Background Document for the Asian Development Bank's: ADB COVID-19 Policy Database Version 2 (May 7, 2020)

This is a project of the Economic Research and Regional Cooperation Department (ERCD) of the Asian Development Bank (ADB).

Team Leader: Jesus Felipe, Advisor, ERCD.[1]

Please send questions about the database to: covid19policy@adb.org

The database is available at: https://covid19policy.adb.org/

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This policy database provides information on the key economic measures that governments are taking to combat the COVID-19 pandemic.

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[1] Principal investigators: Jesus Felipe (Asian Development Bank); Scott Fullwiler (University of Missouri-Kansas City); Gemma Estrada (Asian Development Bank); Maria Susan Torres (Asian Development Bank); Mary Ann Magadia (Asian Development Bank); Donna Faye Bajaro (Asian Development Bank).
Team members: Maria Hanna Jaber (Asian Development Bank); Remrick Patagan (Asian Development Bank); Enrique Feás (Real Instituto Elcano); Al-Habbyel Yusoph (University of the Philippines); Simon Askin (University of the Philippines); Martin Cruz (University of the Philippines); Bingshiun Low (University of Missouri-Kansas City); Ali Alper (University of Missouri-Kansas City).

1. Introduction

This document explains the key concepts that underlie the taxonomy used to construct the Asian Development Bank's (ADB) *ADB Covid-19 Policy Database*, Version 2 (May, 2020). It provides details of the methodology we use to classify the measures taken by countries around the world to combat the COVID-19 pandemic. The database incorporates the available information until May 4, 2020, and covers the 68 members of the ADB, plus the European Central Bank, European Union, Argentina, Brazil, Mexico, the Russian Federation, South Africa, Nigeria, Arab Republic of Egypt, Saudi Arabia, and the Islamic Republic of Iran, that is, a total of 79 entries.

Apart from national sources, the main sources information used are listed in the Appendix. The rest of the document is organized as follows. Section 2 provides the rationale behind the exercise and the framework used. Section 3 discusses the categorization that we use to classify the economic measures and to construct the database. Section 4 shows the country sheet of the data base, and discusses the macroeconomic impact of the different measures. Section 5 provides some final notes and clarifications on the liquidity measures that countries are undertaking.

2. Rationale and Framework

Not all forms of macroeconomic stabilization or stimulus are created equal. Economists have long recognized, for instance, that different types of government spending or tax cuts will have different macroeconomic impacts (or multiplier effects). Rarely, however, do they ground analysis in operations and financial statement effects that are fundamental in every transaction. One reads regularly in textbooks or the financial press about central banks "pumping money into the economy" through open market purchases or lending through standing facilities, as if these were identical to a direct government transfer to households. These transactions, however, are entirely different in terms of operations and financial statement effects. An individual quite obviously is not indifferent to choices such as (i) an end-of-year salary bonus, (ii) an equal amount conversion of part of her retirement portfolio from bonds to a money market fund, or (iii) a line of credit of equal value. By the same token, neither should the economy be indifferent to macroeconomic policies that often have far greater variety in their operational details and financial statement effects.

For the purpose of understanding different policy actions in response to COVID-19, the approach here is to categorize these actions according to their differences in operational details and/or financial statement effects. **Operational details** in this context define the path a given measure takes to affect the financial system, spending, production, and so forth. For the COVID-19 policy responses, these fall into the following categories:

- Providing liquidity
- Encouraging credit creation by the financial sector
- Directly funding households, businesses, and/or state/local/regional governments

Financial statement effects of a given measure answer one of the following questions:

- Who, if anyone, bears the financial risk of the measure and what kind?
- Does the measure create more debt or more income (e.g., net worth or equity, *ceteris paribus*) for the recipients?

These financial statement effects enable an expansion or elaboration of the operational details categories shown in Table 1. The left column repeats the three bulleted categories for operational details. The alternative potential financial statement outcomes are to the right of the respective operational detail categories. In order to provide liquidity, for instance, governments or central banks can (i) lend (expanding the borrowers liabilities in order to obtain central bank liabilities) via existing or expanded standing facilities, (ii) purchase financial assets (exchanging the sellers' financial assets for central bank liabilities), or (iii) relax regulations (such as lowering required minimum liquidity ratios or adjusting how certain short-term, liquid assets are accounted for in capital requirements), expand the range of acceptable collateral for secured loans from the central bank, and so on, which do not directly alter private sector financial statements in the sense that there are no accompanying transactions (though they may encourage or enable financial institutions' subsequent actions and thereby affect financial statements indirectly, of course). The effects on the financial positions derived from credit creation and direct funding are likewise detailed

TABLE 1. Categorization of Measures according to Operational Details and Financial Position Effects

Operational Details	Financial Positions
Providing Liquidity	Measure 01 Loans from the central bank or government to the private and state/regional/local sector Government or central bank purchases of short-term assets from the private sector

	Regulatory or other changes that do not directly alter private sector financial statements
Encouraging credit creation by the financial sector	Measure 02 Increases in liabilities of the private sector and state/regional/local sector to the government or central bank through loans to the financial sector (to enable further lending to the financial and non-financial sectors) or secondary market purchases of securities issued by the financial sector, businesses, or state/regional/local governments Interest rate changes, loan guarantees, forbearances, and regulatory changes that do not directly affect financial positions to encourage private credit creation
Direct funding	Measure 03 Increases in recipients' liabilities through direct loans from the government or central bank Measure 04 Increases in ownership claims of the government or central bank through equity investments in the business and/or financial sectors Measure 05 Increases in income or reductions in costs or obligations through government transfer payments, loan cancellation, tax cuts, forbearances, and so forth

Source: Authors' elaboration.

3. A Categorization of COVID-19 Macroeconomic Measures

The framework in Table 1 shows 8 measures in the taxonomy of COVID-19 macroeconomic measures—five of them from the table (measure 01; measure 02; measure 03; measure 04; measure 05) and three that are effectively double counting from an accounting perspective but nonetheless important measures (measures 06-08). Measure 09 is the mirror image of measure 8 (see explanation below). We add below an additional measure 010 to take into account those actions for which the current information is unclear about the particular measure they should be added to.

The first five measures below derive directly from Table 1. We make two points here. First, is that measures 01-04 correspond to monetary policy, while measure 05 is

fiscal policy. Second, measures 06-08 are sources or funds, while measures 01-05 are uses of funds. In what follows, we elaborate on the specific actions that each of the main nine measures refers to:

Measure 01: Support the normal functioning of the money markets and short-term finance

- 01A Lending to the private sector or state/local/regional governments, and asset purchases to provide liquidity
  - Additional standing facilities or increased provision for normal lending to money markets,
  - Short-term loans to nonfinancial businesses to refinance maturing obligations or otherwise finance short-term operations
  - Direct short-term loans (1 year or less to maturity) to state/local/regional-level governments or purchases of their short-term securities (1 year or less to maturity)
  - Direct purchases of short-term financial assets in secondary markets
  - Repurchase agreements

- 01B Non-lending actions and regulatory adjustments: collateral requirements, payments system policies, liquidity regulations, reserve requirements, etc.

- 01C Foreign exchange operations or domestic lending in foreign currency
  - Loans in foreign currency or foreign exchange swaps from central bank or government to domestic private sector or into domestic currency markets

Examples of Measure 01:

* (PRC): Expansion of re-lending and re-discounting facilities by CNY 1.8 trillion to support manufacturers of medical supplies and daily necessities micro-, small- and medium-sized firms and the agricultural sector at low interest rates.
* (EU): The European Investment Bank (EIB) dedicated liquidity lines to banks to ensure additional working capital support for small and medium enterprises (SMEs) and mid-caps of EUR10 billion.
* (DKK): The (Danmarks Nationalbank) DN announced the launch of an 'extraordinary lending facility' which will make full-allotment,

1-week, collateralized loans available to banks at -0.5 % interest rate.

Measure 02: Encourage private credit creation

- 02A Secondary market purchases of securities (greater than 1 year to maturity), and loans to financial sector
  - Purchases of mortgage-backed securities
  - Purchases of corporate bonds, CLOs or bond ETFs
  - Purchases of new financial sector loans to the non-financial sector in full or less than full.
- 02B Interest rate reductions and other regulatory adjustments: capital requirements, credit and lending standards, oversight, etc.
  - Interest rate reductions
    - Announced reductions in policy rates
    - Attempts to indirectly reduce interest rates via purchases of securities (or bond/fixed-income ETFs) in secondary markets
  - Capital requirements
    - Temporary or permanent reductions in risk-weighted capital requirements, supplementary leverage ratio requirements, countercyclical capital buffer requirements, etc.
    - Temporary or permanent omitting or reduced weighting of certain financial assets in calculating required capital
    - Temporary or permanent sheltering of losses for lenders from equity impairment
    - Regulatory forbearance
  - Oversight
    - Reductions in macroprudential margins of safety (such as loan-to-value ratios, debt-service ratios, etc.)
    - Relaxations in microprudential oversight (such as bank examinations)
- 02C Loan guarantees

Examples of Measure 02:

- (Australia): The government allocates up to AUD15 billion to invest in residential mortgage backed securities and asset backed securities.

* (Australia): To allow banks to lend more to SMEs during the period of disruption caused by COVID-19, RBA has established a term funding facility of at least AUD90 billion for SMEs lending. This is over one year).
* (Finland): One percentage point reduction in the structural buffer requirements of all credit institutions by removing the systemic risk buffer and adjusting institution-specific requirements.
* (Spain): EUR100 billion government loan guarantees for firms and self-employed; EUR2 billion public guarantees for exporters;
* (Switzerland): guarantee program to support bridging loans to SMEs.

Measure 03: Long-term direct lending to businesses, households, and state/local/regional governments, and forbearance

- 03A Long-term direct lending to businesses, households, and state/local/regional governments
  - Direct loans to the non-financial sector (>1 year)
  - Primary market purchases of private debt securities with maturities greater than 1 year (corporate bonds, mortgages or mortgage backed securities, bonds issued by state/local/regional governments, etc.)

- 03B Forbearance

Examples of Measure 03:

* (Malaysia): MYR1 billion fund allocated by Bank Negara Malaysia (central bank) for SMEs involved in food production. Limited to MYR5 million per SME at 3.75% per annum, for a maximum tenure of 8 years.

Measure 04: Equity claims on the private sector (equities, primary and/or secondary, ETFs, etc.)

- Purchases of equities and/or equity ETFs
- Direct investments in non-financial corporations
- Direct investments in banks and other financial institutions

Examples of Measure 04:

* (Germany): (i) EUR100 billion under the newly created economic stabilization fund to directly acquire equity of larger affected

companies and strengthen their capital position; (ii) EUR2 billion to expand venture capital financing to start-ups, new technology companies and small businesses during the coronavirus crisis; and (iii) EUR10 billion fund by the state of Bavaria to buy stakes in struggling companies.

Measure 05: Government support to income/revenue

- 05A Health
  - Healthcare related additions to non-national government income (households, businesses, state/local/regional government)
- 05B Non-health
  - Non-healthcare related additions to non-national government income (households, businesses, state/local/regional government)
  - General examples:
    * Direct purchases (infrastructure, goods, services, etc.)
    * Direct financial assistance for payroll assistance, non-payroll expenses, reductions in revenues/income
    * Direct transfer payments
    * Direct income support for unemployed/poor/etc.
    * Direct job creation
    * Tax cuts/credits/exemptions/delayed payments, etc.
    * Reduction in payment commitments (utilities/rent/etc.) with government assistance/subsidization to private payees
    * Moratoria on debt collections, late payment collections with government assistance/subsidization to private payees or creditors
    * Assistance for private production and supply chains (including "wartime powers" command over industry)

Examples of Measure 05:

* (Austria): (i) EUR15 billion emergency funds for hard-hit industries to provide direct liquidity provisions and subsidies for running costs; (ii) EUR4 billion funds for short-time working, self-employed and funds to finance increased costs of caretaking, etc.; (iii) EUR10 billion for payment deferrals of personal income and corporate income taxes; (iv) rent payment deferrals.

The next three measures are also consistent with Table 1 but effectively double count from an accounting perspective:

Measure 06: Redirecting or reallocating previously budgeted spending

Measure 07: Central bank financing government operations

- 07A Direct Lending and Government Reserve Drawdown
  - Central bank direct loans to government
  - Other, e.g., deficit without bond issues or central bank direct lending (e.g., Singapore spending from reserves)

- 07B Purchases of bonds
  - Central bank purchases of government treasury bonds in the secondary or primary market

Examples of Measure 07:

* (Japan): Purchases of Japan government bonds for "yield curve control"
* (USA): Federal Reserve purchases US Treasury securities in secondary markets (Quantitative Easing)
* (ECB): Purchases of national government bonds
* (Philippines): To further support the Filipino people during the COVID-19 pandemic, the Monetary Board authorized the Bangko Sentral ng Pilipinas (BSP) to purchase government securities from the Bureau of Treasury (BTr) under a repurchase agreement in the amount of Php 300 billion with a maximum repayment period of 6 months

Measure 08: International assistance (borrower/recipient)

- 08A Swaps and clearing arrangements (borrower)
  - Central bank currency swaps and repurchase agreement facility for official foreign accounts
    * Currency swap lines to other central banks (loan collateralized by the borrowing country's currency) or official international organizations (e.g., IMF)
    * Non-currency swap repurchase agreement facilities for official foreign accounts

- 08B International loans and grants (recipient)
  - International aid and grants/donations
    - Grants or loans that are related to the Covid Pandemic in support of DMCs.
    - World Bank/UN/WHO, etc. loans or aid
    - IMF SDRs granted
    - Donations/aid to specific nations

- 08C Asian Development Bank

- 08D Others

Measure 06 is double counting because it is previously budgeted spending (already allocated/budgeted) that is redirected or reallocated has been previously accounted for in government budget position projections and therefore in theory should not affect subsequent projections to the budget position. Measure 07 is double counting because it is just the funding of measure 05. Central bank purchases of government securities or direct loans to the government double count government deficits (except to the degree that the purchases or loans become greater than COVID-19-related deficits. Finally, measure 8 is double counting because it is receiving funds, not spending/lending/investing them. International assistance (measure 08) double counts the domestic central bank lending or domestic government spending that it enables.

Measure 09 is the image of measure 08, from the point of view of the donor country. It is not double counting from this country's perspective.

Measure 09: International assistance (lender/donor)

This measure is the same as number 8 but from the standpoint of the lender country or central bank:

- 09A Swaps and clearing arrangements (lender)
- 09B International loans and grants (lender/donor)

Measure 010: No Breakdown

This category captures actions or announced collections of measures that are not yet clear regarding their fit in one or more of the other 8 measures.

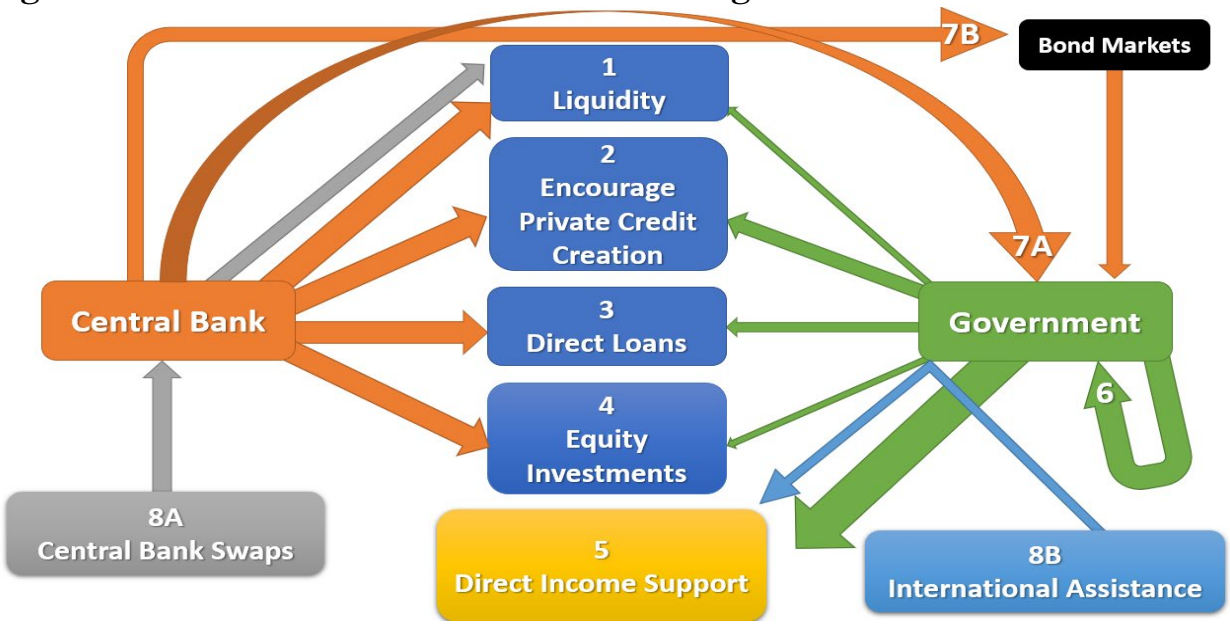
- Amount of measures that cannot be clearly reallocated according to its purposes (e.g., amounts that are intended to cover both).

Examples of Measure 010:

* (EU): EUR37 billion unallocated funds of cohesion policy funding 2014-2020 will be eligible for Coronavirus crisis related expenditure within the Corona Response Investment Initiative. Member States can use them to support public investment for hospitals, SMEs, labor markets, and stressed regions.

As noted earlier, there is a use and funding relationship between measures 01-05 (and 010, discussed below) and 06-08, respectively. From the point of view of the uses, Measures 01-04 are mostly funded by the Central Bank (self-financed) and also partly by the Government. Measure 05 is entirely funded by the Government, and also partly by international assistance (Measure 08B). From the point of view of the funding sources, Measure 06 is a government source and most of it likely ends in the form of Measure 05. In Measure 07 the Central Bank directly or indirectly funds the Government, and this will go to Measures 01-05. Measure 08A directly goes to the Central Bank. Finally, Measure 08B is a Government source and likely ends in the form of Measure 05. This is summarized in Figure 1.

Figure 1. The COVID-19 Measures and Funding



Source: Authors

Each country table in the database provides the sum of the amounts in measures 01-05 (in US dollars), plus measure 010 because the amount registered here refers conceptually to measures 01-05; and plus measure 09 for the lenders. We refer to this as the Total Package provided. Note that adding measures 06-08 would incur double counting. For those measures that involve actual spending from the government such as lending and direct income transfers, the amounts reflected are either actual or estimates, depending on the availability of data. The following four are estimates: (i) effects of non-lending actions; (ii) forbearances; (iii) loan guarantees; and (iv) tax deferrals.

We stress that measures 01-05 (and 010) include aspects as diverse as central bank or government purchases of assets (measure 01), the expected impact of lower interest rates in terms of credit creation (measure 02), and actual government spending (measure 05). The reason for adding them up is that, as we show in the next section, these measures are consistent with either *stimulus* (i.e., results in multiplier effects greater than 0) or *prevention* of further macroeconomic decline (i.e., similar to automatic stabilizers but discretionary in this case). They are all "response measures". [2]

We also show the ratio of the total package to GDP, the ratio of the total package to the total package of the region the economy belongs to, as well as the ratio of the total package to population (in US dollars). These ratios vary significantly across countries as a consequence of the monetary amounts in measures 01-05. In some cases (typically developing countries, but not only), the ratios are very small because countries are dedicating small amounts to those measures, and instead they are passing laws that do not involve payments, e.g., lower reserve requirements for banks', or ask banks to restructure loans, or not to distribute dividends.[3]

It is also important to recall that for the European countries that use the euro, we separate the measures taken by the governments, from those taken by the European Central Bank (ECB) and those of the European Union institutions like the European Investment Bank. Hence, some of these countries will not record any liquidity measures

[2] However, the sum does not capture all measures that countries are implementing to the extent that some countries are not dedicating specific sums to some categories and instead have issued policy statements that do not involve monetary amounts. For this reason, we ask users of the Policy Database to take this into account and exercise caution when making comparisons.
[3] See previous footnote.

under measure 01. ECB measures, as well as those recorded in the European institutions, cannot be apportioned by country.

Finally, we stress that the type of information that some countries provide (qualitative and at times not clear) required some judgement in order to assign some actions into particular measures. This means that some actions may be reclassified in future versions as we get more information.

4. A Classification of Macroeconomic Impacts

Table 1 and the subsequent 9 measures in section 2 allow a classification of macroeconomic measures and their macroeconomic impact(s). The latter are shown in Table 2.

First, every measure's operational details for the main macroeconomic measures 01-05, are consistent with either *stimulus* (i.e., results in multiplier effects greater than 0) or *prevention* of further macroeconomic decline (i.e., similar to automatic stabilizers but discretionary in this case). Whether there is stimulus or prevention for measures 06 and 07 depends on the context. Measures 08 and 09 are prevention.

Second, every measure in 01-05 involves some combination of asset price changes/support and/or financial position effects for the private sector. Measures 06, 07, and 08 are double counting; and asset price changes or support is possible for measures 07 and 08. The effect of measure 09 depends on the recipient country.

Using the two-stage checklist below for each sub-bullet in all measures, the resulting checked boxes for a given measure's sub-bullet are *consistent across countries implementing the same measure*.

Main purpose (one):

☐ Stimulus

☐ Prevention

Effects (several are possible):

☐ Change/support asset prices

☐ Private debt creation

☐ Delay payment obligations

☐ Government/CB claims on private sector

☐ Contingent liabilities of government/CB

☐ Direct ↑ private sector net financial assets
☐ Double counting

TABLE 2. Sample worksheet for the *ADB COVID-19 Policy Database* and macroeconomic impacts of each measure

Measures	Classification of Macro Impacts
Measure 01A Lending to the private sector or state/local/regional governments, and asset purchases to provide liquidity: (i) Loans by the CB or Govt. (standing facilities, loans to enable refinance)	**Main purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☒ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 01A Lending to the private sector or state/local/regional governments, and asset purchases to provide liquidity: (ii) Asset purchases by the CB or Govt.	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 01B Non-lending actions and regulatory adjustments: collateral requirements, payments system policies, liquidity regulations, reserve requirements, etc.	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector

	☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 01C Foreign exchange operations or domestic lending in foreign currency	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 02A Secondary market purchases of securities (greater than 1 year to maturity), and loans to financial sector	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☒ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☒ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 02B Interest rate reductions and other regulatory adjustments: capital requirements, credit and lending standards, oversight, etc.: (i) Interest rate reductions	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☒ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 02B Interest rate reductions and other regulatory adjustments: capital	**Main Purpose:** ☒ Stimulus

requirements, credit and lending standards, oversight, etc.: (ii) Capital requirements, lending oversight	☐ Prevention **Effects:** ☐ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 02C Loan guarantees	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☐ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☒ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 03A Long-term direct lending to businesses, households, and state/local/regional governments	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☐ Change/support asset prices ☒ Pvt debt creation ☐ Delay pmt obligations ☒ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 03B Forbearance	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☐ Change/support asset prices ☐ Pvt debt creation

	☒ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 04 Equity claims on the private sector (equities, primary and/or secondary, ETFs, etc.) (i) Direct equity or preferred equity investments	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☒ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 04 Equity claims on the private sector (equities, primary and/or secondary, ETFs, etc.) (ii) Secondary market, ETFs, etc.	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☒ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting
Measure 05 Government support to income/revenue	**Main Purpose:** ☒ Stimulus ☐ Prevention **Effects:** ☐ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☒ Direct ↑ pvt sector net financial assets ☐ Double counting

Measure 06 Redirecting or reallocating previously budgeted spending	**Stimulus vs prevention depends on context** **Effects:** ☐ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☒ Double counting
Measure 07 Central bank financing government operations	**Stimulus vs prevention depends on context** **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☒ Double counting
Measure 08 International assistance (borrower/recipient)	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects:** ☒ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations ☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☒ Double counting
Measure 09 International Assistance (lender/donor)	**Main Purpose:** ☐ Stimulus ☒ Prevention **Effects depend on what the recipient country does:** ☐ Change/support asset prices ☐ Pvt debt creation ☐ Delay pmt obligations

	☐ Govt/CB claims on pvt sector ☐ Contingent liabilities of govt/CB ☐ Direct ↑ pvt sector net financial assets ☐ Double counting

Source: Authors

Finally, Table 3 shows the typical differences in maturities, markets, lenders, and borrowers across Measures 01-04. These characteristics are "typical" or "usual," but not necessarily universal or present in every circumstance.

TABLE 3. Summary of the (typical) differences among measures 01-04

	Actions to support normal functioning of money markets (i.e., liquidity provision) **1**	**Encouraging private credit creation** **2**	**Lending to nonfinancial sector (unrelated to liquidity needs)** **3**	**Equity claims on the private sector** **4**
Maturities	< 1 year	≥ 1 year	≥ 1 year	N/A
Markets	Any short-term credit market	Secondary debt markets or loan purchases	Primary debt markets, direct loans	Equities (primary and/or secondary, ETFs, etc.)
Borrowers	Financial institutions, nonfinancial businesses, state/regional/local governments, central banks and official accounts (currency swaps and similar arrangements)	Financial institutions (who then lend to the private sector)	Nonfinancial businesses, state/regional/local governments, households	N/A
Lenders	Central bank and government	Central bank and government	Central bank and government	Central bank and government

Source: Authors

5. Additional Note on Liquidity

We end this background document with a reference to liquidity. Operationally, "liquidity" provision in a financial crisis like the current one, or the Global Financial Crisis (GFC), is *not* stimulus. Instead, these are operations for *preventing* a still worse crisis, or, so to speak, putting a floor underneath it. Under normal circumstances, money markets enable payment settlement, short-term funding of financial institutions' operations, and funding of working capital for non-financial businesses mostly on private sector balance sheets. A central bank's role is usually to backstop the largest banks and/or government bond dealers through overdrafts, direct loans (often secured), repurchase agreements, and outright asset purchases/sales/issuance, who then in hierarchical fashion provide the same to other financial institutions and corporations. While the central bank is certainly active in the money markets in various ways, it is itself normally involved in a small subset of liquidity provision with a subset of financial institutions.

In a financial crisis, the money markets cease normal functioning. In the GFC, the failure of Lehman Brothers in September 2008 was obviously central. Lehman was a market maker in several money markets, and was also holding billions of US dollars for its clients, who could not get to their accounts to settle their payments. Even the before Lehman failure, though, the significant disruption to commercial paper and Eurodollar markets led the Federal Reserve (Fed) to create several new standing facilities to lend to banks and to dealers. Later, the Fed's currency swap operations with other central banks were lines of credit, enabling those central banks to support their domestic US dollar markets. The Fed's subsequent commercial paper standing facility directly funded short-term operations of issuers, while its Term Asset-Backed Securities Loan Facility (TALF) operations (often referred to as QE1) to mortgaged-backed securities (MBS) markets encouraged mortgage lending by ensuring a market buyer for the securitized loans.

Central banks' liquidity operations during the GFC provided the funding that is under normal circumstances provided out by private financial markets. As financial institutions could not carry out their normal roles in these markets, and/or as the quantity of trades in some markets overwhelmed what would be 'normal,' central banks simply took these markets onto their balance sheets temporarily, partially or in full. These operations are nothing like "flooding markets with liquidity." If anything, the "amount of liquidity" available in these markets was *less* than in normal times.

The "supply shock" brought on by COVID-19 has disrupted money markets again at an even faster rate and larger scope than the GFC. Almost overnight, every business told to cease operations and every worker told to stay home became a substantially greater financial risk. The same goes for the businesses regularly in the supply chain of the closed businesses, the places those workers shop, the banks they owe debt service to, the landlords they owe rent to, the utilities they pay monthly, the governments they pay taxes to, and so on. And most of these entities typically finance their short-term operations in money markets or through short-term credit arrangements. It should be obvious that operations by central banks and governments to provide this short-term finance when normal liquidity provision is severely impaired is preventive, not stimulative. The mix of quickly devised and scaled standing facilities has not been comparable to the speed, depth, and scope of liquidity provision in money market during normal times.

Sources:

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