

MONEY IN THE TIME OF CORONAVIRUS

J. McAndrews, Economic and Financial Responses to the Coronavirus

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What principles should guide our government's responses to the economic fallout of the Covid-19 pandemic?

To answer the question, it helps if we have a good model of what is happening.

Perhaps the best way to think about the effects of Covid-19 on the economy is to use one of the best models in economics: the circular flow. One can picture the circular flow as a sort of M.C. Escher-like stream, always flowing downhill and yet in a circle. Workers flow to businesses, products and services flow out of businesses to consumers, the consumers are workers who flow to businesses, etc., in a healthy widening gyre.

Above this flowing activity is another circular flow—a halo of sorts—that represents financial flows. Expenditures from consumers flow to businesses; wages, rents, and interest flow to workers, landlords, and lenders.

Markets can be thought of as traffic signals located in the stream that help everyone flow at the right pace and to the right place. Markets help workers get to the right businesses, they help businesses find the right equipment, they help determine how big consumers' expenditures will be, help businesses decide whether to expand or contract production, and so on. The traffic signals in the financial stream also help direct loans to businesses and households, provide incentives for individuals to save, and set the rate of interest—the trade-off between consuming now or saving for the future. Banks can be thought of as straddling the two streams,

active in financial markets, but lending directly to households and businesses to finance real investment.

The government, including the central bank, is on the island around which the circular stream and its halo flow, connecting with the broader stream via canals. Some workers flow to the government, and services such as schools, roads, courts flow out to households and businesses from the government. Importantly, in the financial stream, taxes flow to the government, and payments from the government flow to households and business, via social security, crop support payments, wages and rents, expenditures for medical inputs, etc.

With that model in place, let's think of the Covid-19 risk, and the containment measures that are now necessary to prevent widespread transmission of the disease, as a leak of workers, businesses, and consumers from the circular flow into a pond nearby the circular stream. Fewer workers flow to businesses, less production of goods and services flow to consumers because of the leakage of those factors into the still pond. Furthermore, the financial stream suffers a similar leak. Much of the expenditure of those quarantined does not take place, businesses do not earn revenues, and workers don't earn wages.

One might imagine that this sudden leakage from the stream is manageable. Suppose, for instance, that half of all people go into quarantine for a few months, and, moreover, all payments to and from those people were held in abeyance during the period of quarantine—a sort of temporary payment and interest Jubilee. Then we might imagine that the flows around the circular stream and its halo would continue unimpeded, although on a diminished basis.

Several factors make such a Jubilee unworkable. In general, the leakage from the circular stream is disruptive to the flow with some people earning income but not spending, and others not earning but needing to spend. These imbalances will cause

impedance and turbulence in the flow of economic and financial goods and services. We can group these factors into four broad categories: unbalanced flows, prices and expectations, contractual rigidities, and rejoining the stream.

Unbalanced flows: Flows of expenditures must still occur for households in quarantine, but their productivity is diminished while they are away from work. While some people can work from home, many cannot. So where does the money for their expenditures come from? This is an example of an unbalanced flow: expenditures must be made, but no source of income is flowing into the household. The same is true for businesses: many businesses cannot produce (such as airlines, for example) but must still make expenditures to maintain equipment and pay other necessary costs. Such unbalanced flows require a source of funding from outside the circular flow, as individual households and businesses with limited wealth cannot sustain expenditures for long without corresponding inflows of income.

Prices and expectations: The traffic signals that help route the flow of workers, goods and services, loans and savings, i.e., markets, rely on expectations of how many of those factors are needed. Those expectations are human sentiments—they are based on experience, foresight, and the usual patterns of behavior. But given the sudden leakage from the flow and the resulting imbalances in flows, expectations will be more disperse and markets will not perform as smoothly as is usually the case. These “start/stop” moves can lead to a further slowing of activity around the stream.

Contractual Rigidities: A lot of the traffic in the stream is guided by past agreements, or contracts. Those contracts include home mortgages, leases, credit card loans, employment contracts, etc. Like the stockpiles of wealth that allow individuals and businesses to continue expenditures even without an offsetting flow of income, these contracts have their limits. They often do not have a “reset” button; in general, if a homeowner misses too many payments on her

mortgage, she defaults, and ownership of the house passes to the owner of the mortgage. The reasons why the homeowner missed the payments usually does not matter, even if there is a systemic medical emergency, such as a pandemic, that prevents the homeowner from going to work and to earn income.

Rejoining the stream: Once one has left the circular flow of economic activity, it requires some significant force to rejoin it. It can require getting a new job, finding new customers, doing business in a new way, and, crucially, having the confidence that one is not endangering others, such as one's customers or family members, by venturing out into the stream of activity. These actions to get a new job, find new customers, establish new ways of doing business, are all costly. The people and businesses in the still pond have not had a flow of income to provide for their expenditures, and the extraordinary expenses of rejoining the stream will be additional shortfalls for them.

As we review policies to limit the damage to the economy, we should first recognize that without policies directed at maintaining the circular flow there is a risk that because of the impediments to the flow we just reviewed, the flow could continue to diminish, and because of the costs to rejoin the flow many people and businesses could become stuck in the still pond of a stagnating economy. So, without vigorous policies to support economic activity the flow could remain only a trickle, even after a possible diminution of the Covid-19 threat.

What can be done about this? Some ways to get the flows going again involve monetary policy – increasing government spending, monetizing that spending, monetizing mortgages, increasing the ability of banks to create more money. But other government actions are also required including adjustments to contract obligations, transfer payments, providing actionable data on risks, encouragement and help in matching workers and businesses once the quarantines are

lifted. More than monetary policy alone will be needed to counteract the contraction of the flow of economic activity. We need to counteract each of the impediments identified above in order to restore the economic flow.

1. Income support policies to counteract unbalanced flows

In all private companies and families there is a limit to the financial losses that they can sustain. After the limit is reached, the company is bankrupt, and must suspend its payment of debt. It may have to stop its operations if its revenues aren't sufficient to cover its operating expenses. As we seek to curtail the spread of the virus by limiting travel and large gatherings, many businesses will leak from the circular flow and sustain losses.

It is important to distinguish systemic risks to the economy from other risks. A systemic risk is one that threatens a large part of economic activity. In this crisis, the suspension of large gatherings touches almost every business and threatens the systemic stability of the economy. In such a case, it falls to a source of funding from outside the stream—i.e., the public sector, which can draw on future taxes to finance current spending—to replace that income and provide those services or the recuperative powers of the economy may be permanently damaged.

Further, it is apparent that usually prudent actions by individuals—to avoid sick days and excessive medical tests for fear of the loss of income or the costs involved—are perverse in the case of a pandemic. The public sector should assume these costs immediately.

With so many widespread declines in economic activity, from travel, sports, manufacturing, restaurants, and many others, a good way to approach this loss of income is to provide immediate income support to individuals, especially those with low incomes and wealth, who face significant hardships if

their income is interrupted. Emergency provision of Medicaid, food stamps, and other government benefits to a much broader population would be especially helpful. Extended unemployment benefits too will be important for people who exit the flow of economic activity through job loss.

Another component of maintaining the economy's capacity to function would be to provide guarantees for new debt offerings by businesses, especially those industries hit by the quarantine, going forward. Such guarantees need to be carefully designed to provide the right incentives for businesses to expand when demand for services are revived, to help them rejoin the flow of economic activity.

2. Monetary policies to address prices and expectations

Governmental policy is crucial in guiding expectations of participants in markets. This is clear in many venues. An example of the need for coordination are the actions of governments in shutting down schools, and reopening them; that coordination allows whole populations to plan for their child-care and family meals. More broadly, if private agents' pessimism and liquidity constraints lead to prices that portend future disaster, the government can assist society by reassuring the public that, at a minimum, it will provide goods and services in the future, and will avert disaster.

Some of these actions can be done through the central bank. Last week, for example, the Federal Reserve announced its willingness to lend in large amounts against Treasury collateral to private broker-dealers on favorable terms to support the borrowers' business in dealing in Treasury securities. The market for Treasury securities is one of those traffic signals—an important one—that assist in moderating the flow in financial markets.

Accommodative monetary policies will be needed to reassure

people that they can borrow on favorable terms now. To support that belief, the Fed should restart the program to purchase mortgage-backed securities (MBS) guaranteed by Fannie Mae and Freddie Mac. Furthermore, because of the uncertain value of many loans now on the books of banks, the Fed should also restart the Term Auction Facility, which provides longer-term financing to banks against the collateral of bank loans. That will support the willingness of banks to lend more freely. Those programs should be seen in the light of the confidence and guidance they convey to the public, just as much as they function directly on interest rates and amounts lent.

The Fed has an important role in keeping the financial flows moving; if the financial flow is impeded the flow of economic activity is also disrupted. But the Fed must ensure that nonfinancial firms can receive loans, even if the private financial system is in disarray. It should restart the Commercial Paper Funding Facility, which lends to nonfinancial firms directly against firms' new issuances of commercial paper—short term borrowing by firms. So long as that commercial paper is rated highly, the Fed should help support the flow of credit to nonfinancial firms; again, this policy is, at least in part, to instill confidence that firms can borrow in the future if needed, as much as it is to funnel needed funds to firms now.

Other monetary policy moves are needed for the economy that is diminished by the leakage from the circular flow. Interest rates should be lowered to their effective zero lower bound. Purchases of Treasuries should be expanded. There are novel policies that will be required to address problems that are not yet apparent.

3. Mediation and debt workouts to address contractual rigidities

The administration has announced a temporary waiver of payments of interest on student loans held by federal

agencies. Such contractual flexibility is an example of what is likely to be needed on a much broader scale by workers and companies whose jobs and business are interrupted and removed from the circular flow of economic activity. While a widespread Jubilee of debt forgiveness may be neither feasible nor effective, delaying interest payments, writing down principal amounts, and other compromises by debtors and creditors can be very effective in keeping debtors from defaulting while maintaining the long-term viability of debts.

Banking supervisory policy is important in allowing banks to continue to finance debt that is in arrears, so it is important for bank supervisors to provide and to implement guidance to banks that relax some of the strict rules on classifying debt as delinquent. Fiscal policy to provide alternative sources of income to debtors to assist them in meeting their obligations is vital.

4. Grants and data to address rejoining the stream

In addition to fiscal support to people and businesses that have been excluded from the stream of economic activity by the threat of Covid-19, fiscal support will be needed to assist in financing some the activities necessary to get people back into the flow of economic life. The longer economic activity is interrupted, the more important will be this part of the policy response. Policies to sponsor job fairs, advertising them, and providing grants to businesses to reopen businesses may prove very beneficial in assisting the restart of economic activity.

To reopen a business, an owner must have the confidence that its activity won't endanger its customers, and similarly, in going back to work, a worker must have the confidence that by doing so, she is not threatening her family with an infection of Covid-19. To be blunt, providing such confidence will require real data on the prevalence of the virus,

necessitating widespread testing for it; it will not be provided by self-congratulatory pronouncements from glad-handing government officials. This should be a key policy by governments at all levels.

The Covid-19 crisis has quickly drained much of the dynamic activity from the circular flow of the economy into a still pond of isolation, worry, and expense. Our government is needed to supply income and promises of future support throughout the economy to combat this systemic stop in activity and to lay the foundation for a resumption of the normal flow of economic activity. Carefully designing policies to ameliorate rigid contract terms in debt and other contracts, to guide expectations, assist markets to function and to avoid excessive pessimism, to provide income, food, and medical support to those made destitute by the crisis, and to build ramps for everyone to rejoin the flow of economic participation is of utmost importance for us to emerge from this crisis with a strong economy.

[1] TNB USA Inc. and Wharton Financial Institutions Center. In this essay, I confine myself to general economic and financial policy responses to prevalence and threat of Covid-19. We must aggressively work to contain the spread of the virus itself, in large part to protect the capacity of the medical system to function in its role to treat patients afflicted with Covid-19 and other diseases. I will focus in this essay of economic and financial policies, and not address the important public health issues involved.