Intelligence MEMOS

From: Paul Jenkins and Jeremy M. Kronick

To: Canadian Policymakers

Date: October 5, 2020

Re: HEALTH AND THE ECONOMY – WITH NUMBERS

When the pandemic nature of the COVID-19 virus was finally recognized, Canada acted boldly to contain and control its spread. We didn't know as much as we know now, and as such we were forced into unmeasurable tradeoffs. In those early days with limited information, the focus was rightly on health and on shutting down non-essential parts of our economy to minimize infection and mortality rates.

Now, some seven months into the crisis, we have gained considerable knowledge on a number of fronts, meaning we can measure and minimize those tradeoffs. This fact has gained new urgency given the current resurgence of infection rates.

With the knowledge and experience gained, we are at a point where we can gauge risks and begin to have informed discussions on the optimal mix of policies – on the health front, on the economic front, and, critically, on the intersection of the two.

By accumulating data during the shutdown, we can ask what mix of polices will give us both the health and economic outcomes we desire – in economic parlance, a Pareto optimal outcome.

We can ask, for example, what combinations of restrictions, work protocols, preventative measures and hospital capacity are necessary to achieve the same (or lower) levels of mortality/hospitalization we achieved with a complete lockdown of non-essential industries in the early stages of our COVID-19 battle. And improved data availability now allows us to respond in an informed, timely and forceful manner to new information.

On the health side, our policymakers have been greatly aided by the use of epidemiological models that generate scenarios of the spread of the virus and ways to contain that spread.

What we have not seen in Canada, however, is the use of these types of models to help us assess the optimal mix of health and economic policies combined.

A recent paper by Acemoglu et al. looked at this issue of the optimal mix of policy using US health and economic data. In upcoming work, we will be replicating the model for Canada, though the story is likely the same here, and is exactly the conversation we should be having as we navigate the risks and uncertainties of the current resurgence in cases.

In the Acemoglu et al. paper, the authors' big innovation is to treat their three groups – young (20-49), middle-aged (50-64) and older (65+) – differently, in terms of how they are locked down (or not). This gives policymakers much more flexibility than the invariable policies (e.g., no age differentiation) we were forced to use at the beginning of the pandemic.

Their results show that under a uniform policy, keeping the mortality rate at 0.2 percent in the adult population, the resulting fall in GDP over the next year would be 38 percent.

By contrast, under a targeted policy where the 'old' are locked down more severely than rest of the population, keeping the mortality rate at 0.2 percent, the fall in GDP is reduced to 25 percent.

The authors go further. If we add 'group distancing,' where interactions between 'old' and the rest of the population are limited, the results are even better: keeping the mortality rate at 0.2 percent, the fall in GDP is now 16 percent. And, to all these policies, if we add testing and tracing, the results are better yet: keeping the mortality rate at 0.2 percent, the fall in GDP is now 7 percent.

Of course, these scenarios are highly sensitive to the assumptions and parameters chosen for the model, but are nonetheless robust to a variety of different tests.

So, what policy insights can we import from this research? There are four key ones:

- The need to communicate to the public that keeping parts of the economy open isn't a tradeoff with lives lost due to COVID-19, if done responsibly;

- When you stop treating each group symmetrically, you realize the benefits arising from more targeted policies (whether by age or other criteria), which will be critical to sustaining the recovery;

- The impact on economic growth of targeted policies, combined with group distancing and testing and tracing, without sacrificing lives, shows that much more can be done on this front;

- The need to discuss the intersection of health and the economy in a transparent way with the public.

The success we will have in confronting the recent resurgence in our COVID-19 battle rests ultimately on the behavior of each of us. Our health and economic endpoints and the path to those endpoints are intertwined. We need a narrative from our leaders that engages Canadians to build the understanding and confidence needed to get us to those endpoints.

Paul Jenkins is a former senior deputy governor of the Bank of Canada and a senior fellow at the C.D. Howe Institute, where Jeremy M. Kronick is associate director, research.

To send a comment or leave feedback, email us at blog@cdhowe.org.

The views expressed here are those of the authors. The C.D. Howe Institute does not take corporate positions on policy matters.

This is an updated Intelligence Memo originally published in July.

Trusted Policy Intelligence / Conseils de politiques dignes de confiance