Joint BOT-IMF High-level Conference

EMS IN THE NEW NORMAL: DEALING WITH RISING DOMESTIC LEVERAGE AND THE INTERNATIONAL FINANCIAL CYCLES

Bangkok, Thailand
November 5, 2019

BACKGROUND NOTES

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Joint BOT-IMF High-level Conference

EMS IN THE NEW NORMAL: DEALING WITH RISING DOMESTIC LEVERAGE AND THE INTERNATIONAL FINANCIAL CYCLES

AGENDA

The international financial cycle, including changes in monetary policy stance in advanced economies, creates several challenges for emerging markets and developing economies. While many countries have strengthened their policy frameworks to cope with a more challenging external environment, the prevalence of high private debt, both corporate and household, poses specific challenges to policymakers especially in the Asia-Pacific region. The conference will tease out these challenges by discussing the appropriate macroeconomic policy response, including macroprudential policy, and cross-country experience in dealing with private debt overhang given shifts in the international financial cycle. It aims to facilitate exchanges of views and experiences among policy makers and practitioners, and to come up with useful policy lessons learnt from countries in the region.

The conference will have three sessions:

The first session “Practical Lessons in Addressing High Private Debt” will discuss how countries can effectively deleverage high household and/or corporate debt to avoid impacts of debt overhang while maneuvering international financial cycles. This session will explore the practical experiences of countries that have implemented effective debt resolution strategies and challenges they faced.

The second session “Macro Policy Response to the International Financial Cycle” will discuss how countries in the region have used their macroeconomic policy tools to deal with the international financial cycle, including through monetary, fiscal, and exchange rate policies in the face of volatile capital flows.

The third session “Nexus Between Monetary and Macroprudential Policy” will highlight lessons learnt from the implementation of macroprudential policies (MPPs) by countries with different policy frameworks. It will explore the impact of monetary policy on financial stability, and the interplay between monetary policy, MPPs and capital flow measures (CFMs) in managing risks.

Audience: The conference is aimed at high-level international and regional policymakers and practitioners.
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**Monday November 4, 2019**

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**Tuesday November 5, 2019**

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<td><strong>Welcoming Remarks:</strong> Veerathai Santiprabhob, Governor, Bank of Thailand and IMF Managing Director Kristalina Georgieva</td>
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<td><strong>Fireside Conversation on:</strong> “Current Global Challenges and Solutions: Lessons from Thailand’s Sustainability Journey”</td>
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<td>IMF Managing Director Kristalina Georgieva and Governor Veerathai Santiprabhob</td>
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<td><strong>Moderator:</strong> Veenarat Laohapakakul</td>
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| 10:20–10:50 | Group Photo Session and Coffee Break |

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<th>10:50–12:00</th>
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<td><strong>Moderator:</strong> Changyong Rhee, Director, Asia Pacific Department, IMF</td>
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<td>• Perry Warjiyo, Governor, Bank Indonesia</td>
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<td>• Andrew Sheng, Fung Global Institute</td>
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<td>• Rhoda Weeks-Brown, General Counsel and Director, Legal Department, IMF</td>
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| 12:00–13:30 | Lunch |

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<th>Session II: Macro Policy Response to the International Financial Cycle</th>
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<td><strong>Moderator:</strong> Petya Koeva Brooks, Deputy Director, Strategy Policy and Review Department, IMF</td>
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<td>14:50–16:10</td>
<td><strong>Session III: The Nexus Between Monetary and Macroprudential Policy</strong></td>
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<td><strong>Moderator:</strong> Ratna Sahay, Deputy Director, Monetary and Capital Markets Department, IMF</td>
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<td><strong>Panelists:</strong></td>
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<td></td>
<td>• Howard Lee, Deputy Chief Executive, Hong Kong Monetary Authority</td>
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<td>• Edward Robinson, Deputy Managing Director, Monetary Authority of Singapore</td>
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<td>• Piti Disyatat, Bank for International Settlements and Bank of Thailand</td>
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<td>• Joshua Aizenman, University of Southern California</td>
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<td><strong>Session IV: Round Table Discussion and Conclusion</strong></td>
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<td><strong>Moderator:</strong> Kenneth Kang, Deputy Director, Asia Pacific Department, IMF</td>
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<td><strong>Panelists:</strong></td>
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<td>• José de Gregorio, Former Central Bank Governor and Minister of Economy for Chile</td>
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<td>• Karnit Flug, Former Governor, Bank of Israel</td>
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<td>• Mathee Supapongse, Deputy Governor, Bank of Thailand</td>
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<td></td>
<td>• Rhoda Weeks-Brown, General Counsel and Director, Legal Department, IMF</td>
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<td>18:30–20:30</td>
<td><strong>Dinner for panelists hosted by BOT</strong></td>
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<td>• <strong>Keynote Speaker:</strong> José de Gregorio, Former Central Bank Governor and Minister of Economy for Chile</td>
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I. BACKGROUND

Since the global financial crisis (GFC), central banks in emerging economies (EMs) have been dealing with spillovers from ultra-accommodative monetary policies in advanced economies (AEs). The resulting global search for yield has driven capital flows into EMs, presenting both opportunities and risks. Many EMs are concerned about the impact of prolonged accommodative financial conditions on rising domestic leverage, and more broadly, financial stability risks. This session will discuss the drivers and costs of high private leverage in Asia, as well as multipronged strategies for debt prevention and resolution, including macroeconomic policies as well as legal tools.

A. The Landscape of Private Debt in Asia

Since the GFC, accommodative global financial conditions and domestic policies have fueled the rise of private debt in many EMs, including in Asia.

- Global debt has soared to US$236 trillion (or 320 percent of global GDP) as of 2019:Q1, of which private debt, corporate (financial and nonfinancial) and household, comprise three fourths.\(^1\) Asia accounts for nearly a third of total private debt, equivalent to approximately 250 percent of regional GDP.

- In several Asian economies, household debt has increased sharply in this period (China, Korea, Thailand) and remains elevated as a share of GDP (Korea and Thailand) (Figure 1).

- On the corporate side, despite some moderation following the Asian Financial Crisis (Figure 1), several countries have experienced an acceleration in corporate debt since 2008, which has grown rapidly to unprecedented levels in some cases (China, Korea, Singapore).

- This increase has been driven in large part by interest rates in advanced economies that have been “too low for too long”, which may present unintended consequences for financial stability, particularly for small open economies.

- In many countries, domestic policies to encourage credit as stimulus and financial deregulation have also played a role. For example, in China, policies to support investment were accompanied by an increase in corporate debt; in Thailand, auto loan programs helped support the automotive industry, but also accounted for a significant share of the increase in household debt. In some countries, loosening lending standards could also account for increased indebtedness.

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\(^1\) IIF Global Debt Monitor July 2019.
The landscape of private debt has also evolved, with nonbanks playing an increasingly important role.

- As financial systems have become larger and more complex, nonbanks (such as cooperatives) account for an increasing share of household loans. On the corporate side, the rapid growth of bond markets, partly as a way to address maturity and currency mismatches following the Asian Financial Crisis, has contributed to the shift away from bank financing. The share of foreign currency-denominated borrowing for both household and corporate debt has since declined.

At the current juncture, with rising downside risks to growth, global financial conditions are expected to further loosen.

- The prospects of such prolonged accommodative conditions in both AEs and EMs, together with muted inflation, raise concerns about further buildup of debt vulnerabilities, as financial intermediaries and investors extend their search for yield.

High private leverage can pose a drag on consumption, investment, and growth.

- Leverage, in the context of financial deepening, is an essential pillar of the economy, providing avenues to support financial intermediation, consumption, investment and growth. Indeed, the literature finds significant short-term gains to consumption, investment and growth from an increase in household and corporate leverage.

- However, there are costs to over-indebtedness: the Asian Financial Crisis and the Great Recession illustrate the macroeconomic costs of high debt and slow balance sheet adjustment.

- Over-indebted households are likely to cut back on consumption as their perception of permanent income and wealth is reduced. High corporate debt can weigh on investment
and distort resource allocation; excessively leveraged firms have persistently lower investment, which in turn dampen productivity growth.

- The costs of leverage on growth are likely to be nonlinear, with large costs to GDP growth beyond some threshold: Cecchetti et al 2011 estimate this at 60 percent for households and 80 percent for corporates.

- Garrido, Nadeem, and Riad (forthcoming) show that for Asian economies, private leverage increases downside risks to growth in the medium term. In some cases, the drag on growth from household debt can be larger than that from corporate debt (Figure 2). This could reflect differences in the size of credit extended to each sector, or differences in the way households and corporates adjust their balance sheets after crossing some threshold.

- In many cases, corporates could have more options available to restructure or grow out of their debt burdens than households, making the risks to financial stability greater from household debt than from corporate debt.

**Financial stability risks from high private debt can constrain policy space.** Policy interest rates in most Asian economies remained low since the GFC, and only a few economies raised rates as growth picked up (Figure 3). Consequently, downward policy space is already constrained for many countries. With loose financial conditions expect to continue, and risks to growth rising, policymakers are now faced with the challenge of balancing cyclical conditions to

![Figure 2: Growth at Risk: Household debt can pose a larger drag to growth than corporate debt](image)

Source: Garrido, Nadeem and Riad (forthcoming).

Note: Each figure plots the estimated medium term real GDP growth probability distribution for Thailand (blue lines) and the distribution after an adverse shock (1 s.d.) to household debt and corporate debt (left- and right-side charts respectively) (red dashed lines). Thicker left tails would indicate increased downside risks to GDP growth.

![Figure 3. Policy rates in Asian economies](image)

Source: Haver
boost growth with financial stability considerations.

B. Policy Options for Addressing High Private Debt

To minimize the costs of over-indebtedness, a proactive strategy is key to deleveraging in an orderly manner.

- In other words, how can we prevent over-indebtedness in the first place, and if it has occurred, resolve it efficiently – with minimum costs both to the economy and society?
- Clearly, this points to the importance of deleveraging in “good times”, in contrast to a costly forced adjustment through a boom and bust cycle.

A general framework to tackle private debt overhang consists of multiple complementary economic policies, including monetary, fiscal, and macroprudential tools, as well as legal and institutional frameworks.

Macroeconomic policies play an important role.

- Macroeconomic policies can be aimed both at addressing the drivers of over-indebtedness and the capacity of households and enterprises to bear debt.
  - For example, monetary and macroprudential policies can steer credit conditions and lending standards.
  - Fiscal measures can be used to correct tax incentives that favor debt over equity financing.
  - More broadly, structural policies could support productivity, real wage growth, and inclusivity to help mitigate debt burdens in the aggregate as well as for individual households.

However, the choice of macroeconomic policy mix can be constrained by domestic and global circumstances, including the international financial cycle.

- Monetary policy space can be constrained by the tradeoff between the need to support low growth and address financial stability concerns.
- This may create greater scope for the use of macroprudential tools to target specific pockets of vulnerability. However, enhancing the quality and coverage of financial information and, especially, credit information systems, is needed to ensure macroprudential tools are effective.
- For small open economies, the international financial cycle will play an important role. Many Asian EMs are subject to global interest rates, terms of trade shocks, and investor sentiment, all of which affect the net benefit and risks of borrowing, the ability to repay, as well as the authorities’ policy space to react to leverage. The prospects of further loose financial conditions risk fueling debt buildup, while also constraining policy space.

Legal tools are an emerging and important part of the policy toolkit. If firms and households cannot “grow” their way out of debt – because of the subdued outlook for many
countries – legal tools can be a powerful complement to the macro policy mix to deal with over-indebtedness.

So what does the international evidence tell us about legal tools that can tackle over-indebtedness? Three things:

- First, the legal and economic costs of a formal debt resolution can be very large. In general, measures to resolve household over-indebtedness are less developed than those for corporate over-indebtedness.
- In addition, in many Asian countries, personal bankruptcy carries significant social stigma; in many countries, discharge is minimal with limited opportunities for bankrupt debtors to be economically active.
- Second, legal measures to address over-indebtedness can be classified as preventive measures (ex ante), which address debt before debtors need to resort to the costlier formal resolution process, and reactive measures (ex post), that address the existing stock of debt under resolution.
- Both sets of measures are designed to address high levels of private debt, but from different perspectives. These tools are also synergetic, so both sets of measures are needed for effective deleveraging.
- Finally, the latest trend in this field is the development of ex ante measures that address debt before it needs to be resolved by insolvency proceedings.

An analysis of legal systems in select Asian countries reveals that the legal toolkit to support deleveraging can be further bolstered. Specifically, three observations stand out from Figure 4:2

- First, among Asian countries, Japan and Korea have more well-developed and well-rounded legal toolkits compared to emerging economies. Both countries have developed sophisticated enterprise insolvency systems, drawing from their experiences from corporate debt crises; and both countries have created modern personal insolvency systems to address the side-effects of increased access to finance by households.
- Second, on the preventative (ex ante) side, systems to monitor and address enterprise indebtedness at an early stage are lacking in the region, despite the pivotal role of corporate debt in the Asian Financial Crisis.
- Third, on the reactive (ex post) side, whereas enterprise insolvency systems have evolved greatly since the 1997 crisis, personal insolvency systems provide limited opportunities for a fresh start.

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2 Figure 4 provides an overview of ex ante and ex post legal and institutional tools for debt prevention and resolution in Asia (Garrido, Nadeem and Riad, forthcoming), comparing them to international best practice.
Meanwhile, there has been a significant effort to develop ways to address consumer indebtedness without resorting to formal personal bankruptcy, likely related to the latter’s heavy social costs (e.g. Malaysia’s AKPK, Thailand’s Debt Clinic, Korea’s CCRS). It would be interesting to learn these experiences whether the composition of household debt – whether it is mostly secured or not – mattered for the choice of tool to deploy, and what challenges had to be overcome, if any.

An important consideration when transitioning to a more complete toolkit is striking the appropriate balance of debtor and creditor rights. How should the desire to offer a fresh start to debtors to enable them to reengage productively in the economy be balanced by moral hazard considerations?

C. Summary issues

- What implications do global financial conditions being “too low for too long” hold for private leverage—and financial stability—in Asian economies?
- How can countries develop smart deleveraging policies given global conditions and policies, and their impact on growth and the broader macroeconomic policy space?
- How can macroeconomic policies, including macro-prudential policies, be adjusted to take into account shifts in the international financial cycle?
- What are some of the economic challenges encountered in establishing ex ante and ex post legal measures to contain and address over-indebtedness? What are the social challenges?

![Figure 4. Overview of ex ante and ex post tools in Asia](chart.png)

Note: This chart compares legal and institutional tools for different Asian countries. Each colored line represents one country. Points closer to the outer border suggest a more developed toolkit.
Monetary policy frameworks are being actively discussed again as central banks around the world attempt to chart their course in the unfamiliar trade tensions economic waters. The US Fed has embarked on the review of its monetary policy framework. Central banks have been dealing with the spillovers of the needed remedial policies that AEs have been implementing. The resulting inflows into EMs have one common thread in that they affect the exchange rate making it more volatile and subject to large swing as the capacity of EMs to handle large capital flows and huge stocks of reserves are tested. Some EMs have recently argued that the Fund’s current framework for IT regimes does not capture well their idiosyncratic and unique circumstances and that the less standard policy approaches merit consideration including FX intervention outside of disorderly market conditions and capital flow/macro-prudential measures aimed at curbing external flows and associated risks. This session looks into the likely determinants and impact of EMs’ macro-policy responses to the international financial cycle (IFC) and discusses different macro policy responses to shifts in the IFC taking into account among other factors build up in financial sector vulnerabilities.

Background

• Greater global financial integration and prolonged easing and adoption of unconventional monetary policies in advanced economies present new challenges to emerging markets (charts).

• **Global factors** are increasingly important for financial conditions across countries. We see continued volatility of capital flows, especially to emerging markets (charts). The rise of passive investment funds that follow benchmarks has likely contributed to a higher sensitivity to global drivers.

<table>
<thead>
<tr>
<th>Global financial integration has increased for EMs, and sharply for some</th>
<th>Capital flows to emerging markets have been strong but volatile</th>
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<td><strong>External Assets + Liabilities as % of GDP</strong> (Average and 75th percentile across key EMs)</td>
<td><strong>Capital Flows and Key Components</strong> (as percent of GDP)</td>
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![Graph of External Assets + Liabilities as % of GDP](image1)

![Graph of Capital Flows and Key Components](image2)
• Capital flows can clearly have **substantial benefits** for countries, including by enhancing efficiency, promoting financial sector competitiveness, and facilitating greater productive investment and consumption smoothing.

• **However, volatile capital flows** can also pose risks for economic and financial stability. While flexible exchange rates serve as buffers, they may not always reflect economic fundamentals and can display excessive volatility themselves. More generally, exchange rates do not fully insulate economies from external financial shocks. For example, in the presence of balance sheet mismatches, exchange rate flexibility can have procyclical effects—an exchange rate depreciation can prove contractionary, while an appreciation may boost banks’ lending capacity and strengthen borrowers’ ability to borrow. Additionally, the presence of shallow markets in some EMs and US dollar invoicing make the traditional orthodox approach to responding to capital flows more challenging.

• In practice, we observe that many countries have adopted a **multiplicity of policies** in response to external financial shocks and swings in capital flows. These policies include a combination of monetary policy, FX intervention, macroprudential policies, and capital flow measures. The discussion today is about the pros and cons of different approaches, and the right policy mix to achieve objectives.

• When we look at country experiences, we notice a wide variety of policy responses across EMs. For example, during the March-September 2018 financial tightening episode, Malaysia and Thailand relied much more strongly on FXI than Colombia, South Africa, or Russia, where the adjustment was done through exchange rate appreciation.

[Policy Reactions: March-September 2018](#)

(ER change in percent; FXI in percent of 2018 GDP; policy rate in percent)

![Policy Reactions Chart](chart.png)

**Sources**: COFER, Haver, IRFC, IFS, WEO. Staff calculations.

• Although it has proved difficult to link policy responses to underlying country characteristics, a few links seem fairly robust:
  - Countries with higher external risks tend to intervene more. This is merely an association and the causation can easily go the other way: active use of FXI could lead to larger balance sheet vulnerabilities. There could also be other more general
side effects such as higher output or inflation volatility or impairing institutional frameworks.

- Countries with shallow FX markets tend to intervene more and intervention is especially intense when capital flows are choppy.

The relevance of the international financial cycle does not limit itself to the impact of the tightening phase. Over long periods, external factors leading to sustained capital inflows contribute to the buildup of vulnerabilities. For instance, as the U.S. eased its monetary policy stance for prolonged period of time after the global financial crisis, leverage ratios in the financial sectors of other countries increased, signaling higher financial vulnerability. This has been a central message in recent issues of the GFSR through the growth-at-risk approach.

Many countries have sought to guard against financial stability risks using **macroprudential policies** (chart). These have been often targeted at reducing currency mismatches in emerging markets.
Macroprudential policies are increasingly applied across the globe

Number of Countries that Introduced Macroprudential Policy Tools

- Similarly, while countries generally continued to liberalize their capital accounts, some have at times tightened capital flow measures in recent years (chart).

Several countries across regions proactively manage capital flows

Application of Capital Controls (number of countries, 2014–18)

- Prevailing IMF guidance for inflation targeters (here denominated orthodox policy framework) comprises the following policy assignments: monetary policy ensures internal balance; exchange rate flexibility ensures external balance; macroprudential measures (MPMs) ensure financial stability; FXI is used mainly to avoid disorderly market conditions; and capital flow management measures (CFMs) are only used under specific circumstances.
• Many countries follow this advice, including EMs such as South Africa and Chile, and most advanced economies. However, as already noted, there are also many countries that do not, with a wide variety of alternative policy reactions (here denominated as non-orthodox policies and sometimes called heterodox policies). For example:

- Monetary policy is sometimes used to respond to capital flows, exchange rate pressures, or financial risks
- MPMs are used to smooth the domestic business cycle
- FXI are used to temper orderly capital flows and ER moves
- CFMs are used to lessen domestic and global financial cycles

• Looking at all these different policy responses, the essential question that arises is, under what circumstances does what combination of tools best help navigate the trade-offs in growth, inflation and financial stability objectives of policymakers?

• The IMF’s current work stream on an integrated policy framework (IPF) seeks to identify the best available policy mix that could help countries pursue growth and stability objective, particularly in the face of rising spillovers and deepening macrofinancial and external linkages. This framework will need to consider the nature of shocks—e.g. real or financial, temporary or persistent, realized or probable—and country characteristics—cyclical and structural—as well as interactions between policies.

• The IPF is taking three general approaches that are mutually enriching:

  (i) Country case studies and dialogue with the membership suggest initial insights and bring attention to country characteristics;

  (ii) Cross-country empirical analysis explores whether those generalize to a broader sample, as well as how policies interact with each other. Topics being covered include the effectiveness of MPMs in containing excessive build up of credit; effects of different policies on growth and capital flows (growth at risk and capital flow at risk approaches); impact of policy frameworks (not just policy actions) on countries’ resilience to external shocks; and the costs and benefits of FXI in inflation targeting regimes.

  (iii) Modelling provides a cue on what aspects should be delved deeper on, while also being informed by the first two. This approach is examining the impact of departures from the Mundell-Fleming model, including dominant currency pricing instead of producer currency pricing, financial fragilities, and imperfect credibility of monetary and exchange rate policy frameworks.
• This conference contributes to our dialogue with the membership on this topic, with a particular focus on policy responses to the international financial cycle.
I. BACKGROUND

A. Inflation

The global economy has witnessed a great moderation in inflation during the past decades. In advanced economies (AEs), the moderation took place during 1980s following the two oil shocks experienced in 1970s. Inflation has since declined further, reaching 1½ percent on average during 2010s. Remarkable declines in inflation have been similarly observed in emerging market and developing economies (EMDEs). Nearly 80 percent of the countries in EMDEs have seen inflation averaging just 2-5 percent during 2010s.

While risks to price stability have subsided in many economies, central banks have confronted a new challenge of containing risks to financial stability. Following the global financial crisis and the aftermath of commodity price shocks, many economies have experienced declines in economic growth, and trade woes have more recently started to weigh further on the outlook. In AEs and EMDEs alike, central banks cut their policy rates to stimulate their economies. A prolonged accommodative monetary policy, however, has created side effects as search for yield behavior has led to excessive risk taking and contributed to volatile capital flows. Monetary authorities, supervisors and regulators have taken concerted efforts to safeguard financial stability with the tools at their disposal, including policy rates, macroprudential measures (MPMs), foreign exchange intervention (FXI), and in some cases capital flow measures (CFMs).

B. Governance Framework

Following the practice by AEs, many EMDEs have established macroprudential policy (MPP) framework with a dedicated committee to safeguard financial stability. AEs often
have a dedicated macroprudential council or body outside their central banks. In these economies, the central banks participate in formulation of MPPs. In contrast, central banks in many Asian EMDEs act as the macroprudential authorities. A number of ASEAN-5 economies (Indonesia, Malaysia, Philippines, Thailand, Vietnam) have a dedicated committee inside their central banks, and they often coordinate with other relevant regulators to implement MPPs. In principle, close institutional proximity may foster coordination between monetary and macroprudential policy (Nier and others 2011).

A strong institutional framework can be useful to counter inaction problems that flow from the political economy of macroprudential policy. A study by Arslan and Upper (2017) looked at past episodes of monetary and macroprudential policy implemented in 23 economies, of which 11 countries were EMEs. Their analysis found that more frequent tightening of macroprudential instruments was observed where central banks played a strong role in the governance framework.
Lim and others (2013) and Edge and Liang (2019) find that responses to growing credit risks tend to be faster where the institutional arrangements are strong.

**Governance Framework for Macroprudential Policy**

Greater central bank role in macroprudential frameworks is associated with:

- More tightening of macroprudential instruments...
- ...and tighter monetary policy.


### C. Nexus between Monetary and Macroprudential Policies

**Monetary and macroprudential policies can sometimes work in tandem in containing risks to both financial stability and price stability.** Arslan and Upper (2017) evaluated the timing of MPP use in relation to monetary policy action based on the annual data since 2000. In the case of the loan-to-value (LTV) ratio, their analysis found a positive correlation, which implies that tightening of LTV was accompanied more often by a tightening of monetary policy for a sample of 23 AEs and EMEs. The size of correlation, however, varies widely across jurisdictions and with the strength of the role played by central banks in the governance of MPP. And the empirical results do not take into account of the underlying business and financial cycles.

**Correlation of Changes in Macroprudential Measures and Policy Interest Rates**

Use of both monetary and macroprudential policies does not require implementation of these policies in the same direction. When risks to financial stability are building against the backdrop of buoyant economic conditions, it is sensible for policy makers to tighten both policies to address risks to both price stability and financial stability. However, when risks do not point in the same direction, an optimal policy mix needs to be carefully formulated, in order to reap benefits while minimizing costs to the economy. The experience shows that an accommodative monetary stance may at times be necessary to counter deflationary effects but can at the same time increase risks to financial stability, which may in turn need to be contained by macroprudential policy (IMF 2013).

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<th>State Contingent Mix of Monetary and Macroprudential Policy</th>
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<td><strong>Risk to price stability</strong></td>
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Economic conditions in many countries have been relatively subdued, and low interest environments have led many central banks to focus on the use of MPPs to safeguard financial stability. In several countries, dangerous financial imbalances may develop under low inflation and small output gaps. To ensure macroeconomic stability in the medium term, policy makers would need to make effective use of macroprudential tools that can target specific financial vulnerabilities. Effective MPPs could contain risks ex ante and help build buffers to absorb shocks ex post (IMF 2013).

However, a number of countries also consider shading of their policy rates to support financial stability objectives. Some central banks may keep policy rates tighter than what would be warranted in view of the short-term inflation outlook, in order to contain the build-up of financial imbalances (“lean against the wind”), especially when macroprudential policies are perceived as not fully effective in this regard. Difficult trade-offs can then arise, since such use of monetary policy may also come with sizable costs to short-term output and employment (e.g., IMF 2015).
D. Effectiveness of Macroprudential Policies

The emerging literature generally supports the idea that macroprudential policy can attain its objectives effectively, even if macroprudential authorities often face policy leakages and must address them to enhance policies’ effectiveness. Alam and others (2019) document the quantitative effects of varying LTV ratio caps and find the effects on credit are substantial. However, it can be challenging for the macroprudential authorities to address a buildup of systemic risks from non-bank lending. For example, while a tightening of LTV or debt to income (DTI) ratio—a key borrower-based instrument—can be applied to lending by commercial banks, these measures often do not apply to non-depository financial corporations. And while they can in principle also be applied to non-banks (e.g., as in Korea), such applications may be more difficult to enforce effectively.

More generally, it can be useful to employ a portfolio of tools, such as a combination of loan-to-value and debt-to-income constraints, to address vulnerabilities. The experience is that a combination of different tools is needed to contain risks from different angles and make use of differences in the channels of transmission across tools. For instance, while LTV ratio caps can protect against shocks to asset prices, a debt-to-income ratio cap can be useful to protect borrowers from interest rate and income shocks. It may in addition be useful to counter leakages, where a tighter LTV ratio leads borrowers to obtain the down-payment through additional unsecured borrowing (IMF 2014).

The role of communication needs to be considered as a means of enhancing effectiveness of MPP. Many central banks find that clarity in communication can be important in the deployment of macroprudential policy tools. And basic tenets of effective communication are being developed (e.g., IMF 2014, and CGFS 2016). However, the practice is still quite diverse, and questions remain as to how best to formulate a macroprudential policy strategy (Born et al, 2014; Partel, 2017).

E. Optimal Policy Mix

The search for an optimal policy mix goes beyond monetary and macroprudential policy. Prolonged accommodative monetary policies in AEs have created abundant global liquidity, and EMEs are vulnerable to volatile capital flows as a result of policy spillovers. A highly interconnected global economy challenges central banks in EMEs as they absorb large capital inflows and confront a buildup of risks from rising leverage. To address the risks in these unfamiliar waters, the authorities in a number of countries go beyond monetary and macroprudential policies and are also using other instruments, including foreign exchange.
intervention (FXI) and capital flow measures (CFMs). It is too early to pin-point the optimal policy mix in an integrated policy framework that would comprise all of these policies. In the meantime, policy makers explore the policy frontier through a “learning by doing” approach, with the practice coming ahead of the theory in this area.

Sources: (Left chart) IMF FFA database; and (right chart) Cecchetti, Mancini, Narita, and Sahay (2019).
I. INTRODUCTION

1. Since the global financial crisis (GFC), highly accommodative international financial conditions have fueled the rise of private debt to unprecedented levels. Global debt increased to US$236 trillion, or 320 percent of global GDP as of 2019:Q1, of which private debt, corporate and household, comprise three fourths. The increase in global indebtedness over the past decade has been largely driven by private sector debt, especially in emerging market economies (EMEs). In advanced economies (AEs), private sector debt reached a peak of 190 percent of GDP in 2009 with little deleveraging since (IMF Fiscal Monitor April 2018). While below those of AEs on average, several EMEs have seen some of the largest increases in corporate and/or household debt levels since 2007 (Figure 1).

2. Private over-indebtedness can be a drag on macroeconomic activity. Although moderate household debt levels can help boost demand and build personal wealth, high indebtedness can curtail growth over the medium term. Over-indebted households cut back on consumption as their perception of permanent income and wealth is reduced (Mian and Sufi 2017, IMF 2017). High corporate debt can weigh on investment and distort resource allocation (Lamont, 1995). Moreover, the Great Recession not only brought to the fore the costs on growth of high levels of debt and slow balance sheet adjustment, but also potential nonlinearities in these costs (Reinhart and Rogoff 2010, Cecchetti et al 2011, Lombardi et al 2017).

3. With weaker economic prospects, financial markets expect interest rates to stay lower for longer. About 70 percent of economies, weighted by GDP, have adopted a more accommodative

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1 Authors: Nagwa Riad (NRiad@imf.org), Sanaa Nadeem (SNadeem@imf.org), and a team from the IMF’s Legal Department LEG (Jose Garrido (lead; jGarrido@imf.org), Chanda DeLong, Nadia Rendak and Anjum Rosha). To-Nhu Dao provided invaluable research assistance. The views expressed in this paper are those of the authors and do not necessarily represent those of the IMF or IMF policy.

2 This draft has been prepared in advance of the Joint IMF-Bank of Thailand Conference on “Emerging Markets in the New Normal: Dealing with the International Financial Cycles and Rising Domestic Leverage” to be held in Bangkok, Thailand on November 5, 2019. This version is preliminary and for comments and to elicit further debate.

3 IIF Global Debt Monitor, July 2019.

4 The terms “debt overhang” and “over-indebtedness” are used interchangeably in this paper to refer to situations of excessive debt.
monetary stance to support growth. The shift has been accompanied by a sharp decline in longer-term yields; in some major economies, interest rates are deeply negative (IMF 2019). In fact, the amount of government and corporate bonds with negative yields has increased to about $15 trillion, implying even looser financial conditions. These conditions, however, come at a cost to financial stability; they encourage the buildup of debt vulnerabilities as financial intermediaries and investors extend their search for yield. IMF analysis of eight major economies, including the U.S. and China, suggests that in the event of a material economic slowdown, corporate debt at risk – debt owed by firms unable to cover interest expenses with earnings – could rise to US$19 trillion. This is equivalent to almost 40 percent of corporate debt in these economies.

4. **The current conjuncture poses challenges to Asian economies.** The Asia Bond Market Initiative helped deepen local bond markets and reduce sovereign risk. Deeper financial markets, however, have made the region an attractive source of capital in search of higher yields, especially after the GFC, contributing to the buildup of private debt and increasing its exposure to market volatility. Downward policy space is already limited for many small open economies in Asia where policy interest rates remained low since the GFC and did not rise as growth picked up. Now, with continuing accommodative financial conditions and rising headwinds to growth, policymakers are faced with the challenge boosting growth while not amplifying private over-indebtedness.

5. **Given the high economic and social costs of over-indebtedness, a focus on preventive approaches becomes imperative, especially on the legal side.** The presence of private debt overhang motivates the need to deleverage proactively in an orderly manner. In general, macroeconomic policies, macroprudential frameworks, and legal and other institutional frameworks can work together to help deleverage. An orderly deleveraging would typically comprise measures that tackle both the stock of debt and its flow. Given constrained macroeconomic policy space, this paper explores the role of legal tools in addressing over-indebtedness. Here, whereas international best practice in dealing with corporate debt resolution are reasonably well established, those for household debt are fairly lagging. In addition, standards are only emerging for preventive practices in both the corporate and household sectors.

6. **This paper makes two contributions.** First, it applies the growth-at-risk framework (Adrian, Boyarchenko, and Giannone 2019) to several Asian economies to examine how different types of private leverage present risks to GDP growth. Second, it evaluates legal techniques to prevent and treat corporate and household over-indebtedness in ASEAN economies by drawing on the experience of other major Asian and advanced countries. Both approaches then inform policy priorities for ASEAN countries to address high levels of private debt at the current conjuncture.

7. **The remainder of the paper proceeds as follows.** Section II examines developments in corporate and household debt in ASEAN countries. Section III focuses on the economic costs of over-indebtedness, presenting an empirical analysis of the effects of leverage on growth using the growth-at-risk (GaR) model for four Asian countries, Korea, Japan, Singapore and Thailand. Section IV

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5 The analysis simulates the impact to growth that is half as severe as the global financial crisis of 2007-08 (GFSR October 2019).
6 The Asian Bond Markets Initiative (ABMI) was launched in December 2002 by the Association of Southeast Asian Nations (ASEAN) and the People’s Republic of China, Japan, and the Republic of Korea—collectively known as ASEAN+3—to develop local currency (LCY) bond markets and promote regional financial cooperation. See Asian Development Bank (2017). *The Asian Bond Markets Initiative: Policy Maker Achievements and Challenges.*
discusses the set of broad macroeconomic options available to policymakers to address overindebtedness. Section V then focuses on legal frameworks, surveying those in ASEAN-5 countries, China, India, Japan and Korea against international best practice. Section VI concludes.

II. PRIVATE DEBT IN ASIA: STYLISTED FACTS

8. **Asia accounts for nearly a third of global private debt, equivalent to approximately [250] percent of regional GDP.** In several Asian economies, household debt has increased sharply in this period (China, Korea, Thailand) and remains elevated (Korea and Thailand) (Figure 2). On the corporate side, despite some moderation following the Asian Financial Crisis, several countries have experienced an acceleration in corporate debt since 2008, growing rapidly to unprecedented levels in some cases (China, Korea, Singapore).

9. **The financial landscape is also changing, with a growing role of nonbank institutions.** As financial systems have become larger and more complex, nonbanks (such as cooperatives) account for an increasing share of household loans. On the corporate side, the rapid growth of bond markets has contributed to the shift away from bank financing. Equity market growth has been slower in emerging Asia than advanced Asian economies. The share of foreign currency denominated borrowing for both household and corporate debt has declined since the Asian Financial Crisis, which was a key source of vulnerability.

10. **The drivers of the increase in corporate debt have been largely similar across countries, with some underlying differences.** As noted earlier, a common driver has been the prolonged use of unconventional monetary policy in major AEs which pushed investors’ search for yield toward more vibrant economies in the region (e.g. Korea, Thailand, Singapore). The impact of these flows was at times amplified by country-specific factors, such as the massive stimulus in China to counter the collapse in external trade and boost domestic demand. The stimulus relied on rapid credit...
growth – a pace well in excess of optimal financial deepening – and financed a large construction boom that resulted in overstocking in the real estate and overcapacity in related upstream industries. That said, in countries like Singapore, corporates’ debt servicing capacity is supported by ample cash buffers.8

11. **The drivers of the rise in household debt in Asia have been slightly differentiated along income levels.** Housing related debt was a key driver of higher household debt in Australia, Korea, Singapore, China. In other countries, such as Thailand, the rise in household debt was driven by consumer loans, such as auto and personal loans, which largely reflect the extension of targeted public support programs implemented in response to the 2012 floods and extended through the less regulated cooperative sector (Figure 3).

![](Image)

### Figure 3: The Composition of Household Debt in China and Thailand

**China 2019 AIV SIP**

**Corporate debt**

**Thailand, Composition of Household Debt, 2019:Q1**

- Mortgage
- Car purchase
- Credit Card
- Personal Loan
- Business Loan
- Others

Source: Bank of Thailand

III. **The Macroeconomic Costs of Over-Indebtedness**

A. **What Does the Literature Tell Us?**

12. **Leverage is an essential pillar of the economy, but at high levels, it can be a source of macroeconomic vulnerabilities.** In the context of financial deepening, leverage provides avenues to support financial intermediation, consumption, investment and growth.9 Yet, the Asian Financial Crisis and the Great Recession illustrate the macroeconomic costs of high debt and slow balance sheet adjustment. High corporate debt can weigh on investment and distort resource allocation; excessively leveraged firms have persistently lower investment, which in turn dampen productivity growth (Gebauer et al, 2017). Recent research on Asia finds that excessively leveraged firms (zombies) had persistently lower tangible and intangible investment, which in turn dampened

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8 IMF Country Report No. 19/233
9 Using a panel of 30 countries over the past 40 years, Mian and Sufi (2017) show that a rise in the household debt to GDP ratio [increases consumption in the near term but] systematically predicts lower subsequent growth and a rise in unemployment. The October 2017 GFSR chapter finds that an increase in household debt has a positive contemporaneous relationship to GDP growth and consumption and a negative association in the future (three years ahead).
productivity growth. Similarly, over-indebted households are likely to cut back on consumption as their perception of permanent income and wealth is reduced (King, 1994). Mian and Sufi (2018) and Garber et al (NBER, 2018) identify higher marginal propensity to consume among debtors as a crucial feature in explaining the severity of recessions following household debt expansions. Vulnerabilities from household debt can build up faster if the increase in debt to GDP outpaces its share in disposable income, a closer measure of debt servicing capacity.

13. **The effect of leverage on growth is likely nonlinear, with large costs to growth beyond some threshold and over the medium term.** Building on pioneering work by Reinhart and Rogoff (2010) on “tipping points”, Cecchetti et al (2011) estimate this threshold at 85 percent of GDP for households and 90 percent for corporates. IMF (2017) finds that an increase in household debt has a positive contemporaneous relationship to GDP growth and consumption and a negative association in the future (three years ahead). An increase in the household debt-to-GDP ratio raises long-term growth as long as the final ratio is below a threshold between 36 and 70 percent of GDP. Similar intertemporal results are reported by Lombardi et al (2017), with negative long-run effects on consumption intensifying as the household debt-to-GDP ratio exceeds 60 percent, and 80 percent for GDP growth. This strand of analysis, however, assumes that tipping points are time invariant; more recent work has explored time- and state-dependent thresholds (see Yang and Su (2018)).

14. **To move beyond threshold based methods to better capture nonlinearities, this paper uses the Growth at Risk methodology.** By linking macrofinancial conditions to the probability of future GDP growth, such methods move beyond focusing on a point estimate of the impact of debt on growth. It seeks to exploit correlations between a large set of macrofinancial variables to deliver insights on the entire growth distribution and the relative importance of its key drivers.

**B. Private Debt and Risks to Growth**

15. **To assess the risk to GDP growth from private leverage, the conditional distribution of GDP growth in Asian countries is estimated.** This involves estimating quartile regressions of GDP growth on partitions, which summarize groups of related variables (using principal components analysis to reduce dimensionality). The quartile regression estimates are then used to generate a t-skew distribution of GDP growth.

16. **For this analysis, we run quantile regressions of a country’s GDP growth y_{t+q} quarters ahead on the following three regressor groups:** financial conditions, trade partner macroeconomic conditions, and measures of private leverage (household and corporate):

\[
y_{t+q} = \beta_y y_t + \beta_f f_{t+q} + \beta_{tp} t_{p,t} + \beta_l lv_{t+q} + \epsilon_{t+q}
\]

<table>
<thead>
<tr>
<th>10 April 2018 IMF Asia and Pacific Regional Economic Outlook</th>
</tr>
</thead>
</table>

12 Following the methodology in Adrian et al 2019, the estimated quartile regression coefficients are used to estimate the parameters of t-skew distribution: \( f(y; \mu, \sigma, \theta, \nu) = \frac{t(\frac{y - \mu}{\alpha \sigma}, \nu)}{\theta \frac{\alpha^\nu}{\Gamma(\frac{\nu}{2})} \left(1 + \frac{1}{\nu} \frac{\alpha^2}{\sigma^2} \right)^{\nu/2}} \) where \( t() \) and \( T() \) are the PDF and CDF of the Student t-distribution; \( \mu \) is the location, \( \sigma \) is the scale, \( \theta \) is the shape and \( \nu \) is the fatness. For each, we choose the four parameters \( \{\mu_t, \sigma_t, \alpha_t, \nu_t\} \) of the skewed t-distribution \( f \) to minimize the squared distance between our estimated quantile function \( Q_{yt+h|xt}(\tau) \) from (2) and the quantile function of the skewed t-distribution \( F^{-1}(\tau; \mu_t, \sigma_t, \alpha_t, \nu_t) \) from (3) to match the 10, 25, 75, and 90 percent quantiles:
Financial conditions consist of credit growth, sovereign and corporate bond spreads, REER change and volatility, terms of trade, VIX, equity and house price growth. Trade partner macroeconomic indicators comprise US and China GDP growth. Finally, private leverage comprises household and corporate debt to GDP ratios (level and change). The model uses quarterly data from 1995Q1 to 2018Q4. From the estimated quantile coefficients, we estimate the individual conditional GDP growth distribution for four Asian economies: Japan, Korea, Singapore and Thailand. \(^{13}\)

17. **The estimated conditional distributions of GDP growth in the baseline suggest risks are tilted to the downside over the medium term.** The mode and the left tail of the growth distribution, measured by the GAR5%, the level of growth below which 5 percent of the growth distribution lies, declines over time for most countries. This showcases the risks to future growth from current financial conditions including accommodative global financial conditions and elevated leverage for the countries in the sample.

18. **Results confirm the importance of private leverage in driving tail risks to future GDP growth.** As shown in Figure 4, the estimated conditional quartile coefficients show the nonlinear impact of financial conditions, including leverage, on growth: coefficients for household and corporate debt differ over the distribution, with often larger coefficients at the left tail of the growth distribution rather than the mean and upper tail. Two findings are noteworthy:

- **First**, on the time dimension, both household and corporate debt appear to support growth in the short run (as seen in the rightward shift of the distribution), but reduce growth over the medium term. However, this boost to growth from household debt is more short-lived than that from corporate debt. This is consistent with findings in the literature that in the very short run, household debt may boost growth (see Mian et al 2015, IMF 2017).

- **Second**, in most countries, the drag of household debt on growth tends to last throughout the growth distribution, while corporate debt tends to be concentrated only at the lower end of the distribution. \(^{14}\)

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\(^{13}\) Individual economies are selected based on data availability. A panel version of this analysis is currently in progress.

\(^{14}\) The outsize role of corporate debt in lower growth outcomes could reflect that the bottom percentiles group observations on the Asian Financial Crisis.
19. The potentially longer-lasting drag of household debt on growth are highlighted by looking at shifts in the growth distribution. We use compare the impact of a 1 standard deviation increase in household and corporate debt on the growth distribution, over the near and medium term. As seen in the quantile coefficients, in the short run, an increase in household debt does not result in a large leftward shift of the growth distribution (Figure 5). However, in the medium term, the effects of household debt on the growth distribution are more pronounced. Meanwhile, a one standard deviation shock to the corporate debt/GDP ratio shifts the distribution of GDP growth to the left but by less over the medium term, with a smaller decline in the mode and the left tail thickens but by a smaller degree.

![Figure 5. Shocks to Private Debt: Distribution of Real GDP Growth](image)

Note: Each figure plots the estimated near and medium term real GDP growth probability density functions (black lines) and the distribution after an adverse shock (1 s.d.) to household debt (blue lines) and corporate debt (red dotted lines). Thicker left tails would indicate increased downside risks to GDP growth. Near term is defined as 4 quarters ahead, while medium term is defined as 12 or 16 quarters ahead.

20. This differential impact could be explained by the preexisting levels and composition of debt, as well as the importance of private consumption as a growth driver. For many of these countries, household debt levels are higher than corporate debt levels. Household debt also plays an important role in fueling consumption (rather than productive investment), which has in turn been a significant driver of growth in recent years. Meanwhile, legal and institutional frameworks could also play an important role: for many of these advanced economy cases with highly developed corporate debt markets, there avenues to manage (and grow out of) corporate leverage are multifold, while options for managing household debt are more limited.

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15 For these countries, household debt levels are also close to or above high-risk thresholds identified by the literature (see Lombardi, Mohanty, and Shim 2017).
IV. **TACKLING OVER-INDEBTEDNESS: A MULTIPRONGED APPROACH**

21. The above analysis underscores the importance of building resilience against high leverage. High private leverage can embed risks to growth in the medium term. It is important to have appropriate policies both to prevent over-indebtedness from arising in the first place, as well as procedures to manage the stock of debt. Both approaches are needed for orderly deleveraging.

22. A multipronged approach, comprising macroeconomic policies, micro- and macro-prudential and fiscal tools, and legal measures can help prevent and address over-indebtedness. A robust and mutually reinforcing policy framework can enable countries to operate with higher levels of debt and be more responsive to shocks when they occur.

- **Macroeconomic policies** that support growth can help households and corporates grow out of indebtedness, by bolstering their capacity to repay.

- **Institutional frameworks** can build financial resilience enabling countries to safely carry higher household debt. In general, countries with stronger supervisory frameworks were able to safely operate with high debt, and therefore attenuate the urgency for sub-optimal and costly deleveraging (IMF 2017).

- **Macroprudential policies** can also help countries address pockets of risk. Although macroprudential frameworks to deal with corporate leverage are relatively underdeveloped, although the use of debt-at-risk analysis is becoming more sophisticated (e.g. Singapore), and existing measures have tended to focus on household debt. Several countries in Asia have indeed both deployed and strengthened macroprudential measures to deal with high household debt (Table 1).

- **Fiscal policy that removes tax distortions toward leverage can also contribute to financial stability.** Excessive private leverage can be amplified by tax provisions that favor finance by debt rather than equity – known as the debt bias. For corporates, the bias is induced through the deductibility of interest but not equity costs for the corporate income tax; for households, it is

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**Table 1: Macroprudential Measures to Address Household Debt**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>Upgrading non-bank financial institutions supervision to harmonize it with that for banks and promoting more rigorous bank assessments. New supervisory tools such as the Debt Service Ratio (DSR) covering all forms of household debt are being introduced in 2018-19. Mortgage contracts are being changed to insulate household from interest rate risk through a rapid shift from variable-rate bullet loans to fixed-rate amortizing mortgages. The loan-to-value (LTV) and debt-to-income (DTI) ratios were reduced to record lows of 40 percent, and are now well below recent highs of 70 and 60 percent, respectively, to which they were increased in August 2014.</td>
</tr>
<tr>
<td>China</td>
<td>Systemic risk assessment of the household sector was strengthened, including by extending coverage beyond mortgages. Efforts were stepped up to collect and process data beyond the aggregate credit and housing market indicators.</td>
</tr>
<tr>
<td>Thailand</td>
<td>The Bank of Thailand has taken several steps, including setting limits on credit card and personal loans and tightening LTV on mortgage loans.</td>
</tr>
</tbody>
</table>

Source: China 2019 Article IV Staff Report, Korea 2017 Selected Issues Paper
induced from the mortgage interest deductions (IMF 2016). Addressing debt bias should feature prominently in countries’ tax reform plans aimed at deleveraging. These could include gradual reform of tax deductions for mortgage interest and limiting interest deductibility for corporates combined with an ‘allowance for corporate equity” system (to mitigate a possible loss of revenue).

23. **At the current juncture with constraints to macroeconomic policy space, legal tools can become a potent weapon in the arsenal.** For many small open economies with high or rising leverage, low global interest rates and headwinds to growth make it challenging to raise growth without further fueling financial stability risks. In this setting, this paper will now explore the role of legal tools in addressing over-indebtedness to deleverage in an orderly manner.

## V. Legal Frameworks to Tackle Over-indebtedness

24. **Legal frameworks are critical to dealing with over-indebtedness.** The legal system provides mechanisms for enforcing contractual rights, including credit, and can also regulate situations where multiple creditors compete to enforce over the insufficient assets of the debtor (insolvency). The legal system promotes payment discipline and discourages strategic behavior by debtors. At the same time, the law must offer efficient solutions to preserve the value of viable enterprises and provide a second chance to well-intending debtors.

25. **An effective legal strategy involves both ex-ante and ex-post debt measures.** Over-indebtedness of enterprises and households has negative consequences for debtors, creditors, and for the economy as a whole. Legal frameworks therefore should involve **preventive** measures to contain high levels of debt before they become unsustainable (ex-ante measures), and **reactive** measures that address the problem of over-indebtedness once it materializes (ex-post measures) to support orderly deleveraging. For the purposes of this paper, the dividing line between ex ante and ex post strategies is set in the intervention of the judiciary. Judicial insolvency proceedings can entail large direct and indirect costs. We thus define preventive or ex ante techniques as those that typically avoid these costly formal judicial proceedings. A simplified overview of the measures for addressing household and enterprise debt is illustrated in Figure 6. Tables 2 and 3 provide a brief description of each measure under ex-ante and ex-post approaches respectively.

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**Figure 6: Overview of Ex Ante and Ex Post Measures to Address Over-Indebtedness**

<table>
<thead>
<tr>
<th>Household</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit information systems</td>
<td>Financial and economic information</td>
</tr>
<tr>
<td>Advice to debtors</td>
<td>Early warning systems</td>
</tr>
<tr>
<td>Informal debt restructurings</td>
<td>Informal debt restructurings</td>
</tr>
<tr>
<td>Bankruptcy: Liquidation</td>
<td>Bankruptcy: Repayment plans</td>
</tr>
<tr>
<td>Bankruptcy: Repayment plans</td>
<td>Debt enforcement</td>
</tr>
<tr>
<td>Debt enforcement</td>
<td>Debt enforcement</td>
</tr>
</tbody>
</table>

**EX ANTE**

**EX POST**

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17 We use the terms “enterprises” as equivalent to “corporates” and the term “household” to refer to individuals or consumers. In the legal literature, the basic distinction is between enterprise or business insolvency and consumer insolvency; or between corporate insolvency and individual insolvency.
### Corporates

| Credit and financial information | Adequate financial information on enterprises is a prerequisite for preventive approaches and is only possible with a developed legal infrastructure in place. It plays an enabling role not only for other preventive legal measures, but also for the appropriate monitoring of enterprise debts by financial entities and supervisors, including the implementation of macroprudential tools. There are two main sources of credit and financial information for enterprises: credit registries (public) and credit bureaus (private). These sources provide information about defaults, levels of debt, and general creditworthiness. Financial statements provide the most complete information on the financial and economic situation of enterprises, especially when the information is prepared according to widely accepted accounting standards and is subject to auditing. Information in financial statements allows creditors and supervisors to analyze indicators of enterprise distress and risk of insolvency, such as the Z-score (Altman, 1968). |
| Early warning systems | Early warning systems for enterprise indebtedness draw on existing systems for supervised financial institutions and require the collection of abundant data from enterprises, especially on different sources of debt (bank debt, taxes, social security contributions). This allows for the identification of risks and the implementation of strategies that address problems before the company becomes seriously distressed. The main advantage of early identification of distress is that the number of available restructuring options is higher, and financial institutions may be able to react before their loans are classified as non-performing. |
| Informal debt restructuring mechanisms | Informal debt restructuring mechanisms represent a tested approach to avoid overindebtedness and insolvency, and typically involve the debtor and its major financial creditors. In some cases, banking associations and central banks have promoted “debt restructuring principles” that include guidelines for the behavior of debtors and creditors during restructuring negotiations. Informal debt restructuring avoids the costs of formal insolvency processes and allows for a flexible resolution of distress in a confidential environment. |

### Households

| Credit information systems | Credit information systems are instrumental for the containment of household debt and can collect negative and positive information about credit relationships and payment patterns in other transactions, such as utilities and telecommunications. |
| Advice to debtors | Specialized legal and financial advice is often needed when households are confronted with debt problems. One of the most important issues for debtors’ counseling is advice on the different options consumers have for restructuring their debts. |
| Informal debt restructuring (including agreements to avoid insolvency) | Informal debt restructuring is typically the last option to avoid the use of bankruptcy procedures. As households experience debt distress, the legal system can offer alternative dispute resolution (ADR) solutions. Beyond simple contractual negotiation, these techniques include mediation, conciliation, and arbitration. ADR avoids the involvement of the courts and the costs and legal consequences of a formal insolvency procedure. Informal debt restructuring can also be supported by the public administration. This can be done, for instance, by establishing a mediating role for financial supervisors or specialized financial consumer protection authorities. Financial institutions may commit to seek negotiated solutions with consumers following the provisions of a code of conduct issued by the bank supervisor or by the financial industry itself. This is part of the reasonable forbearance that financial institutions exercise in respect of distressed borrowers. |
Table 3: Ex-Post Tools for Corporates and Households

<table>
<thead>
<tr>
<th>Corporates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reorganization</td>
<td>Reorganization procedures are the hallmark of modern insolvency regimes. They prevent the destruction of economic value by allowing viable companies to be restructured, resulting in higher recovery values for creditors, the preservation of businesses, jobs and contractual relationships.</td>
</tr>
<tr>
<td>Liquidation</td>
<td>Liquidation proceedings represent the safety valve of the insolvency system and are the main instrument to deal with non-viable enterprises. The goal to make the enterprise exit the market, redeploying assets to more productive uses and minimizing to the extent possible the losses of creditors. The regulation of liquidation proceedings follows a similar scheme in most jurisdictions, in Asia and globally. The effectiveness of the liquidation process depends on several legal and economic factors, including (i) when the sale of assets is conducted swiftly and without incurring high costs; (ii) having the possibility of selling the business as a going concern increases the overall recovery of claims, although this may need to impose some restrictions on secured creditors. However, sales of enterprises or enterprise units require a developed market. Naturally, the quality of institutions (courts and insolvency administrators) directly affects the quality of the liquidation process.</td>
</tr>
<tr>
<td>Debt enforcement</td>
<td>Debt enforcement provides the foundation for the insolvency system. Over-indebtedness of enterprises typically involve multiple creditors, which requires complex, multilateral insolvency proceedings. Basic enforcement mechanisms provide a response to default in credit relationships, minimizing moral hazard and promoting debt discipline and credit recovery. In addition, strong debt enforcement mechanisms provide the backdrop for meaningful debt restructuring negotiations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Households</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankruptcy: Liquidation</td>
<td>Liquidation of the estate provides deserving debtors with a discharge of the outstanding debt. It serves to operate a fresh start policy for over-indebted individuals, by discharging the outstanding debt. Discharge should only be granted to debtors that have not engaged in fraudulent conduct.</td>
</tr>
<tr>
<td>Bankruptcy: Repayment Plans</td>
<td>Repayment plans are an alternative to traditional bankruptcy, based on the liquidation of the debtor’s estate. A more modern modality of personal insolvency proceedings allows debtors to retain (part of) their assets and commit to a repayment plan for a specified period, after which the debtor receives a discharge. These proceedings tend to be identified with the term &quot;rehabilitation&quot;.</td>
</tr>
<tr>
<td>Debt enforcement</td>
<td>Debt enforcement offers creditors the possibility of recovering claims from the debtor’s assets. Debt enforcement is typically used in bilateral relationships, whereas over-indebtedness typically involves multiple parties and requires insolvency. Effective debt enforcement is a fundamental element that creates incentives for payment discipline and for the conduct of proper restructuring negotiations between debtors and creditors, and it is an essential element for secured credit.</td>
</tr>
</tbody>
</table>

26. **The emerging trend is to focus on the prevention of over-indebtedness.** Traditionally, legal measures focused on the treatment of over-indebtedness ex-post through enterprise and consumer insolvency. Whereas an international standard for enterprise insolvency exists (UNCITRAL Legislative Guide and World Bank Principles), there is no internationally accepted standard for consumer insolvency, due to wider differences in social and political approaches to issue of consumer debt. There is a growing trend in many countries to adopt ex-ante tools that would prevent insolvency from arising in the first place. These measures are recent, both for enterprises and households, and therefore there are no international standards for them, only emerging best practices.
27. An inventory of the legal frameworks for dealing with corporate and household debt is provided for a number of Asian countries. Figure 7 summarizes the findings of a review of legal systems in the ASEAN-5 countries plus four of the largest Asian economies (China, Japan, India and Korea). The underlying methodology for the scoring of ex-ante and ex-post tools is explained in Annex I.18 The paper now discusses the state of play of Asian legal systems relating to household and enterprise debt.

Figure 7. Overview of Ex Ante and Ex Post Tools in Asia

<table>
<thead>
<tr>
<th>Household</th>
<th>Enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit information systems</td>
<td>Credit and Financial Information</td>
</tr>
<tr>
<td>Debt enforcement</td>
<td>Debt enforcement</td>
</tr>
<tr>
<td>Bankruptcy repayment plan</td>
<td>Early warning systems</td>
</tr>
<tr>
<td>Informal debt restructuring</td>
<td>Informal and preventive debt restructuring mechanisms</td>
</tr>
</tbody>
</table>

Note: This chart compares legal and institutional tools for different Asian countries. Each colored line represents one country. Points closer to the outer border suggest a more developed toolkit.

Ex-ante Tools for Enterprises

28. The development of preventive tools for enterprise over-indebtedness is fairly recent. Such techniques aim to avoid the costs formal judicial insolvency proceedings and may also be effective at reducing the economic burden associated with elevated debt levels, thereby preserving the viability of enterprises. Ex-ante tools rely on the availability of financial and economic information and also include early warning systems and informal restructuring procedures. Figure 8 presents a summary of ex-ante tools for enterprises in Asia, revealing gaps in early warning systems.

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18 The analysis includes the ASEAN-5 countries (Indonesia, Malaysia, The Philippines, Singapore, and Thailand), and the four largest Asian economies (China, India, Japan and Korea).
(i) Credit and financial information

29. **Credit information systems tend to have a limited coverage of enterprises in Asian systems.** In some countries, credit information systems have been designed mostly to gather information about consumer credit (Japan, Thailand, Philippines). In other cases, even if the systems collect positive and negative information on enterprises, the main source of information is the banking sector (China, India). However, given the importance of non-bank financial institutions, the coverage of enterprise liabilities offered by credit information systems is necessarily limited. That said, credit information systems in Korea, Malaysia, and Singapore have achieved wider coverage of enterprise liabilities.

30. **The availability and quality of financial and economic information on enterprises is increasing in Asian systems.** Asian systems have made progress in the implementation of regimes based on international financial reporting standards and establishing auditing systems. There is a clear gap between listed and unlisted companies regarding the quality of accounting information and the rules on disclosure of financial statements. In most Asian countries, only listed companies publish information on their financial statements. There is a trend to develop electronic systems for the submission and publication of financial statements.

(ii) Early warning systems

31. **Currently there are no examples of operating early warning systems in ASEAN countries or in Asia.** The policy of developing early warning systems, especially addressed at small and medium enterprises, has originated in Europe (France, Denmark). Only a few European countries have significant experience in the design of mechanisms that alert debtors of signs of distress and provide support for debt restructuring or other adequate changes to prevent insolvency. In advanced Asian economies, there is some reliance on the role of leading banks in monitoring the finances of small and medium enterprises and acting promptly to address enterprise distress at an early stage.

32. **For large enterprises, internal audit and risk management perform a similar function to early warning systems.** Large enterprises in ASEAN countries, and also in Asian countries generally, tend to have internal audit as a consequence of a statutory obligation or as part of the corporate governance code applied to listed companies. The existence of a risk management function increases the effectiveness of internal monitoring.

(iii) Informal debt restructuring mechanisms

33. **Since the 1997 Asian crisis, countries have built up experience in the use of informal restructuring.** Informal restructuring was widely used in the financial restructuring of enterprises in Thailand, Indonesia, Korea and Malaysia. Japan also developed a strong practice in the use of
informal restructuring techniques. The legal culture in Asia is extremely receptive to negotiated solutions compared to adversarial litigation (Tomasic and Little, 1998), which explains the success of informal debt restructuring.

34. **Informal debt restructuring mechanisms can be enhanced with the support of administrative authorities.** The intervention of the administration can facilitate negotiations among the parties, beyond endorsing a set of principles informing those negotiations. Asian countries have been the pioneers in implementing this approach after the Asian crisis, and several countries have maintained enhanced debt restructuring mechanisms as part of the regular restructuring toolkit (Table 4).

<table>
<thead>
<tr>
<th><strong>34. Informal Debt Restructuring Mechanisms</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Korea</strong> has developed an enhanced restructuring mechanism, in joint management under the Corporate Restructuring Promotion Act (CRPA). The CRPA supports an informal approach, where creditors form a committee of financial creditors and decide on the restructuring application. The committee takes decisions by majority. Creditors who disagree with the decisions of the committee are entitled to be bought out by the majority.</td>
</tr>
<tr>
<td><strong>Malaysia</strong> revised its Corporate Debt Restructuring mechanism (CDR) to incorporate technical improvements. The mechanism is designed to apply irrespective of the existence of an economic crisis and has a special version for small and medium enterprises. This approach could be easily replicated by other ASEAN countries, especially those with experience in the design and operation of enhanced debt restructuring frameworks (Thailand, Indonesia).</td>
</tr>
<tr>
<td><strong>The Philippines</strong> designed an informal debt restructuring mechanism with special features. Out-of-court restructuring agreements benefit from the same legal recognition as a judicially-sanctioned restructuring, if those agreements meet specified conditions of super-majorities and publication.</td>
</tr>
</tbody>
</table>

35. **Due to the limitations of informal debt restructuring, there is a trend to complement them with preventive insolvency procedures.** Informal debt restructuring faces constraints in cases where numerous creditors are involved and unanimous agreement on restructuring measures is unlikely. Preventive insolvency procedures are hybrid procedures, i.e., they benefit from limited judicial intervention, without incorporating the full set of rules and effects of a formal insolvency process. This means that the cost and impact of the procedures is limited, compared with a full reorganization.

36. **Although there is no experience with preventive insolvency procedures in Asia, some countries use procedures that perform a similar function.** In Malaysia and Singapore, for instance, it is possible to use schemes of arrangement to restructure distressed enterprises. Schemes of arrangement allow for a negotiation which results in a binding agreement for the debtor and all creditors, if the requisite majorities are reached. Intervention of the court is reduced, compared with formal insolvency proceedings.

37. **In addition to the preventive techniques mentioned above, some countries have implemented support programs for indebted enterprises.** These include advice for debt restructuring provided by financial and legal specialists. For micro- and small enterprises, this support can be connected with early warning systems and/or with informal debt restructuring mechanisms, as in the case of Korea and Japan.
38. Preventive strategies against household over-indebtedness are increasingly important and seek to avoid the social cost of bankruptcy. Strategies to contain household debt follow different yet complementary approaches to corporate ones. General policies include financial education, financial consumer protection, macroprudential tools and policies for responsible lending. Techniques based on adequate legal infrastructure include collateral registries, valuation regimes and, especially, credit information systems – all of these are necessary for the effectiveness of macroprudential tools. The most important legal tool for the prevention of over-indebtedness, informal restructuring of debt, is also premised on the accuracy of the information provided by registries and credit information systems. The main preventive legal measures include: credit information systems, support and advice to debtors, informal debt restructuring, including agreements to avoid insolvency.

39. Asian countries have developed preventive mechanisms to address household debt (Figure 9). Progress in financial inclusion has resulted in higher levels of household debt. Since social stigma and severe personal consequences are attached to bankruptcy, most legal systems in Asia have put in place restructuring solutions that avoid the use of the bankruptcy process.

(i) Credit information systems

40. Credit information systems are instrumental for containing household debt. They can collect information about credit relationships and payment patterns in other transactions, such as utilities and telecommunications. Some credit information systems in Asia have reached a wide coverage of the adult population (Figure 10). The situation in ASEAN countries is diverse, mainly due to differences in access to finance. Expanding coverage is a necessary step to implement macroprudential policies and legal strategies to address household over-indebtedness.

(ii) Support to debtors

41. Specialized legal and financial advice is often needed when households are confronted with debt problems. One of the most important issues for debtors’ counseling is advice on the different options consumers have for restructuring their debts. Advice can be provided through
dedicated public institutions or associations of lawyers and insolvency practitioners as pro bono programs or agreements with the public sector (Table 5).

Table 5: Examples of Support to Debtors in Asia

<table>
<thead>
<tr>
<th>Public institutions</th>
<th>Other bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia: Bank Negara’s Credit Counseling and Debt Management Agency (AKPK) offers free debt counseling to consumers and facilitates a number of debt restructuring options.</td>
<td>Singapore: Credit Counseling Services (CCS) is a private charity that provides financial education and debt counseling services to debtors.</td>
</tr>
<tr>
<td>Korea: Credit Counseling and Recovery Services (CCRS) was created as an initiative of the financial sector, but after several changes, it has re-emerged as a public agency, as part of the authorities’ strategy to address household indebtedness.</td>
<td>Thailand: The Debt Clinic was established by the Bank of Thailand and is managed by an Asset Management Company (Sukhumvit AM). It is an example of cooperation between the public and private sectors.</td>
</tr>
</tbody>
</table>

(iii) Informal debt restructuring (including agreements to avoid insolvency)

42. Asia has experience with informal restructuring of household debt through various mechanisms that are typically linked to support programs to debtors. This can be done by establishing a mediating role for financial supervisors or specialized financial consumer protection authorities (Table 6).

Table 6: Informal household debt restructuring in Asia

| Korea: CCRS offers plans to consolidate and repay debts to financial institutions, in the shape of two modalities (individual workout and pre-workout) along the lines pre-agreed with credit institutions. |
| Malaysia: AKPK offers a Debt Management Program (DMP) for consumers with debts to financial institutions. The DMP is a personalized debt repayment plan agreed with the participating financial institutions, based on the advice that the debtor receives from the AKPK specialists. The DMP is designed to maintain minimum living standards of the debtor, while making monthly payments to reduce and ultimately extinguish debt. |
| Thailand: The Debt Clinic Program is designed to offer restructuring solutions to debtors who have debts with multiple banks and is now seeking to expand its coverage to non-bank financial institutions, given their important role in consumer finance. The debts of consumers are rescheduled with longer maturities at a low interest rate. The scheme is facilitated by the transfer of the non-performing loans to the AMC, which can then find an optimal restructuring solution. |
| Singapore: CCS also offers a DMP based on credit counseling, with similar characteristics, and a Repayment Assistance Scheme (RAS) that helps debtors restructure unsecured debt by consolidating it and extending the maturity with a low interest rate. |

43. An agreement with creditors may be the last opportunity to avoid bankruptcy. As the costs of personal bankruptcy are extremely high in Asian countries, due to the stigma and the heavy restrictions imposed on debtors, legal systems tend to offer a last chance of avoiding bankruptcy by way of an agreement or settlement with creditors (Table 7).
44. **Once enterprises become over-indebted, the legal system must provide tools for the resolution of insolvency.** Even with the development of preventive tools, there will always be cases where enterprises become subject to an unsustainable debt burden. Ex-post tools preserve viable enterprises – by reorganizing them – and redeploy assets to more productive uses – by liquidating the assets of non-viable enterprises (OECD, 2017). Effective insolvency regimes minimize the losses suffered by creditors in both cases and are generally associated with lower excessive leverage (Jarmuzek and Rozenov, 2019).

45. **Asian insolvency systems have made great progress in the last decades.** At the time of the Asian crisis, enterprise insolvency regimes in the region, and in particular, in ASEAN countries, were insufficient and antiquated. The Asian crisis acted as a catalyst for insolvency reforms and raised awareness globally about the importance of insolvency regimes for financial stability. In many other countries, reforms have been introduced in the last decade (Philippines, Singapore, and Malaysia). In particular, many reforms have focused on the introduction and improvement of reorganization procedures. The situation in Asia today is dramatically different. Most countries have implemented insolvency frameworks that are largely inspired by best international practice (Figure 11).

(i) **Reorganization**

46. **Most Asian countries, including ASEAN, have introduced reorganization procedures.** Reorganization procedures represent an integral part of the insolvency framework in the large (China, India, Japan, Korea). However, there are important differences in practice: reorganizations are not frequent in China, whereas in in India, an attempt at reorganization is an essential part of every
corporate insolvency procedure. Korea and Japan have reorganization regimes that follow more closely the international standard. Among ASEAN countries, Thailand introduced reorganization procedures after the crisis and has amended the law to include further improvements. The legal framework in Indonesia and the Philippines includes reorganization procedures, while Singapore and Malaysia have recently reformed their systems to introduce rehabilitation procedures. However, there are important differences in the regulation of reorganization procedures which affect their effectiveness (see Annex 1).

(ii) Liquidation

47. Liquidation proceedings are not particularly effective in Asia. Value destruction occurs because it is difficult to sell businesses as a going concern in the absence of large and developed markets for distressed enterprises. Selling assets piecemeal results in low recoveries and increased costs of the process, especially in the absence of qualified insolvency professionals.

(iii) Debt enforcement

48. Asian enforcement systems are generally effective, in varying degrees. Most countries in Asia require a judicial procedure for the enforcement of claims, including secured claims (China, Japan, Korea, Philippines, Indonesia, and Thailand). Enforcement of secured claims can take place out of court in some Asian countries (India, Malaysia, and Singapore). This suggests a division between civil law and common law systems.

49. Institutional quality affects the effectiveness of ex-post tools. All ex-post tools are based on formal procedures. Therefore, the quality of the courts and of supporting professionals (insolvency professionals, bailiffs) have a direct bearing on the effectiveness of the legal system. Some countries have created specialized insolvency courts (Thailand, Korea, China, and India). The development of a qualified insolvency profession is pending in most Asian systems. India has already implemented the new framework for the insolvency profession, and Singapore is planning to introduce a new regime for insolvency professionals. The creation of asset management companies (AMCs) can increase the effectiveness of ex-post tools, due to the inherent specialization and concentration of creditor rights.

D. Ex-Post Tools for Households

50. Ex-post measures to address household over-indebtedness require insolvency procedures, with an increasing emphasis on rehabilitating debtors. This is achieved through the discharge of the debt, provided that the conditions set in the law are met. Among these conditions, typically debtors must surrender all assets except those protected by exemption; and it may also be that debtors must devote their income, after deducting their living expenses, to the payment of their debts, for a specified period, before they earn a discharge of the remaining debt.
51. The regulation of personal insolvency is an outstanding issue in most Asian systems. Not all Asian countries have a personal insolvency system; China is an example. In some countries, personal insolvency is still inspired by notions of retribution against the defaulting debtor, such as in Malaysia or Singapore. In the absence of debt relief mechanisms, debtors may withdraw from the formal economy to escape creditor action. In addition, there are other factors that contribute to the low use of personal insolvency: the stigma attached to bankruptcy (Japan, Thailand, Malaysia, Indonesia, Singapore); and the cost and duration of the process. Figure 12 provides a summary of the availability of ex-post tools for household debt in select Asian countries.

(i) Personal bankruptcy - liquidation

52. Liquidation of the estate provides deserving debtors with a discharge of the outstanding debt. In personal bankruptcy, liquidation has a very different connotation than in enterprise bankruptcy. While liquidation signals the end of the enterprise, liquidation of the assets of the debtor serves to operate a fresh start policy for over-indebted individuals, by discharging the outstanding debt. Discharge should only be granted to debtors that have not engaged in fraudulent conduct.

53. Asian countries tend to be restrictive in discharging debts of bankrupt individuals. Although Japan and Korea are closer to a fresh start policy, policies toward discharge remain restrictive in other countries (Table 8). Even in Japan and Korea, social prejudice towards bankrupt debtors represents a serious obstacle to a wider use of personal bankruptcy.

<table>
<thead>
<tr>
<th>Table 8. Personal Bankruptcy Regimes in Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full discharge (Fresh start)</strong></td>
</tr>
<tr>
<td><em>Japan</em> is the Asian country with the longest tradition of a personal bankruptcy inspired by a fresh start policy. Personal bankruptcy is a simple procedure where the assets of the debtor are liquidated for the benefit of the creditors—except exemptions for household items—and the debtor receives a discharge. The causes for denial of the discharge are limited, and listed in the law, and only certain categories of debt (taxes, salaries) are non-dischargeable. A debtor who has received a discharge cannot receive another discharge for the following ten years.</td>
</tr>
<tr>
<td><em>Korea</em> adopted a full regime for personal bankruptcy with a discharge. For a long period, judges were reluctant to grant discharges to bankrupt debtors.</td>
</tr>
<tr>
<td><strong>Restrictions to Discharge</strong></td>
</tr>
<tr>
<td><em>Thailand</em>, after the reform of the bankruptcy law in the wake of the Asian crisis, provides a discharge after three years for the commencement of the proceedings, or when the debtor has paid 50 percent of debts. The peculiarity is that bankruptcy can only be requested by creditors, whereas the global trend is that voluntary bankruptcy is not only allowed, but it is more frequent in practice than involuntary bankruptcy.</td>
</tr>
<tr>
<td>In <em>Malaysia</em>, bankruptcy is still regarded as a credit collection technique, and is often used by creditors to put pressure on debtors. Bankruptcy imposes numerous restrictions on the debtor; there is no automatic discharge.</td>
</tr>
<tr>
<td><em>Indonesian</em> law is based on similar principles and does not generally discharge the debts of bankrupts after the liquidation of their state.</td>
</tr>
<tr>
<td><em>Singapore</em> imposes heavy restrictions on bankrupt persons (including travel restrictions) and establishes limitations to discharge.</td>
</tr>
</tbody>
</table>
Providing a discharge to debtors with no assets may require a different approach. The main objective of personal bankruptcy is not debt collection, but the implementation of a fresh start policy. For debtors with no assets, it would be unreasonable to have a process that costs more than the debts it is supposed to address. In Korea and Japan, the practice of ‘simultaneous termination’ refers to bankruptcies in cases where there are no-assets, so that the procedure is terminated and only the part related to discharge continues. Other countries may therefore wish to consider specific mechanisms for granting discharge to debtors with no assets.

(ii) Personal bankruptcy – repayment plans

Some Asian countries are incorporating repayment plans in their personal insolvency legislation. Japan, following the U.S. model, introduced “special civil rehabilitation proceedings” where the debtor commits to making payments under a 3-year plan. In the Korean individual rehabilitation proceedings, debtors must make payments under a 5-year repayment plan. The court can give a discharge even if the debtor does not make all payments under the plan, as long as creditors receive more than what they would have received in the bankruptcy of the debtor. In the Philippines, a suspension of payments scheme is granted to individual debtors (similar to that of enterprises), provided the debtor is solvent.

(iii) Debt enforcement

Debt enforcement tends to be effective in most Asian systems. Advanced economies in Asia tend to provide effective mechanisms for debt enforcement, especially for secured debts, but enforcement of debts remains a challenge in the lower income economies. The main problems are excessive delays and high collection costs. In some countries, enforcement of secured debts against individuals is fast, since it is possible to enforce without intervention of the courts (Malaysia, Singapore).

The institutional framework influences the effectiveness of the personal bankruptcy and debt enforcement regimes. In some countries, there are courts specialized for the collection of small claims (India). Other countries have specialized enforcement agencies (Thailand). The development of an insolvency profession is extremely important for personal bankruptcy, as modern systems are based on the minimal intervention of judges and the performance of functions by qualified insolvency professionals.

E. Legal Frameworks: The Way Forward for ASEAN Countries

An evaluation of legal frameworks in ASEAN countries reveal certain gaps. The analytical approach used in this paper identifies areas where ASEAN systems could improve in order to have a more complete legal toolbox to tackle over-indebtedness of enterprises and households. These include:

- Ex-ante tools for the over-indebtedness of enterprises are missing. Although some systems have ample experience with informal debt restructuring, there is insufficient coverage of enterprise liabilities in credit information systems. The development of early warning systems
would also represent a major improvement over the existing mechanisms to identify risks at an early stage, which only apply to large companies.

- **Ex-post tools for over-indebtedness of households need to be developed.** Many ASEAN systems are making important efforts in reinforcing preventive approaches to over-indebtedness for households. These efforts could reflect the inadequacy of the ex-post regime: because personal bankruptcy regimes are repressive and bring with them legal sanctions and social stigma, policymakers are focusing on developing tools that avoid insolvency. However, ex-post tools are just as necessary as preventive tools, and ASEAN systems should also include personal insolvency procedures that grant a discharge on the basis of liquidation or a repayment plan.

- **A market based-approach tends to deliver better outcomes over ad-hoc or across-the-board measures.** Debt resolution mechanisms function under the premise that the debtor and creditors will choose a rational course of action, reaching the most efficient economic solution (restructuring or liquidation). Ad-hoc or across-the board solutions fail to adequately distinguish the situation of different debtors and therefore generate inefficiencies.

59. **Ultimately, all countries need to refine existing tools to achieve a better treatment of over-indebtedness.** In each ASEAN system, a granular analysis shows specific areas where the legal framework can be strengthened to provide better prevention and treatment of enterprise and household over-indebtedness. The extension of the model of specialized courts and, especially, the introduction of a regulated insolvency profession would improve the institutional capacity and the effectiveness of all these tools.

60. **The design of new reforms of the legal framework should be based on systematic data collection.** Traditionally, insolvency reforms have been designed without taking empirical data into consideration. New reforms should be backed by impact assessments and robust data collection (Garrido et al., 2019).

VI. **CONCLUSION AND POLICY RECOMMENDATIONS**

61. **This paper has examined the risks to growth private leverage entails, and the growing risk from household debt.** Despite potential short term gains, high private leverage can embed risks to growth in the medium term. There are also large monetary, legal and social costs with debt overhang and the formal resolution process. Experience tells us the costs of prevention can be lower than the costs of treatment, and a first best strategy of avoiding too much debt should be pursued. Nevertheless, where over-indebtedness does exist, it is important to have quick and low cost resolution strategies that rehabilitate economic agents to productive activity.

62. **Addressing over-indebtedness requires a comprehensive approach that includes macroeconomic and legal policies:**

- Macroprudential policies are important as both preventive and reactive measures (e.g. LTVs, DTI). However, macroprudential tools are not effective without good information on overall liabilities, servicing capacity, or collateral values.
• Fiscal policies can be preventive e.g. tax policy to remove debt bias for both corporates and households (eliminate mortgage deductions in personal income tax). They can also be reactive by providing support to over-indebted households. It is important that fiscal measures do not distort competition (i.e. no subsidies for failing enterprises).

• The current juncture shines the spotlight on legal policies. The focus should be on preventive measures, including wider policies for consumers such as financial literacy, consumer protection, and responsible lending). These need to be combined with ex-post measures that influence the behavior of economic actors and make ex-ante measures more effective.

• Preventive systems have less capacity constraints to deal with a high number of indebted corporations or households versus ex-post systems which can become overwhelmed, especially if deleveraging is systemic or large-scale.

63. **A strategy tailored to country specific circumstances should be prioritized.** The analysis in this paper reveals the areas where countries can improve the most, namely ex-measures for corporates and ex-post tools for households. The spider charts provide a useful guide for countries to enact reforms where the gaps are largest. Other important considerations, such as balancing moral hazard of discharge with the need for encouraging risk taking and innovation and the appropriate balance of debtor vs. credit rights, should reflect country characteristics.

64. **The elements of the toolkit reinforce each other to have a cumulative effect in addressing over-indebtedness.** There are tools that work better for certain cases; having a higher number of tools affords the flexibility to deal with cases of over-indebtedness differently. At the same time, effective insolvency prevention mechanisms reduce the flow of cases and allow the court systems to be more efficient in dealing with those that make it to the courts. In short, there are many synergies between the different tools that this paper has brought out.


Garrido, Jose (dir.); Bergthaler, Wolfgang; DeLong, Chanda; Johnson, Juliet; Rasekh, Amira; Rosha, Anjum; and Stetsenko, Natalia, 2019, “The Use of Data in Assessing and Designing Insolvency Systems”, *IMF Working Paper* 19/27.


ANNEX I – METHODOLOGY FOR THE ANALYSIS OF COUNTRY LEGAL SYSTEMS

The radar charts (Figures 7-12) included in the paper are a graphical representation of a qualitative assessment conducted on the ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and four large Asian countries (China, India, Japan, and Korea).

The assessment focuses mostly on the existence of building blocks of systems for the prevention and treatment of over-indebtedness in the corporate and household sector. The degree to which the actual effectiveness of the systems is incorporated into the assessment is approximative, due to the lack of empirical information available. The numerical rating is generally based on a transposition of ROSC methodology ratings (i.e. non-compliant, 0-25; materially non-compliant, 26-50; largely compliant, 51-75; fully compliant, 76-100).

The assessment of country systems is based on the analysis of legislation and on secondary sources.

The specific methodological guidelines for the different blocks of the analysis are as follows:

A. Ex Ante - Enterprise

- **Financial and economic information.** This includes: credit bureau or credit registry for enterprises, access to financial information in public registries (if possible, including also small companies), accounting and auditing for large enterprises.
  - Coverage of credit bureau (number of enterprises)
  - Liabilities covered (financial and non-financial)
  - Quality of accounting information for listed enterprises
  - Quality of auditing
  - Disclosure of accounts
  - Disclosure of accounts for unlisted companies

- **Early warning systems and support for indebted enterprises.** This includes the special mechanisms designed for the detection of enterprise distress at early stages, whether connected with control mechanisms or designed as self-assessment tools and supported by specialized advice. The area also covers the existence of internal risk management and internal audit function at public listed companies. In addition, programs that are targeted to micro, small and medium enterprises to provide legal and financial advice to avoid over-indebtedness should also be considered.
  - Early warning systems
  - Internal risk management and internal audit
  - Legal and financial advice for micro, small and medium enterprises

- **Informal debt restructuring mechanisms and preventive insolvency procedures.** This includes: debt restructuring principles; master restructuring agreements; enhanced debt restructuring procedures, with support from supervisors or other state administrations; preventive insolvency procedures, including hybrid procedures, i.e. out-of-court procedures supported by stay orders and/or fast-track confirmation (pre-pack) of negotiated restructuring agreements.
o Debt restructuring principles
o Master restructuring agreements
o Enhanced debt restructuring
o Preventive insolvency procedures

B. Ex Ante - Household

- **Credit information systems.** This includes credit registries and credit bureaus and focuses on the coverage of the adult population and the type of liabilities covered:
  - Coverage of adult population
  - Liabilities included in the system (financial, commercial)

- **Advice and support to debtors.** This includes all programs of support to distressed debtors, which may have the components of legal advice, debt counseling, and targeted financial support.
  - Legal advice programs
  - Debt counseling
  - Targeted financial support

- **Informal debt restructuring and agreements to avoid insolvency.** This includes supported ADR mechanisms to assist individuals with debt-related problems. This may include: mediation, conciliation, or arbitration. This may also include a code of conduct for financial institutions, and the intervention of financial authorities’ (financial mediator or ombudsman, or a committee to deal with financial consumer intervention); and agreements to avoid insolvency (insertion of a phase in the insolvency process that avoids a declaration of bankruptcy by giving the debtor a last chance to reach an agreement with creditors).
  - ADR (mediation, conciliation, arbitration)
  - Financial consumer protection mechanisms
  - Agreements to avoid insolvency: general availability and lack of obstacles for these agreements; existence of incentives or an obligation to seek the agreement before formal opening of bankruptcy.

C. Ex Post - Enterprise

- **Reorganization.** The analysis focuses on the following aspects of reorganization:
  - Commencement criteria (broad standard means early reorganization is more likely)
  - Debtor in possession/balance with protection against misconduct (DIP also means early reorganization is more likely)
  - Stay of creditor actions, with adequate protection of secured creditors
  - Provision of new finance
  - Cram-down of minorities
  - Executory contracts (and prohibition of *ipso facto* clauses)
  - Simplified reorganization for small enterprises

- **Liquidation.** The analysis hinges on the existence of a functional liquidation framework, which requires a straightforward procedure, with no complications, allowing for the sale of the business
as a going concern, or of business units, and properly supported by an adequate institutional framework of courts and insolvency professionals. rather than a piecemeal liquidation. The rating focuses on the following aspects:

- **Streamlined liquidation procedure**
- **Flexibility in sale of the business**
- **Strength of the institutional framework**

**Debt enforcement**. Debt enforcement provides the general framework for the ex post treatment of indebtedness. The general functionality of the debt enforcement regime affects all the other elements of the treatment of indebtedness and over-indebtedness. In order to assess the system, the following factors can be taken into account:

- **Streamlined procedures for debt enforcement (summary proceedings)**
- **Existence of specialized courts for debt enforcement (financial debts)**
- **Availability of out-of-court enforcement mechanisms**

**D. Ex post- Household**

**Personal bankruptcy**. The general assessment of the personal bankruptcy regime includes whether there is an existing regime for the insolvency of individuals, whether the regime is inspired by principles of rehabilitation (fresh start, discharge within a reasonable time) or if the regime is purely punitive. An additional factor is the efficient processing of debtors with no assets.

**Personal bankruptcy – repayment plans**. The existence of an option that allows the debtor to repay part of the debts over a specified period, and retain ownership of certain assets (for instance, the debtor’s primary residence) is assessed as an important part of the ex-post debt resolution regime.

**Debt enforcement**. The debt enforcement regime applicable to individuals is one of the most important areas, influencing both ex ante and ex post strategies to deal with over-indebtedness.

**Rating**
The rating given is based on the general effectiveness of the regime for the enforcement of secured debt and unsecured debt, the quality of the institutional framework (court system) and availability of out-of-court enforcement for secured debt.

- **Effectiveness of enforcement of secured debt**
- **Effectiveness of enforcement of unsecured debt**
- **Quality of institutional framework (including existence of specialize courts for small claims, or for financial claims)**
- **Availability of out-of-court enforcement for secured debt**