

FINANCIAL STABILITY REPORT



FINANCIAL STABILITY COORDINATION COUNCIL

FINANCIAL STABILITY REPORT 2nd SEMESTER 2020

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Prepared by:

FINANCIAL STABILITY COORDINATION COUNCIL

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LIST OF ACRONYMS, ABBREVIATIONS and SYMBOLS

ADB		Asian Dovelonment Pank
	-	Asian Development Bank Asian financial crisis
AFC	-	
BIS	-	Bank for International Settlements
Bps	-	Basis points
BSP	-	Bangko Sentral ng Pilipinas
CGFS	-	Committee on Global Financial System
COVID-19	-	Coronavirus disease
EBIT	-	Earnings before interest and taxes
ECQ	-	Enhanced Community Quarantine
FCY	-	Foreign currency
FIES	-	Family Income and Expenditure Survey
FSCC	-	Financial Stability Coordination Council
FSR	-	Financial Stability Report
GCQ	-	General Community Quarantine
GDP	-	Gross domestic product
GFC	-	Global financial crisis
GS	-	Government securities
HMOs	-	Health Maintenance Organizations
IC	-	Insurance Commission
ICR	-	Interest coverage ratio
ICT	-	Information and communications technology
IMF	-	International Monetary Fund
10	-	Input-output
IT	-	Information technology
LFS	-	Labor Force Survey
MSMEs	-	Micro, small, and medium enterprises
NCR	-	National Capital Region
NFCs	-	Non-financial corporations
OSRM	-	Office of Systemic Risk Management
P/E	-	Price-to-earnings
, PDIC	-	Philippine Deposit Insurance Corporation
PERA	-	Personal Equity Requirement Account
PCHC	_	Philippine Clearing House Corporation
PHP	-	Philippine peso
PSA	_	Philippine Statistics Authority
PSE	_	Philippine Stock Exchange
QE	_	Quantitative easing
QR	_	Quick response
RPK	_	Revenue-passenger-kilometer
S1	_	First semester
SAP	_	Social Amelioration Program
	-	-
SEC SWS	-	Securities and Exchange Commission Social Weather Station
	-	
US Fed	-	United States Federal Reserve
USD	-	US dollar
WHO	-	World Health Organization
YoY	-	Year-on-year
YTD	-	Year-to-date

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MESSAGE FROM THE FSCC CHAIRMAN and BSP GOVERNOR

A decade after the Global Financial Crisis (GFC), "systemic risk" is once again topmost in the minds of financial authorities. As disruptive as the GFC was – where the chain of events brought the global financial market to the brink of collapse – experts estimate the effect of the Coronavirus disease (COVID-19) to come close to that last seen during the 1929 Great Depression. As we did 12 years ago, the global economy is again being asked to relearn how to deal with and live through systemic disruptions.

The primary lesson from the GFC was that the whole financial market is more than the sum of its parts. Authorities must consider the risk behaviors coming from the interactions within a complex network of agents, institutions, products, and services. Since then, the pursuit of financial stability has been defined by the singular focus on managing "systemic risks," enhancing the resiliency of the system so that we are in a stronger position when system-wide disruptions arise.

COVID-19 is a natural test case for how we now handle systemic risks. Yet, various experts have noted that COVID-19 is different. Rather than directly impacting the financial markets, the authorities must now address the pandemic-cum-recession spillovers, from the real economy to the financial market, and possibly back. This is a challenge because we are tasked to respond, even if the core issue is not in finance, at least not yet.

The Financial Stability Coordination Council (FSCC) was purposely created in 2011 so that your financial authorities can act collaboratively on systemic disruptions. The Council recognized early on that there is no ready playbook when systemic risks arise from constantly evolving market conditions. As such, out-of-the-box interventions are more the norm than the exception but great care must be exercised in the policy execution.

In this 2nd Semester 2020 Financial Stability Report (FSR), we reiterate the high-level focus we invest upon systemic risk management and display the out-of-the-box mindset that the current unusual times require. We do not simply monitor the risks but offer concrete interventions for specific underlying risks.

With the damage that COVID-19 has already created, we believe that consumer preferences, risk behaviors and how things will be done in the New Economy will be fundamentally different in key aspects. In this sense, forecasting an uncertain future using the older norms may not be as effective. Instead, the FSCC believes that the path ahead depends on how we define the future market landscape so that we can create our own transition to that common destination. To do so, there are a lot of things that need to be done and these have to be done collectively. An integral part of the effort is to raise awareness and our shift to a semestral FSR reflects that commitment to communicate more and communicate effectively.

We continue wishing everyone good health as we share this 2^{M} Semester 2020 FSR.

BENJAMIN E. DIOKNO FSCC Chairman and BSP Governor



Financial stability is the state when prospective systemic risks are mitigated so as to allow financial consumers, both individuals and corporate entities, to pursue viable economic goals while avoiding disruptions to the smooth functioning of the financial system that can negatively affect the rest of the economy.

– FSCC



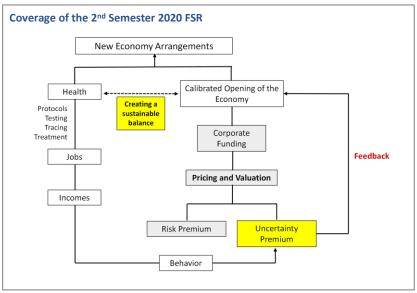
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EXECUTIVE SUMMARY AND FINANCIAL STABILITY ASSESSMENT

The decision early this year to shift the release of the FSR from an annual to a semestral series was motivated by the changing market conditions and the desire to keep market stakeholders better informed in a more timely manner. With the effects of COVID-19 now evident in the official data, this release of the 2^{nd} Semester 2020 FSR validates such decision.

Data showed that incomes have been impaired, both for business entities and for households. Employment figures shifted sharply, and so did the underlying cashflows. The impact though is uneven and a segment of society that is already economically vulnerable has faced greater challenges. Likewise, the suspension of economic activity has businesses managing a range of outcomes from lower profits to outright losses. With debt obligations even before the COVID-19 outbreak, this weaker business results have deeper implications over the near and medium-term.

Although COVID-19 started as a public health issue, it is vital to reiterate that the real economy and the financial market are symbiotic. Thus, the adverse impact of COVID-19 on the macroeconomy will be reflected in the financial market in some form. In **Chapter 2**, discussions provide indications of a "risk off" stance by creditor institutions. Liquidity is available but the appetite is predominantly for short-term issues. These manifestations of risk aversion are a natural response under uncertain conditions, but what may be best for the individual parts may indeed be adverse for the whole system. This is the current scenario, coupled with higher risk premiums and the outflow of portfolio investments.



Source: Bangko Sentral ng Pilipinas (BSP), Office of Systemic Risk Management (OSRM)

All these set the stage for the discussion in **Chapter 3**. Consequently, the future market landscape will be defined by a premium on physical space and an increased use of technology, largely to sustain that premium on space. Substantially, it impacts what can be done, how things are preferred to be transacted and what the authorities may have to focus on. It also interjects a view of the interlinkages between economic activities and between firms in the economy. Disregarding these interconnections might only run the risk of missing out on the whole by focusing too much on specific parts.



This is the New Economy and the transition from 'here to there' cannot be handled by merely doing more of the same things. Change is inevitable but the risk aversion in the macrofinancial market cannot be addressed by forecasting a moving target that is the future. In essence, the future landscape should be defined, with stakeholders as artists who will decide and design their path forward.



COVID-19 continues to be the central issue but its macrofinancial effects are much more evident now than in the April 2020 FSR. The drop in income is significant, both for corporations as well as households who rely more on informal or irregular cash flows. As a result, there are clear indications of heightened risk aversion (discussed in the next chapter). This chapter explores income shock and other macroeconomic facets that will likely affect the market landscape of the (future) New Economy.

1.1. Impact on the demand side

On March 11, the World Health Organization (WHO) declared the outbreak of COVID-19 a pandemic. Reaching the threshold as a global spread of a new disease, jurisdictions sought to contain its spread by literally cutting off transmission channels. Cross-border travel and transport were disallowed, effectively cutting off the global value chain. In several jurisdictions, strict lockdowns were imposed, together with enhanced safety and socialdistancing initiatives.

1.1.1. Employment impact of COVID-19

Employment numbers swung sharply. The entire island of Luzon was placed under Enhanced Community Quarantine (ECQ) on March 16. From an economic standpoint, this lockdown is significant because the island group accounts for 71.9 percent of nominal Gross Domestic Product (GDP). The National Capital Region (NCR) is the center of economic activity, contributing 52.2 percent to Luzon-wide GDP.

At the household level, the suspension of economic activity was felt through employment. Compared with the January 2020 unemployment rate of 5.1 percent, the April 2020 Labor Force Survey (LFS) reported a record-high of 17.7 percent, translating to 7.3 million in the unemployed. This is not unexpected since the April LFS was conducted after the Luzon lockdown was initiated. Inclusively, the bigger concern with the April figures was that the labor force participation rate dropped to a record low of 55.6 percent. This literally indicates that 3.9 million who were in the labor force in January were no longer classified as part of the workforce in April.¹ This decline is particularly significant when one considers the change in the labor-forceeligible population (i.e., aged 15 years and older), which increased by 881 thousand from January to April.

¹ Per the Technical Notes on the LFS, the Labor Force refers to the population 15 years old and over who contribute to the production of goods and services in the country. It comprises the employed and unemployed.

Conversely, the July round of the LFS provided a different picture. As sharply as employment fell in April, the July figures pointed to an increase of 7.5 million in the ranks of the employed. The count of the unemployed fell by only 2.7 million, with the larger story being the increase by 4.9 million of those participating in the labor force. The latter is particularly significant since there was only a modest increase of 339 thousand in the labor-forceeligible population, indicating that about 4.5 million who were not participating in the labor force in April were now back by July.

Household incomes were affected. The V-shaped swing in the employment numbers can be explained, in part, by looking at the category "with job but not at work." In this particular context, this temporary condition is the lockdown imposed beginning March 16.

The April LFS showed that 38.4 percent of those employed were classified as temporarily not at work,² or 13.0 million out of the 33.8 million classified as employed (versus the comparable January 2020 figure of only 332 thousand). About 97 percent of those with a job but not at work is

Table 1.1: Hours worked			
HOURS WORKED		er of employ	
	Jan-20	Apr-20	Jul-20
Less than 40 hours	13,443	10,942	16,760
Worked 40 hours and over	28,768	9,853	23,188
With a job, not at work	332	12,970	1,357
Total employed	42,543	33,764	41,306

Table 1.1: Hours worked

Source: Philippine Statistics Authority (PSA)

attributable to the ECQ which affected 12.6 million individuals. This single statistic highlights the initial effect of the lockdown. As the ECQ was downgraded into a General Community Quarantine (GCQ) in June, those who are employed but temporarily not at work dropped to 1.4 million by the July LFS. (Table 1.1)

The key issue with the above raises the question of how those classified as temporarily not at work were being compensated. Unfortunately, there is no direct data that can validate the various arrangements that were adopted as employers have exerted discretion on basic labor conditions, which may include working hours/days adjustments, payment of wages, and other wage and wage-related benefits. Consequently, this suggests significant implications on income, with the ECQ lasting until June while a GCQ has been in place since then.³

An alternative way of looking at the employment figures is by the number of hours spent at work. In general, this has been falling, from 42.1 hours a week in 2019, 41.3 hours in January 2020, 35 hours in April and to 38.2 hours in July. Technically, this puts the labor force at less than full-time

² The official designation is **"With a job but not at work"** which is defined as "those who have a job or business but are not at work because of temporary illness or injury, vacation or other reasons."

³ Per the Omnibus Guidelines on the Implementation of Community Quarantine in the Philippines, the ECQ refers to the implementation of temporary measures imposing stringent limitations on movement and transportation of people, strict regulation of operating industries, provision of food and essential services, and heightened presence of uniformed personnel to enforce community quarantine protocols. The GCQ, meanwhile, refers to the implementation of temporary measures limiting movement and transportation, regulation of operating industries, and presence of uniformed personnel to enforce community quarantine protocols. Modified ECQ refers to the transition phase between ECQ and GCQ, when the following temporary measures are relaxed and become less necessary: stringent limits on movement and transportation of people, strict regulation operating industries, provision food and essential services, and heightened presence of uniformed personnel to enforce community quarantine protocols.

employment, with the increase in the July round attributed to those working more than 48 hours a week in search of more income.

Looking at the employment numbers by occupation (**Table 1.2**), an across-theboard decline is observed in the April round and then followed by the increases in the July round. On the whole though, there is a 1.2 million net decrease in the employment numbers, which already benefitted from a (possibly seasonal) net rise of 935 thousand jobs in agriculture, forestry and fishery.

OCCUPATION CLASS	Number o	of Employed	('000)
	Jan-20	Apr-20	Jul-20
Professionals	2,457	1,965	2,098
Technicians & Associate Professionals	1,611	1,317	1,390
Clerical Support Workers	2,845	2,157	2,371
Service & Sales Workers	8,465	6,210	7,857
Skilled Agricultural, Forestry & Fishery Workers	4,855	4,754	5,789
Craft & Related Trade Workers	3,256	2,163	3,001
Plant & Machine Operators & Assemblers	3,448	2,613	3,298
Elementary Occupations	11,523	9,374	11,826
Managers	3,980	3,137	3,537
Armed Forces Occupations & Special Occupations	102	73	138
Total employed	42,543	33,764	41,306
Source: DSA			

Table 1.2: Employment by occupation

Source: PSA

Table 1.2 suggests that the net loss in employment in January to July is almost equally distributed between Managers, Professionals, Technicians and Associate Professionals, on one hand, versus workers in all other occupations (excluding Agriculture, Forestry and Fishery), on the other hand. This is reinforced by **Table 1.3** which showed that the gains in employment between April and July are for those who have a regular wage and salary as well as those whose incomes depend on the fortunes of the economy.

Table 1.3: Class of worker

Number	of employe	ed ('000)
Jan-20	Apr-20	Jul-20
27,757	21,323	24,965
11,135	9,702	12,095
1.002		
_,	613	1,067
2,649	2,126	3,179
42,543	33,764	41,306
	Jan-20 27,757 11,135 1,002 2,649	27,757 21,323 11,135 9,702 1,002 613 2,649 2,126

Source: PSA

A point that can be flagged here and will be discussed further in this report is how soon the impaired regular incomes can be reinstated. In the interim, this necessitates concrete financial support from the National Government, particularly in light of increased poverty and hunger indications (see following section). Over the medium to longer-term, this will depend on a full opening of the economy. However, this may also run the risk of oversimplifying the issue. Specifically, if a full reopening of the economy will still require physical distancing and increased reliance on online transactions, it is possible that some jobs may be lost permanently and in lieu of more New Economy-aligned employment requirements. This point is central to this FSR.

Taken together, what all these point to is that household income has been eroded. This is the case because (1) jobs have been lost, (2) some of those still classified as employed are not getting compensated, (3) a significant

portion of those employed rely on economic activity rather than salaries and wages, and (4) those working a longer workweek are doing so for monetary purposes. As significant as the dislocation has already been, the effects of the COVID-19 crisis continue to linger. This then suggests that not only have incomes already been lost, there is also the question of whether the cash flows can be reinstated in the future.

Productivity implications. This decline in purchasing power – both current and possibly in the future, at least for some segments of society – must also consider productivity. Accordingly, the decline in the number of hours worked in a week is a concern. Despite the sharp rise of those working longer hours in their desire to earn more, on average the workweek is in fact shorter. This seems to contradict various reports which indicated that work-from-home arrangements have actually lengthened working hours, converting some of the commute time into work-related activities.

From online retail shopping to remote schooling to telemedicine, COVID-19 has accentuated the role of digital technology, bringing about changes in the market landscape. A recent study by the Asian Development Bank (ADB)⁴ also emphasized how the pandemic will likely spur digital transformation in the world of work. Consequently, digital acceleration will affect the productivity of those low-skilled workers in low-paying jobs, who are more exposed to shorter working hours and higher risk of displacement due to their manual and routine work.

This is not a phenomenon uniquely arising from COVID-19. In a prior note, the International Monetary Fund (IMF)⁵ highlighted the growing mismatch in jobs and skills alongside the shift in the working environment from being labor-intensive to capital-intensive. This would lead to a reduced demand for and the wages of occupations performing routine tasks (IMF, 2020a).

What COVID-19 has done is to amplify the mismatches. Not only will technology play a greater role moving forward, the immediate impact of COVID-19 has been on families that rely on the informal economy or have irregular pay-offs. This point is made in the IMF's latest Regional Economic Outlook (REO) for Asia Pacific.⁶

Such mismatch would have macroeconomic costs as it reduces inclusive growth and productivity due to the imbalanced distribution of the labor force and lack of firm-specific knowledge (Keah and Nguyen, 2019). As digitalization changes the task composition of jobs, such job transition and occupation switch will be much more difficult for the low-skilled, especially the large share of informal sector workers who are already laboring under low wages and capital investment, with little access to social protection coverage.

⁴ Inocencio and Park (2020).

⁵ Group of Twenty: Measurement and Policy Changes (2018)

⁶ Regional Economic Outlook Asia Pacific. Navigating the Pandemic: A Multispeed Recovery in Asia

1.1.2. Exacerbating the challenges faced by vulnerable households

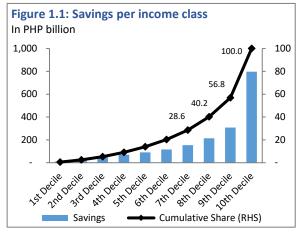
The natural recourse when recurring income is curtailed is to fall back on household saving. Unfortunately, this is where demographic differences are quite stark, weighing heavier against households which are already vulnerable by their limited financial means.

The 2018 Family Income and Expenditure Survey (FIES) showed that 71.4 percent of national saving is attributable to only 30 percent of families (**Figure 1.1**). This is a structural feature of the economy and one finds a similar proportion for Metro Manila, although the NCR figures are slightly less concentrated with the top three deciles of families contributing 65.1 percent of NCR saving.

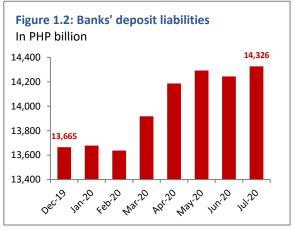
From this perspective, the rise in bank deposits is not a surprise (**Figure 1.2**). That is, even though incomes have been affected, the impact is much less severe at the higher deciles among families and, as will be discussed below, not all corporations suffered losses despite the sharp GDP contraction in Q2 2020. As such, there remains some amount of disposable incomes which find their way to being safekept as easily accessible bank deposits.

The other side is where the concern arises. From the FIES, it can be determined that the bottom 30 percent of families nationwide account for only 5.3 percent of national saving. While it is technically a weighted average between Metro Manila's 5.5 percent and the 5.3 percent rate for Areas Outside Metro Manila, the more important take-away is that the percentage is remarkably robust regardless of geographical consideration.

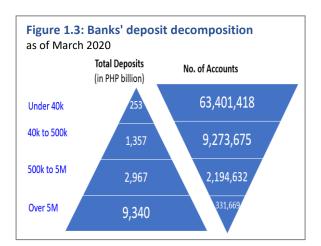
This is why the income effect of COVID-19 is significant. Those who depend on the fortunes of the economy or those in the informal sector or part of the "gig economy" are more likely to have suffered a "no work, no pay" condition. They are likely to be among the first few deciles in the FIES hierarchy which means that they also have less capacity to save. Data from bank deposits (**Figure**



Source: PSA, OSRM staff calculations



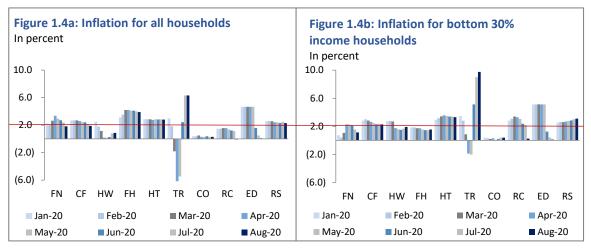
Source: BSP



Source: BSP, OSRM staff calculations

1.3) also show an inverse relationship between the number of accounts and their total amount vis-à-vis the overall outstanding balance.

The point then is that those who unfortunately are less endowed likely lost incomes and have limited financial saving on hand as a fallback. The added irony is that these vulnerable households are also experiencing higher inflation in key expenditure categories: health, utilities, and transportation (**Figure 1.4a and 1.4b**). With the proverbial savings lifeline limited and rising expenditure costs, the increased pressure on poverty incidence is very real.



*FN - Food and Non-Alcoholic Beverages; AT - Alcoholic Beverages and Tobacco; CF - Clothing and Footwear; HW - Housing, Water, Electricity, Gas, and Other Fuels; FH - Furnishing, Household Equipment and Routine Maintenance of the House; HT – Health; TR – Transport; CO – Communication; RC - Recreation and Culture; ED – Education; and RS - Restaurant and Miscellaneous Goods and Services

Source: PSA

The recent survey of the Social Weather Station (SWS)⁷ identified increased incidence of hunger. Although the survey used self-rated incidence, the fact that the results showed a notable increase cannot be set aside. This dilemma is urgent and, again, requires direct socio-economic interventions. Yet, the longer-term prospects are also at risk. Cost-push inflation puts the onus on the more vulnerable families and if the old supply chains and production models are restructured into the New Economy, the number and type of available jobs can become an issue.

1.2. Impact on the supply side

The cost of the COVID-19 outbreak affected businesses as well. With the suspension of business activity since mid-March, the contraction in GDP in Q2 was hardly a surprise. To some, though, the actual magnitude was the surprise since public estimates placed it closer to an expected minus 10 percent – coming from a Q1 figure at that time of negative 0.2 percent – rather than the announced minus 16.5 percent.

As the pandemic was unfolding, various global associations were providing updates, with the most notable difficulties reported in air travel and

⁷ The mobile survey found that hunger rate increased from 16.7 percent in May 2020 to 20.9 percent in July 2020 or approximately 5.2 million families.

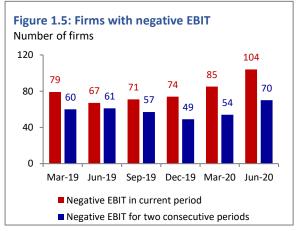
transport, consequently spilling over into tourism-related activities. This was validated in the Q2 GDP data with the hardest hit sectors being leisurerelated services (travel, food and accommodation) and transportation. Construction and manufacturing were adversely affected while industries such as finance and information and communications technology (ICT) which can operate, at least in part, without physical contact grew on a yearon-year (YoY) basis. If there was, however, a genuine surprise in the Q2 figures, it was that of wholesale and retail trade which contracted by a modest 13.1 percent. One would have expected a larger drop in this sector given a high-volume, compressed-space and disposable-income type of activities under this sector, features that COVID-19 surely impinged upon. Alternatively, one may hypothesize that the fuller impact on wholesale and retail trade may still lie ahead, a thought that cannot be encouraging for an economy that traditionally relies heavily on consumption expenditures.

1.2.1. Debt servicing will be a focal issue

In the evolving market environment, an important element underlying the various corporate press statements issued soon after the GDP data were announced may have been missed. That is, despite the adverse result of a 16.5 percent contraction in Q2, corporate results were actually diverse, ranging from lower profits to outright losses. This is an important point for two reasons.

Timing of income matters for debt servicing. Corporate debt is managed in such a way that there is enough funding available to meet obligations. Typically, internal funds (principally via operating revenues) are the first line before the company resorts to borrowings.

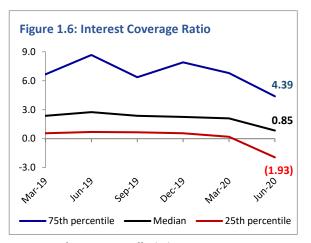
Data on earnings before interest and taxes (EBIT) provide an interesting insight. In a sample of 234 listed firms,⁸ 104 reported losses in Q2 (Figure 1.5). This is a relatively significant rise from the 85 firms with losses in Q1 and is in sharp contrast to the 2019 average. While it would be tempting to surmise that the rise is solely attributable to the business effects of COVID-19, data from Figure 1.5 showed that the number of firms with consecutive losses has been rising since end-2019. From 49 firms with current period losses in Q4 2019, this has now increased by about 140 percent in Q2 2020. These findings indicate that financial difficulties were already present but COVID-19 provided an additional strain on corporate finances.



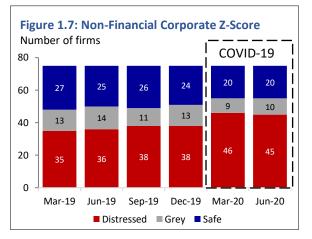
Source: Refinitiv, OSRM staff calculations

⁸ The sample consists of publicly-listed small and medium enterprises, holding companies, and relatively large companies belonging to the Financials, Industrial, Mining and Oil, Property, and Services Sectors.

This does not imply insolvency. A broader perusal of the EBIT database will validate that firms do incur operating losses from time to time but are viable over the medium to longer-term. Where this matter is the ability to service immediately maturing obligations. While there are limitations on the availability of direct data on the cash position of non-financial corporations (NFCs), it can be assumed that it is not normal practice for them to maintain a level of liquidity that matches their maturing obligations one-to-one. In this sense, the surprise of having COVID-19 does not only mean a delay in operations. The lockdown does affect the underlying financial condition of the firms which has consequences (see **Section 1.2**) and would need to be addressed (see **Chapter 3**).



Source: Refinitiv, OSRM staff calculations



*A z-score above 2.99 means the firm is safe from bankruptcy while below 1.81 means the company is distressed and has a high risk of going into bankruptcy. Those in the grey area should be considered as a warning for possible problems. Source: Refinitiv, OSRM staff calculations

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The amount of income affects corporate viability. What concerns financial authorities is that liquidity concerns can, under certain conditions, escalate into a solvency problem. This converts a one-off operating anomaly into a viability concern, from temporary to structural effects.

EBIT is again a useful metric but phrased as an interest coverage ratio (ICR).⁹ Figure 1.6 showed that the ICR fell sharply in 2020. A closer look at firm-level data implies that the deterioration in ICR was generally experienced across industries, as the Q2 ICR values for the 25th percentile, median and 75th percentile of the total sample stood lower relative to the immediately preceding periods. While this is a natural consequence from Figure 1.5, the concern is that half of the 174 firms covered have ICRs below unity in Q2. This is a red flag.

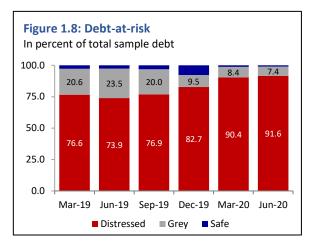
Calculations for the Altman Z-score¹⁰ provide complementary insights. Although the sample size is modest, **Figure 1.7** showed that the number of firms classified by the Altman model as "distressed" has increased in 2020, after being largely stable in 2019. The data indicates further that these "distressed" firms account for a significant portion of the debts carried by the firms in the sample. This is represented by the debt-at-risk¹¹ calculations in **Figure 1.8**.

⁹ Calculated as the ratio between EBIT and Interest Expense. It is critical that firms maintain an ICR in multiples above 1.0 to ensure that they have internally generated funds to self-liquidate debt servicing and because there are still expenses to be covered before EBIT (or EBITDA) becomes net income.

¹⁰ Financial distress is measured by the standard Altman Z-score, which takes into account a firm's net liquid asset, cumulative profitability, asset productivity, market value of equity relative to book value of total debt, and capital turnover ratio (Altman, 1968).

¹¹ In this report, debt at risk refers to the outstanding balance of all financial obligations of firms classified as distressed, neutral and safe based on the Altman Z-scores.

These points reiterate why the drop in earnings in 2020 is critical. Apart from the timing issue raised in the preceding section, there is a rather sharp drop in ICRs that should be monitored. While previously it was leverage which was seen as a potential systemic risk, the current situation is different. Today, debt servicing – and arguably for some, it may be corporate viability – may be the primary issue as a result of the income shock. This is despite lower interest rates which should translate into lower interest expenses once repricing sets in. However, the fixed schedule of obligations will now be matched against the variable timing and quantity of income.



Source: Refinitiv, OSRM staff calculations

1.2.2. Corporate and industry-level difficulties open the possibility of a "slow-burn contagion"

The weaker YoY first semester (S1) results from various economic activities (based on GDP growth rates) and across firms (based on their press statements and the preceding discussion) lead to the point of whether there could be lingering effects. One can argue that since the ongoing recession has arisen out of the COVID-19 pandemic, the prospects moving forward cannot be disassociated with the handling of the virus. On this note, depending on how one appreciates the various media reports, a vaccine may be available as early as the next few months or as late as two years from now.¹²

Yet, the deeper and arguably more interesting question is whether the socio-economic damage already created by COVID-19 will have lingering effects. Part of this may be just a delay as the intervening factors may need time to work themselves through the economy. This may be the case for wholesale and retail trade as flagged earlier, and it will apply to the financial market where the impact may arise only when the authorities exit from the various relief measures.

But there is also that component where the damage may amplify because the state of any agent will impact the conditions of other agents with whom the former has natural economic linkages. This is the point of looking at the system as intertwined chains of related and sequenced transactions. Each chain branches off to other transactions, effectively creating a network where the shocks can amplify or dampen depending on how the chains are structured.

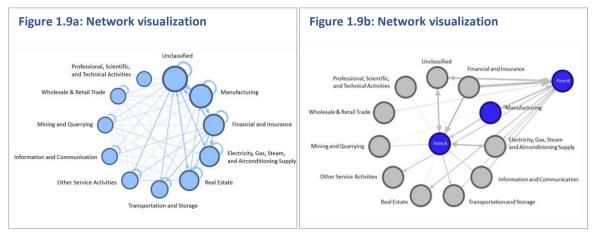
¹² In a document published on September 30, 2020, the WHO listed 41 candidate vaccines that are in the various phases of clinical evaluation and 151 more in pre-clinical stages of research and development. Amidst growing pressures to fast-track the development of a vaccine against COVID-19, independent researchers and scientists have raised concerns over the veracity of clinical trial evaluations, as trial results were rarely shared by vaccine developers to the public (The New York Times, 2020). It can be recalled that in early September, trials for the vaccine being developed by University of Oxford and the pharmaceutical company AstraZeneca had to be temporarily put on hold while regulators looked into the case of a participant who experienced an "unexplained illness," the details of which were not immediately disclosed (The Washington Post, 2020). Meanwhile, going past Phase 3 is a challenge as clinical trials would now have to be conducted on a large scale. This would ensure that enough data is available to prove the safety and efficacy of a vaccine prospect.

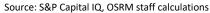
This is the FSCC's take-away from the GFC and the network analysis is applied in its surveillance of systemic risks. In particular, the Council views the economy not only in terms of its individual activities (a vertical view) but more so on how each activity relates to other activities (the horizontal view). Economics provides a similar and familiar input-output (IO) relationship¹³ except that in the case of the Council, the relationships were drawn based on the number of business connections as disclosed at the firm-level. The FSCC's stylized representation of these relationships is represented in **Table 1.4** based on firm-level data. Alternatively, one can generate a general supplier-customer matrix of the general format as **Figures 1.9a and 1.9b**.

Economic Sectors	EL	FI	IC	MA	МІ	ОТ	PS	RE	TS	WR
Electricity, Gas, Steam, and										
Airconditioning Supply (EL)	X _{1,1}	X _{1,2}	X _{1,3}	X _{1,4}	X _{1,5}	X _{1,6}	X _{1,7}	X _{1,8}	X _{1,9}	X _{1,10}
Financial and Insurance (FI)	X _{2,1}	X _{2,2}	X _{2,3}	X _{2,4}	X _{2,5}	X _{2,6}	X _{2,7}	X _{2,8}	X _{2,9}	X _{2,10}
Information and Communication (IC)	X _{3,1}	X _{3,2}	Х _{3,3}	X _{3,4}	X _{3,5}	X _{3,6}	X _{3,7}	X _{3,8}	Х _{3,9}	X _{3,10}
Manufacturing (MA)	X _{4,1}	X _{4,2}	X _{4,3}	X _{4,4}	X _{4,5}	X _{4,6}	X _{4,7}	X _{4,8}	X _{4,9}	X _{4,10}
Mining and Quarrying (MI)	X _{5,1}	X _{5,2}	Х _{5,3}	X _{5,4}	X _{5,5}	X _{5,6}	X _{5,7}	X _{5,8}	X _{5,9}	X _{5,10}
Other Service Activities (OT)	X _{6,1}	X _{6,2}	Х _{6,3}	Х _{6,4}	Х _{6,5}	Х _{6,6}	Х _{6,7}	Х _{6,8}	Х _{6,9}	X _{6,10}
Professional, Scientific, and Technical										
Activities (PS)	X _{7,1}	X _{7,2}	X _{7,3}	X _{7,4}	X _{7,5}	X _{7,6}	X _{7,7}	X _{7,8}	X _{7,9}	X _{7,10}
Real Estate (RE)	X _{8,1}	X _{8,2}	Х _{8,3}	X _{8,4}	X _{8,5}	X _{8,6}	X _{8,7}	X _{8,8}	Х _{8,9}	X _{8,10}
Transportation and Storage (TS)	X _{9,1}	X _{9,2}	X _{9,3}	X _{9,4}	X _{9,5}	X _{9,6}	X _{9,7}	X _{9,8}	X _{9,9}	X _{9,10}
Wholesale & Retail Trade (WR)	X _{10,1}	X _{10,2}	X _{10,3}	X _{10,4}	X _{10,5}	X _{10,6}	X _{10,7}	X _{10,8}	X _{10,9}	X _{10,10}

Table 1.4: Corporate supplier-buyer matrix

Source: S&P Capital IQ, OSRM staff calculations





In either **Table 1.4** or **Figures 1.9a and 1.9b**, the point is that, ultimately, the economy is a linked network of activities to activities and firms to firms. The magnitudes X_{11} , X_{12} ... X_{nn} reflect the frequency of business connections which would allow small values to eventually have a much larger final impact when all other subsidiary routes throughout the network are

¹³ The latest full-size IO matrix for the Philippines is for 2006. An abbreviated version is available for 2012.

accounted for. In the calculations, for example, finance is a limited input to wholesale and retail trade in terms of direct business connections but finance contributes significantly to manufacturing which requires significant inputs from wholesale and retail trade.

Hence, these linkages raise the possibility of follow-through effects. This is simply reflective of the reality of spillover effects, the magnitude of which will then depend on running through the linkages. Coupled with the income effects in the previous section, future business arrangements should consider how the links may adopt and adapt.

As significant and, thus far, as protracted the effects are of COVID-19, the likely outcome is that there is some degree of amplified vulnerabilities that is percolating without evident data at this juncture. This is the notion of slow-burn contagion.



The real economy and the financial markets are always symbiotic as the opportunities and challenges in one will eventually get reflected in the other. As it is, the unfolding global health issue has created uncertainties which get reflected in the financial market as heightened risk aversion or more of a "risk off" stance. This chapter shows developments in financial prices and fund flows. There were actions pointed out, which would be a rational response at the level of agents but have a broader adverse impact at the level of the system. Expectations evolve but there is a felt need to manage uncertainties that are at the root of escalated aversion.

2.1. Previous crises

The global economy is in the midst of a recession whose adverse impact has been estimated by multilateral agencies to be close to those seen during the 1929 Great Depression. As deep as the expected dislocations are, COVID-19 is categorically different because it is a recession that has been caused by interventions to curtail a pandemic. Since the WHO does not take lightly its decision to call an outbreak a pandemic (as opposed to an epidemic), its classification of COVID-19, together with the characterization by the multilateral agencies, suggests the depth and breadth of the infection.

For financial authorities, this presents unique challenges. Unlike the Asian Financial Crisis (AFC) and GFC, the ongoing global recession is rooted in the public health issue, not in financial markets. However, uncertainties breed risk aversion and so the financial markets will certainly be affected, either in fund flows or in risk prices. Since the expectation is that the likely dislocations come close to that of the Great Depression, then no current policymaker would have direct experience on what it was like then in a manner that can help with the handling of the COVID-19 pandemic-cum-recession. These points imply that there is no ready-made policy playbook for this evolving crisis, forcing the authorities to introduce out-of-the-box interventions.

This can be seen as a call for pre-emptive and collective action, the very point that the GFC raised about the perils of systemic risks. Yet, collective action will always be a challenge as authorities face idiosyncratic risks whose handling may have cross-border consequences. As to the pre-emptive policy stance, the authorities have taken strong action on expansionary fiscal, monetary and economic policies, supplemented by various regulatory relief measures to cushion the ill-effects of the income shock. But operating within a fluid environment that is subject to "epidemiological waves" and financial spillovers, establishing either a definitive exit strategy or a change in policy course (where warranted by evolving data) would be a challenge.

Where do all of these situate us?

At least there are three points to highlight. First, previous financial crises required a healthy dose of liquidity to address the difficulties. Getting to a state of illiquidity would be the fastest way to complicate things in the financial markets. The caveat though is that this crisis is precisely not rooted in the financial market, so the calibration of liquidity injections is a learning process for the authorities. As shown below, financial markets are prone to non-linearities in risk behavior so that the price of liquidity may not induce the movement of funding liquidity if a threshold of risk aversion is reached.

Second, history tells that crises, let alone pandemics, have lasting effects. A recent presentation by the ASEAN+3 Macroeconomic Research Office¹⁴ showed, for example, that ASEAN never really recovered its real GDP growth path after the Asian and Global financial crises. At the level of pandemics, the longer-term effect attributed by studies¹⁵ on the Spanish Flu include lower incomes, lower educational attainment, greater physical disabilities, and a greater need for government funding support.

And third, some authorities have exercised judgement by adapting to the demands of the evolving crisis. Quantitative Easing (QE) was used during the GFC as an unconventional monetary policy instrument to influence short-term rates. Following its own experience with QE much earlier, the Bank of Japan introduced instead its Yield Curve Control regime, which targets instead longer-term yields. Lately, the United States Federal Reserve (US Fed) announced its shift to "average inflation targeting." This effectively sets interest rates low for a prolonged period, which likewise reinforces the US Fed's view that COVID-19 will take some time to unfold before markets stabilize. The point of all these is that the authorities assessed the crisis conditions as requiring a different oversight approach, effectively modifying the established norms in order to generate better results. This flexibility is important in dealing with newer but potentially longer-term dislocations from the crisis.

2.2. Credit markets are liquid but risk aversion is noticeable

Early intervention of the central bank ensured that the market was liquid. As noted above, the previous financial crises showed how critical funding liquidity is in stabilizing the initial shock. As such, financial authorities worldwide acted quickly to infuse liquidity in the system. In the case of the Philippines, the central bank reduced the reserve requirements by 200 basis points, freeing up PHP 200 billion in funds. In addition, the policy rate was likewise reduced by 175 basis points year-to-date (YTD) to ease cost pressures (see **Box Article 1**).

¹⁴ As presented in the 3rd BSP Webinar Series "Managing Systemic Risk in the time of Pandemic: What has Changed since the Global Financial Crisis?" held on September 29, 2020.

¹⁵ See Almond, D. (2006). See also Beach B, Ferrie JP, Saavedra MH (2018).

BOX ARTICLE 1 The BSP's stabilizing hand in the pandemic storm

Departing from the typical gradualist approach, central banks took decisive and bold actions at the onset of the pandemic. The BSP was no exception. It began reducing policy rate as early as February after the first case of COVID-19 infection was recorded. A week after the implementation of Luzon-wide quarantine, the BSP stepped up the deployment of additional policy ammunitions.

The series of policy rate cuts translated into a cumulative 175 basis points (bps) reduction as of August 2020. To facilitate credit intermediation and ensure short-term peso liquidity in the financial system, a four-week cancellation of the TDF auction was enforced. As permitted by the BSP Charter, a one-hour window for the purchase of government securities was opened on March 24, 2020 to reassure market participants of the demand for GS should they need to liquidate their holdings. A package of time-bound regulatory relief and forbearance measures were made available to financial institutions for them to extend assistance to their clients.

The sudden freeze of economic activities led to the sell-off of government securities, at the most crucial time when funding is required to bankroll the massive requirements for social safety nets. The BSP, as allowed by its charter, extended an emergency loan to the National Government worth PHP 300 billion pesos via a repurchase agreement.

To further ease liquidity conditions, the BSP reduced reserve requirements for universal and commercial banks by 200 bps in April and 100 bps each for thrift banks and rural and cooperative banks in July 2020. Recognizing the significance of micro, small, and medium enterprises (MSMEs) in the Philippine economy, the BSP allowed new loans to MSMEs and critically impacted large enterprises that do not belong to a conglomerate as eligible instruments for compliance with the BSP's reserve requirement. Earlier reforms on the interoperability of the retail payment system, aided by regulatory relief measures, have facilitated the significant growth of digital transactions through the PESONet and InstaPay during the pandemic.

The BSP remains steadfastly disciplined as it helps the economy tide over the pandemic. The BSP and fiscal authorities have also carefully sought to preserve the credibility of economic policies and adopted a longer-term perspective, with each keeping to its sworn mandate while maintaining tight policy coordination and stakeholder engagement.

Despite the unprecedented collapse in economic activity, there were fewer bankruptcies in the first half of 2020, which may have, paradoxically, been interrupted by the lockdowns. Therefore, ensuring that the financial system can work out reallocations that support efficiency and growth is key. Many firms will not be able to remain in business without sustained policy support. On the other hand, delaying the roll back for too long would slow down the necessary adjustment with longer-term consequences.

The BSP continues to lay the solid groundwork for further strengthening its policy apparatus. Pursuant to the initiative towards market-based monetary operations, the BSP started offering BSP Securities (Bills and Bonds) on September 18, 2020 via auction. The initial offering entailed 28-day BSP Bills with an indicative offer volume of about PHP 20 billion. The BSP securities will augment the existing supply of risk-free financial instruments in the banking system and help in the development of the local bond market. The BSP has also actively engaged with supervised financial institutions and government partners in launching the digital Personal Equity Retirement Account (PERA) for savings mobilization and capital market development. This represents a tangible breakthrough since the passage of the PERA Act of 2008.

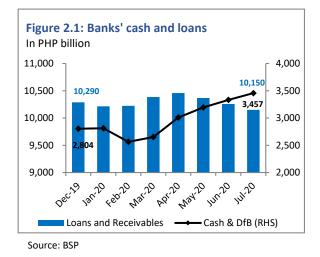
Structural rigidities can restrain the growth of new activities, thereby making it difficult to execute exit strategies. Thus, the BSP strongly advocates for the passage of pending transformative legislative bills¹⁶ that exemplify responsible reforms with adequate safeguards and risk sharing mechanisms. Nonetheless, the overall restructuring goes beyond monetary and fiscal measures. It also involves reforms in competition and labor market policies.

Source: Monetary and Economics Sector, BSP

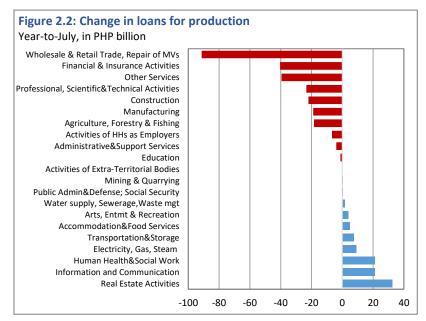
¹⁶ Bayanihan II, passed into law on September 11, 2020; Financial Institutions Strategic Transfer (FIST) Bill; Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery (GUIDE) Act; and Corporate Recovery and Tax Incentives for Enterprises Act (CREATE), which is a repackaged Corporate Income Tax and Incentives Rationalization Act (CITIRA)

On top of these liquidity-inducing interventions, it is interesting to note that bank deposit balances have continued to rise as shown earlier in **Figure 1.2**. This suggests that, despite the adverse effects of COVID-19 in S1, there are incremental disposable incomes that can be deployed. This supports the earlier view that aggregate saving has not (yet) been significantly altered by the employment shock from COVID-19 given the distribution of household incomes and savings. It is possible, nonetheless, that the pass-through of corporate losses into the net worth of the families with controlling interests in the major corporations will require time to fully process. Under this scenario, and considering the policy interventions, there should be no doubt that the financial market is liquid.

What is being seen is a classic case of managing risks and uncertainties. The availability of funding liquidity provides the needed backdrop for appreciating the shift in bank balance sheets at the aggregate. However, as seen from Figure 2.1, cash has increased while the outstanding balance of loans and receivables has declined since its peak in April, with the largest monthly decline recorded in July. Its further breakdown (Figure 2.2) showed diverse outcomes, with key sectors¹⁷ like wholesale and retail trade, finance and insurance, as well as manufacturing, all showing a reduction in outstanding loans. In contrast, sectors such as utilities, health, information and communication,



and real estate have seen increased loan balances, the latter of which may be reflecting the opportunities that low-cost mortgages provide (as well as the availability of cash flows from would-be borrowers).



Source: BSP, OSRM staff calculations

¹⁷ Key sectors refer to the economic activities that posted the largest contribution to GDP growth.

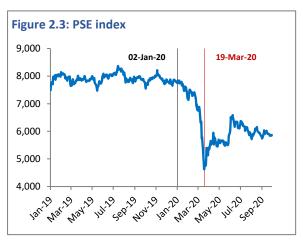
The net reduction in loans and receivables should be contrasted with the rising deposit balances, and the reduction in bills payable.¹⁸ This makes the balance sheet of the banking industry relatively stronger as liquidity is enhanced, credit risk exposures have fallen, and liabilities have been reduced.

This is a classic case of a risk-off stance, but it is also a case of Fallacy of Composition. That is, the heightened risk aversion among banks has concentrated liquidity with them but these have not been redeployed to reboot economic activity, making the recovery a more difficult proposition. This suggests that unless the risk aversion is addressed, any economic forecast of future growth that rests on the premise that risk aversion can self-correct is contentious, particularly if the transition period is protracted.

This risk-off stance is highlighted even more by the apparent gap between maturing obligations and the EBIT reported by firms (as discussed in **Chapter 1**). To close such gap, new funding is required. This can only come from convincing risk-averse creditors of their future viability (despite that future being uncertain because of the effects of COVID-19), raising more shareholder funding (**Section 2.3**) or via debt securities (**Section 2.4**).

2.3. The equities market has seen disruptions before but 2020 has been a big challenge

Raising new funding among shareholders is certainly a prerogative of the owners. Among listed companies, however, it has been reported that USD 311.1 million in IPOs has been issued YTD with follow-on issuances of USD 567.9 million (Refinitiv, 2020). Against a market capitalization of USD 271.1 billion (as of 25 September 2020), this represents an infusion of 0.32 percent.



Source: Refinitiv

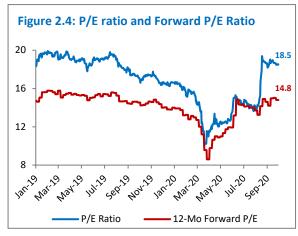
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In general, the equities market has seen significant volatility. Coming from 2019 where the Philippine Stock Exchange (PSE) Index was within a tight band of 7,600 to 8,200 points for the most part, the early part of 2020 showed a significant drop to 4,623 on March 19, a few days into the lockdown. While the 2020 index is off its low for the year, the YTD performance remains to be a decline (Figure 2.3).

This is a curious result since the central bank reduced the policy rate successively on February 6, March 19, April 16, and June 25, totaling 175 basis points. At least in theory, such reduction in interest rates should have provided a revaluation boost against expected future cash flows. Since it largely has not, another component of stock price valuation i.e., earnings must shed some light on this matter.

¹⁸ Bills payable include obligations to the BSP, interbank loans payable, other deposit substitutes, among others. (BSP, n.d.)

As a proxy, consider the price-to-earnings (P/E) as a measure of how equities are priced relative to earnings. It is recognized that P/E valuation is typically used at the firm level and some fair amount of caution is necessary in trying to replicate it as a market valuation tool. Within this caveat though, it immediately stands out that in 2020 amid the COVID-19 crisis, the aggregated ratio was more volatile compared to previous years when it was merely moving within a band (**Figure 2.4**). A sharp increase in P/E was particularly noted in August. Looking closely, however, the marked rise in P/E came with a marginal increase in price P, and as implied, a steep drop in earnings E. Given this, it can



Source: Refinitiv

be argued that the spike is not telling of a higher valuation in the equities market, but rather, an indicative pressure on earnings. The drop in implied earnings also times well with the August release of GDP figures as well as the quarterly reports for the bulk of listed firms in the same month, all of which have corroborated the narrative of depressed income streams due to the COVID-19 shock.

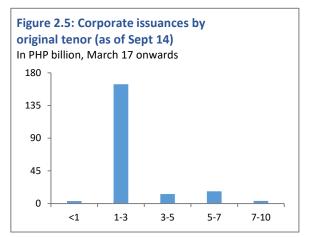
On another note, the forward P/E¹⁹ ratio has consistently been lower than the current P/E. And since the contemporaneous price is the numerator for both ratios, it follows that the projected future earnings have consistently been higher than current earnings. This then further suggests that investors have always had a rosier view of tomorrow. However, it would help market participants to effectively price risk if estimated future earnings are effectively captured as well.

In the context of this discounted cash flow type of valuation which takes into account financial and macroeconomic data, including a prolonged lowinterest rate environment, a recovery of the equities market appears to hinge on better prospects for the economy as a whole.

2.4. Opportunities for funding via securities

Corporate securities are being issued but at short tenors. The lower-foreven-longer interest rate regime may not have boosted the equities market much but it has made it attractive for PH corporates to issue fixed-rate securities. New issuances from March 17 to September 14 amounted to PHP 201.5 billion, which is equivalent to 13.6 percent of total outstanding listed corporate securities. These issuances, however, are observed to have shorter-term tenors, mostly between one to three years (**Figure 2.5**). This strongly suggests that the funds would be more for operations, shore up

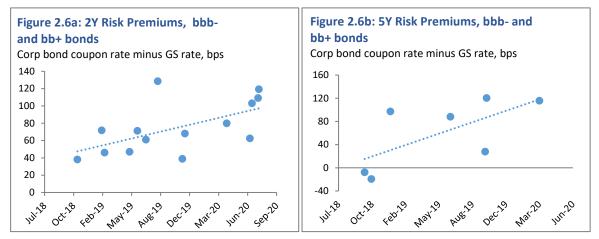
¹⁹ The forward P/E ratio is calculated as the current price divided by the estimated earnings-per-share for the next twelve months. Forward earnings for the next twelve months are estimated using projected corporate financial data and macroeconomic data discounted to the present value.





liquidity or refinancing, rather than for capital expenditures.

Corporates are pricing-in more risk moving forward. The heightened issuance of corporate securities also comes with an underlying pricing narrative. As illustrated in **Figures 2.6a** and **2.6b**, the premium of corporate bond yields over the credit risk-free government bond rates have been rising, for a sample of similarly rated securities with two-year and five-year tenors. This is interesting considering that the policy rate has decreased, which then has brought down the yields of government securities (GS).



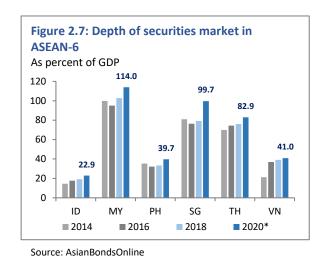
Source: PDS, Refinitiv, OSRM staff calculations

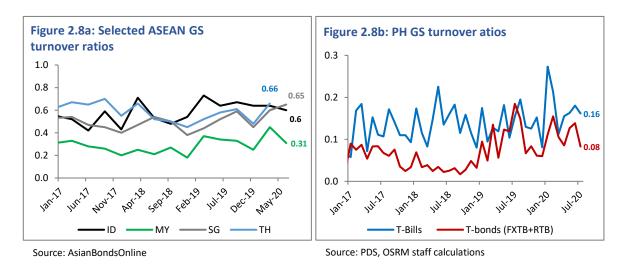
The value of price discovery cannot be understated. On the surface, this seems to suggest that issuers are conscious of rewarding their investors a notional risk return. Intuitively, such returns may already include an "uncertainty premium" on top of the return for issuer risk. To better understand this behavior, there is a need to establish a robust spot yield curve based on GS, above which the corporate yield curves, based on credit rating, can be situated. This will give the authorities a clear decomposition of the portion of the pricing that cannot be attributed to sovereign or issuer risks.

This is made more urgent with the release of the study made for the Committee on the Global Financial System (CGFS).²⁰ In this study, the Philippines' 10-year bonds had relatively wide bid-ask spreads and manifested a high price sensitivity to trading activity. These are classic liquidity metrics and the results could be used to reinforce the value of better pricing via stronger liquidity.

²⁰ Establishing viable capital markets (2019)

It should be noted that several local bond market reforms have been adopted but, as with any market, development will always be a continuing process. As has been documented previously in the FSCC's Policy Note,²¹ depth in the Philippine securities market remains modest (**Figure 2.7**) and trading turnover can be improved (**Figures 2.8a** and **2.8b**). These reiterate that there is a significant upside to the reform agenda, but for this purpose, these also reinforce the value of risk pricing which would be another element in reinvigorating the government and corporate securities market. This will be discussed further in **Section 3.3.2**.





2.5. Offshore exposure, sustainability and repricing risks

Various data confirmed that there are Philippine corporations who have the credit standing to be able to borrow in foreign currency (FCY) terms in the offshore market.²² Indeed, this is what the data from the Bank for International Settlements (BIS) showed, where the debts of NFCs have increased significantly between March 2018 and March 2020 (**Figure 2.9**). COVID-19 presents a debt servicing concern to the extent that corporate incomes have weakened since the Q1 cut-off for the BIS data.

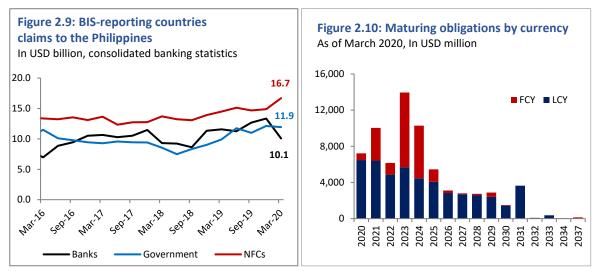
The incentive remains, however, for NFCs to borrow in the offshore market. Interest rates should be lower offshore and the Philippine peso has been generally appreciating against the US dollar. For NFCs that use the borrowed funds to generate FCY income in the same currency, there is obviously no additional exchange rate risk involved. Without granular data on who these borrowers are, this remains a blind spot for the Philippine authorities and should be managed as a risk.

²¹ In the said FSCC Policy Note "Managing Systemic Risks through the Capital Market in February 2020, it was shown that both the depth of and the turnover in the Philippine securities market are comparatively low vis-à-vis other ASEAN jurisdictions.

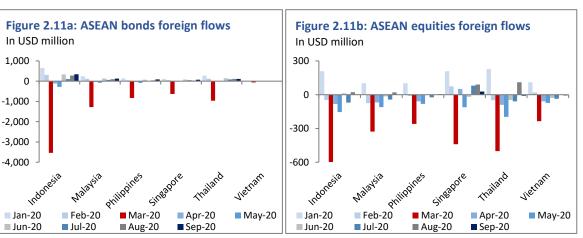
²² Bond issuance, especially offshore issuances, have been concentrated to large corporations, most of which are PSEi component firms.

This risk cannot be dismissed as a paper exercise. Based on third-party sources, NFCs will have significant FCY maturities in 2023 and 2024 (**Figure 2.10**). This will put the FCY obligations at roughly 20 percent to 25 percent of the country's international reserves, which would seem to be a non-trivial amount if there is a bunching in the demand.

More to the point, COVID-19 has instigated a flight to the USD as a safe haven currency. Within ASEAN, the capital outflow has been consistent for 2020 (Figures 2.11a and 2.11b) with the likely destination being US Money Market funds (Figure 2.12). These outflows are occurring despite sovereigns maintaining positive interest rate spreads over US instruments. This can only suggest that either there is a notional-though-positive spread below which funds will prefer USD instruments or that, based on the interest rate parity framework, the local currencies are seen as depreciating significantly in the near-term to more than make up for the positive interest rate spread.

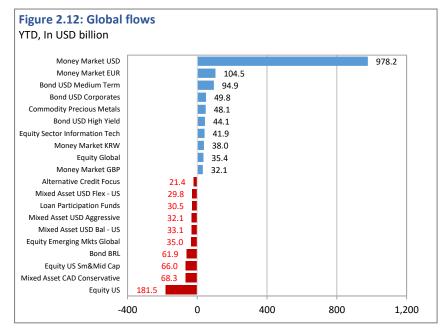


Source: BIS



Source: S&P Capital IQ, OSRM staff calculations

Source: EPFR, OSRM staff calculations



Source: Refinitiv, OSRM staff calculations

The former is an empirical question that is hard to monitor for the authorities as it will likely involve sentiments and a dynamic (non-stationary) risk-on-risk-off mindset. The latter reflects the possibility of a snapback of the local currency that will surely be disruptive as forward market hedging is not commonly in use as of the moment.

TRANSITIONING TO THE NEW ECONOMY

The COVID-19 virus – and more importantly, its macrofinancial consequences – continues to spread. This will require deliberate action, not only to curtail its further proliferation but also to address the damages that have come with it. The likely scenario is that the post-COVID economy will be fundamentally different from the old structures, at least in some critical respects. Right now, the policy issue comes down to income impairment and a level of uncertainty that is nurturing risk aversion in financial markets. To talk about recovery and the New Economy, these policy issues need a proactive response. Consumers and businesses are expected to update their preferences and risk behaviors. Thus, current models and policy benchmarks based on more normal times may no longer be as reflective of the underlying economy as they once were. To move forward, there must be a vision of the future, against which economic agents can craft their transition. That vision anchors expectations and the transition must address the underlying effects of COVID-19. Absent of this, the economy may be facing a slow-burn contagion that no one would prefer.

3.1. Changes in agent behaviors and business models

It is expected that the post-COVID-19 world – most likely defined as "containment" rather than an outright "eradication" of the virus – will continue to insist on a preference for safe distancing. This puts physical space at a premium and the spatial connections between market agents are expected to be increasingly conducted via cyber facilities. Employer-employee interaction, on the other hand, is expected to have alternative arrangements (i.e., work-from-home, rotations, shortened workweek or flexible office hours). This will rely on the information technology (IT) ecosystem and office productivity will be continually assessed. Such alternate arrangements would then loop back to the preference for space, affecting the value of current work-related space and the demand for future needs.

There may also be a rethink of supply links. The global value chain developed on the back of the viability of cross-border transportation, with the creation of production hubs as key elements of the end-to-end production line. As rare as pandemics are, the impact on cross-border transportation may still take time to sort out which can cause production bottlenecks. As noted by the IMF REO, the path of full recovery will be protracted and there is noticeable variability across jurisdictions. In addition, millennials (who are said to always prefer now over tomorrow) and other consumers (who will now browse and request delivery at the speed of the internet) are imposing their own imprimatur on "Just-in-

Time" models. This creates a natural demand and shorter supply chains. If consumers make no distinction about where products are sourced, then COVID-19 has effectively changed branding preferences. For consumers who still prefer certain brands sourced from specific locations, there may be some discussions between efficiency versus expediency.

At the consumer level, perhaps the adage *once-bitten-twice-shy* is apt. Those with disposable incomes may think of building up their precautionary savings. If so, this will likely affect consumption patterns while the availability of delivery services changes what and how items may be purchased. Those with limited potential for precautionary saving though, are made even more vulnerable. Accordingly, the National Government may have to think of ways to mitigate the risks arising from greater social imbalance. For the medical field, one expects that there will be significant changes so that future pandemics are not "black swan" events.²³

All of these suggest that the New Economy is unlikely to revert to the old norms. There are structural changes because behaviors are affected as well. As will be discussed in **Section 3.3.1**, planning for the future may actually require more backward induction from a common future point. For now, changes can be reasonably expected of the New Economy.

Figure 3.1 provides a rough schematic of some changes. The focus is on whether the production of the outputs can be done "remotely" via technological innovations, whether the consumer can receive delivery of the output, separate from whether the consumer needs to browse at the store to confirm his/her preference for the product. These three questions may serve as a guide and may be expanded in the future.

Economic Sectors	Can production be done remotely?	Can the end product be delivered to the consumer "offsite"?	Will demand need an "in store" review by the consumer?
Manufacturing		Direct delivery	
Electricity, Gas, Water			
Construction		Yes	Yes
Wholesale and Retail Trade		Personal shopper	Online shopping
Transportation and Storage		Delivery services	
Accommodation and Food Services		Food	Food
Information and Communication	Yes		
Financial and Insurance	Yes	Online transactions	
Real Estate		Yes	Yes
Professional Services	Online consultations	Online consultations	
Education	Yes	Yes	
Health		Online consultations	

Table 3.1: Schematic of the New Economy

Source: BSP OSRM

²³ Nicolas Taleb published a book about the GFC which he describes as a black swan event i.e., an event that is not in the realm of the expected, cannot be forecasted but once it occurs, there is a great deal of rationalization of why it should have been foreseen. He argues, however, that COVID-19 should be a "white swan" because it is preventable, and he cites various jurisdictions which have made preparations for such tail events (Financial Times, 2020).

3.1.1. Producers need to re-assess

With the disruptions in supply chains, production needs to reposition itself in the New Economy, even if a vaccine would not be available for some time. Some industries are already undergoing a noticeable shift. While finance and education are smaller components of GDP, they nonetheless have lasting effects on the economy. With the former, the backroom operations will necessarily continue to be done on-site but more financial services are available through online platforms (with **Box Article 2** as an example). This furthers the trend of tech-oriented start-ups that are otherwise not regulated by the traditional financial authorities.²⁴ With the latter, the effects may not be as immediate, but quality education has always been found to suffer in previous episodes of a pandemic, particularly online learning that puts a high premium on the digital readiness of both the students and the academe.

Other industries, such as manufacturing, utilities and construction, are unlikely to catch up. All sub-industries under manufacturing may end up at status quo except with some adjustment for demand, especially if the end-product is retail oriented. Electricity, gas and water need to be harnessed at plants while construction needs to be on-site, even if the delivery of its final products need not require the buyer to be on-site. More fundamental changes in other activities can be expected.

- Wholesale and trade. The viability of big and bigger malls may have to be reconsidered. This is not just because of physical distancing norms, which will affect baseline assumptions about foot traffic. The bigger concern may be in the emergence of e-commerce, which has given retailers its internet-based platform to sell and market products. This provides consumers greater reach and enables households to purchase at the comfort of their homes, without being constrained with store hours or dreaded parking at the malls. With some products visible on the online market even before the pandemic, the quarantine was the trigger for the underlying, likely permanent change. Online transactions also adjust the employment frontier from the stores/retailers to the backroom services handling electronic orders. Physical stores may not be completely eliminated but a reconfiguration is likely.
- Transportation-related services. The premium on space hits transportation significantly. Air travel needs to be reconfigured on the operating assumption that the baseline revenue-passenger-kilometer (RPK)²⁵ is adjusted downwards. With most airplanes currently acquired via a lease, the financing component necessarily must be addressed. Public transportation carriers are similarly impacted as passengers-per-trip is expected to decline even though the marginal cost (fuel and depreciation) is less dependent on the number of riding passengers as they are on the number of trips.

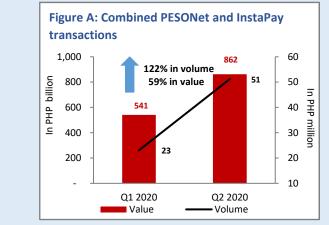
²⁴ The Financial Technology Sub-Sector, under the Financial Supervision Sector of the BSP, supervises entities that provide financial services through global digital platforms/channels such are-money issuers and virtual currency exchanges.
²⁵ RPK is the metric of demand used by airlines.

²⁵ RPK is the metric of demand used by airlines.

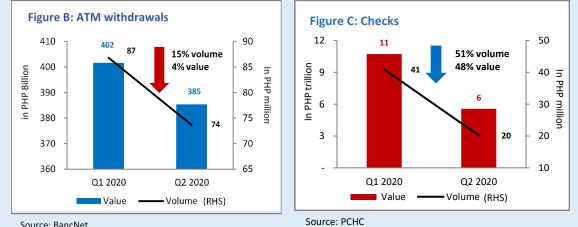
BOX ARTICLE 2 Digital payments – The way forward in the New Economy

The payment system in the country has exhibited resilience against the COVID-19 pandemic²⁶ when digital payment services have become more important than ever before. The country is well equipped with electronic payment rails which have become a necessity in a world where making financial transactions face-to-face is no longer a safe and practical choice.

Data show that, since the outbreak of the pandemic, there has been an exponential rise in the usage of PESONet and Instapay for electronic fund transfers, and a notable decline in the volume of paper-based transactions as represented by ATM withdrawals and check payments. The PESONet, in particular, has helped ensure that the vulnerable sectors efficiently and safely received the government's financial assistance. The PESONet was used by the Development Bank of the Philippines in distributing the SSS Small Business Wage Subsidy to over three million employees of MSMEs. The upward trajectory in the adoption of PESONet and Instapay continued even after the community quarantine was relaxed starting June 2020.



Source: BancNet and Philippine Clearing House Corporation (PCHC)



Source: BancNet

Moving forward, the BSP shall sustain momentum for the adoption of digital payment services by pursuing the following initiatives: (i) the use of Quick Response (QR) Ph for person to merchant (P2M) payments in addition to the existing person-to-person use case; (ii) the creation of a bills payment facility which seeks to eliminate the inefficient fragmented bills payment mechanisms; (iii) the adoption of a direct debit payment service that shall streamline the settlement of recurring payments; and (iv) the implementation of a rationalized fee structure for epayment services.²⁷

By actively promoting e-payments, the BSP ensures the country of a smooth transition into the New Economy where every Filipino stand to benefit from a safe, efficient and reliable payment system.

Source: Financial Supervision Sector, BSP

²⁶ The ECQ was imposed over Metro Manila and the rest of Luzon on March 17, 2020 and was relaxed to GCQ starting June 1, 2020.

²⁷ QR Ph is the National QR Code Standard which the BSP has required payment service providers to adopt pursuant to BSP Circular No. 1055.

Likewise, air and sea cargo are also not dependent on passenger traffic, but will nonetheless depend on market activity where intra-border activity is all the more important. Vehicles used for delivery services are expected to get a further boost from the shift to e-commerce and this will favor compact, maintenance-light designs.

- Leisure activities and services. A global economy reeling from a pandemic will carefully weigh the timing and propriety of leisure-related activities. There will be a balance between treating leisure as a demand that can be postponed as against a needed outlet for built-up stress. The key will be in convincing the public that standard health protocols and hygiene practices are effectively and continuously applied, particularly for facilities that offer public use. Dine-in facilities and travel accommodations will likely see demand lag for some time, while current capacities and sprawling structures will have to be rationalized in light of the spacing and health concerns.
- Real estate. This presents an enigma as several factors are at play. For one, the value of distancing and the preference for open spaces will create a premium for more "sprawling" developments and a discount on existing "cramped" locations. For another, as interest rates are expected to remain low for some time, financing real estate is relatively cheap at this point. Yet, there is that premium on liquidity as well. While developers have a strong desire to re-establish their liquidity, would-be buyers may also not want to part with their liquidity given market uncertainties. All these may boil down to a need versus a want on the buy-side while the sell side may have to prioritize liquidity for now in anticipation of a protracted recovery to an uncertain New Economy.
- Professional services. Face-to-face meetings are still not the norm and increasingly, business dealings are held through virtual meetings. Advisory-type services are creating a demand for remote meeting apps, with the sustainability heavily depending on available IT infrastructures. Most professional services can be delivered through cyber means but at some loss of interpersonal interactions. Such interaction may be more important for some (for example, medical consultations and legal advice) than others (i.e. business transactions and consulting services). Webinars and e-learning facilities may now be the rave, but the network that one develops in face-to-face activities is as much value than the knowledge shared at these activities. In effect, the output can be delivered in cyberspace but cannot really be quite the same.

3.1.2. The diversity across consumers and households matters

Changes in production cannot be independent of the emerging trends on the consumption side. This is where demographics matters since it is diversity that best defines the landscape across households.

 Households with higher cash flows. There are households that have options and these are often tied to the availability of savings and recurring cash flows. They could very well dine-in (or have been used to it as part of their pre-COVID-19 consumption pattern) but they would probably skip these in exchange for delivered food or home cooking. They may visit retail malls but are also more conscious of social distancing. Online purchases are not uncommon as well as online medical consultations.

Some of them may still have children of schooling age and those children are often described as "tech-savvy." This means that they were born into the culture of living with a smartphone and a laptop updated with the latest apps (as well as games and music). Digitization is then the norm, whether it be for the family's finances or for their day-to-day activities.

For these households, the New Economy accelerates their reliance on ICT resources. Available disposable income is channeled through cyberbased demand, which then affects the way retail trade is conducted. There will likely be increased demand for ICT resources i.e., greater internet speeds, better gadgets and heightened use of financial technology. An increase in prices can be tolerated since they are willing to pay for the cost of convenience and expediency.

 Households with modest cash flows. Other households have much less options, if there are at all. Dine-in takes on the meaning of being able to consume at home and celebrations may be in the form of fast foods (although the possibility of "take out" should not be dismissed). They rely on public transportation but, when this is not available, they could internalize the costs by either opting to walk for hours to get to their destination or use bicycles/motorbikes, even at the risk of the absence of road safety gears.

Aside from the ubiquitous and must-have mobile phone, there is limited reliance on ICT resources. Online services are generally not an option and purchases are preferred via physical presence. The same face-to-face presence defines their interactions with the rest of society. They will likely avail of clinic services, or hospitals if it really cannot be helped. Education, despite the desire of the authorities, would largely be inschool and in general, cash payments are the norm. Collectively, the New Economy poses challenges for these households. Even if more ICT resources are publicly made available, this would not necessarily translate into their increased demand. A "right-sizing" transition would be vital, which the National Government must initiate. Otherwise, the New Economy is "dichotomized" creating a divide where it will be increasingly difficult to reconcile the allocation of scarce economic capital.

3.1.3. Funding markets should take a broader view

Funding markets cannot be disassociated with the above changing patterns since finance does not exist for its own purposes. It must be symbiotic with the real economy (and its stakeholders). While the Philippine financial market has seen its fair share of disruptions and challenges, the ongoing recession presents new uncertainties and risks. At least four issues come to mind.

First, **Chapter 2** outlined the effects of COVID-19 on the financial sector. COVID-19 is a systemic shock and the financial market must see it unequivocally as creating system-level risks that can escalate further. Following the discussion in **Section 1.2**, taking a systemic view means that finance must consider the interlinkages between industries and between firms. This is where the financial authorities and the credit markets must work together.

Second, the credit decision must remain with creditor institutions. However, the notion of credit risk now extends beyond firm-level parameters since the debtor must now be situated in the context of how it will position itself in the New Economy. This builds on the first point above.

Third, since credit risk must have a general sense of the debtor's potential impact on the system, then the traditional oversight of the safety and soundness of creditors may benefit from taking a more system-wide view as well. As will be discussed further in **Section 3.3** below, liquidity considerations may pose a more immediate concern while the allocation of risk capital may have to assess both the direct and indirect (i.e., through 3rd parties) credit risk of the borrower.

Fourth, the inroads into the digitization of finance, in the FSCC's view, is irreversible at this point. But the oversight structure remains that largely by institution rather than by function. While initiatives have been pursued on this critical point (**Box Article 3**), the ability of financial authorities to supervise techdriven firms performing financial functions needs to be solidified.

For these reasons, the landscape of funding markets will likely change as well. There have been market practitioners who have commented that what constitutes a "bank" in the future will likely be different from one's current appreciation of a one-stop-shop. COVID-19 almost guarantees that this will come to fruition.

BOX ARTICLE 3

Exigency at times of uncertainty – The FSCC member-agencies initiatives

COVID-19 and moving forward in the insurance industry

The Insurance Commission (IC) took swift actions regarding the slowdown of the insurance industry due to the COVID-19 pandemic. These actions aimed at ensuring continuity of operations and effective delivery of services while observing safety protocols and alternative-work schemes.

The IC also provided regulatory reliefs to its stakeholders, who have been adversely affected by the COVID-19 pandemic. As part of the reliefs, companies that failed to comply with the minimum net worth and minimum capital investment requirements of at least PHP 900 million and PHP 225 million, respectively, were indeterminately reprieved to give them financial leeway and window to focus on the delivery of their services. Deadlines and penalties for late submission of regulatory reportorial requirements were also relaxed.

Insurance and pre-need companies, Health Maintenance Organizations (HMOs), and Mutual Benefits Associations were encouraged to extend the coverage of COVID-19 and related conditions in health insurance policies and HMO agreements for access of the insuring public to necessary medical treatments and health care services. The entities have settled an aggregate COVID 19-related claims pay-out of PHP 327.0 million – mostly on medical benefits including in-patient, out-patient, medical reimbursement, daily hospitalization benefits, and critical illness benefits – based on the survey conducted by IC last May 2020.

As the country transitions to the "New Economy," the IC already adopted digital payments, online submission of certain reportorial requirements, and continues to develop other digital platforms to improve the undertaking of its regulatory processes. Further, the IC is also set to publish this year its *Insurance Commission Financial Crisis Management and Resolution Handbook*. The handbook will serve as a guide to IC and its regulated entities in preventing and mitigating financial risks.

The IC continues to uphold its regulatory functions to foster financial sustainability and promote awareness to the general public of the importance of insurance as a financial instrument and security against any financial and economic adversities.

Source: IC

Looking back and moving forward: Lessons learned during the ECQ

Field operations in two closed banks had just started when the Government placed the entire Luzon under ECQ on March 17, 2020. Work has to be suspended. Personnel have to be recalled. But how about the depositors of these closed banks who badly need their insured deposits? This situation posed grave challenges to the Philippine Deposit Insurance Corporation (PDIC), especially on how it can dispense its mandate while ensuring the safety of its clients and personnel.

The PDIC shifted to online filing for depositors, who are required to transact in these closed banks. Upon easing of lockdown, additional modes for filing become available, including through mail and courier service. Instead of processing claims on the field, this was done in the Head Office. Depositors were notified of the status of their claims through emails and text messages and offered payment options via check and cash-over-the-counter facility of the nearest branch of a government bank in their area. The requirements and new procedures were constantly communicated to the depositors through the PDIC website, social media accounts, local radio networks, and local government partners.

As of August 31, 2020, PDIC was able to pay the insured deposits of 2,562 deposit accounts, equivalent to 77.63 percent of the total accounts in these two banks.

Learning from this experience, the PDIC shall move forward focusing on enhancing business continuity, monitoring of banks' financial condition, raising public awareness, and ensuring readiness for payouts and other resolution methods. In the pipeline is the adoption of electronic claims settlement operations where claims filed online will be settled via checkless payment, using a Multi-Channel Disbursement Facility of a government bank. In this arrangement, depositors will be provided with a Reference or Personal Identification Number (R/PIN) to claim their deposit insurance payment in any of the accredited payment outlets. There is an ongoing coordination with local government units to facilitate takeover operations of closed banks. Guidelines will be adopted to allow for offsite or remote bank examinations.

Source: Roberto B. Tan, President and CEO, PDIC

COVID-19 and moving forward in the capital markets

Globally, policy responses have been directed towards supporting the financial sector. With the "Great Lockdown," the world's total economic stimulus spending alone reached USD 18 trillion (IMF, 2020). The record level liquidity injections have stabilized the regional and national financial markets. Although domestic demand plummeted and external demand nosedived in some regions, developing Asia's capital flows, financial markets and currencies have recuperated, and portfolio flows have resumed. (ADB, 2020; FitchRatings, 2020; McKinsey, 2020; Moody's, 2020; NEDA, 2020; Oxford Economics, 2020).

The listing of the first real estate investment trust, the issuance of a major bank's "COVID Action Response bonds," and a local telecommunications firm's comeback in the international bond market are among the signs of the domestic capital markets' resilience amid the pandemic. The local bond markets are fundamentally buoyant and in good shape to sustain performance. Trading in the secondary market for government securities is expected to flourish in the short-term. (BlackRock Investment, 2020; FMIC and UA&P, 2020; PSE, 2020; TAC Economics, 2020).

Philippine regulators also provided a springboard for risk assets to rebound. The Securities and Exchange Commission (SEC) adjusted its disclosure requirements to promote transparency and accountability. It also enabled the creation of corporate debt vehicles to support liquidity requirements. These, and the stable outlook in the country's credit ratings, are seen to restore investing public confidence and ease business pessimism.

As the country recovers from the technical recession, the capital markets are expected to support economic recovery. The expected sustained period of low interest rates is also expected to contribute to the recovery and encourage investment. Notwithstanding the dim prospects that a prolonged COVID-19 pandemic may bring, the SEC, together with the other financial regulators, will be poised to undertake decisive action and concerted effort to sustain the resilience of the Philippine capital markets and corporate environment.

Source: Economic Research and Training Department, SEC

3.2. Addressing the current issues

While the previous section attempted to identify where the changes may come from, one cannot lose sight of the current problems that are already being faced as a result of COVID-19. Less profits to outright losses, movements in and out of the labor force, and different costs borne by varied households were evident in the earlier chapters. Put together, two issues stand out.

3.2.1. Managing expected credit deterioration

It is totally expected that the quality of credit receivables will deteriorate moving forward. The extent and distribution of the income effects (**Chapter 1**) suggest that this is forthcoming. While the "when" and the "how much" aspects can be discussed, these may not be as critical right now. Contemporaneous data does show that non-performing loan ratios remain numerically low but this is cushioned in part by the regulatory forbearance that were earlier introduced. More importantly, however, low ratios do not preclude it to rise significantly and linger at higher levels for some time. This was our experience in the aftermath of the AFC and as a result, the Philippine economy took some time to recover.

Preparing for the credit situation is a key objective. One should not be complacent with credit quality numbers that have remained low. To the contrary, vigilance should be the preferred approach so that one can "get ahead" of the numbers and have an organized system in place before they adversely turn.

The task is to align a notion of vulnerability with a view of the New Economy. Firms which are temporarily distressed today but are nevertheless seen as fundamentally viable in the future, make a good case for being extended some assistance to get themselves back on track. After all, the recession caused by this pandemic was not their doing and they were as much surprised as anyone.

Yet, this is where the challenge also lies. In order to make headway, the heightened risk aversion should be addressed and have the financial institutions get back to taking on calculated risks. Credit considerations, both outstanding and future lines, may no longer be simply a matter of the creditor's projection of the debtor's cash flows.

To the extent that recovery into the New Economy requires funding, then the availability of credit becomes akin to a public good in a risk-averse world. Its calibrated distribution can generate positive effects, but any deterioration can quickly create negative externalities. The current enhanced level of risk-aversion though creates a problem. Not only does it limit risk-taking (and thus the redistribution of liquidity) but emerging difficulties with known counterparties can create a dilemma. Specifically, if any bank decides to cut the credit line of a common borrower, other banks may take pre-emptive action by cutting the lines of other borrowers common to a pool of creditors. While this may be a defensive move for any bank, all banks engaging in such behavior will only serve to amplify the illiquidity in the market. Again, a Fallacy of Composition situation will require collective action.

This collective action calls for a longer-term view on how the economic activity fits into the New Economy. Together with the discussion on possible slow-burn contagion (**Chapter 1**), this raises the need for "systemic-ness" to be an additional credit element. That is, aside from the prospects of the borrower, additional consideration can be made of how the firm, its economic activity fit into the overall dynamics of the economy. The credit decision must remain with creditors such as banks since this is their core function. However, the added insights about the market landscape in the envisioned New Economy is going to be an important add-on which the authorities themselves can provide (see **Section 3.3.1** below).

How does this differ from the current use of industry analysis in the credit underwriting process? And how does this help mitigate the expected forward challenges with credit quality?

The answer to the first is that it extends and encourages the use of a uniform baseline. Rather than look at each economic activity on its own, the authorities can generate a snapshot of the interlinkages across industries, based on the existing business connections already reported by firms. This takes it a step further because a horizontal scan of industries is made available based on existing – not theoretical – microdata on business connections used. This serves as the uniform baseline that should provide a more holistic view.

For the second, the network of business connections can suggest the extent to which each economic activity (and its linkages) can possibly amplify or dampen shocks. With the private sector and financial authorities collaborating, risk exposures to the various business lines can be examined for emerging pressure points. Based on the assessment of business lines, creditor institutions can provide their regulators their own approaches for handling difficulties that may (or may not) arise with specific counterparties.

This bears repeating. The credit decision must remain with creditor institutions. What is being espoused is that the authorities provide a systemic view of the linkages. From a credit impairment standpoint, one can think of the distinction between the probability of default (which the creditor can assess) and the loss given the default parameter (which the authorities can shed light on with a systemic view).

Creditors benefit as the adequacy of their risk capital is assessed relative to the broader direct and indirect linkages arising from business connections. For regulators, this systemic solution provides better and more real-time information on the quality of outstanding debts generated. Such information, in turn, can be used to gauge refinancing requirements to move the economy forward.

3.2.2. Need for welfare support

In the broader context, welfare safety nets are outside the purview of the FSCC. However, COVID-19 is a shock first to the macroeconomy and the timing and nature of any spillover into financial markets rests, in part, on how real sector disruptions are addressed.

Ultimately, due to the specific nature of the COVID-19 shock, unprogrammed expenditures from the National Government play an important role. This is, in fact, what is seen throughout the world. Yet, fiscal policy is under pressure to fund what is needed while keeping to the standards of prudence. This is a difficult balance with the concept of dynamic fiscal policy²⁸ being resurrected.

National budgets and expenditures are invariably governed by appropriate laws. But just as monetary policy is assumed to unbundle its effects beyond the calendar year, it may be worth considering a similar line of monitoring for fiscal policy. The reporting may still be within the realm of the budget year but authorities may find it beneficial to think also of the fiscal policy stance (i.e., expansionary, neutral, or contractionary) in multi-period terms. What may look "expansionary" today may turn out to be much more "neutral" over time when all things are considered. At this juncture, the role of fiscal policy should be recognized, with **Box Article 4** further describing the country's finance arm at the forefront of national recovery.

The discussion on unconventional policy, after the recent move by Germany, is likely to move forward. Yet, the flagged issue is not merely about how the expenditures will be funded via taxes or borrowing, but rather what the expenditures are for. The FSCC's appreciation of fiscal policy is that of a stimulus in the tradition of Keynes. Without discussing the pros and cons of Keynesian economics, the point is simply to flag that a big-enough shock to socio-economic conditions will bring some cohorts below a critical minimum standard of living.

This suggests the imperative to address the deficiency faced by vulnerable segments of society. This is not an issue of using government spending to stimulate aggregate demand that can then nurture growth. Rather, it is an expenditure to meet minimum welfare norms.

²⁸ See Auerback and Kotlikoof (1987). Recently, the concept of "unconventional fiscal policy" has also been discussed. This uses the announcement effect on the path of present and future taxes to influence current consumption.

BOX ARTICLE 4

The critical role of fiscal policy: From where and to where

Fiscal policy is the use by the government of its taxation and spending powers and the management of its assets and debts to attain efficiency, equity and stability objectives. How the government defines its role in achieving these developmental objectives determines the manner and extent to which fiscal policy is implemented. This in turn, either builds up pressures around fiscal fault lines or enhances fiscal stability.

Through various fiscal (e.g., on taxation that mobilized more resources) and structural (e.g., privatization which redefined government's role as more of a provider of a level playing field and umpire rather than an athlete) reforms and judicious debt management, the Philippine fiscal sector transformed from being the Achilles' heel of the economy to a strong pillar of stability, and enabler of sustainable and inclusive development. The timely fiscal reforms in the early 2000s, for instance, staved off a brewing fiscal distress, reduced the debt-to-GDP ratio, and created ample room for maneuver to afford a counter-cyclical response to the 2008-09 GFC and, among others, subsequently expanded the conditional cash transfer aimed at breaking the cycle of inter-generational poverty.

The recent extraordinary events triggered by the COVID-19 epidemic called for yet another heavy lifting by both monetary and fiscal authorities. Fiscal policy has and henceforth will continue to play a decisive role in helping recover lost household incomes and reviving the economy, while being mindful of stability implications of such actions thereby keeping its powder dry to maintain the multi-strike capability in the event of a prolonged battle against the pandemic.

Source: Department of Finance

Such a stance is the rationale behind the Social Amelioration Program (SAP) of the government. Targeting households in the informal sector whose livelihoods were affected by the imposition of the community quarantine, SAP provides a cash subsidy that is intended to be spent on food, medical expenses and daily needs. The employment data in **Chapter 1** only reinforce the socio-economic impact of COVID-19 on the least fortunate families. Thus, considering that the subsidy only amounts to USD 100 to USD 130²⁹ per family for two months, its effect is more likely for welfare support rather than for boosting sustainable economic growth.

Ultimately, such expenditures are for the account of the National Government. To the extent that they are unprogrammed, they may raise the debt figures typically cited in the context of fiscal concerns. The FSCC thinks that it may be useful for planning purposes to segregate the expenditures between that which has been spent to support the vulnerable segments of society versus the cost borne by the government to initiate an actual reboot of the economy. This will be fairer to the fiscal authorities and their use of fiscal policy, while being cleaner from the standpoint of purpose.

3.3. Setting the anchor and overseeing the transition

The road towards full recovery is not just about dealing with the existing funding requirements. It has to involve a clear statement of the future.

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²⁹ Based on a round figure exchange rate of PHP 50 per USD, for simplicity.

While there is a desire for a greater sense of normalcy, stakeholders are at a loss of what "normal" now entails. Some "vision" of the New Economy and the underlying interlinkages between economic activities will help in addressing the uncertainties.

These details must come from the authorities. Typically, a holistic view of the IO relationships across economic activities is a concern of the national planning agency. But it takes years to update an IO table. The latest detailed IO table is that of 2006 although a compressed version was released for 2012. Both versions face concerns over relevance given the lapse of time and the significant intervening events. With the strong possibility of a new normal, the propriety of forecasting an uncertain future using models derived from normal-times risks that the empirical results disconnect with the behaviors in the new order. To address this specification mismatch, another route should be considered.

3.3.1. A vision of the New Economy

That alternative route is akin to driving using a Global Positioning System service. The economic drivers can be informed of a common destination, and from different start positions, they can make their decisions as to when and how to make their journey forward. This is fundamentally different from knowing the general vicinity of a place that one would want to reach, where the sense of traffic does not benefit from knowing the road conditions.

The key is to depict the destination as vividly as possible. The expected premium on social distancing will positively affect, for example, the demand for office space. Yet, that premium and the viability of the ICT infrastructure may impose a contrarian effect to the same office space segment. As outlined in previous sections of this report, businesses that currently rely on a high turnover of on-site retail consumers will likely be affected the most. Those that operate plants and equipment may see less operational changes.

On the whole, the vision of the New Economy combines the narrative in **Section 3.1** and the key messages from **Table 1.4** as well as **Figures 1.9a and 1.9b**. There are still a lot of transactions within an economic activity (i.e., firms within one economic activity transacting amongst themselves) but Finance and Insurance, Utilities and Manufacturing have intricate links with the rest of the economy, going through Real Estate as well as Wholesale and Retail Trade. While all of these activities do depend on a robust economy, finance and trade are particularly sensitive to the emergence of an ICT-norm.

This view of the New Economy is different since it does not depend on a forecast from current conditions based on pre-COVID-19 models. Instead, it literally depicts how the various economic activities (and by construction, the firms underlying those activities) are likely situated in a future where

physical distancing remains the norm and where technology can substitute some physical presence. Rather than head forward to an uncertain future, a crucial part of that transition is the necessity to assess one's viability under the new norms, and make adjustments to current capacities for a better fit, if at all.

3.3.2. Addressing risk aversion

Above all, starting from a view of the New Economy presupposes that the current elevated levels of aversion towards risk can be addressed. There is an irony in circular reasoning: the shock to the economy has created uncertainties which has nurtured risk aversion, inducing banks to take a more defensive credit stance which then likely prolongs the recovery of the economy, creating another layer of uncertainty. The symbiosis between the real economy and financial markets is at one end and a Fallacy of Composition rests at the other. This impasse on risk aversion gets addressed only if the initial uncertainties are managed or if there is a collective rise in altruism.

Certainly, one can act on the former, without prejudice on the possibility of the latter. There is an appreciation on why lending institutions are averse to taking on additional credit risks at this juncture but there is also a recognition on the availability of liquidity. Thus, the objective is to re-deploy the liquidity as part of a general strategy for the lending institutions to get more comfortable in taking more calibrated risks.

There is now a need to enhance risk pricing and valuation in the capital market. The viability of any investment outlet depends on risk pricing (at initial issue) and valuation (in the secondary market). This ensures that risk-takers are appropriately rewarded. However, current conditions suggest an uncertainty premium. While this is not unexpected and arguably rational for micro-agents, this add-on can be mitigated by enhancing the discovery of risk prices as a parallel to greater clarity of the future.

This push stands on two legs. On one side is the traditional desire for an array of spot yields across tenors. This should reflect the pure price of funding (without compounding effects) at various tenors (technically, without a private issuer risk). Financial authorities must be able to independently validate the yields, while market stakeholders must be able to directly access them as the basis for their funding/investment actions.

The other leg is for the yields to connect the securities and credit markets. There should not be any discrepancy, outside of structuring costs, in the price of 5-year funds, for example, whether these are sourced from the banking or securities market. Having that link ensures consistency and transparency, while avoiding any arbitrage opportunities. Certainly, there would be issuer risks that must be priced into any transaction and corporate credit yield curves can be drawn subsequently. Nevertheless, the pure price of liquidity has to be more uniform across alternative funding sources for any specific tenor.

Early work on the array of spot yields using the Nelson-Siegel model is promising but much more work needs to be done. In transition to the postpandemic world, the cost of uncertainty should be minimized, while ensuring that risks are not mispriced. Investors need a transparent and accessible price, which would serve as their basis for their financial decisions.

3.3.3. Is there a need to revisit regulatory approaches?

The risk aversion of financial market participants and the reactions of consumers to the changing market landscape raise an issue of whether a change in regulatory approach is warranted, if at all. While a vaccine to COVID-19 is topmost on everyone's list, there may be other factors in play that should be considered. Taking off from the discussion in **Section 3.2**, these include:

- GDP as a metric for overall welfare the economic contraction is not just a matter of league tables because there is a welfare implication underpinning the reported figures. Instead of focusing on growth rates that are sensitive to base effects, focus can be on returning to 2019 per capita GDP levels.
- Fiscal policy stance the discussion above with respect to (a) possibly considering an intertemporal view of the fiscal stance, and (b) instilling greater clarity between a fiscal stimulus and welfare support is reiterated. One feeds into the other and could better represent the efforts that have been undertaken with respect to rebuilding per capita GDP.
- Consumer basket this is more than a "base year" issue because of the possibility that consumer preferences, driven by the income shock and the changing market landscape, have adapted. The reported inflation figures may have to be reassessed in light of the recent experience of the most vulnerable families and whether 3 percent (+/- 1 percentage point) remains the preferred policy target for monetary policy.
- Capital rebalancing as the pre-COVID-19 world increasingly diverges from the envisioned New Economy, the rebalancing of scarce capital also increasingly becomes more of a socioeconomic planning issue so that there is sufficient capital allocated to "sunrise" industries. This, in turn, affects future GDP and the path of long-term growth.

- Interplay between solvency and liquidity the GFC highlighted how liquidity considerations play, arguably, a more immediate concern than solvency. Not that the latter is unimportant, far from it. Rather, the first line of disruption is liquidity. COVID-19 reiterates that critical point all the more. In supervising micro institutions, regulators may be guided more by the contributions of Minsky (1992) and Vercelli (2009).
- Market oversight building on the above, the current conditions should sufficiently emphasize why and how systemic risk oversight fits into the work of financial authorities. The policy interventions need to worry about interlinkages and the resulting externalities, addressing the "inaction bias" and the Fallacy of Composition that are observed heading into a crisis. Systemic risk management, however, is not only about addressing instabilities because, even in more normal times, it must enhance stability to be in a better position should instabilities arise.

3.4. Other key interventions

The above simply confirms that much still needs to be done. But as important as the issues are of providing welfare support, addressing the future market landscape, mitigating risk aversion, and considering possible longer-term policy implications, there are still two points that should be raised. Technically, these have been raised before – and repeatedly – but they take on an added dimension in our quest to recover.

3.4.1. Reinforcing granularity and timeliness of data

The repeated take-away from systemic risk analysis is the need for more granular and more timely data compared to what is currently available. As markets have become intricately interconnected, shocks will immediately impact risk behaviors and the authorities should not have to wait for the next quarterly macro data with a two-month lag to assess the evolving situation.

It is not just a question of the direction of change but more of how and where the critical changes are happening. It is known, for example, that the lockdowns designed to contain the spread of COVID-19 would have an adverse impact on GDP. But it does prove useful to have mobility indicators on hand to assess evolving pressure points and subsequent gains. Online transactions are likewise useful to get a gauge of liquidity demands and if these can be provided in a spatial framework, the authorities would be able to re-balance their attention to areas or issues that may need more immediate attention. As "panic" is a natural outcome of uncertainty, monitoring mobility and transaction habits of individuals will help assess the ebb and flow of market reaction, consumer preferences and risk behaviors. The discussion on the interlinkages between industries and the firms underlying those business connections also gives the authorities a fresh view of the economy. Rather than focus on aggregate values, one can look at how the parts interact with one another to shed light on how and where the whole is more than the sum of the parts. Pressure points on crossborder borrowing remain a concern at this point as the aggregates are seen after the fact but have no basis for looking into possible future outcomes industry-by-industry, and in some instances, systemically important entities by systemically important entities.

This push for more granular and timely data will stretch the frontier of surveillance but it will likely also raise a discussion between public oversight and private sector confidentiality. This is a difficult call and for sure, a line in the sand is needed. It is not clear where this line should be or how intense that separation must be. What a systemic shock makes clear is that the current location and intensity is not enough.

3.4.2. Strengthening communication as a policy tool

Just as granular and real-time data equips authorities with better information to make appropriate decisions, the public too should be appropriately informed of evolving systemic risks. But as the COVID-19 situation has shown, this is difficult at many levels.

Communicating "risks" is not straightforward because there is a behavioral response at the other end that ultimately transforms into consumer choices and risk actions. Different agents are expected to respond differently, causing diverse outcomes even for the exact same shock. In addition, these responses need not be opposite-but-symmetrical between normal and stress periods which may lead to surprising outcomes. If the point of communication policy is to eliminate uncertainties by laying the premise of the likely course of action, communicating risks leaves open the possibility of unintended public reactions.

COVID-19 is unquestionably a systemic shock, and while pandemics are relatively rare occurrences, communication policy has been a challenge as market conditions ebb and flow. One could not forecast with any strong basis neither the exact turning point of the outbreak nor the risk behaviors of market players. Looking into interlinkages offers a new perspective but the appropriate solution is for the whole network and not in particular parts. This runs the danger of packaging the message as too aggregate or, it may be lost if too many component details are being considered.

Financial markets may not have been the direct target of the virus and as a result, the effects are more likely to slowly slide in than be a sudden stop. This makes surveillance and analysis difficult because the acceptance of a pre-emptive intervention depends on making the case that there is a reason to intervene. That is as much diagnostics as it is messaging. In fact, optics

may just be as important: there may even be those who react to the notion of an escalated aversion towards risks even though the effective oversight of all financial markets rests on stakeholders being "risk averse" i.e., in the Markowitz tradition of a risk-return trade-off.

As difficult as these challenges may be, communication must play a role. It is essential to effective policy. To address risk aversion, the authorities need to establish and communicate the market landscape of the New Economy. This must be a strategic view with enough tactical details. This has not been done before. There is a need to explain that the whole is more than the sum of the parts and that what is rational for each stakeholder from a risk standpoint can create unintended systemic risk outcomes. This too is a frontier territory from a communication standpoint. Yet, without these, a vision of the future leads to a moving target outcome which may have to be frequently revised given the uncertainties that abound. This is the result that effective systemic risk communication is avoiding.

FINAL THOUGHTS

The number of COVID-19 cases continues to rise but the daily increments have fallen. At the time of this writing, the 7-day average is only at 2,613, a significant drop from 4,563 in August. The Department of Trade and Industry has just announced that several businesses³⁰ in areas under GCQ will now be allowed to operate at 100 percent capacity while food establishments and restaurants may now operate beyond 50 percent. These are encouraging signs heading towards "normalcy."

To be sure, vigilance must remain the operative guideline. It has been seen that several jurisdictions open their economies only to experience a resurgence in confirmed cases. With a virus outbreak, the occurrence of such "waves" is always a possibility, if not expected, more so that one cannot, in advance, see with the naked eye who is infected and how it is transmitted from one person to another.

While fully recognizing the encouraging developments, one cannot ignore that there are issues already before us. COVID-19 has created its damage medically, and some tragically. In the process, purchasing power has been impaired because of lost jobs, lost incomes and the unplanned use of family savings (if any). A re-opening of the economy is a step in the right direction, but it is also not clear if lost opportunities can be recouped or how the displaced can be refitted into the post-COVID-19 world.

Despite all its ill-effects, nonetheless, COVID-19 has its silver linings. As one senior market player described, COVID-19 made immediately possible what chief executive officers, chief financial officers and chief information officers had been thinking about for years: the reliance on technology to operate the affairs of the office from our respective homes. Given the health shock, market players who were allowed to operate during the lockdown found creative ways to be a "going concern." The scale and scope of operations were certainly adjusted but changes had to be quickly adopted to meet the call of the times. Some of these changes were not always favorable on the working population but from a business operation standpoint, the new arrangements during the community quarantine period provided a template of how the New Economy may look.

At the aggregate, funding liquidity is available today. Nonetheless, distribution across different family cohorts matters and one cannot overlook that creditors have become extra cautious, with risk premiums rising. As rational as that may be for individual agents, the system outcome is not what one desires or needs. As finance always rebalances, *"hoc quoque transibit"* (this too shall pass) but there is a cost and the transition arguably does not take one back to the pre-COVID-19 arrangements.

In this sense, there will be uncertainties on the road towards the New Economy. The authorities need to address these uncertainties so that all stakeholders can make informed choices of their own transition. This FSR suggests:

- 1. Defining the market landscape for the New Economy as the prerequisite condition;
- 2. Deciding the extent to which the New Economy reflects fundamental changes in the behaviors and confidence of both households and businesses, which will then impact the way fiscal, monetary, banking, and economic policies are currently framed and executed;
- 3. Institutionalizing the interconnections between industries and between firms when assessing economic prospects and in managing the unfolding credit concerns;

³⁰ Notably, these include non-leisure wholesale and retail trade (whether or not based in shopping malls) as well as private and public construction.

- 4. Distinguishing welfare support expenditures from conventional fiscal policy accounting;
- 5. Assessing the viability of a multi-year perspective for our fiscal policy stance;
- 6. Managing risk aversion by addressing the uncertainty premium by institutionalizing spot yields which can be used in either credit or securities markets; and
- 7. Engaging all stakeholders on emerging systemic risks, including the need for more timely and granular data as well as the more frequent exchange of information.

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