



ASIAN BONDS - ENTERING QUALITY TERRITORY

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Asian bonds have seen strong growth and may offer quality diversification potential.



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- _ Asia is entering the upper class of bond markets. Measured in terms of credit quality, yield and volatility, Asian bonds have already made considerable progress. Asia also has clear structural advantages.
- The volume of the Asian dollar bond market has more than quadrupled within ten years. It is now the largest of the emerging-market regions.
- _ Asia may offer good diversification opportunities for international bond portfolios. High issue volumes and the U.S.-Chinese trade conflict, however, are currently weighing on the market.

BLURRY BORDERS BETWEEN DEVELOPED AND EMERGING COUNTRIES

The division of the world into developed (DM) and emerging markets (EM) may be an out of date classification. To a degree the current trade conflict is an example of how little separates the developed from the emerging. The United States is reacting extremely nervously to China's rise to second largest global economy, right next to America in the global power hierarchy. In capital markets, on the other hand, the old order still prevails – at least in the perceptions and classifications of the norm-setting index providers. The division into DM and EM sometimes has somewhat peculiar effects. Countries such as South Korea, Hong Kong or Singapore are listed as emerging markets, along with Russia, Saudi Arabia or Pakistan. But this does not change the fact that for many investors emerging markets are a separate, self-contained asset class, not to be mixed with, for example, U.S. corporate bonds.

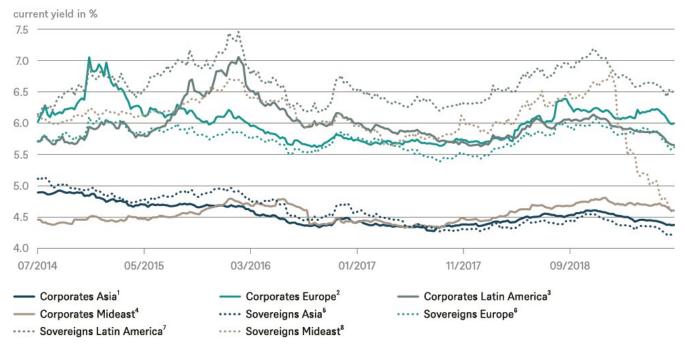
In our view, Asian hard-currency bonds in particular do not deserve this skepticism. On many parameters they are at least on par with developed countries, and well ahead of most other EM regions. Ownership is one aspect of this

superiority. Almost four-fifths of Asian dollar-bond issues are now taken up by Asian investors, which, in our opinion, increases this asset class's stability.

What favors Asian bonds less is that, although listed as emerging, they generally offer returns close to those of developed-country assets. This has become less the case recently, however. In the spring, the U.S. and European central banks made it clear that their key interest rates might go down again. This accelerated the decline in yields on developed bond markets that had already been in place for some months, and generated a rise to a record 13 trillion dollars in bonds with negative yields worldwide in June.¹ Negative interest rates have even spread to the eastern periphery of Europe, with Poland, the Czech Republic and Hungary also now receiving money for borrowing. Asia is still a long way from this, as the chart below shows. And in the current environment of ultra-low interest rates, in which every basis point counts, this should ensure more attention for the region. Developed central banks' renewed dovishness has also dissipated investors' fears that liquidity could flee emerging markets.

¹ Source: https://www.bloomberg.com/opinion/articles/2019-07-29/negative-yields-could-be-the-death-of-bond-markets as of 7/30/19
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EMERGING-MARKET BONDS BY REGION AND STATUS (CORPORATE VS. SOVEREIGN)



Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 7/10/19

- ¹ J.P. Morgan Corporate Emerging Markets Bond Index Broad Asia
- ² J.P. Morgan Corporate Emerging Markets Bond Index Broad Europe
- ³ J.P. Morgan Corporate Emerging Markets Bond Index Broad Latin
- ⁴ J.P. Morgan Corporate Emerging Markets Bond Index Broad Mideast
- ⁵ J.P. Morgan Emerging Markets Bond Index Global Asia
- ⁶ J.P. Morgan Emerging Markets Bond Index Global Europe
- ⁷ J.P. Morgan Emerging Markets Bond Index Global Latin
- ⁸ J.P. Morgan Emerging Markets Bond Index Global Mideast

PECULIARITIES OF EMERGING-MARKET INDICES

The chart highlights a number of distinctive features of emerging-market bonds.

- Yields on corporate-bond indices are on average lower than those on government-bond indices.
- _ The four regions divide into two: in Latin America and the Middle East, yields are well above those in Asia and (broadly defined) emerging Europe.
- The index composition is more dynamic than for developed-country indices, with a corresponding impact on the key figures for the index.² In general, there are some structural differences between emerging-market indices, which makes comparisons challenging (see appendix for more).

DRIVERS OF ASIAN CAPITAL MARKETS

The Asian bond market is currently being driven by a range of global and local factors.

Not surprisingly, the U.S. trade conflicts with China and other countries are having a strong influence. The G20 meeting did not lead to any further escalation of the conflict with China nor was the dispute resolved. It continues to smolder in the background and is likely to deter investment and provoke further disruptions and shifts in value chains.

- U.S. interest rates and the strength of the dollar are extremely important for bond markets and inflows into the region. The start of the U.S. interest-rate hike cycle a few years ago caused some nervousness. Bonds have performed well this year after it became clear that the U.S. Federal Reserve (Fed) is now more likely to lower interest rates than raise them.
- Commodity prices also play an important role in emerging markets in general. Unlike most of its EM peers Asia benefits from lower prices as it is a net importer. If Asian capital markets nevertheless should begin to show weakness in periods of declining commodity prices, it is mostly because these price declines have been interpreted as an indication of a weaker global economy.
- _ Inflation plays a much smaller role in emerging markets than in the past. In Asia in particular inflation is so low overall that the central banks face no obstacle should they need to relax monetary policy further.
- _ Finally, emerging markets typically tend to be associated with political and institutional risk in the minds of investors. Recent examples are the surprising dismissal

² The chart shows this clearly in the corporate bond index for the Middle East, where yields have fallen quite abruptly – by over two percentage points – since the beginning of the year due to the inclusion of oil-rich countries in the index.

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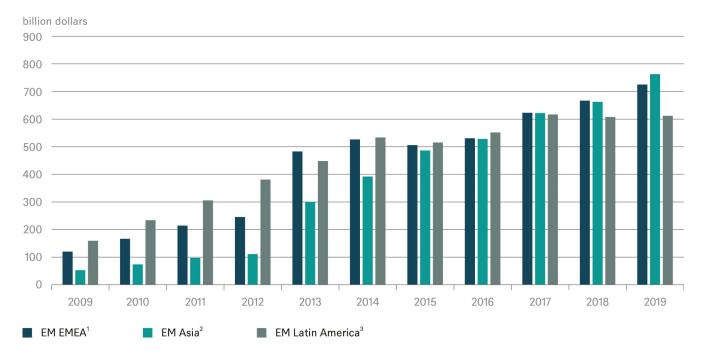
of the Turkish central-bank chief and the unexpected resignation of the Mexican finance minister. Here too, however, Asia is relatively stable, although current tensions in Hong Kong continue to attract some headlines. And of course there has been no shortage of political surprises in industrialized countries as well.

GROWING MARKET WITH SELF-REINFORCING MOMENTUM

After a long shadowy existence, the Asian bond market has developed dynamically in recent years. As a result, at \$763 billion, it is now the largest of the three major emerging-

market regions (in terms of outstanding dollar bonds). The J.P. Morgan Asia Credit Index (JACI Index – including sovereign and corporate bonds), unlike the indices shown in the chart, is not limited to the emerging markets of Asia and is slightly larger at 977 billion, almost as big as the U.S. high-yield market (1.2 trillion dollars). However, Asian-bond indices cover a much more diversified universe in terms of countries and sectors.

ASIA CATCHES UP AND OVERTAKES: MARKET SIZES OF THE THREE MOST IMPORTANT EMERGING-MARKET REGIONS



Sources: Refinitiv, DWS Investment GmbH as of 7/17/19

The way in which Asia has taken the lead in terms of quality and quantity is particularly striking in corporate bonds. The J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) has a Standard & Poors rating of BBB+ and 299 issuers in Asia compared to: 191 issuers in Latin America with an average rating of BB+; 67 issuers and also a BB+ for emerging Europe; and 62 issuers for the Middle East, with a rating of BBB-. Default rates in Asia have been below those in Latin America and Europe for years. The credit-quality advantage is also reflected in the following chart, which shows the correlations of the Asian bonds with U.S. bonds. While Asian bonds were still most strongly oriented towards U.S. high-yield bonds in the 2008-12 period, the correlation coefficient has narrowed from 0.45 to 0.07. U.S.

government bonds and U.S. corporate bonds with investment-grade status have now become the main drivers, almost on a par with each other. But with a coefficient of around 0.3, one cannot speak of a dominant impulse here either.

In contrast to the JACI the other corporate EM indices are much more correlated to the United States, which underscores the potentially greater diversification qualities of Asian bonds. The downside is that the trading volume is equally distributed among a wide range of countries and issuers. We estimate that about half the emerging Asia's bonds fulfill the liquidity requirements of the average institutional investor.

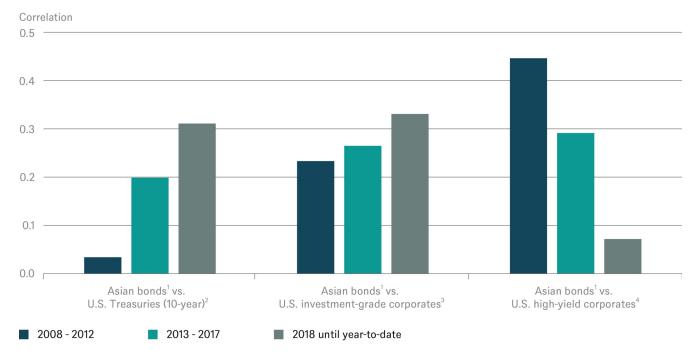
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¹ Bloomberg Barclays Aggregate EM - EMEA USD

² Bloomberg Barclays Aggregate EM - Asia USD

³ Bloomberg Barclays Aggregate EM - LATAM USD

ASIAN BONDS POINT UPWARDS: CORRELATION OF ASIAN BONDS WITH U.S. GOVERNMENT AND CORPORATE-BOND INDICES



Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 7/10/19

A good average rating for Asian bonds may also be partly responsible for the fact that they have lower volatility than corporate bonds from emerging Europe and Latin America. Another reason for the greater stability in Asia: a far greater proportion of the bonds issued there, 74%, are bought by domestic investors. The fear of speculative, hot money which can be withdrawn from a region just as quickly as it can flood in, is therefore much less justified in Asia than in the other regions.

The growth in Asian domestic investors reflects many factors. One is rising prosperity, combined with rapidly developing financial infrastructure, in terms of products and providers, and sound regulation. Asian bonds are in demand in the region for private retirement provision or as an investment away from the real-estate market and therefore bond supply now has the potential to largely be absorbed by local demand. In our opinion, this anchor of stability should have a positive impact on foreign demand for Asian bonds.

THE CURRENT DWS VIEW ON THE MARKET IS NEUTRAL

Other parameters need to be looked at in order to determine how attractive the asset class is in the short and medium term. The CIO view on Asian credit is currently neutral, mainly due to our concern that the market might not be able to cope with a sharp rise in issuance volumes. Up to and including June, bond issuance in the course of the year was 27% higher than in the previous year. In June alone, bonds worth 36 billion dollars were issued. At 34% of the total volume, the share of high-yield bonds is significantly higher than their share in the outstanding volume. Half of this new high-yield issuance is in Chinese real estate, a sector we do not particularly favor. So far, the overall supply has been well absorbed. But we should not simply extrapolate this trend, since it has been supported by benign global capital markets during the period.

The chart below shows how Asian bonds have in the longer run tracked U.S. government bonds, so that yields have fallen despite the flood of issuance. One driver for this rally, global central banks' renewed dovishness this year, has worked especially well for EM assets.

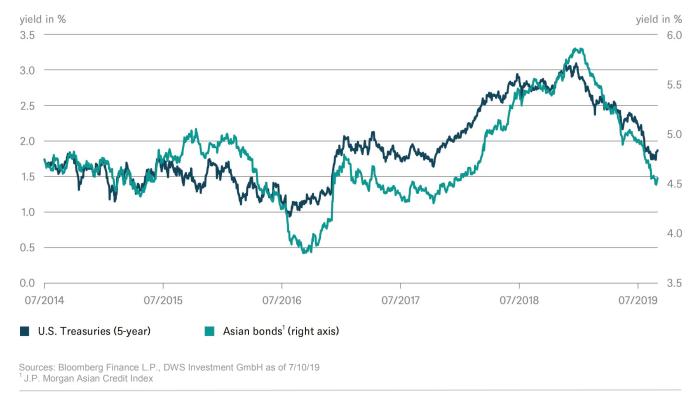
¹ J.P. Morgan Asian Credit Index

² ICE BofA Merrill Lynch 10 Year US Treasury Index

³ ICE BofA Merrill Lynch US Corp Master Index

⁴ ICE BofA Merrill Lynch US High Yield Index

LONGER TERM, U.S. BONDS LEAD THE WAY: ASIAN BONDS AND U.S. TREASURY YIELDS



Our discussion has been entirely about hard-currency bonds – predominantly U.S. dollar bonds – but the currency component of emerging-market investments should not be ignored. The debt sustainability of a country also depends on the exchange rate, which affects both exports and interest payments. However, we do not expect the dollar to continue the appreciation (against a trade-weighted currency basket) that began at the beginning of 2018, but, as in the past six months, trades sideways.

The development of the Chinese-U.S. conflict remains important for Asian markets – as Chinese stocks have shown in the past year during which the MSCI China Index has underperformed both the MSCI World and the MSCI Emerging Markets Index. Investor nervousness has been less noticeable in Asian bond indices, probably because investors tend to switch from equities to bonds in periods of higher uncertainty. The conflict is nonetheless an important factor. After all, China has a dominant share of 51% in the JACI. But from an investor's point of view, we would not follow this weighting at the moment anyway, but would consider reducing China's share in favor of other regions including Indonesia and India among others. We believe that the most watched topics by the markets, tariffs and corporate-

sanction lists, could remain calm for the time being. But in this environment, a medium-term de-escalation remains wishful thinking. The extent to which China will be prepared to make economic sacrifices for political reasons remains to be seen but this risk should not be neglected. At the same time, however, it should not be overlooked that Asia today is much less dependent on investment and demand from the West than it was ten years ago. Not least because of the increased prosperity and increased domestic trade in this region.

INCREASING PREMIUM FOR THE HIGH-YIELD SEGMENT

The chart below shows the rising differentiation between investment grade and high-yield bonds over the last ten years. While the spread premium for high-yield bonds was only 1.5 in 2009, it has now risen to more than 3. We believe this reflects increased discrimination from institutional investors, who have tended to focus on discrete allocations to the higher-quality parts of the market.

INCREASING SPREAD OF HIGH-YIELD VERSUS INVESTMENT-GRADE BONDS



- Difference between high-yield¹ and investment-grade Asian bonds² (in %)
- Ratio high-yield¹ vs. investment-grade Asian bonds²

Sources: Refinitiv, DWS Investment GmbH as of 7/25/19 $^{\rm 1}$ J.P. Morgan JACI Index Non-Investment Grade - Spread Over Treasury $^{\rm 2}$ J.P. Morgan JACI Index Investment Grade - Spread Over Treasury

EXCURSE: OVERVIEW OF THE ASIAN BOND MARKET

The bond market in Asia is not easy to grasp as it is defined differently by every index provider. Countries such as South Korea, Singapore or Hong Kong are sometimes assigned to the Asian EM region, sometimes not. We often referred to the JACI (Index), which does not make this division and includes all countries of the region (excluding Japan, which is seen as a developed market). It also includes both government and corporate investment grade and high-yield bonds, making it the broadest index for Asian dollar bonds.

Other popular indices are the JPM EMBI Asia (Index), which tracks government bonds, and the JPM CEMBI Asia (Index), which tracks corporate bonds. To add to the confusion, the former includes bonds from Singapore, Hong Kong and Korea, while the latter does not. And while the yield difference between these two indices is negligible, it is

clearly visible when Asian bonds are divided into investment grade and high yield. However, high-yield bonds are far less important in Asia than in other emerging markets. In the JACI, for example, which combines both classes, less than one-fourth of the outstanding bond volume is accounted for by high-yield bonds.

APPENDIX: PERFORMANCE OVER THE PAST 5 YEARS (12-MONTH PERIODS)

	06/14 - 06/15	06/15 - 06/16	06/16 - 06/17	06/17 - 06/18	06/18 - 06/19
MSCI China Index	21.0%	-25.2%	31.1%	19.6%	-9.3%
MSCI World Index	-0.4%	-4.7%	15.9%	9.0%	4.3%
MSCI Emerging Markets Index	-7.5%	-14.2%	21.2%	5.8%	-1.4%

Past performance is not indicative of future returns. Sources: Bloomberg Finance L.P., DWS Investment GmbH as of 6/30/18

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GLOSSARY

Appreciation

In relation to currencies, **appreciation** refers to a gain of value against another currency over time.

Basis point

One basis point equals 1/100 of a percentage point.

Bloomberg Barclays Aggregate EM - Asia USD

The Bloomberg Barclays Aggregate EM - Asia USD is a hardcurrency emerging-markets debt benchmark that depicts USDdenominated debt from Asia.

Bloomberg Barclays Aggregate EM - EMEA USD

The **Bloomberg Barclays Aggregate EM - EMEA USD** is a hard-currency emerging-markets debt benchmark that depicts USD-denominated debt from EMEA.

Bloomberg Barclays Aggregate EM - LATAM USD

The **Bloomberg Barclays Aggregate EM - LATAM USD** is a hard-currency emerging-markets debt benchmark that depicts USD-denominated debt from LATAM.

Central bank

A **central bank** manages a state's currency, money supply and interest rates.

Corporate bond

A **corporate bond** is a bond issued by a corporation in order finance their business.

Correlation

Correlation is a measure of how closely two variables move together over time.

Developed Markets (DM)

A **developed market (DM)** is a country fully developed in terms of its economy and capital markets.

Diversification

Diversification refers to the dispersal of investments across asset types, geographies and so on with the aim of reducing risk or boosting risk-adjusted returns.

Dove

Doves are in favor of an expansive monetary policy.

Emerging markets (EM)

Emerging markets (EM) are economies not yet fully developed in terms of, amongst others, market efficiency and liquidity.

Exchange rate

The exchange rate is the rate at which two currencies are traded.

G20

The **Group of 20** are the largest industrialized and emerging economies in the world.

Hard currency

A **hard currency** is any globally traded currency that is considered as historically stable and can be exchanged easily.

High Yield (HY)

High-yield bonds are issued by below-investment-grade-rated issuers and usually offer a relatively high yield.

ICE BofA Merrill Lynch 10 Year US Treasury Index

The ICE BofA Merrill Lynch 10 Year US Treasury Index measures the performance of Treasuries with ten years remaining until maturity.

ICE BofA Merrill Lynch US Corp Master Index

The ICE BofA Merrill Lynch US Corporate Master Index value tracks the performance of dollar-denominated investment grade rated corporate debt publically issued in the US domestic market.

ICE BofA Merrill Lynch US High Yield Index

The ICE BofA Merrill Lynch US High Yield Index tracks the performance of dollar-denominated below investment grade, including zero-coupon and payment-in-kind (PIK) bonds.

Inflation

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

Investment grade (IG)

Investment grade (IG) refers to a credit rating from a rating agency that indicates that a bond has a relatively low risk of default.

J.P. Morgan Asia Credit Index (JACI Index)

The **J.P. Morgan Asia Credit Index** (JACI Index) provides investors the opportunity to track total return performance of the Asia fixed-rate dollar bond market. The index is a market cap-weighted index comprising sovereign, quasi-sovereign and corporate bonds and it is partitioned by country, sector and credit rating.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI)

The J. P. Morgan Corporate Emerging Markets Bond Index (CEMBI) is an index tracking dollar-denominated bonds issued by emerging-market corporates.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Asia

The J.P. Morgan Corporate Emerging Markets Bond Index Broad Asia is a liquid corporate emerging-markets benchmark that tracks dollar-denominated corporate bonds issued by entities in Asian emerging markets.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Europe

The J.P. Morgan Corporate Emerging Markets Bond Index Broad Europe is a liquid corporate emerging markets benchmark that tracks dollar-denominated corporate bonds issued by entities in Eurpean emerging markets.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Latin

The J.P. Morgan Corporate Emerging Markets Bond Index Broad Latin is a liquid corporate emerging-markets benchmark that tracks dollar-denominated corporate bonds issued by entities in Latin-American emerging markets.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Mideast

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J.P. Morgan Emerging Markets Bond Index Global Asia

The J.P. Morgan Emerging Markets Bond Index Global Asia comprieses dollar-denominated government bonds, issued by select Asian emerging-market countries.

J.P. Morgan Emerging Markets Bond Index Global Europe

The J.P. Morgan Emerging Markets Bond Index Global Europe comprises dollar-denominated government bonds, issued by select European emerging-market countries.

J.P. Morgan Emerging Markets Bond Index Global Latin

The J.P. Morgan Emerging Markets Bond Index Global Latin comprises dollar-denominated government bonds, issued by select Latin-American emerging-market countries.

J.P. Morgan Emerging Markets Bond Index Global Mideast

The **J.P. Morgan Emerging Markets Bond Index Global Mideast** comprises dollar-denominated government bonds, issued by select Middle-Eastern emerging-market countries.

J.P. Morgan JACI Investment Grade Index

The **J.P. Morgan JACI Investment Grade Index** provides investors the opportunity to track total-return performance of the Asia fixed-rate investment-grade dollar-denominated bond market.

J.P. Morgan JACI Non-Investment Grade Index

The J.P. Morgan JACI Non-Investment Grade Index provides investors the opportunity to track total-return performance of the Asia fixed-rate non-investment-grade dollar-denominated bond market.

Key interest rates

Key interest rates stated by central banks to determine the most important rates of borrowing.

Liquidity

Liquidity refers to the degree to which an asset or security can be bought or sold in the market without affecting the asset's price and to the ability to convert an asset to cash quickly.

Monetary policy

Monetary policy focuses on controlling the supply of money with the ulterior motive of price stability, reducing unemployment, boosting growth, etc. (depending on the central bank's mandate).

MSCI AC World Index

The **MSCI AC World Index** captures large- and mid-cap companies across 23 developed- and 24 emerging-market countries.

MSCI China Index

The **MSCI China Index** captures large- and mid-cap representation across China H shares, B shares, Red chips, P chips and foreign listings.

MSCI Emerging Markets Index

The **MSCI Emerging Markets Index** captures large- and mid-cap representation across 23 emerging-market countries.

Periphery

Periphery countries are less developed than the core countries of a specific region. In the Eurozone, the euro periphery consists of the economically weaker countries such as Greece, Portugal, Italy, Spain and Ireland.

Sovereign bonds

Sovereign bonds are bonds issued by governments.

Spread

The **spread** is the difference between the quoted rates of return on two different investments, usually of different credit quality.

Standard and Poor's (S&P)

Standard and Poor's (S&P) is a financial services company that provides debt rating as well as other financial research and market indices

Treasuries

Treasuries are fixed-interest U.S. government debt securities with different maturities: Treasury bills (1 year maximum), Treasury notes (2 to 10 years), Treasury bonds (20 to 30 years) and Treasury Inflation Protected Securities (TIPS) (5, 10 and 30 years).

U.S. dollar (USD)

The **U.S.** dollar (USD) is the official currency of the United States and its overseas territories.

U.S. Federal Reserve (Fed)

The **U.S. Federal Reserve**, often referred to as **"the Fed"**, is the central bank of the United States.

Volatility

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

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