OSA Industry Development Associates

Source: OIDA (May 2020) 9/16

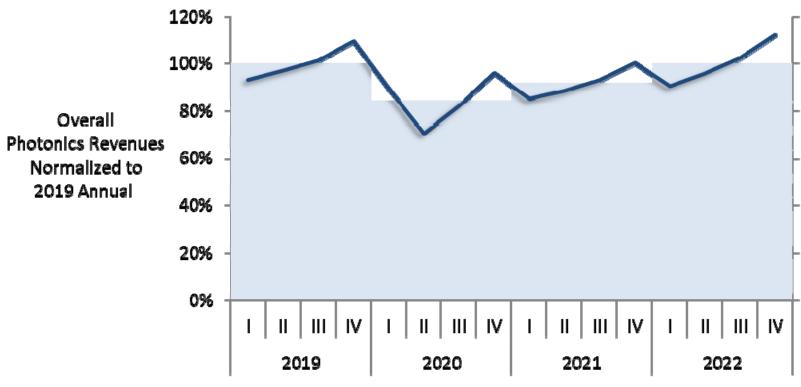
#### Sawtooth demand-side recovery



OSA Industry Development Associates

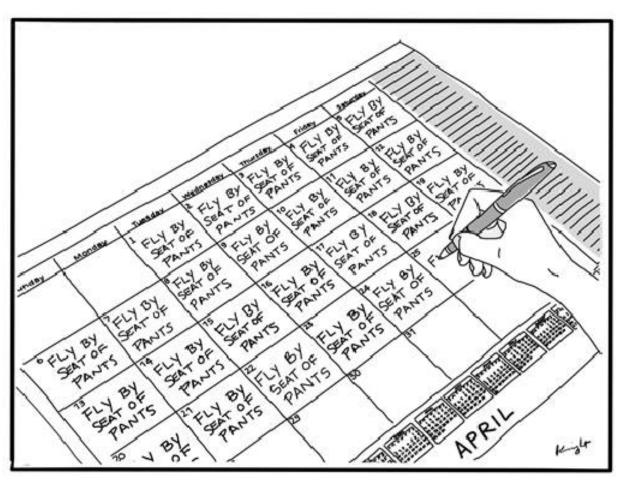
Source: OIDA (May 2020) 10/16

#### Sawtooth demand-side recovery



OSA Industry Development Associates

11/16





Source: Douglas Knight, CartoonStock.

#### **OIDA** webinars on pandemic response

April 23 OIDA: Maneuvering the supply chain

April 30 OIDA: Employment law

May 7 OIDA: Insights from the investment community

May 8 Optics & Photonics News: Optics and photonics tools in the fight against COVID-19

May 19 U.S. federal COVID-19 assistance programs for companies

May 21 OIDA: Customer and supplier contracts

May 28 OIDA: Methods to enhance liquidity

June 16 OIDA: Communications market update

June 17 OIDA: Bringing products to market

And much more: osa.org/industry





OIDA Chair Dr. Simin Cai for the 16 April 2020 webinar.

#### **WEARE** ŮΝ

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## Thank you!

Questions? thausken@osa.org

