

# **Global Reboot: The Changing Structure of the World Economy**

November 8, 2022

Presented by: Bill Campbell Portfolio Manager

Mark Christensen Portfolio Manager





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#### Webcast Announcements

#### DoubleLine®

#### **Upcoming Webcasts:**

#### November 22, 2022 – Income Fund Webcast 1:15 pm PT/4:15 pm ET

DoubleLine Portfolio Manager Ken Shinoda will discuss the DoubleLine Income Fund.

#### December 6, 2022 – Total Return Bond Fund Webcast 1:15 pm PT/4:15 pm ET

DoubleLine CEO Jeffrey Gundlach and Portfolio Manager Andrew Hsu will discuss the DoubleLine Total Return Bond Fund.

#### January 10, 2023 – Just Markets Webcast 1:15 pm PT/4:15 pm ET

DoubleLine CEO Jeffrey Gundlach will discuss the outlook for the markets.

# DoubleLine's webcast schedule is available on our website.

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# **Fund Offerings**

DoubleLine®

#### **Emerging Markets Fixed Income Fund**

#### **Retail and Institutional Class**

No Load Mutual Fund

	Retail N Share	Institutional I Share
Ticker	DLENX	DBLEX
Min. Investment	\$2,000	\$100,000
Min. IRA Investment	\$500	\$5,000
Gross Expense Ratio	1.12%	0.87%

#### Low Duration Emerging Markets Fixed Income Fund

#### **Retail and Institutional Class**

No Load Mutual Fund

	Retail N Share	Institutional I Share
Ticker	DELNX	DBLLX
Min. Investment	\$2,000	\$100,000
Min. IRA Investment	\$500	\$5 <i>,</i> 000
Gross Expense Ratio	0.93%	0.68%
Net Expense Ratio*	0.84%	0.59%
Net Expense Ratio*	0.84%	0.59%

The funds' investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information about the investment company, and may be obtained by calling (877) 354-6311/(877) DLine11, or visiting www.doubleline.com. Read carefully before investing.

Mutual fund investing involves risk. Principal loss is possible. The Emerging Markets and Low Duration Emerging Markets Funds Invest in debt securities in lower-rated and non-rated securities present a greater risk of loss to principal and interest than higher-rated securities. The Funds invests in foreign securities which involve greater volatility and political, economic and currency risks and differences in accounting methods. These risks are greater for investments in emerging markets. Derivatives may involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous.

Opinions expressed are subject to change at any time, are not forecasts and should not be considered investment advice. Fund holdings and sector allocations are subject to change and are not a recommendation to buy or sell any security.

Diversification does not assure a profit or protect against loss in a declining market. While the Funds are no-load, management fees and other expenses still apply. Please refer to the prospectus for further details.

\* The Advisor has contractually agreed to waive fees and reimburse expenses through July 31, 2023.

DoubleLine Funds are distributed by Quasar Distributors, LLC.

# **Fund Offerings**

#### **Global Bond Fund**

#### **Retail and Institutional Class**

No Load Mutual Fund

	Retail N Share	Institutional I Share
Ticker	DLGBX	DBLGX
Min. Investment	\$2,000	\$100,000
Min. IRA Investment	\$500	\$5,000
Gross Expense Ratio	0.97%	0.72%
Net Expense Ratio*	0.95%	0.70%

#### **Emerging Markets Local Currency Bond Fund**

#### **Retail and Institutional Class**

No Load Mutual Fund

	Retail N Share	Institutional I Share
Ticker	DLELX	DBELX
Min. Investment	\$2,000	\$100,000
Min. IRA Investment	\$500	\$5 <i>,</i> 000
Gross Expense Ratio	2.90%	2.75%
Net Expense Ratio*	1.15%	0.90%

# The funds' investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information about the investment company, and may be obtained by calling (877) 354-6311/(877) DLine11, or visiting www.doubleline.com. Read carefully before investing.

**Mutual fund investing involves risk. Principal loss is possible**. Investments in debt securities typically decrease when interest rates rise. This risk is usually greater for longer-term debt securities. Investments in lower-rated and non-rated securities present a greater risk of loss to principal and interest than higher rated securities. Investments in asset-backed and mortgage-backed securities include additional risks that investors should be aware of including credit risk, prepayment risk, possible liquidity and default as well as increased susceptibility to adverse economic developments. Investments in foreign securities, which involve political, economic, and currency risks, greater volatility, and differences in accounting methods. These risks are greater for investments in emerging markets. The Fund may use certain types of exchange traded funds or investment derivatives. Derivatives involve risks different from, and in certain cases, greater than the risks presented by more traditional investments. Derivatives involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested. ETF investments involve additional risks such as the market price trading at a discount to its net asset value, an active secondary trading market may not develop or be maintained, or trading may be halted by the exchange in which they trade, which may impact a fund's ability to sell its shares. The Fund may use leverage which may cause the effect of an increase or decrease in the value of the portfolio securities to be magnified and the fund to be more volatile than if leverage was not used.

Opinions expressed are subject to change at any time, are not forecasts and should not be considered investment advice.

Fund holdings and sector allocations are subject to change and are not a recommendation to buy or sell any security. Diversification does not assure a profit or protect against loss in a declining market. While the Funds are no-load, management fees and other expenses still apply. Please refer to the prospectus for further details.

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DoubleLine Funds are distributed by Quasar Distributors, LLC.

# **DoubleLine Emerging Markets Fixed Income Fund**

#### Emerging Markets Fixed Income Fund

						Annu	alized		Gross
Quarter-End Returns September 30, 2022	1 Mo	3Q2022	Year-to- Date	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception (4-6-10 to 9-30-22)	Expense Ratio
I-share (DBLEX)	-7.40	-6.40	-20.73	-20.73	-4.56	-1.73	1.45	3.12	0.87
N-share (DLENX)	-7.52	-6.46	-20.96	-21.01	-4.81	-1.98	1.19	2.86	1.12
J.P. Morgan EMBI GD Index	-6.36	-4.57	-23.95	-24.28	-7.15	-2.62	1.08	3.11	

As of September 30, 2022	I Share	N Share
Gross SEC 30-Day Yield	7.53	7.27
Net SEC 30-Day Yield	7.53	7.27

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling 213-633-8200 or by visiting www.doubleline.com.

JP Morgan Emerging Markets Bond Global Diversified Index is a uniquely-weighted version of the EMBI Global. It limits the weights of those Index countries with larger debt stocks by only including specified portions of these countries' eligible current face amounts of debt outstanding. The countries covered in the EMBI Global Diversified are identical to those covered in by EMBI Global. It is not possible to invest in an index.

#### **DoubleLine Low Duration Emerging Markets Fixed Income Fund**



Low Duration Emerging Markets Fixed Income Fund										
						An	nualized		Gross	Net
Quarter-End Returns September 30, 2022	1 Mo	3Q2022	Year-to- Date	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception (4-7-14 to 9-30-22)	Expense Ratio	Expense Ratio <sup>1</sup>
I-share (DBLLX)	-2.72	-1.88	-7.79	-8.25	-1.21	0.49	-	1.61	0.68	0.59
N-share (DELNX)	-2.74	-2.05	-8.05	-8.57	-1.49	0.23	-	1.37	0.93	0.84
J.P. Morgan CEMBI BD 1-3 Yr. Index	-1.43	-0.79	-10.57	-11.19	-0.85	0.97	-	2.02		

As of September 30, 2022	I Share	N Share
Gross SEC 30-Day Yield	5.05	4.79
Net SEC 30-Day Yield	5.12	4.87

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling 213-633-8200 or by visiting www.doubleline.com.

<sup>1</sup> The Advisor has contractually agreed to waive fees and reimburse expenses through July 31, 2023.

JP Morgan CEMBI Broad Diversified 1-3 Year is a market capitalization weighted index consisting of 1-3 year maturity US-denominated Emerging Market corporate bonds. It is a liquid global corporate benchmark representing Asia, Latin America, Europe and the Middle East/Africa. It is not possible to invest in an index.

#### **DoubleLine Global Bond Fund**

Global Bond Fund										
						Annu	alized		Gross	Net
Quarter-End Returns September 30, 2022	1 Mo	3Q2022	Year-to- Date	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception (12-17-15 to 9-30-22)	Expense Ratio	Expense Ratio <sup>1</sup>
I-share (DBLGX)	-5.26	-7.58	-19.51	-21.00	-7.51	-4.46	-	-2.41	0.72	0.70
N-share (DLGBX)	-5.29	-7.73	-19.67	-21.16	-7.76	-4.70	-	-2.65	0.97	0.95
FTSE WGBI	-5.10	-7.61	-21.27	-22.14	-7.03	-3.07	-	-1.09		

As of September 30, 2022	I Share	N Share
Gross SEC 30-Day Yield	2.17	1.91
Net SEC 30-Day Yield	2.20	1.94

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling 213-633-8200 or by visiting www.doubleline.com.

<sup>1</sup> The Advisor has contractually agreed to waive fees and reimburse expenses through July 31, 2023.

FTSE World Government Bond Index (WGBI) - Measures the performance of fixed-rate, local currency, investment grade sovereign bonds. The WGBI is a widely used benchmark that currently comprises sovereign debt from over 20 countries, denominated in a variety of currencies, and has more than 25 years of history available. The WGBI provides a broad benchmark for the global sovereign fixed income market. Sub-indices are available in any combination of currency, maturity, or rating. It is not possible to invest in an index.

# **DoubleLine Emerging Markets Local Currency Bond Fund**



Emerging Markets Local Currency Bond Fund										
						Anr	nualized		Gross	Net
Quarter-End Returns September 30, 2022	1 Mo	3Q2022	Year-to- Date	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception (6-30-19 to 9-30-22)	Expense Ratio	Expense Ratio <sup>1</sup>
I-share (DBELX)	-4.29	-4.65	-12.90	-14.13	-5.48	-	-	-6.01	2.75	0.90
N-share (DLELX)	-4.23	-4.58	-13.00	-14.29	-5.69	-	-	-6.22	2.90	1.15
J.P. Morgan GBI-EM GD Index (USD)	-4.87	-4.73	-18.57	-20.63	-7.06	-	-	-6.75		

As of September 30, 2022	I Share	N Share
Gross SEC 30-Day Yield	5.05	4.78
Net SEC 30-Day Yield	6.87	6.60

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling 213-633-8200 or by visiting www.doubleline.com.

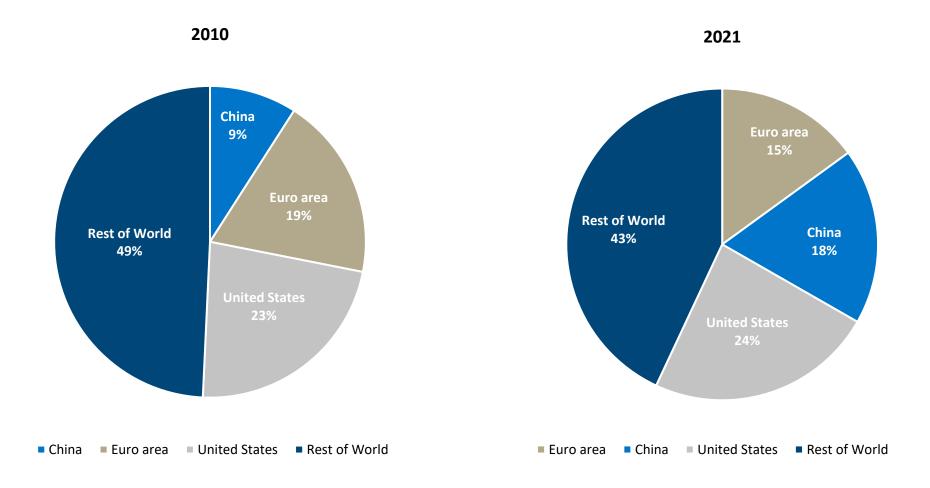
<sup>1</sup> The Advisor has contractually agreed to waive fees and reimburse expenses through July 31, 2023.

The JP Morgan Government Bond – Emerging Market Index (GBI-EM) series was launched in 2005 and is the first comprehensive global emerging markets index of local government bond debt. The GBI-EM Global Diversified is one of the three root versions of the GBI-EM and is the most widely used version of the GBI-EM index. The GBI-EM Global Diversified index represents an investable benchmark, created to capture a diverse set of countries that are accessible by most of the international investor base.



China GDP as a Percent of Global GDP

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Source: IMF, DoubleLine IMF World Economic Outlook, October 2022

COVID



#### Figure 1.13. New Confirmed COVID-19 Deaths

Russia, Türkiye, South Africa 17,500 - United States Rest of the world Euro area Other AEs 15.000 -India EMDE Asia ex. IND 12,500-LAC 10,000 -7,500-5,000-2,500 -Mar. Sep. Mar. Sep. Mar. Sep. 2020 21 22 22 20 21

(Persons; seven-day moving average)

Sources: Our World in Data; and IMF staff calculations.

Note: Data as of September 13, 2022. Economy group and regional classifications are those in the *World Economic Outlook*. "Other AEs" by International Organization for Standardization (ISO) country codes are AUS, CAN, CHE, CZE, DNK, GBR, HKG, ISL, ISR, JPN, KOR, MAC, NOR, NZL, SGP, SMR, SWE, and TWN. AEs = advanced economies; EMDE Asia ex. IND = emerging market and developing economies in Asia excluding India; LAC = Latin American and Caribbean economies.

Source: IMF, DoubleLine IMF World Economic Outlook, October 2022

China Zero COVID Policy

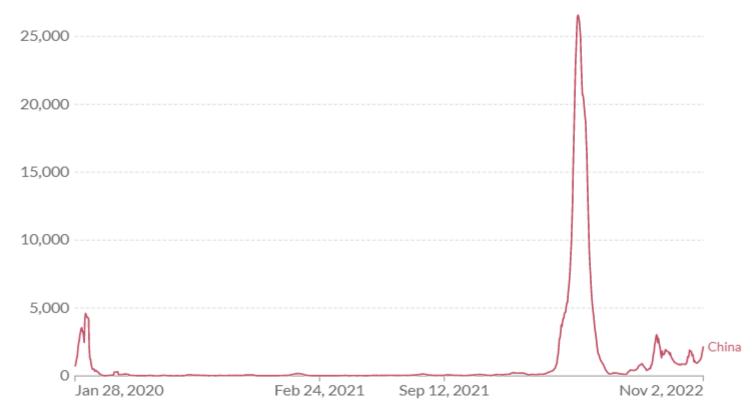


Daily new confirmed COVID-19 cases 7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



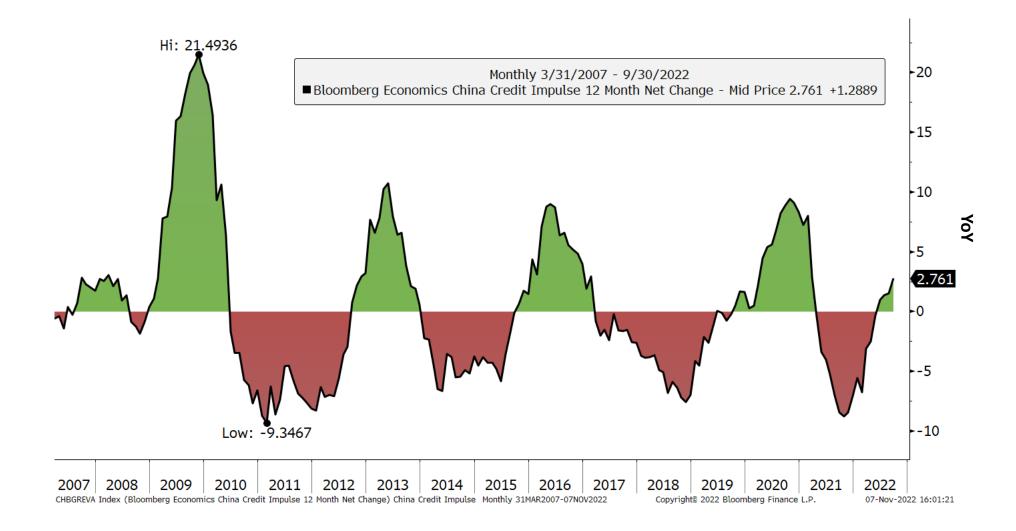


Add country



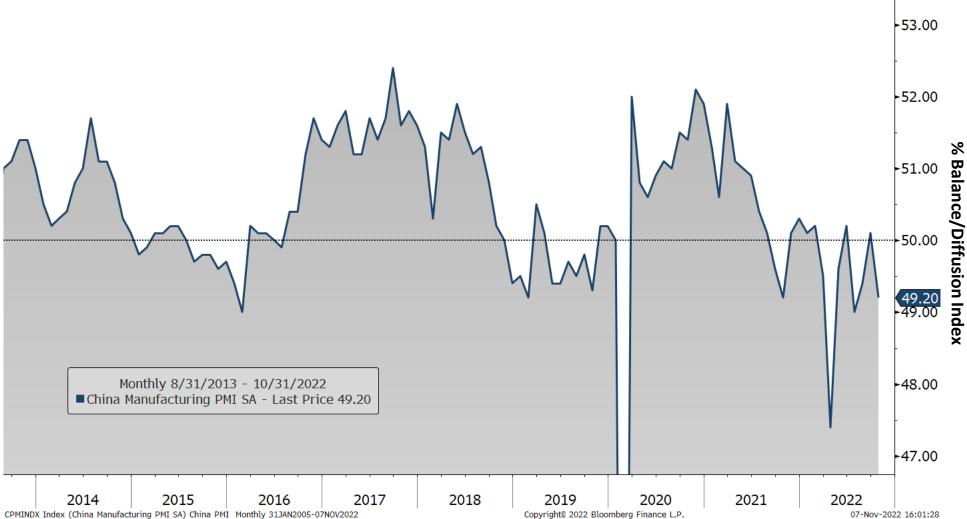
Source: Johns Hopkins University, Our World in Data, DoubleLine https://ourworldindata.org/coronavirus/country/china (\*November 2, 2022)

# **China Credit Impulse: 12-month Change**



**DoubleLine** 

China Growth Slowing

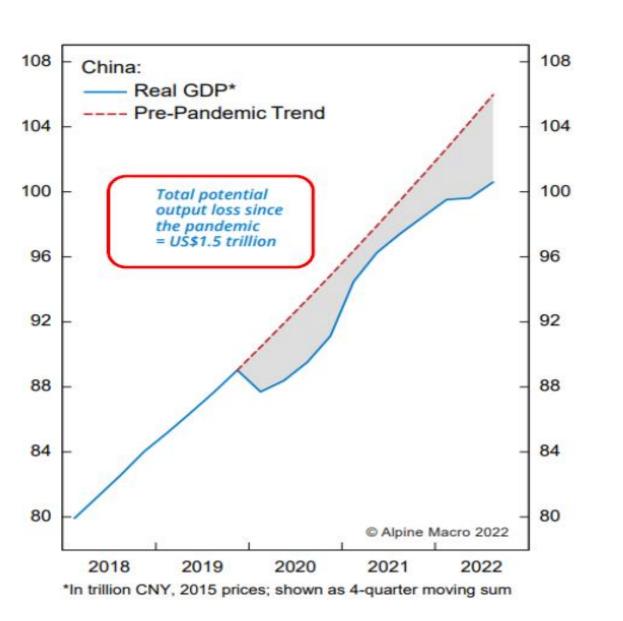


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CPMINDX Index (China Manufacturing PMI SA) China PMI Monthly 31JAN2005-07N0V2022

Source: Bloomberg; DoubleLine China Manufacturing PMI SA

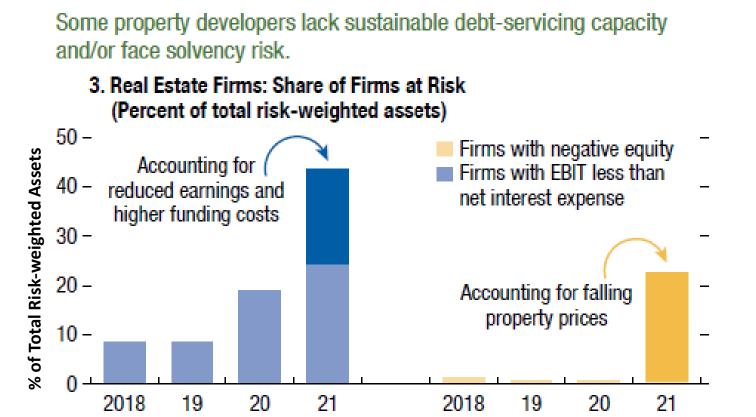
Impact of zero-Covid policy



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Source: Alpha Macro

China Real Estate Firms at Risk



DoubleLin

High defaults and low recoveries on presold property mortgages could significantly impair bank capital ...

Source: IMF, DoubleLine IMF Global Financial Stability Report, October 2022

# **New Leadership in China**

As of October 24, 2022

#### Exhibit 1: The newly-unveiled Politburo Standing Committee

The new 'board' is dominated by President Xi's protégés



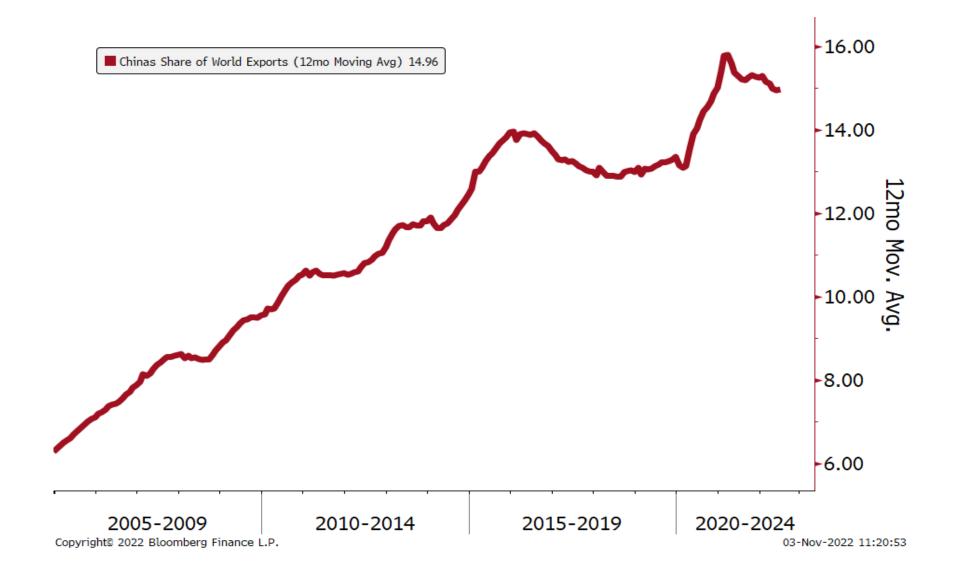
Source: Government websites, Xinhua News Agency

BofA GLOBAL RESEARCH

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China's Share of Global Exports

DoubleLine®



Source: Bloomberg, DoubleLine

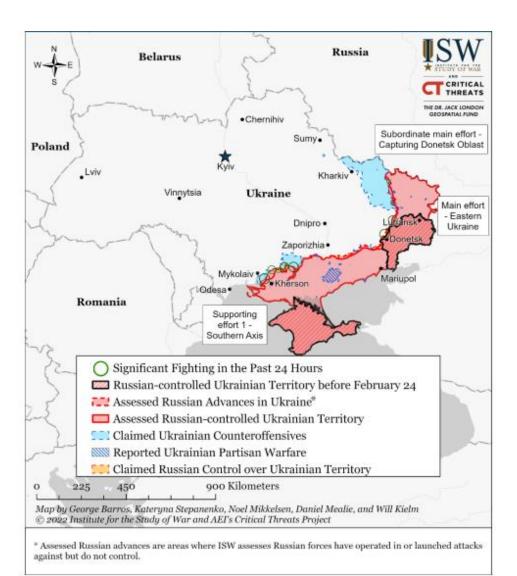
Geopolitical Risks

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- Taiwan
- South China Sea
- Deglobalization as Western Countries Look to Delink from China in Areas of National Security Interests



Russia's Invasion of Ukraine



• Putin is focused on southern and eastern Ukraine after failing to capture Kyiv during the first phase of the war and retreat of Russian forces from the Kharkiv region.

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- Expect a protracted conflict military escalation will take place in Ukraine's southern/eastern regions and land bridge to Crimea. There are increasing risks of a direct confrontation with NATO/EU and an asymmetric Russian response (nuclear weapons).
- Recent Key Dates:
  - October 10<sup>th</sup> Russia launched several dozen long-range missiles at major cities across Ukraine, including the center of the capital Kyiv, hitting important civilian infrastructure. Attacks were in response to the bombing of the Crimea bridge.
  - September 21<sup>st</sup> Putin ordered a partial mobilization of up to 300,000 military personnel, endorsed referendums in Russianheld Ukrainian regions, and threatened the West with nuclear retaliation.
  - September 10<sup>th</sup> in a surprise counteroffensive, Ukraine recaptured some 270 square miles and the key towns of Izium, Balakliya and Kupiansk — previously controlled by Russian forces for months.

**Russia Sanctions** 

#### **Energy sanctions**

• Western nations have banned Russian commodity imports in a series of sanctions moves – the US, EU, UK and Canada have all targeted oil/coal.

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- EU will ban seaborne Russian oil imports (December 5, 2022) and petroleum products (February 5, 2023). Some exemptions have been carved out for countries like Hungary, Slovakia, Czech Republic and Bulgaria.
- EU will also bar companies from providing services for Russian oil shipments (December 5, 2022). This includes trade finance, brokering and insurance.
- U.S. government, the G7 and the EU plan to impose a price cap on Russian oil purchases (December 5, 2022).
- Russian oil supply disruptions are seen hitting 1.5 million b/d in Q1 2023 as the markets absorb the EU sanctions and price caps, S&P Global estimates.

#### **Financial Sanctions**

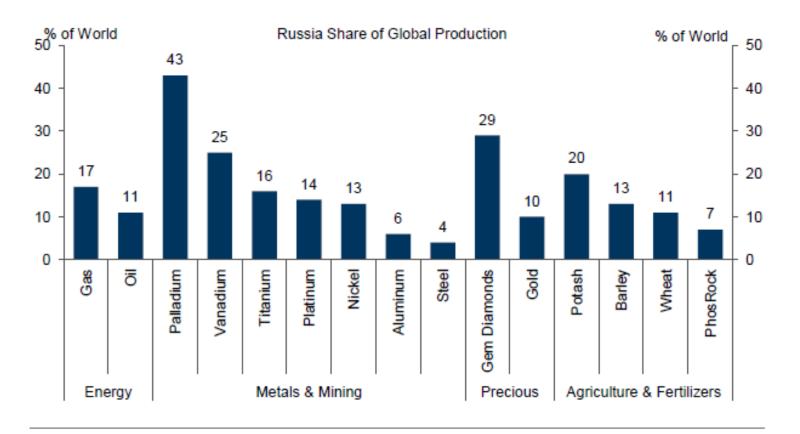
- Severe financial sanctions have targeted the central bank, cut off investment flows to the country's economy, and pushed the sovereign near default.
- US/EU have frozen the reserves of the central bank, limiting the ability of Russia to defend its economy, currency, and debt markets.
- Sanctions have been applied to various systemically important financial institutions/corporates, limiting their ability operate and raise capital in Western markets.
- US along with key allies have removed key Russian banks from the SWIFT financial messaging system, essentially banning them from international transactions. The actions were agreed to by the European Commission, Britain, Canada, France, Germany, Italy and the United States

Source: DoubleLine

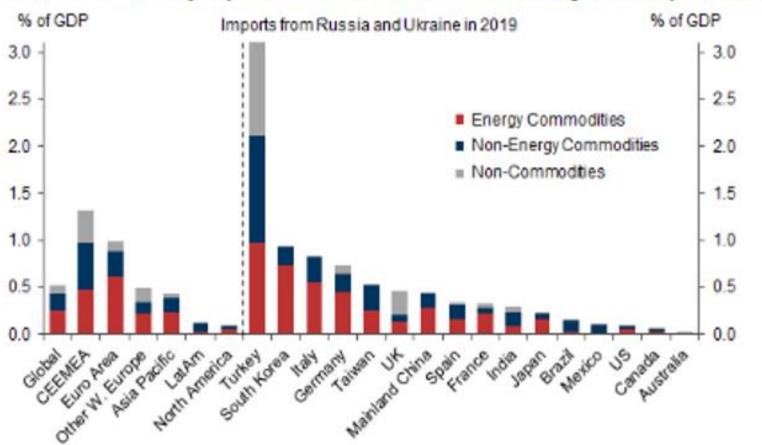
Russia Commodity Production and Trade Linkages



#### Appendix 1: Russia Is a Major Commodity Producer



Russia Commodity Production and Trade Linkages



#### Exhibit 1: Commodity Imports from Russia and Ukraine Are Large for Europe and CEEMEA

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Source: Goldman Sachs

Russia Gas Supplies to the EU

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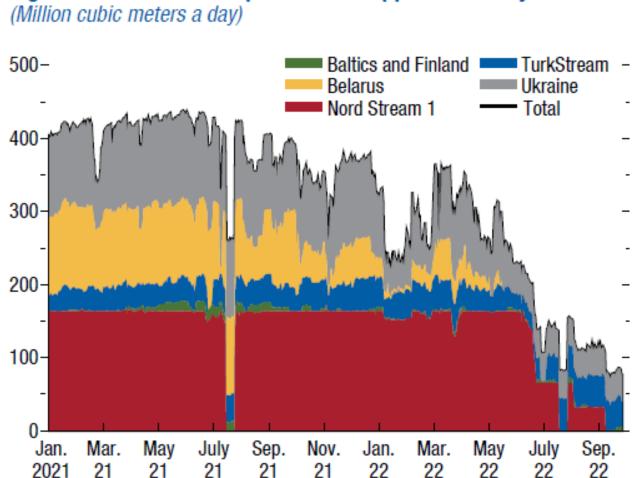
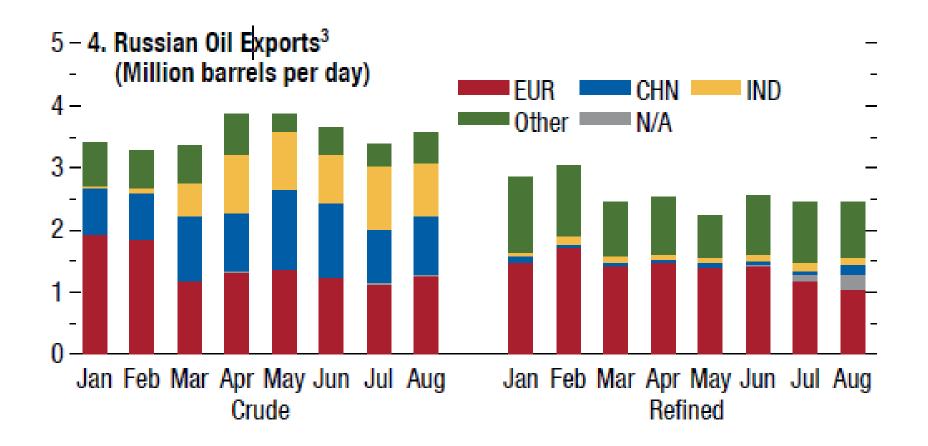


Figure 1.12. Russian Pipeline Gas Supplies to EU by Route (Million cubic meters a day)

Source: IMF, DoubleLine IMF World Economic Outlook, October 2022

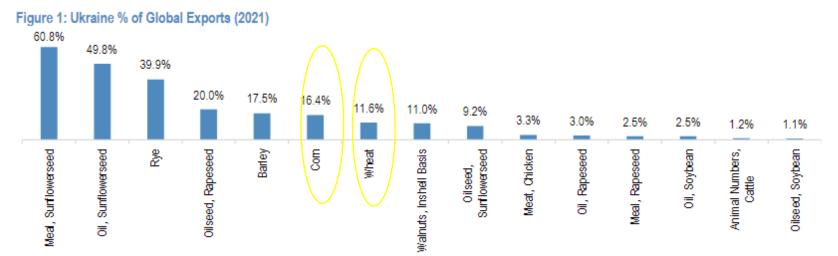
**Russia Oil Exports** 



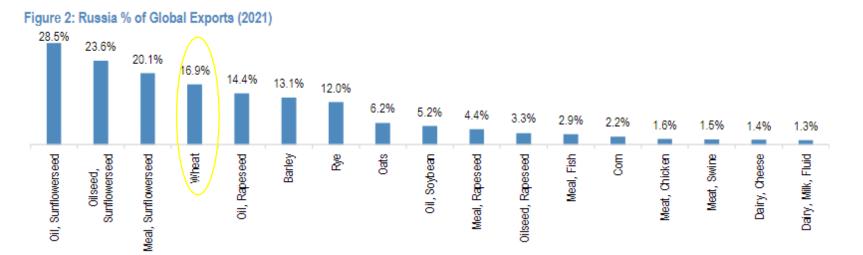


Russia and Ukraine Agriculture Exports

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Source: J.P. Morgan, USDA.

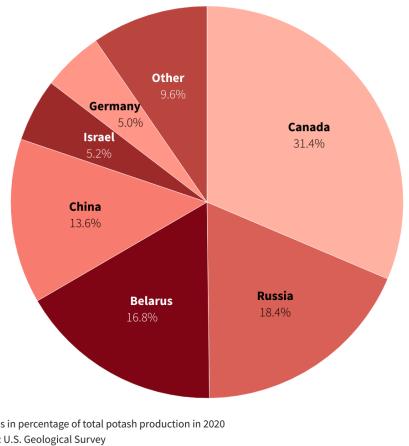


Source: J.P. Morgan, USDA

Russia and Belarus are Major Potash Producers



#### Sanctions leave a void in global potash production Russia and Belarus together made up about 35% of output in 2020

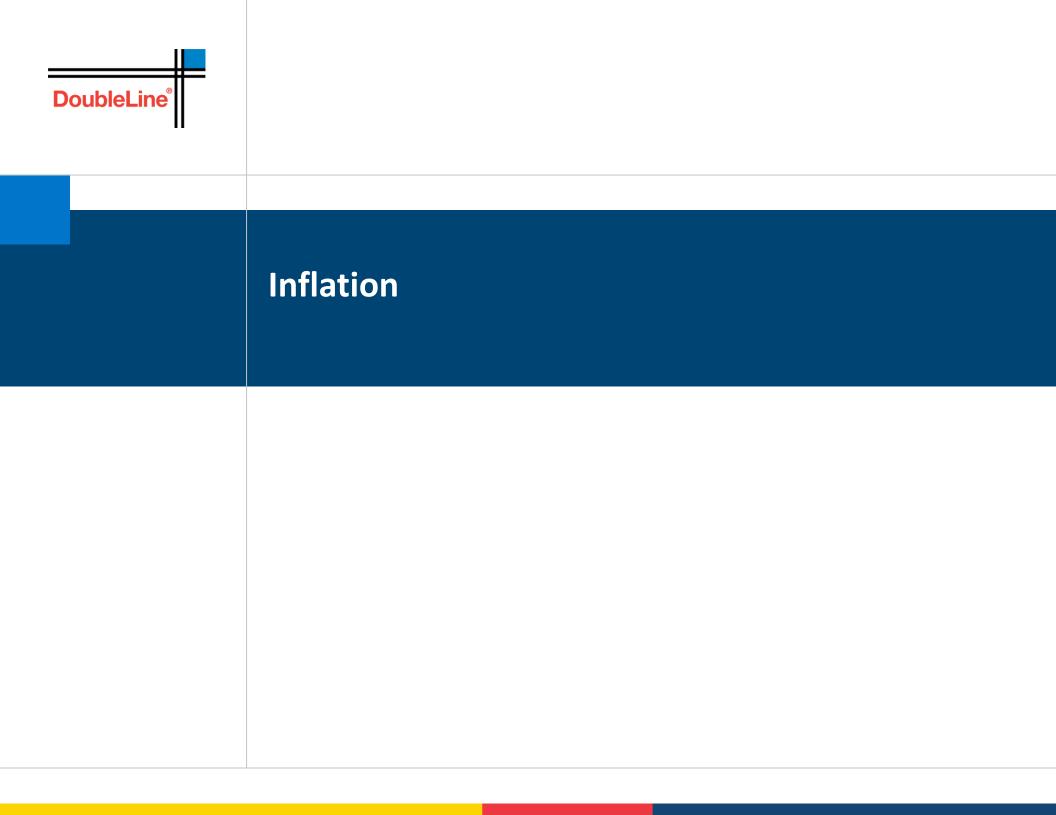


Note: Figures in percentage of total potash production in 2020 Data source: U.S. Geological Survey Reuters | Ruhi Soni

Source: Reuters; https://www.reuters.com/business/fertilizer-sector-set-biggest-profits-years-russia-ukraine-conflict-2022-05-02/ As of 2020

Implications of Russia's Invasion of Ukraine

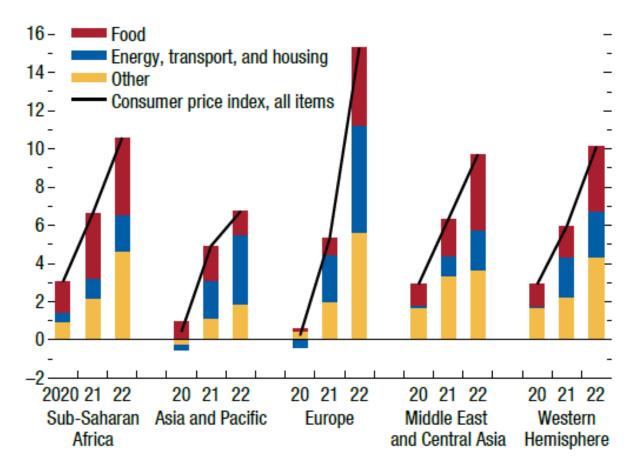
- Higher commodity prices
- Potential for commodity shortages
- Increased geopolitical risks
- Lower growth across the eurozone
- Deglobalization and friend-shoring



**Global Factors Contributing to Inflation** 

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# Figure 1.9. Inflation Driven by Food and Fuel (Annualized percent)



Source: IMF, DoubleLine IMF World Economic Outlook, October 2022

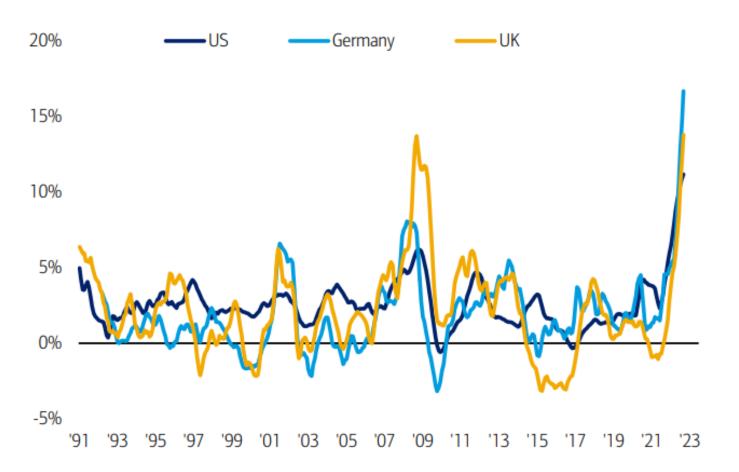
# **Food inflation**

As of October 20, 2022

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#### **Chart 7: Inflation shock continues**

Food price inflation YoY%

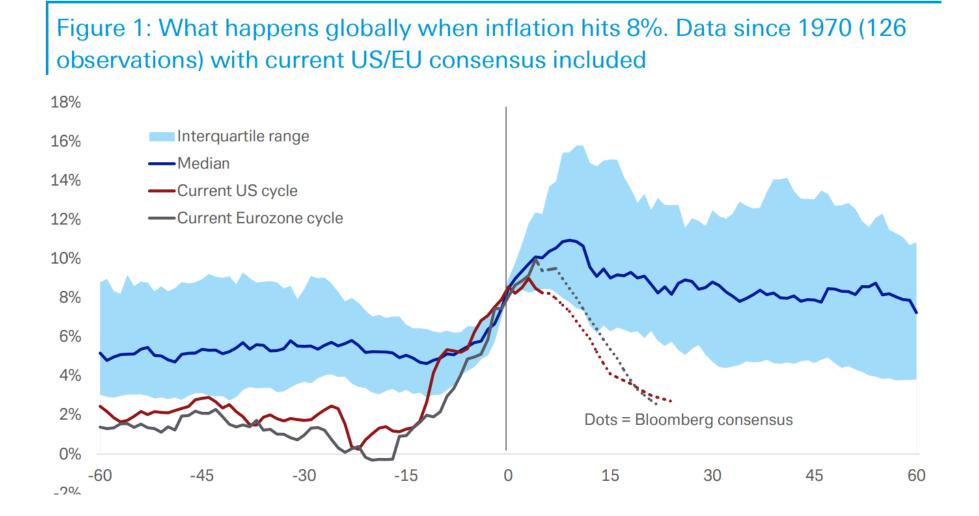


IMF World Inflation Revisions

2022 Inflation Forecast*				
			October 2022	Difference from April
		April 2022 WEO	WEO	2022 WEO
World		7.4	8.8	1.4
Advanced Economies		5.7	7.2	1.5
	US	7.7	8.1	0.4
	Euro Area	5.3	8.3	3.1
	Japan	1.0	2.0	1.0
	UK	7.4	9.1	1.7
Emerging and Developing		8.7	9.9	1.2
	EM Asia	3.5	4.1	0.6
	EM Europe	27.1	27.8	0.8
	Latam + Caribbean	11.2	14.1	2.8
	Middle East	12.8	13.8	1.0
	Sub-Saharan Africa	12.2	14.4	2.3

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Source: IMF, DoubleLine WEO: World Economic Outlook

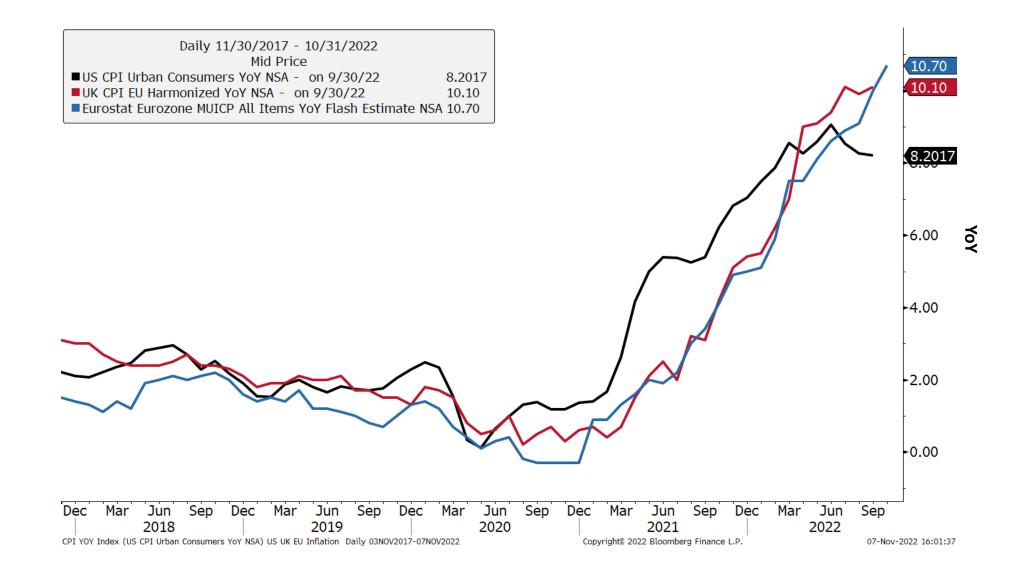


**DoubleLine** 

Source: GFD, Bloomberg Finance LP, Deutsche Bank Covers 50 DM and EM countries

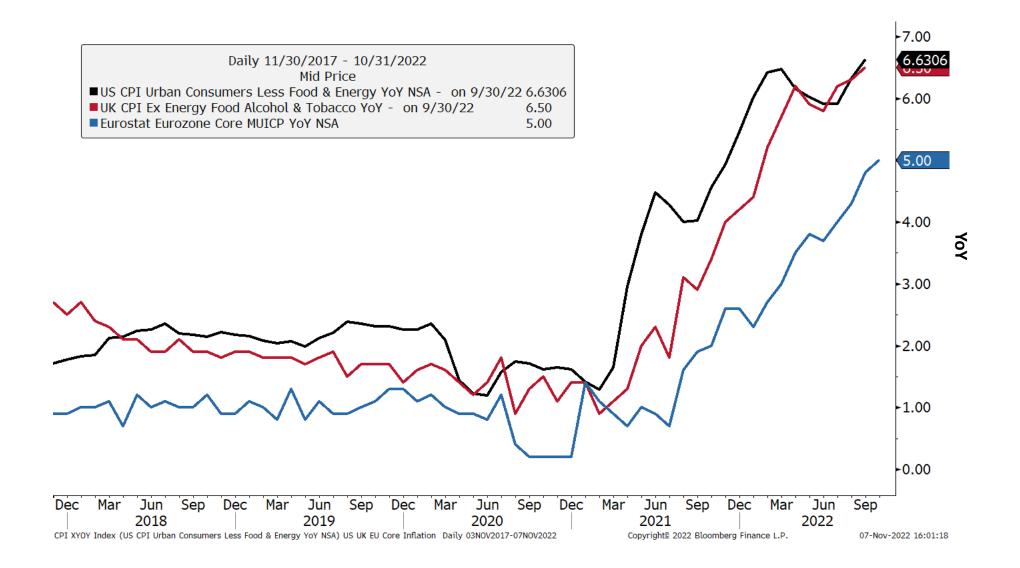
US UK EU Headline Inflation

DoubleLine®



US UK EU Core Inflation

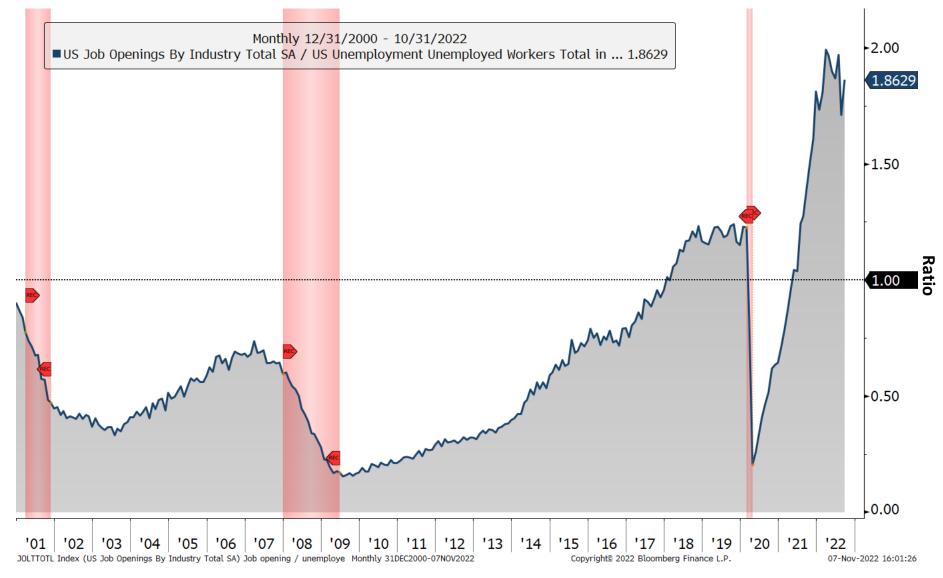




Tight Labor Market

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#### More Job Openings than Job Seekers

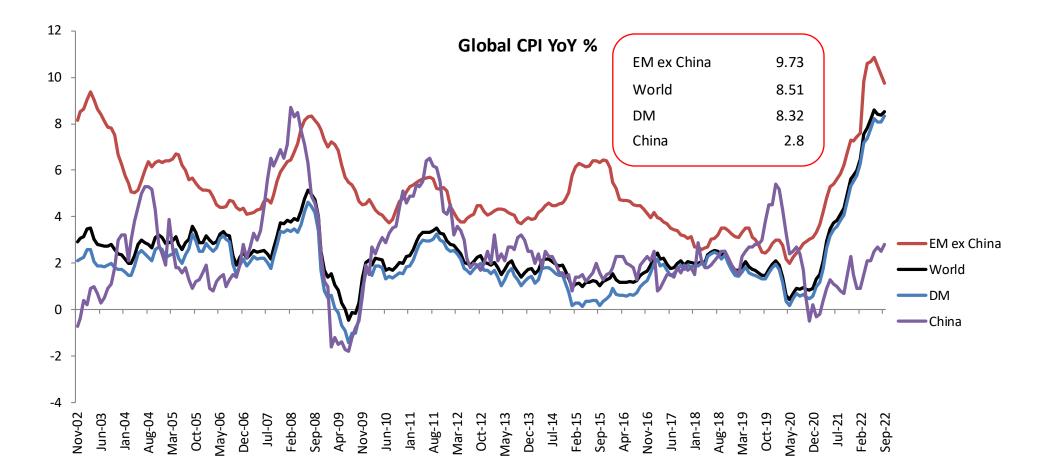


Source: Bloomberg, BLS Red shaded areas indicate recessionary periods

#### **Global CPI YoY %**

As of September 30, 2022

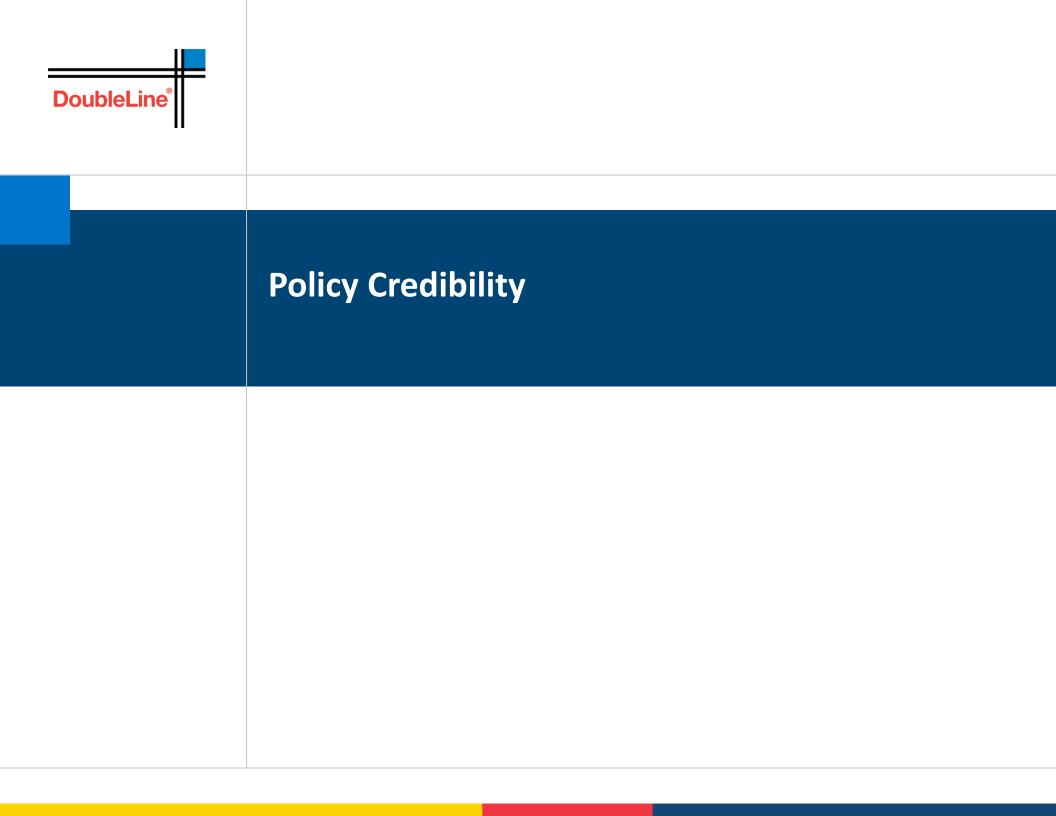




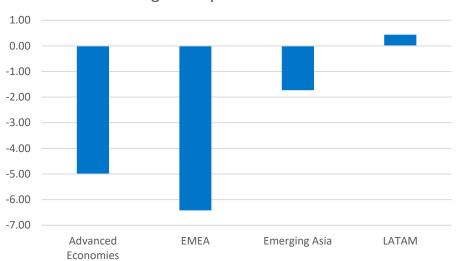
Source: Bloomberg; DoubleLine

Note: Inflation indices are GDP weighted;

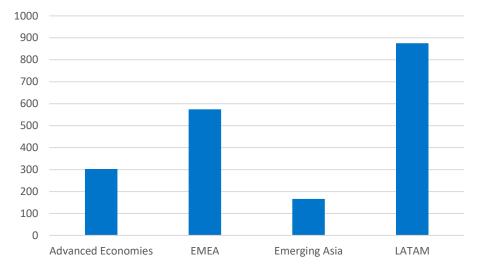
DM is comprised of US, Eurozone, Japan, UK, Canada, Australia, Sweden, Norway, and Switzerland. EM is comprised of Brazil, Russia, China, Korea, South Africa, Mexico, Colombia, Chile, Turkey, Poland. World is DM and EM.



Central Bank Policy Comparison Across Region



#### Average Policy Rate less Inflation



#### Average Cumulative Hikes (bps)

	Average	Average		
	Policy Rate	Cummaltive		
EM Central Banks	less Inflation	Hikes (bps - rhs)		
Advanced Economies	-4.99	303		
EMEA	-6.42	574		
Emerging Asia	-1.73	166		
LATAM	0.44	875		

Source: IMF, Bloomberg, DoubleLine

**BPS: Basis Points** 

Advanced economies: US, EU, UK, Japan, Canada, New Zealand, Australia EMEA: South Africa, Israel, Czech Republic, Russia, Poland, Hungary EM Asia: South Korea, India, Indonesia, Malaysia LatAm: Brazil, Colombia, Peru, Chile, Mexico

Central Bank Policy Comparison Across Region

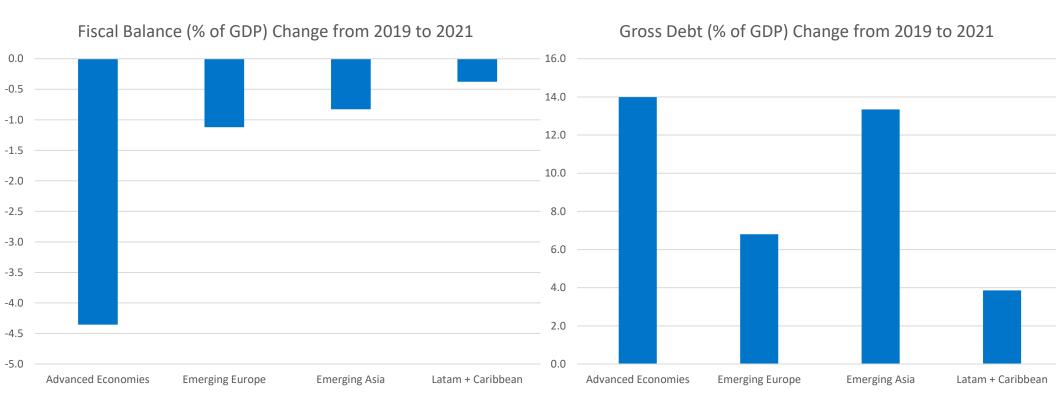
DoubleLine®	

Central Bank Policy I	Rate Hikes					
					Headline	
		Start Date of	Cumulative	Policy	Inflation	Central Bank
DM Central Banks	Country	Hiking Cycle	Hikes (bps)	Rate(%)	Rate (%)	Inf Target
Fed	US	3/16/2022	300	3.25	8.20	2.00
ECB	EU	7/21/2022	200	1.50	10.70	2.00
BoE	UK	12/16/2021	215	2.25	10.10	2.00
BoJ	Japan			-0.10	3.00	2.00
ВоС	Canada	3/3/2022	350	3.75	6.90	1.0-3.0
RBNZ	New Zealand	10/6/2021	325	3.50	7.20	1.0-3.0
RBA	Australia	5/3/2022	275	2.85	7.30	2.0-3.0
					Headline	
		Start Date of	Cumulative	Policy	Inflation	Central Bank
EM Central Banks	Country	Hiking Cycle	Hikes (bps)	Rate(%)	Rate (%)	Inf Target
ВСВ	Brazil	3/17/2021	1175	13.75	7.17	3.5 (+/- 1.5)
BanRep	Colombia	10/1/2021	925	11.00	11.44	3.0 (+/- 1.0)
BCRP	Peru	8/12/2021	675	7.00	8.28	2.0 (+/- 1.0)
BCCh	Chile	7/14/2021	1075	11.25	13.70	3.0 (+/- 1.0)
Banxico	Mexico	6/24/2021	525	9.25	8.70	3.0 (+/- 1.0)
SARB	South Africa	11/19/2021	275	6.25	7.50	3.0-6.0
Bol	Israel	4/11/2022	265	2.75	4.59	1.0-3.0
CNB	Czech Rep	6/23/2021	675	7.00	18.00	2.0 (+/- 1.0)
CBRT	Russia*	3/19/2021	325	7.50	13.68	4.00
NBP	Poland	10/6/2021	665	6.75	17.90	2.5 (+/- 1.0)
NBH	Hungary	6/22/2021	1240	13.00	20.10	3.0 (+/- 1.0)
ВоК	South Korea	8/26/2021	250	3.00	5.70	2.00
RBI	India	5/4/2022	190	5.90	7.41	4.0 (+/- 2.0)
BI	Indonesia	8/23/2022	125	4.75	5.71	3.0 (+/- 1.0)
BNM	Malaysia	5/11/2022	75	2.50	4.50	

Source: IMF, DoubleLine

Fiscal and Debt to GDP Comparison by Region



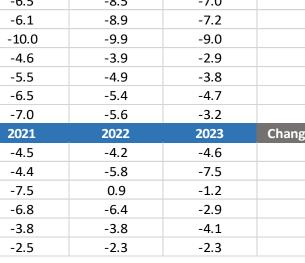


Source: IMF, Bloomberg, DoubleLine BPS: Basis Points Advanced economies: US, EU, UK, Japan, Canada, New Zealand, Australia EMEA: South Africa, Israel, Czech Republic, Russia, Poland, Hungary EM Asia: South Korea, India, Indonesia, Malaysia LatAm: Brazil, Colombia, Peru, Chile, Mexico

International Fiscal Balances

Fiscal Balance (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Advanced Economies	-2.9	-10.4	-7.2	-3.6	-3.7	-4.4
US	-5.5	-14.5	-10.9	-4.0	-5.7	-5.5
Euro Area	-0.7	-7.0	-5.1	-3.8	-3.3	-4.4
Japan	-3.0	-9.0	-6.7	-7.9	-3.6	-3.6
UK	-2.2	-12.8	-8.0	-4.3	-2.3	-5.8
Canada	0.0	-11.4	-5.0	-2.2	-1.2	-5.0
Australia	-4.4	-8.8	-6.5	-3.4	-3.0	-2.1
New Zealand	-2.5	-4.0	-4.8	-4.7	-2.2	-2.3
Fiscal Balance (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Emerging Europe	-0.7	-5.4	-1.8	-3.4	-3.1	-1.1
Poland	-0.7	-6.9	-1.9	-4.1	-3.1	-1.1
Hungary	-2.1	-7.8	-6.8	-4.9	-3.1	-4.7
Romania	-4.9	-9.8	-6.9	-6.4	-5.3	-1.9
Turkey	-4.8	-5.1	-3.9	-4.2	-5.6	0.9
Czech Republic	0.3	-5.8	-5.9	-4.0	-3.3	-6.2
Fiscal Balance (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Emerging Asia	-5.7	-9.4	-6.5	-8.5	-7.0	-0.8
China	-6.1	-9.7	-6.1	-8.9	-7.2	0.0
India	-7.5	-12.8	-10.0	-9.9	-9.0	-2.5
Indonesia	-2.2	-6.1	-4.6	-3.9	-2.9	-2.4
Malaysia	-2.0	-4.6	-5.5	-4.9	-3.8	-3.4
Philippines	-1.7	-5.7	-6.5	-5.4	-4.7	-4.8
Thailand	-0.8	-4.7	-7.0	-5.6	-3.2	-6.2
Fiscal Balance (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Latam + Caribbean	-4.1	-8.7	-4.5	-4.2	-4.6	-0.4
Brazil	-5.9	-13.3	-4.4	-5.8	-7.5	1.5
Chile	-2.7	-7.1	-7.5	0.9	-1.2	-4.8
Colombia	-3.5	-7.0	-6.8	-6.4	-2.9	-3.4
Mexico	-2.3	-4.4	-3.8	-3.8	-4.1	-1.5
Peru	-1.4	-8.3	-2.5	-2.3	-2.3	-1.2

Source: IMF; DoubleLine



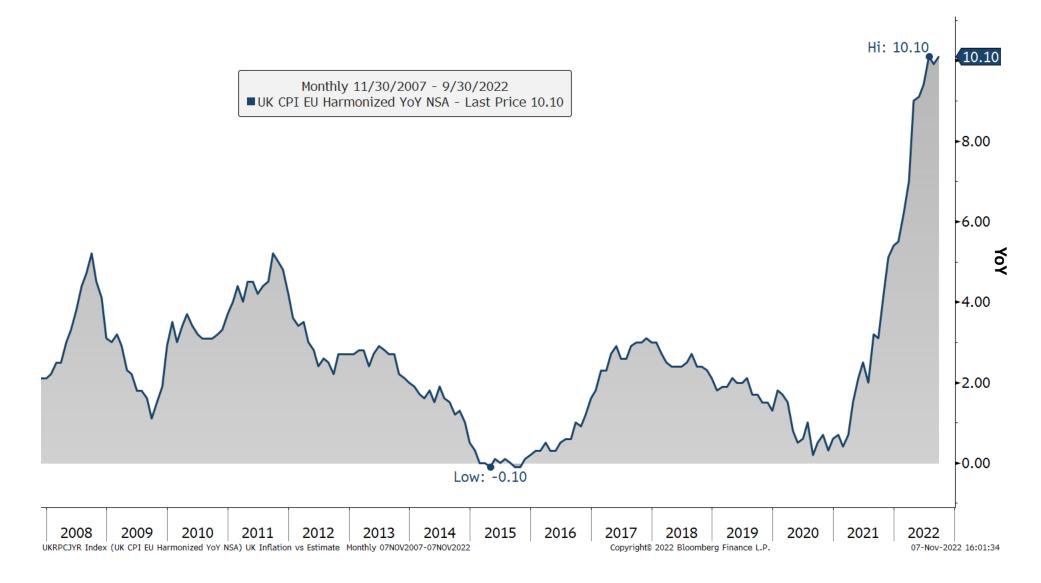
International Debt as % of GDP

Gross Debt (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Advanced Economies	103.9	123.2	117.9	112.4	111.3	17.8
US	108.8	134.5	128.1	122.1	122.9	19.3
Euro Area	83.8	96.9	95.3	93.0	91.3	11.5
Japan	236.3	259.4	262.5	263.9	261.1	26.2
UK	83.9	102.6	95.3	87.0	79.9	11.5
Canada	87.2	117.8	112.9	102.2	98.7	25.7
Australia	46.7	57.2	58.4	56.7	58.6	11.7
New Zealand	31.8	43.2	50.8	56.6	58.6	19.0
Gross Debt (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Emerging Europe	29.7	38.6	36.5	32.3	32.3	7.9
Poland	45.6	57.1	53.8	48.7	45.1	8.2
Hungary	65.5	79.6	76.8	74.8	73.7	11.3
Romania	36.8	49.6	51.4	49.7	51.7	14.6
Turkey	32.6	39.7	41.8	37.5	37.7	9.2
Czech Republic	30.0	37.6	42.0	41.5	41.2	12.0
Gross Debt (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Emerging Asia	56.8	67.5	70.1	74.2	79.5	13.9
China	57.2	68.1	71.5	76.9	84.1	14.2
India	75.1	89.2	84.2	83.4	83.8	9.0
Indonesia	30.6	39.8	41.2	40.9	40.4	10.6
Malaysia	57.1	67.7	69.0	69.6	70.0	11.9
Philippines	37.0	51.6	57.0	59.3	61.0	20.0
Thailand	41.1	49.5	58.4	61.5	61.4	17.3
Gross Debt (% of GDP)	2019	2020	2021	2022	2023	Change 2019 to 2021
Latam + Caribbean	67.9	77.4	71.8	69.3	69.2	7.8
Brazil	87.9	98.7	93.0	88.2	88.9	5.1
Chile	28.3	32.6	36.3	36.2	36.9	8.0
Colombia	52.4	65.7	64.6	61.1	60.0	12.2
Mexico	53.3	60.1	57.6	56.8	58.7	4.2
Peru	26.9	35.0	36.4	34.8	35.7	9.4

Source: IMF; DoubleLine

**UK Inflation** 

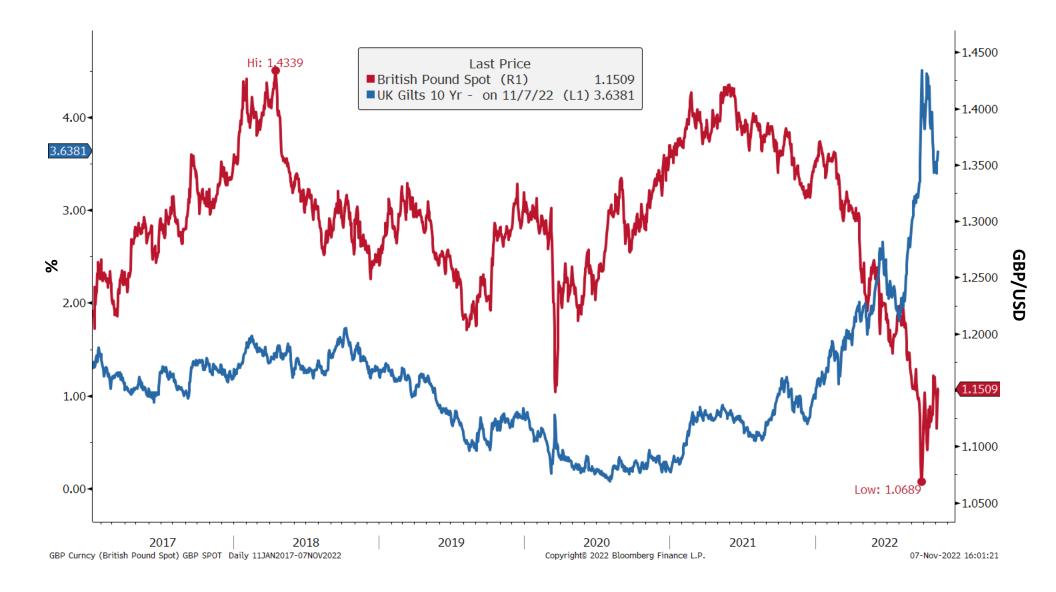


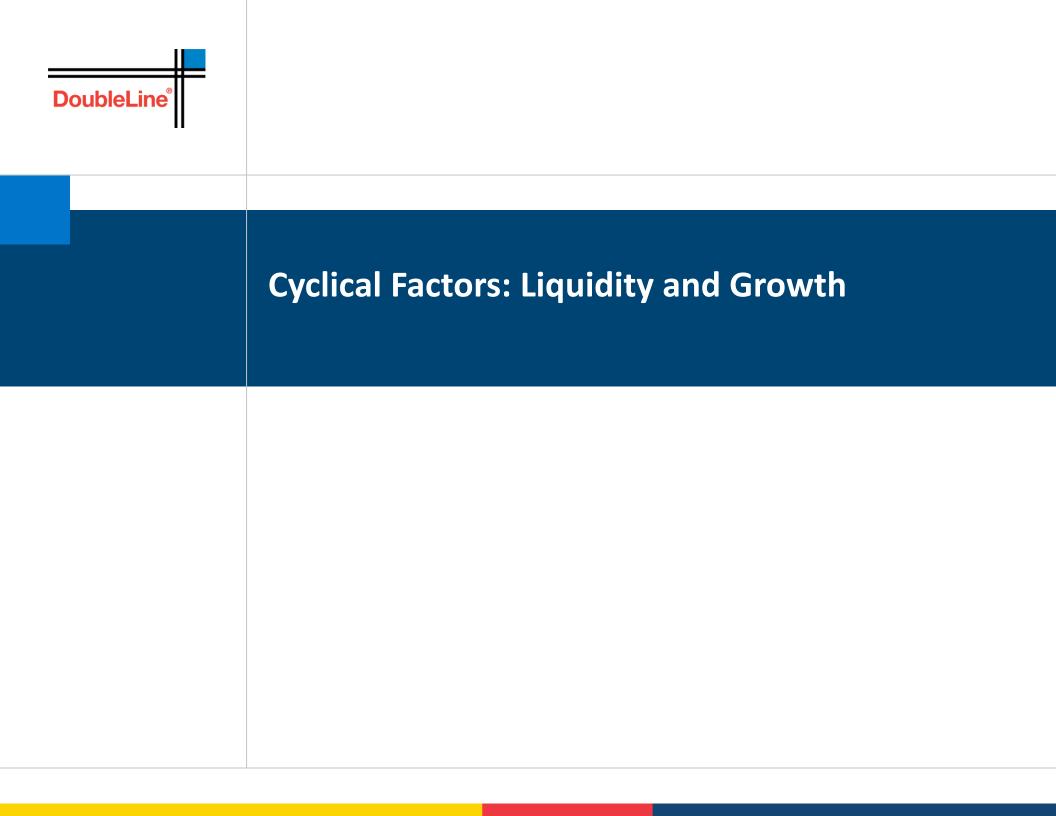


Source: Bloomberg; DoubleLine UKRPCJYR Index

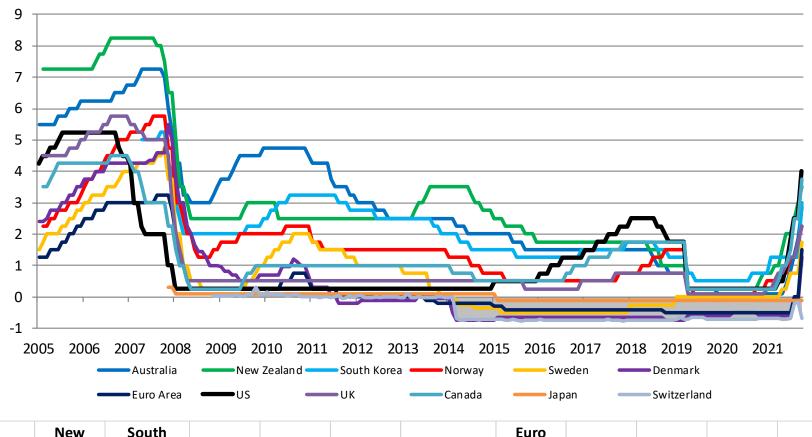
United Kingdom The Canary in the Coal Mine

DoubleLine®





#### **Global Central Bank Policy Rates**

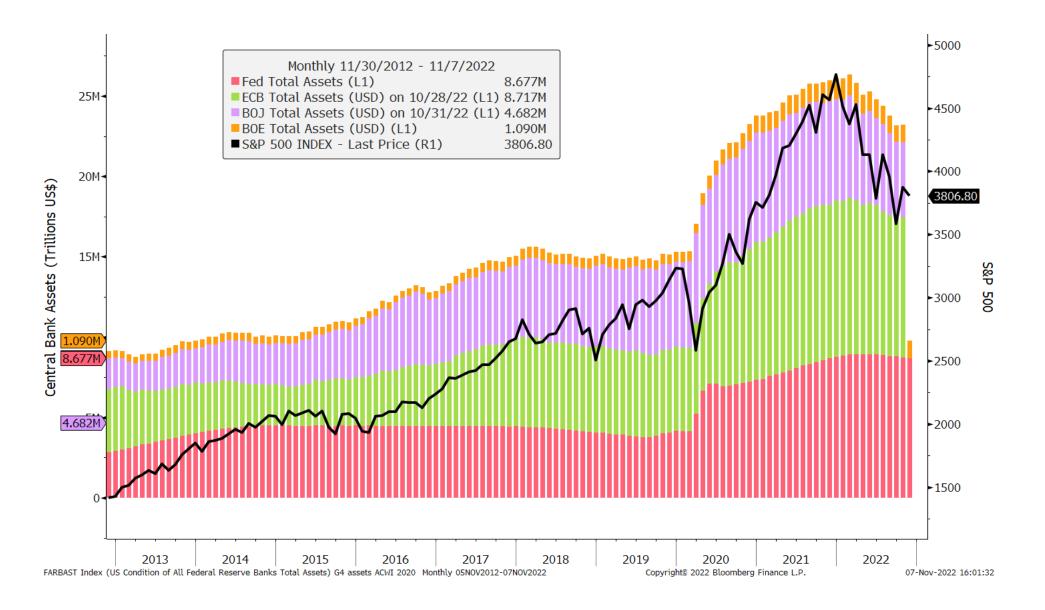


#### **Central Bank Policy Rates (%)**

DoubleLine

New South Euro Australia Zealand Korea Norway Sweden Denmark Switzerland Area US UK Canada Japan 2.85 3.5 3 2.25 1.75 1.25 0.5 1.5 2.25 3.75 4 -0.1

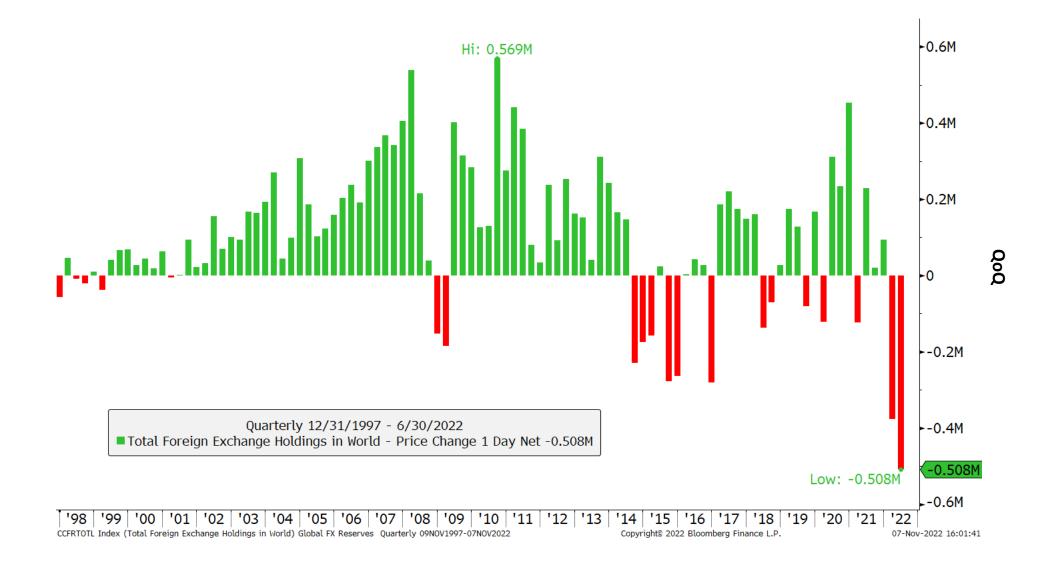
#### Liquidity: G4 Central Bank Balance sheet vs S&P 500



**DoubleLine** 

#### **Global FX Reserves**

DoubleLine®

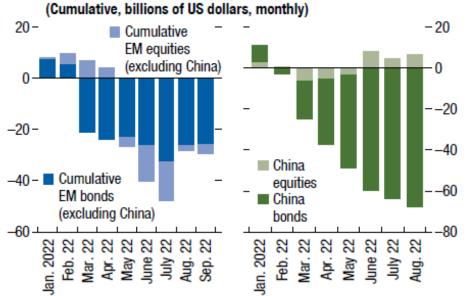


#### Source: IMF, DoubleLine IMF Global Financial Stability Report, October 2022

#### International Fixed Income Cumulative Flows to the EM Local Currency Bond Markets

# Local currency bond outflows have been substantial in 2022, while equity outflows have been modest.

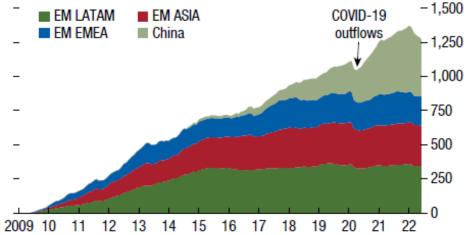
1. Local Currency Bond and Equity Flows



Bond funds dedicated to emerging markets have seen large outflows reach nearly 10 percent of assets under management, which still compares somewhat favorably to the draw-downs in 2013 and 2015. Recent outflows have been relatively small compared to the overall stock of foreign holdings.

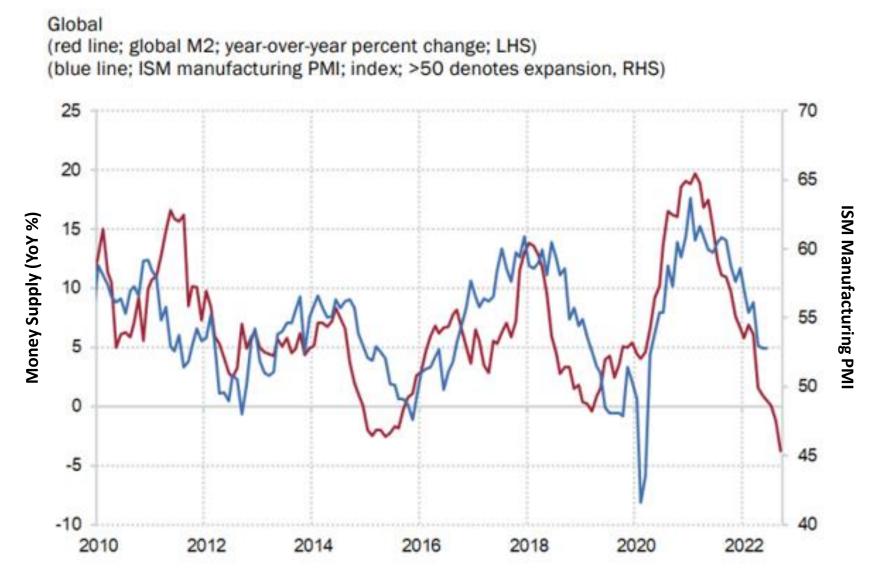
DoubleLine

2. Cumulative Flows to Local Currency Bond Markets by Region (Billions of US dollars)



Capital flows at risk have deteriorated since April 2022 amid persistent dollar strength, with over a 40 percent implied probability of outflows.

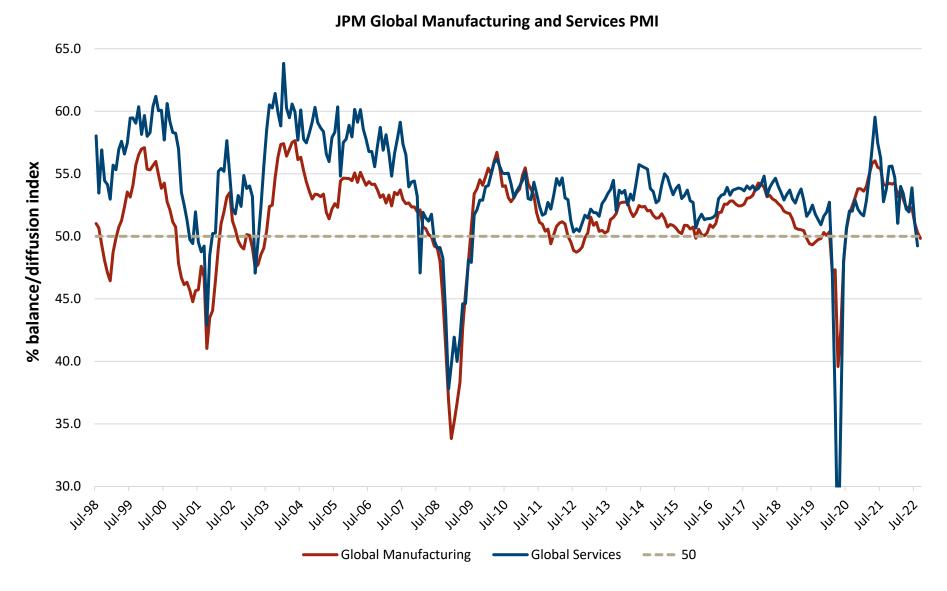
### Global M2 (2mo lead) and ISM Manufacturing PMI



DoubleLine

Source: Bloomberg, Rosenberg Research M2: Money Supply

#### JPMorgan Global Manufacturing and Services PMI

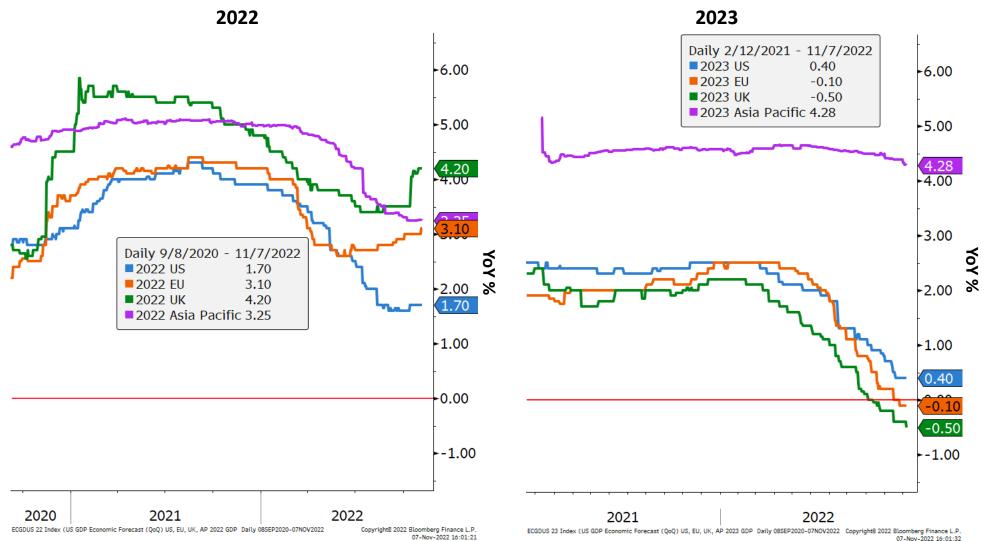


**DoubleLine** 

Source: JPMorgan, DoubleLine

#### Real GDP 2022, 2023 Forecast by Global Region

# DoubleLine

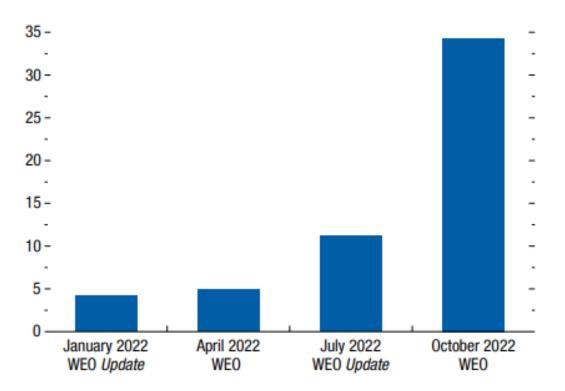


ECGDUS 23 Index (US GDP Economic Forecast (QoQ) US, EU, UK, AP 2023 GDP Daily 08SEP2020-07NOV2022 Copyright@ 2022 Bloomberg Finance L.P. 07-Nov-2022 16:01:32

#### **Countries in Contraction: Share of Global GDP: IMF Forecasts**

DoubleLine®

#### Figure 1.14. Countries in Contraction as a Share of Global GDP, 2022–23 (Percent)



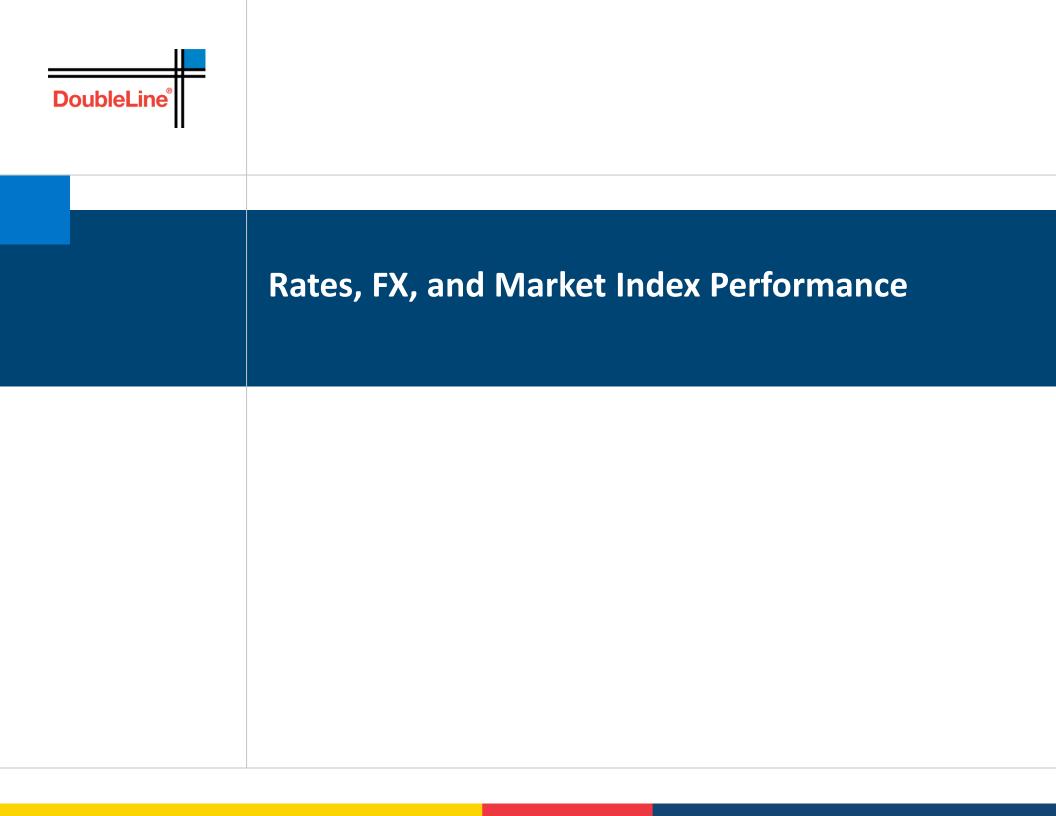
Source: IMF staff calculations.

Note: "Contraction" is defined as consecutive negative quarter-over-quarter growth in 2022 or 2023. The bars show the countries' share in global GDP using purchasing-power-parity-based GDP in 2022 as weights. WEO = World Economic Outlook.

IMF World Growth Revisions

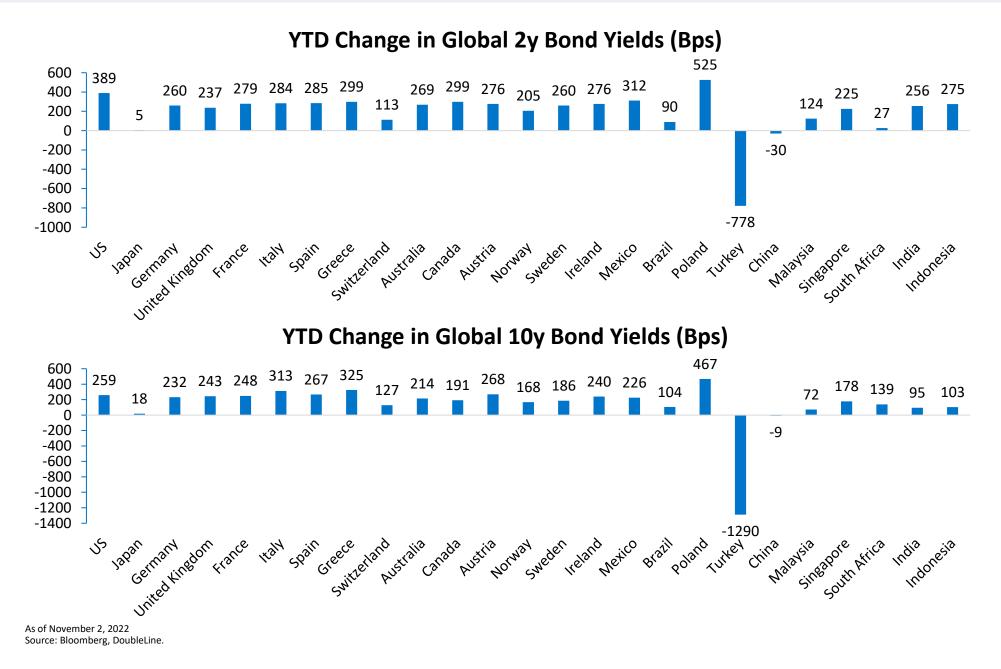
2022 IMF Growth Forecast			
		October 2022	Difference from April
	April 2022 WEO	WEO	2022 WEO
World	3.6	3.2	-0.4
Advanced Economies	3.3	2.4	-0.8
US	3.7	1.6	-2.1
Euro Area	2.8	3.1	0.3
Japan	2.4	1.7	-0.6
UK	3.7	3.6	-0.1
Emerging and Developing	3.8	3.7	-0.1
EM Asia	5.4	4.4	-1.0
EM Europe	-2.9	0.0	2.8
Latam + Caribbean	2.5	3.5	0.9
Middle East	4.6	5.0	0.4
Sub-Saharan Africa	3.8	3.6	0.2

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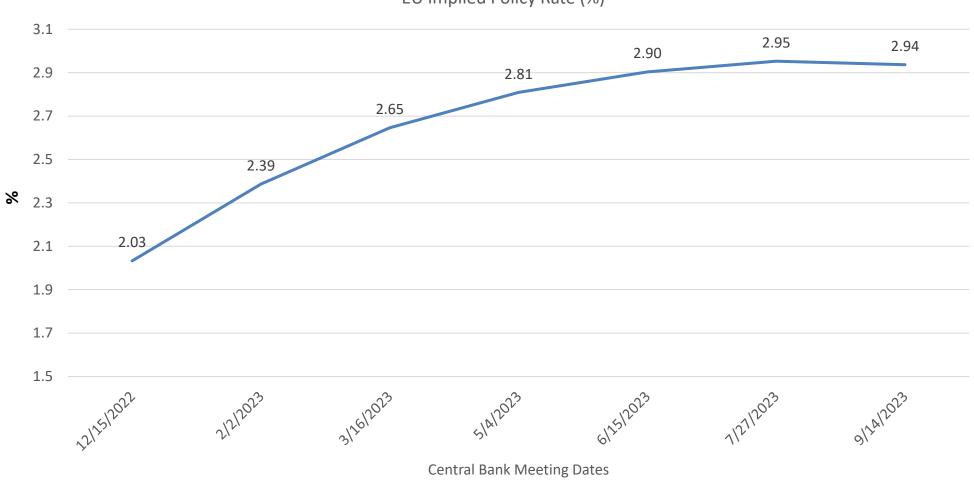


YTD Change in Global Bond Yields (BPS)

DoubleLine®



WIRP ECB

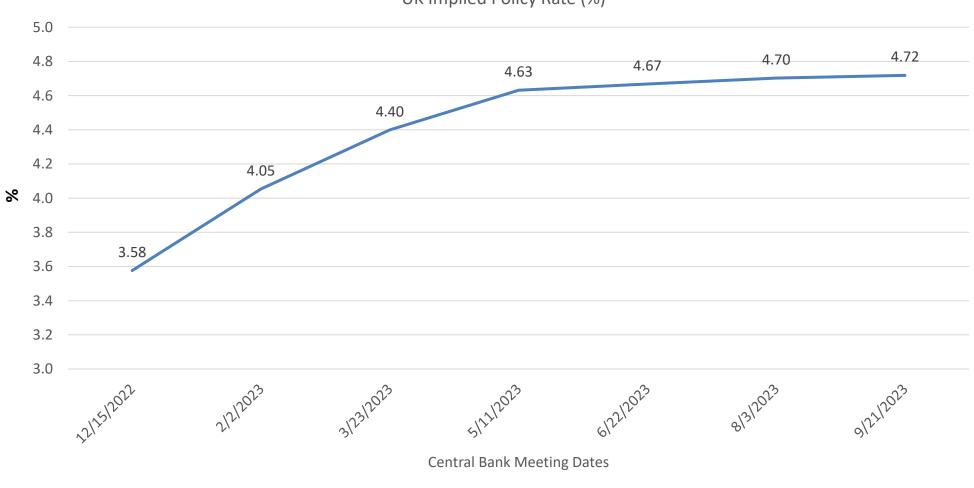


EU Implied Policy Rate (%)

**DoubleLine** 

As of November 3, 2022 Source: Bloomberg; DoubleLine

WIRP BOE

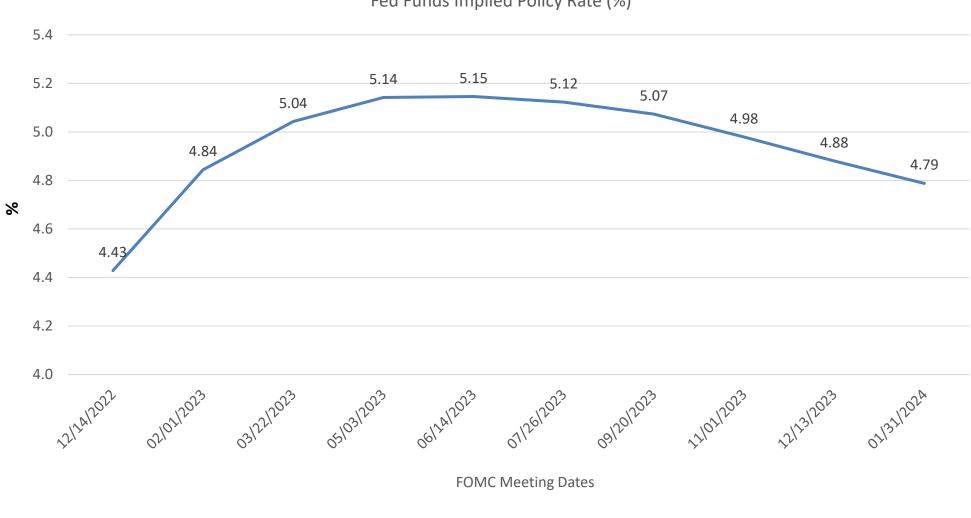


UK Implied Policy Rate (%)

**DoubleLine** 

As of November 3, 2022 Source: Bloomberg; DoubleLine

WIRP US



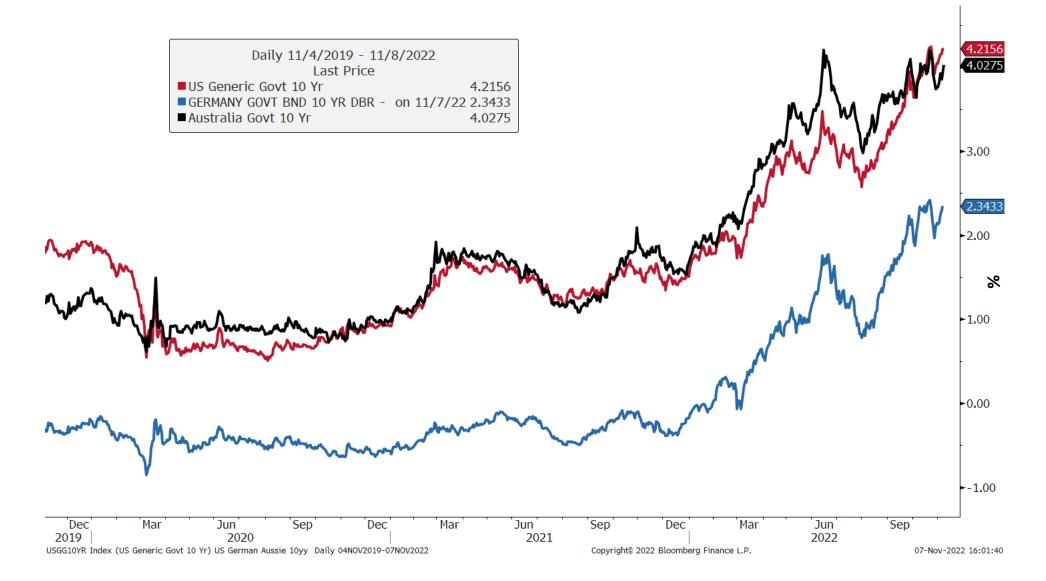
Fed Funds Implied Policy Rate (%)

DoubleLine

As of November 3, 2022 Source: Bloomberg; DoubleLine

**Global Bond Yields** 





Source: Bloomberg, DoubleLine

**Global Real Bond Yields** 

20

10

0

-10

-20

-50

-60

-70

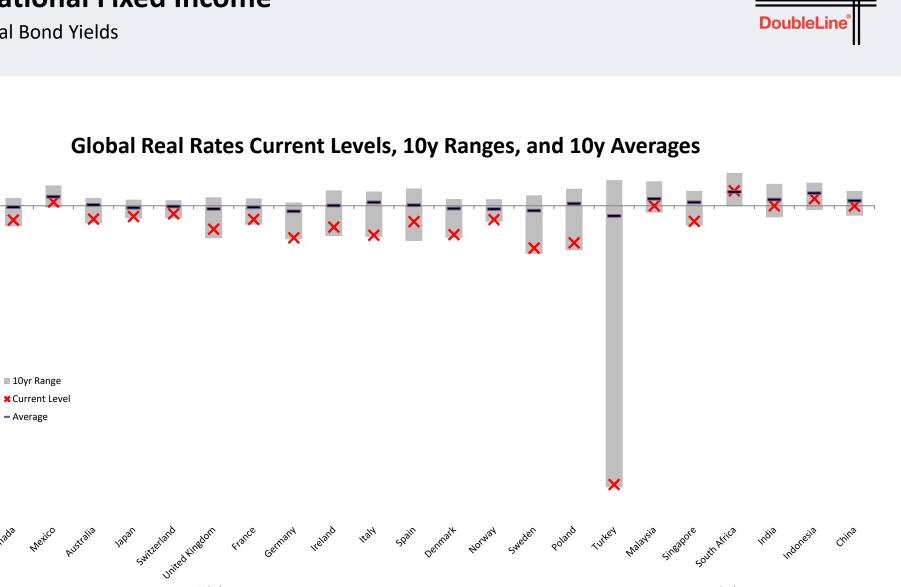
-80

Current High

Low

Avg.

-20 -30 -40



South

Africa

3.86

8.44

0.36

3.61

India

-0.02

5.67

-2.82

1.60

Indonesia

1.83

5.93

-0.94

3.26

China

-0.05

3.86

-2.44

1.32

Poland

-9.53

4.36

-11.33

0.58

Sweden

-10.89

2.68

-12.26

-1.22

Turkey

-71.80

6.62

-72.39

-2.58

Malaysia

-0.02

6.30

-1.63

1.82

Sing.

-4.02

3.84

-4.96

0.89

As of November 2, 2022 Source: Bloomberg, DoubleLine

Canada

Canada

-3.69

1.99

-5.16

-0.33

Mexico

0.97

5.24

-0.31

2.36

Australia

-3.42

1.97

-4.32

0.26

Japan

-2.76

1.58

-3.12

-0.50

Swiss

-2.07

1.45

-3.09

-0.15

United

Kingdom

-6.01

2.19

-8.24

-0.78

France

-3.52

1.92

-4.72

-0.37

Germanv

-8.26

0.84

-8.53

-1.40

Ireland

-5.51

3.98

-7.64

0.10

Italy

-7.60

3.68

-7.89

0.93

Spain

-4.08

4.44

-8.94

0.19

Denmark

-7.41

1.74

-8.10

-0.71

Norway

-3.56

1.70

-4.00

-0.83

సా

US

-4.37

2.36

-6.81

-0.26

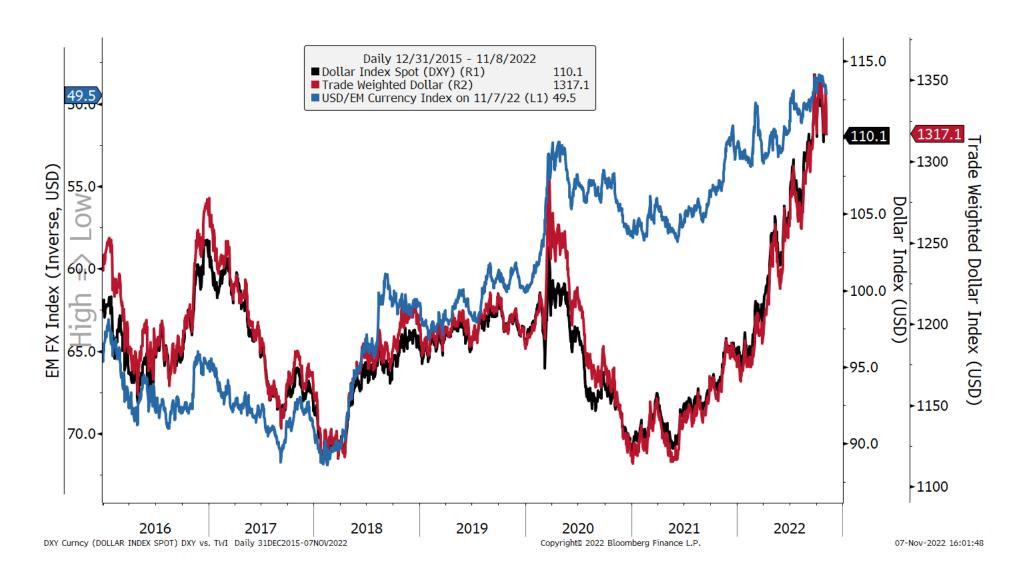
2/10 recession watch



DoubleLine

Source: Bloomberg, DoubleLine Red shaded areas indicate recessionary periods

DXY vs Bloomberg USD Index and EMFX

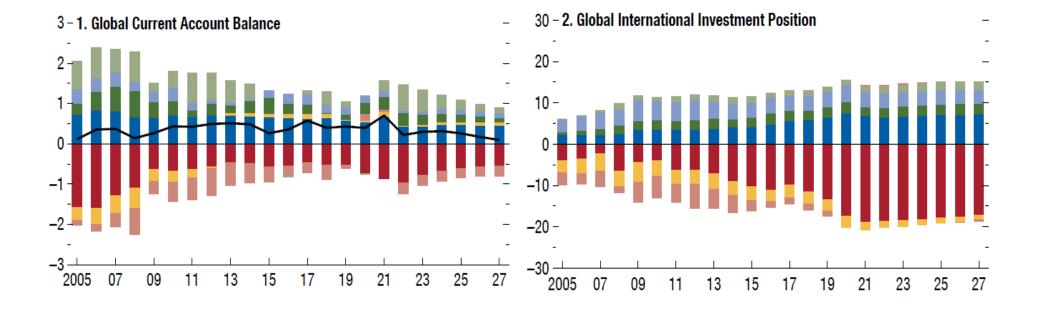


**DoubleLine** 

Source: Bloomberg; DoubleLine JPM EM FX Index: TRY 8.33%, RUB 8.33%, HUF 8.33%, ZAR 8.33%, BRL 11.1%, MXN 11.1%, CLP 11.1%, CNH 11.1%, INR 11.1%, SGD 11.1%

Global Current Account and Net International Investment

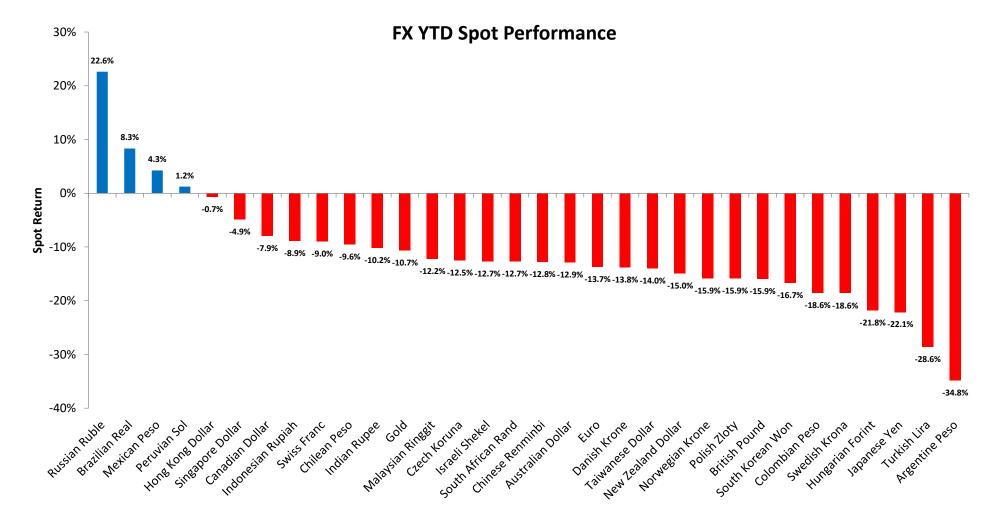






Source: IMF, DoubleLine IMF World Economic Outlook, October 2022

FX performance YTD



DoubleLi

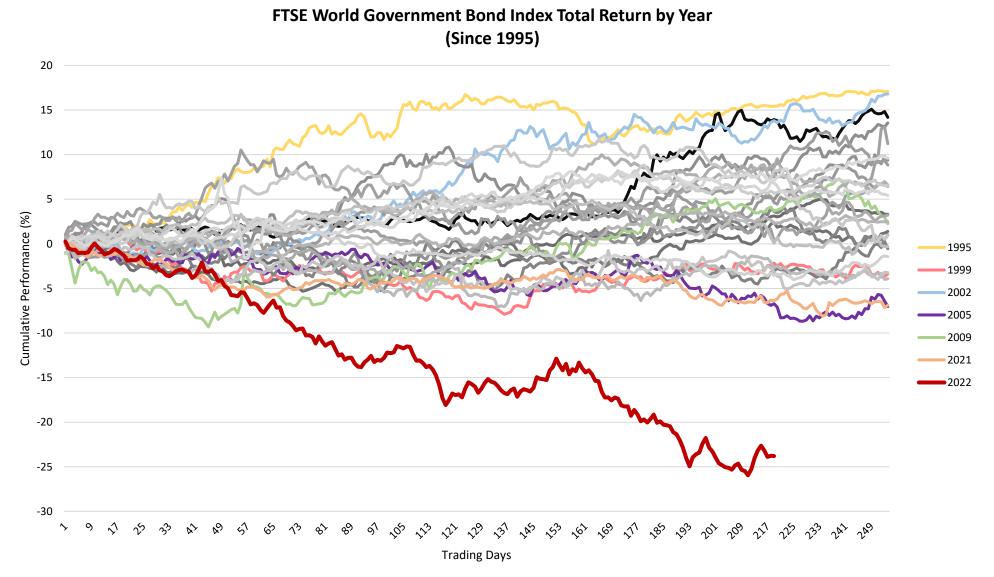
As of November 2, 2022

Source: Bloomberg; DoubleLine

JPY = Japanese Yen, CNY = China Yuan Renminbi, HKD = Hong Kong Dollar, IDR = Indonesian Rupiah, SGD = Singapore Dollar, PEN = Peruvian Nuevo Sol, CHF = Swiss Franc, INR = Indian Rupee, GBP = British Pound, ILS = Israeli New Shekel, NZD = New Zealand Dollar, Eur = Euro, SEK = Swedish Krona, TWD = Taiwan Dollar, AUD= Australian Dollar, MYR = Malaysian Ringgit, CZK = Czech Koruna, BRL = Brazilian Lira, KRW= Korean Won, NOK = Norwegian Krone, MXN = Mexican Peso, PLN = Polish Zloty, CAD = Canadian Dollar, COP = Columbian Peso, TRY = Turkish Lira, CLP = Chilean Peso, ZAR = South African Rand, HUF = Hungarian Forint, RUB = Russian Ruble. Please see Appendix for index definitions.

An investment cannot be made in and index.

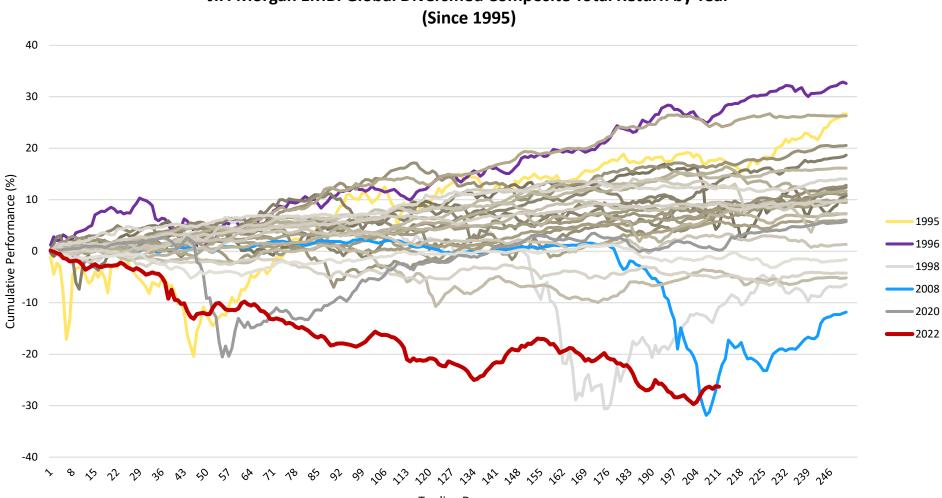
Total Returns by Year



**DoubleLine** 

As of November 2, 2022 Source: Bloomberg, DoubleLine

Total Returns by Year



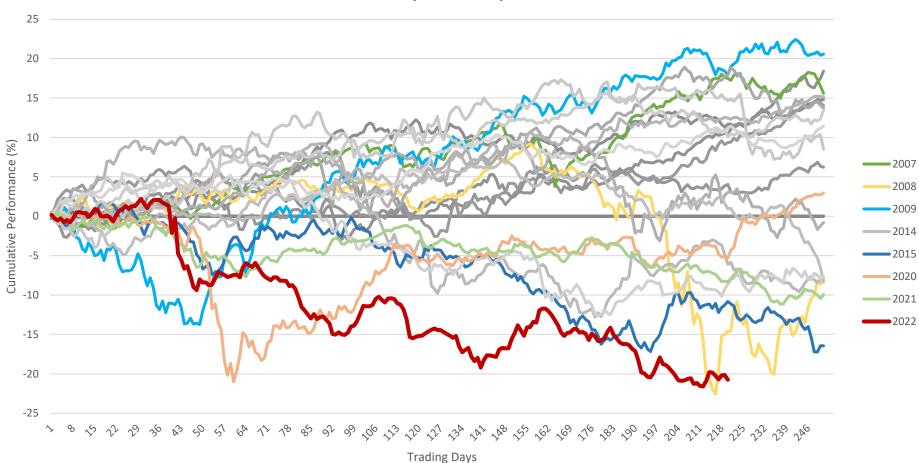
J.P. Morgan EMBI Global Diversified Composite Total Return by Year

**DoubleLine** 

Trading Days

As of November 2, 2022 Source: Bloomberg, DoubleLine

Total Returns by Year



J.P. Morgan EMBI Global Diversified Composite Total Return by Year (Since 1995) DoubleLine

As of November 2, 2022 Source: Bloomberg, DoubleLine

JP Morgan Global Bond Index Yield to Worst



J.P. Morgan Global Bond Index

**DoubleLine** 

As of November 2, 2022 Source: Bloomberg; DoubleLine

JP Morgan GBI-EM GD Yield to Worst

10 9 December 31, 2002 - November 2, 2022 8 Yield to Worst (%) 7 6 5 4 Mayloa NOVIZ feb.11 141-28 Decite Maril 0<sup>2:22</sup> Decol OCTOS Marol AUEO8 Jan 10 Jun 1 APr.1A seq.15

## J.P. Morgan GBI-EM Global Diversified Bond Index

**DoubleLine** 

As of November 2, 2022 Source: Bloomberg; DoubleLine



# DoubleLine Global Bond and DoubleLine Emerging Markets Local Currency Fund Review

# **Global Bond Fund Performance Review**

As of September 30, 2022

DoubleLine®	

Global Bond Fund	1-Year (9/30/2021 to 9/30/2022)	Since Inception (12/17/15 to 9/30/2022)	Standard Deviation
I-shares	-21.00%	-2.41%	6.04%
N-shares	-21.16%	-2.65%	6.01%
Global Index			
FTSE WGBI Index	-22.14%	-1.13%	6.49%

Source: DoubleLine, FTSE Russell

FTSE WGBI = FTSE World Government Bond Index

Please see the appendix of this presentation for further index descriptions.

An investment cannot be made directly in an index.

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling (213) 633-8200 or by visiting www.doubleline.com.

# **Global Bond Fund Portfolio Summary**

As of September 30, 2022

	DBLGX/DLGBX	FTSE WGBI
Duration	6.3	7.6
Average Life	7.0	9.6
Rating Allocation		
Investment Grade	98.36%	100.00%
Non-Investment Grade	1.64%	0.00%
Currency Allocation		
U.S. Dollar Denominated	38.0%	44.7%
Non-U.S. Dollar Denominated	54.6%	56.3%
Cash	7.4%	0.0%

**DoubleLin** 

Source: FTSE, DoubleLine

FTSE WGBI = FTSE World Government Bond Index

Please see the appendix of this presentation for further index descriptions.

Past performance is no guarantee of future results. An investment cannot be made directly in an index.

Credit distribution is determined from the highest available credit rating from any Nationally Recognized Statistical Rating Organization (S&P, Moody's and Fitch). There were no unrated securities in the Fund as of September 30, 2022.

Investment Grade – Refers to a bond whose credit rating is BBB- or higher by Standard and Poor's or Baa3 or higher by Moody's. Ratings are based on corporate bond model. The higher the rating, the more likely the bond will pay back 100 cents on the dollar.

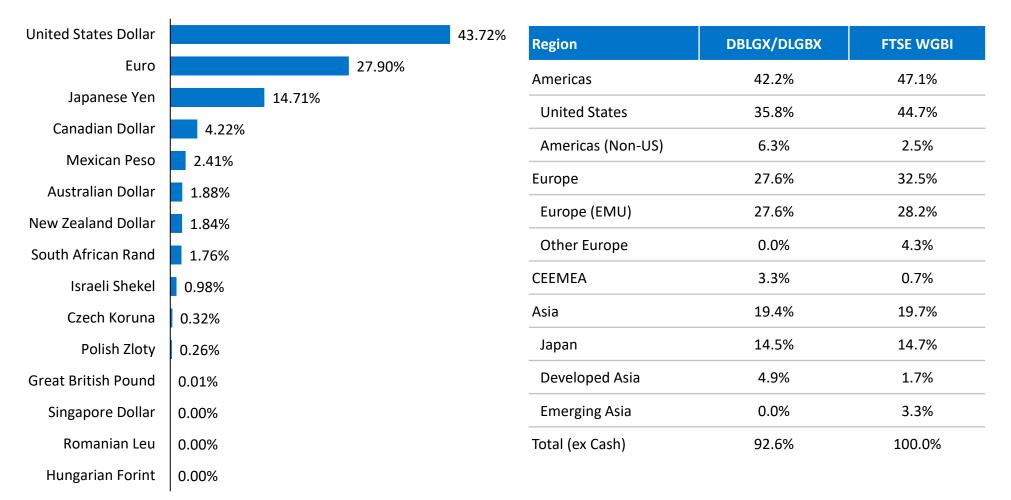
Below Investment Grade (BB, B and below) – These bonds are seen as having a higher default risk or other adverse credit events, but typically pay higher yields than better quality bonds in order to make them attractive. They are less likely to pay back 100 cents on the dollar.

## **Global Bond Fund Portfolio Summary**

As of September 30, 2022

**Regional Breakdown** 

**Currency Breakdown** 



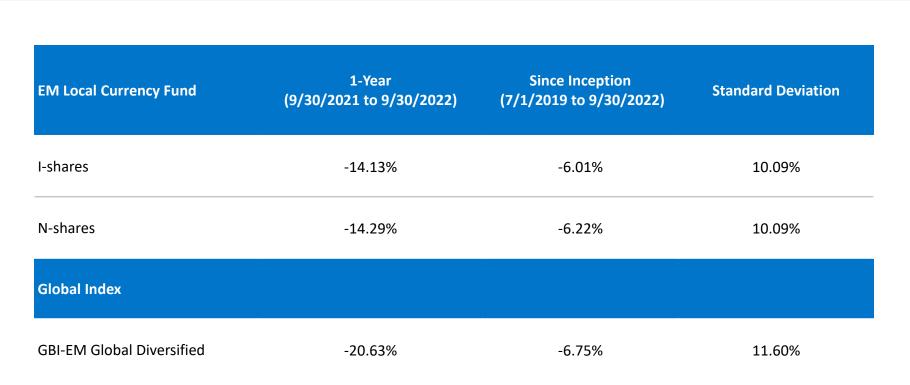
Source: DoubleLine, FTSE Russell

FTSE WGBI: FTSE World Government Bond Index; CEEMEA: Central Eastern Europe Middle East & Africa. JGB's – Japanese Government Bonds.

Past performance is no guarantee of future results. An investment cannot be made directly in an index.

# **Emerging Markets Local Currency Fund Performance Review**

As of September 30, 2022



DoubleLir

Source: DoubleLine, JP Morgan

GBI-EM Global Diversified = JP Morgan Emerging Markets Government Bond Index Global Diversified

Please see the appendix of this presentation for further index descriptions.

An investment cannot be made directly in an index.

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling (213) 633-8200 or by visiting www.doubleline.com.

## **Emerging Markets Local Currency Fund**

As of September 30, 2022

	DBELX	GBI-EM Global Diversified
Duration	3.5	4.8
Average Life	4.6	7.1
Rating Allocation		
Investment Grade	72.1%	72.5%
Non-Investment Grade	23.1%	27.5%
Currency Allocation		
U.S. Dollar Denominated	0.0%	0.0%
Non-U.S. Dollar Denominated	95.1%	100.0%
Cash	4.9%	0.0%

**DoubleLin** 

Source: DoubleLine, JP Morgan

GBI-EM Global Diversified = JP Morgan Emerging Markets Government Bond Index Global Diversified

Please see the appendix of this presentation for further index descriptions.

Past performance is no guarantee of future results. An investment cannot be made directly in an index.

Credit distribution is determined from the highest available credit rating from any Nationally Recognized Statistical Rating Organization (S&P, Moody's and Fitch). There were no unrated securities in the Fund as of September 30, 2022.

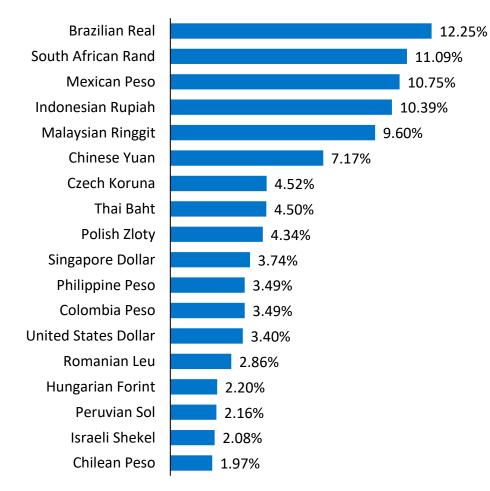
Investment Grade – Refers to a bond whose credit rating is BBB- or higher by Standard and Poor's or Baa3 or higher by Moody's. Ratings are based on corporate bond model. The higher the rating, the more likely the bond will pay back 100 cents on the dollar.

Below Investment Grade (BB, B and below) – These bonds are seen as having a higher default risk or other adverse credit events, but typically pay higher yields than better quality bonds in order to make them attractive. They are less likely to pay back 100 cents on the dollar.

## **Emerging Markets Local Currency Fund**

As of September 30, 2022

### **Currency Breakdown**



## **Regional Breakdown**

Region	DBELX	GBI-EM GD
Americas	30.0%	28.8%
United States	0.0%	0.0%
Americas (Non-US)	30.0%	28.8%
Europe	0.0%	0.0%
CEEMEA	26.6%	31.1%
Africa & Middle East	13.0%	11.7%
Cen./Eastern Europe	13.6%	19.4%
Asia	38.5%	40.1%
Developed Asia	3.7%	0.0%
Emerging Asia	34.8%	40.1%
Total (ex Cash)	95.1%	100.0%

Source: DoubleLine, JP Morgan

GBI-EM Global Diversified = JP Morgan Emerging Markets Government Bond Index Global Diversified; CEEMEA: Central Eastern Europe Middle East & Africa. Past performance is no guarantee of future results. An investment cannot be made directly in an index.

80



DoubleLine Emerging Markets Fixed Income Fund and DoubleLine Low Duration Emerging Markets Fixed Income Fund Review



Near-Term Headwinds to EM Asset Class

	Я	
<b>DoubleLine</b> <sup>®</sup>		

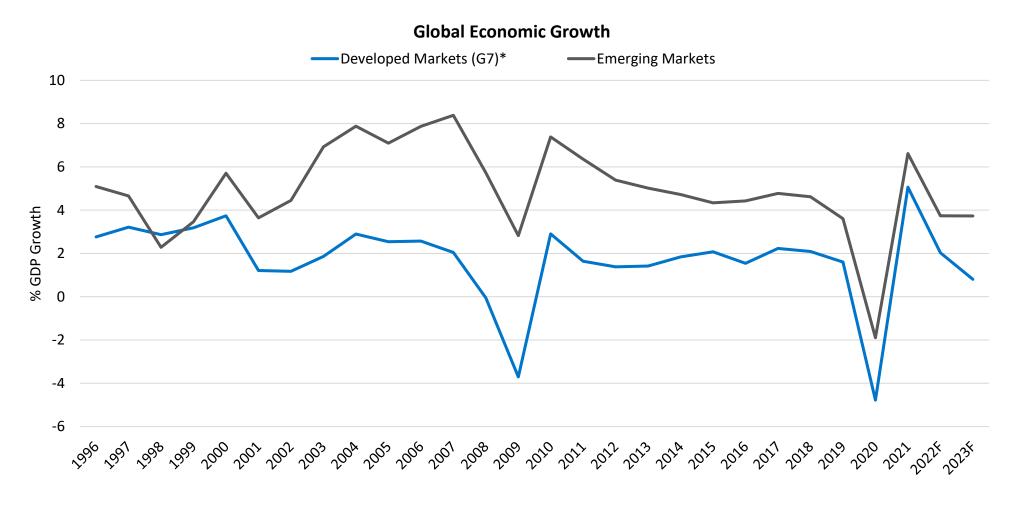
	Webcast		
Inflation & Rising Treasury Yields	November 2021/May 2022		
China Property Sector	November 2021		
EM Political Risks	November 2021		
Pandemic	May 2022		
War	May 2022		

Global Growth Slowdown

Emerging Market Growth on the Mend

GDP growth in Emerging Markets is expected to continue to outpace Developed Markets.

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As of October 2022

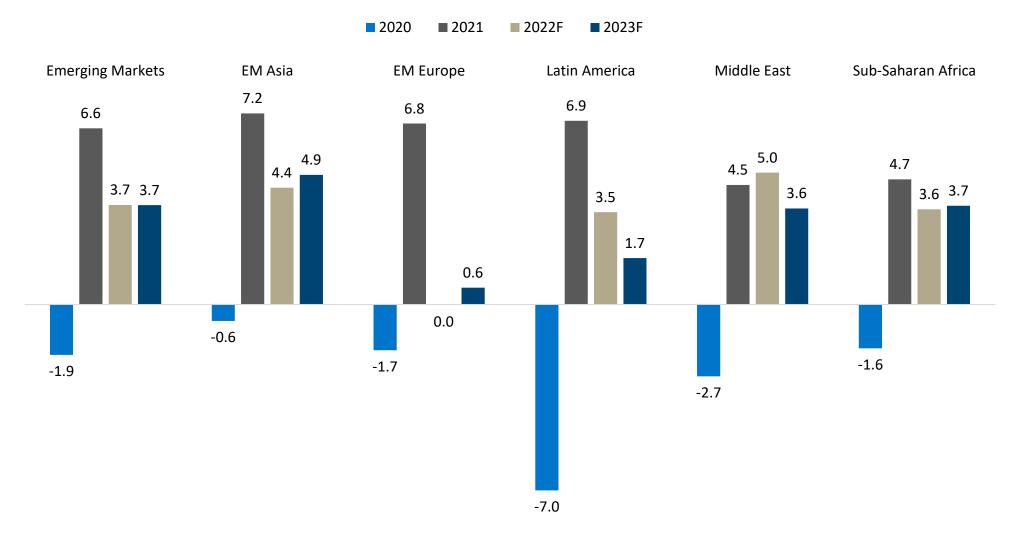
Source: International Monetary Fund, DoubleLine

Forecasts are inherently limited, may not come to pass and cannot be relied upon for investment decisions.

\* G7 refers to a grouping of the seven wealthiest major developed nations: the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom.

Fundamentals – GDP Growth Rates

DoubleLine®



Real GDP Growth (% YoY)

Source: IMF World Economic Outlook – October 2022

Fundamentals – Fiscal Balances

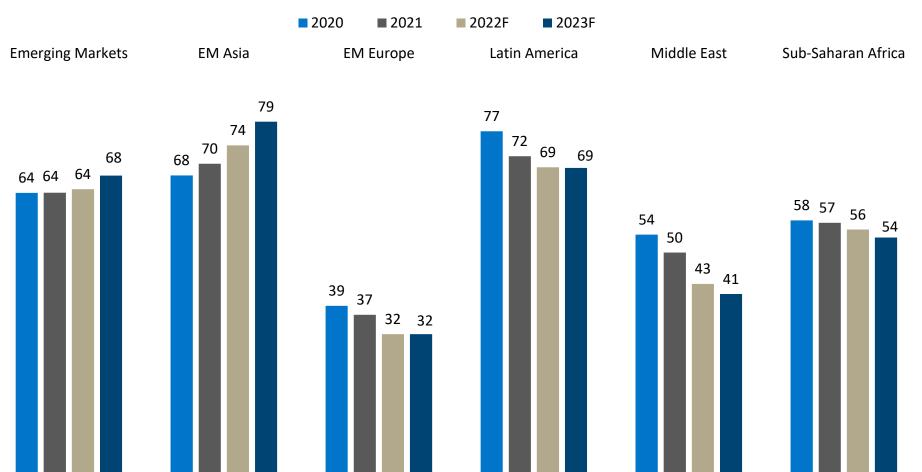
Fiscal Balance (% of GDP) 2021 2020 2022F 2023F **Emerging Markets** Middle East Sub-Saharan Africa EM Asia EM Europe Latin America 0.2 -0.8 -1.8 -3.4 -3.2 -4.5 -4.5 -4.2 -4.6 -5.1 -5.3 -5.4 -5.4 -6.1 -6.4 -6.5 -7.0 -7.8 -8.5 -8.6 -8.7 -9.4

**DoubleLine** 

Source: IMF World Economic Outlook – October 2022

Fundamentals – Debt / GDP



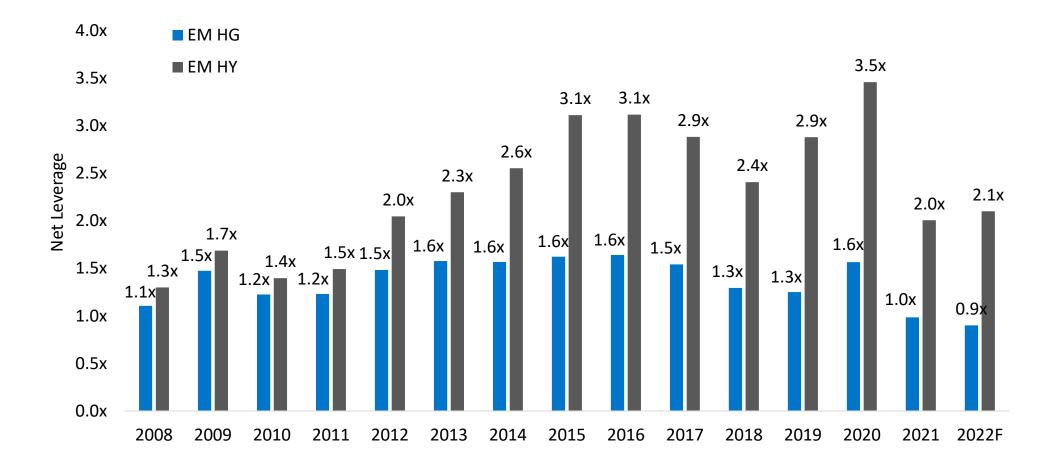


Consolidated Gross Gov't Debt (% of GDP)

Fundamentals – Net Leverage

DoubleLine®

## EM corporate net leverage



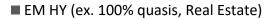
Source: J.P.Morgan EM Corporate Fundamentals Checkup EM HG – Emerging Markets High Grade, EM HY – Emerging Markets High Yield

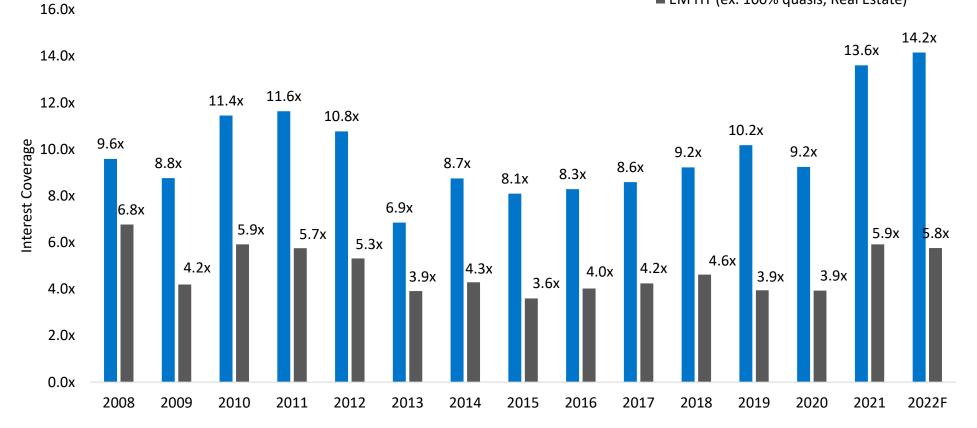
Fundamentals – Interest Coverage



## **Strong Interest Coverage**

EM HG (ex 100% quasi, ex Real Estate)



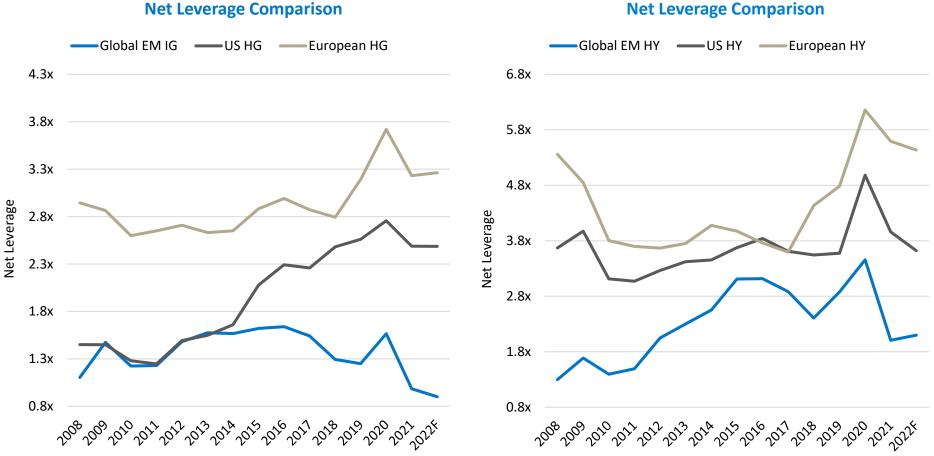


Source: J.P.Morgan EM Corporate Fundamentals Checkup EM HG – Emerging Markets High Grade, EM HY – Emerging Markets High Yield

Fundamentals – Net Leverage Comparison



**Global HY** 



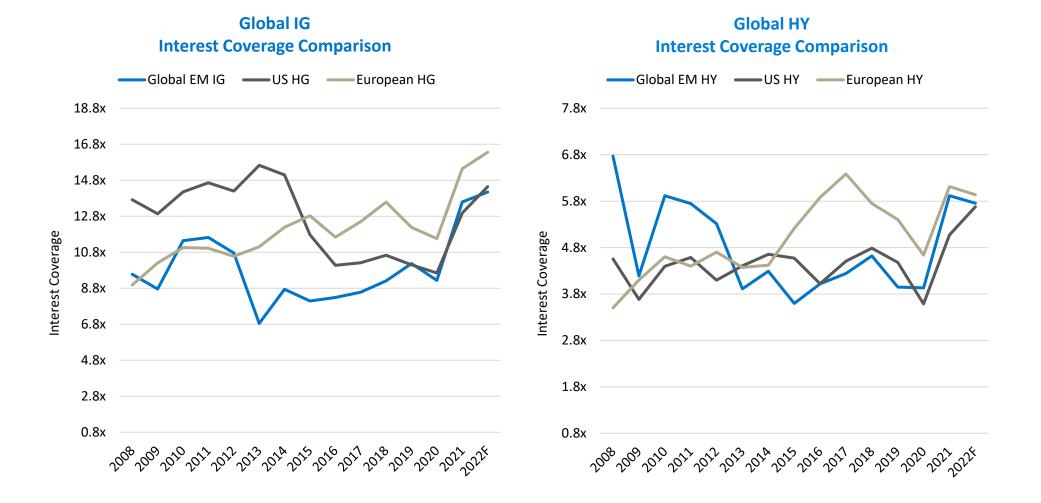
Global IG Net Leverage Comparison

Source: J.P.Morgan, CapitalIQ, Bloomberg

EM IG Net – Emerging Markets Investment Grade Net, US IG – U.S. Investment Grade, Eur IG – Europe Investment Grade, EM HY Net – Emerging Markets High Yield Net, US HY – U.S. High Yield, Eur HY – Europe High Yield

Fundamentals – Interest Coverage Comparison

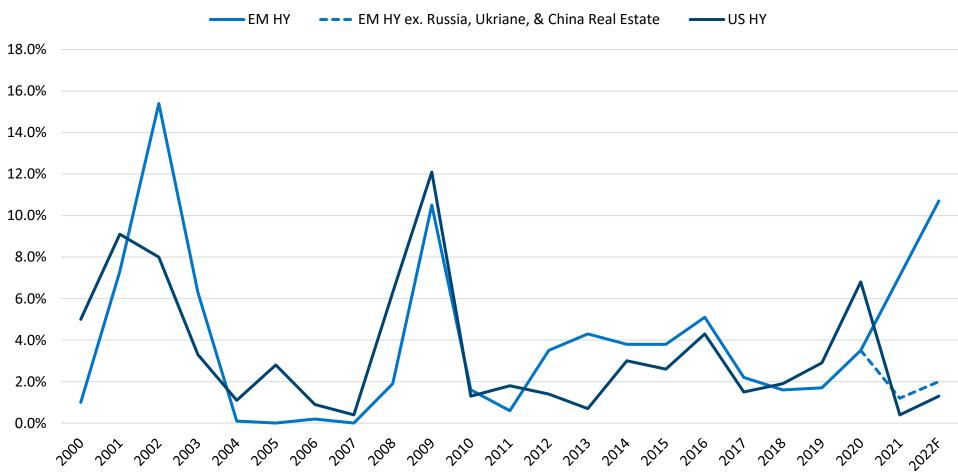




Source: J.P.Morgan, CapitalIQ, Bloomberg

EM IG – Emerging Markets Investment Grade, US IG – U.S. Investment Grade, Eur IG – Europe Investment Grade, EM HY– Emerging Markets High Yield, US HY – U.S. High Yield, Eur HY – Europe High Yield

**EM Default Rates** 



# EM vs. DM Corporate Default Rates

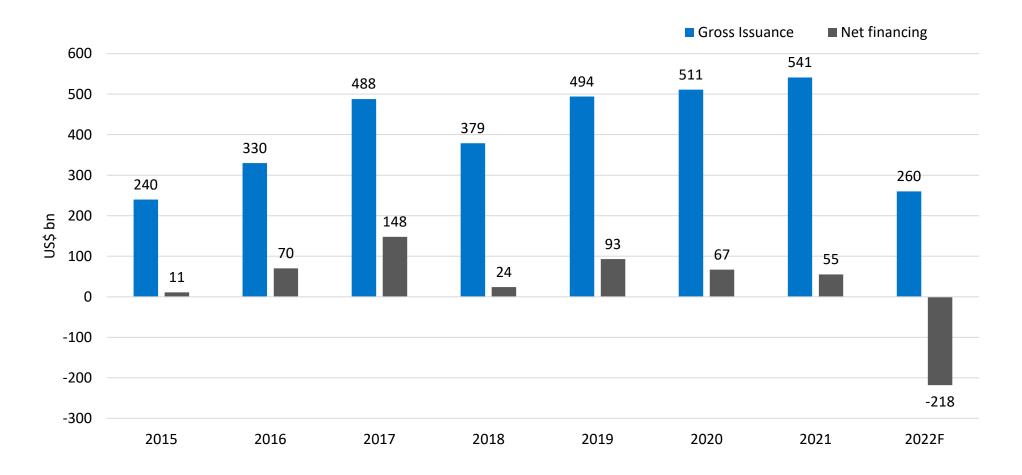
DoubleLine

Source: J.P.Morgan EM HY – Emerging Markets High Yield Net, US HY – U.S. High Yield,

Technicals – Issuance

DoubleLine®

#### **Gross Issuance and Net Financing for EM External Corporates**



Source: J.P. Morgan In USD, billions, J.P. Morgan EM Corporate Strategy Guide, September 2022 Net financing is Gross Issuance less amortizations, coupons, tenders/buybacks/calls

Technicals – Flows

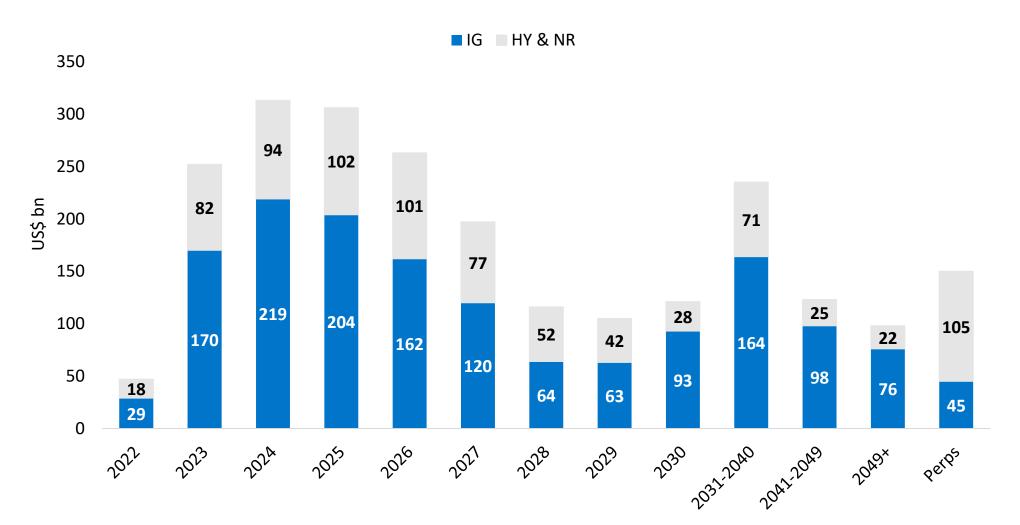
US\$ billions 80 67.1 52.5 60 40 23.3 20 18.7 0 -20 -40 -60 -80 -82.9 -100 Feb Jul Oct Jan Mar Apr May Jun Aug Sep Nov Dec -2018 2019 -2020 

## EM Fixed Income Fund (Strategic & Retail) Cumulative Flows

**DoubleLine** 

Source: J.P. Morgan EM Corporate Strategy Guide, September 2022

**EM Maturity Wall** 



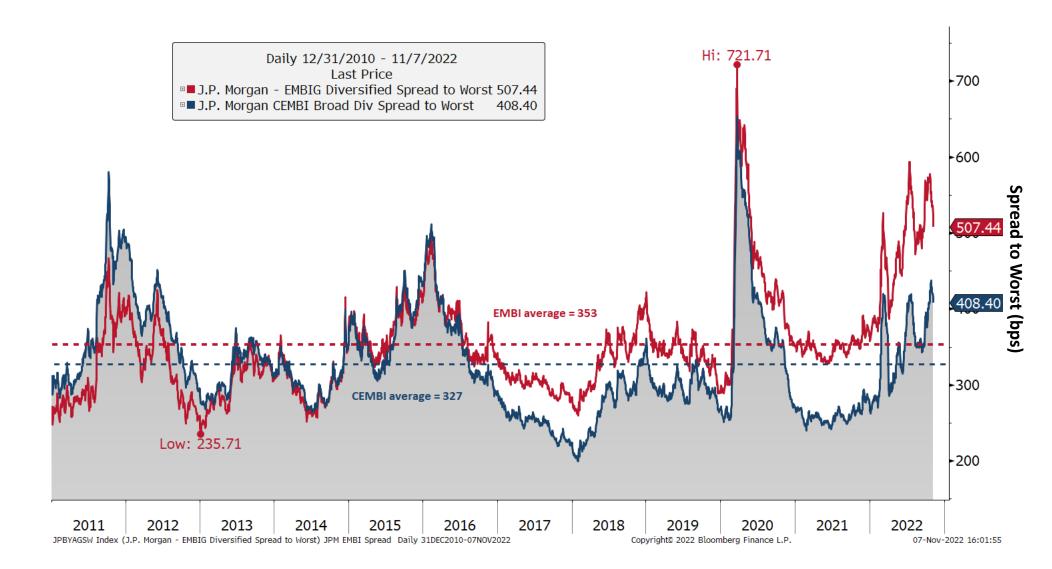
EM corporate annual maturities by IG and HY & NR

**DoubleLine** 

Source: J.P.Morgan EM Corporate Weekly Monitor

IG – Emerging Markets High Grade, HY & NR – Emerging Markets High Yield and Not Rated

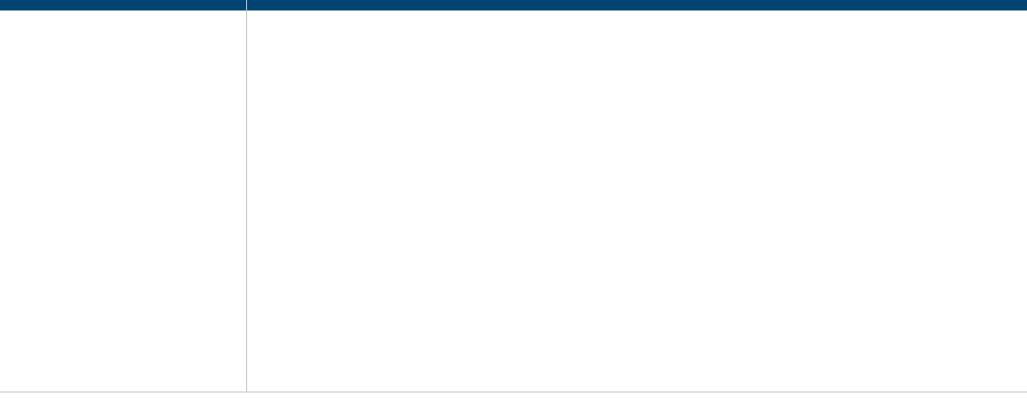
Valuation - Spreads



**DoubleLine** 



DoubleLine Emerging Markets Fixed Income Fund & DoubleLine Low Duration Emerging Markets Fixed Income Fund Review



## **DoubleLine Emerging Markets Fixed Income Fund**

**DBLEX Performance Review** 

**CEMBI** Broad Diversified

DBLEX	1-Year as of 9/30/2022
I-share	-20.73%
N-share	-21.01%
JP Morgan EM Debt Indices (USD Denominated)	
EMBI Global Diversified	-24.28%

-16.73%

JP Morgan EM Debt Indices (Non-USD Den	ominated)
GBI-EM Global Diversified	-20.63%

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month-end may be obtained by calling (213) 633-8200 or by visiting www.doublelinefunds.com.

EMBI GD = JP Morgan Emerging Markets Bond Index Global Diversified, CEMBI BD= JP Morgan Corporate Emerging Markets Bond Index Broad Diversified, GBI-EM = JP Morgan Emerging Markets Government Bond Index Please see the appendix of this presentation for further index descriptions. An investment cannot be made directly in an index.

# **DoubleLine Emerging Markets Fixed Income Fund**

**DBLEX Performance Review** 

DBLEX	Since Inception Annualized (4/6/10 to 9/30/2022)	Standard Deviation	Sharpe Ratio	
I-shares	3.12% 8.13%		0.35	
N-shares	2.86%	8.14%	0.32	
JP Morgan EM Debt Indices				
EMBI GD	3.11%	8.42%	0.34	
CEMBI BD	3.80%	6.17%	0.55	
GBI-EM GD	-0.50%	11.69%	-0.03	

DBLEX	<b>1-Year</b> (9/30/2021 to 9/30/2022)	Standard Deviation	Sharpe Ratio
I-shares	-20.73%	10.01%	-2.29
N-shares	-21.01%	-21.01% 10.23%	
JP Morgan EM Debt Indices			
EMBI GD	-24.28%	10.79%	-2.53
CEMBI BD	-16.73%	6.07%	-2.93
GBI-EM GD	-20.63%	9.07%	-2.70

Source: DoubleLine, JP Morgan, Bloomberg

EMBI GD = JP Morgan Emerging Market Bond Index Global Diversified, CEMBI BD = JP Morgan Corporate Emerging Market Bond Index Broad Diversified, GBI-EM = JP Morgan Emerging Markets Government Bond Index Global Diversified. Please see the appendix of this presentation for further index descriptions.

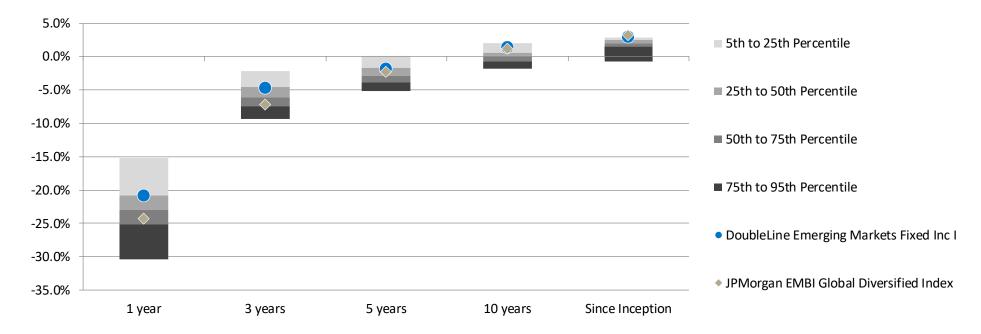
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## DoubleLine Emerging Markets Fixed Income Fund Return



Since Inception: May 1, 2010 through September 30, 2022

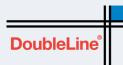


Manager vs Morningstar Emerging Markets Bond (MF+ETF): Return Rank					
	1 year 275 mng	3 years 258 mng	5 years 245 mng	10 years 137 mng	Since Inception 99 mng
DoubleLine Emerging Markets Fixed Income Fund (DBLEX)	24%	24%	25%	10%	4%
JPM EMBI Global Diversified	69%	71%	34%	11%	3%

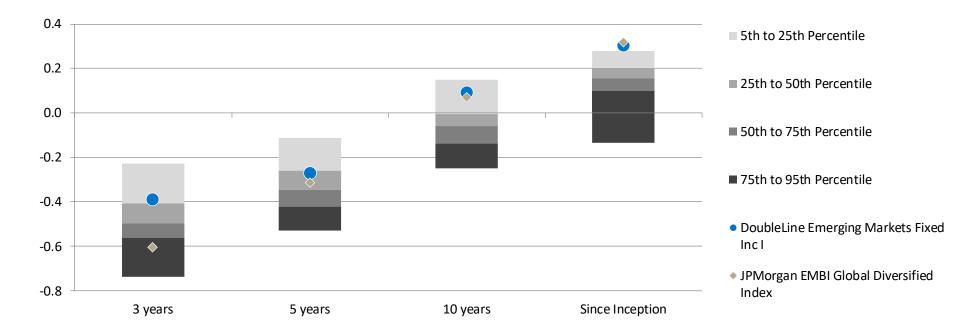
Note: DoubleLine Emerging Markets Fixed Income Fund inception date was April 6, 2010. Zephyr Style Advisor does not calculate partial months, therefore the start date for statistics shown is May 2010. Source: Zephyr Style Advisor Mng = Managers

Past performance does not guarantee future results.

## **DoubleLine Emerging Markets Fixed Income Fund** Sharpe Ratio



Since Inception: May 1, 2010 through September 30, 2022



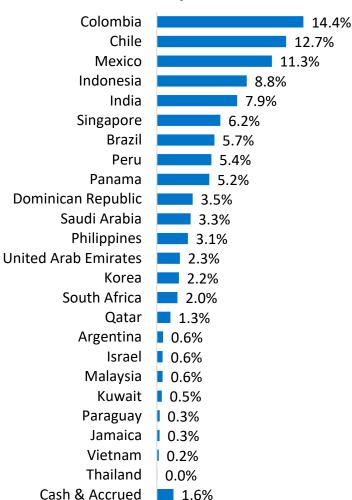
Manager vs Morningstar Emerging Markets Bond (MF+ETF): Sharpe Ratio Rank				
	3 years 258 mng	5 years 245 mng	10 years 137 mng	Since Inception 99 mng
DoubleLine Emerging Markets Fixed Income Fund (DBLEX)	19%	27%	10%	3%
JPM EMBI Global Diversified	88%	35%	11%	3%

Note: DoubleLine Emerging Markets Fixed Income Fund inception date was April 6, 2010. Zephyr Style Advisor does not calculate partial months, therefore the start date for statistics shown is May 2010. Source: Zephyr Style Advisor Mng = Managers

Past performance does not guarantee future results.

## **Emerging Markets Fixed Income Fund**

As of September 30, 2022



#### Country Breakdown

	DBLEX/DLENX	EMBI Global Diversified
Market Price	\$71.81	\$75.29
Duration	6.99	6.58
Average Life	11.38	12.24
Asset Allocation		
Investment Grade	66.56%	51.79%
BB	23.01%	22.30%
B and Below	7.51%	25.71%
Not Rated/Other	1.28%	0.20%
Cash and Accrued	1.64%	0.00%
Sovereign	30.08%	79.73%
Quasi-Sovereign	16.58%	20.27%
Corporate	51.70%	0.00%
U.S. Dollar-Denominated	100.00%	100.00%

Credit distribution is determined from the highest available credit rating from any Nationally Recognized Statistical Rating Organization (S&P, Moody's and Fitch).

**Investment Grade** – Refers to a bond whose credit rating is BBB- or higher by Standard and Poor's or Baa3 or higher by Moody's. Ratings are based on corporate bond model. The higher the rating, the more likely the bond will pay back 100 cents on the dollar.

**Below Investment Grade (BB, B and below)** – These bonds are seen as having a higher default risk or other adverse credit events, but typically pay higher yields than better quality bonds in order to make them attractive. They are less likely to pay back 100 cents on the dollar.

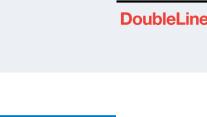
Source: JP Morgan, DoubleLine

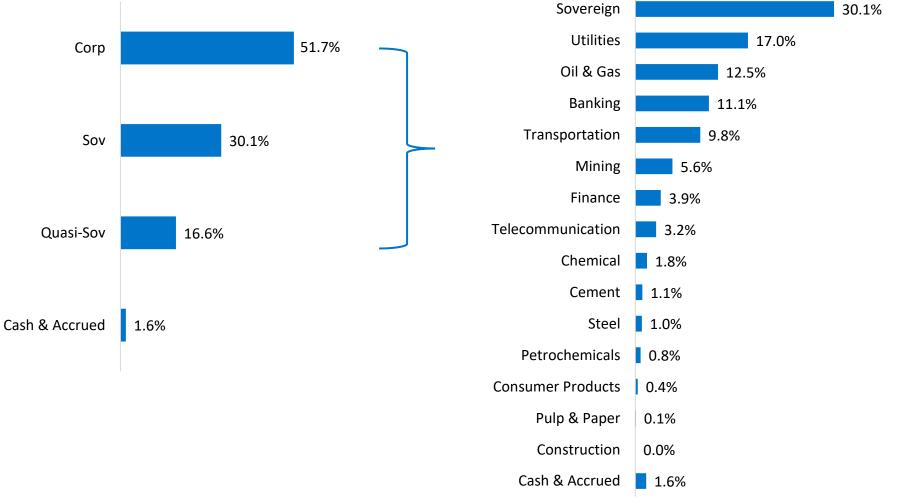
*EMBI GD* = JP Morgan Emerging Markets Bond Index Global Diversified. Please see the appendix of this presentation for further index descriptions. Fund holdings and sector allocations are subject to change and are not a recommendation to buy or sell any security.

Past performance is no guarantee of future results. An investment cannot be made directly in an index.

## **Emerging Markets Fixed Income Fund**

## DBLEX Portfolio Distribution





# **Low Duration Emerging Markets Fixed Income Fund**

**DBLLX Performance Review** 

DBLLX	1-Year as of 9/30/2022
I-share	-8.25%
N-share	-8.57%

JP Morgan EM Debt Indices (U.S. \$ Denominated) CEMBI Broad Diversified Maturity 1-3 Years -11.19%

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CEMBI Broad Diversified Maturity 1-3 Years = JP Morgan Corporate Emerging Markets Bond Index Broad Diversified Maturity 1-3 years. Please see the appendix of this presentation for further index descriptions. An investment cannot be made directly in an index.

## DoubleLine Low Duration Emerging Markets Fixed Income Fund

**DBLLX Performance Review** 

DBLLX	Since Inception Annualized (4/7/14 to 9/30/2022)	Standard Deviation	Sharpe Ratio
I-shares	1.61%	3.56%	0.25
N-shares	1.37%	3.55%	0.18
JP Morgan EM Debt Indices			
CEMBI BD Maturity 1-3 Years	2.02%	4.24%	0.31

DBLLX	<b>1-Year</b> (9/30/2021 to 9/30/2022)	Standard Deviation	Sharpe Ratio
I-shares	-8.25%	3.36%	-2.61
N-shares	-8.57%	3.37%	-2.68
JP Morgan EM Debt Indices			
CEMBI BD Maturity 1-3 Years	-11.19%	5.22%	-2.21

Source: DoubleLine, JP Morgan, Bloomberg

CEMBI BD = JP Morgan Corporate Emerging Market Bond Index Broad Diversified. Please see the appendix of this presentation for further index descriptions.

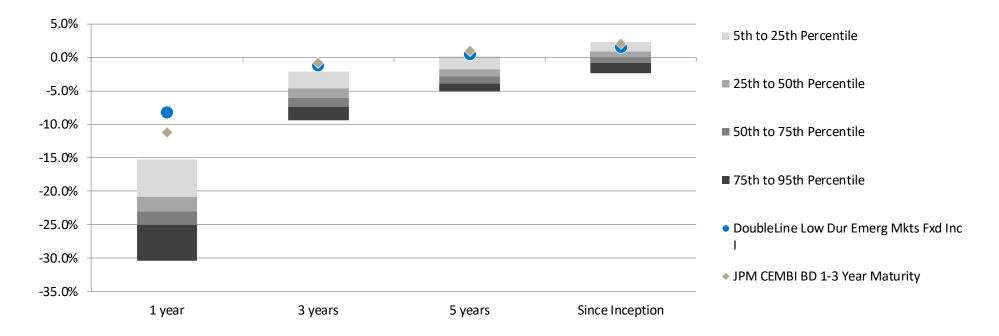
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## DoubleLine Low Duration Emerging Markets Fixed Income Fund Return



Since Inception: May 1, 2014 through September 30, 2022



Manager vs Morningstar Emerging Markets Bond (MF+ETF): Return Rank				
	1 year 275 mng	3 years 258 mng	5 years 245 mng	Since Inception 187 mng
DoubleLine Low Dur Emerg Mkts Fxd Inc I	1%	3%	3%	15%
JPM CEMBI BD 1-3 Year	2%	3%	3%	11%

Note: DoubleLine Low Duration Emerging Markets Fixed Income Fund inception date was April 7, 2014. Zephyr Style Advisor does not calculate partial months, therefore the start date for statistics shown is May 2014. Source: Zephyr Style Advisor

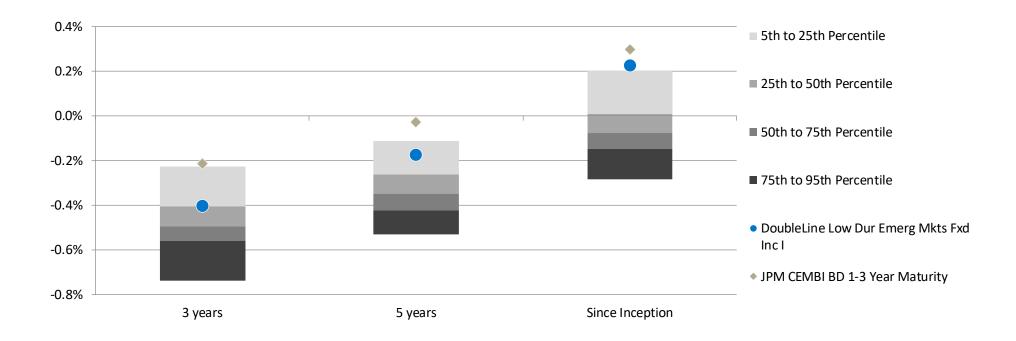
Mng = Managers

Past performance does not guarantee future results.

## DoubleLine Low Duration Emerging Markets Fixed Income Fund Sharpe Ratio



Since Inception: May 1, 2014 through September 30, 2022



Manager vs Morningstar Emerging Markets Bond (MF+ETF): Sharpe Ratio Rank				
	3 years 258 mng	5 years 245 mng	Since Inception 187 mng	
DoubleLine Low Dur Emerg Mkts Fxd Inc I	24%	12%	3%	
JPM CEMBI BD 1-3 Year	4%	3%	1%	

Note: DoubleLine Low Duration Emerging Markets Fixed Income Fund inception date was April 7, 2014. Zephyr Style Advisor does not calculate partial months, therefore the start date for statistics shown is May 2014. Source: Zephyr Style Advisor Mng = Managers

Past performance does not guarantee future results.

## Low Duration Emerging Markets Fixed Income Fund

12.9%

DBLLX Portfolio Summary as of September 30, 2022



**Country Breakdown** Peru Korea 9.6% Colombia 9.5% Singapore 9.4% Chile 9.1% Indonesia 7.9% Brazil 5.9% Malaysia 5.8% India 5.1% Panama 3.8% Mexico 3.5% Qatar 2.7% South Africa 2.3% 2.0% Israel Saudi Arabia 1.9% **United Arab Emirates** 1.8% Kuwait 1.7% Paraguay 0.6% Guatemala 0.4% Dominican Republic 0.4% Jamaica 0.1% Cash & Accrued 3.5%

		CEMBI Broad Div 1-3yr
	DBLLX/DELNX	Maturity
Market Price	\$90.52	\$93.74
Duration	2.71	1.69
Average Life	2.99	1.92
Asset Allocation		
Investment Grade	74.65%	61.48%
BB	19.07%	15.95%
B and Below	2.54%	14.13%
Not Rated/Other	0.27%	8.43%
Cash and Accrued	3.48%	0.00%
Sovereign	14.60%	0.00%
Corp/Quasi-Sovereign	81.92%	100.00%
U.S. Dollar-Denominated	100.0%	100.0%
Cash and Accrued	3.48%	0.00%

Credit distribution is determined from the highest available credit rating from any Nationally Recognized Statistical Rating Organization (S&P, Moody's and Fitch).

Investment Grade – Refers to a bond whose credit rating is BBB- or higher by Standard and Poor's or Baa3 or higher by Moody's. Ratings are based on corporate bond model. The higher the rating, the more likely the bond will pay back 100 cents on the dollar.

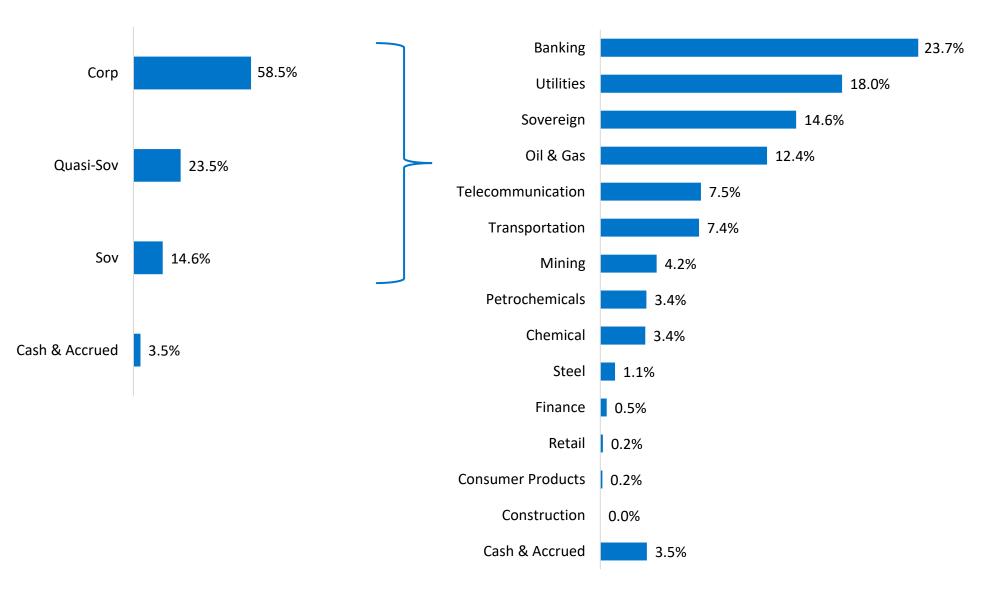
Below Investment Grade (BB, B and below) – These bonds are seen as having a higher default risk or other adverse credit events, but typically pay higher yields than better quality bonds in order to make them attractive. They are less likely to pay back 100 cents on the dollar.

Source: JP Morgan, DoubleLine

CEMBI Broad Div 1-3yr Maturity = JP Morgan Corporate Emerging Markets Bond Index Broad Diversified Maturity 1-3 Years. Please see the appendix of this presentation for further index descriptions. Fund holdings and sector allocations are subject to change and are not a recommendation to buy or sell any security. Past performance is no guarantee of future results. An investment cannot be made directly in an index.

# Low Duration Emerging Markets Fixed Income Fund

#### **DBLLX Portfolio Distribution**



**DoubleLine** 

Source: DoubleLine as of September 30, 2022 Subject to change without notice.

## **Emerging Markets Outlook**

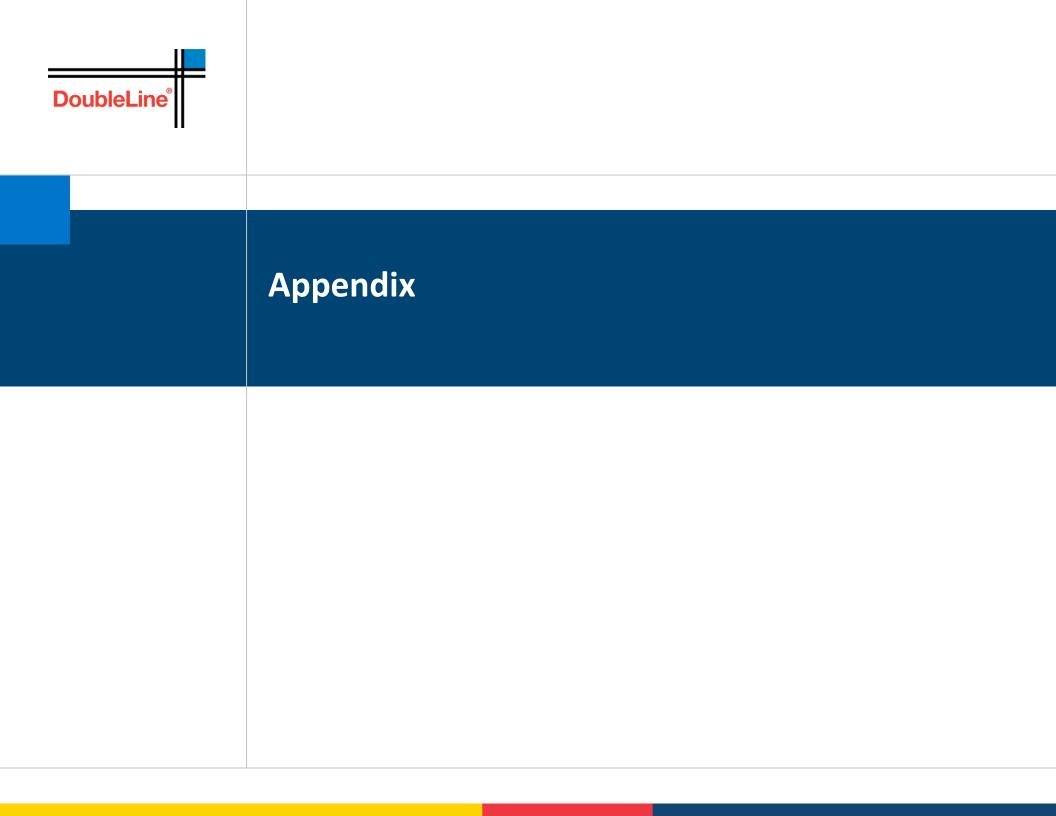
• Global growth slowdown – or uneven economic slowdown across regions, countries and sectors

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- Declining inflation vs. inflation remaining sticky or stuck at higher levels
- When will central banks be able to pivot away from their tightening cycles?
- EM central bank tightening nearing completion
- Limited EM fiscal space
- Stable EM sovereign fundamentals
- Slightly weakening EM corporate balance sheets starting from a strong base

# **Emerging Markets Risk**

- Restrictive monetary policy despite slowing growth outlook
- Inflation remains high and persistent
- Slowing China Growth
  - Property sector
  - Zero Covid policy
- Financial stability risks
- Global energy or food crisis
- Social stability risks
- Ongoing geopolitical tensions
- Country idiosyncratic risks



Average Life – Length of time the principal of a debt issue is expected to be outstanding. Average life does not take into account interest payments but only principal payments made on a loan or security.

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**Basis Points (BPS)** – Basis points (or basis point (bp)) refer to a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01% or 0.0001, and is used to denote the percentage change in a financial instrument. The relationship between percentage changes and basis points can be summarized as: 1% change = 100 basis points; 0.01% = 1 basis point.

Bloomberg Agriculture Spot Index – This index measures the price movements of agricultural commodities included in the Bloomberg Commodity Index and select subindexes.

**Bloomberg Asia Ex-Japan USD Credit China HY** - The Bloomberg Barclays Asia Ex-Japan USD Credit China High Yield Index tracks the performance of high yield, fixed-rate US dollardenominated debt issued by government-related and corporate Chinese issuers. This index is a subset of the flagship EM Asia USD Credit Index. The index was created in April 2013, with index history backfilled to July 1, 2009.

Bloomberg Barclays Global Aggregate Index – This index is a flagship measure of global investment grade debt from 24 local currency markets. This multicurrency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

**Bloomberg Commodity (BCOM) Index** – This index (formerly the Dow Jones-UBS Commodity Index) is calculated on an excess return basis and reflects the price movements of commodity futures. It rebalances annually, weighted two-thirds by trading volume and one-third by world production, and weight caps are applied at the commodity, sector and group levels for diversification. The roll period typically occurs from the sixth to 10th business day based on the roll schedule.

Bloomberg Dollar Spot Index – The Bloomberg Dollar Spot Index tracks the performance of a basket of ten leading global currencies versus the U.S. Dollar. Each currency in the basket and their weight is determined annually based on their share of international trade and FX liquidity. The BBDXY Index data starts from Dec 31, 2004 with a base level of 1000.

Bloomberg Emerging Markets High Yield Total Return Index - The Bloomberg Emerging Markets High Yield Total Return Index tracks the total return performance of the high yield component of the Bloomberg Emerging Markets USD Aggregate Bond Index. The Bloomberg Emerging Markets USD Aggregate Bond Index is a flagship hard currency Emerging Markets debt benchmark that includes fixed and floating-rate US dollar-denominated debt issued from sovereign, quasi-sovereign, and corporate EM issuers. Country eligibility and classification as Emerging Markets is rules-based and reviewed annually using World Bank income group and International Monetary Fund (IMF) country classifications. This index was previously called Bloomberg US EM Index, and history is available back to 1993.

Bloomberg Eurozone Financial Conditions Index – This index tracks the overall level of financial stress in eurozone money, bond and equity markets to help assess the availability and cost of credit. Bloomberg U.S. Financial Conditions Index – This index provides a daily statistical measure of the relative strength of the U.S. money markets, bond markets and equity markets and is considered an accurate gauge of the overall conditions in U.S. financial and credit markets.

Brent Crude Oil – Major trading classification of sweet light crude oil that serves as a benchmark price for purchases of oil worldwide. Brent is known as a light, sweet oil because it contains 0.24% sulfur, making it "sweet," and has a low density, making it "light."

Cash Flow - Is the net amount of cash and cash-equivalents being transferred into and out of a business.

China (Export) Containerized Freight Index (CCFI) – This index ("China Freight Rates Index") measures the global shipping market by tracking data from select ports and shipping companies. It is published every Friday.

China Manufacturing Purchasing Managers Index (PMI) – This index, compiled by the China Federation of Logistics & Purchasing (CFLP) and China Logistics Information Center (CLIC), provides an early indication each month of economic activities in the Chinese manufacturing sector. Every month questionnaires are sent to over 700 manufacturing enterprises all over China.

Citi China Financial Conditions Index – This index uses weighted financial variables to measure economic performance in China.

**Citi Economic Data Change Indexes** – These indexes measure data releases for various economies relative to their one-year history. A positive reading means that data releases have been stronger than their one-year average, and a negative reading means that data releases have been worse than their one-year average.

**Compound Annual Growth Rate (CAGR)** – Rate of return that would be required for an investment to grow from its beginning balance to its ending balance, assuming the profits were reinvested at the end of each period of the investment's life span.

**Conference Board Consumer Confidence Index (CCI)** – This index (published the last Tuesday of every month) measures U.S. consumers' optimism in the economy based on their saving and spending activity.

**Consumer Price Index (CPI)** – This index examines the weighted average of the prices of a basket of consumer goods and services, such as transportation, food and medical care. It is calculated by averaging price changes for each item in the basket. Changes in the CPI are used to assess price changes associated with the cost of living. The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation.

Correlation - Statistic that measures the degree to which two securities move in relation to each other.

**Coupon** – A coupon or coupon payment is the annual interest rate paid on a bond, expressed as a percentage of the face value and paid from issue date until maturity. Coupons are usually referred to in terms of the coupon rate (the sum of coupons paid in a year divided by the face value of the bond in question).

**Credit Quality** – Determined from the highest available credit rating from any nationally recognized statistical rating agency (NRSRO, generally S&P, Moody's or Fitch). DoubleLine chooses to display credit ratings using S&P's rating convention, although the rating might be sourced from another NRSRO. The rating agency evaluates a bond issuer's financial strength, meaning its ability to pay a bond's principal and interest in a timely fashion. Ratings are expressed as letters ranging from "AAA," which is the highest grade, to "D," which is the lowest grade. In situations where the rating agency has not issued a formal rating on a security, the security will be classified as "nonrated."

**Duration** – Commonly used measure of the potential volatility of the price of a debt security, or the aggregate market value of a portfolio of debt securities, prior to maturity. Securities with a longer duration generally have more volatile prices than securities of comparable quality with a shorter duration.

**Deustche Bank FX Volatility Indicator Index** - CVIX is the Deutsche Bank Currency Volatility Index. Similarly to the Chicago Board Options Exchange Volatility Index (VIX), which measures the impliedvolatility of equity markets (based on the S&P 500), CVIX measures the implied volatility of currency markets. Thus, it is a measure of the market's expectation of future currency volatility.

Employment Cost Index (ECI) – Survey of employer payrolls conducted by the U.S. Bureau of Labor Statistics that measures the change in total employee compensation each quarter. It is used by a wide variety of stakeholders – economists, investors, employers – to track the state of the economy or set pay scales for their employees.

Freightos Baltic Index (FBX) – This oceanic freight index, produced by Freightos and the Baltic Exchange, tracks market rates for 40-foot containers in eight regions: China/East Asia, North America West Coast, North America East Coast, Europe, North Europe, South America East Coast, South America West Coast and Mediterranean.

Foreign Exchange (FX) – Foreign exchange (forex or FX) is the trading of one currency for another. For example, one can swap the U.S. dollar for the euro. Foreign exchange transactions can take place on the foreign exchange market, also known as the forex market. There is no centralized location, rather the forex market is an electronic network of banks, brokers, institutions and individual traders (mostly trading through brokers or banks).

GDP US Chained 2012 Dollars Index - "Real" GDP which is GDP adjusted for inflation.

**Gold** – Gold Spot Price is measured in U.S. dollars per troy ounce.

**G4** - U.S., Europe, Japan, England

**G-10 (Group of Ten)** – The G-10 comprises 11 industrialized nations that meet on an annual basis, or more frequently as needed, to consult each other, debate and cooperate on international financial matters. The member countries are: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

High Yield (HY) Bonds – Bonds that pay higher interest rates because they have lower credit ratings than investment grade (IG) bonds. HY bonds are more likely to default, so they must pay a higher yield than IG bonds to compensate investors.

ICE Bank of America (BofA) U.S. Corporate Index – This index tracks the performance of U.S. dollar-denominated, investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch) and an investment grade-rated country of risk (based on an average of Moody's, S&P and Fitch foreign currency, long-term sovereign debt ratings). Securities must also have at least one year remaining to final maturity, a fixed coupon schedule and a minimum amount outstanding of \$250 million.

ICE Bank of America (BofA) U.S. Government Index – This index tracks the performance of U.S. government debt such as Treasuries.

ICE Bank of America (BofA) U.S. High Yield (HY) Cash Pay Index – This index tracks the performance of U.S. dollar-denominated, below-investment-grade corporate debt, currently in a coupon paying period, that is publicly issued in the U.S. domestic market. Qualifying securities must have a below-investment-grade rating (based on an average of Moody's, S&P and Fitch) and an investment grade-rated country of risk (based on an average of Moody's, S&P and Fitch foreign currency, long-term sovereign debt ratings). Securities must also have more than one year remaining to final maturity, a fixed coupon schedule and a minimum outstanding amount of \$100 million.

ICE Bank of America (BofA) Merrill Lynch Option Volatility Estimate (MOVE) Index - This is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options. It is the weighted average of volatilities on the CT2, CT5, CT10, and CT30. (weightedaverage of 1m2y, 1m5y, 1m10y and 1m30y Treasury implied vols with weights 0.2/0.2/0.4/0.2, respectively).

**IHS Markit Developed Markets and Emerging Markets Manufacturing Indexes** – The Purchasing Managers' Index is based on monthly surveys of select companies representing major and developing economies worldwide. There are two parts to the monthly PMI releases: the headline PMI number, designed to provide a snapshot of the health of the economy, and the subindexes, or component-level data. The subindexes provide data on key economic drivers, such as inflation, exports, employment and inventories. Each country (or regional) PMI survey for the manufacturing or service sector is based on questionnaire responses from panels of senior purchasing executives (or similar) at over 400 companies.

**IHS Markit Manufacturing Purchasing Managers' Indexes** – These indexes (referred to individually as PMI) rely on data from surveys of senior level executives in their respective countries. An overall sentiment index is calculated from the results of queries on production, orders, inventories, employment and other factors.

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Investment Grade – Rating that signifies a municipal or corporate bond presents a relatively low risk of default. Bonds below this designation are considered to have a high risk of default and are commonly referred to as "junk bonds." The higher the bond rating the more likely the bond will return 100 cents on the U.S. dollar.

**ISM Manufacturing Index** – This index (formerly the ISM Purchasing Managers Index (PMI)) is compiled by the Institute for Supply Management and tracks the economic health of the manufacturing sector. The index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and employment environment.

JACI - The JACI tracks total returns for US dollar-denominated bonds issued by Asia sovereign, quasi-sovereign, and corporate borrowers. Countries covered are

Bangladesh, China, Hong Kong, India, Indonesia, Malaysia, Macau, Mongolia, Pakistan, The Philippines, Taiwan, Thailand, Singapore, South Korea, Sri Lanka and Vietnam.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) – This index is a market capitalization-weighted index consisting of U.S. dollar-denominated emerging markets corporate bonds. CEMBI is a liquid global corporate benchmark representing Asia, Latin America, Europe and the Middle East/Africa.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified – This index is a uniquely weighted version of the CEMBI, which is a market capitalization-weighted index consisting of U.S. dollar-denominated emerging markets corporate bonds. It limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified High Grade – This subindex of the CEMBI Broad Diversified includes high grade (or "investment grade") securities. J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified High Yield – This subindex of the CEMBI Broad Diversified includes below-investment-grade (or "high yield") securities.

J.P. Morgan Emerging Market Currency Index (EMCI) – This index is a tradable benchmark for emerging markets currencies versus the U.S. dollar.

J.P. Morgan Emerging Markets Bond Index (EMBI) – This index tracks emerging markets (EM) bonds and comprises sovereign debt and EM corporate bonds.

J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified – This index is a uniquely weighted version of the EMBI, which tracks emerging markets (EM) bonds and comprises sovereign debt and EM corporate bonds. It limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified High Grade – This subindex of the EMBI Global Diversified includes high grade (or "investment grade") securities.

J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified Spread – Credit spread of the EMBI Global Diversified compared to U.S. Treasuries.

J.P. Morgan Government Bond Index – Emerging Markets (GBI-EM) – This index is the first comprehensive, global local emerging markets index and consists of regularly traded, liquid, fixed-rate, domestic currency government bonds to which international investors can gain exposure.

J.P. Morgan Government Bond Index – Emerging Markets (GBI-EM) Broad Diversified – This market capitalization-weighted index comprises U.S. dollar-denominated corporate bonds from emerging markets. It is a liquid global corporate benchmark representing Asia, Latin America, Europe and the Middle East/Africa.

J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD) – This index is a uniquely weighted version of the EMBI. The EMBI tracks bonds from emerging markets (EM), and comprises sovereign debt and EM corporate bonds. The EMBI GD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD) Investment Grade (IG) – This index is a uniquely weighted version of the EMBI that tracks the IG component. The EMBI tracks bonds from emerging markets (EM), and comprises sovereign debt and EM corporate bonds. The EMBI GD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD) High Yield (HY) – This index is a uniquely weighted version of the EMBI that tracks the HY component. The EMBI tracks bonds from emerging markets (EM), and comprises sovereign debt and EM corporate bonds. The EMBI GD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI BD) – This index is a uniquely weighted version of the CEMBI, which is a market capitalization-weighted index consisting of U.S. dollar-denominated emerging markets corporate bonds. The CEMBI BD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI BD) Investment Grade (IG) – This index tracks the IG component of a uniquely weighted version of the CEMBI, which is a market capitalization-weighted index consisting of U.S. dollar-denominated emerging markets corporate bonds. The CEMBI BD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

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J.P. Morgan Emerging Markets Bond Index Global Diversified Quasi - This index is a uniquely weighted version of the EMBI that tracks the quasi-sovereign component. The EMBI tracks bonds from emerging markets (EM), and comprises sovereign debt and EM corporate bonds. The EMBI GD limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding. For index purposes, a quasi-sovereign is defined as an entity that is 100% guaranteed or 100% owned by the national government, and resides in the index eligible country.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) High Yield (HY) – This index tracks the HY component of the CEMBI, a market capitalization-weighted index consisting of U.S. dollardenominated emerging markets corporate bonds. The CEMBI is a liquid global corporate benchmark representing Asia, Latin America, Europe and the Middle East/Africa.

JULI - The J.P. Morgan US Liquid Index (JULI) and the Morgan Aggregate Index Europe (MAGGIE) encompass fixed rate high-grade coverage across these two regions.

Maggie - The J.P. Morgan US Liquid Index (JULI) and the Morgan Aggregate Index Europe (MAGGIE) encompass fixed rate high-grade coverage across these two regions.

Manheim Used Vehicle Value Index - Measurement, published monthly by Manheim, gauges wholesale auction prices for used cars.

Market Price – weighted average of the prices of a fund's portfolio holdings. While market price is a component of a fund's net asset value (NAV), it should not be confused with a fund's NAV.

Morgan Stanley Capital International Emerging Markets (MSCI EM) Currency Index – This index measures the total return of 25 emerging markets currencies relative to the U.S. dollar where the weight of each currency is equal to its country weight in the MSCI EMI.

Morgan Stanley Capital International Emerging Markets Index (MSCI EMI) – This index captures large- and mid-cap representation across 26 emerging markets countries. With 1,385 constituents, the index covers approximately 85% of the free-float-adjusted market capitalization in each country.

**Option-Adjusted Spread (OAS)** – Measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is then adjusted to take into account an embedded option. Typically, an analyst uses U.S. Treasury yields for the risk-free rate. The spread is added to the fixed-income security price to make the risk-free bond price the same as the bond.

**S&P 500 Index** – This unmanaged capitalization-weighted index of the stocks of the 500 largest publicly traded U.S. companies is designed to measure performance of the broad domestic economy through changes in the aggregate market value of the 500 stocks, which represent all major industries.

S&P GSCI – This index (formerly the Goldman Sachs Commodity Index) measures investment in the commodity markets and commodity market performance over time.

Shanghai Export Containerized Freight Index (SCFI) – This index, produced by the Shanghai Shipping Exchange, reflects the ocean freight and the associated seaborne surcharges of individual shipping routes on the spot market.

Sharpe Ratio – Measure used to help investors understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Volatility is a measure of the price fluctuations of an asset or portfolio.

**Smart Beta** – Defines a set of investment strategies that emphasize the use of alternative index construction rules to traditional market capitalization-based indexes. Smart beta emphasizes capturing investment factors or market inefficiencies in a rules-based and transparent way.

**Spread** – Difference between yields on differing debt instruments, calculated by deducting the yield of one instrument from another. The higher the yield spread, the greater the difference between the yields offered by each instrument. The spread can be measured between debt instruments of differing maturities, credit ratings or risk.

Spread-to-Worst - Measures the dispersion of returns between the best and worst performing security in a given market, usually bond markets, or between returns from different markets.

**Standard Deviation** – A measure of the variation or dispersion of a set of data from its mean or expected/budgeted value. A low standard deviation indicates that the data points tend to be very close to the mean, whereas a high standard deviation indicates that the data is spread out over a large range of values. A measure of an investment's volatility.

Trade-Weighted U.S. Dollar Index – This index, created by the Federal Reserve, measures the value of the U.S. dollar based on its competitiveness versus trading partners.

U.S. Dollar Index (DXY) – A weighted geometric mean of the U.S. dollar's value relative to a basket of six major foreign currencies: the euro, Japanese yen, British pound, Canadian dollar, Swedish krona and Swiss franc.

**U.S. Economic Policy Uncertainty Index** – This index measures policy-related uncertainty by tracking Congressional Budget Office reports on temporary federal tax provisions, the Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters and search terms in 10 large daily newspapers.

Weighted Average Life (WAL) – Average number of years for which each dollar of unpaid principal on a loan, mortgage or bond remains outstanding.

**Zombie Firms** - Zombie companies are indebted businesses that, although generating cash, after covering running costs, fixed costs (wages, rates, rent) they only have enough funds to service the interest on their loans, but not the debt itself. As such they generally depend on banks (creditors) for their continued existence, effectively putting them on never-ending life support.

Hard data – Is a verifiable fact that is acquired from reliable sources according to a robust methodology.
Soft data – Is data based on qualitative information such as a rating, survey or poll.
EBITDA - Earnings before interest, taxes, depreciation and amortization
Beta - Is a measure of a stock or portfolio's level of systematic and unsystematic risk based on in its prior performance.
IMF - International Monetary Fund
QE - Quantitative Easing
GDP - Gross Domestic Product
PBOC - People's Bank of China
VAT - Value Added Tax
RRR - Reserve Requirement Ratio
WTI - West Texas Intermediate
AMLO - Andrés Manuel López Obrador
CFTC - Commodity Futures Trading Commission
LATAM - Latin America
SME - Small to Medium Enterprises

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## Webcast Announcements

## DoubleLine®

## **Upcoming Webcasts:**

### November 22, 2022 – Income Fund Webcast 1:15 pm PT/4:15 pm ET

DoubleLine Portfolio Manager Ken Shinoda will discuss the DoubleLine Income Fund.

## December 6, 2022 – Total Return Bond Fund Webcast 1:15 pm PT/4:15 pm ET

DoubleLine CEO Jeffrey Gundlach and Portfolio Manager Andrew Hsu will discuss the DoubleLine Total Return Bond Fund.

#### January 10, 2023 – Just Markets Webcast 1:15 pm PT/4:15 pm ET

DoubleLine CEO Jeffrey Gundlach will discuss the outlook for the markets.

# DoubleLine's webcast schedule is available on our website.

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