

## The coming collapse of credit

Welcome to the 7<sup>th</sup> *Economic Perspectives* seminar here in the magnificent Innholders Hall. I begin by thanking my fellow economists, Tom Traill and Yvan Berthou, for their immense contributions to our research effort and publications, and Dari Raskovic, who has done a great job, taking care of all the practical arrangements for this seminar.

Subscribers to *Economic Perspectives* will have noticed an addition to the publications stable from the beginning of this year – our monthly **Market Focus**. **Market Focus** is where our global macro themes intersect with financial market contexts. We highlight 8 favoured assets every month as practical illustrations of our global macro thinking and offer the opportunity for interaction in a short conference call. If you have not yet discovered **Market Focus**, sample copies are available today.

For several years, our mainstay publications have been **Global Inflation Perspective** and **Global Credit Perspective**. We have built a rich and diverse research archive on both these topics. To clarify, our thoughts concerning the global economic growth narrative flow naturally out of our assessment of global credit conditions. Empirically, for the past 20-plus years, it is **credit** rather than **money** that makes the world go round: the amount of credit, the relative price of government debt at different maturities and the corporate credit spread. In combination, these three variables, we have found, are sufficient to form a reliable – though not infallible – judgement about the near-term outlook for global economic activity.

Using this approach, we have not yet found it appropriate to warn of an imminent global recession. The inflation-adjusted growth of global debt has remained positive, corporate credit spreads have stayed tight and, although the slope of the yield curve has flattened, this has happened gradually. We have been unimpressed by the tumbling manufacturing purchasing managers' surveys, goods inventory pile-ups, the receding pace of industrial output and deflating producer prices. We consider them the by-products of the chaotic dislocation unleashed by the US administration on global supply chains and networks. As long as the largest labour markets in the world are tightening, real wages are accelerating and credit remains generally available and affordable, we judge that final demand will hold firm and the global goods economy will normalise.

The escalation in trade tensions has been accompanied by a spike in various measures of policy-related uncertainty, notably the EPU index. We expect that rising uncertainty will be picked up in credit deceleration but accept that this may not fully capture its growth-dampening effects. Against this, is the dramatic reversal of the net balance of interest rate changes by central banks around the world – from tightening to easing. It is reasonable to expect at least a temporary reprieve for cyclical indicators in response.

However, to devise an asset allocation strategy for 2020 on the flimsy basis of prospective central bank rate cuts and the hope of a meaningful Chinese credit expansion would be cavalier indeed. Especially, when there is a critical development in corporate credit that threatens to undermine the basis for global economic growth in 2020-22. Hence, the focus of today's seminar: **"The coming collapse of corporate credit"**.

The central thesis is that the pricing of corporate credit – in the US, but not only in the US, is bifurcating. The debt issued by a cluster of impressive companies will continue to price off – and sometimes under – their respective government yield curves. But the debt of a fat tail of vulnerable, poorly-rated, corporate borrowers will price according to idiosyncratic risk and illiquidity. We observe this effect most clearly in CCC-rated corporate bonds, but our expectation is that the infection will spread up the debt structure with casualties as highly-rated as BBB. Widening credit spreads will signal

the end of the global economic expansion, with aggravated impacts on capital spending and employment over the next 2-3 years.

Central bank financial repression – expressed until now as the suppression of nominal interest rates, the elimination of the term premium and the compression of corporate credit spreads – appears to be losing its grip on the pricing of the weakest credits. We expect that neither cuts in short-term rates nor the resumption of QE will prevent this bifurcation.

To understand its significance, it is necessary to revisit the speeches made by Alan Greenspan and Ben Bernanke in the autumn of 2002. Quotes from these speeches can be found on page 4 of the slidepack. In the wake of the horrific events of 9/11, the US economy was in poor shape and corporate credit spreads blew out. Greenspan and Bernanke set out to allay the fears of recession and deflation that were rife. Greenspan expressed his confidence in the power of derivatives to disperse risk and absorb economic shocks. He dismissed the likelihood of “cascading failures that could threaten financial stability.”

Bernanke, then a Fed governor, opened up the Fed’s anti-deflation tool kit, declaring that the central bank was not limited in its reflationary abilities by the zero interest rate bound, but would buy government bonds and other assets as necessary to stave off a deflationary scenario. The impact of these speeches was to drive home the message that US companies would not struggle to service their debts. The Fed’s commitment to take powerful reflationary action, as required, was a coded message that corporate defaults would not escalate and that markets were over-pricing default risk. Over the next 18 months, credit spreads crashed. The weakest credits enjoyed the largest revaluations.

Greenspan and Bernanke ushered in what we describe as the “open all hours” corporate credit market; where issuers in different economic sectors, geographies and of varying creditworthiness, would be accommodated at all times. Since 2001, the proportion of high-yield bonds in the total has risen from 40 per cent to 57 per cent. Even during the global financial crisis, issuers of high yield bonds were not denied.

On page 6, we contrast the CCC/BB yield premium with the BB/BBB premium. Notice the dramatic fall in the relative price of the riskiest corporate debt in the latter part of 2002. This situation prevailed for around 10 years, but from 2013 onwards the relative price of CCC-rated debt has steadily increased. This is the beginning of the bifurcation process mentioned earlier.

Why should we look to see widening credit spreads over the coming year? The short answer is profits! As many of you will be aware, there is a marked divergence between the path of profit margins for the S&P 500 companies and for the entire US corporate sector, as derived from the national income and product accounts. The gap is of the order of 200 basis points, which represents the largest positive divergence of S&P margins from NIPA margins since 1999-2000. Moreover, NIPA margins have been shrinking since 2013.

Part of the reconciliation of these two measures lies in the differing accounting treatment of profits in company accounts versus the national income and product accounts. Latitude in the timing of the recognition of profits and losses in company accounts is an example of the different assumptions and conventions followed in the two contexts. Another explanation of the discrepancy reflects the increasing extent to which S&P companies are no longer representative of the US domestic corporate sector as a whole. There is positive skew in the distribution of corporate profitability in the universe of companies, but also within the S&P 500, with the emergence of an elite group of super-profitable companies. A separate academic study of profit markups found that virtually all the trend increase in markups since 1980s was attributable to the gains of the top quartile of companies.

**“In 1980, average markups began to rise from 21% above marginal cost to 61% now. The increase is driven mainly by the upper tail of the markup distribution: the upper percentiles have increased sharply, while the median is unchanged. In addition to the fattening upper tail of the unweighted markup distribution, there is reallocation of market share from low to high markup firms.”**

*Jan De Loecker, Jan Eeckhout and Gabriel Unger, “The Rise of Market Power and the Macroeconomic Implications”, Harvard University, November 22, 2018*

By inference, the profitability of the US corporate sector excluding the S&P 500 companies has eroded markedly. A further downturn in aggregate profitability will have a disproportionate impact down the scale. At a macroeconomic level we observe a deceleration of nominal GDP growth from 6 per cent to 4 percent while wage bill growth remains firm. Operating profits are being squeezed by rising labour and materials costs. The trade war is highly destructive to profit margins as stronger firms are in better position to delay passing on tariff increases to customers. Pages 8 and 9 summarise the evolution of the US after-tax profit share in GDP and the 5-year profits growth rate. Page 11 suggests that the flattening yield curve is a credible leading indicator of the profit share.

The next piece of the puzzle is the behaviour of corporate bond defaults, which have disconnected from the corporate debt-to-GDP ratio since 2011. Financial repression creates a fertile environment for all manner of bad lending practices and the ability to disguise non-performing loans as sound. Financial repression is synonymous with default rate suppression. Based on the behaviour of the manufacturing ISM index, the CCC bond spread should be far wider (page 14). Based on the path of the non-manufacturing ISM index, the BB bond spread should also be much wider.

Financial repression has effectively disabled the fire alarm. The removal of loan covenants has the same effect. The first awareness of the fire risk .... is the flames. What we observe are the consequences of a failed macro-policy framework – the subject of our June seminar, “Blowing up the box!” – namely, non-overlapping concentrations of risk and reward. Credit risk is multiplying for small caps and SMEs. Indeed, the small-cap debt-equity ratio exceeds the large-cap ratio for the first time. Illiquidity premiums are rising for investment grade and high yield bonds (page 19 and 20). The emerging signs of a bifurcation in credit pricing are already visible.

**There are three distinct areas of concern:** high yield corporate bonds where default risk is significantly under-priced; leveraged loans, where weak credits have been buried in illiquid structures – once again; and the echo of high yield within investment grade debt, commonly known as triple-B cliff risk.

**High yield bonds and bond funds** came under heavy pressure in December 2018. Primary dealers, who in times past would have buffered the selling pressure and carried more inventory, did the exact opposite. Financial regulation appears to have reinforced pro-cyclicality. Bid-ask spreads widened (page 22) as redemptions soared (page 23) in the fourth quarter of last year. Bear in mind that there is little or no daily liquidity in four-fifths of the US junk bond universe. The liquidity promised in high-yield ETFs is unavailable in most of their constituents. The policy pivot by the US Federal Reserve arrived just in time, like the cavalry riding over the hill. Watch this space.

**Leveraged loans** sit possibly at the epicentre of the coming corporate credit crisis because of their illiquidity, weak credit ratings and the predominance of cov-lite. The rapid growth of the leverage loan market, and CLOs within it, is suggestive of a final dash before the window of opportunity closes. Lately, discounts have been required more frequently to enable a deal to close and the trailing 12-month return to leveraged loans has evaporated.

Finally, we suspect that there are serious credit problems lurking in the **triple-B tranche of the corporate bond market**. The credit ratings of some very large and very indebted companies are leavened by favourable weighted contributions from non-balance sheet metrics. Deteriorating profitability and diminishing access to affordable refinancing terms could weaken the credit outlook for some wounded beasts, to the point where investors prudently bale out of their debt. Beware the *de facto* downgrade from triple-B to junk rating. In the case of an actual downgrade, the largest companies would overload the junk universe by joining it.

What is the significance of widening credit spreads for the economic outlook? Credit spreads are an embodiment of the concept of the “external finance premium”, a concept well-understood by former Fed chair Ben Bernanke since he wrote the manual. In his seminal paper with Mark Gertler in 1995, entitled “Inside the Black Box: The Credit Channel of Monetary Policy Transmission”, Bernanke argued that “The 'credit channel' theory of monetary policy transmission holds that informational frictions in credit markets worsen during tight-money periods. The resulting increase in the external finance premium--the difference in cost between internal and external funds-- enhances the effects of monetary policy on the real economy.”

What Bernanke means by “informational frictions” is the additional cost of finance demanded by external parties to compensate for their knowledge deficit relative to the management of the company. In easy-credit periods, such as those prevailing since the GFC, the external finance premium is low and, implicitly, trust is high. If the providers of the external finance are reach-for-yield investors with no interest in due diligence, then the external finance premium can become very low indeed.

However, when credit pricing bifurcates and credit conditions tighten for the weakest segments of the market, then the external finance premium rises to reflect the uncertainty regarding the company’s financial performance and the tradability of its securities. The greater the artificial compression of credit spreads going into a downturn the greater the scope for an explosive rebound. As the marginal cost of capital rises, companies postpone purchases to conserve internal funds and minimise on the use of external finance. This is the source of the contractionary dynamic that amplifies and/or prolongs the downturn and delivers adverse outcomes for investment spending and unemployment.

Ex-Fed governor Jeremy Stein and his research partners published a major study of the impact of credit pricing and credit market sentiment on the business cycle in 2017. They discovered, using US data from 1929 to 2015, that “elevated credit-market sentiment (tight credit spreads) in year  $t - 2$  is associated with a decline in economic activity in years  $t$  and  $t + 1$ . Underlying this result is the existence of predictable mean reversion in credit-market conditions. When credit risk is aggressively priced, spreads subsequently widen. The timing of this widening is, in turn, closely tied to the onset of a contraction in economic activity. Exploring the mechanism, we find that buoyant credit-market sentiment in year  $t - 2$  also forecasts a change in the composition of external finance: net debt issuance falls in year  $t$ , while net equity issuance increases, consistent with the reversal in credit-market conditions leading to an inward shift in credit supply. Unlike much of the current literature on the role of financial frictions in macroeconomics, this article suggests that **investor sentiment in credit markets can be an important driver of economic fluctuations.**”

This is the scenario that we now face, after a decade of default risk suppression and artificially tight credit spreads. Note that, in the latter stages net debt issuance falls and net equity issuance increases. There is a clear warning here to those parts of the equity market that have enjoyed the support of debt-funded share buybacks.

To summarise:

- Financial repression is losing its grip on credit spreads for the weakest and least liquid high yield bond issuers and credit conditions are tightening for a fat tail of unprofitable/ cash flow negative businesses
- Central banks are no longer able to throw their cloak of protection over the whole credit spectrum. Credit markets will no longer be 'open all hours'
- The catalyst for the bifurcation of credit pricing is a downturn in aggregate corporate profitability, aggravated by the positive skew in the distribution of profitability.
- As the weak go the wall in increasing numbers, a new loan and bond default cycle will take shape despite the best efforts of central banks to prevent it. This cycle is likely to become severe and prolonged, due to the sustained compression of credit spreads in defiance of price discovery, with profound economic and political consequences.
- The inflationary implications of the collapse of the weaker segments of corporate credit are ambiguous: although failed businesses imply rising unemployment and weakening corporate pricing power, economic capacity will be destroyed and aggregate demand will be supported by a robust fiscal response

It should come as no surprise to see manifestations of skewed distributions and disparate outcomes in the corporate dimension as in the personal and household dimensions. The corporate sector has its own rich and poor neighbourhoods, its own lush pastures and wilderness places, its own oases and deserts. The difference is that there is no welfare system, other than access to cheap money. When this is taken away, the result is a rising incidence of insolvency and default.

**Peter Warburton**

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