Degussa 🐢 Market Report

12 March 2020



USD per ounce of silver







Source: Thomson Financial; graphs by Degussa.

Precious metals prices							
	Actual	Change against (in percent):					
	(spot)	2 W	3 M	12 M			
I. In US-dollar							
Gold	1.658.8	0.9	13.4	28.9			
Silver	16.9	-8.3	0.1	12.0			
Platinum	877.6	-9.8	-2.2	3.6			
Palladium	2.370.8	-12.3	28.0	67.0			
II. In euro							
Gold	1.464.3	-3.3	11.0	27.5			
Silver	14.9	-12.2	-2.1	10.9			
Platinum	774.7	-13.7	-4.4	2.8			
Palladium	2.093.0	-16.0	25.3	65.1			
III. Gold price in other currencies							
JPY	173.764.0	-5.2	9.0	21.2			
CNY	11.527.3	-0.2	12.0	33.4			
GBP	1.281.8	1.2	13.4	30.5			
INR	122.222.3	1.9	16.7	37.2			
RUB	118.946.1	13.0	26.7	41.7			

Source: Thomson Financial; calculations by Degussa.

Economics · Finance · Precious Metals

OUR TOP ISSUES 📂

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

TRUTHS ABOUT MONEY – PAST, PRESENT, FUTURE

Introduction

In this article, I would like to accomplish two goals: First, I want to explain what money is (and what it is not). I will argue that money is the medium of exchange, and that being the medium of exchange is the only function of money. Second, I will point out why the size of the money supply does not matter; and that the money supply does not have to grow to make an economy any richer.

These two insights can be considered timeless truths about money, and I believe they are also of the utmost importance if we want to understand better (1) the role "sound money" plays for our society's economic progress; (2) what the desirable properties of "sound money" are – past, present, future.

What money is

Let me start with the first issue of my talk: and that is explaining what money is. *Money is the universally accepted means of exchange*. It is, in fact, a good like any other. What makes it really special is that money is the most marketable, the most liquid of all goods in the economy.

Money is no consumption good and no production good. It is the exchange good, it is a good sui generis. I should also note that money is not a claim on goods, and in a free market, no one is obliged to give you something for your money.

Let us move on and ask: What are the functions of money? According to most economic textbooks, the answer is: Money has three functions: means of exchange, unit of account, and store of value. Upon closer examination, however, we can see that money has just one function, and that is the means of exchange function.

The unit of account function and the store of value function and even the means of deferred payment function are merely sub-functions of the means of exchange function of money. This is easy to understand: The unit of account function expresses the exchange ratios of goods and services in money, for example, 1 apple costs 1 euro.

The store of value function (and the means of deferred payment function) means that people hold money for exchanging it tomorrow rather than today.

Precious metal prices (USD/oz) in the last 4 years



Source: Thomson Financial; graphs by Degussa.

Optimal money stock

From this we can draw the following logical conclusion: If money has just one function – and that is the means of exchange function –, it does not matter how small or how large the money stock is. In other words: Whether the money stock is 1 million US\$, 1 billion US\$ or 100 billion US\$ does not matter.

Any given money stock in the economy is as good as any other for financing all turnovers necessary: Irrespective of the actual size of the money stock, any turnover of goods and services can be conducted with a given money stock.

A large money stock of, say, 10 billion US\$ would lead to high goods prices, while a small money stock of, say, 1 billion US\$, leads to low goods prices. What is perhaps even more important to note in this context – and which might catch some of you by surprise – is this:

No increase in the money supply can improve the monetary function of money. An increase in the money supply will merely dilute the effectiveness of each money unit in serving as a medium of exchange. In other words: A rise in the quantity of money does not confer any social benefit. It simply reduces the exchange value of the money unit.

Why? Because money is – like any other economic good – subject to the law of diminishing marginal utility. A rise in the quantity of money reduces the marginal utility of the additionally obtained money unit versus vendible items. As a result (and other things being equal), the additional money units will be exchanged against vendible items (sooner or later), thereby raising their money prices.

Now you may ask: Why is it then that in today's monetary regime (be it in the US, Europe, Asia, or Latin America) the money supply is increasing? This is an excellent question indeed, and I promise I will provide you with the answer towards the end of this article.

Free to choose

Meanwhile, let me ask you a question: Would you prefer money that loses its purchasing power over time? Or would you rather hold money that keeps, or even increases, its purchasing power over time? I think that most people (who are in their right mind) would opt for money with stable purchasing power or money that gains in purchasing power.

If you were to hold money that is gaining purchasing power, wouldn't that be great? Of course, it would be great for you! But wait: What would happen if and when goods prices could not rise, or even fall over time? If that were the case, wouldn't that cause a significant problem for the economy as a whole?

Let us assume people opt for money that has a constant supply. (You may think of people using bitcoin as money, and the total amount of bitcoin is a constant 21 million units.) An increase in the economy's output would then lead (other things being equal) to deflation in goods prices. Wouldn't the economy fall over the cliff? Wouldn't it destroy firms' profits? Wouldn't consumers stop consuming? The answer to all these questions is "no".

A firm's profit is simply the spread between revenue and costs. In an economy where the prices of goods go up (which is the case in today's 'inflation regime'), the successful entrepreneur has to make sure that revenues rise faster than



costs. Likewise, in an economy where there is price deflation, the firm has to make sure that its costs fall faster than its revenues. A firm that produces goods and services in accordance with market demand can flourish in a price inflation as well as price deflation regime.

Time preference

What would price deflation do to consumer demand? Wouldn't people refrain from buying goods today as they can expect to buy them at lower prices in the future? The answer is: No, we cannot come to such a conclusion. First of all, there are goods and services, the consumption of which cannot be postponed. Think of food, clothes, shelter, etc.

What is more, there is a phenomenon in the field of human action that is called time preference. Time preference means that people value a good available today higher than the same good (under same conditions) at a later point in time. The manifestation of time preference is the originary interest rate: It represents the value discount a future good suffers vis-a-vis a present good.

Time preference and the originary interest rate are always positive and can never disappear – as they are categories of human action. What time preference means for peoples' demand I would like to illustrate with a simple example.

Example

Imagine a car costs \$50,000 today and \$40,000 in a year. Whether people will buy today or postpone their purchase depends on the marginal utility. Of course, the marginal utility of buying the car for \$40,000 ranks higher on people's value scale than paying \$50,000 for the car.

When it comes to making the decision of buying now or buying later, people will do the following: They compare the discounted marginal utility of purchasing the good for \$40,000 in a year from now against the marginal utility of buying it for \$50,000 today.

If the discounted marginal utility of buying the car for \$40,000 in a year is lower than the marginal utility of buying at \$50,000 now, people buy now. If it is higher, they will postpone their purchase. Everyone will use their individual time preference rate for discounting the marginal utility of buying the car in a year for \$40,000.

As people's time preference rate can never be zero, let alone become negative, we cannot conclude that people will delay their purchases only because of lower goods prices in the future. In fact, all depends on peoples' time preference. If peoples' time preference is high, people will tend to buy today; and if their time preference is low, they will tend to postpone their purchases.

What this example should tell us is this: There would be nothing wrong if and when goods prices were to decline (rather than rise) over time. For this would not mean that demand will dry up, that the economy would, literally speaking, vanish in a black hole. In fact, this is a misleading, a false idea.

There is no economic reason to think that the economy wouldn't prosper if and when the prices of goods decline over time. In fact, prices of goods do not have to rise to make an economy grow. There is no economic reason why you should believe that the money supply has to rise over time to make an economy wealthier.

Credit markets

But what about credit markets if the prices of goods decline, you may ask? If, for instance, prices fall by three per cent per year, the purchasing power of money increases by three per cent. In this case, I would not exchange my money for a T-Bill that yields only, say, two per cent per year.

To make me part with my money, a borrower would have to offer a return on the investment that is higher than the increase in the purchasing power of money. Market credit interest rates would approach zero in nominal terms: the price component would become negative, corresponding (grosso modo) with the positive real interest rate component. It may well be that under such conditions, credit would become more expensive when compared with today's fiat money world.

Firms would fund their expenditures by retaining earnings and by rights issues – rather than taking on new debt, and people would put a higher portion of their savings in company stocks than bonds. In a world of goods price deflation, the credit market can be expected to function without any problems. But credit markets would not be inflated as much as they have become in today's fiat money regime.

Today's fiat money regime

What do I mean when I mention "fiat money? Fiat money has basically three characteristics: (1) It is money monopolized by the by the state. (2) State-sponsored central banks, in close cooperation with commercial banks, issue fiat money through credit expansion; it is money production "out of thin air", so to speak. (3) Fiat money is dematerialised money; it consists of colourful paper tickets and bits and bytes on computer hard drives.

Be it the US dollar, the euro, the Chinese renminbi, the Japanese yen or the Swiss franc: They are all fiat monies.

Fiat money is by no means harmless. In fact, it has far-reaching and seriously damaging economic and societal consequences, effects that extend beyond what most people would imagine. Fiat money is inflationary; it benefits a few at the expense of many others; it causes boom-and-bust cycles; it leads to over-indebtedness; it corrupts society's morals, and it most likely will ultimately end in a depression on a grand scale.

The issuance of fiat money stealthily shifts resources out of the hands of the many, and it puts them in the hands of the government and its beneficiaries – the banking & financial industry, big business, government employees, recipients of government contracts, to name a few.

The monopoly over fiat money production allows the state to increase its financial power immensely, making it possible to expand at the expense of consumers' and entrepreneurs' freedom and liberty.

It is by no means overdone to say that fiat money paves the way towards the "deep state", and ultimately towards a totalitarian state.



So here we have arrived at an answer to the question I raised earlier: A fiat money system has been established for benefitting some at the expense of many others, especially the state and its beneficiaries.

Privileging fiat money

You should not fall victim to the belief that the widespread use of fiat money does by no means testify voluntary acceptance on the part of money users.

In a world where governments have monopolised money production, currency competition is suppressed, and people are effectively coerced into using fiat money for two reasons.

First, governments have established 'legal tender laws', which effectively privilege the use of government's fiat money over alternative media of exchange.

Money is not only used in cash transactions, but also for payment of debt. Legal tender law means that the state decrees that "money contracts" can be settled by what the government says is money.

If government decrees its own fiat currency as money, its money is privileged against other money candidates.

What is more, fiat money – which is of lower quality than, say, gold or silver in terms of retaining its purchasing power – drives out the better money. This is what "Gresham's Law" tells us: Money overvalued by the state drives money undervalued by the state out of circulation.

Second, governments have imposed capital gain taxes and/or value-added taxes on goods that might compete with fiat money such as, say, gold, silver or crypto units, thereby making them uncompetitive in comparison with the use of fiat money.

A free market in money

In view of the severe economic and ethical defects of governments' fiat currencies, however, there are good reasons for making a case for a free market in money.

In a free market in money, people would have full freedom to choose the kind of money they wish to hold, and people would also have the freedom to offer goods that others may want to demand as money.

In a free market in money, it will be the demand for money that will decide what money is. And we should have little doubt that people would most likely demand "sound money" – that is money that preserves its purchasing power fairly well over time.

What kind of money would be chosen in a free market? Mr Miller would opt for "something" as money that is accepted as a means of exchange by, say, his baker.

The baker, in turn, would willingly accept "something" that he thinks his cobbler will accept as a means of exchange.

In other words: People will go for a good that has the highest marketability, the highest liquidity of all goods.



And we tend to know which (physical) properties such a good must have: it must be scarce, homogenous, durable, transportable, mintable, divisible, and it must represent a relatively high exchange value per unit.

This explains very well why, in the past at least, people have decided to use precious metals, especially in the form of gold and silver, as money when they were free to choose.

The message I would like to hammer home is that there is no reason to fear that a free market in money wouldn't work.

In fact, it can be expected to work just great – like any other free market such as, for instance, the free market for sports shoes, books, music, cars, and mobile phones.

In other words: A free market in money would provide the best possible money at the lowest cost.

Towards "Monetary Enlightenment"

So far, I have outlined some timeless truths about money.

Money is indispensable for a modern economy, for it serves as the means of economic calculation.

Without money, we could not sustain the kind of division of labour and, as a result, economic prosperity which has been built up over the past.

The critical question is whether, in the age of digital transformation, new technologies can be taken advantage of for bringing about better money, sound money. I am quite optimistic the chances are there.

The latest developments in markets for crypto units are certainly promising – especially so as they signify that people have gone out searching for better money.

Also, the many entrepreneurial attempts to digitise the world's premier currency, its ultimate means of payment, namely gold, have made exciting progress.

However: While technological progress provides excellent opportunities for improving our money, it might not prove to be sufficient – as governments and their central banks do their best to prevent a free market in money.

And they are powerful defenders of their monopoly status. For instance, central banks consider issuing so-called "central bank digital currencies". If and when this "innovation" is put into practice, monetary authorities would tighten their grip on the money and credit system and monetary developments even further.

In fact, there is the acute danger that the growing power of central banks over monetary affairs, if not stopped and rolled back, will ultimately bulldoze that what is left of the free society and the free market system.

So what is really needed is Monetary Enlightenment: Familiarising people with time-tested and timeless truths about the nature of money.

"[T]he sound-money principle has two aspects. It is affirmative in approving the market's choice of a commonly used medium of exchange. It is negative in obstructing the government's propensity to meddle with the currency system."

"It is impossible to grasp the meaning of the idea of sound money if one does not realize that it was devised as an instrument for the protection of civil liberties against despotic inroads on the part of governments. Ideologically it belongs in the same class with political constitutions and bills of right."

> Ludwig von Mises (1881 – 1973)

Informing the people that there is better money for them, and encouraging them to demand sound money – money that serves their needs better than governments' fiat currencies.

And once people realise that they will be better off with free market money, chances to end government's monopolisation of money, legal tender laws and tax burdens imposed on potential money candidates will arise.

Sound economics reveals that people would enjoy more freedom and greater prosperity with a means of payment they are allowed to establish in the free market.

So there is good reason to call for a free market in money: To give people the freedom to choose which kind of money they would like to use: Precious metals, that is gold and silver, or crypto currencies or whatever.

I hope that this article succeeds in making a contribution to "Monetary Enlightenment".

This talk was given by Thorsten Polleit n at the Value of Bitcoin Conference on 5 March 2020 in Vienna.

PRECIOUS METALS PRICES

In US-dollar per ounce

	G	old	Silver Platinum		inum	Palladium		
I. Actual	1657.9		16.9		876.8		2371.0	
II. Gliding averages					1			
5 days	1657.6		17.1		875.4		2484.0	
10 days	1639.6		17.2		879.8		2559.7	
20 days	1625.2		17.7		926.8		2567.7	
50 days	1586.6		17.8		960.2		2382.4	
100 days	1532.9		17.5		937.4		2105.0	
200 days	1495.4		17.1		903.0		1825.7	
III. Estimate for end 2020	1690		22.9		930		1570	
Bandwidths	Low	High	Low	High	Low	High	Low	High
	1440	1840	16	26	780	990	1380	1650
(1)	-13	11	-4	56	-11	13	-42	-30
IV. Annual averages			I		1			
2016	1242		17.0		985		617	
2017	1253		17.1		947		857	
2018	1268		15.8		880		1019	

In euro per ounce								
	Go	old	Silver		Platinum		Palladium	
	1464.0		15.0				-	
I. Actual	1464.0		15.0		//4.2		2093.8	
II. Gliding averages					1			
5 days	1469.5		15.2		776.1		2202.1	
10 days	1470.0		15.4		789.0		2296.4	
20 days	1477.9		16.1		843.6		2336.2	
50 days	1436.9		16.1		869.8		2158.8	
100 days	1385.6		15.9		847.3		1903.6	
200 days	1347.5		15.5		813.8		1646.4	
III. Estimate for end 2020	1580		22		870		1470	
Bandwidths	Low	High	Low	High	Low	High	Low	High
	1350.0	1730.0	15.3	24.8	730.0	930.0	1290.0	1550.0
(1)	-8	18	2	66	-6	20	-38	-26
IV. Annual averages			I		1		1	
2016	1120		15		888		557	
2017	1116		15		844		760	
2018	1072		13		743		863	

Source: Thomson Financial; own calculations and estimates. Numbers are rounded.

⁽¹⁾ Estimated return against actual price in percent.

BITCOIN, PERFORMANCE OF VARIOUS ASSET CLASSES

Bitcoin in US dollars



Source: Thomson Financial; graph by Degussa.

Performance of stocks, commodities, FX and bonds

(a) In national currencies



(b) In euro



Source: Thomson Financial; calculations by Degussa.

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