Credit build-up and financial stability issues: do we know enough to calibrate appropriate intervention?

Remarks on the Policy Panel

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Introduction

The amount of credit outstanding has significantly risen in recent years. As one would expect, this is viewed with concern given the vast academic literature on the link between credit growth and financial market vulnerabilities. Also, one cannot overlook the focus of the current global reform agenda on better managing credit risks, whether it be through revising risk weights in the standardised approach, moderating cyclicality, addressing the opaqueness of shadow banking or evaluating the effect of financial technology. While the policy concern over credit growth is palpable in regulatory spheres, the view on the ground suggests that a lot of unknowns exist.

This is partly due to the lack of data and rigorous empirical support, both of which this conference is addressing. However, I would argue that there are other nuances that need to be considered. Specifically, credit dynamics need to be understood in the context of changed market conditions and expanded central bank operating concerns. It is no longer enough to argue that "excessive" credit growth is a known driver of recessions. Instead, we have to better understand the changed context of when, where and how credit growth is an issue.

Changed market oversight

The rise in the outstanding debt of corporates and households is often attributed to the low interest rate environment, which has persisted for some time. Phrased in this manner, the prudential issue would be how underwriting standards are holding up and the extent of defaults that may arise when interest rates eventually readjust to higher levels.

We have certainly seen this play out before. However, although it is a perennial concern, this is not automatically a financial stability issue in the current context. Even in the absence of a universal definition, we think of financial **in**stability not just in terms of the size of the problem (in currency terms) but more so in terms of the

[1] Remarks made during the policy panel on "Balancing policy objectives in Asia: leverage versus long-term economic growth" at the BNM-BIS conference on "Financial systems and the real economy". At the time of the conference, the author was Assistant Governor in the Supervision and Examination Sector of Bangko Sentral ng Pilipinas (BSP). Currently, he is Head of the newly created Office of Systemic Risk Management at BSP. The remarks here are made in his personal capacity and do not necessarily reflect the views of BSP.

breadth of its dislocation. That is, instability cuts across financial segments, thus leading to a breakdown of the cash, contingent and capital markets, including its clearing and settlement functions.

If we are to consider corporate debt and household indebtedness within the overarching prudential norm of financial stability, it has to be more than just the intertemporal effects of credit. Rather, we have to see credit growth through a modified set of policy lenses and assess it against enhanced prudential standards, recognising that financial stability is "different" in its management of relevant risks.

At Bangko Sentral ng Pilipinas (BSP), we have coined the term "*CL2 risks*" to focus our attention on why and how financial stability matters. We appreciate that ***credit*** **concentrations** that are unmatched by effective risk management have a debilitating effect and this can be magnified quickly through the financial market via channels of risk, ie ***contagion***. Apart from the known issues regarding credit cycles, **leverage** is also an issue because there are many blind spots that nurture concentration and contagion challenges. And, depending on how these channels of risk pan out, ***liquidity*** in the market may be impaired, causing further distortions, if not dislocations.

This is how we analyse the emerging issues. As it turns out, while it provides us with a means to think of the linkages, there remain challenges in execution. The rest of my comments focus on the linkages and the challenges we see from them.

Corporate leverage has risen

The issue is that there are too many unknowns about the rise in credit. Since the specific features of the loan agreement are unknown except to the contracting parties themselves, it will not be evident to third-party analysts how corporates are using the loan proceeds by looking simply at financial statements. For example, the rise in debt and a fall in profitability may be explained by the deliberate decision to invest into long-gestating undertakings, sacrificing short-term carrying costs for an expected longer-term increase in productivity and profitability.

Anecdotally, we do hear of such initiatives among Philippine corporates. This is so in light of the prolonged period of Philippine growth, favourable demographics and bright economic prospects. In our private discussions with various corporate executives, we also note their active management of debt, taking on a preference for fixed-rate local currency obligations while remaining open to foreign currency obligations when they see strategic value in line with their operations.

On the face of it then, higher corporate debt may just be a response to an expanding economy. The debt levels must be monitored but they are neither automatically a financial stability concern nor are vulnerabilities necessarily imminent. Admittedly, there is opaqueness because the balance between benefits and costs will be unknown unless the loan terms are made public. That said, some precautionary interventions may already be warranted.

Foremost, the absence of periodic and more granular data needs to be addressed. For banks, banking supervisors are already putting in place measures to exert better control over concentration and contagion risks. In line with the Basel Committee on Banking Supervision (BCBS) best practices, there is a minimum

leverage ratio while the Committee continues to deliberate on amendments to the standardised approach for credit risk.

While banks are generally covered, the bigger challenge lies with the non-bank sector, specifically non-financial corporations (NFCs). Apart from the audited annual statements, there are no mandatory reports for corporations that can be seen as the counterpart of the periodic prudential reports required of banks. In fact, there are no prudential standards applicable against, for example, leverage or a debt-to-income ratio.

Data compiled for the BSP Financial Stability Committee suggest that NFC leverage has increased in recent years.[2] We also know from BIS reporting countries that cross-border debt incurred by non-bank corporates in the Philippines increased from USD 7,781 million as of end 2008 to USD 13,046 million as of March 2016.[3]

In the sample data we monitor, we also find that the corporations that have increased their debts have also experienced a decline in their ROE. On paper, this indicates some impairment in their capacity to pay, but more granular information tells us that the bulk of the outstanding loans will mature in three to five years. Thus, unless there are specific cross-default cross-acceleration provisions in the debt contracts, this "impairment" may not be as imminent as it may seem.

The point is that we see the debt build-up in publicly available corporate balance sheets but we do not yet fully appreciate what lies behind these figures. The financial stability concern cannot be defined exclusively by the increase in leverage. Rather, it is the fact that the results of network analysis and contingent claims analysis tell us that debt defaults strongly link the real economy and banks.

This is then no longer a conceptual issue but a prudential policy concern. On this basis, we have made some early interventions. For mortgage exposures, for example, BSP has been deliberate in not setting caps or introducing tax measures. Instead, we impose a targeted real estate stress test whose acronym, REST, was not chosen by accident. Depending on the results of the tests, we require the banks to explain their particular risk management strategies to the satisfaction of the regulator.

Our more complex banks also face a minimum 5% leverage ratio. This is deliberately higher than the 3% under the Basel Accord, indicating a lower cap of 20 times on the bank's gearing ratio instead of the global threshold of 33 times. We meant this to have a signalling effect, but we were comfortable that it would not cause unintended consequences since our quantitative impact study (QIS) indicated existing leverage ratios well above the proposed 5% threshold prior to the formal approval of the local standard.

On the NFCs, there is collaboration with the Philippine Securities and Exchange Commission (SEC), among others,[4] for a survey to be released. This will measure the extent and profile of NFC debts, from both onshore and offshore sources. Based on

[2] There is no systematic data for the leverage ratio among corporates in the Philippines since they are not among the required information submitted in the audited annual financial statements. The data referred to cover both listed and unlisted firms. The sample is made up of firms that collectively make up the top 50% of their industry's total assets.

[3] Data are accessible from the BIS website.

[4] This survey is part of the work being undertaken by the Financial Stability Coordination Council, an inter-agency collaboration between BSP, the SEC, the Insurance Commission, the Philippine Deposit Insurance Corporation, the Bureau of the Treasury and the Department of Finance.

periodic analysis of this survey, pro-active interventions may be considered to precisely mitigate the build-up of *CL2 risks* that concern us.

Increased focus on household indebtedness

The OECD has pointed to increasing household indebtedness as a major concern, particularly when seen in the light of the financial literacy results regarding money management, saving and retirement planning. However, if data are an issue for corporate leverage, one can only imagine how household indebtedness is an even bigger data gap concern.

Certainly, household finance is inherently difficult to monitor. Countries such as the Philippines do not have direct data on household finance except for infrequent surveys that do not track the same families over time. The informal financial market is likewise an important facet in emerging market economies – as a venue for funding and in the context of financial inclusion – and this is inherently difficult to capture in quantitative studies. Furthermore, demographic data confirm that there is great variability across Philippine families, so that the very concept of a "household" is not going to be consistent across geographical locations and across socio-economic classifications.

The closest data we have are those for consumer loans from banks.[5] Between September 2008 and the latest figure of September 2016, consumer loans increased from PHP 400.1 billion to PHP 1,202.6 billion.[6] The latter represents 11.6% of nominal GDP – as opposed to 5.7% in September 2008 – which appears modest when compared to often-cited Asian regional data.

The key fact remains, though, that we have seen this portfolio triple in size in only eight years. Conceptually, any concern over the pace of the debt build-up can be evaluated akin to the interest coverage ratio for corporates. Thus, the household's capacity to service its debt would have deteriorated if household saving before interest and taxes[7] had not also tripled in eight years, which translates into an annual compounded growth of 14.75%.

Currently available data, unfortunately, are not granular enough to make such a determination. Thus, at this juncture, we will continue to monitor the issue while trying to devise ways to address the material gap in data. As in the case of corporate leverage, we note that household debt (or its closest proxy indicator) shows an increase over time. Nonetheless, we do not have the full range of information needed to categorically conclude that this is a financial stability issue. Relative to our *CL2 risk* framework, we cannot close the issue because we do not have any basis as yet for concentration, contagion and liquidity.

Let me just recall that the data mentioned above do not cover informal market indebtedness. While the latter is clearly a data gap, a tangential issue that has been raised is whether household indebtedness has any implication for the financial

[5] This means of course that these clients have already been vetted by their banks in terms of capacity to pay and thus are technically "financially included".

[6] Basic data were sourced from the BSP website.

[7] This is the counterpart of EBIT for corporations.

inclusion initiative. Should there be extra concern that a portion of the household debt build-up is due to families that are essentially on the cusp between the formal and informal financial markets?

The issue can be phrased more generally by asking whether the extent of financial inclusion is inversely related to financial stability, ie that financial inclusion causes financial instability. Although our concern in this forum is credit, this general question can also be asked on the deposit side. The policy concern is whether deposits of modest balances (of the type associated with microfinance and inclusion) are more prone to contagion risk in the event of a market shock.

On this point, a study done by Canlas et al (2016)[8] looks at micro data from bank closures in the Philippines and examines the behaviour of deposits belonging to the smallest deposit bucket after the closure of the bank. Using a difference-on-difference analysis, the authors find no evidence to support the view that small deposits are much more volatile than large deposits. In fact, both small and large deposits are shown to be withdrawn before the bank is closed, which suggests that information is not as asymmetric as is typically assumed. As concluded by the authors, "even if financial inclusion were to become more widespread (ie via small deposits), it is not any more a source of financial instability than large deposits, at least as far as bank runs are concerned".

Clearly, much more can be done to properly situate the household within the financial inclusion-financial stability space. The results from Canlas et al (2016), though, provide some early evidence that modest saving balances in banks are not as diametrically different from the behaviour of large deposit balances as may be assumed. The build-up in consumer debt should be monitored and data gaps need to be addressed, but on the whole the evidence is not explicitly conclusive that *CL2 risks* have developed to the extent that macroprudential policy intervention is already warranted.

Final thoughts

The preceding point effectively summarises the credit situation in the Philippines. We certainly see debt-related numbers rising for both corporates and households but there are data gaps that prevent a categorical conclusion on whether or not financial stability concerns are already present. The fact that the Philippines has enjoyed 71 straight quarters of positive growth suggests expanding potential income and wealth. The increase in corporate debt may be to further augment productive capacity in the real sector while the increase in (the proxy of) household indebtedness reflects enhanced demand for real estate, credit cards, auto loans etc due to increased wealth.

Thus, unless there is better information, one cannot draw unambiguous conclusions, specifically with respect to financial stability. We should again point out that these data gaps are not trivial. What would be needed is granular, if not transactional, information so that the debt can be juxtaposed against the *current* use

[8] Dante B Canlas, Johnny Noe E Ravalo and Eli M Remolona, "Do micro deposits run more than other deposits? Three event studies of contagion and financial inclusion in the Philippines", 2016, paper presented at the BSP-BIS conference on "Financial inclusion and central banks" held on 2–4 June 2016 in Cebu, the Philippines.

of funds and the borrower's *future* cash flows. Gathering such information from the borrower may be deemed intrusive and a breach of confidentiality. Thus, some other means will have to be found to be able to properly assess the market landscape.

Setting aside the data gap issue, what is often raised today is whether policy intervention is needed on corporate and household debt at this juncture and what form these interventions should take. Addressing the issue of incomplete and imperfect debt-related data will settle the question regarding the absolute state of the market, ie whether credit conditions are "good" or "bad". However, given the limitations on data, it is still possible to phrase the issue in more relative terms.

The increase in corporate leverage and household indebtedness can, for example, be measured against an increase in corporate and household income. Relative to a reference point, we can then define the current state as being "better off" or "worse off" than the reference point.

From what is known to us, it does seem that the sharp build-up in debt has not been matched by a commensurate increase in income. From the perspective of a central bank, our intervention is with the lender and, for this reason, we have tools such as REST, a higher minimum leverage ratio, a higher regulatory capital adequacy ratio, and a calibrated handling of the liquidity coverage ratio.

However, if the focus is squarely on NFCs and/or informal market borrowing by households, these issues extend beyond the usual remit of central banks. This is where it becomes more of a financial stability concern and, as such, will require cross-agency collaboration in the event that a single financial stability entity has not been designated.

Enhanced surveillance is a given but beyond this, there may be other parallel interventions. Cross-border cross-currency borrowings, for example, may need to be hedged so that NFCs do not become either too-big- or too-interconnected-to-fail.[9] Periodic surveys of NFCs to gather high-level debt data will be useful as well.

On the household side, financial inclusion, financial literacy and consumer redress initiatives may be heightened so that informal borrowing can be brought within the remit of formal markets. Some consideration may also be given in structuring new reports for banks for their retail loans just so that a better picture can be generated by regulatory authorities.

On the whole, while there remain many open issues, regulatory authorities do need to act pro-actively. The interventions will likely be jurisdiction-specific but there are options to consider which essentially address what we do not (but need to) know while introducing some sand-in-the-wheels to prudentially temper (but not curtail) current credit growth trajectories if these cannot be explained in risk-based terms.

[9] A related concern is that non-BIS reporting jurisdictions do not see the full extent of cross-border banking statistics from the BIS. While standards certainly need to be maintained, there may be scope to assist non-reporting countries to be elevated to reporting countries, while at the same time the BIS may consider on a bilateral basis providing more analytical information to jurisdictions in this transition.