

MONTHLY MACRO OUTLOOK

07
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2018

ThirdRock

KEY MACROECONOMIC DEVELOPMENTS

- The steady rise of debt, both public and private, is one of the more compelling signs of emerging imbalances right now
- Government balance sheets suggest that some nations are better positioned to repay their obligations than others
- The U.S. economy remains solid in the face of recent market turmoil, although some weakness is beginning to surface

This month, we explore the pressing issue of total debt; not just from public borrowers—beloved among those with an eye on emerging market (EM) sovereign debt—but also the stock of private (in particular, household and corporate) debt. While many observers tend to think of public debt as a uniquely EM problem and substantial private debt buildup as only possible in developed markets (DMs), we show that post-crisis trends actually reveal the opposite. We riff off this dive into debt by looking at public balance sheets, more generally. We close with a look at the underlying macro fundamentals for the U.S. economy, which is especially cogent in light of recent market volatility.

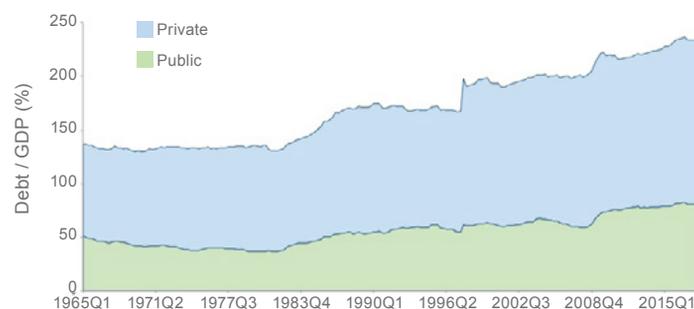
DEBT IN A TIME OF PLENTY

The world is awash in debt. At the global level, total debt—comprising both public and private borrowing—amounted to 235 percent of global output in the first quarter of 2018 (in dollar terms, this is a staggering \$250 trillion). This increase is perhaps all the more remarkable given that the mid-2007 debt share stood a little shy of 200 percent. You may also recall, of course, that the global crisis of 2007/08 was, in no small part, due to unsustainable debt burdens (housing debt principally in Dubai, Ireland, Spain, and the U.S., and sovereign debt across many European economies).

Yet here we are: a decade after the worst debt-induced crisis in modern memory, and yet the inclination to pare back on leverage remains largely unabated.

Before we dive deeper into details, some history may be in order. After remaining fairly stable through till the tail end of the 1970s, debt stocks (as a share of GDP) began to rise (Fig. A). This entailed public debt—emanating mainly from Latin American governments seeking finance for major infrastructure development projects, and enabled by Middle Eastern lenders eager to recycle windfall oil revenue—as well as private debt, as banks in the region expanded their balance sheets financing investment and consumption. The episode eventually ended in tears in the early 1980s, and arrested total debt accumulation for a good decade. There were intermittent instances of EM debt troubles, undoubtedly—Mexico in 1994 comes to mind—but the rising debt trajectory was largely contained.

FIG. A: THE WORLD HAS BECOME EVER-MORE INDEBTED SINCE THE 1980S, WITH AN ACCELERATION AFTER THE ASIAN CRISIS



Source: Thirdrock calculations, from BIS.

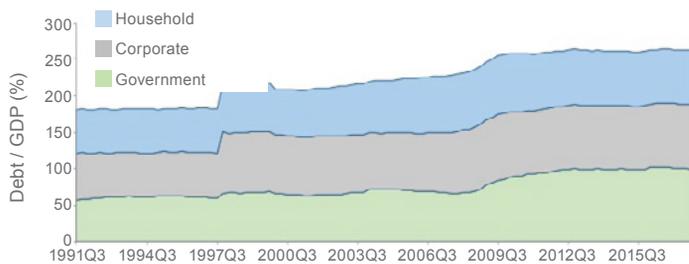
Notes: Credit to private nonfinancial (series Q...P:A:M:XDC:A) and general government (series Q...G:A:N:XDC:A) from all sectors, market value for private, and nominal value for public (except Korea), adjusted for breaks. Jump at 1997Q4 is partially an artifact of the data, representing the inclusion of Japanese government debt into the database but exacerbated by the Asian crisis.

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At least till the mid-1990s. Bolstered by solid growth records and local currencies implicitly tied to the dollar, private borrowers in East Asian economies began to crank up their borrowing. This exploded in the Asian crisis of 1997, which spread like contagion to other EMs—Russia in 1998, and Latin America (again) in 1999—such that by the 2000s, global total debt had jumped another quantum to a little less than 200 percent of global output.

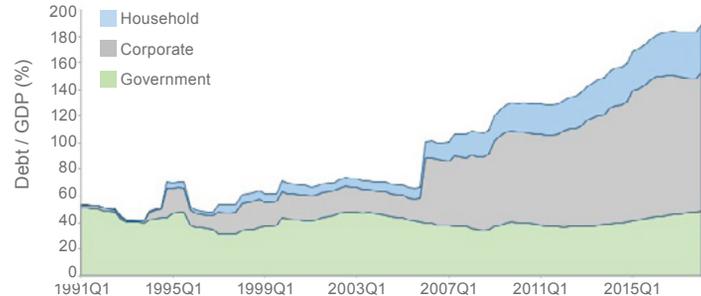
Yet none of that history has prepared the world for the acceleration of debt since the financial crisis. The dip in debt growth that followed the crisis was vanishingly brief: owing to government bailouts, global public debt had resumed an upward path by 2009, and private debt pretty much followed about a year or two later. A finer breakdown reveals the divergent paths followed by advanced relative to emerging economies. For DMs, it is clear that total debt is rising by dint of increases in the public debt burden; since the crisis, public debt has increased by 50 percent, to almost 100 percent of GDP in the first quarter of this year (Fig. B). In contrast, the source of the rising tide of total debt in EMs stems from private—more specifically, corporate—debt (Fig. C). The growth in this instance has been even more rapid: over the past decade, corporate debt has doubled its share of GDP.

FIG. B: ADVANCED ECONOMY DEBT AFTER THE GLOBAL CRISIS HAS BEEN ATTRIBUTABLE TO GOVERNMENT BORROWING



Source: Thirdrock calculations, from BIS.
Notes: Credit to nonfinancial household (series Q:...:H:A:M:XDC:A), corporate (series Q:...:N:A:M:XDC:A), and general government (series Q:...:G:A:N:XDC:A) from all sectors, market value for private, and nominal value for public, adjusted for breaks. The discrete jump at 1997Q4 is partially an artifact of the data, representing the inclusion of Japanese government debt into the database, but was exacerbated by the 1997 Asian crisis.

FIG. C: POST-FINANCIAL CRISIS, THE RAPID ACCELERATION IN EM DEBT HAS BEEN DUE TO CORPORATE BORROWING



Source: Thirdrock calculations, from BIS.
Notes: Credit to nonfinancial household (series Q:...:H:A:M:XDC:A), corporate (series Q:...:N:A:M:XDC:A), and general government (series Q:...:G:A:N:XDC:A) from all sectors, market value for private, and nominal value for public (except Korea), adjusted for breaks.

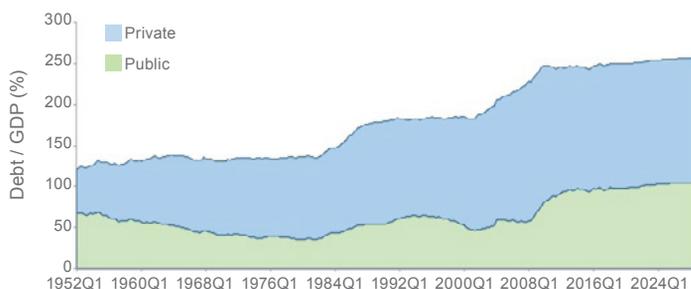
What is perhaps most surprising about this new pattern of debt accumulation—especially in light of the history discussed above—is that, traditionally, EMs have typically struggled with government debt, especially external sovereign debt issued in a foreign currency. Recent woes in Argentina and Turkey are a reminder that this sort of debt dynamic is certainly not behind us, but it is nevertheless insightful to contrast the much more modest pace of government debt pickup in EMs since 2007, versus the larger bump in government debt for DMs as a whole. DM governments—often viewed as more temperate when it comes to fiscal prudence, and moreover do not have to deal with the “original sin” of being unable to borrow in their domestic currencies. Still, it must be worrisome to even to the most stoic observers that government debt in the industrialized economies is a little more than double that in the developing world. This significant public debt burden owed by DMs is belatedly coming into focus with Italian debt shenanigans, although we’d point out that the Italians are far from the only perpetrators of debt largesse among their peers.

Such public debt growth tends to be especially corrosive for growth, which post-crisis DMs are already struggling with in general, owing to very weak productivity growth. Our estimates suggest that a one standard-deviation increase in public debt accumulation (amounting to about 35 percentage points, which is comparable to the average debt buildup in DMs) translates into a cumulative drag of about 0.3 percent of output growth, realized over the course of the following

year. Although seemingly small, these 30 basis points—a number broadly in line with other estimates in the academic literature, much of which stress the detrimental consequences of excessive public debt burdens on economic activity—is a slowdown that that already anemically-growing DMs can ill-afford to lose.

This applies even to the currently high-flying U.S. economy. As mentioned in an earlier Outlook and by the IMF, the U.S. has the dubious distinction of being the only advanced economy expected to increase its debt share of GDP over the next decade, rather than decrease it. Rather than making hay while the sun is still shining, the world's largest economy—and in absolute terms, by far the world's largest debtor nation—has chosen to run large fiscal deficits, late in the cycle. The direct consequence of this choice is a projected increase in total debt (even holding the shares of private debt constant) to 256 percent of GDP by 2028 (Fig. D), accelerating to as much as 317 percent by 2048. It is this sort of troubling debt dynamics that has us concerned for the medium to longer run, a fact that fixed income traders appear to be increasingly pricing into the long end of Treasury rates.

FIG. D: EVEN WITH STABLE PRIVATE DEBT, TOTAL DEBT IN THE U.S. WILL BREACH 250 PERCENT OVER THE NEXT DECADE



Source: Thirdrock calculations, from BIS and CBO.
Notes: Credit to private nonfinancial (series Q:...:P:A:M:XDC:A) and general government (series Q:...:G:A:N:XDC:A) from all sectors, market value for private, and nominal value for public, adjusted for breaks. Estimates of public debt from 2018-28 rely on CBO projections, and holds private shares constant.

It is worth noting that some of the usual DM suspects—Japan and the Euro Area—do not feature as prominently in this round of debt buildup. While public debt in Japan has continued to inch upward, this has been offset by reductions in the liabilities of corporate Japan; total debt has, as a result, remained pretty much

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constant at about 356 percent of output since the end of 2012 (still an eye-popping number, but old Japan hands will recognize that most of this debt is owed to its own citizens, and Japan remains a net creditor on a global basis. Another surprise comes from the Euro Area, which has remarkably seen its public debt drop: between mid-2014 (when public debt peaked at 93 percent of GDP), the supposedly chronically fiscally- challenged region shaved 7 percentage points of its aggregate public-sector balance sheet, crisis of the euro be damned.

The picture for EMs might also strike grizzled observers of markets as somewhat unexpected. The private sector in developing countries has generally not built up much leverage, preferring to finance capital expenditures with retained earnings. But the rise of state-owned enterprises (SOEs) across EMs, alongside greater access to capital markets due to financial globalization, has seen an enormous expansion of corporate debt by firms from the global South. Nor is this only a China story, even though (as might be expected) China is the 800-pound gorilla (dragon?) when it comes to looking at EM debt buildup. From Brazil's Banco do Brasil and Petrobras, to the Kremlin's control over more than 4,000 Russian corporations, to the vast reach of the Emirati royal families into finance, real estate, shipping, and sport, SOEs have extended their reliance on leverage even as they have expanded their influence into the global economy.

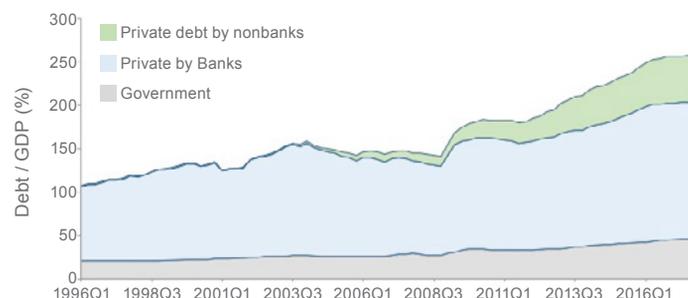
Mind you, there are good economic reasons for the gradual expansion of private debt over time. In particular, as the economic development and

financial system of a country matures, we would expect credit to the private sector to increase, since the carrying capacity of the economy would have gradually ramped up. Investment opportunities in a growing economy will need to be financed, and it is natural for entrepreneurs to exploit leverage to maximize profitable returns. Indeed, there is substantial academic research that demonstrates that financial development of this nature is not only associated with but may actually be an important driver of growth. So we are not surprised that, with per capita incomes in the global economy having risen from \$4,400 in the mid-1960s to more than \$10,600 last year (in inflation-adjusted dollar terms), higher debt shares would be a very natural outgrowth. Indeed, the increase of debt by around 1.7 times since then is actually smaller than the multiple for income growth (of 2.4).

And yet, and yet. As is the case for public debt, it is not so much rising private sector borrowing that worries us, but the speed with which such corporate liabilities have accumulated. Our estimates suggest that, like public debt increases, speedy growth in firm debt can pose barriers to growth of a similar (albeit slightly smaller) order. And nowhere is the concern about firm borrowing more stark than in China, which has amassed corporate debt at 164 percent of output—almost a third the outstanding debt stock—and has exhibited difficulty in pruning this down, even with their previously-tired strategy of debt-for-equity swaps.

Perhaps just as worrying, China has a number of debt exposures that go beyond the headline figures for private and debt burdens. Insofar as private debt is concerned, shadow debt issued by non-bank entities (a topic we first broached in the middle of the year) has not only failed to improve, but—after an earlier plateau between mid-2016 and mid-2017—has now appeared to be on the march again (Fig. E). The first quarter of this year saw an uptick of shadow banking issuance to 55 percent, a 2 percentage point increase over the past year. Progress is also threatened by the People's Bank's decision to offset some of the trade-related hit by reopening the credit spigots; with total social financing no longer on a contractionary posture, it is difficult to imagine how some of these funds do not flow to the informal banking sector.

FIG. E: WHILE CHINA HAS RESTRAINED CORPORATE DEBT BUILDUP SOMEWHAT, THE SHADOW BANKING SECTOR STILL LOOMS LARGE



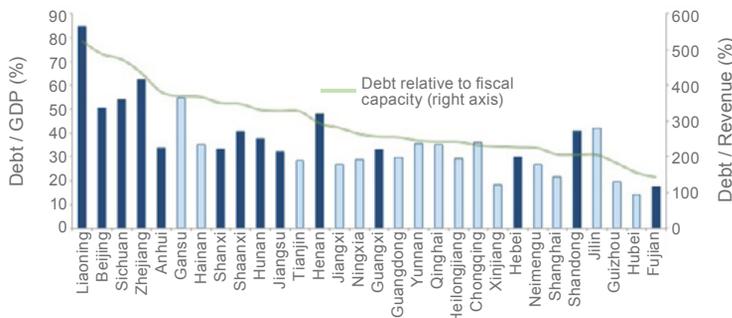
Source: Thirdrock calculations, from BIS.

Notes: Credit to general government (series Q...:G:A:N:770:A), private nonfinancial sector from all sectors (series Q...:P:A:M:770:A) and banks only (series Q...:P:A:B:770:A), with nonbank (shadow) issuance calculated as the difference between the latter two. Market value for private, and nominal value for public, adjusted for breaks.

The public side of the ledger faces its own form of shadow debt: the buildup of provincial borrowing. In principle, subnational debt is rolled into central government debt, and so the low aggregate public debt share should be reassuring. But local governments have a history of concealing true debt burdens by relying on local government financial vehicles (LGFVs)—indeed, the explicit recognition of off-budget local government debt led to a more than doubling of central government debt in 2014—but the practice of informal borrowing via LGFVs has remained largely unabated, and current IMF projections for Beijing's relatively gentle increase in anticipated debt burdens through till 2022 do not take a potential blowup in such subnational borrowings into account.

There are at least two additional reasons why we are monitoring the provincial debt situation closely. First, while the focus is often on the provincial debt share—ranging from highs in excess of 80 percent of gross provincial product (Liaoning) to lows in the low teens (Hubei)—what is potentially more relevant to stability concerns are repayment capacity (defined as the ratio of debt to revenue), and the political sensitivity of the relevant indebted regions (Fig. F). The former is important for ensuring the sort of liquidity necessary to avoid defaults, while the latter has been the concern of Chinese leaderships for time immemorial; many a dynasty have been toppled owing to poorly managing political unrest.

FIG. F: PROVINCIAL DEBT/OUTPUT IS LESS RELEVANT TO STABILITY PROSPECTS VERSUS REPAYMENT CAPACITY AND POLITICAL ENSITIVITIES



Source: Thirdrock calculations, from NBS, NAO, and China Labor Bulletin.
Notes: Gross provincial product are the provincial output shares of national GDP. Data are for 2013, based on NAO audit results. Navy bars are provinces with above-median protest activity.

Incidentally, China’s penchant for expanding leverage as a development strategy has also had consequences elsewhere in the developing world. China’s Belt and Road Initiative (BRI) has recently garnered headlines, but of the sort China would probably rather avoid: countries as wide-ranging as Malaysia, Pakistan, Kenya, and Tonga—along with international institutions such as the Asian Development Bank and the IMF—have flagged the possibility of a “debt trap” for emerging markets that pile on BRI-related infrastructure loans. Not all BRI projects have paid off in the manner envisioned by either China or its EM borrowers; this further toll from ongoing payments—typically extended in relatively heady economic times—will become a more pressing

concern when the winds of economic change inevitably shift.

An old banker’s dictum (attributed to Paul Getty) asserts that if you owe the bank \$100, that’s your problem; but if you owe the bank \$100 million, that’s the bank’s problem. More poignant these days is that the huge global debt burden is truly the world’s problem.

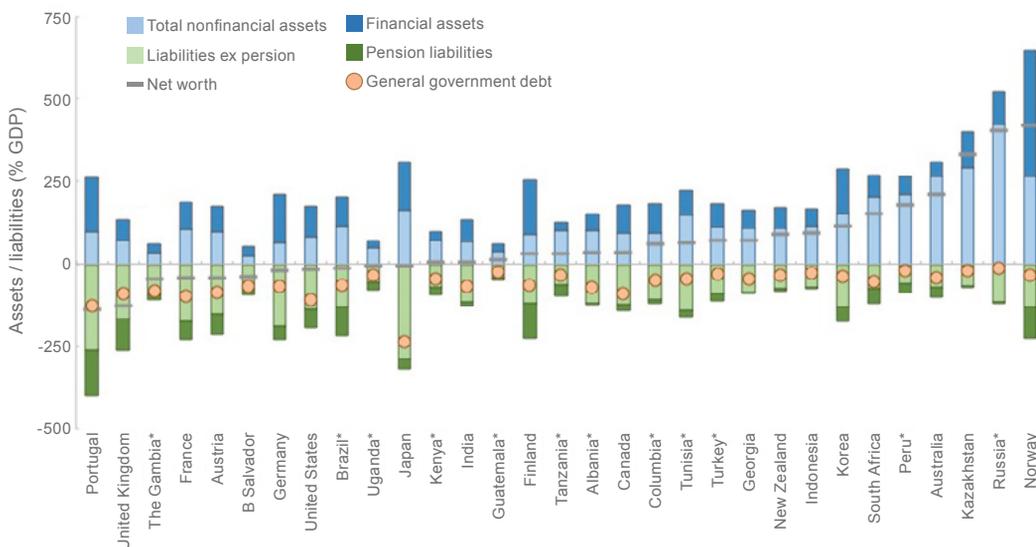
THE PUBLIC WEALTH (OR POVERTY) OF NATIONS

Following our expansive (and possibly depressing) tour of countries’ liabilities, it is worth taking a careful step back to examine whether this doom-and-gloom scenario of seemingly inexorably-rising rising debt can ever be remedied. On possible bright spark, then, is that—by and large—nations are not overburdened beyond what they can possibly handle. Put another way, a holistic view of the full balance sheet of the public sector tends to reveal that.

Adam Smith, often known as the father of modern economics, titled the work that established his claim The Wealth of Nations. Yet economists have rarely deeply explored this matter with much zeal, not least because tracking the many implicit liabilities and poorly-valued nonfinancial assets seems like it would be too gargantuan a task. Thanks to the hardworking beavers at the IMF, however, we now have a snapshot of how such balance sheets—at least on the governmental level—and the message from

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FIG. G: PUBLIC BALANCE SHEETS GENERALLY REVEAL FEW LIABILITIES THAT ARE NOT MOSTLY COVERED BY ASSETS



Source: Thirdrock compilation, using IMF Fiscal Monitor
Notes: Estimates based on a single year of data, typically between 2013 and 2015

this exercise is both concerning but also reassuring (at different levels).

We'll start with the bad news. Public debt is only a (relatively small) part of the picture. Once one factors in additional governmental obligations—including pensions and other implicit liabilities—it is clear that the sum total of such potential payouts generally far outweigh the debt burden, in many instances by several times (the notable exception here is Japan) (Fig. G). In a number of alarming instances—such as Austria, Germany, France, Portugal, and the United Kingdom—liabilities balloon to twice the explicit governmental debt burden. This, of course, is not news to most keen observers of advanced- economy fiscal affairs, and indeed is the premise for efforts aimed at reforming the retirement system.

And now the slightly sunnier news. Government assets, in general, are quite substantive. The combination of all public nonfinancial and financial holdings is, for the vast majority of economies, either larger or broadly comparable to the size of liabilities (Portugal and the UK again stand out here). And just as comforting, in many cases these are not just comprised of nonfinancial assets—the valuation and disposability which may well be questionable—but also financial assets, which are typically marked to market and often can be liquidated to meet liability calls.

Just as important, these assets serve as collateral that undoubtedly help shore up the credibility of the public finance system; if governments are known to have enough assets to use as actual collateral, the ability of the government to borrow is even greater, since all governments also have the ability to raise revenue

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through taxation indefinitely into the future (this is why in principle any government that maintains the ability to print its own currency can never technically go bankrupt, so long as most of its debt is denominated in local currency. As an aside, if one ever needs a simple explanation for why Japan can sustain its 236 percent-of-GDP government debt ratio—besides the fact that it's all owed mostly to Japanese themselves—the justification is right there in the figure: Japan's government balance sheet nets out to about zero.

So there we have it. It is not so much the ability of governments to make good on their debt or even all their outstanding obligations, explicit or implicit. Rather, it is their willingness to do so, since most clearly have the asset backing to net out these liabilities (likely to the detriment of future generations, since this amounts to selling off their collective national inheritance; but then again, our children would also not be held liable for debt they did not directly incur). Whether they choose to meet these obligations is another matter, but it is important to keep the fact that it is not for lack of resources.

From the investor perspective, this information certainly leads us toward more caution with regard to Portuguese and UK fixed income, and corroborates our point, made in previous Outlooks, that Japanese equity assets are often underrated by markets. On the flip side, conditional on a solid framework for the rule of law, we would look favorably on assets in Oceania (Australia/New Zealand), as well as Norway.

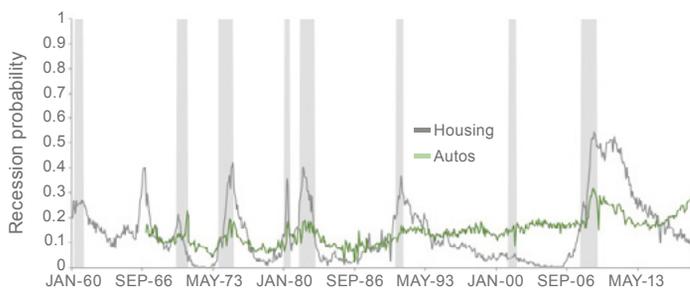
UNITED STATES: STILL STANDING TALL, BUT THERE ARE CHINKS IN THE ARMOR

With U.S. Treasury yields spiking and equity markets in turmoil, it is worthwhile revisiting the U.S. macro landscape—not least because so much of trading sentiment appears to be centered on expectations of continued support from macro fundamentals—without which the downturn in risk assets may well become a more protracted affair. Back in May, we suggested that financial markets were pricing a much higher probability of a U.S. recession than prevailing macro fundamentals implied; over the past half year, these distinct probabilities have again converged, in favor of the economic data. But a number of economic series are beginning to poke holes in the otherwise solid edifice of the American macroeconomy.

Before examining these indicators, it's probably worth pointing out—as many others have—that the recent corrections were widely anticipated, if not perfectly predicted. The proximate cause was, of course, that Treasury yields had already repriced significantly upward. Whatever the reason behind those increase in yields, it was inevitable that equity prices would at some point reflect the inherently higher discount rates applied to the future stream of dividends. Moreover, U.S. equity markets had also run significantly ahead of not only EM stock aggregates but also other DM indexes. Even setting aside traditional valuation metrics—which had been flashing varying degrees of overvaluation prior to the correction—and even with the enviable status as the shiniest knife in the drawer, the largely unabated equity rally looked to be increasingly untenable.

And how shiny is that knife? Well, we've been closely following the high-frequency data over the past year and a number of signals have begun to nag at us. The first relates to the sales of consumer durables. This is well-exemplified by recession probabilities calculated exclusively using data on auto sales (Fig. H). As is evident, on the sole basis of this metric, the risks of recession have risen to exceed every other previous cycle since 1973. The auto slump is, of course, simply reflective of a more generalized weakening in the sales of such goods, which is likely to slump even further in response to rising prices that result from the Trump administration's tariff actions.

FIG. H: CRACKS ARE BEGINNING TO EMERGE IN SELECT SECTORS OF THE U.S. ECONOMY, NOTABLY IN CONSUMER DURABLES AND HOUSING



Source: Thirdrock calculations, using BEA and Census Bureau/ Datastream.

Notes: Recession probability based on a univariate probit model, with constant. Coefficient for independent variable (new building permits for housing, new passenger car sales for autos) computed with Huber-White robust standard errors, and is significant at standard levels.

“ It is not unwise to hedge for [recession] eventuality by taking some risk off the table, notably with rotations into more defensive sectors. ”

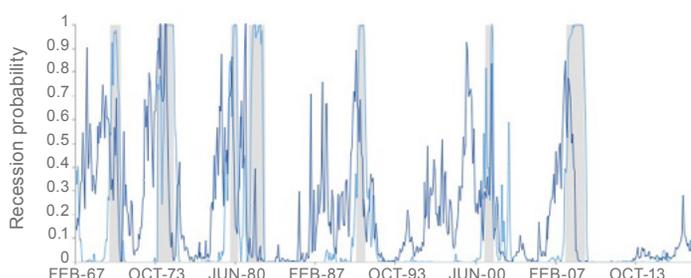
The other indicator that has sent a worrying warning stems from housing. The slowing housing market has occupied our minds for a while now, and as can be seen, recession risks based on this indicator alone have been ticking upwards (albeit still below the 40 percent or so probability that is more reliably associated with recessions). And while the rapid price appreciation alongside rising mortgage debt growth has mainly been limited to a number of (mainly Western and Eastern seaboard counties), a careful look at a number of alternative housing metrics reveals a difficult-to-deny inflection since the end of the first quarter. So the housing data offers another point of corroboration to the point about weak spots.

It's probably worth noting at this stage that these two ingredients maketh not the recession omelet. The suite of macro indicators currently points to an essentially zero probability of a recession onset, and even financial market indicators have tamed, and point analogously to negligible recession risk (here, those that have appealed to the flattening yield spread between 2 and 10-year Treasuries ignore two essential points: first, that simple extrapolation of the 2/10 trend is problematic, since it does not account for the likelihood of the long end rising due to steadily rising term and default risk premia; and second, that the far-more-predictively-accurate spread between 3-month bills and 10-year bonds has been flattening, rather than falling, since midyear). So we remain calm about whether the U.S. is contemporaneously in a recession (lest one thinks such real-time determinations should be obvious, it is worthwhile recalling that the massive 2007/08 recession was only called almost a full year after its onset, and as late as mid-2008 there were still debates over whether the U.S. was in fact undergoing a contraction).

That does not mean, however, that we see no problems on the horizon. This becomes evident once we contrast current recession probabilities to those one year ahead,

using a combination of macroeconomic and financial market measures (Fig. 1). And there, we see clearly that recession risks are rising. To be clear, they remain low—in the order of around 7 percent by our estimates—but a sharp spike in probability in the recent past (which has since collapsed) is reminiscent of the sort of warning spikes we see prior to actual recessions. Such elevated risks do not, alas, definitively allow us to peg down precisely when the next U.S. recession might occur, but hint at the likelihood of trouble as close into the future as a year ahead. Once the economy begins to go south, the probability of a recession's onset tend to rise very quickly, as the data rapidly turn sour. It is not unwise to hedge for that eventuality by taking some risk off the table, notably with rotations into more defensive sectors, a strategy many have already begun to pursue, if indicators of investor positioning are anything to go by.

FIG. 1: ALTHOUGH CONTEMPORANEOUS RECESSION PROBABILITIES IN THE UNITED STATES REMAIN LOW, RISKS ARE RISING ONE YEAR OUT



Source: Thirdrock calculations, using ISM/Datastream.

Notes: Recession probability based on a multivariate probit model, with constant. Coefficient for independent variables computed with Huber-White robust standard errors, and are all significant at standard levels. Independent variables include ISM PMI, consumer confidence, auto sales, housing starts, initial claims, the unemployment rate, the 12M lagged 10Y/3M treasury yield spread, and the DJIA index.

Just as important, while many observers are currently pricing in a comparatively shallow recession when it comes round—citing the fact that few large imbalances are evident on the horizon—what would otherwise be a shallow recession could well turn out to be deeper and more prolonged, due to the inability of the government to deploy decisive countercyclical macro policy (with the late-cycle fiscal stimulus, the room for additional government spending will be constrained; and even if the recession were to occur only in two years, the level of interest rates would be insufficiently high enough to entail a deep cut). Were this to be the case, any equity market correction may be more severe than many are currently expecting.

On our part, we recognize this as a tail risk, but one of rising concern as the expansion powers on. Our impression is that the Fed is also treating it pretty much as one, and indeed is actively working to free up wiggle room for interest rate cuts when it becomes necessary. That is why we believe that the Fed will most likely stay the course in its telegraphed rate hike cycle.

All that said, as we pointed out above, the U.S. economy remains, for now, the strongest-performing advanced economy on a relative basis, and all the more after the gradual reversion of the Euro Area toward its longer-term trend. While macro surprises are becoming increasingly rare, underlying activity still powers substantially over potential (to the extent that analysts are beginning to update their estimates of U.S. growth potential to something closer to 2 percent, from about 1.6 percent as recently as a year ago). And any slowdown thus far remains a “second-derivative” concern: a relative slowdown in an otherwise blistering growth rate, not a fall in the growth rate into negative territory. This late-cycle run still has legs yet.

INVESTMENT TAKEAWAYS

We had begun the process of rebalancing our U.S. equity portfolio to take some risk off the table, but of course that has not fully insulated us from recent market volatility. Markets have settled somewhat, but we expect volatility to remain elevated in the absence of decisive macro fundamental support, a point we made earlier this year. We do not recommend trying to identify market bottoms, but rather to allow the turmoil to play itself out before making portfolio allocation decisions. Our medium-term theme of focusing on financials and healthcare remains, along with growth-led areas of tech (AI, robotics, cybersecurity). We remain guarded about heading too boldly into EM equities at this stage—and certainly not until current market conditions settle—except selectively where valuations are starting to look attractive. Within EM equity space, we are relatively more bullish on Asia relative to other parts of the world. We maintain that remaining short duration on DM fixed income, given the late stage of the U.S. business cycle, and the largely unabated hiking path for the Federal Reserve. As always, the more cautious can purchase protection via taking on yen exposure, or looking to inflation-protected treasuries.

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