BANK FOR INTERNATIONAL SETTLEMENTS

Debt trouble comes in threes

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Introduction

Thank you for the invitation to this International Finance Forum Conference.

There was an interesting editorial in the *Financial Times* recently (26 September 2014) that reads: "When the global economy crashed in 2008, the list of culprits was long, including dozy regulators, greedy bankers and feckless subprime borrowers. Now the dismal science itself is in the dock." The editorial goes on to defend the need for more pluralism and humility in the economics profession, the need to pay more attention to unorthodox thinkers, not to take mathematical models too literally, and, most importantly, to remember that at the core of this discipline is human behaviour.

I agree with the thrust of the editorial, which obviously has relevant implications for policymakers. But I must say it is worrisome that these first sentences of the editorial are today still the most popular explanation of the crisis. It looks as if three stars became aligned by coincidence – sleepy regulators, greedy bankers and some careless borrowers – and then a terrible *exogenous* shock occurred. These elements may have been part of the explanation, but, as the editorial suggests, we need to think deeper. In my view, a better explanation is to consider what happened as an *endogenous*, self-reinforcing process that had led to a build-up of financial imbalances and sectoral distortions that at some point became unsustainable. This alternative view questions some of the prevailing consensus and looks for the deeper causes of the crisis. To be sure, no convergence of minds towards a new consensus has yet been achieved.

The point I want to make is that the root of the crisis and the slow recovery from it go deeper than the "sleepy, greedy and careless" caricature. There are, for instance, conceptual elements such as the lack of proper integration of finance in economics and hence in economic policies. As a consequence, the role of debt or the magnitude of the contagion channels may have been underestimated. Incentives are another important element. There are incentives to take risks and cash in tangible gains today at the cost of potential instability in what seems to be distant tomorrow. There are also incentives to ever expand finance; the relentless accumulation of debt we observe is a case in point. There are institutional issues too. The post-Bretton Woods international monetary system does not seem to provide an effective anchor for monetary and financial stability, nor does it seem to have the capacity to keep the expansion of finance proportionate to the needs of the real economy.

From the BIS perspective, the aftermath of the global financial crisis is a complex balance sheet recession, linked to the bust phase of a long financial cycle. To understand and address the economic challenges that this bust phase poses, we need to take a longer-term perspective, and to analyse and internalise better the interplay between the real economy and finance. As the editorial proposes, we

need to be humble and recognise that we don't yet have a satisfactory analytical framework. But I believe that debt has a prominent role in this interplay.

So let me now focus on debt, which is the topic I have been asked to speak about because the BIS has written quite a bit on this issue. Indeed, debt was also the theme of this year's BIS Annual Conference that took place in June.

I opened that conference by acknowledging that we don't have a good answer to the question: how much debt is too much debt? However, it does not mean that we should be relaxed about the evolution of debt since the beginning of the crisis in 2007. Far from it.

Globally, debt – of households, non-financial corporates and governments combined – has risen from around 210% of GDP at the end of 2007 to around 235% of GDP according to the latest available figures in 2014. That's a rise of more than 20 percentage points in the course of just over six years. The increase has been faster in emerging market economies, albeit from a lower initial level, but debt has risen in advanced economies as well.

Not surprisingly, I find myself agreeing with the question posed in the title of a recent *Geneva Report* – "Deleveraging? What deleveraging?" – though not necessarily with all the policy conclusions drawn by the authors.[1]

Today I would like to share with you a few thoughts about debt and its consequences. I will first take stock of where we are by highlighting a few additional figures on debt and sharing some observations on why the current pattern and dynamics of borrowing do not seem to fully reflect the performance of economically sound functions. I will then reflect on the consequences of higher debt levels. I am tempted to call this section "Debt trouble comes in threes", paraphrasing the saying "Trouble comes in threes". In other words, trouble usually doesn't come alone.

Taking stock

How is the 20 percentage point increase in global debt divided between the private and the public sector?

In advanced economies, government debt has risen by close to 40 percentage points of GDP since end-2007 to over 110% of GDP, while private sector debt has fallen by about 10 percentage points. In emerging market economies, the picture is reversed, with private sector debt growing by more than 40 points during the same period to over 120% of GDP, while government debt has risen only slightly. The total debt levels in emerging market economies are mostly still significantly lower than those in advanced economies.

In other words, despite a damaging global financial crisis that resulted from excessive leverage, and despite the deleveraging of specific sectors, there really has been little or no deleveraging in aggregate. Some countries – for example, the United States, the United Kingdom and Spain – have managed to reduce excessive household debt since the crisis, but their government debt has increased substantially. Others, especially among the emerging market economies, have kept public sector borrowing largely under control, but borrowing by their firms and households has run rampant.

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[1] L Buttiglione, P Lane, L Reichlin and V Reinhart, "Deleveraging? What deleveraging?", *Geneva Reports on the World Economy*, no 16, September 2014.

The figures I have cited so far refer to the debt taken on by end borrowers. By contrast, leverage among major banks – at least when measured in relation to their equity – has declined since 2007. In particular, banks worldwide have become better capitalised, thanks to stronger regulation and market discipline.

And from a global perspective, aggregate cross-border bank lending, largely driven by the banks most affected by the crisis, has been relatively subdued since then, although it has shown some signs of growth in the past year. These cross-border banking flows are useful for channelling savings to countries that need resources for investment, but research has found that historically they tend to amplify domestic credit booms and busts – on both the upside and the downside. So, given the initial conditions, cross-border banking flows "taking a breather" may on balance be good news – especially since it has stopped adding fuel to those countries that have been experiencing financial booms.

That said, we see that, at the same time, international bond issuance has hit record highs, especially for emerging market corporates. This development requires some attention.

Let me emphasise that debt, by itself, is not necessarily bad. It performs a useful, indeed vital, economic function. To quote from a 2011 *BIS Working Paper* by Cecchetti, Mohanty and Zampolli:[2] "Finance is one of the building blocks of modern society, spurring economies to grow [...] individuals can consume even without current income. With debt, businesses can invest when their sales would otherwise not allow it. And, when they are able to borrow, fiscal authorities can play their role in stabilising the macroeconomy." The authors' empirical analysis supports the view that, at moderate levels, debt enhances growth, but beyond a certain threshold it becomes a drag on growth – very much in the spirit of the findings by Reinhart and Rogoff[3] as well as some other authors.[4]

In many emerging market economies, the increasing debt stocks reflect, at least in part, progress in the development of their financial systems. Financial deepening contributes to economic well-being and to lower financial and macroeconomic volatility. As more households and businesses gain access to credit, this gives them greater flexibility to smooth out their consumption and to make long-term investments.

In practice, however, debt is often used in ways that don't seem to correspond to economically sound functions. For example, in some of the countries that were hit hard by the financial crisis, households have tended to extract equity from their homes in good times while paying down their debts in bad times. In other words, the availability of housing finance has reinforced the economic cycle, instead of smoothing it. And a recent study by the Swedish central bank found that, despite high levels of household debt in that country, roughly four out of 10 borrowers are not reducing or amortising their debts.[5]

Corporate borrowers also tend to be procyclical – paying down debt in recessions and borrowing to buy back shares during an upswing. The present cycle seems to be no exception. Corporations in advanced economies hoarded cash during the crisis, and more recently they have been issuing debt in order to buy back shares or to fund leveraged acquisitions. Meanwhile, in many economies, high corporate profitability is not being matched by spending on real investments.

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[2] S Cecchetti, M Mohanty and F Zampolli, "The real effects of debt", *BIS Working Papers*, no 352, September 2011.

[3] C Reinhart and K Rogoff, *This time is different. Eight centuries of financial folly*, Princeton University Press, 2009; and "Growth in time of debt", *American Economic Review Papers & Proceedings*, no 100, pp 573–8, 2010.

[4] Bank for International Settlements, *83rd Annual Report*, June 2013, pp 45–6.

[5] J Winstrand and D Ölcer, "How indebted are Swedish households?", *Economic Commentary*, Sveriges Riksbank, May 2014.

While some governments have been able to use fiscal policy to counteract demand shortfalls in the aftermath of the crisis, their ability to perform this stabilising function has sooner or later become constrained by the high debt accumulated during the crisis (or even before). The result has been adverse debt dynamics – despite record low interest rates – with government debt stocks not yet returning to a clearly sustainable path. And some countries, especially on the European periphery, have even been forced to cut spending during the downturn.

What are some of the implications of excessive debt?

In my introduction, I said that the debt trouble comes in threes. At the origin is the build-up of financial imbalances that leads to excessive credit growth. What are the three types of trouble?

The first and the most obvious: the build-up of financial imbalances risks a future financial crisis, an impaired financial sector and a debt overhang.

The leverage that builds up during the boom weakens balance sheets, which reduces borrowers' capacity to repay and their resiliency to shocks. This vulnerability, in turn, magnifies creditors' losses, amplifies market participants' responses and contributes to generating market dynamics that are abrupt and non-linear.[6] Relatively small declines in asset prices can force borrowers to cut back their activities, and in some cases default or reschedule their debts, which is costly for lenders and a potential drag on borrowers' finances. We have seen this type of effect most recently in response to the sharp falls in house prices in countries such as the United States, Spain and Ireland. Similar adverse dynamics can occur if problems hit an overleveraged corporate sector, as several Asian economies learnt in the crises of the 1990s.

This excess sensitivity is just a symptom of the fact that leverage increases procyclicality. Small downside shocks to the economy become transformed, through various channels, into large ones. But the seeds of the problems that materialise in the bust are in fact sown during the boom. There, the procyclicality operates on the upside: borrowers can expand their balance sheets and take on risks too easily, pushing up asset prices and making it easier still to borrow more. The boom sets the stage for the subsequent bust. History has taught us that large external debt is correlated with greater vulnerabilities and potentially sudden stops.

Indeed, research at the BIS has found that when private sector credit-to-GDP ratios are significantly above their long-term trend, banking strains are likely to follow within three years.[7] And right now, a number of emerging economies, as well as some advanced ones, have reached this point in the financial cycle.

And the subsequent debt overhang holds back growth. Households and firms seek to pay back what turn out to be excessive debt burdens, built on the illusory promise of permanent prosperity that the boom had fostered. Expansionary aggregate demand policies lose effectiveness. And, unless the financial sector is fixed quickly, it restricts and, more importantly, misallocates credit: reluctance to take losses keeps credit available for the weaker borrowers and curtails or makes it more expensive for the healthier ones. The damage caused by delayed balance sheet repair following the bust of the boom in Japan is well documented.

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[6] S Morris and H S Shin, "Risk-taking channel of monetary policy: a global game approach", Princeton University, January 2014, mimeo.

[7] C Borio, "The financial cycle and macroeconomics: What have we learnt?", *BIS Working Papers*, no 395, December 2012.

The second, but less obvious, kind of trouble is that debt accumulation fosters misallocations of real resources.

The GDP and credit growth in the pre-crisis boom years were not evenly spread. They were concentrated disproportionately in specific sectors. For instance, in countries like Spain and Ireland, growth in the boom years was largely propelled by the construction sector as well as finance.

Leverage can distort investment decision-making, giving incentives to put resources into projects that promise quick, measurable returns, rather than into longer-term ventures with less certain but potentially more valuable rewards. Such incentives are arguably stronger when leverage is cheap.

The consequence of this association between debt accumulation and real resource misallocation is important. When boom turns to bust, the bloated sectors will have to shrink. Reviving growth in this kind of recession requires flexibility and capacity in the economy to reallocate resources efficiently from less productive to more productive sectors.

Third, financial booms mask deficiencies in the real economy.

Credit booms can act as a smokescreen. They tend to mask the sectoral misallocations that I just described, making it difficult to detect and prevent these misallocations in time. Boom times also tend to hide other slow-moving forms of deterioration in real growth potential. One such example is the trend decline in productivity growth in the advanced economies that started decades ago. Arresting this decline is crucial to achieving sustainable economic growth. Additional examples are adverse demographics and the secular decline of job reallocation rates.[8] What appears fantastically harmonious on the way up thanks to the flattering effect of the credit-driven boom becomes cacophony and fragmentation on the way down.

Conclusion

And so that's why I said debt trouble comes in threes. The combination of these three types of debt-related phenomenon together with policies that neglect the power of financial cycles can give rise to serious risks in the long term. A sequence of such boom-bust cycles can sap strength from the global economy. And polices – fiscal, monetary and prudential – that do not lean sufficiently against the build-up of the financial booms but ease aggressively and persistently against the bust risk entrenching instability and chronic weakness: policy ammunition is progressively eroded while debt levels fail to adjust. A debt trap looms large.

Moving away from the debt-driven growth model of the last few decades is in my view essential in order for the global economy to truly recover from the crisis. This will require efforts from the public and the private sector alike to restore the resilience and reliability of the financial system. But no less importantly, it will require a rebalancing of economic policies so as to support greater flexibility and productivity in the real economy. In other words, a wider but country-specific reform agenda is needed.

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[8] S Davis and J Haltiwanger, "Labor market fluidity and economic performance", paper presented at the Jackson Hole Economic Symposium, August 2014.