The Pandemic and Productivity

for CABE virtual conference:
"The Impact of the Pandemic on the Economy"

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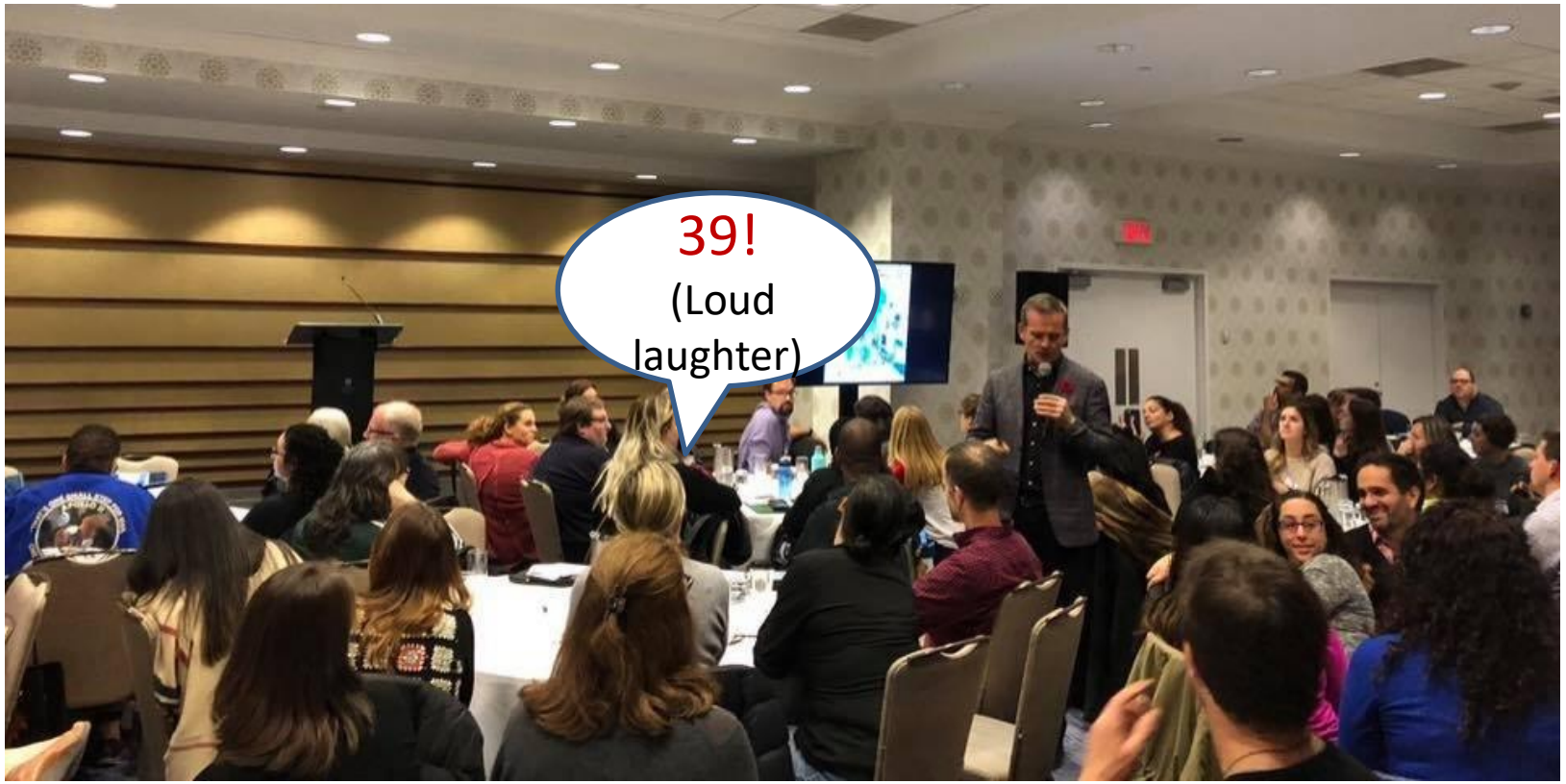
*Thanks to Joel Blit, Andrew Sharpe, Mikal Skuterud, SSHRC and Statistics Canada. Errors/opinions are mine.

- There are lots of economics opinions about what to do about Covid-19
- And a shortage of data but even more no consensus on what the virus is going to do and when/whether there will be a vaccine/ treatment
- points are becoming well-worn…

Joketellers' convention…



Joketellers' convention…

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Main points:

1. I am not a virologist.
2. Measured productivity per hour ↑
3. Varies by industry
4. Arguably suggests COVID restrictions on producers less important than shifts in demand: "The Great Mismatch"
5. Review some Canadian and U.S. findings possibly relevant
6. Policy: I don't know but will share some inclinations

Productivity isn’t everything, but in the long run it is almost everything. A country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker. *Paul Krugman*

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Productivity

≠ Measured productivity

≠ Wellbeing

Which Productivity?

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Greatest implications for standard of living, for transfers and taxes

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Perhaps best indicator of technical progress

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$$=$$

$$\frac{output}{worker}$$

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Possible indicator of work sharing

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Employment rate

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Underemployment

Where labour hours may currently being measured particularly poorly.

Short-run productivity

Comparing June, 2019 to June, 2020

latest GDP by industry by month, Labour Force Survey

$$\frac{output}{pop} = \frac{output}{labour\ hour} \times \frac{labour\ hour}{worker} \times \frac{worker}{pop}$$

- Output ↓ 8%, # workers ↓ just over 8%: productivity per worker flat or a bit up
- Labour hours per worker↓ 5%: productivity per hour ↑ (little change in part-time/full-time) (work sharing? SEPH? Seasonality?)
- Compositional (low-wage workers hurt) e.g. Lemieux, Milligan, Schirle, Skuterud (*Canadian Public Policy/Analyse de politiques, 20*20); (low productivity industries decline) (Gu, *Statistics Canada,* 2020)
- (avg. wages, 2020 vs. 2019, ↑ year over year:
  J $1.16 F $1.12 M $1.72 A $3.02 M $3.92 J $2.06 J $1.75)
- Home production

- Is the decline in output more due to less demand or because production has become more difficult?
- In many contexts hard to identify: both purchasers and sellers may be cautious
- But my prior that it is mostly demand is reinforced by the ↑ in short-run productivity
- Another rough exercise (2-digit NAICS) which illustrates some of the mismatch:

June 2019 to June 2020

Output → Output per hour ↓	Up	Down 0-5%	Down 5 -10%	Down > 10%
Up ≥ 10%	Agriculture Retail (!) Real estate/ renting/leasing	Construction		Information, culture and recreation
Up 5-10%			Wholesale Prof/sci/tech Education	Other services
Up 0-5%		Fish, hunt, trap Utilities Public admin	Manuf. –nondur. Health	Business/ building serv.
Down 0-5%	Finance/insure			Mining, oil, gas Manuf.-durable Accommodation/ Food Services
Down 0 – 10%				Transport/ warehousing
Down >10%				Forestry

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L to R pattern arguably lines up with common guesses on "demand"

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Not much pattern either way lining up with common guesses on restriction effects

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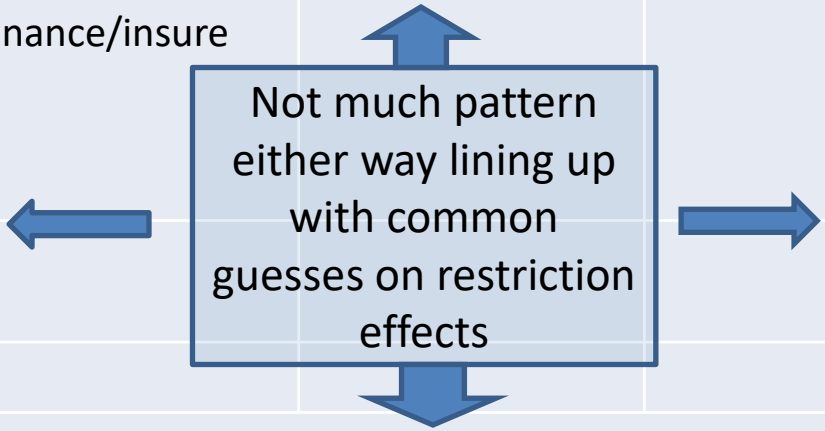


June 2019 to June 2020
A couple of 3-digit NAICS disaggregations…

- Warehousing: prod. ↑ 6%, emp. ↑ 11%, hours↑ 2%
- Trucking: production ↓15%, emp. ↓ 4%, hours ↓ 13%
- Air trans: production ↓ 95%, emp. ↓ hours 44%, ↓ 61%
- Accomm., production ↓ 57%, emp. ↓ 34%, hours ↓ 50%
- Food, production ↓40%, emp.↓ 30%, hours ↓42%

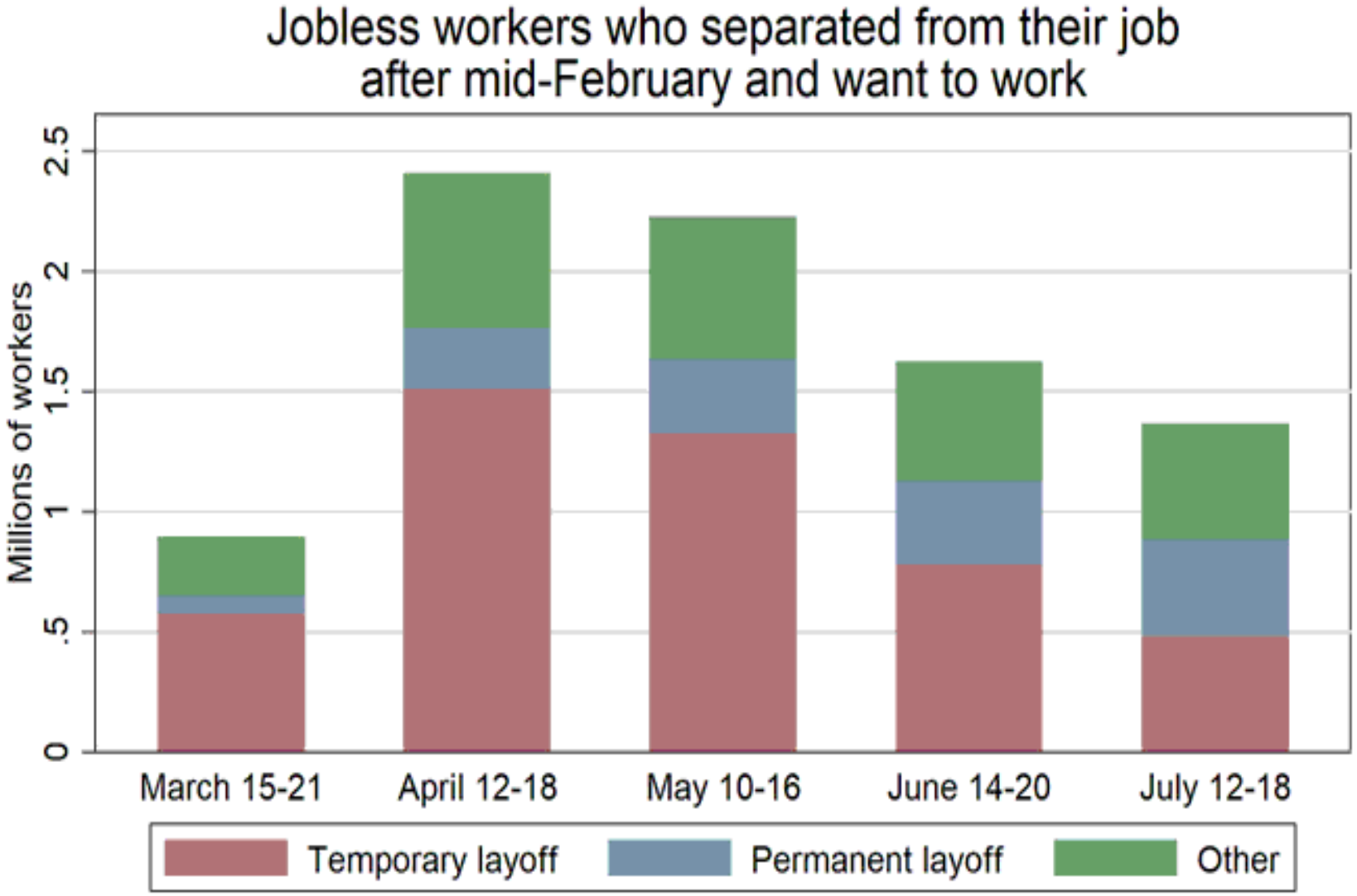
Working from home?

- 40% could work from home (Gallacher and Hossain, *Canadian Public Policy/Analyse de politiques,* 2020); Deng, Morissette and Messacar, StatCan, 2020)
- But only weak evidence of correlation between working from home and continued employment (e.g. online travel agents, ticket sellers)
- Jones, Lange, Riddell, Warman (*CPP/Adp*, 2020): work from home/not work from home had same vacancy drop
- Savage and Turcotte (StatCan, 2020):
  June: 22% working from home

Medium-term to long-term productivity

Barrero, Bloom, Davis (Becker-Friedman, 2020) for U.S.:

- 10% of all jobs (20% of office jobs) will permanently switch to work from home
- 32 – 42% of COVID-induced layoffs will be permanent



Note: Temporary layoffs include not-in-labour-force who are awaiting recall or reply. Other includes job leavers, re-entrants, future starts, discouraged workers, and those not searching for a job for personal reasons, including caring for children.
Source: Labour Force Survey (PUMFs). Charted by @mikalskuterud.

Will relaxing restrictions restore growth?

- Who shut down economy? gov't or "the people"? (i.e. what kind of coma?) (cost-benefit analysis?)

Will relaxing restrictions restore growth?

- Who shut down economy? gov't or "the people"?
- U.S.: Goolsbee and Syverson, "Fear, Lockdown and Diversion: Comparing Drivers of Pandemic Economic Decline", NBER
- Using cellphone tracking:

  (a) much of the economic decline preceded restrictions

  (b) consumer traffic down 60%, 7 percentage points due to policy

Will relaxing restrictions restore growth?

- Canada shutdown similar to U.S. shutdown
- Armstrong, Lebo, Lucas (*CPP/Adp,* 2020): 75 Canadian/U.S. cities (incorporating state/prov. policies): "…policy differences…modest" but mobility drops larger in Canada
- Chan (*CPP/Adp*, 2020): Canada: largest February to April mobility reductions in cities, Quebec
- Langevin and Turcotte (StatCan, 2020): June 15, self-reported concerns …

Will relaxing restrictions restore growth?

- Langevin and Turcotte, (StatCan, 2020)

	Very concerned	Somewhat concerned
Mass events?	66%	27%
Airplane?	64%	30%
Restaurants/bars?	38%	50%
Shopping?	24%	62%
Personal care?	17.5%	56%

- Scarring effects on graduates (Frenette, Messacar, Handler, StatCan, 2020)
- Overall employment rate (men 60.5%; women: 51.5%),
  15-24 unemployment rate (24%)
- Conference Board (consumer confidence not recovering)
- CEWS support not forever
- Fiscal issues/U.S. issues
- Joel Blit (*CPP/Adp*, 2020) argues that employers may automate more quickly creating safer, higher productivity workplaces
- Business closure data (StatCan: 100K businesses or 15%) (see also Beland, Fakorede, Mikola CPP/Adp, 2020; Mo, Cukier, Atputharajah, Boase, Hon, CPP/Adp, forthcoming)

More positively…

- Retail sales back (and not just online)
- And (Pew Research Centre, 2020/8/27)

	Canada	**U.S.**	**U.K.**	**Median of 14**
Gov't handled well?	88%	46%	47%	72%
Life changed?	57-69% M-W	60-75% M-W	60-73% M-W	54-63% M-W
More united?	66%	18%	46%	46%

What’s to be done?

- Sick leave? Yes but…

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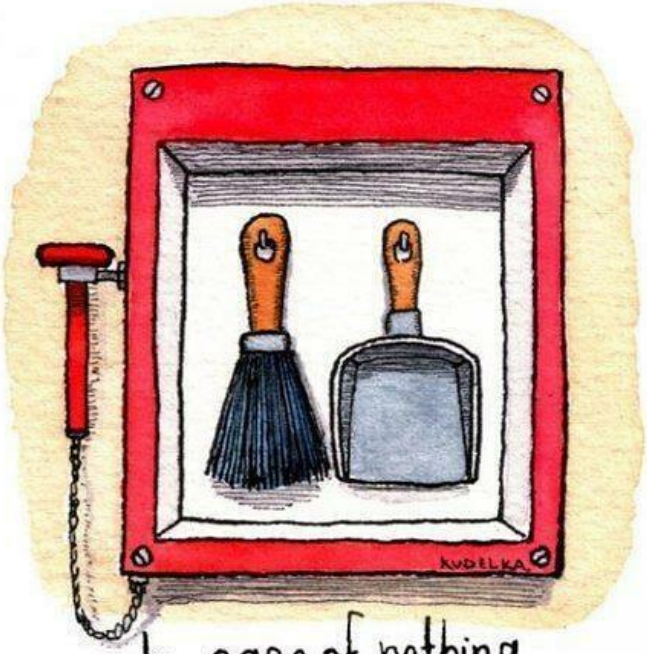
- "Economists see something work in practice and wonder if it works in theory"
- Sick leave sort of works in practice: can't work in a standard model with sickness unobservable and utility falling in labour
- In practice, some observability, some penalty for sickness + <u>good employer-employee relations/ people like their jobs</u>

What's to be done?

- But going forward, if no vaccine or treatment: increasing disputes over workplace safety

My opinion: loosening restrictions, sick leave/workplace regulation, income support reforms (work now pays!), enabling work measures (day care!) will not be enough…

KEYNESIAN ECONOMICS



Productive Stimulus

- U.S.: Chetty, Friedman, Hendren, Stepner, 2020, NBER
- U.S.: 25% saving
- Low interest rates; lots of people on support
- Need gov't spending targeted towards speedy, productive employment in ways that will reduce number on gov't support
- Orphan wells +++ (roads, IT,…)
- Green? (public transit?)

Main points:

1. Measured productivity per hour ↑
2. Varies by industry
3. Suggests COVID restrictions less important for production than shifts in demand: “The Great Mismatch”
4. Gov’t didn’t shutdown economy, people did: rebound not automatic
5. Opinion: on its own, labour market recovery will be slow
6. . Productive stimulus

Final points

- The stakes right now are particularly high: big differential for getting it right and lots of uncertainty/risk
- For (big) firms, time to make favourable contracts?

- <u>Productive gov't stimulus</u>

Thank you!