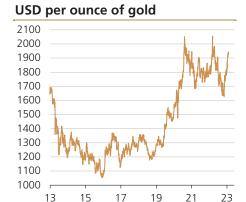
2 February 2023

Economics · Finance · Precious Metals



OUR TOP ISSUES

This is a short summary of our fortnightly **Degussa Marktreport**.

YOU THINK THE GLOBAL ECONOMY IS BRIGHTENING? BEWARE: THE BIG HIT IS YET TO COME ...

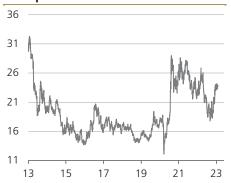
Relief is spreading among economic analysts and stock market experts. Energy prices are decreasing noticeably. The energy supply this winter seems secure; in Europe, government support for consumers and producers is available if needed. China is turning away from its zero-covid policy, and production is ramping up again. However, high goods price inflation is still a major concern for consumers and producers, but central banks deliver at least some interest rate hikes to hopefully reducing currency devaluation. So should we bid farewell to crisis and recession worries? Unfortunately, not.

Because there is an overall economic development that is tantamount to a storm but remains unnamed by many experts and investors. And that is *the global contraction of the real money supply*. What does that mean? The real money supply represents the actual purchasing power of money. Example: You have 10 USD, and 1 apple costs 1 USD. So with your 10 USD, you can buy 10 apples. If the apple price increases to, say, 2 USD per piece, the purchasing power of the 10 USD falls to 5 apples. It becomes obvious that the real money supply is determined by the interplay between the nominal money supply and the prices of goods.

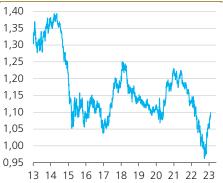
The real money supply in an economy can decrease when the nominal money supply goes down and/or goods prices rise. This is exactly what is currently happening around the world. The chart below shows the annual growth rate of the real money supply in the OECD from 1981 to October 2022. The real money supply recently contracted by 7.3 per cent year-on-year. There has never been anything like this before. What is the reason?

The enormous rise in goods prices, i.e. the high inflation, is a consequence of central banks' monetary policy. In the course of the politically dictated lockdowns, they have increased the money supply enormously. For example, the US Federal Reserve has expanded the M2 money stock by around 40 per cent since the end of 2019, and the European Central Bank has increased the M3 money supply by 25 per cent. As the growth in the supply of goods has not kept pace, a huge *money supply overhang* has emerged, which is now met with "costpush" effects – such as the consequences of "green policies," lockdowns, and the Ukraine war – unleashed in sky-high goods price inflation.

USD per ounce of silver



EURUSD

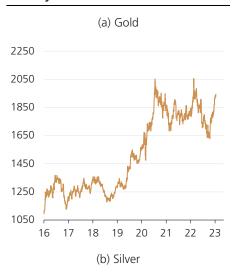


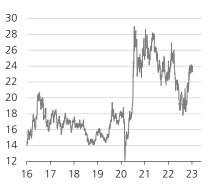
13 14 15 16 17 18 19 20 21 23 Source: Refinitiv; graphs by Degussa.

Precious m	etals prices						
	Actual	Change against (in percent):					
	(spot)	2 W	3 M	12 M			
I. In US-dollar							
Gold	1.952,3	1,7	19,5	2,3			
Silver	24,0	-1,0	25,4	-1,7			
Platinum	1.008,3	-5,3	8,9	-3,4			
Palladium	1.676,6	-6,3	-8,9	-32,6			
II. In euro							
Gold	1.775,2	0,1	7,5	4,4			
Silver	21,8	-2,5	12,8	0,3			
Platinum	916,7	-6,7	-2,2	-1,4			
Palladium	1.524,0	-7,7	-18,2	-31,3			
III. Gold price in other currencies							
JPY	251.248,0	2,3	3,5	14,5			
CNY	13.161,0	2,3	10,4	9,3			
GBP	1.575,7	0,4	10,7	10,8			
INR	159.577,8	1,9	18,1	10,8			
RUB	136.441,7	9,3	36,9	-29,2			

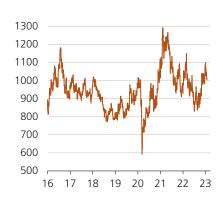
Source: Refinitiv; calculations by Degussa

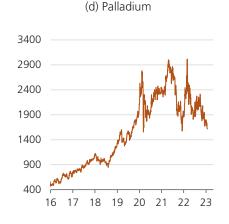
Precious metal prices (USD/oz), last seven years





(c) Platinum





Source: Refinitiv; graphs Degussa.

The 'real money supply" shrinks like never before ...

Real money stock in the OECD, annual changes in per cent



Source: Refinitiv; calculations Degussa.

*Annual increase in the "broadly defined" money stock minus annual increase in consumer goods prices.

In the meantime, however, nominal money supply growth has fallen sharply again. In the US, it declined by 1.3 zero per cent year-on-year in December 2022, and in the euro area it slowed down to 4.1 per cent. The reason: Loan demand is declining, commercial banks are granting fewer loans, and consequently, the new money supply generated by bank lending is falling. Furthermore, central banks are no longer buying government bonds, which is one reason why the inflow of new money into the economy is drying up.

It may sound paradoxical, but in economic terms, the current high goods price inflation is reducing the money supply overhang, and along with now significantly reduced money supply growth, downward pressure on future inflation is already increasing.

However, if the real money supply shrinks as sharply as it is currently, the signs point to at least an economic slowdown and, more likely, a recession. When the real money supply in the economy shrinks, those holding cash become poorer. They can now no longer purchase the quantities of goods they previously bought- and need to adjust their spending: stop buying more expensive goods, or continue buying more expensive goods while forgoing other things. The result is a drop in aggregate demand.

This phenomenon is, by the way, well known in theory as the "real balance effect." It goes back to the Israeli-American economist Don Patinkin (1922 - 1995). Patinkin wanted to show, among other things, that the national economy can, so to speak, heal itself in crises without the need for government intervention. If, for example, goods prices fall in a recessionary depression, this strengthens the purchasing power of market players if and when the money

supply remains unchanged. They can expand their demand for goods, and the economy works its way out of the crisis more or less automatically.

Applied to current conditions, we can see that a rather powerful "negative money balance effect" is unfolding: The initial increase in the quantity of money resulted in a rise of the real money supply, which fuelled consumption and production. Then, goods price inflation took off, and, at the same time, monetary expansion slowed down. The result is a very sharp decline in the real money stock, which, in turn, leads to lower economic activity, even recession.

The contraction of output and employment, in turn, exerts downward pressure on (the rise of) goods prices, establishing a new relation between the outstanding money stock and goods prices in accordance with peoples' preferences. Once this adjustment has run its course, and the nominal money stock remains unchanged, goods price inflation dies out. The economy ends up with a higher level of goods prices – when compared with the situation before the nominal money supply had been increased.

So why do central banks want to raise interest rates even further? Monetary authorities fear that doing nothing and waiting in the current regime of sky-high inflation could erode peoples' trust in unbacked paper currencies. That, in turn, would push up market participants' inflation expectations – which, incidentally, is already happening – and create an even bigger inflation crisis further down the road. Moreover, central bank councils usually base their monetary policy on current inflation; they typically have little or no regard for the development of the real money supply.

The central banks are thus – consciously or unconsciously – triggering a "stabilization recession", an economic contraction to break the inflationary wave. At first glance, their plan could most likely work out. Because if the demand for goods drops, companies can only reduce their inventories by cutting prices. The leeway for passing on costs and speculation on future price increases diminishes. Higher wage demands fail to materialize. And most importantly, credit and money supply growth ebb away in a recession, mitigating future inflationary pressure. But at second glance, this is a very explosive approach in the current monetary environment.

A recession will likely put highly indebted economies under severe stress. Many debtors are no longer be able to service their debts. Loan defaults increase. As a result, banks become reluctant to grant new loans and demand repayment of expiring loans. Investor confidence in debt-ridden economies and financial markets is dwindling. The result is a fulminant credit crisis, at least at the scale of the one in 2008/2009: Investors fear that their interest and principal payments will not be made. Credit markets freeze and the unbacked monetary system is headed for collapse.

The economic pain would be enormous, and the political pressure on central banks to lower interest rates again and keep the economy afloat with new credit and more money would be foreseeable: In the hour of need, governments and the public at large will likely see the policy of the least evil in increasing the money supply. Even a sky high inflation policy becomes acceptable from their point of view to escape a perceived even greater evil. There are quite a few examples of this tragic handling of the unbacked paper money system.

Just think of 2008/2009 (the global financial and economic crisis) and 2020/2021 (the crisis after the politically dictated lockdowns): To ward off the

crises or keep them as small as possible, central banks lowered interest rates and drastically expanded the money supply. The outcome was inflation – asset price inflation from early 2009 or consumer goods price inflation, which reared its ugly head towards the end of 2021. From this perspective, it is not unlikely that history will repeat itself.

If central banks are not stopped from doing what they are doing – causing boom and bust by manipulating downwards market interest rates and relent-lessly expanding the quantity of money created out of thin air – it will eventually lead to a level of inflation well beyond the inflation we have witnessed over the past year and a half. From this perspective, the currently sharply contracting real money stock in the world economy is – it has to be feared – the harbinger of a new round of super-easy monetary policy and super-high inflation, even hyperinflation, further down the road.

PRECIOUS METALS PRICES

In US-Dollar per ounce

	Gold 1951,5		Silver		Platinum		Palladium 1676,3		
I. Actual									
II. Gliding averages									
10 days	188	0,1	2.	3,8	107	74,2	176	56,1	
20 days	1845,9		23,8		1043,4		1752,2		
50 days	180	1800,9		22,8		1020,6		1837,8	
100 days	173	1737,6		21,0		961,5		1953,1	
200 days	177	6,9	2	1,1	94	4,9	200	07,2	
III. Estimates for end 2023	2200		29		1250		1450		
(1)	13	3	2	21	2	24		14	
Band width	Low	High	Low	High	Low	High	Low	High	
	1900	2360	23,3	32,9	1060	1380	1300	1670	
(1)	-3	21	-3	37	5	37	-22	0	
V. Annual averages									
2020	1753		20,2		878		2180		
2021	1804		25,5		1095		2422		
2022	17	98	21,7		956		2154		

In Euro per ounce

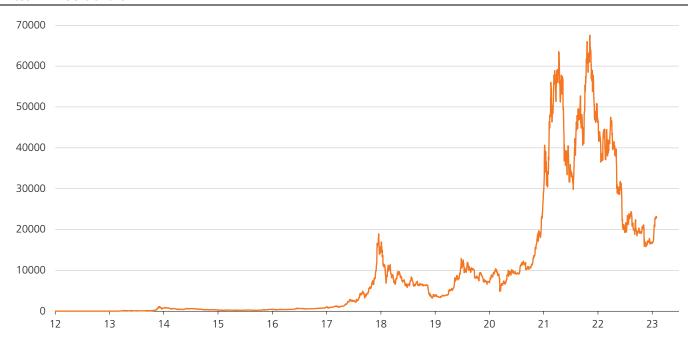
	Gold		Silver		Platinum		Palladium	
I. Actual	1774,4		21,8		917,2		1524,2	
II. Gliding averages								
10 days	175	3,6	22,2		1002,0		1647,5	
20 days	1729,2		22,3		977,4		1641,6	
50 days	1710,2		21,7		969,3		1746,9	
100 days	1702,6		20,6		941,3		1920,6	
200 days	1723,1		20,4		916,3		1950,2	
III. Estimates for autumn 2023	2100		28		1200		1392	
(1)	18	8	2	27	3	1	-	9
Band width	Low	High	Low	High	Low	High	Low	High
	1820	2300	22,4	31,6	1010	1320	1240	1600
(1)	3	30	2	45	10	44	-19	5
V. Annual averages								
2020	1535		18		769		1911	
2021	1519		21		921		2035	
2022			21		905		2041	

Source: Refinitiv; calculations and estimates Degussa. Numbers are rounded.

 $^{^{\}left(1\right) }$ On the basis of actual prices.

BITCOIN, PERFORMANCE OF VARIOUS ASSET CLASSES

Bitcoin in US dollars

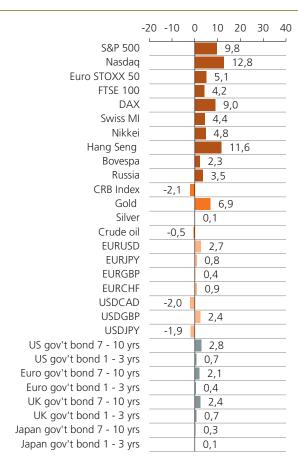


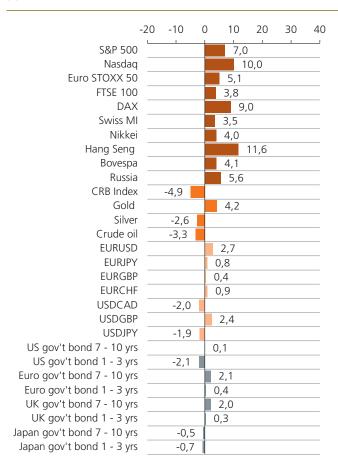
Source: Refinitiv; graph by Degussa.

Performance of stocks, commodities, FX and bonds

(a) In national currencies

(b) In euro





Source: Refinitiv; calculations by Degussa.



Articles in earlier issues of the Degussa Market Report

Issue	Content
2 February 2023	You Think the Global Economy Is Brigthening? Beware: The Big Hit Is Yet To Come
19 January 2023	Outlook 2023: Keepy Buying Physical Gold And Silver
22 December 2022	Central banks' propensity for inflation is a very good reason to hold at least some gold
8 December 2022	Some Thoughts About Central Banks' Renewed Interest In Gold
24 November 2022	Some Thoughts About Central Banks' Renewed Interest In Gold
10 November 2022	Investing In An Inflationary Regime: Keep At Least Some Gold
27 October 2022	Fasten Your Seatbelt: The Fed Replaces Monetary Inflation With Monetary Deflation
13 October 2022	Proposal in the US Congress: Reintroduction of Gold Backing For the US Dollar
29 September 2022	Capital Markets Have Become A Dangerous Place
15 September 2022	Inflation, High Inflation, Hyperinflation
1 September 2022	Everything you always wanted to know about MONEY (but were afraid to ask)
18 August 2022	Sky-High Inflation Is Just One Reason To Hold Physical Gold
4 August 2022	Excessive Money Growth Leads To Super-High Inflation
21 July 2022	Dollar Dominance Brings Yen And Euro To Their Knees
7 July 2022	I'm Sorry To Say, But It Doesn't Look Good. Hold At Least Some Gold
23 June 2022	On The Future Of Markets And Money
9 June 2022	Interest Rates Rise. Financial Repression Continues
26 May 2022	Crisis Risk On The Rise. Gold As Insurance
12 May 2022	The Fed Makes Boom & Bust, And What It Means For Gold
28 April 2022	The Fed's Boom And Bust Cycle – And What It Means For Your Money
14 April 2022	Do You Know What Inflation Really Is? Then Hold Gold And Silver
31 March 2022	How Not To Get Battered
17 March 2022	There is no Return to Normality. The Case for Gold and Silver
3 March 2022	Gold: Too Low For Too Long
17 February 2022	The Inflation beast is bigger than you think it is
3 February 2022	The Bigger Gold Picture
20 January 2022	Outlook for Gold and Silber brighter than you think it is
16 December 2021	Welcome to a new chapter in the boom-and-bust-drama
2 December 2021	Inflation Is Not Temporary But Here To Stay
18 November 2021	The Case Against Gold And Silver. Revisited
4 November 2021	Stagflation Is Rearing Its Ugly Head
21 October 2021	At A Crossroads. It Is Time For Gold And Silver
7 October 2021	Here Comes The Inflation Beast
23 September 2021	Evergrande: China's Potential 'Lehman moment'?
8 September 2021	It All Depends On The Fed's 'Safety Net'
26 August 2021	Our Money Gets Thrown Under The Bus
12 August 2021	The Crime of 1971
29 July 2021	Gold And The Market Fear That Is Not
15 July 2021	Gold and the Monetary Policy Empire of Deception
The Desires Mandatas	poort (Gorman) and the Degusca Market Penert (English) are available at:

The Degussa Marktreport (German) and the Degussa Market Report (English) are available at:

www.degussa-goldhandel.de/marktreport

8 2 February 2023

Disclaimer

Degussa Goldhandel GmbH, Frankfurt am Main, is responsible for creating this document. The authors of this document certify that the views expressed in it accurately reflect their personal views and that their compensation was not, is not, nor will be directly or indirectly related to the recommendations or views contained in this document. The analyst(s) named in this document are not registered / qualified as research analysts with FINRA and are therefore not subject to NASD Rule 2711.

This document serves for information purposes only and does not take into account the recipient's particular circumstances. Its contents are not intended to be and should not be construed as an offer or solicitation to acquire or dispose of precious metals or securities mentioned in this document and shall not serve as the basis or a part of any contract.

The information contained in this document was obtained from sources that Degussa Goldhandel GmbH holds to be reliable and accurate. Degussa Goldhandel GmbH makes no guarantee or warranty with regard to correctness, accuracy, completeness or fitness for a particular purpose.

All opinions and views reflect the current view of the author or authors on the date of publication and are subject to change without notice. The opinions expressed herein do not necessarily reflect the opinions of Degussa Goldhandel GmbH. Degussa Goldhandel GmbH is under no obligation to update, modify or amend this document or to otherwise notify its recipients in the event that any circumstance mentioned or statement, estimate or forecast set forth in this document changes or is subsequently rendered inaccurate.

The past performance of financial instruments is not indicative of future results. No assurance can be given that any views described herein would yield favorable returns on investments. There is the possibility that said forecasts in this document may not come to pass owing to various risk factors. These include, without limitation, market volatility, sector volatility, corporate actions, the unavailability of complete and accurate information and/or the circumstance that underlying assumptions made by Degussa Goldhandel GmbH or by other sources relied upon in the document should prove inaccurate. Neither Degussa Goldhandel GmbH nor any of its directors, officers or employees shall be liable for any damages arising out of or in any way connected with the use of this document and its content.

Any inclusion of hyperlinks to the websites of organizations in this document in no way implies that Degussa Goldhandel GmbH endorses, recommends or approves of any material on or accessible from the linked page. Degussa Goldhandel GmbH assumes no responsibility for the content of and information accessible from these websites, nor for any consequences arising from the use of such content or information.

This document is intended only for use by the recipient. It may not be modified, reproduced, distributed, published or passed on to any other person, in whole or in part, without the prior, written consent of Degussa Goldhandel GmbH. The manner in which this document is distributed may be further restricted by law in certain countries, including the USA. It is incumbent upon every person who comes to possess this document to inform themselves about and observe such restrictions. By accepting this document, the recipient agrees to the foregoing provisions.

Imprint

Marktreport is published every 14 days on Thursdays and is a free service provided by Degussa Goldhandel GmbH.

Deadline for this edition: 2 February 2023

Publisher: Degussa Degussa Goldhandel GmbH, Kettenhofweg 29, 60325 Frankfurt, Tel.: (069) 860068-0, Fax: (069) 860068-222

E-Mail: info@degussa-goldhandel.de, Internet: www.degussa-goldhandel.de

Editor in chief: Dr. Thorsten Polleit

Degussa Market Report is available on the Internet at: http://www.degussa-goldhandel.de/marktreport/



Frankfurt Headquarters

Kettenhofweg 29 · 60325 Frankfurt Phone: 069-860 068 – 0 · info@degussa-goldhandel.de

Retail buying and selling outlets in Germany:

Augsburg (shop & showroom): Maximiliansstraße $53 \cdot 86150$ Augsburg Phone: $0821-508667 - 0 \cdot augsburg@degussa-goldhandel.de$

Berlin (shop & showroom): Fasanenstraße $70 \cdot 10719$ Berlin Phone: 030-8872838 – $0 \cdot$ berlin@degussa-goldhandel.de

Dusseldorf (Old Gold Centre): In der KÖ Galerie Königsallee 60 / Eingang Steinstraße · 40212 Dusseldorf Phone: 0211-13 06 858 – 0 · duesseldorf@degussa-goldhandel.de

Frankfurt (shop & showroom): Kettenhofweg 25 \cdot 60325 Frankfurt Phone: 069-860 068 – 100 \cdot frankfurt@degussa-goldhandel.de

 $\begin{tabular}{ll} \begin{tabular}{ll} \be$

Hanover (shop & showroom): Theaterstraße $7 \cdot 30159$ Hanover Phone: $0511-897338 - 0 \cdot \text{hannover@degussa-goldhandel.de}$

Cologne (shop & showroom): Gereonstraße 18-32 · 50670 Cologne Phone: 0221-120 620 – 0 · koeln@degussa-goldhandel.de

Munich (shop & showroom): Promenadeplatz 12 · 80333 Munich Phone: 089-13 92613 – 18 · muenchen@degussa-goldhandel.de

Munich (Old Gold Centre): Promenadeplatz 10 \cdot 80333 Munich Phone: 089-1392613 – 10 \cdot muenchen-altgold@degussa-goldhandel.de

 $\begin{tabular}{ll} \textbf{Nuremberg} & (shop \& showroom): Prinzregentenufer 7 \cdot 90489 \ Nuremberg \\ Phone: 0911-669 \ 488-0 \cdot nuernberg@degussa-goldhandel.de \\ \end{tabular}$

 $\begin{array}{l} \textbf{Pforzheim} \ (\text{refinery}) \text{:} \ \textit{Freiburger} \ \textit{Straße} \ 12 \cdot 75179 \ \textit{Pforzheim} \\ \textit{Phone:} \ 0.7231-58795 - 0 \cdot \textit{pforzheim@degussa-goldhandel.de} \end{array}$

Stuttgart (shop & showroom): Marktstraße $6 \cdot 70173$ Stuttgart Phone: 0711-305893 – $6 \cdot$ stuttgart@degussa-goldhandel.de

Retail buying and selling outlets around the world:

Zurich (shop & showroom): Bleicherweg 41 · 8002 Zurich Phone: 0041-44-40341 10 · zuerich@degussa-goldhandel.ch

Geneva (shop & showroom): Quai du Mont-Blanc $5 \cdot 1201$ Genève Phone: $0041-22\ 908\ 14\ 00 \cdot geneve@degussa-goldhandel.ch$

Madrid (shop & showroom): Calle de Velázquez 2 · 28001 Madrid Phone: 0034-911 982 900 · info@degussa-mp.es

London Sharps Pixley Ltd. (member of the Degussa 1) Group) Phone: 0044-207 871 0532 · info@sharpspixley.com