

# THE GOLD STANDARD

A GEOSTRATEGIC PERSPECTIVE



OLD WORLD GEOSTRATEGY 1.

TAMÁS DEZSŐ





#### IMPRESSUM

Publisher:  
BL Nonprofit Kft.  
H-1067 Budapest,  
24 Eötvös Street

Managing director:  
Gergely Dobozi

Art Director:  
Magdolna Hársfalvi

Typography:  
Bernadett Bodor

Cover:  
Claude Vignon,  
*Croesus Receiving a Tribute from  
a Lydian Peasant* (1629). Musée des  
Beaux-Arts de Tours, Tours, France  
Source: Wikimedia commons

Printing house: *Virtuóz Kft.*

Accountable manager:  
*Gergely Tolonics*

Translated by *Laura Lábady*

ISSN 2732-3161

Prof. Dr. Tamás Dezső  
President  
Board of Trustees of the Batthyány Lajos Foundation  
Director General  
Migration Research Institute  
Hungarian Conservative ©

BUDAPEST, A.D. MMXXV



# Contents

4

THEORETICAL INTRODUCTION

24

CHANGES IN THE WORLD PRICE OF GOLD

30

CENTRAL BANK GOLD RESERVES

82

GLOBAL GOLD PRODUCTION

104

CONCLUSION

110

BIBLIOGRAPHY





# 1

## Theoretical Introduction

A Possible Scenario

Pieter Boel, *Large Vanitas* –  
*Allegory of the Vanities of the World* (1663).  
Palais des Beaux-Arts de Lille, Lille, France





### 1.1 THE CONCEPTUAL FRAMEWORK FOR RESEARCH

In the last decade, we have observed two diagnostic phenomena that have indirectly led to the ideas and conclusions that prompted the writing of this paper.

One of these phenomena is the gradual rise, then surge, and later the soar in the price of gold following the global financial crisis of 2008 (*Figures 4–5*).

The other, almost parallel in rhythm and probably in logic, is the large-scale and rapid gold purchases by central banks outside the ‘Global West’ and within the ‘Global West’ by central banks in Poland and Hungary and, to a lesser extent, the Czech Republic (*Figures 6–7*), in order to increase the volume and proportion of gold in their total reserves.

Recently, there have been several studies on the dramatic explosion in the value of gold and its appreciation in the global monetary sphere, or at least in the significance of the central bank reserves, and the upsurge in central bank gold buying.<sup>1</sup> However, an important feature of these studies is that they are written by those who, by virtue of their role in the market, still think in terms of a global open gold market where all players (especially central banks) are still relatively free to buy investment/reserve gold to enhance the stability of their economies and monetary policies.<sup>2</sup> How long this situation will continue and how long the global gold market will remain open, we do not know. Whether there will be a period when individual countries and their central banks will start to ‘withdraw’<sup>3</sup> gold from the market to accumulate it as central bank gold reserves and to support their monetary policy is not known for sure, but it cannot be ruled out. If this results in a reduction in the amount of freshly mined and/or reinvested free gold available for other uses (e.g., jewellery industry) in the markets, it could lead to further unprecedented gold price increases.


A further question is how state/institutional actors in the global gold market can model the attitude of private individuals towards gold (investment gold, jewellery), investment, and gold accumulation, which over millennia have resulted in serious patterns of behaviour deeply rooted in the minds of the average person, even completely different from the market logic. The average person, the consumer, has little understanding of global financial logic or even of the rules of the stock market—in contrast, everyone has an opinion about gold and knows that it is perhaps the best store of value and can be an aesthetic experience in its attractive beauty, too. While 44–46 per cent (i.e., 1,442–1,640 tonnes)<sup>4</sup> of the world’s gold mined annually (3,206–3,646 tonnes per year; see below for further details) is used for making jewellery, the value of this market segment and its interests and future standards of behaviour should not be underestimated. In addition, these attitudes and behavioural/investment norms are difficult to model with global banking monetary algorithms, as they contain many subjective elements that are not necessarily influenced by global monetary trends. There are several countries (such as India) where gold held in the family home, perhaps in a bank vault, is the basis of family wealth. This is particularly true in countries where, in addition to cultural traditions, the savings/investment market is less developed. There are many cases where a country has tried to shore up its ailing budget, or more specifically, the national currency, by

<sup>1</sup> MIDDELKOOP–MARSH 2024.

<sup>2</sup> Here, we do not detail the purchases by other investors according to other criteria (e.g., speculative positions through derivative markets). This study focuses mainly on state actors and (geo)strategic processes.

<sup>3</sup> In the ‘central bank gold market’, of course, there are those who buy and those who sell, but the balance of the two is clearly in the direction of buying and central bank accumulation, which results in an increase in the amount and proportion of the world’s central bank gold reserves, in turn resulting in less gold going to other uses, which can also drive up the price of gold. See later.

<sup>4</sup> Approximately 121,928,310,000–138,670,200,000 US dollars.



The question is whether, with the growing importance of gold, the big state actors see the strategic space as an opportunity, perhaps not so much economic as political, or rather as a source of danger, which will force them to act to change their strategic thinking and open up new spaces of competition. They must be prepared for both offensive and defensive scenarios.





1 oz gold bullion coins issued by Australia, the United States of America and Canada



1 oz gold bullion coins issued by Russia, China and South Africa

SOURCE: WIKIMEDIA COMMONS, WIKIPEDIA

asking the population to sell their private gold/jewellery to the state (Türkiye).<sup>5</sup> Furthermore, it only takes a wave of distrust, even emotional distrust, of the currencies that dominate the global financial markets (USD, EUR) for those parts of the world where financial services are not so well developed to start thinking *en masse* about how to diversify away from the dollar and invest their money in gold instead. Such a wave of mistrust could be fuelled by the BRICS world's desire to reverse the USD's leadership in world trade<sup>6</sup> and replace it with another currency. The extent to which the foundations of this new currency and the associated international financial system can be built on gold and gold reserves will be one of the main questions of the future.

**This paper approaches the problem primarily from a historical/geostrategic rather than an economic approach and methodology.** Furthermore, the present study is, by its nature, the result of descriptive research based on the analysis of data from databases of international organizations. It produces comparative statistical sections based on the databases, which we believe provide an indicative description of the present situation and allow the description of certain future scenarios or plausible scenarios.

The starting point is the polarization and possible division of the world into two opposing blocs. The BRICS initiative was more of a theoretical framework until the West's policy of sanctions following the outbreak of the Russia–Ukraine war and its efforts to break away from China suddenly shed new light on global processes that could easily lead to the emergence of a bipolar world ('Global West' versus BRICS+18, or rather the BRICS world).

In this geopolitical and world economic system, which is based on very complex equilibria, every change and every shift of emphasis affects the equilibrium of the whole system, and thus, every move of the BRICS world has a fundamental impact on the future of the 'Global West', including the European Union.

The reason why gold is highlighted in this research and is a case study is because it is clear that after the 2008 global financial crisis and the outbreak of the Russia–Ukraine war, it reacted almost immediately to the uncertainties of the financial world and, as a safe haven asset<sup>7</sup> (flight-to-quality effect), its price started to soar again and again. This soaring was diagnostic enough for new theories and considerations to emerge on the reinterpretation of the role of gold and its possible rehabilitation. These theories are grouped around the following themes:

1. The possibility of reintroducing a future gold standard;
2. The role of central bank gold reserves and the importance of increasing them;
3. The theoretical possibilities for the introduction of gold-based digital currencies (in particular, central bank digital currencies, CBDCs).

<sup>5</sup> The relationship between the populations of Türkiye and India and gold is a well-known phenomenon. According to some estimates, Türkiye's population may have around 3,500 tonnes of gold, while India's may have up to 20,000 tonnes. Thus, in times of economic/financial crises, similar attempts have been made to use gold to stabilize the budget or even the national currency by various means (Gold Deposit, GDS, or Gold Metal Loan, GML). SHARMA 2015; BETWEEN 2011 AND 2013, THE TURKISH CENTRAL BANK SIGNIFICANTLY INCREASED ITS GOLD RESERVES THROUGH THE SO-CALLED RESERVE OPTIONS MECHANISM (ROM). ONE OF THE BEST-KNOWN EXAMPLES DATES BACK TO 1934, WHEN ROOSEVELT IN THE UNITED STATES OBLIGED PEOPLE TO SELL THEIR INVESTMENT GOLD TO THE GOVERNMENT AT A DISCOUNT BY MEANS OF EXECUTIVE ORDER 6102, GOLD RESERVE ACT 1934. *THE CONVERSATION* (2021).

<sup>6</sup> USD: Share of global foreign exchange reserves: 57 per cent; Share of export invoicing: 54 per cent; Share of foreign exchange transactions: 88 per cent, <https://www.atlanticcouncil.org/programs/geoeconomics-center/dollar-dominance-monitor/>.

<sup>7</sup> See among others BAUR–SMALES–LEE 2018.



The present paper thus examines a specific cross-section of the future of the relationship between the BRICS world, which is seeking to break or possibly eliminate the global hegemony of the USD and the SWIFT system (and many other elements), and the 'Global West', which is seeking to maintain its hegemony, and the question of the role that gold could play in the transformation of the monetary system of the future, whether motivated by the organic evolution of its present role or by the introduction of a new currency for the BRICS world.

An increase in the price of gold (*Figures 4–5*) without any monetary intervention will increase 1) the amount of central bank reserves (if they are accounted for at market value; 2) the share of gold in total reserves (ForEx+gold), an indicator that may, wittingly or unwittingly, play a role in the future introduction of a gold standard. If somebody were to peg their national currency to a gold standard in some way in the future, this could cause a major disturbance in international financial markets and currency exchange rates.


#### **ELEMENTS OF A POSSIBLE SCENARIO**

This introductory chapter attempts to outline the challenges that the 'Global West', including Europe and the European Union, our world, faces in a changing world, with a substantial shift in the geopolitical balance of power. The following is a bulleted list of the facts, opportunities, and challenges to which, like it or not, the 'Global West' must respond strategically. The question is how competitive the EU's ideology-driven economic and sanctions policy is with non-Western and largely pragmatic competition policy based on geostrategic principles. Can the 'Global West' keep pace with the faster pace of development of the BRICS world, or will it gradually fall behind and lose its global leadership?

As the explosive growth of BRICS has raised the question of the US dollar's disappearance as the world's leading currency and its replacement by another BRICS currency, and the possibility that gold could be the basis of this new currency, this paper will try to approach the question through the future role of gold, which is now becoming increasingly important in the Western world.

The key elements of our starting point are summarized in the following points:

1. The G7, and more broadly the 'Global West', is challenged by the BRICS grouping, which started with five countries (Russia, China, India, South-Africa, and Brazil) in 2009/2010 and was enlarged by 4+1 members from 1 January 2024 (Iran, United Arab Emirates, Egypt, and Ethiopia, while Saudi Arabia has not formally responded to the invitation but is present at all events). At the 16th BRICS Summit, held between 22 and 24 October 2024 in Kazan, Russia, it was decided to admit 13 more associate members (*Figure 1, Map 1*). In addition, dozens of countries also announced their intention to join or were represented at the Kazan Summit (*Map 1*). These countries now account for 44.56 per cent of world GDP, compared to 29.93 per cent for the G7 and only 13.56 per cent for the EU (*Figure 2*). Furthermore, while the BRICS+18 countries already account for 58.14 per cent of the world's population, the G7 account for 8.22 per cent and the EU (overlapping with the G7) for only 5.59 per cent (*Figure 3*). The BRICS world, which is gradually and step by step absorbing the world outside the 'Global West', already has a significant lead in both indicators. However, the multitude



Gold is recognized and appreciated in every country and every region of the world, and there is a general public confidence in its value. This millennia-old public trust does not require a state or international guarantee, as is the case with any monetary system. Moreover, gold can hardly be sanctioned at the level of ordinary people. This is why gold, in some ways an alternative to printed/coined money, has survived all the economic and financial crises that have arisen since currencies were separated from the gold standard.



of the population in the area may further distort the global demographic, trade/economic, and political balance.<sup>8</sup>

2. The BRICS+18 has repeatedly announced its intention to rebalance world trade to a system where the BRICS world members will be the beneficiaries, by introducing or paving the way<sup>9</sup> for a new common value measure ('common denominator', 'least common multiple') to break the monopoly<sup>10</sup> of the US dollar in world trade, which is meant to maintain the hegemony of the 'Global West'.
3. Russia's exclusion from SWIFT has made it even more urgent for the BRICS world to create a new international transfer and clearing system (BRICS Cross-Border Payment Initiative, BCBPI)<sup>11</sup>, independent of SWIFT, but also to reform the international monetary and financial system (IMFS)<sup>12</sup>—also to break the Western hegemony and reduce the vulnerability of the BRICS world in this area, or to eliminate this vulnerability after the complete break away and the creation of an alternative trading world order.
4. While the separation of the two systems (USD-based world trade and SWIFT) has been a recurring issue in BRICS communication since 2009/2010, the exclusion of Russia from SWIFT and the blocking<sup>13</sup> of a significant part, if not all, of its USD 428.3 billion foreign exchange (ForEx) reserves (*Figure 8*) has created a radically new situation that could significantly accelerate the process, as we are no longer thinking about a theoretical construct but about solving a direct practical problem.

<sup>8</sup> The political and economic impact of BRICS enlargement on the existing economic world order has been the subject of numerous analyses. See the briefing of the EU's European Parliamentary Research Service of 15 March 2024. JÜTTEN–FALKENBERG 2024.

<sup>9</sup> While official, internationally accredited figures show that 94.7 per cent (USD 3,381.38 billion) of China's 'total reserves' (USD 3,572.84 billion) are in foreign currency (see *Figure 6* below), the process of 'dedollarization' can only be carried out at a deliberate, planned pace, as long as China's losses in USD will be smaller than its gains from the world trade order that will follow USD hegemony.

<sup>10</sup> 57.39 per cent at 24Q3, <https://data.imf.org/?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4>; USD: Share of global foreign exchange reserves: 57 per cent; Share of export invoicing: 54 per cent; Share of foreign exchange transactions: 88 per cent, <https://www.atlanticcouncil.org/programs/geoeconomics-center/dollar-dominance-monitor/>.

<sup>11</sup> See in particular the following points of a policy study by the Russian BRICS Presidency: '7 Payments system could be protected from external influence by putting central banks in the middle of transactions. Establishing direct links between individual countries' central banks may minimize risks; in essence this mechanism builds on the approach that commercial banks continue to utilize the correspondent network that is linked via the central bank. This means that no single commercial entity that is part of the network can be excluded from the system as that would entail restricting the central bank itself. 8 BRICS Cross-Border Payment Initiative (BCBPI) project offers a potential option for cross border settlement. The Bank of Russia as the acting Chair of the BRICS Payment Task Force has presented to the BRICS countries' central banks a proposal to explore the establishment of a common multilateral settlement platform based on modern technologies named BCBPI – the new supranational infrastructure could greatly reduce risks and accelerate cross-border payments initiatives.' YAKOV AND PARTNERS 2024.

<sup>12</sup> 16th BRICS Summit, Kazan Declaration, Strengthening Multilateralism for Just Global Development and Security, Kazan, Russian Federation, 23 October 2024, Section 12: 'We recognise the crucial role of BRICS in the process of improving the international monetary and financial system (IMFS), with a view to making it more responsive to the needs of all countries. In this regard, we take note of the BRICS Chairship Research on the Improvement of the IMFS, which outlines core principles of security, independence, inclusion and sustainability crucial for economic and social prosperity. We encourage our Finance Ministers and Central/National Bank Governors to continue this work.' <http://static.kremlin.ru/media/events/files/en/RosOySvLzGaJtmx2wYFv0lN4NSPZploG.pdf>. For more details, see YAKOV AND PARTNERS 2024.

<sup>13</sup> <https://www.reuters.com/world/europe/what-where-are-russias-300-billion-reserves-frozen-west-2023-12-28/>.

5. Moreover, while from 2009/2010 until the outbreak of the Russian-Ukrainian war, this issue was primarily an economic and technical issue on which there was joint professional reflection (how to break the hegemony of the US dollar in a way the BRICS countries benefit more than they lose and how this could be achieved technically), after the Russia–Ukraine war and the sanctions against Russia, the problem became an actual political issue, the dynamics of whose solution are different from those of reflection on economic issues.
6. Not to mention that the exclusion from the SWIFT system and the weaponization of the US dollar, within the framework of sanctions, has become a real threat for many countries, especially those outside the 'Global West', for which a solution must be sought in advance.<sup>14</sup> These countries may feel vulnerable to these regimes, and for ideological/political/geostrategic reasons, they may be excluded from this circulation, with their foreign reserves frozen, depriving them of an important element of their financial stability. These countries could easily conclude that the solution is to replace the USD with another currency not in the hands of the 'Global West' or even to create a new universal currency that is generally accepted and trusted by the BRICS countries.
7. In the same way, the threat of exclusion from the SWIFT system for political or economic reasons could also accelerate the introduction of a new system (BCBPI, see above) and the reform of the IMFS system.
8. The change is symbolic, as it could mean the end of the economic hegemony of the 'Global West' and a reordering of the global political and economic balance and balance of power. Many people do not believe in such a scenario, but US President Donald Trump has indicated that any such attempt to challenge or *ad absurdum* end the hegemony of the US dollar would entail a 100 per cent customs penalty on the BRICS countries.
9. An important question is whether the countries of the BRICS world and other actors outside the 'Global West' see the vulnerability to these global systems (USD-based accounting system, SWIFT) as a threat in strategic planning and whether they seek to minimize the resulting risks. This also implies moving away from these systems and creating or joining alternative systems that do not involve this level of vulnerability to the 'Global West'.
10. Exclusion from the two systems may also entail a further loss of Western position, since through these two platforms—its banking system and its IT system—the US and indirectly the 'Global West' can also, *ad absurdum*, directly monitor trade with the rest of the world, which may also be an obvious strategic advantage. If we exclude certain countries from these systems (e.g., Russia), they may see the future in building or joining alternative systems. Either way, the advantage for the US and the 'Global West' of monitoring other countries' trade and banking activities through these systems may be reduced and then lost. This strategic information will then have to be gathered from other sources.

<sup>14</sup> It is perhaps because of this fear that while 71 per cent of the world's foreign exchange reserves were in US dollars in 2000, this proportion fell to 56 per cent by 2022. ALIMUKHAMEDOV 2024, 8.





Nicolas Poussin, *Hannibal Crossing the Alps on Elephants*  
(ca. 1625-1626). Private collection

SOURCE: WIKIMEDIA COMMONS



11. Gold could be (one of) the basis of the new general value measure in the BRICS world. The question is whether this new measure of value will be a traditional basket of currencies or a (partly) gold-based digital currency.<sup>15</sup>
12. Is a (at least partly) gold-based digital money feasible?
13. Is a (at least partly) gold-based CBDC (central bank digital currency) feasible?<sup>16</sup>
14. If the world's remaining gold reserves are indeed finite<sup>17</sup> (see details below in Chapter 4), can gold play the role of the force behind new monetary systems?
15. If two independent trading world orders (BRICS world versus 'Global West') with two independent, even rival, monetary and interbank transfer and accounting systems are implemented, the most obvious basis of conversion between the two systems may well be gold. Thus, the weight of the two systems in gold, or more precisely in (central bank) gold reserves, will express the relationship between the two players in terms of power.
16. Can cryptocurrencies, which do not yet have the basis for trust behind them as physical gold and whose fate may be in doubt if the current cryptocurrency systems do not get caught up in the framework of the 'Global West' world order, fulfil this role of intermediary or general value measurer over the two (commercial) world orders, like gold? Does the BRICS world embrace this system<sup>18</sup> and accept its role as a common denominator, like gold, or will it create its own pro-secession cryptocurrency systems in this segment, too? The question is whether in the cryptocurrency world there will be rivalry within a global system, or whether there will be two parallel, partially or fully independent systems competing.
17. If the future of (Western) cryptocurrency systems is uncertain in this respect, it reinforces the acceptance of gold as the only general measure of value above rival systems.
18. The current uncertainty in world politics is, in any case, fuelling demand for gold, which has pushed gold prices to historic highs in recent years (see *Figures 4–5*).
19. Gold's importance is growing regardless, and central banks are increasingly demanding available gold, which could keep prices high for a long time (see *Figure 4–5*). If gold fulfils the role outlined above, it will further strengthen demand for it, which will further increase its importance, which could further strengthen gold price.

<sup>15</sup> See Alexej Jordanov, content architect at Dutch online platform GoldRepublic, in MIDDELKOOP–MARSH 2024, 21.

<sup>16</sup> ORTLIEB 2021; FERNÁNDEZ–VILLAVÉRDE–SANCHES 2022, 1–27; FERNÁNDEZ–VILLAVÉRDE–SANCHES 2024, 1–47.

<sup>17</sup> World Gold Council: 53,000 tonnes, USGS: 59,000 tonnes, while the annual global extraction is around 3,200–3,600 tonnes. A 1998 USGS report published in 2000 estimated the US unexplored gold reserves at 33,000 tonnes: 15,000 tonnes for known gold deposits and 18,000 tonnes for unknown gold deposits, <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-gold.pdf>, 82–83.

<sup>18</sup> As US President-elect Donald Trump has stressed in his campaign and after his electoral success his support for this system and the reaffirmation of the US cryptocurrency as a great power, this may create mistrust in the BRICS world towards cryptocurrency systems, perhaps still dominated by the 'Global West', as a means of Western influence.

20. The question will be when central banks will start to 'withdraw' gold from the markets to an even greater extent<sup>19</sup> in order to further increase their strategic gold reserves, especially as the 'withdrawal' from the market will generate a rise in the price of gold, so that the value of the reserve held in gold will continue to rise in foreign currency terms, thus 'realising gain'. This development may occur despite the fact that we know that canonical monetary logic dictates that there is an ideal ratio of ForEx to gold in a central bank reserve pool.
21. Another question to be answered is whether countries caught between the two big conglomerates ('Global West' and the BRICS+5+13 world) can have a 'third passenger' policy or whether they have to adapt to the expectations of one of the big systems (politically, economically, and, above all, technically: specifically, which financial/transfer/etc system they use). Which transaction system a country uses, for example, can determine which world order it belongs to. It is not certain that a neutral system will exist. Since the as yet unstructured countries of this 'third world' or 'Global South' do not and cannot have a core state organizing them into a third, 'middle way' force, there is a chance that they will be drawn by the gravitational pull of one of the major systems, realizing a higher degree of bipolarity.
22. Finally, the most important question is whether the BRICS world intends to abolish the traditional Western hegemony, to replace the dollar, to create an alternative to the SWIFT system, etc, and to make all monetary, financial, economic, and trade changes within the current framework of rules, maintaining the status quo of the current international rules and principles, or to go beyond them and create new rules. It may be in its strategic interest to play this 'chess game' according to its own rules, within the framework of the conditions that it favours.

The 'Global West's' visions, plans, and aspirations for the financial systems of the future are only within the current, post-Bretton Woods, **canonical** (the traditional perception of the role and place of gold in monetary logic) framework<sup>20</sup>, the current rules of the game, and perhaps not sufficiently open to the previous, precious metal-based logic, having no plan B for a **post-canonical** logic and world (one that somehow incorporates gold and gives gold a prominent, if not dominant, role). There are already theoretical attempts for a **post-canonical hybrid** (digital money and, in particular, CBDC combined with gold)<sup>21</sup> world and financial systems (gold-based digital money or gold-based CBDC).<sup>22</sup>

The question is whether the countries of the BRICS world will play the game according to the traditional market rules or whether they will use unorthodox methods to end Western dominance and create their own alternative reality—for example, whether or not the 'improving of international monetary and financial system (IMFS)' clause in Section 12 of the BRICS Kazan Declaration<sup>23</sup>

<sup>19</sup> According to US statistics, 46 per cent of the gold processed annually is still used to make jewellery, and central banks buy 'only' 23 per cent of gold, while 16 per cent is used to make physical gold bars and 9 per cent is used to make investment coins and medals. SHAEFFER 2024, 83.

<sup>20</sup> Present authors have developed the categories they have set up here (canonical, post-canonical, post-canonical hybrid) in the light of and in accordance with the seven-phase periodization that appears in the latest OMFIF analysis: Headley et al., 'Tracking the Seven Ages of Gold', Figure 1 (OMFIF, 2024). This chronological categorization approaches the issue from a strategic rather than a monetary perspective.

<sup>21</sup> FERNÁNDEZ–VILLAVÉRDE–SANCHES 2022, 1–27; FERNÁNDEZ–VILLAVÉRDE–SANCHES 2024, 1–47.

<sup>22</sup> ORTLIEB 2021.


<sup>23</sup> <http://static.kremlin.ru/media/events/files/en/RosOySvLzGajtmx2wYFv0lN4NSPZploG.pdf>.



## *Theoretical Introduction*

quoted above, or the BRICS Cross-Border Payment Initiative (BCBPI) would be an instrument to end the hegemony of the 'Global West' (see Point 3 above). In war theory, too, the basic principle is that each side wants to fight under conditions, in terrain, and under criteria that favour it and minimize the opponent's potential superiority in a particular area. It is therefore not certain that this future chess game will be fought within the bounds of the current rules based on the canonical tradition—however unlikely this may seem. We do not know whether the members of the Senate in Rome in 218 BC believed, or gave much credence to, the chances that Hannibal would drive his elephants through the passes of the Alps and defeat the Roman armies, or whether the clear opinion was that this was inconceivable, impossible, impracticable, defied all reasonable and prudent expectations, and simply could not happen. But it did happen, and it turned the previous status quo upside down.

The present study, therefore, aims to explore this problem area from the perspectives outlined above and to answer some of the questions raised.

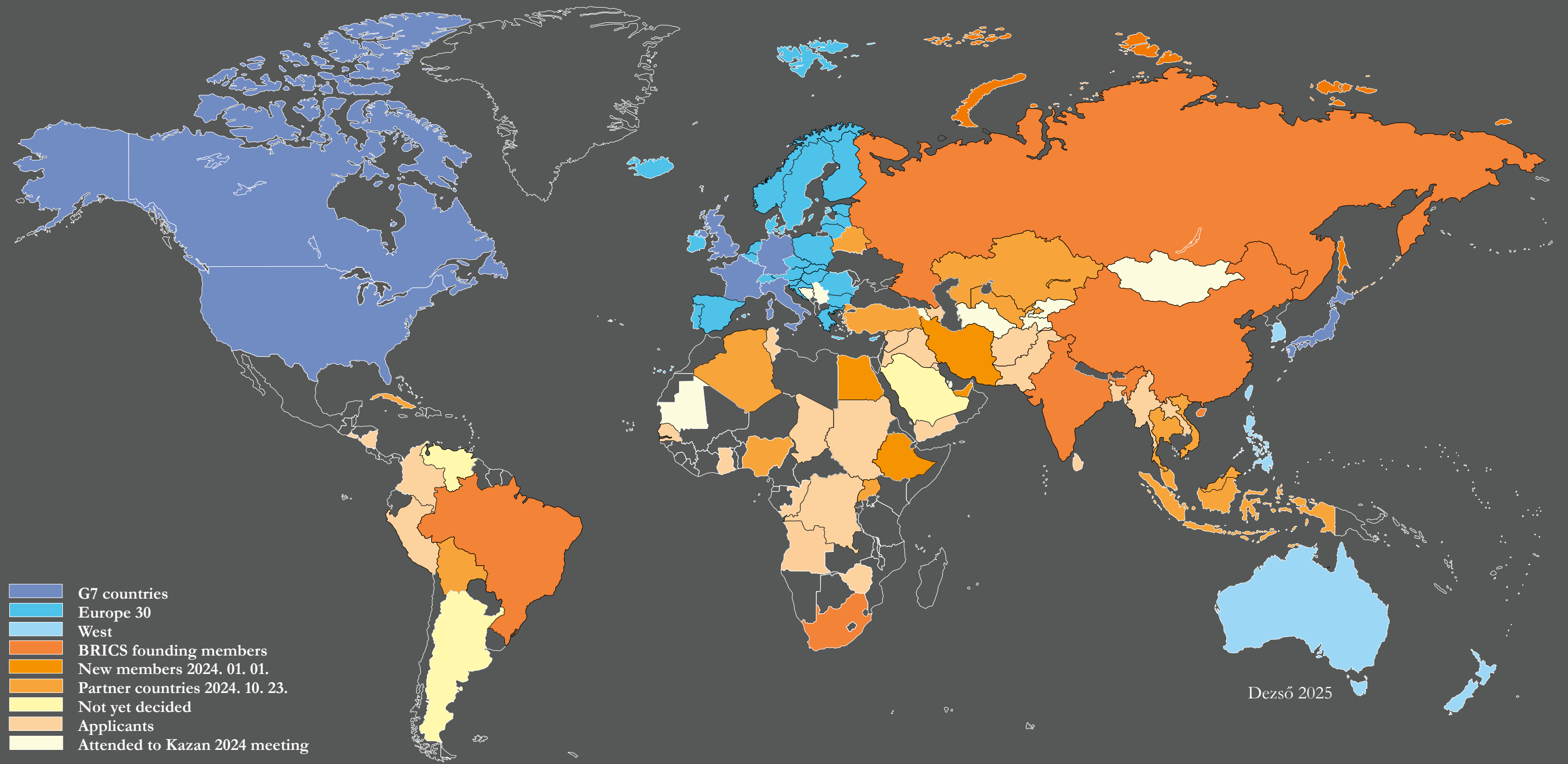


In (geo)strategic planning, if it appears that there is even a 5 per cent chance of an unorthodox scenario that changes or circumvents the canonical rules, that risk needs to be managed as it can cause serious surprises and problems if ignored. We must, therefore, be prepared for any scenario, even the most unlikely, in the canonical framework. Such preparation, to get ahead of the curve, could be a longer-term, medium-term process, following the gradual transformation of the environment.

SOURCE: WIKIMEDIA COMMONS



1. BRICS enlargement prospects





2009	2010	1 January 2024	24 October 2024
Russia	South Africa	Iran	Algeria
China		United Arab Emirates (UAE)	Belarus
India		Egypt	Bolivia
Brazil		Ethiopia	Indonesia
		Saudi Arabia — pending	Cuba
			Kazakhstan
			Malaysia
			Nigeria
			Thailand
			Türkiye
			Uganda
			Uzbekistan
			Vietnam

Figure 1. The pace of the enlargement of the BRICS countries

G7		EU				BRICS+	
per cent (world)		per cent (world)				per cent (world)	
United States (USA)	15.42	Austria	0.36	Latvia	0.04	Brazil	2.35
United Kingdom (UK)	2.22	Belgium	0.44	Lithuania	0.08	South Africa	0.57
France	2.21	Bulgaria	0.12	Luxembourg	0.05	India	7.51
Japan	3.72	Cyprus	0.03	Hungary	0.24	China	18.82
Canada	1.36	Czech Republic	0.31	Malta	0.02	Russia	2.89
Germany	3.17	Denmark	0.25	Germany	3.17		32.17
Italy	1.83	Estonia	0.04	Italy	1.83	UAE	0.51
		Finland	0.19	Portugal	0.27	Egypt	1.03
		France	2.21	Romania	0.45	Ethiopia	0.23
		Greek	0.24	Spain	1.38	Iran	0.99
		The Netherlands	0.74	Sweden	0.41	Saudi Arabia	1.29
		Croatia	0.09	Slovakia	0.13		3.54
		Ireland	0.41	Slovenia	0.06	Algeria	0.42
		Poland	0.98			Belarus	0.15
						Bolivia	0.07
						Indonesia	2.44
						Cuba	
						Kazakhstan	0.43
						Malaysia	0.71
						Nigeria	0.77
						Thailand	0.91
						Türkiye	1.77
						Uganda	0.09
						Uzbekistan	0.23
						Vietnam	0.86
							8.85
29.93 per cent		13.56 per cent				44.56 per cent	

Figure 2. Share of G7, EU, and BRICS+ countries in world GDP

(<https://www.imf.org/external/datamapper/PPPSH@WEO/EU/CHN/USA>)

G7		EU				BRICS+	
per cent (world) <sup>24</sup>		per cent (world)				per cent (world)	
US	345.427	Austria	9.121	Latvia	1.872	Brazil	211.999
UK	69.138	Belgium	11.739	Lithuania	2.859	South Africa	64.007
France	66.549	Bulgaria	6.758	Luxembourg	0.673	India	1,450.936
Japan	123.753	Cyprus	1.358	Hungary	9.676	China	1,419.321
Canada	39.742	Czech Republic	10.736	Malta	0.540	Russia	144.820
Germany	84.552	Denmark	5.977	Germany	84.552		3,291.083
Italy	59.343	Estonia	1.361	Italy	59.343	UAE	11.027
	788.504	Finland	5.617	Portugal	10.425	Egypt	116.538
		France	66.549	Romania	19.015	Ethiopia	132.060
		Greek	10.048	Spain	47.911	Iran	91.568
		The Netherlands	18.229	Sweden	10.607	Saudi Arabia	33.963
		Croatia	3.875	Slovakia	5.507		385.156
		Ireland	4.503	Slovenia	2.119	+13	998.089
		Poland	38.539		449.509		4,674.328
9.66 per cent		5.50 per cent				57.27 per cent	

Figure 3. Population of G7, EU, and BRICS+18 countries (in millions).  
United Nations, Department of Economic and Social Affairs, Population Division, Middle Variant, *World Population Prospects 2024, File POP/1-1: Total population (both sexes combined) by region, subregion and country, annually for 1950-2100 (thousands), POP/DB/WPP/Rev.2024/POP/F01-1*, <https://population.un.org/wpp/downloads>

<sup>24</sup> Estimated world population in 2024: 8.161.973.000. United Nations, Department of Economic and Social Affairs, Population Division, Middle Variant, *World Population Prospects 2024, File POP/1-1: Total population (both sexes combined) by region, subregion and country, annually for 1950-2100 (thousands), POP/DB/WPP/Rev.2024/POP/F01-1*, <https://population.un.org/wpp/downloads>.





# 2



## Changes in the World Price of Gold

Gaspar van den Hoecke, *Croesus Showing his Treasures to Solon* (1630s). National Museum in Warsaw, Warsaw, Poland



The price of gold has increased tenfold from 2000 to the present day, that is, over the past 25 years, and has risen from USD 274/ounce (oz) at the end of 2000 to USD 2,812/oz on 31 January 2025 (Figures 4–5). There are clearly identifiable periods of this change:

Between 2000 and 2005, the price of gold rose steadily<sup>25</sup> and nearly doubled, from USD 276/oz in 2000 to USD 500/oz in 2005.

Between 2005 and 2012, the price of gold rose steeply from USD 500/oz to USD 1,775/oz in 2012. The global financial crisis of 2008–2009 played a role in this sudden, more than two-and-a-half-times price increase, which had an impact for years afterwards and pushed the gold price to historic highs as a ‘safe Heaven’ diversification investment.

A strong correction followed between 2012 and 2018, which first brought the gold price down to 1,070 USD/oz by 2015 and then to a level of 1,260 USD/oz by the end of 2018.

From 2018 to the present, a second major rise followed, with the exchange rate curve staying in the USD 1,800/oz range between 2020 and 2022, before a further bounce to reach the record price of USD 2,812/oz on 31 January 2025. This explosive price increase—which went from USD 1,813/oz on 31 December 2022 to USD 2,812/oz on 31 January 2025, meaning a USD 1,000 rise in two years—can be seen partly or entirely as a market response to the uncertainty and economic stagnation resulting from the Russia–Ukraine war and sanctions policy.

Today’s analysis suggests that this gold price level will no longer decline or fluctuate significantly and that further gains of up to several hundred per cent<sup>26</sup> are likely as gold becomes more important. A further increase and the unquestionable return of gold to monetary thinking could lead to a substantial conceptual shift in this area.

Today, the increase in gold price has already reached a level that will have a meaningful impact on monetary developments. The increase in the value of the gold reserve has a major impact on the value of the total reserves of a given state. For example, the value of Germany’s gold reserves of 3,351.53 tonnes<sup>27</sup> (Figure 8) was worth USD 195 billion (195,359,889,333) at USD 1,813/oz at the end of December 2022, but after the price explosion of USD 1,000 two years later (31 January 2025) it was worth USD 303 billion (303,007,175,292), which is a not-at-all negligible increase in value of USD 107 billion (107,647,285,959).

If the position and price of gold continues to strengthen as it has been doing today, and central banks continue to increase their gold reserves (see Chapter 3: ‘Central Bank Gold Reserves’) in the face of an uncertain international political and economic environment, which means that they will continue to make more and more of the demand and thus ‘withdraw’ gold from the market (see Chapter 4), this will lead to further gold price increases with unchanged or even increasing demand. If the amount of gold mined (estimated at between 3,206<sup>28</sup> and 3,646<sup>29</sup> tonnes per year globally) does not increase in proportion to demand, which is empirically very likely, then the increased demand for gold (central

<sup>25</sup> In 1999, the European Central Bank and 21 other central banks signed the Central Bank Gold Agreement, in which they agreed to regulate the amount of central bank sales (400 tonnes per year, with a ceiling of 2,000 tonnes for five years). This has eliminated a large supply from the market, with a consequent increase in the price. This was subsequently renewed three times: 8 March 2004: 500 tonnes per year, 2,500 tonnes for five years; 27 September 2009: 400 tonnes per year, 2,000 tonnes for five years; 17 September 2014: signatories agreed to coordinate their gold trade to avoid major market upheavals, until finally it was terminated at the end of September 2019, <https://www.gold.org/central-banks/central-bank-gold-agreements>.

<sup>26</sup> GOLDMAN 2024.

<sup>27</sup> 1 tonne = 32.151 troy ounces. 3351.53 tonnes = 107,755.041 troy ounces.

<sup>28</sup> <https://www.usgs.gov/centers/national-minerals-information-center/international-minerals-statistics-and-information>.

<sup>29</sup> <https://www.gold.org/goldhub/data/gold-production-by-country>.

banks are accumulating more and more gold each year and thus ‘withdrawing’ it from the market, private individuals are buying more and more investment gold and the jewellery trade is getting less and less gold) will have a serious upward effect on prices. Thus, if central banks gradually ‘withdraw’ more and more gold from the market in order to increase their gold reserves for stability purposes, this increase in demand and contraction in supply could push up the price of gold even further.

In addition, of course, other factors, such as the US dollar’s fluctuation or unexpected inflation, can also drive up gold prices<sup>30</sup>, which (during and after the COVID-19 pandemic, coupled with the uncertainty caused by the Russia–Ukraine war) may also have played a role in the gold price explosion of the past 2–3 years.



Francesco Fontebasso, *Family of Darius Before Alexander* (1750). Dallas Museum of Art, Dallas, Texas, USA

<sup>30</sup> On the relationship between inflation and the price of gold, see BECKMAN–CZUDAJ 2012; CONLON–LUCEY–UDDIN 2015; GOSH–LEVIN–MACMILLAN–WRIGHT 2001; FERNÁNDEZ–VILLAVÉRDE–SÁNCHEZ 2024; CENTRAL BANKING NEWSDESK 2024.



	Q1 (31 March)	Q2 (30 June)	Q3 (30 September)	Q4 (31 December)
2000	276	288	273	274
2001	257	270	293	276
2002	301	318	320	349
2003	330	345	382	409
2004	421	401	407	441
2005	425	440	462	500
2006	556	579	589	620
2007	656	652	737	810
2008	925	907	903	848
2009	954	918	1,040	1,130
2010	1,142	1,193	1,346	1,368
2011	1,461	1,527	1,617	1,613
2012	1,621	1,613	1,775	1,693
2013	1,574	1,250	1,306	1,204
2014	1,292	1,326	1,216	1,206
2015	1,203	1,170	1,131	1,070
2016	1,236	1,320	1,322	1,131
2017	1,257	1,249	1,282	1,291
2018	1,323	1,268	1,201	1,261
2019	1,295	1,403	1,489	1,479
2020	1,618	1,747	1,883	1,877
2021	1,691	1,755	1,742	1,805
2022	1,929	1,797	1,634	1,813
2023	1,965	1,908	1,870	2,069
2024	2,280	2,330	2,667	2,615
2025	2,812 (31 January)			

Figure 4. Changes in the world price of gold (end of each quarter, 1 oz, USD).  
SOURCE: <https://www.gold.org/goldhub/data/gold-prices>

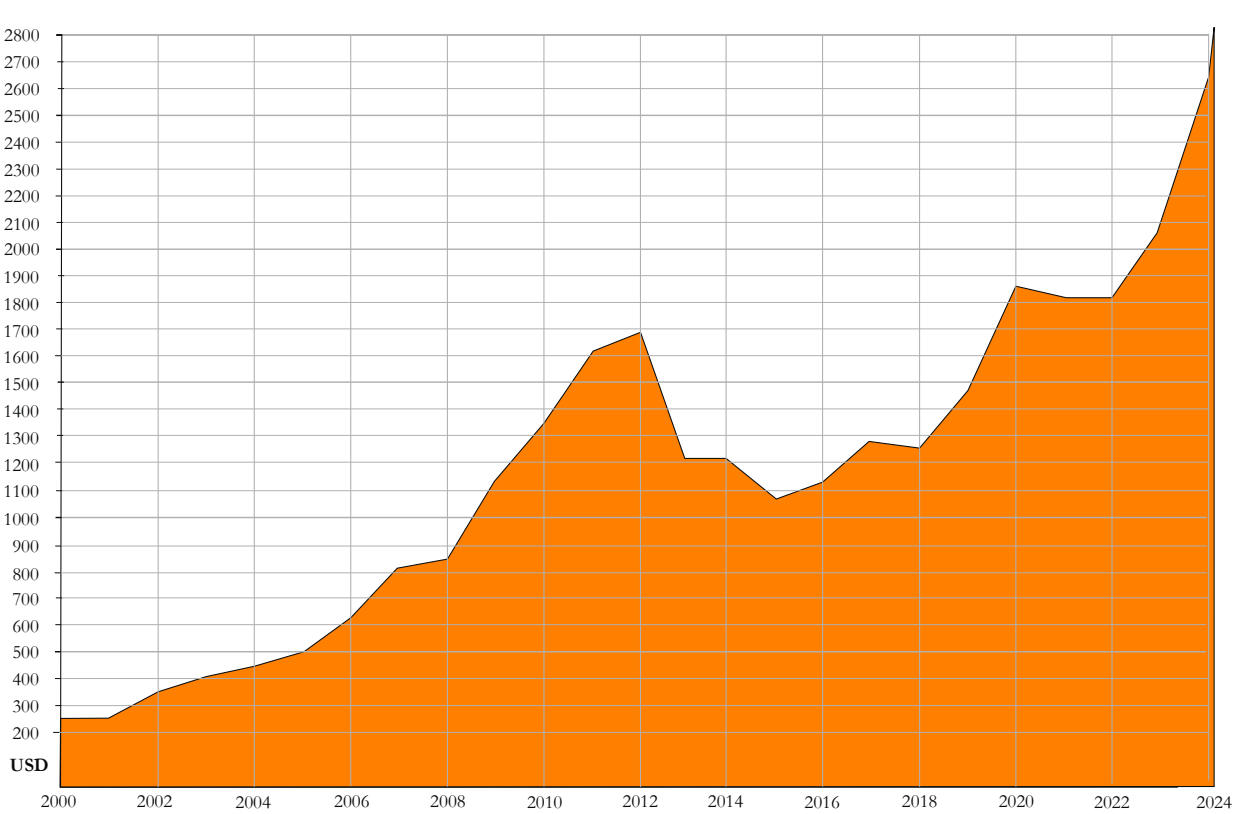


Figure 5. Changes in the world price of gold 2000–2025, annual breakdown





Eugène Delacroix, *Death of Sardanapalus*  
(1827). Louvre Museum, Paris, France

# 3



## Central Bank Gold Reserves<sup>31</sup>

‘Ctesias says that he (Sardanapalus, King of Assyria) started a war and gathered a large army, but was defeated by Arbakas and died after setting himself on fire in his palace on a pyre four plethrons high, on which he had placed 150 golden couches and as many golden tables. He had a room one hundred feet in size, built of wood inside the pyre, and placed the couches there, lying down there himself with his wife; his concubines lay on the other couches...Then he covered the room with large, thick beams and piled many thick logs around it so that there would be no exit. He piled up ten million talents of gold and a hundred million talents of silver, cloaks, purple robes, and all kinds of garments. Then he ordered the pyre to be lit from below, and it burned for fifteen days. Those who saw the smoke were amazed and thought he was offering a sacrifice—only the eunuchs knew the truth. And although Sardanapalus lived an extremely hedonistic life, he died with dignity in this way.’

Athénaios *Deipnosophistae* XII. 38

<sup>31</sup> The present paper, due to its (geo)strategic approach, is primarily concerned with the interpretation and management strategies and behavioural patterns of state actors, i.e. central banks, and consequently pays less attention to the activities of non-state gold market participants, which are important from an economic point of view. On the structure and logic of the gold market, the role of private/corporate gold funds, (gold) exchanges, ETFs, etc., see ALIMUKHAMEDOV 2024, 5-10.



The world's central banks hold nearly 17 per cent of all the gold ever mined in the world, i.e., 36,699 tonnes of gold. In 2023 alone, 1,037 tonnes of gold were bought.<sup>32</sup>

There is almost complete professional consensus that the explosion in gold prices and the increased interest in gold have been due to several important factors.<sup>33</sup> New gold accumulation after 2008 was motivated by fears of another economic crisis (much of the gold reserve accumulation took place after 2010) as central banks believed that gold reserve accumulation would reduce risk by diversifying resources, provide some level of protection against unexpected inflation for investors, and improve economic stability.<sup>34</sup> A significant amount of gold reserves can, therefore, protect against macroeconomic uncertainty and the negative effects of geopolitical changes. Finally, it can also help reduce the negative effects of sanctions<sup>35</sup> on national currencies and reserves held in ForEx, as seen in the case of Russia and other countries in the past<sup>36</sup>.

There is also a broad professional consensus<sup>37</sup> that the two waves of BRICS enlargement (see 'Theoretical Introduction' and *Figure 1*) and the radically changed geopolitical and world trade situation—the Russia–Ukraine war and the sanctions against Russia, including the freezing of its foreign reserves (300–428 billion USD, see *Figure 8*), as well as its exclusion from the SWIFT system—has accelerated the pace of thinking about 'dedollarization' and the replacement of SWIFT by a new BRICS system (BRICS Cross-Border Payment Initiative, BCBPI) and the reform of the IMFS (international monetary and financial system) (see in detail 'Theoretical Introduction', points 3–4). This logic has led to an increasing pace of gold purchases by the BRICS central banks.

There is, however, a general consensus that the increase in gold demand and the subsequent rise in gold prices was obviously fuelled by the 2008 Global Financial Crisis (GFC), the US–China trade war, BREXIT, the COVID-19 pandemic, the Russia–Ukraine war, and geopolitical uncertainty caused by the sanctions policy against Russia. In a survey of gold market participants (managers) conducted by the World Gold Council, they commented on the 'new historical importance of gold' and its 'good performance in times of crisis', and 61 per cent expected gold stocks to rise significantly in the next 12 months.<sup>38</sup> Central banks' attitudes towards gold changed significantly after the 2008 financial crisis, with former net sellers becoming net buyers.<sup>39</sup>

However, this analytical finding is too general. Indeed, as *Figures 6* and *7* and *Map 5* show, the Western world (the 'Global West', including the G7 and the EU) has not reacted at all to the current uncertain situation by buying gold but has continued to sell rather than buy (*Figure 6*). By contrast, countries outside the 'Global West', notably the BRICS+18 world, have started to buy gold in earnest (*Figure 7*, *Map 5*), so the global central bank gold hoarding boom was exclusively a reaction of the world outside the 'Global West'. In the entire Western world, only Poland, Hungary, and partly the Czech

<sup>32</sup> Pistilli (2024). For full details and a summary, see NEWMAN ET AL. 2024, 'OFFICIAL SECTOR', CHAPTER 7, 66–70.

<sup>33</sup> Such as the Global Financial Crisis, the COVID-19 pandemic, the US–China trade war, BREXIT, sanctions on Russia, etc. ALIMUKHAMEDOV 2024, 3.

<sup>34</sup> PISTILLI 2024.

<sup>35</sup> In terms of foreign exchange reserves, gold has favourable characteristics, such as being free from credit risk and the possibility of being held in a particular country, thus protecting it from possible sanctions.

<sup>36</sup> Central Bank of Iran (USD 1.9 billion) in 2010, National Bank of Kazakhstan (USD 22.6 billion) in 2017, Central Bank of Venezuela (USD 342 million) in 2020, Da Afghanistan Bank (USD 7 billion) in 2021, and most recently the Central Bank of Russia (approx. USD 258 billion). ALIMUKHAMEDOV 2024, 3.

<sup>37</sup> See in particular a recent OMFIF study. MIDDELKOOP–MARSH 2024.

<sup>38</sup> ALIMUKHAMEDOV 2024, 3.

<sup>39</sup> ALIMUKHAMEDOV 2024, 3.

Republic reacted to the above-detailed changes in the geopolitical and economic/financial environment by buying gold (see below).

As shown in *Figure 6*, between 2002 and 2024, the central banks of the 'Global West' sold 3,014.6 tonnes of gold (of which 1,734.7 tonnes were sold by the Eurozone countries) and bought only 680.6 tonnes of gold, according to official audited data (*Figure 6*). The balance of the two is minus 2,334 tonnes, so the central bank gold reserves of the 'Global West' countries decreased by 2,334 tonnes over the period. The sales were minor in amount but relatively large in number, 'small' technical corrections and deals, with the larger sales being made under the Central Bank Gold Agreement 1–4 (see footnote 25 above). 334 tonnes shows that the Western canonical monetary strategy did not see the way out in (further) gold accumulation, probably thinking that the central banks of the 'Global West' had already accumulated huge gold reserves (*Figures 8*, *11*, *14*).

The BRICS+18 group of countries, on the other hand, follows a completely different path. The 23 countries have significantly increased their central bank gold reserves over the past 23 years. Their central banks bought a total of 6,362.7 tonnes of gold and sold only 125.9 tonnes. The balance was, therefore, a not insignificant increase of 6,236.8 tonnes. It should be noted here that the BRICS+18 countries do not necessarily have an interest in transparency in reporting and disclosing the true size of their central bank gold reserves according to Western standards and systems. This is particularly the case for Russia and China, which, in addition to their broadly monitorable expectations of international markets, may also have significant 'under-the-radar' gold reserves from other sources as well<sup>40</sup>, such as their own production (see next chapter). For this reason, many, including the author of this paper, believe that the gold reserves of the two countries' central banks significantly exceed the size of the gold reserves recorded by international organizations and audited by their systems.

If the phenomenon is approached by looking only at the necessity of individual sales and purchases and not by placing them in a longer time series coordinate system, i.e. if we do not look at the trend, then it is obvious that individual sales and purchases can be explained within the framework of traditional, canonical financial thinking. However, if we look at the trend from a (geo)strategic point of view, we can conclude that, although there was an individual monetary decision behind each transaction, the trend is diagnostic and (geo)strategically indicative: there is a different strategic objective and a different logic behind the monetary decisions of the two sets.

The predominance of the 'Global West' in gold reserves (see *Figures 8–14* below) is still convincing, but the trend, the methodological/philosophical/strategic difference between the two political sets, is obvious. It seems that the 'Global West', within the framework of canonical monetary thinking, has moderate confidence in the importance of further accumulation/increase of central bank gold reserves and sees it as a diversifying tool at most, even if the share of gold (by value) in total central bank reserves (ForEx+gold) in the G7 in the US, Germany, France, and Italy is well above 70 per cent(!) (*Figure 8*), and the 'Global West' also holds a significant share of total gold reserves. In addition, apart from the state actors, the major US and European investment banks (BNP, Citibank, Goldman Sachs, HSBC, ICBC, JP Morgan, Merrill Lynch, Morgan Stanley, Standard Chartered, Toronto-Dominion, UBS) are also important players in the gold market, providing liquidity to the market as market makers, which is a very important feature of this market and an advantage of this form of investment—although they are 'non-governmental' profit-oriented institutions, they are also linked to Western countries by a thousand links, if for no other

<sup>40</sup> For a good summary table on sources of supply (over-the-counter markets, legacy assets, domestic production, off-market transactions with other CBs or international organizations, derivatives, ETFs, etc.), see ALIMUKHAMEDOV 2024, FIGURE 4.



We are convinced that the relationship of gold to *foreign exchange* within *total reserves* will be a determining factor not only in monetary policy judgments and economic stability, but also in future credit rating criteria.

reason than that their banking supervision is carried out by institutions in these countries. It is also important to note, also to the strategic advantage of the West, that exposure to the gold market can also be taken through Exchange Traded Funds (ETFs), a market also dominated by the US and the EU.

In contrast, in other parts of the world outside the 'Global West', and especially in the BRICS+18, the trend is the opposite of the Western, canonical approach and highlights the strategic importance of gold, the accumulation of central bank gold reserves, in these systems. And this is the level at which the different buying/selling attitudes cannot be simply deduced from the different monetary 'policy' choices of peoples outside the 'Global West' based on different civilizational traditions, also in relation to gold, which the canonical monetary philosophy of the West cannot necessarily interpret. Here, according to the present author's (geo)strategic approach, it is fundamental strategic differences that lie in the background: it is as if these countries envisage a key role for gold in the future financial world after their vision of a dollar-based international accounting period and are thinking of building a system(s) in which gold could play a dominant role (gold standard, partly or wholly gold-based digital currency, possibly gold-based CBDC). The question is, under what rules of the game does the BRICS world want to reduce or eliminate the advantage of the 'Global West'.

International central bank analysts commend<sup>41</sup> the Central and Eastern European central banks for identifying the revalued importance of gold in the changing global geopolitical environment and for starting to buy gold at an early stage. A glance at *Figure 6* shows that within the entire 'Global West', only Poland, Hungary, and to a lesser extent the Czech Republic have embarked on a path of gold reserve accumulation and gold buying. This may be due to confidence in gold or the need to increase gold reserves to 'Western' levels.

**Poland** has significantly increased the size of its central bank gold reserves over the last two years. With 419.7 tonnes<sup>42</sup> (see *Figures 8, 11, 15, 18*), it ranks 13th in the world ranking but only 20th in the world in terms of gold reserves per capita with 10.89 grams and only 16.2 per cent of its total central bank reserves are gold, which is 30th in the world (*Figure 21*). The Governor of the Central Bank of Poland (Narodowy Bank Polski), Adam Glapiński, has therefore announced that the Central Bank of Poland will continue to buy gold, aims to increase the gold reserve to 600 tonnes, and to raise the share of gold in the total central bank reserves to 20 per cent.<sup>43</sup>

Similarly, they point out that **Hungary** has also embarked on a systematic gold buying programme<sup>44</sup> and was the second-largest gold buyer in the 'Global West' behind Poland in 2024 and between 2002 and 2024 (*Figure 6*).<sup>45</sup> With 110.01 tonnes of gold reserves, Hungary has already become the 32nd largest gold reserve country in the world, 18th in the world with 11.37 grams of gold reserves per capita, and 24th in the world with 18 per cent of total reserves. In the last two segments, it is ahead of Poland and the Czech Republic (see *Figure 21*). Apart from Poland and Hungary, the Czech Republic has also made substantial gold purchases, although its performance in all three segments is worse than that of Poland and Hungary (*Figure 21*).

<sup>41</sup> MIDDELKOOP–MARSH 2024, 5, 12, 17.

<sup>42</sup> The vast majority of this is reportedly stored at the Bank of England. LAHIRI 2024.

<sup>43</sup> Lahiri (2024); see furthermore MIDDELKOOP–MARSH 2024, 18–19.

<sup>44</sup> For the Hungarian National Bank's 'gold policy' see: BANAI – KOLOZSI – LADÁNYI 2021, 138-146; KOLOZSI 2021; KOLOZSI 2024a; KOLOZSI 2024b.

<sup>45</sup> 'Tellingly, the Hungarian central bank commented that gold "may play a stabilising role and act as a major line of defense under extreme market conditions or in times of structural changes in the international financial system.' NIEUWENHUIJS 2023A; ACCORDING TO SOME ANALYSES, THE OPTIMAL PROPORTION OF GOLD IN A CENTRAL BANK PORTFOLIO ON A RISK/RETURN BASIS MAY RANGE BETWEEN 5 AND 20 PER CENT. ALIMUKHAMEDOV 2024, 24–25.





Marinus van Reymerswaele, *The Money Changer and His Wife* (1539). Museo del Prado, Madrid, Spain

SOURCE: WIKIMEDIA COMMONS



This paper groups and analyzes the data collected in the tables in *Figures 6 to 22* and their various cross-sections with the specific purpose of assessing the balance of power between the ‘Global West’ and the BRICS world and drawing conclusions from them.

The role of gold can already be examined from several perspectives in what we now call the canonical monetary logic. In a principled analysis of gold reserves derived from officially reported statistical data series, four indicative and diagnostic sections are worth considering. One of these is based on an absolute data series, while three are based on relative data series derived from the absolute data series.

- 1. The amount of gold owned.** The amount of gold held by a country’s central bank is an absolute figure. This is the number of tonnes/kg of gold held as central bank reserves by a certain country. This section allows an indicative comparison regardless of the size, population, economic strength, and reserve holdings of countries (*Figure 21*).
- 2. The amount of gold reserves per capita.** A derivative relative data series is obtained by dividing the amount of gold reserves (in weight or USD) by the population of a given state. The ratio of gold reserves to population is a more difficult section to interpret in economic terms, but it is the best way to find out whether a country has a large gold reserve relative to a small population or vice versa. In any case, it is an illustrative comparison between countries (*Figure 21*).
- 3. The value of gold reserves as a proportion of total reserves.**<sup>46</sup> The percentage of this absolute amount of gold, calculated at daily exchange rates, in the total reserves relative to the foreign exchange reserve is a relative figure. This section is already a relative data series since it is not relative to a global indicator but to a country’s own reserve structure, but it is still diagnostic because it reflects the theoretical views of the monetary policy of the country concerned on the structure of central bank reserves (ForEx versus gold). This section nevertheless allows for an indicative comparison (*Figure 21*).
- 4. The value of gold reserves as a percentage of GDP.** It is a relative series, but an analytical approach when the value of gold reserves is compared to the country’s GDP. Again, it should be stressed that this (as in point 2) obviously depends on the daily gold price, but all indications are that the gold price is holding steady at the current level of 3,000 USD/oz and that a further rise is forecast (see below). According to some ideas, this indicator (defined in percentage terms) could be a criterion for the introduction of (or joining to) a new gold standard.<sup>47</sup> It is not yet clear how realistic this option is, but such data has been reported. This intersection may also be indicative (*Figure 22*).

<sup>46</sup> It should be noted that there are countries whose currency is a reserve currency in itself (see US, EU), so they do not need to hold substantial reserves as gold is, in many cases, a historical legacy asset for them, so the gold ratio is high. Other countries, e.g., small open countries with floating exchange rate regimes, are much more vulnerable, so in their case, it is important to hold liquid foreign exchange reserves to provide foreign exchange liquidity and intervention capacity for the banking system and to ensure the foreign exchange matrix. In these cases (e.g., Hungary), the share of gold is typically lower.

<sup>47</sup> NIEUWENHUIJS 2023A. SEE ALSO: NIEUWENHUIJS 2023B.

### 3.1 GENERAL CONCLUSIONS FOR INDIVIDUAL COUNTRIES AND GROUPS OF COUNTRIES (‘Global West’ versus BRICS World)

Even though gold is still largely outside the framework of traditional Western financial rationalities, the ‘Global West’ still has the upper hand in central bank gold reserves. *Figure 7* shows the figures for the central bank gold reserves of each of the ‘Global West’ groups (G7, EU, ‘Global West’, Western Balkans, IMF, ECB), broken down into total reserves, including foreign exchange reserves and gold reserves. *Figure 9* shows the same data for the BRICS world (BRICS+5+13), while *Figure 10* shows the same data for the ‘Rest of the World’. Only countries with gold reserves according to the World Gold Council database are included. Already from these three basic figures, it can be seen that although the BRICS world has a larger total stock of reserves (more than USD 6,649 billion) than the G7 (USD 3,456 billion), the ‘Global West’ is still slightly (for now) better off with an accumulation of USD 6,926 billion). What is more diagnostic, however, is that while the amount of foreign exchange reserves within total reserves is much higher in the BRICS world (USD 6,030 billion) than in the ‘Global West’ (only USD 5,019 billion), the ‘Global West’ has much more, three times as much in listed gold reserves as the BRICS world (USD 1,883 billion vs. USD 490 billion).

If we look at this in the context of the logic of the present study, which focuses on the presence of physical gold, compared to the 22,270.91 tons of registered gold reserves of the ‘Global West’, the BRICS world has only 7,990.39 tons, which is much less than it will need, if it is to introduce a new, partly gold-based currency to replace the dominant USD in international trade. However, in the case of central bank gold reserves, the pace of public national bank gold purchases by the BRICS countries (*Figures 6–7*) will not be enough to change the current unfavourable situation for them alone, but will also need to be matched by gold accumulation from domestic mining (see next chapter).

The United States has the world’s largest listed gold reserve (8,133.46 tonnes, *Figure 21*). It holds 25.97 per cent of the world’s listed gold reserves (*Figure 11*). It is followed by three major EU Member States: Germany (3,351.53 tonnes), Italy (2,451.84 tonnes), and France (2,436.94 tonnes). Other EU Member States with significant gold reserves are the Netherlands (612.45 tonnes), Poland (419.70 tonnes), Portugal (382.66 tonnes), Spain (281.58 tonnes), Austria (280.00 tonnes), Belgium (227.40 tonnes), Sweden (125.72 tonnes), Greece (114.52 tonnes), and Hungary (110.01 tonnes). With this amount of gold, Hungary ranks 32nd in the world, 14th in Europe, and 12th in the European Union. Traditionally, Switzerland also has a huge gold reserve (1,039.94 tonnes), and the UK has 310.29 tonnes of central bank gold reserves, but these two countries are also known to hold huge private and public gold reserves in their banks (for example, the Bank of England).

Three of the leading BRICS countries, Russia (2,332.74 tonnes), China (2,264.32 tonnes), and India (853.63 tonnes), also have huge gold reserves, but these are significantly below the G7/EU gold reserves.

In 2023, as shown in *Maps 2 and 3*, European countries held 38.3 per cent of the world’s listed central bank gold reserves, with the EU Member States holding one-third (33.75 per cent) and the Eurozone countries 31.44 per cent. The United States held 8,133.46 tonnes of gold, representing 24.91 per cent of the world’s listed central bank gold reserves. Russia, with 2,332.74 tonnes of gold, accounted for 7.14 per cent of the world’s gold, while China, with 2,191.53 tonnes of gold, held 6.71 per cent of it. At that time, the ratios showed that 53.64 per cent of the world’s central bank-owned listed gold reserves were held by the G7, while only 18.2 per cent were held by the BRICS+5.





The Gold Forint of Matthias Corvinus, king of Hungary and Croatia from 1458 to 1490, as Matthias I. Following his monetary reform in 1467, the country's patron saint, the *Patrona Hungariae* was added to the obverse of the gold forints, while the reverse of the coin bears the traditional depiction of *Saint Ladislaus*.

This situation has not changed significantly in 2024. As shown in *Figures 11–13* and *Map 4*, the G7 hold 55.98 per cent of the world's listed gold reserves. If we add to this the gold reserves of the rest of Europe (EU and non-EU countries) and the 'West' (including Japan) outside Europe and the G7 (845.97 tonnes), the 'Global West' holds 71.31 per cent of the world's listed central bank gold reserves, i.e. 22,329.97 tonnes of gold (*Figure 11*). The BRICS world (BRICS+5+13), on the other hand, holds only a quarter (25.51 per cent) of the world's gold reserves, i.e., 7,990.31 tonnes (*Figure 12*).

The tables (*Figures 11 to 13*) and maps (*Maps 2 to 4*) clearly demonstrate the distribution pattern of the world's central bank gold reserves. Significant quantities of gold have accumulated in Europe, mainly in the western part of the continent, and in the United States, but traditionally, large gold reserves are held by the countries of Inner Asia (mainly Kazakhstan and Uzbekistan) as well. Historically, Türkiye (595.37 tonnes of gold), the Muslim countries of the Middle East, and North Africa also have significant gold reserves.

It is noteworthy that three of the world's six largest gold producers (see *Map 8–9*) – Canada, Australia, and South Africa – either have no listed (known) gold reserves (Canada) or relatively low central bank gold reserves (South Africa: 125.44 tonnes, 29th in the world rankings; Australia: 79.87 tonnes, 36th in the world rankings) (*Figure 21*). These gold reserves are on par with Hungary's gold reserves (110.01 tonnes, ranked 32nd, *Figure 21*). However, for these three countries, the annual gold production of several hundred tonnes (Canada: 191.9–205.8 tonnes; Australia: 293.8–313.8 tonnes; South Africa: 88.8–104.3 tonnes) is a much greater guarantee of gold supply and replenishment than in a country with no substantial gold production. Thus, the strategy of these countries is based not so much on the size of their accumulated gold reserves but on the huge amount of gold that is available and can be extracted.

#### NON-STATE ACTORS

However, we should also note that (central) bank gold reserves can not only be accumulated by large 'state' central banks. The third largest gold reserve in the world (2,814.1 tonnes) is held by the **International Monetary Fund (IMF)**.<sup>48</sup> Since its creation in 1944, it has accumulated this amount of gold from four sources: 1) the founders paid 25 per cent of their quota in gold at the time of its creation; 2) member states repay interest to the IMF in gold; 3) member states have the option to repay any loan in gold; 4) if a member state wishes to buy another member states's currency from the IMF, it can do so in exchange for gold.<sup>49</sup>

Although the IMF is not a 'state' actor, it plays an important role in the international financial processes. Despite its distrust of the IMF, the BRICS world recognizes its importance, stressing that it cannot be a servant of Western interests and, in the 2024 Kazan Declaration, calls for reform of the IMF along with the Bretton Woods institutions, in particular by calling for more parity and representativeness in advocacy, governance, and decision-making.<sup>50</sup>

<sup>48</sup> PISTILLI 2024.

<sup>49</sup> IMF 2024.

<sup>50</sup> Kazan Declaration 2024, Section 12: 'We reaffirm our commitment to maintaining a strong and effective Global Financial Safety Net with a quota-based and adequately resourced IMF at its center. We call for the reform of the Bretton Woods institutions, which includes increased representation of EMDCs in leadership positions to reflect the contribution of EMDCs to the global economy. We support a merit-based, inclusive and equitable selection process for the top positions at the Bretton Woods institutions, increased geographical representation and the role and share of women. We note the quota increase at the 16th General Review of Quotas (GRQ) and urge members to secure domestic approvals to make quota increase effective. We welcome the decision to create a 25th chair at the IMF Executive Board to enhance the voice and representation of Sub-Saharan Africa...'



We can conclude that the IMF, as a representative organization with 189 member states, has every opportunity to play a mediator or function as a bridge in the new, post-canonical bipolar financial world order.

The **European Central Bank (ECB)** also has gold reserves. When it was founded in 1998, it agreed with the founders that 15 per cent of their first capital contributions (EUR 40 billion) would be transferred to the ECB in gold<sup>51</sup> (some of the gold sales in *Figure 6* also fall into this category). In 2016, this ratio—largely due to the rise in gold prices—was already 28 per cent.

### COUNTRIES STORING GOLD RESERVES AT HOME AND ABROAD

Another important question is where countries store their gold reserves: at home or in banks in other countries, primarily the United States, Great Britain, or Switzerland (*Figure 23*). There is a long tradition of some central banks storing part of their gold reserves in these countries and possibly also trading with them.<sup>52</sup> However, in the future, where a given country stores its (strategic) gold reserves may become a strategic issue. This may be important in times of crisis, and the sanctions policy of today's world may make many actors uncertain that, in addition to their foreign exchange reserves, which are more vulnerable to sanctions, they at least know that their gold reserves are more secure. Countries that store a large amount of gold reserves of other countries' central banks also have greater prestige. Great Britain, for example, has 'only' 310.29 tonnes of gold reserves (which is the 17th largest gold reserve in the world), but many countries store a significant part of their gold reserves in the Bank of England (*Figure 23*). Thus, although the data is moderately public, approximately 2,000 tonnes of gold are stored in Great Britain.<sup>53</sup>

### METHODOLOGICAL/TECHNICAL NOTES

To understand the statistical data sets used in this study, we need to make five methodological remarks at this point (which also affect the calculations in the tables and maps (*Maps 2–7*)):

1. From a methodological point of view, it is better to compare the net weight of gold because changes in the gold exchange rate can affect its share of total reserves measured in USD.
2. The second, partly technical, remark is that we only have data on Russian gold reserves from before the outbreak of the Russia–Ukraine war, and Russian gold was included in the table at the then exchange rate of 60.13 million USD/tonne. This is largely due to the fact that we do not know the fate of Russian gold reserves, nor the current amount of gold reserves at the disposal of the Central Bank of Russia. From now on, Russia will have a moderate interest—within the framework of the current, traditional logic and canonical monetary policy—in making the amount of its gold reserves public.

<sup>51</sup> WORLD GOLD COUNCIL 2024.

<sup>52</sup> If a country wants to use its foreign exchange reserves for financial operations (e.g., providing liquidity through gold swaps or gold lending), it can do so much more easily in such places.

<sup>53</sup> BUNKER BLOG 2023.

According to the current outlook, the price of gold will not return from today's price of around 3,000 USD/oz to the price level of 2008, or even before 2023 (Figure 4: 2020: 1,877 USD/oz; 2021: 1,805 USD/oz; 2022: 1,813 USD/oz)<sup>54</sup>, and in fact, it will even increase further in the form of a price explosion and may even reach the price of 10,000 USD/oz by the end of the decade.<sup>55</sup> Therefore, we assume that this section will be a diagnostic and determining aspect in the coming decade, and the proportion of gold reserves within all central bank reserves should fundamentally change the structure of thinking about reserves, and at least the role of gold reserves should be revalued in central bank monetary policy. This is all the more true because countries around the world perceive the possibility of their foreign exchange reserves being sanctioned and frozen ad absurdum as one of the most important weapons of Western sanctions policy and, at the same time, one of the greatest threats to other countries in the world. This could make their savings in foreign currency inaccessible or even lost. This could significantly increase the importance and value of gold reserves, primarily those held in the vaults of domestic central banks.

<sup>54</sup> NEWMAN ET AL. 2024, 6.

<sup>55</sup> GOLDMAN 2022; THOMPSON 2023; BARISHEFF 2012.



3. The United States still officially records<sup>56</sup> its 8,133.46-tonne gold reserves at the statutory price set under Bretton Woods, i.e., USD 42.22/oz, compared to market prices of around USD 2,695. However, in our tables, its value is shown at the real price (USD 84.55 m/tonne) according to the World Gold Council's calculation methodology. Some believe that the United States is also protecting the hegemony of the dollar by trying to 'demonetize'<sup>57</sup> gold. This could be changed by a gold-based (central bank) digital currency.
4. We also know, to a certain extent, that although the BRICS+18 countries are at a serious disadvantage compared to the 'Global West' in terms of the size of their gold reserves (*Figure 14*), their gold production (1,313.9 tonnes per year) is double the gold production of the G7/'Global West' (652.4 tonnes per year, see Chapter 4, *Maps 8–9*, and *Figures 1–2* for details). We do not know, however, how much of this huge amount of gold reserves the BRICS+18 world creates without being accompanied by internationally controlled and registered gold purchase transactions. Thus, it is difficult to estimate the real gold reserves of the leading BRICS member states. If the huge amount of gold they produce is refined into (secret) central bank gold reserves in a process invisible and unmonitorable to the international (central) banking world, then the map of central bank gold reserves, our picture of the proportions of international central bank gold reserves, may even be misleading. According to some ideas, for example, regardless of the fact that it is constantly buying<sup>58</sup> and discovering new gold fields<sup>59</sup>, China's gold reserves are much higher than the 2,264.32 tonnes<sup>60</sup> in the official data; it may even be double that.<sup>61</sup> This 'secret' gold reserve formation may play an important role in the unexpected disruption of the future gold reserve balance, in changing the situation that is now favorable to the 'Global West', and in creating a new, partly gold-based BRICS currency.
5. Similarly, the fate of the nearly 400 tonnes of gold that, according to some estimates, are smuggled out of Africa each year is practically untraceable (see Chapter 4).

### 3.2 THE AMOUNT OF GOLD RESERVES PER CAPITA

This indicator is created by dividing the amount of gold reserves (in weight or USD) by the population of the given state. Although the projection of gold reserves to the size of population is more difficult to interpret economically, it is through this that it is most evident that a given country has large gold reserves in relation to a smaller population, or vice versa. In any case, such a comparison between countries is not only illustrative (*Figure 20*, *Map 6*), but also provides an objective picture, since here two specific absolute values (the size of the gold reserves and the population) are included in the formula, while in sections 3 and 4 we get even more relative data, since these formulas only contain internal

<sup>56</sup> SHAEFFER 2024, 82, NOTE 4.

<sup>57</sup> NIEUWENHUIJS 2022.

<sup>58</sup> REUTERS 2024A. According to official data from the People's Bank of China, China had 72.96 million troy ounces (2,269.27 tonnes) of gold reserves at this time.

<sup>59</sup> REUTERS 2024B.

<sup>60</sup> NIEUWENHUIJS 2023C, Chart 3. Citing unofficial estimates, it nearly doubles the real size of China's gold reserves.

<sup>61</sup> NIEUWENHUIJS 2023C.

mathematical ratios regardless of the size of the total reserves and the GDP. In this indicator, **Hungary ranks in the prestigious 18th place on the 'world ranking' with 11.37 grams of gold per capita.**<sup>62</sup>

### 3.3 THE PERCENTAGE OF FOREX AND GOLD RESERVES WITHIN THE TOTAL RESERVES OF GIVEN COUNTRIES AND GROUPS OF COUNTRIES

The role of gold can be examined in several comparisons already in the current monetary logic, which we call canonical. Similarly, it is indicative to examine the ratio of gold reserves to total reserves and ForEx reserves within the total reserves of individual countries.

This examination naturally depends on the gold exchange rate since it makes quite a difference if we calculate the value of gold in the central bank gold reserves at, for example, 1,800 USD/oz (57,872,231 USD/tonne) or 2,700 USD/oz (86,700,000 USD/tonne). The explosive gold price rise of recent years (*Figures 4–5*) has, of course, significantly increased the size and amount of the total national bank reserves of those countries (we can say that it has realized a serious return) that had significant gold reserves. In these countries, the value of gold converted to USD has increased significantly within total reserves, and thus, its ratio to foreign exchange within total reserves has also increased remarkably.

The central bank reserves of countries with a high ratio of gold to ForEx reserves are on much firmer footing than the central bank reserves of countries with the vast majority of their total reserves in foreign exchange rather than gold.<sup>63</sup> Not only because they have a diversified portfolio and gold is not as exposed to the exchange rate fluctuations of individual national currencies and inflation but also because, according to the post-canonical logic of the present author, the role of gold will increase significantly not only in regional but also in global monetary policy, hence central bank reserves of countries with a high ratio of gold to ForEx reserves might be on a much firmer footing than the central bank reserves of countries with the vast majority of their total reserves in foreign exchange rather than gold. As we have already emphasized, gold can be the bridge, mediator, and general value measure that can create a connection between the two major political/commercial/monetary systems that are emerging. Regardless of this logic, national banks, we may say, are lining up for gold and are systematically increasing the proportion of their gold reserves within total reserves.

In the current situation, therefore, countries with large gold reserves are at an advantage. *Figures 14–16*, *20* and *Map 7* show which countries have the highest proportion of gold in their national bank reserves. In this 'world ranking' (*Figure 20*), only two non-European countries are in the top 10, and only 10 are in the top 25.

In the case of the countries with the largest gold reserves, this proportion has now reached 70 per cent: in the case of Portugal, the United States, Germany, France, and Italy, the proportion of gold reaches almost three quarters of all reserves, while in Austria, the Netherlands, and Greece it is two thirds. In the case of the countries in the first third, a large part of the gold is historically accumulated, i.e., 'legacy gold'. Also characteristic are the high gold reserves and the high share of gold in total reserves

<sup>62</sup> The amount of gold in private hands in a given country is a relevant but difficult question to examine. According to American statistics, 46 per cent of the gold processed annually is used for jewellery, so a huge amount of gold ends up in private hands worldwide. SHAEFFER 2024, 83.

<sup>63</sup> Even if we know that within the central bank reserve, the ratio of foreign currency and gold may vary from country to country in an ideal-typical way.





Dosso Dossi, *An Allegory of Fortune* (ca. 1530).  
Getty Center – J. Paul Getty Trust, Los Angeles, California, USA





SOURCE: WIKIPEDIA

of Central Asian states (Uzbekistan, Kazakhstan, and Kyrgyzstan) and Türkiye. Similar to Greece (9th place) and Cyprus (10th place), which also rank high, these countries have historical reasons for their relationship with gold, too. Of the Central and Eastern European countries, only Hungary and Slovakia made it into the top 25 with their share of 18 per cent.

### 3.4 THE VALUE OF GOLD RESERVES AS A PERCENTAGE OF GDP

According to some ideas, leading EU countries have been trying to balance their gold reserves in relation to each other in recent decades—both through sales and purchases. One of the conditions for joining the Eurozone could be that the level of gold reserves should reach 4 per cent of GDP. However, since the price of gold moves independently of the EU's monetary policy, the percentage is uncertain due to the movement of the gold exchange rate, so—if there really was such a balancing effort—the expectation would be to reach a nearly identical level.<sup>64</sup> In this context, the Central Bank of Poland's gold purchase could also be a sign of compliance with this principle.

Another idea is that this gold reserve/GDP ratio is linked to a future requirement that will allow countries that meet it to join a newly established European gold standard.<sup>65</sup> However, the question still remains whether these traditional principles—the ratio/relationship of the value of gold reserves measured at the daily exchange rate to the GDP of the given country, and the harmonization of these ratios/relationships within the EU—, or simply the sheer mass of gold accumulated as reserves, will be the determining factor in the emerging bipolar world order.

If the goal is indeed to switch to a new gold standard, this is still a monetary transformation within its own system and logic—and in this sense regional and not global. The present author seeks to answer what role gold may play in the global monetary and trade systems in the future.

However, the data series in *Figure 22* do not show any signs of the stability of this gold reserves/GDP ratio.

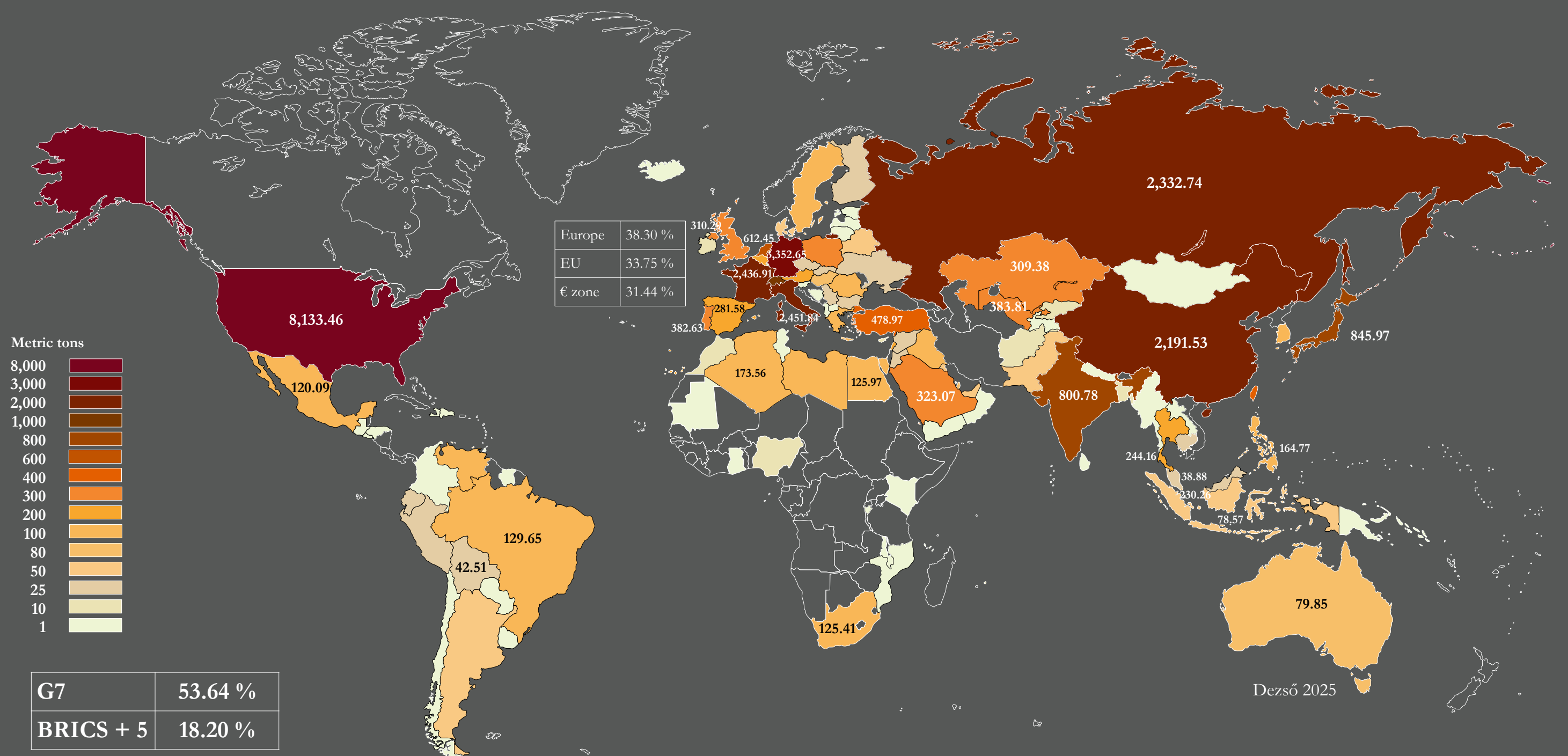
<sup>64</sup> NIEUWENHUIJS 2023A, CHART 1.

<sup>65</sup> NIEUWENHUIJS 2023A. SEE ALSO NIEUWENHUIJS 2023B.



2.

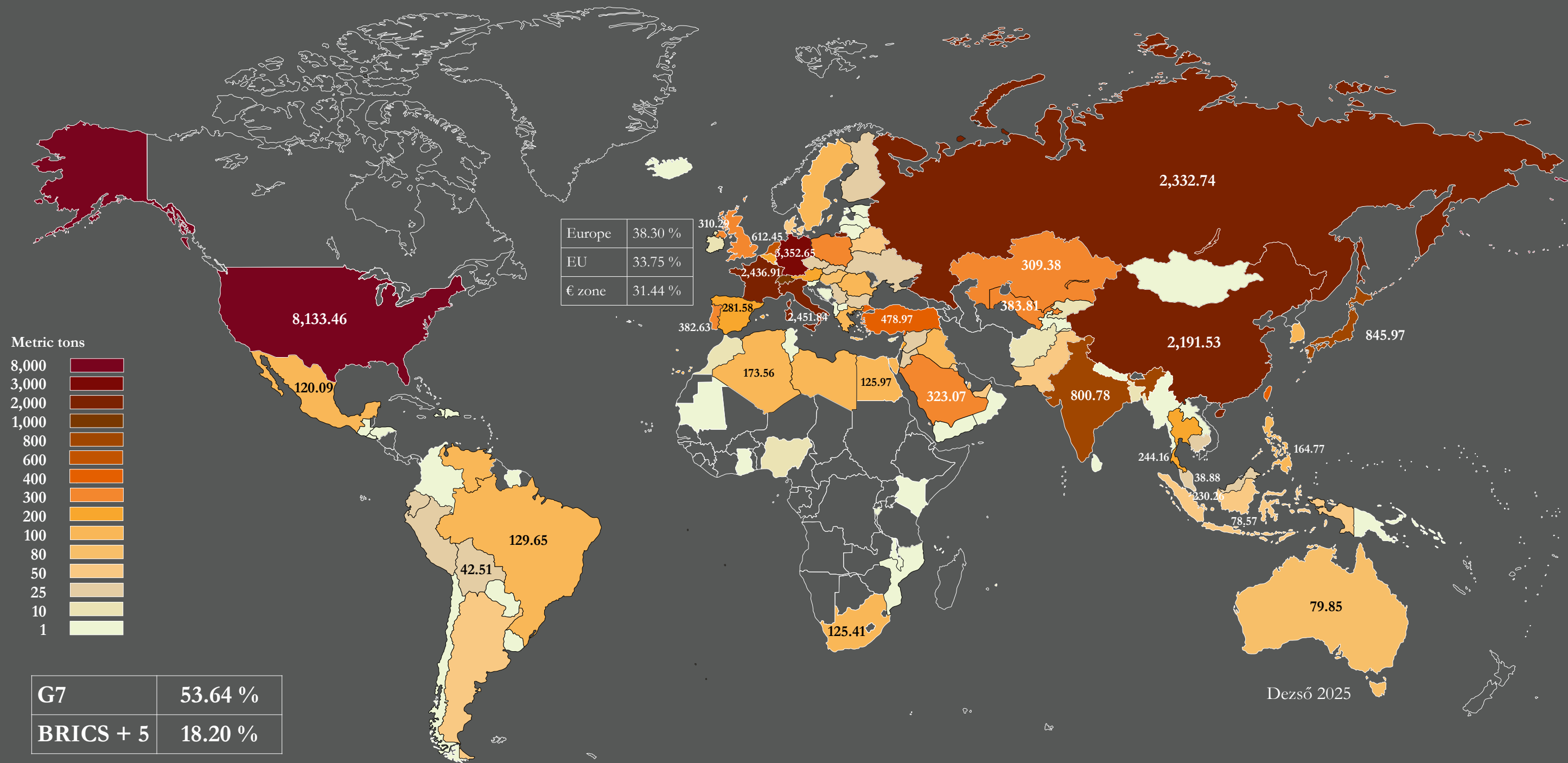
Gold reserves per country  
(World Gold Council 2023)  
(metric tons)





3.

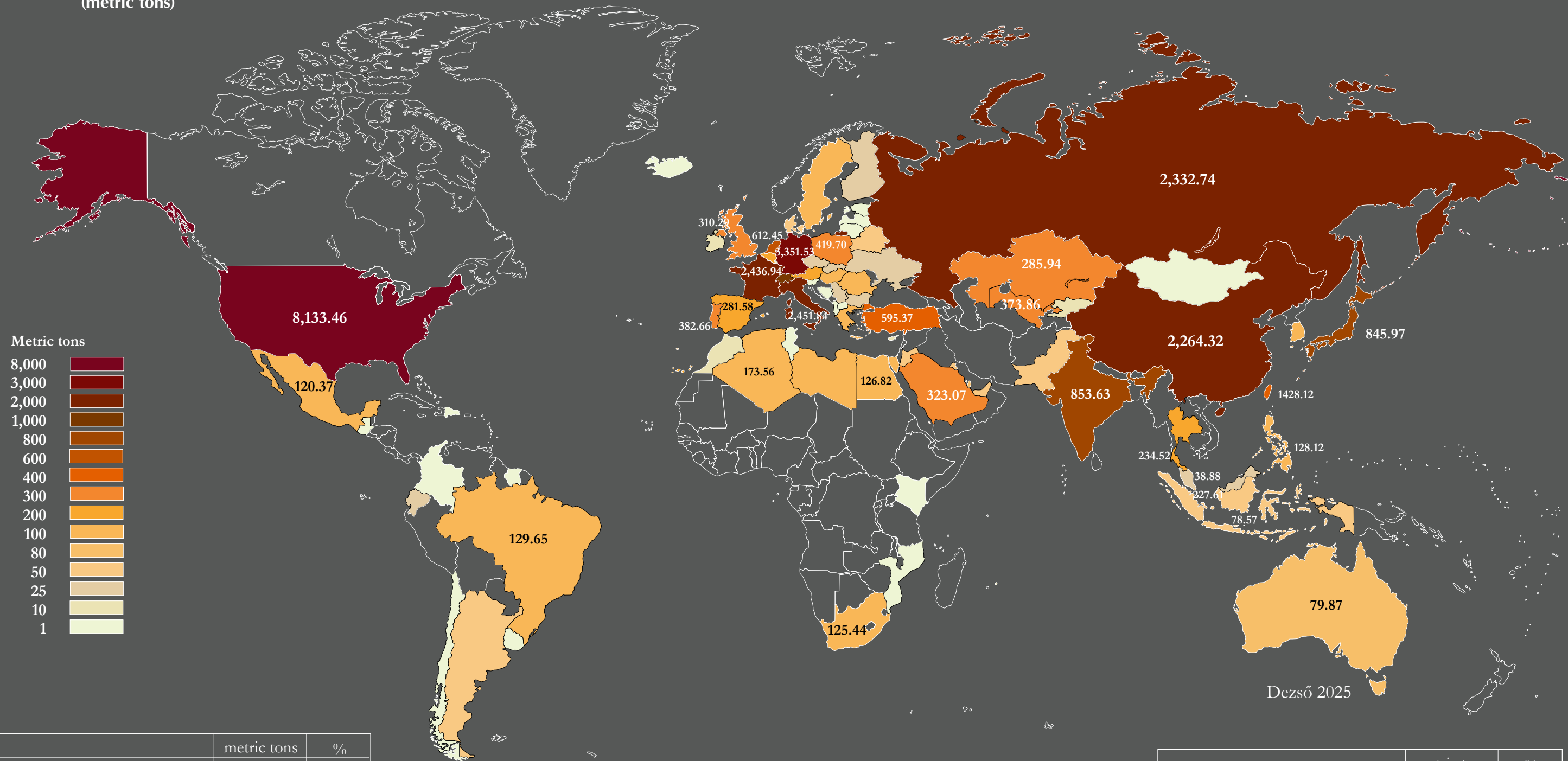
Gold reserves per country  
(World Gold Council 2023)  
(metric tons)





4.

Gold reserves per country  
(World Gold Council 2024)  
(metric tons)

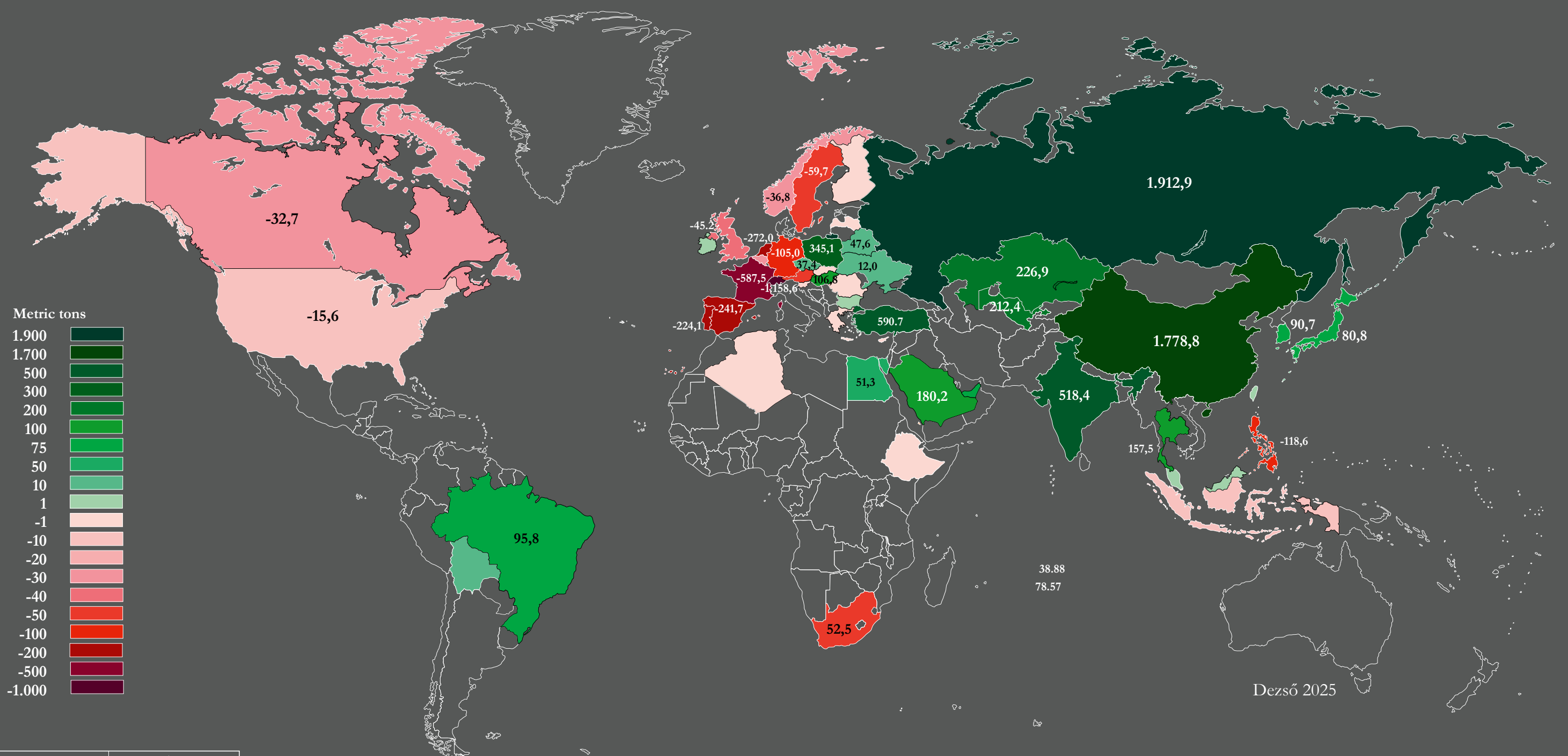


	metric tons	%
EU	11,176.77	35.69
G7 (USA, UK, Japan)	9,289.72	29.66
'Rest of Europe' + West Balkans	1,128.35	3.60
Global West (Far East)	735.13	2.34
Total, % of global gold reserves	22,329.77	71.31

	metric tons	%
BRICS	5,705.78	18.22
+ 5 countries	449.89	1.43
+ 13 countries	1,834.72	5.86
Total, % of global gold reserves	7,990.39	25.51



5. Changes in gold reserves by country, 2002–2024  
(World Gold Council 2024)  
(metric tons)

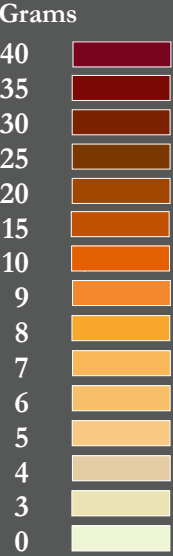


Dezső 2025

	metric tons
'Global West'	-2.334,0
BRICS+5+13	6.236,8



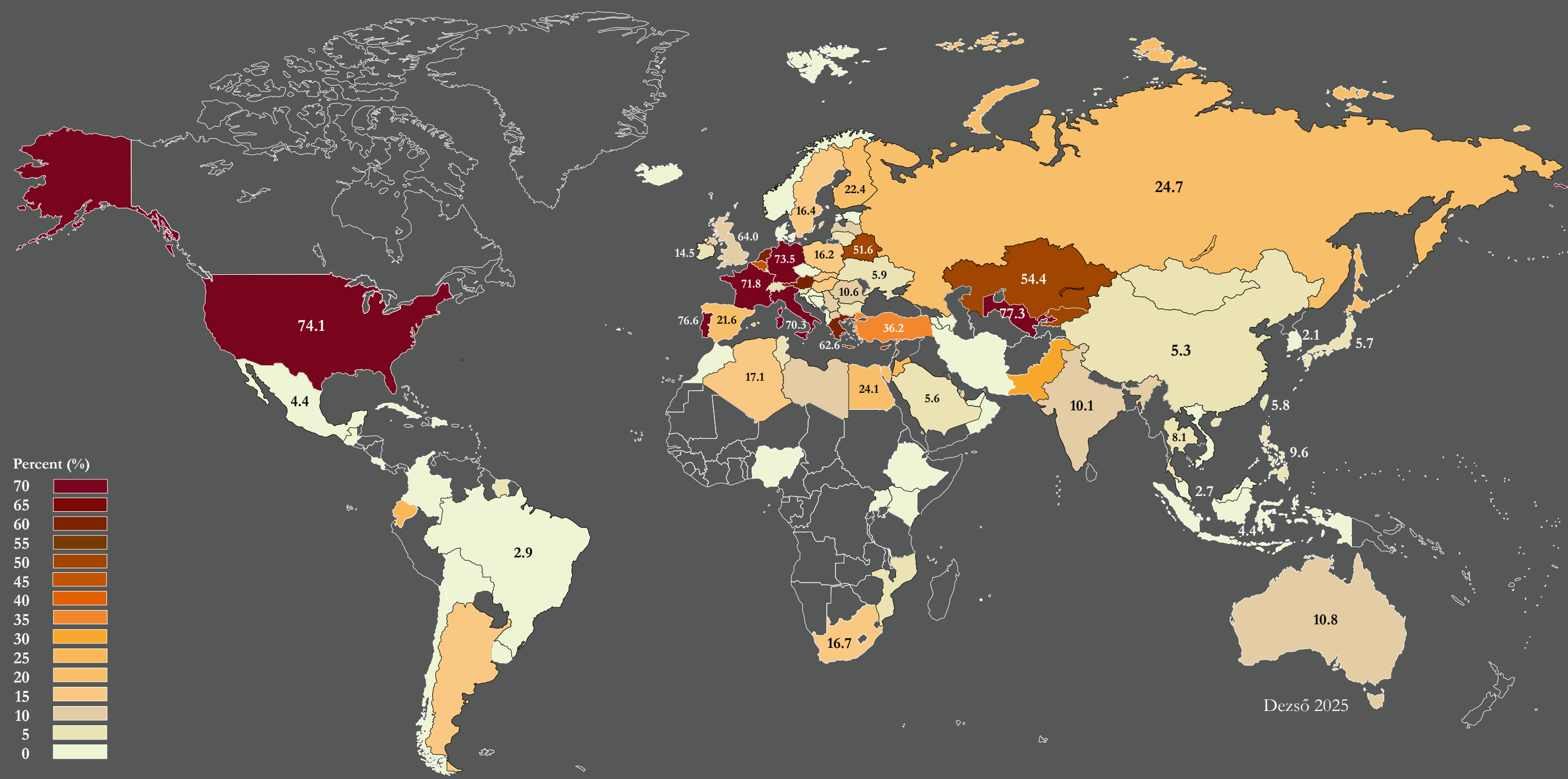
6.



Dezső 2025



7. Ratio of gold reserves in total reserves per country  
(World Gold Council 2024)  
(%)





G7 + EU + 'Global West'																									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	total	
Canada	14.1	15.2										0.4		1.3	1.7									32.7	
France	0.1		39.4	159.5	106.0	116.7	110.9	56.7						0.2	0.2	0.2			0.2	0.3	0.3	0.2		587.5	
Germany	10.8	6.3	6.3	5.4	5.3	5.1	4.8	5.8	5.8	4.7	4.9	4.2	3.0	3.2	3.0	4.3	3.9	3.2	4.0	3.4	4.0	2.5	1.1	105.0	
Italy																								0	
Japan																				80.8				80.8	4
UK	41.4	0.7	1.1	1.4	0.6																			45.2	
USA		14.1	1.2	1.1	1.6																			15.6	
Austria	30.0		10.0	5.0	13.7	8.7																		67.4	
Belgium	0.1	0.1	0.1	30.1		0.1	0.1																	30.6	
Bulgaria	0.1						0.1					0.1	0.1	0.1	0.1	0.1	0.1		0.3					0.9	8
Croatia																					1.9	1.9		0	
Cyprus							0.6																	0.6	
Czech Republic	0.1		0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.9	0.7	0.3	0.5	0.3	0.3	0.7	0.8	1.5	1.1	1.4	18.7	20.5	37.4	5
Denmark																								0	
Estonia																								0	
Finland																				0.1				0.1	
Greece	0.2	15.1	0.4	0.2	3.8	0.8		0.1	0.8		0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.4	0.2	0.2	0.2	0.1	8.0	
Hungary			0.1												3.1	3.1	28.4			63.0		15.5		106.8	2
Ireland							0.5													3.5	2.5			6.5	7
Latvia													1.1											1.1	
Lithuania																								0	
Luxembourg																								0	
Malta						0.3	0.3		0.1	0.2			0.2					0.5	0.4	0.1		0.2	0.1	0	
The Netherlands	32.8	74.2		82.5	54.0	19.5	9.0											0.5	0.4	0.1		0.2	0.1	0	
Poland		0.1															25.7	100		2.2	2.2	130	89.5	345.1	1
Portugal	14.9	74.7	54.9	44.8	34.9																	0.1		224.1	
Romania	0.1	0.2		0.2	0.1	1.0												0.1						1.5	
Slovakia								3.3					0.1											3.4	
Slovenia				2.5		1.9																		4.4	
Spain				65.6	41.0	135.1																		241.7	
Sweden				17.0	9.9	9.7	11.8	11.3																59.7	
Eurozone	88.8	170.4	110.3	439.7	331.2	358.5	139.4	63.1	6.8	3.6	4.8	4.0	4.8	4.6	2.7	4.0	3.7	2.4	3.7	0.3	1.0	0.1	6.2	1,734.7	
Australia																								0	
Iceland																								0	
New Zealand																								0	
Norway		0.1	36.7																					36.8	
Philippines	23.3	15.9	34.2	66.9	10.8	12.1	22.3	1.2	1.0	5.0	33.6	0.8	1.8	0.6	0.4		1.6		9.1	30.0	1.1	1.3	29.4	118.6	
South Korea	0.1	0.1	0.2	0.1	1.2	1.3		0.1		40.0	30.0	20.0												90.7	3
Switzerland	281.8	283.4	279.0	64.2		144.9	105.1						0.1										0.1	1,158.6	
Ukraine	8.3	3.7	3.4	8.1	0.9	0.8	0.5	0.4	0.5	0.5	7.4	6.8	18.7	3.7	1.9		1.2	0.9	0.9	0.9			0.3	12.0	6
Taiwan										1.2	1.2							1.2	1.2			1.2	1.6	0.4	9
	2,334.0																								

Figure 6. Gold purchases and sales by central banks of the G7, EU, and the 'Global West' countries between 2002 and 2024.  
Sales:  , purchases:  .  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>



BRICS+5+13																											
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	total			
Brazil	0.5										33.6				0.1		0.1			62.3				95.6	10		
China	99.2							454.1						708.2	80.2		10.0	95.8			62.2	224.9	44.2	1,778.8	2		
India								200								0.3	42.3	34.5	41.7	77.5	33.3	16.2	72.6	518.4	4		
Russia	35.3	2.5	3.2	0.1	14.6	48.9	69.2	129.5	139.6	94.3	74.8	77.4	173.0	206.4	200.7	223.5	274.3	158.1	27.4	3.1	31.1		31	1,912.9	1		
South Africa	4.4	49.9	0.3	0.1	0.1	0.2	0.4	0.2	0.1	0.1	0.1		0.1			0.1								52.5			
Egypt																0.9	1.9	0.9	0.9	0.7	44.7	0.7	0.6	51.3			
Ethiopia	1.3	7.6												0.2					0.2					6.3			
Iran																								0			
Saudi Arabia							180.0								0.2									180.2	8		
UAE		12.3												7.5	0.1	0.2	0.1	15.0	35.1	2.2	19.5	0.5	1.3	75.7			
Algeria																		0.1						0.1			
Belarus		3.1	3.1	6.2	3.1	7.1	5.0	9.7	12.2	23	5.1	1.6	1.9	0.5	4.2	0.4	0.4	1.8	1.3	3.3	0.5	0.1	0.1	47.6			
Bolivia	0.9								7.0	7.0		0.2												13.3			
Cuba																								0			
Indonesia					23.3						0.9	4.0				2.5	2.0							16.1			
Kazakhstan	4.1	1.0	3.0	2.7	7.6	2.2	2.4	1.5	3.1	14.7	33.3	28.4	48.1	30.0	36.2	41.8	50.6	35.0	2.4	14.5	50.7	57.4	10.2	226.9	6		
Malaysia													0.6	2.5		0.6	1.2							2.5			
Nigeria																								0			
Thailand	0.6	3.1	3.1						15.6	52.9						1.6				90.2			9.6	157.5	9		
Türkiye <sup>66</sup>										79.2	164.3	160.1	9.4	13.6	138.5	187.7	76.2	64.7	163.1	58.6	129.1	80.0		590.7	3		
Türkiye <sup>67</sup>																85.9	51.4	125.6	15.6	0.4	147.6	1.6	74.8	498.9	5		
Uganda																								0			
Uzbekistan												47.3	57.2	37.0	17.1	7.8	18.7	19.3	3.4	29.5	33.9	24.6	11.2	212.4	7		
Vietnam																								0			
																								6,236.8			

Figure 7. Gold purchases and sales by central banks of BRICS+5+13 countries between 2002 and 2024.

Sales: , purchases: .

SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>66</sup> <https://www.gold.org/goldhub/data/gold-reserves-by-country>: This data reflects changes in gross gold reserves. Since 2011, gold has been added to Turkey’s balance sheet as a result of gold policies aimed at supporting the banking system’s liquidity management. Please see the link for information <https://www.gold.org/download/file/16208/Central-bank-stats-methodology-technical-adjustments.pdf>.

<sup>67</sup> <https://www.gold.org/goldhub/data/gold-reserves-by-country>: The figure provided is official sector gold reserves, i.e. the sum of central bank owned gold and Treasury gold holdings. This is equivalent to gross gold reserves less all gold held at the central bank in relation to commercial sector gold policies, such as the Reserve Option Mechanism (ROM), collateral, deposits, and swaps. Please see this link for information on this new methodology: <https://www.gold.org/download/file/16208/Central-bank-stats-methodology-technical-adjustments.pdf> .



G7 + EU + ‘Global West’						
	Total reserves (mUSD)	ForEx (mUSD)	ForEx (per cent)	Gold (tonnes)	Gold (mUSD) <sup>68</sup>	Gold per cent
Canada	126,375.0	126,375.0	—	—	—	—
France	286,805.5	80,748.9	28.2	2,436.94	206,056.6	71.8
Germany	385,353.0	101,962.7	26.5	3,351.53	283,390.2	73.5
Italy	295,087.6	87,771.3	29.7	2,451.84	207,316.3	70.3
Japan	1,254,896.5	1,183,364.8	94.3	845.97	71,531.7	5.7
UK	180,751.8	154,515.3	85.5	310.29	26,236.5	14.5
USA	927,307.5	239,578.4	25.9	8,133.46	687,729.1	74.1
	3,456,576.9	1,974,316.4		17,530.03	1,482,260.4	
Austria	36,588.8	12,914.0	35.3	280.00	23,674.8	64.7
Belgium	42,685.9	23,458.4	55.0	227.40	19,227.5	45.0
Bulgaria	46,759.0	43,303.0	92.6	40.87	3,456.0	7.4
Croatia	3,283.1	3,283.1	—	—	—	—
Cyprus	2,120.1	944.5	44.6	13.90	1,175.6	55.4
Czech Republic	154,525.3	150,600.2	97.5	46.42	3,925.1	2.5
Denmark	116,050.2	110,423.2	95.2	66.55	5,627.0	4.8
Estonia	2,347.9	2,326.9	99.1	0.25	21.0	0.9
Finland	18,471.8	14,327.0	77.6	49.02	4,144.8	22.4
Greece	15,473.1	5,789.6	37.4	114.52	9,683.4	62.6
Hungary	51,471.8	42,169.7	82.0	110.01	9,302.1	18.0
Ireland	12,860.8	11,843.1	92.1	12.04	1,017.8	7.9
Latvia	5,400.5	4,837.6	89.6	6.66	562.8	10.4
Lithuania	6,208.0	5,716.2	92.1	5.82	491.8	7.9
Luxembourg	3,046.8	2,857.4	93.8	2.24	189.3	6.2
Malta	1,502.1	1,486.3	99.0	0.19	15.8	1.0
The Netherlands	80,920.8	29,134.4	36.0	612.45	51,786.3	64.0
Poland	218,508.5	183,020.3	83.8	419.70	35,488.1	16.2
Portugal	42,216.5	9,860.2	23.4	382.66	32,356.2	76.6
Romania	82,389.5	73,629.4	89.4	103.60	8,760.1	10.6
Slovakia	14,898.3	12,218.4	82.0	31.69	2,679.9	18.0
Slovenia	2,870.4	2,602.2	90.7	3.17	268.2	9.3
Spain	110,240.6	86,431.7	78.4	281.58	23,808.9	21.6
Sweden	64,729.0	54,098.7	83.6	125.72	10,630.2	16.4
	1,135,568.8	863,817.1		2,936.46	248,292.7	
Iceland	6,674.2	6,506.4	97.5	1.98	167.8	2.5
Norway	89,105.9	89,105.9	—	—	—	—
Switzerland	950,103.0	862,170.6	90.8	1,039.94	87,932.4	9.2
Ukraine	38,866.5	36,552.1	94.1	27.37	2,314.4	5.9
	1,084,749.6	994,335.0		1,069.29	90,414.6	
Australia	62,286.7	55,533.0	89.2	79.87	6,753.7	10.8
Philippines	112,680.5	101,847.3	90.4	128.12	10,833.2	9.6
South Korea	422,683.0	413,851.6	97.9	104.45	8,831.4	2.1
Taiwan	613,670.0	577,929.0	94.2	422.69	35,741.0	5.8
New Zealand	38,059.0	38,059.0	—	—	—	—
	1,249,379.4	1,187,219.9		735.13	62,159.3	
Albania	6,560.1	6,270.9	95.6	3.42	289.3	4.4
Bosnia and Herzegovina	9,623.5	9,497.3	98.7	1.49	126.2	1.3
North Macedonia	4,912.4	4,329.6	88.1	6.89	582.8	11.9
Serbia	31,574.3	27,578.3	87.4	47.26	3,995.9	12.6
	52,670.3	47,676.1		59.06	4,994.2	
	6,978,945.0	5,067,364.5		22,329.97	1,888,121.2	

Figure 8. Central bank reserves of the G7, EU, ‘Global West’, and Western Balkan countries (total, ForEx, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>68</sup> At a rate of 84.55 million USD/tonne or 2,629.94 USD/oz.

BRICS+5+13						
	Total reserves (mUSD)	ForEx (mUSD)	ForEx (per cent)	Gold (tonnes)	Gold (mUSD) <sup>69</sup>	Gold per cent
Brazil	371,999.7	361,036.9	97.1	129.65	10,962.8	2.9
China	3,572,841.2	3,381,380.8	94.7	2,264.32	191,460.4	5.3
India	712,231.2	640,051.7	89.9	853.63	72,179.5	10.1
Russia <sup>70</sup>	568,600.0	428,300.0	75.3	2,332.74	140,287.5 <sup>71</sup>	24.7
South Africa	63,584.3	52,977.7	83.3	125.44	10,606.6	16.7
	5,289,256.4	4,863,747.1		5,705.78	297,072.6	
Egypt	44,531.7	33,808.6	75.9	126.82	10,723.1	24.1
Ethiopia	—	—	—	—	—	—
Iran	—	—	—	—	—	—
Saudi Arabia	483,856.7	456,539.5	94.4	323.07	27,317.1	5.6
UAE	—	—	—	—	—	—
	528,388.4	490,348.1		449.89	38,040.2	
Algeria	85,925.6	71,250.5	82.9	173.56	14,675.1	17.1
Belarus	8,852.4	4,285.0	48.4	54.02	4,567.4	51.6
Bolivia	—	—	—	—	—	—
Cuba	—	—	—	—	—	—
Indonesia	149,875.5	143,232.2	95.6	78.57	6,643.3	4.4
Kazakhstan	44,407.4	20,229.6	45.6	285.94	24,177.9	54.4
Malaysia	119,619.8	116,332.4	97.3	38.88	3,287.4	2.7
Nigeria	—	—	—	—	—	—
Thailand	242,985.6	223,155.7	91.9	234.52	19,829.8	8.1
Türkey	139,048.8	88,707.0	63.8	595.37	50,341.8	36.2
Uganda	—	—	—	—	—	—
Uzbekistan	40,890.8	9,278.8	22.7	373.86	31,612.0	77.3
Vietnam	—	—	—	—	—	—
	831,605.9	676,471.2		1,834.72	155,134.7	
	6,649,250.7	6,030,566.4		7,990.39	490,247.5	

Figure 9. Central bank reserves of BRICS+5+13 countries (total, ForEx, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>69</sup> At 84.55 million USD/tonne.

<sup>70</sup> Data before 2022, current status unknown.

<sup>71</sup> Still at 60.13 million USD/tonne of 2022.



'Rest of the World'						
	Total reserves (mUSD)	ForEx (mUSD)	ForEx (per cent)	Gold (tonnes)	Gold (mUSD) <sup>72</sup>	Gold per cent
Jordan	21,055.6	15,239.6	82.4	68.78	5,816.1	27.6
Kuwait	53,941.3	47,263.9	87.6	78.97	6,677.3	12.4
Libya	95,407.3	83,007.1	87.0	146.65	12,400.2	13.0
Morocco	37,934.5	36,064.5	95.1	22.12	1,870.0	4.9
Oman	18,848.6	18,848.6	—	—	—	—
Qatar	53,419.9	44,157.5	82.7	109.54	9,262.4	17.3
Tunisia	9,227.9	8,649.3	93.7	6.84	578.6	6.3
	<b>289,835.1</b>	<b>253,230.5</b>		<b>432.90</b>	<b>36,604.6</b>	
Armenia	3,565.9	3,565.9	—	—	—	—
Azerbaijan	13,728.7	13,728.7	—	—	—	—
Kirgisistan	4,200.0	2,005.1	47.8	25.96	2,194.8	52.2
Mongolia	4,407.8	4,080.1	92.6	3.88	327.7	7.4
Pakistan	,450.6	11,978.3	68.7	64.72	5,472.3	31.3
	<b>43,353.0</b>	<b>35,358.1</b>		<b>94.56</b>	<b>7,994.8</b>	
Singapore	<b>402,677.8</b>	<b>383,431.8</b>	95.2	<b>227.61</b>	<b>19,245.9</b>	4.8
Kenya	8,602.6	8,601.1	99.98	0.02	1.5	0.02
Mauritius	8,059.1	7,009.3	87.0	12.42	1,049.9	13.0
Mozambique	3,859.5	3,526.9	91.4	3.94	332.9	8.6
	<b>20,521.0</b>	<b>19,137.3</b>		<b>16.38</b>	<b>1,384.3</b>	
Argentina	27,115.5	21,895.1	80.8	61.74	5,220.3	19.2
Chile	45,602.8	45,582.1	99.9	0.25	20.7	0.05
Colombia	62,980.7	62,585.4	99.4	4.68	395.3	0.6
Costa Rica	14,205.3	—	—	—	—	—
Dominican Republic	14,560.3	14,512.2	96.7	0.57	48.1	0.33
Ecuador	8,584.6	6,362.3	74.1	26.28	2,222.2	25.9
Guatemala	24,223.5	23,640.7	97.6	6.89	582.8	2.4
Mexico	231,841.0	221,663.2	95.6	120.37	10,177.8	4.4
Suriname	1,545.2	1,442.6	93.4	1.21	102.6	6.6
Uruguay	18,843.2	18,834.8	99.9	0.10	8.45	0.04
	<b>449,502.1</b>	<b>416,518.4</b>		<b>222.09</b>	<b>18,778.2</b>	
	<b>1,205,889.0</b>	<b>1,107,676.1</b>		<b>993.54</b>	<b>84,007.8</b>	

Figure 10. Central bank reserves of the 'Rest of the World' countries (total, ForEx, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>72</sup> At an exchange rate of 84.55 million USD/tonne.

G7 + EU + 'Global West'			
	Gold (tonnes)	Gold percentage of a country's total reserves	Gold percentage of the world's total gold reserves (31,313.90 tonnes)
USA	8,133.46	<b>74.1</b>	25.97
UK	310.29	14.5	0.99
France	2,436.94	<b>71.8</b>	7.78
Japan	845.97	5.7	2.70
Canada	—	—	
Germany	3,351.53	<b>73.5</b>	10.70
Italy	2,451.84	<b>70.3</b>	7.83
	<b>17,530.03</b>		<b>55.98</b>
Austria	280.00	<b>64.7</b>	0.89
Belgium	227.40	<b>45.0</b>	0.72
Bulgaria	40.87	7.4	0.13
Croatia	—	—	0
Cyprus	13.90	<b>55.4</b>	0.04
Czech Republic	46.42	2.5	0.14
Denmark	66.55	4.8	0.21
Estonia	0.25	0.9	0
Finland	49.02	22.4	0.15
Greece	114.52	<b>62.6</b>	0.36
The Netherlands	612.45	<b>64.0</b>	1.95
Ireland	12.04	7.9	0.04
Poland	419.70	16.2	1.34
Latvia	6.66	10.4	0.02
Lithuania	5.82	7.9	0.02
Luxembourg	2.24	6.2	0
Hungary	110.01	18.0	0.35
Malta	0.19	1.0	0
Portugal	382.66	<b>76.6</b>	1.22
Romania	103.60	10.6	0.32
Spain	281.58	21.6	0.89
Sweden	125.72	16.4	0.40
Slovakia	31.69	18.0	0.10
Slovenia	3.17	9.3	0.01
	<b>2,936.46</b>		<b>9.37</b>
Iceland	1.98	2.5	0
Norway	—	—	0
Switzerland	1,039.94	9.2	3.32
Ukraine	27.37	5.9	0.08
	<b>1,069.29</b>		<b>3.41</b>
Australia	79.87	10.8	0.25
New Zealand	—	—	0
South Korea	104.45	2.1	0.33
Philippines	128.12	9.6	0.40
Taiwan	422.69	5.8	1.34
	<b>735.13</b>		<b>2.34</b>
Albania	3.42	4.4	0.01
Bosnia and Hercegovina	1.49	1.3	0
North Macedonia	6.89	11.9	0.02
Serbia	47.26	12.6	0.15
	<b>59.06</b>		<b>0.18</b>
	<b>22,329.97</b>		<b>71.31</b>

Figure 11. The share of central bank gold reserves of the G7, EU, 'Global West',  
and Western Balkan countries in relation to the total central bank gold reserves of the world.  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>



BRICS+5+13			
	Gold (tonnes)	Goldpercentage of a country's total reserves	Goldpercentage of the world's total gold reserves (31,313.90 tonnes)
Brazil	129.65	2.9	0.41
China	2,264.32	5.3	7.23
India	853.63	10.1	2.72
Russia <sup>73</sup>	2,332.74	24.7	7.45
South Africa	125.44	16.7	0.40
	5,705.78		18.22
Egypt	126.82	24.1	0.40
Ethiopia	—	—	0
Iran	—	—	0
Saudi Arabia	323.07	5.6	1.03
UAE	—	—	0
	449.89		1.43
Algeria	173.56	17.1	0.55
Belarus	54.02	51.6	0.17
Bolivia	—	—	0
Cuba	—	—	0
Indonesia	78.57	4.4	0.25
Kazakhstan	285.94	54.4	0.91
Malaysia	38.88	2.7	0.12
Nigeria	—	—	0
Thailand	234.52	8.1	0.75
Türkiye	595.37	36.2	1.90
Uganda	—	—	0
Uzbekistan	373.86	77.3	1.19
Vietnam	—	—	0
	1,834.72		5.86
	7,990.39		25.51

Figure 12. The share of central bank gold reserves of BRICS+5+13 countries in total global central bank gold reserves.

SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>73</sup> Data from 2023, current status unknown.

'Rest of the World'			
	Gold (tonnes)	Gold percentage of a country's total reserves	Gold percentage of the world's total gold reserves (31,313.90 tonnes)
Jordan	68.78	27.6	0.21
Kuwait	78.97	12.4	0.25
Libya	146.65	13.0	0.47
Morocco	22.12	4.9	0.07
Oman	—	—	0
Qatar	109.54	17.3	0.34
Tunesia	6.84	6.3	0.02
	432.90		1.38
Armenia	—	—	0
Azerbaijan	—	—	0
Kirgisistan	25.96	52.2	0.08
Mongolia	3.88	7.4	0.01
Pakistan	64.72	31.3	0.20
	94.56		0.30
Singapore	227.61	4.8	0.72
Kenya	0.02	0.02	0
Mauritius	12.42	13.0	0.04
Mozambique	3.94	8.6	0.01
	16.38		0.05
Argentina	61.74	19.2	0.19
Chile	0.25	0.05	0
Colombia	4.68	0.6	0.01
Costa Rica	—	—	0
Dominican Rep.	0.57	0.33	0
Ecuador	26.28	25.9	0.08
Guatemala	6.89	2.4	0.02
Mexico	120.37	4.4	0.38
Suriname	1.21	6.6	0
Uruguay	0.10	0.04	0
	222.09		0.70
	993.54		3.17

Figure 13. The proportion of central bank gold reserves of the 'Rest of the World' countries compared to the total central bank gold reserves of the world. SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>



Global reserves				
	Total reserves (mUSD)	ForEx (mUSD)	Gold (tonnes)	Gold (mUSD)
G7	3,456,576.9	1,974,316.4	17,530.03	1,482,260.4
EU	1,135,568.8	863,817.1	2,936.46	248,292.7
‘Rest of Europe’	1,084,749.6	994,335.0	1,069.29	90,414.6
‘Global West’	1,249,379.4	1,187,219.9	735.13	62,159.3
	6,926,274.7	5,019,688.4	22,270.91	1,883,127.0
Western Balkans	52,670.3	47,676.1	59.06	4,994.2
	52,670.3	47,676.1	59.06	4,994.2
BRICS	5,289,256.4	4,863,747.1	5,705.78	297,072.6
+5	528,388.4	490,348.1	449.89	38,040.2
+13	831,605.9	676,471.2	1,834.72	155,134.7
	6,649,250.7	6,030,566.4	7,990.39	490,247.5
North Africa	289,835.1	253,230.5	432.90	36,604.6
Middle East	43,353.0	35,358.1	94.56	7,994.8
Singapore	402,677.8	383,431.8	227.61	19,245.9
East Africa	20,521.0	19,137.3	16.38	1,384.3
South America	449,502.1	416,518.4	222.09	18,778.2
	1,205.889.0	1,107,676.1	993.54	84,007.8
			31,313.9	

Figure 14. Central bank reserves of countries/groups of countries around the world (total, ForEx, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

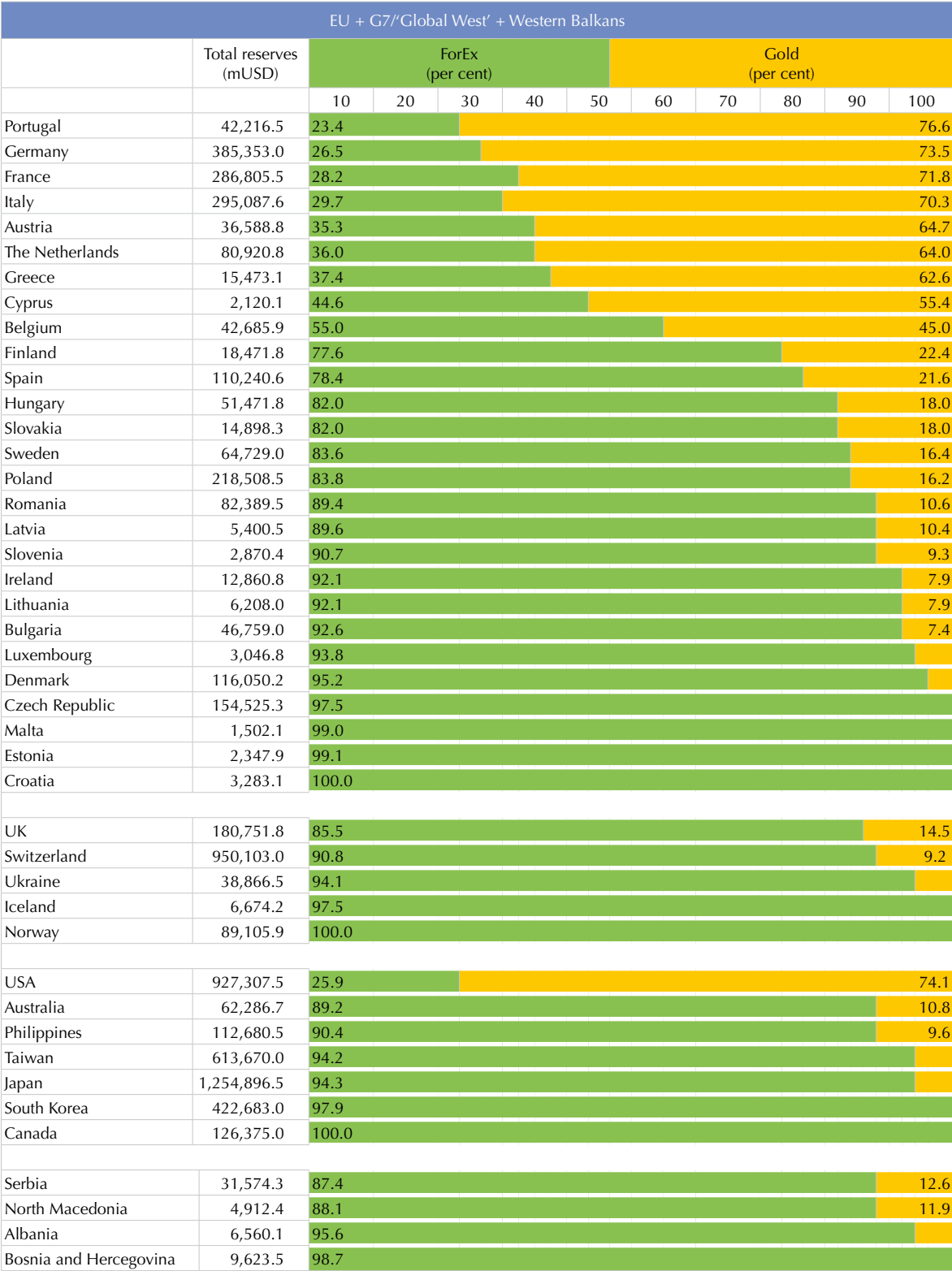


Figure 15. Central bank reserves of the EU, G7/‘Global West’ and Western Balkan countries: percentage distribution of ForEx and gold reserves.  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>



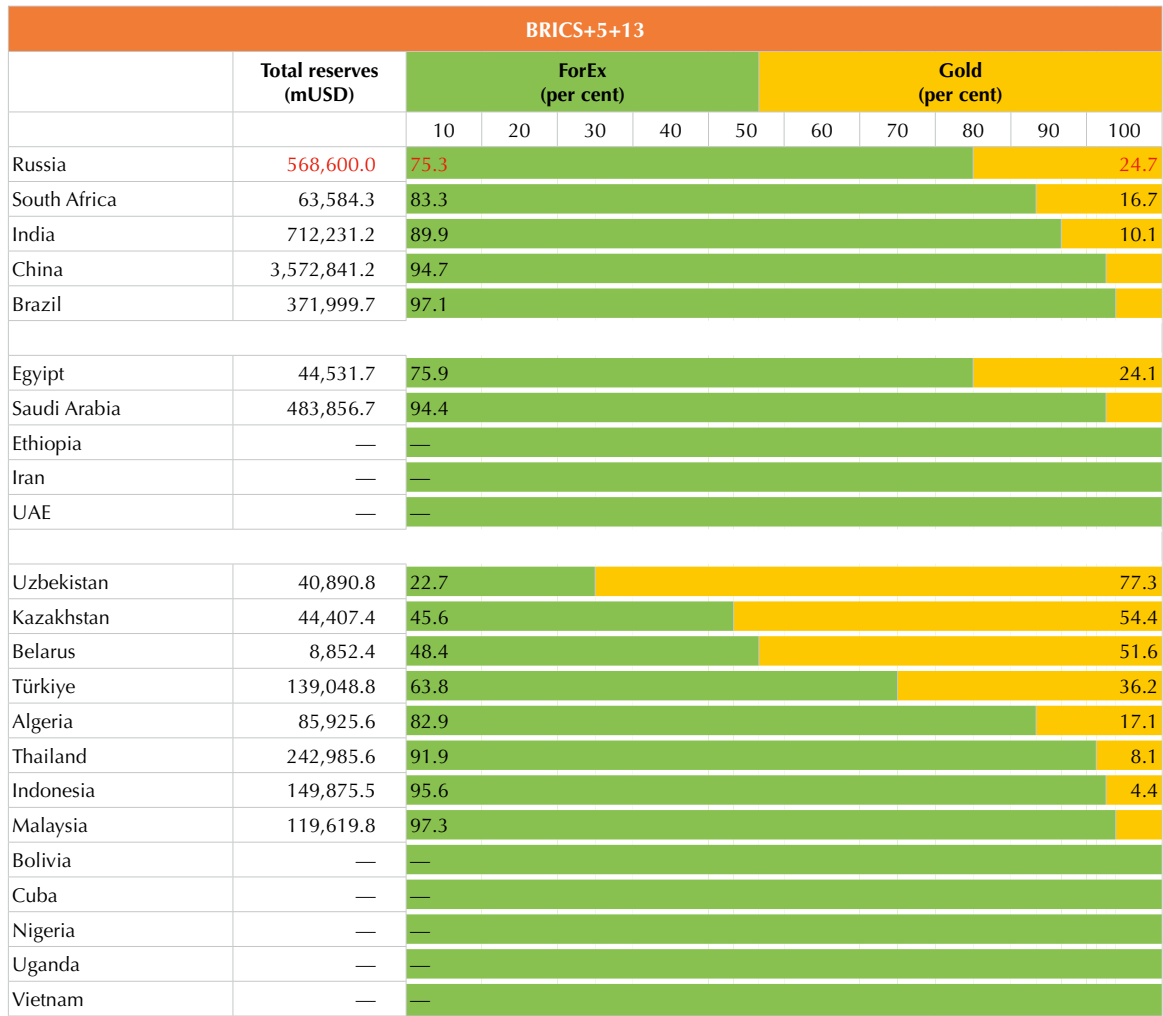


Figure 16. Central bank reserves of BRICS+5+13 countries: percentage distribution of Forex and gold reserves. (total, Forex, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

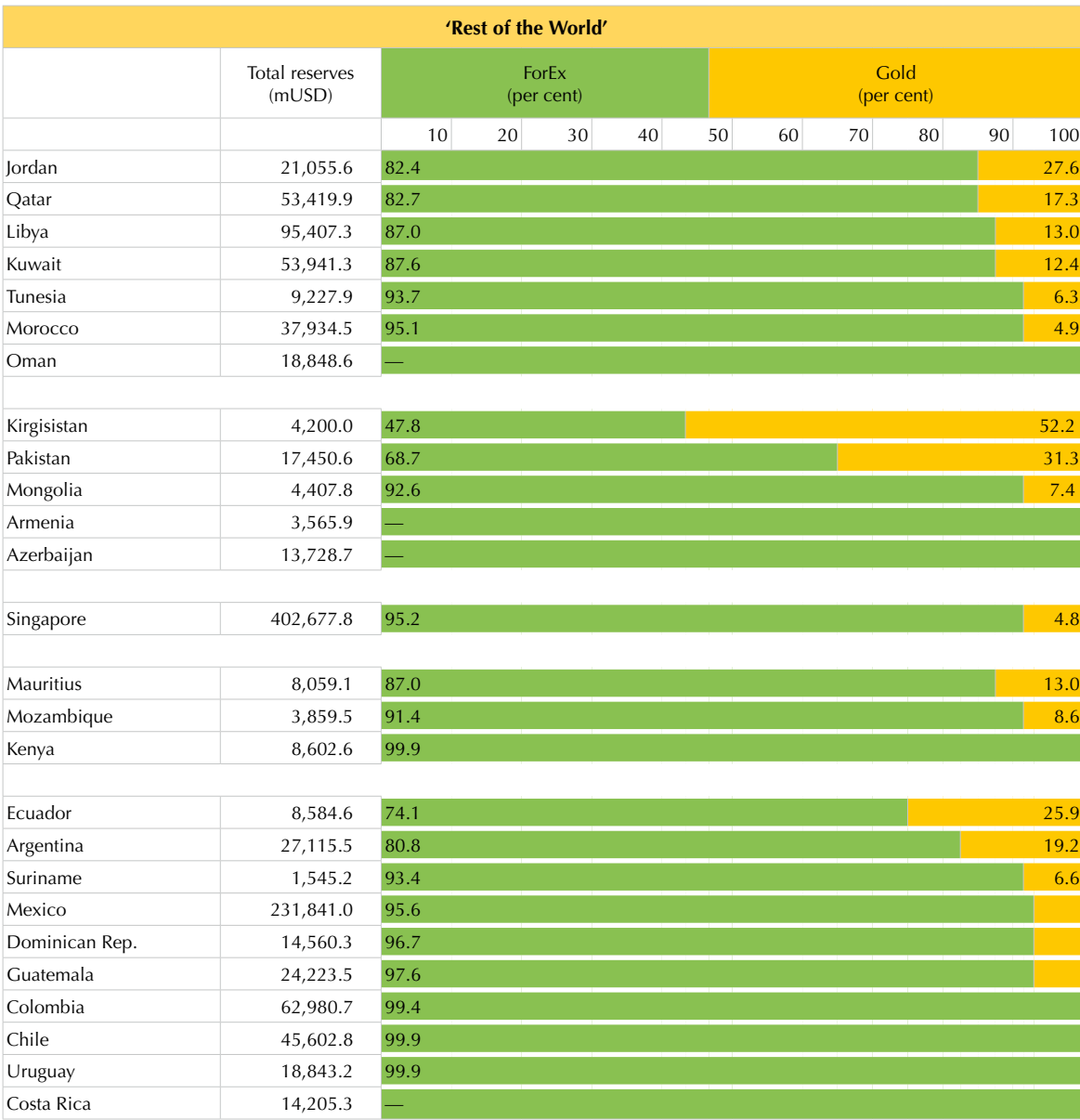


Figure 17. Central bank reserves of the 'Rest of the World' countries: percentage distribution of Forex and gold reserves. (total, Forex, gold).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>



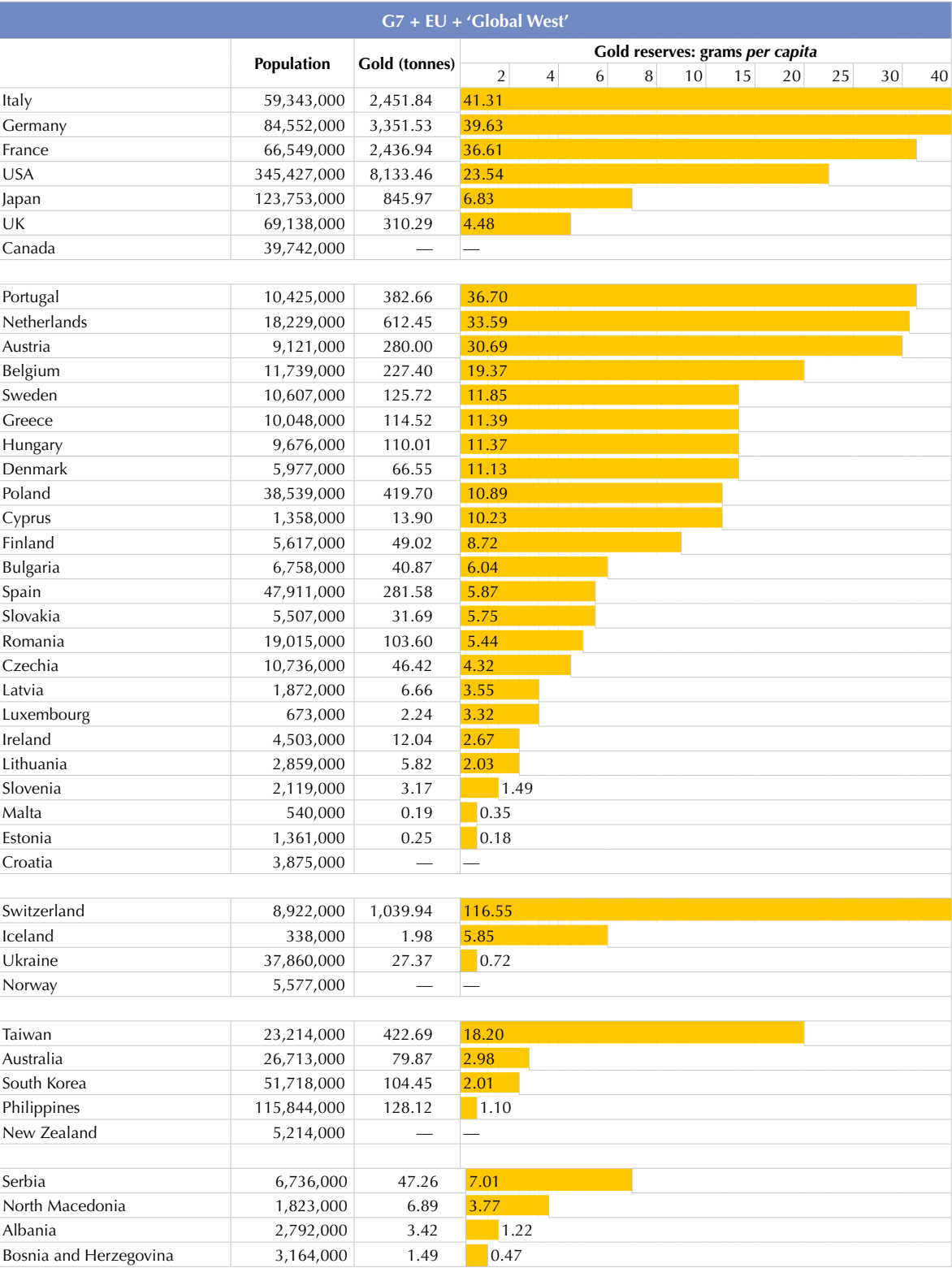


Figure 18. Central bank reserves of the G7, EU, and the 'Global West' and Western Balkan countries:Gold reserves per capita (grams per capita).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

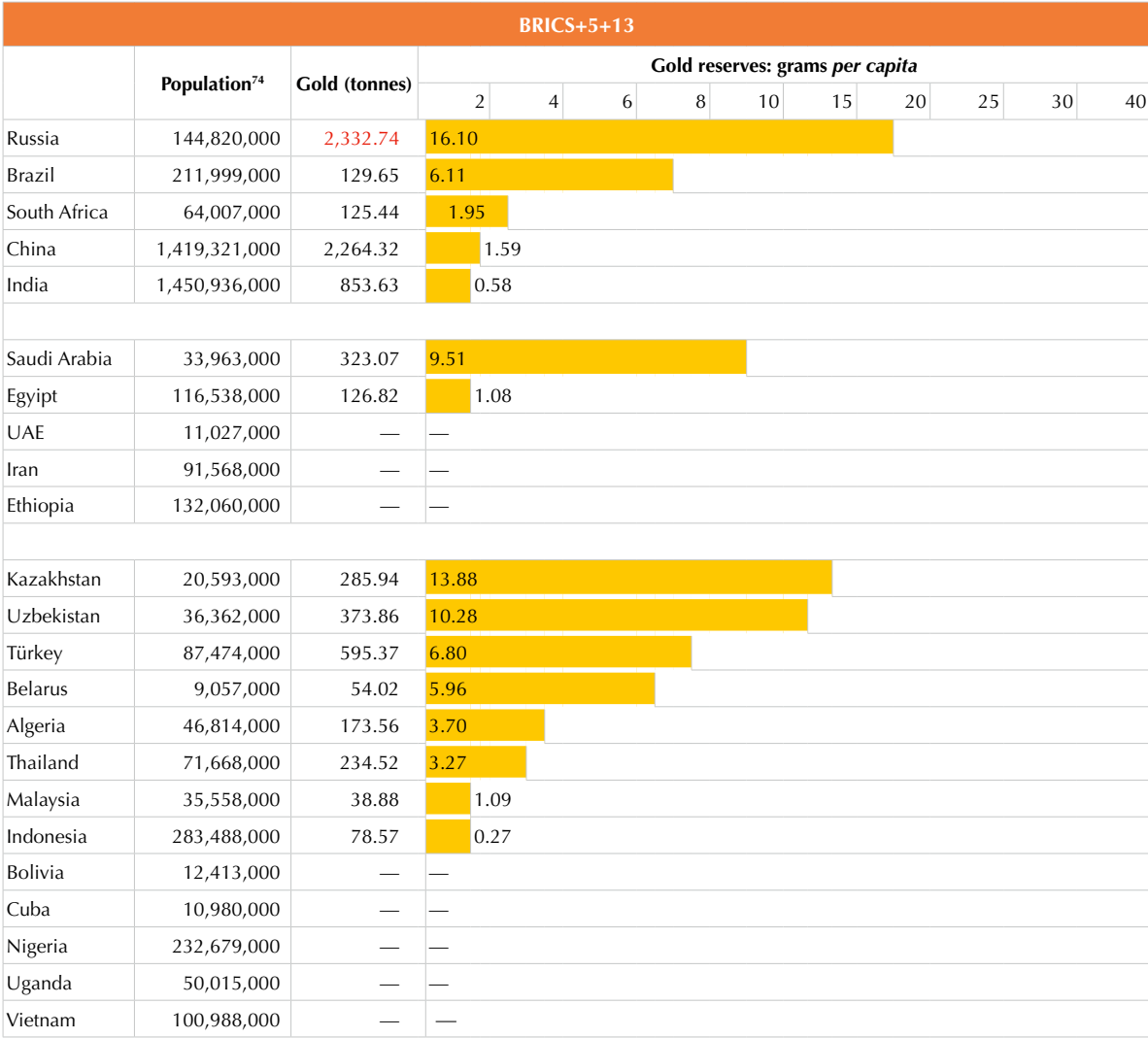


Figure 19: Central bank reserves of BRICS+5+13 countries: Gold reserves per capita (grams per capita).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>74</sup> Based on the 2024 calculations of the UN Department of Economic and Social Affairs, Population division. Middle Variant, World Population Prospects 2024, File POP/1-1: Total population (both sexes combined) by region, subregion, and country, annually for 1950–2100 (thousands), POP/DB/WPP/Rev.2024/POP/F01-1, <https://population.un.org/wpp/downloads>.

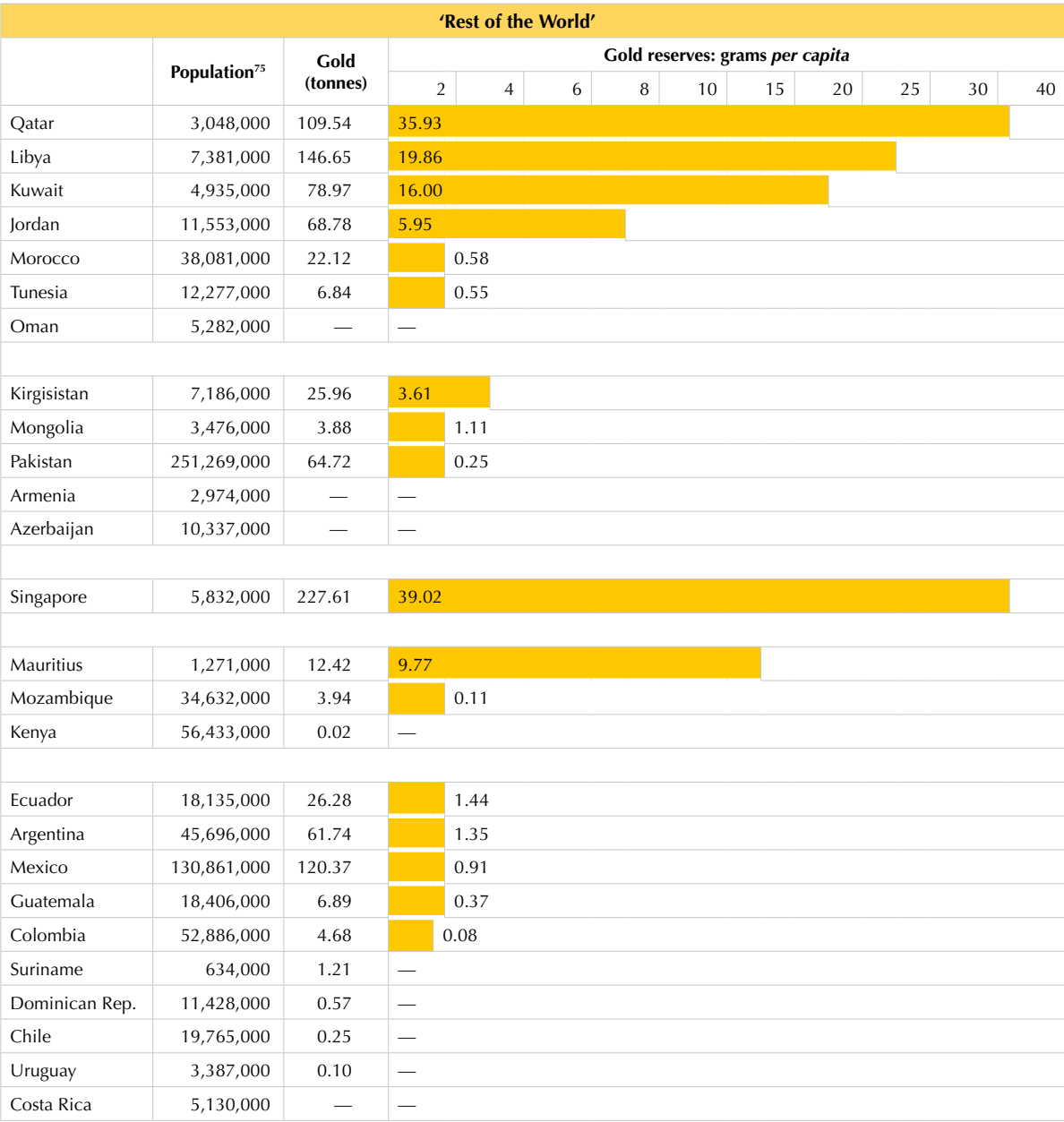


Figure 20. Central bank reserves of the ‘Rest of the World’ countries: Gold reserves *per capita* (grams *per capita*).  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

<sup>75</sup> ENSZ Department of Economic and Social Affairs, Population division 2024-es kalkulációi alapján. Middle Variant, *World Population Prospects 2024, File POP/1-1: Total population (both sexes combined) by region, subregion and country, annually for 1950-2100 (thousands), POP/DB/WPP/Rev.2024/POP/F01-1*, <https://population.un.org/wpp/downloads>

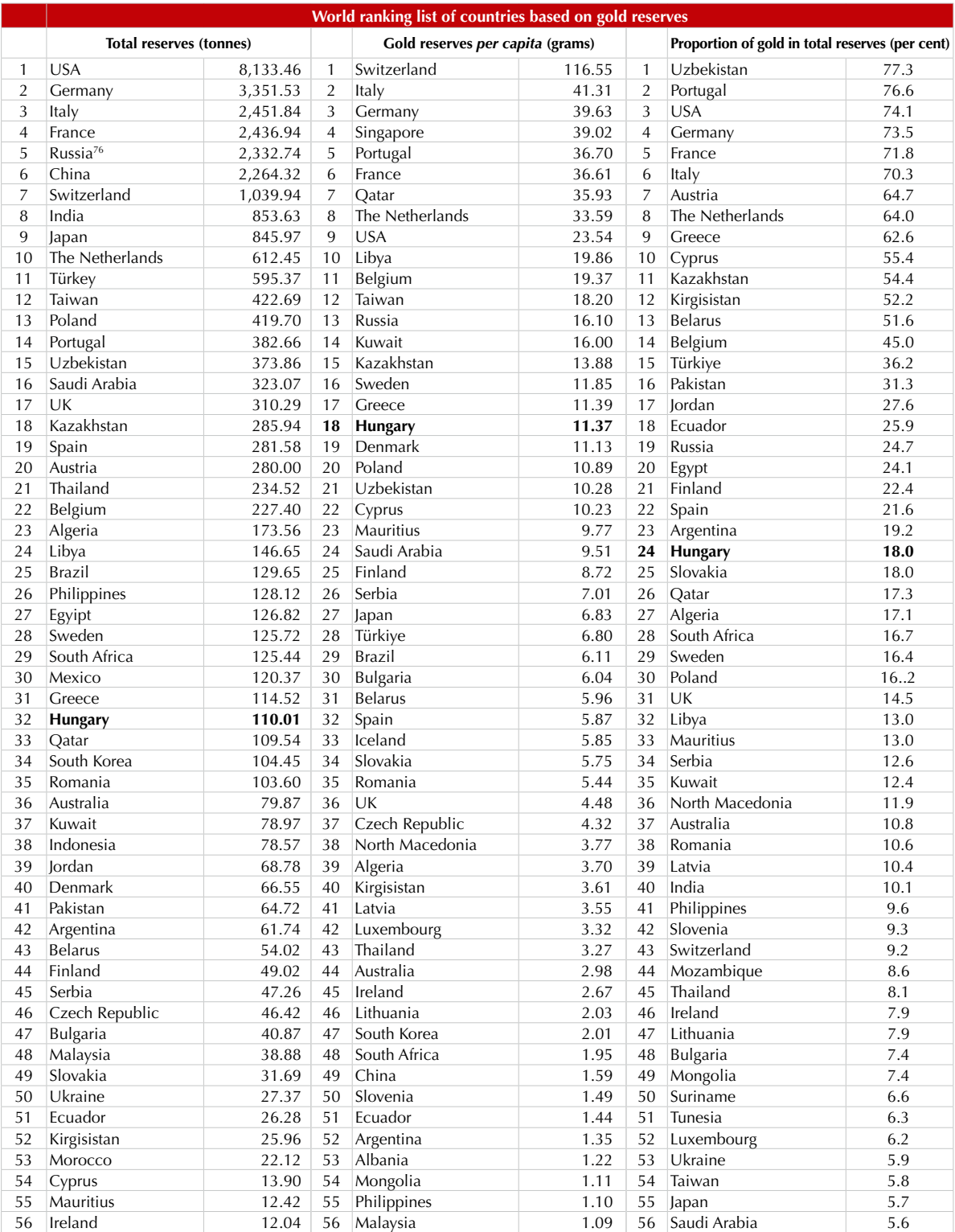


Figure 21. World ranking of gold reserves by country: 1. total gold reserves in tonnes, 2. *per capita* gold reserves in grams, 3. share of gold reserves in total national bank reserves in per cent.

<sup>76</sup> Data from 2023, current status unknown.



SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>

G7 + EU + ‘Global West’						
	Total reserves (mUSD)	Gold (tonnes)	Gold (mUSD)	GDP (mUSD)	Gold reserves/GDP (per cent)	
Portugal	42,216.5	382.66	32,356.2	319,930	10.11	1
Switzerland	950,103.0	1,039.94	87,932.4	999,600	8.79	2
Italy	295,087.6	2,451.84	207,316.3	2,460,000	8.42	3
France	286,805.5	2,436.94	206,056.6	3,280,000	6.28	4
Germany	385,353.0	3,351.53	283,390.2	4,920,000	5.76	5
Serbia	31,574.3	47.26	3,995.9	88,630	4.50	6
Taiwan	613,670.0	422.69	35,741.0	814,440	4.38	7
Austria	36,588.8	280.00	23,674.8	559,220	4.23	8
The Netherlands	80,920.8	612.45	51,786.3	1,270,000	4.07	9
Poland	218,508.5	419.70	35,488.1	915,450	3.87	10
Hungary	51,471.8	110.01	9,302.1	245,620	3.78	11
Greece	15,473.1	114.52	9,683.4	265,170	3.65	12
North Macedonia	4,912.4	6.89	582.8	17,090	3.41	13
Cyprus	2,120.1	13.90	1,175.6	37,690	3.11	14
Bulgaria	46,759.0	40.87	3,456.0	115,530	2.99	15
Belgium	42,685.9	227.40	19,227.5	689,360	2.78	16
USA	927,307.5	8,133.46	687,729.1	30,340,000	2.26	17
Romania	82,389.5	103.60	8,760.1	406,200	2.15	18
Philippines	112,680.5	128.12	10,833.2	507,670	2.13	19
Slovakia	14,898.3	31.69	2,679.9	152,480	1.75	20
Sweden	64,729.0	125.72	10,630.2	638,780	1.66	21
Denmark	116,050.2	66.55	5,627.0	431,230	1.30	22
Spain	110,240.6	281.58	23,808.9	1,830,000	1.30	22
Finland	18,471.8	49.02	4,144.8	319,990	1.29	23
Ukraine	38,866.5	27.37	2,314.4	189,830	1.21	24
Latvia	5,400.5	6.66	562.8	48,160	1.16	25
Czech Republic	154,525.3	46.42	3,925.1	360,230	1.08	26
Albania	6,560.1	3.42	289.3	27,990	1.03	27
Lithuania	6,208.0	5.82	491.8	87,980	0.55	28
Iceland	6,674.2	1.98	167.8	35,380	0.47	29
South Korea	422,683.0	104.45	8,831.4	1,950,000	0.45	30
Bosnia and Hercegovina	9,623.5	1.49	126.2	29,860	0.42	31
Australia	62,286.7	79.87	6,753.7	1,880,000	0.35	32
Slovenia	2,870.4	3.17	268.2	77,350	0.34	33
Luxembourg	3,046.8	2.24	189.3	96,990	0.19	34
Ireland	12,860.8	12.04	1,017.8	587,230	0.17	35
UK	180,751.8	310.29	26,236.5	3,730,000	0.07	36
Estonia	2,347.9	0.25	21.0	45,310	0.04	37
Japan	1,254,896.5	845.97	71,531.7	4,930,000	0.01	38
Malta	1,502.1	0.19	15.8	26,260	0.006	39
Canada	126,375.0	—	—	2,330,000	—	40
Croatia	3,283.1	—	—	96,030	—	40
Norway	89,105.9	—	—	506,470	—	40
New Zealand	38,059.0	—	—	262,920	—	40

Figure 22. Gold reserves as a percentage of GDP in the ‘Global West’ countries.  
SOURCE: <https://www.gold.org/goldhub/data/gold-reserves-by-country>,

<https://www.imf.org/external/datamapper/NGDPD@WEO/OEMDC/ADVEC/WEOWORLD/>

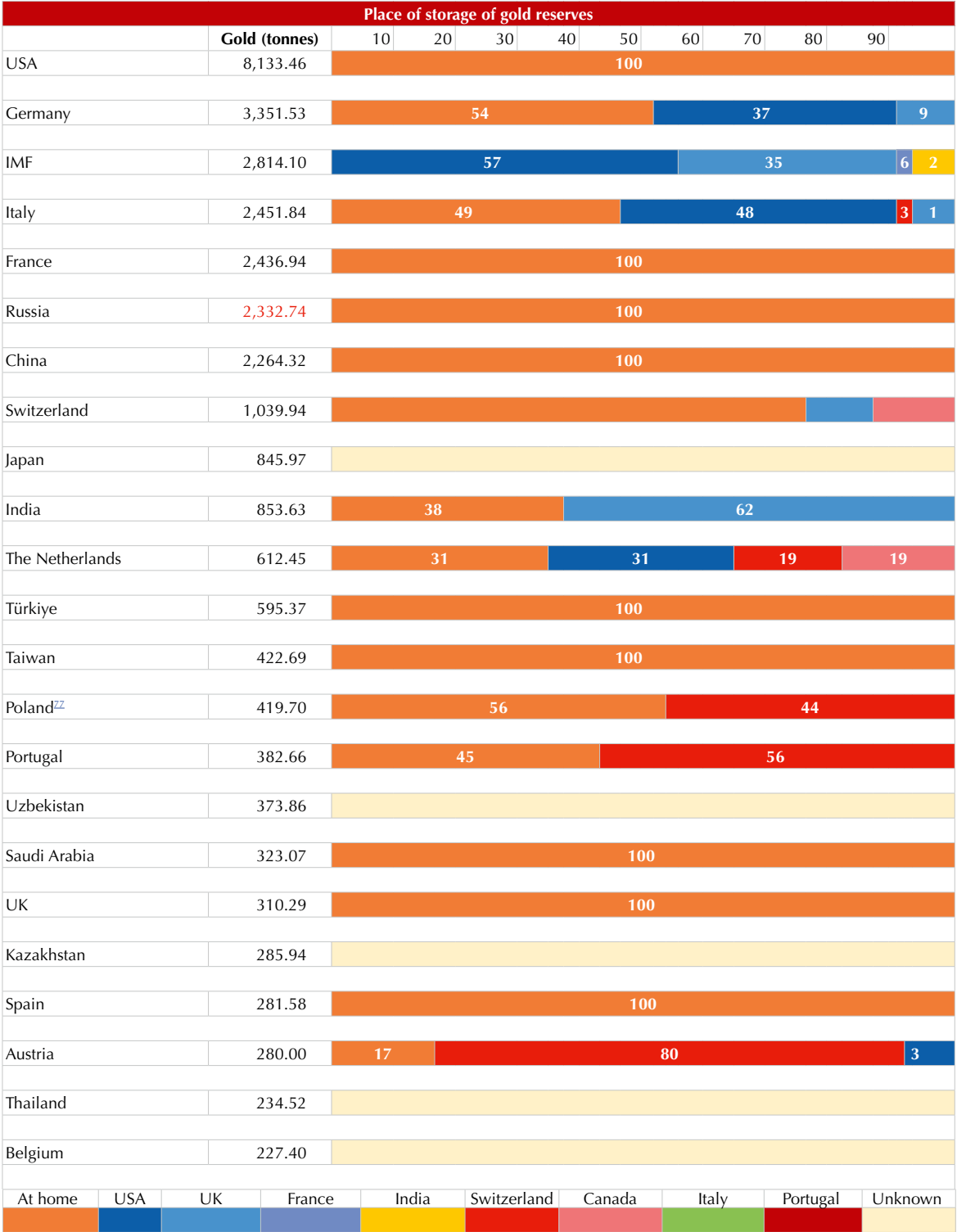


Figure 23. Which country keeps its gold reserves where.  
SOURCE: <https://bunker-group.com/en/blog/central-banks-that-keep-their-gold-in-another-country>

<sup>77</sup> The data is from before the 2024 purchase, so we do not know exactly what percentage of its gold Polans keeps at home today.





# 4

## Global Gold Production<sup>78</sup>

Paolo Veronese, *The Family of Darius Before Alexander* (1565). National Gallery, London, UK





4.1 INTRODUCTION

Various rough estimates have been made of the amount of gold that has not yet been mined in the Earth’s crust. According to the United States Geological Survey<sup>79</sup> and the World Gold Council<sup>80</sup>, this amount is around 59,000 tonnes. So far, it is estimated that 212,582 tonnes of gold have been mined on Earth, a significant part of it since 1950<sup>81</sup>.

In contrast, the amount of gold mined in the world annually can be estimated at between 3,206<sup>82</sup> and 3,646<sup>83</sup> tonnes. If the estimate is correct, and the amount of gold economically available in the Earth’s crust is indeed around 59,000 tonnes, then a simple calculation can be estimated that if this much gold is mined and the rate of extraction does not change, then the easily accessible and extractable gold will run out within 16.2 to 18.4 years. This will obviously not reduce the demand for gold and will significantly increase its price. In the future, as the price of gold rises, mining ever deeper deposits that are still physically accessible may also become economical<sup>84</sup>, but this too has physical limitations.

If the amount of newly mined gold decreases, a reallocation of available gold by category (use) and the probability of an increase in the amount and proportion of gold accumulated in central bank gold reserves may begin.

Use category	tonnes	per cent
jewellery	96,487	45
investment gold	47,454	22
central bank reserves	36,699	17
other	31,943	15

Figure 24. Use categories of the 212,582 tonnes of gold mined so far.  
SOURCE: <https://www.gold.org/goldhub/data/how-much-gold>

The range of uses for gold mined around the world has hardly changed. The range of use of gold is divided between jewellery<sup>85</sup>, central bank reserves<sup>86</sup>, gold bars, investment coins<sup>87</sup>, industrial/electronic components<sup>88</sup>, and a few other uses. According to the National Minerals Information Center of the U.S. Geological Survey<sup>89</sup>, a significant part of the processed gold serves the purposes of gold accumulation: gold reserves of national banks, gold bars, investment gold coins, and ultimately, jewellery<sup>90</sup> also serve the purposes of reserve accumulation. This means trust in gold at the state, corporate, and household levels. These data show some change from 2022 to 2023, the clear beneficiaries of which were central banks, whose gold reserves increased by 14 per cent, while in the field of jewellery making, there was

<sup>78</sup> For the most complete summary, see NEWMAN ET AL. 2024, 18–37.

<sup>79</sup> SHAEFFER 2024, 83.

<sup>80</sup> <https://www.gold.org/goldhub/data/how-much-gold>.

<sup>81</sup> 96,487 tonnes (45 per cent) are jewellery; 47,454 tonnes (22 per cent) are investment gold bars and coins; 36,699 tonnes (17 per cent) are held as central bank gold reserves; and 31,943 tonnes (15 per cent) are used for other purposes.

<sup>82</sup> <https://www.usgs.gov/centers/national-minerals-information-center/international-minerals-statistics-and-information>.

<sup>83</sup> <https://www.gold.org/goldhub/data/gold-production-by-country>.

<sup>84</sup> Today, 2 grams of gold per tonne of moved soil is already economical, but in loose soil, even 1 gram per tonne can be economical.

<sup>85</sup> For the most complete summary, see Newman et al., ‘Jewellery’ (2024), Chapter 5, 44–60.

<sup>86</sup> For the most complete summary, see Newman et al., ‘Official Sector’ (2024), 66–70.

<sup>87</sup> For the most complete summary, see Newman et al., ‘Investment’ (2024), 71–86.

<sup>88</sup> For the most complete summary, see Newman et al., ‘Industrial Fabrication’ (2024), 61–65.

<sup>89</sup> <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-gold.pdf>, 82–83.

<sup>90</sup> For example, in India, a significant portion of the wealth of average people is accumulated in gold jewellery.

almost no change. The gold bar market decreased by 5 per cent, the electronic components market by 11 per cent, while the share of investment gold coins increased by 6 per cent.<sup>91</sup>

	2022	2023
	(per cent)	(per cent)
jewellery	46	44
central bank reserves	23	26
gold bars	16	15
investment coins	9	9.5
electronic components	5	4.5
other	1	1

Figure 25. Use categories of gold mined annually in 2022 and 2023.

SOURCE: Shaeffer (2024), 83.

4.2 GOLD PRODUCTION

In general, gold is mined in several ways around the world, and here we should not necessarily think about technological differences, but rather about the resources, technical background, and volume of mining: 1) artisanal; 2) small-scale; 3) semi-industrial; and 4) industrial. It can also be stated that gold mining in most of the continents is carried out within an organized and state-controlled framework, so the data from there are reliable. Africa is the only continent where, despite state supervision, the amount of gold mined ‘under the radar’ and entering the illegal trade is relatively large, which can only be assessed or rather estimated using other methods. We therefore deal with African gold mining and (illegal) trade in a separate chapter (see below). Some countries, at the same time, may not be interested in publishing real data on their gold mining or the size of their central bank gold reserves.

Figure 24 and Maps 8–9 show the world’s gold production in detail using data sets from several sources. In line with the aim of this study, various comparative sections can be made from the data sets. Thus, we can compare, among other things, the gold production of 1) individual countries; 2) individual continents; and 3) the two major world orders (the ‘Global West’ and the BRICS world), the importance of which is emphasized by the fact that the BRICS world wants to increase its global influence and surpass the ‘Global West’ by rearranging the current economic world order (by eliminating the global leading role of the USD and the SWIFT system, see introductory thoughts above). In this endeavor and in strengthening its economic weight, it wants to rely partly on gold.

As can be seen in the data series in Figures 26–28, according to the published data, Europe produces the least gold (1.25 per cent/1.1 per cent), while Africa brings the most to the surface (20.57 per cent/27.5 per cent) (Maps 8–9). Gold production is distributed roughly proportionally between regions/continents. However, this study does not examine each region/continent, but rather, like all previous aspects, from the perspective of the world’s two major power centers, the ‘Global West’ and the BRICS world. Figure 28 and Charts 1–2 show how the gold production of individual BRICS states and the G7 gold-producing countries (Australia, Canada, United States) has changed over the past 10 years, remaining stable in volume with minor fluctuations (with a peak from 2016 to 2018). If this continues to be the case, future processes can be modeled within this set of conditions and framework.

<sup>91</sup> <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-gold.pdf>, 82–83.



Gold is not produced in the Solar System. According to our current knowledge, only neutron star explosions generate enough energy/pressure/heat to create the right conditions for gold to form and produce gold (reaching a proton number of 79 in the periodic table). Therefore, on Earth, only gold that was scattered in our galaxy billions of years ago during neutron star explosions and incorporated into the mass of the Earth during planetary formation is available. The amount of gold is, therefore, finite.

The new countries joining the first round of BRICS expansion on 1 January 2024 (*Figure 1*) are of geostrategic importance (*Map 1*). Iran, the United Arab Emirates, Egypt, Ethiopia, and Saudi Arabia (which has not yet joined) control all important strategic routes in the Middle East (oil trade) from the Arabian/Persian Gulf through the Strait of Hormuz to the Suez Canal. In the second round of expansion on 24 October 2024, countries of similar geostrategic importance joined (for example, almost all of Indochina) (*Figure 1, Map 1*), but these countries have very serious gold mining capacities compared to the countries of the first round of expansion (see *Charts 1* and *2*). As *Charts 1* and *2* show, the founding countries of BRICS have the largest gold mining capacities in the world. The countries of the second round of enlargement (+13 countries) brought so much additional gold mining capacity into the system that the gold mining capacity of the BRICS+18 countries increased to double the gold mining capacity of the G7. It seems statistically proven that in this round of enlargement, the integration of as much gold mining capacity as possible into the BRICS system, and with it the overwhelming preponderance of global gold mining capacity and the possession of available gold resources over the 'Global West', may have played a key role.

As we saw in the previous chapter, the 'Global West' has a significant advantage in terms of listed (and known) central bank gold reserves (*Figure 14*: 22,270.91 tonnes versus 7,990.39 tonnes). However, if the BRICS countries believe that the amount of gold reserves can play a role in creating the foundations of their new currency to replace the US dollar in the future, then they should increase the amount of gold reserves at their disposal. This effort is probably in line with the already increased importance of gold and its possible reintegration into modern financial systems.

The share of gold in the total reserves of the BRICS countries (*Figure 9*) is very low compared to the very high Western shares (*Figure 8*). It is only high in Russia, Türkiye, Kazakhstan, and Uzbekistan. The introduction of the future—partly gold-based—new BRICS currency may result not only in the increase of the net mass of gold reserves, but also in the increase of its share in total central bank reserves (ForEx+gold).

In 2023, **China** was the largest buyer of gold (with 225 tonnes between November 2022 and March 2024).<sup>92</sup> At the same time, China is gradually divesting its US dollar-denominated securities. In 2013, it held US securities worth 1.3 trillion dollars, which it reduced to 767 billion by March 2024<sup>93</sup> (partly due to the sanctions policy after 2022). All the same, the share of gold in China's reserves is still only 5.3 per cent (*Figure 9*). At the same time, China is the world's largest gold producer (378.2 tonnes/year, *Figures 26* and *28, Chart 1, Maps 8–9*), where, according to recent news, a new, profitable gold field has been discovered in Hunan Province<sup>94</sup>, which is estimated to contain gold worth 83 billion dollars (equivalent to 30,740,740.740 ounces = 956.16 tonnes).

**Russia** also bought more than two hundred tonnes of gold in the decade before 2022.<sup>95</sup> However, due to the sanctions policy affecting the country, including the freezing of its foreign exchange reserves (300 to 428 billion USD, see *Figure 8*), the situation has changed, and we have little information about Russian reserves today. However, it seems certain that Russia does not have much interest and/or opportunity to accumulate reserves in US dollars and euros even after the conclusion of a ceasefire/peace, either at home or abroad in ForEx, bonds, etc. This suggests that Russia will place greater emphasis on accumulating reserves in gold in the future.

<sup>92</sup> NEWMAN ET AL. 2024, 66–68.

<sup>93</sup> NEWMAN ET AL. 2024, 68.

<sup>94</sup> REUTERS 2024B.

<sup>95</sup> NEWMAN ET AL. 2024, 66–68.



The biggest problem is that we do not know exactly how much gold Russia and China have in their real reserves, how much gold they have accumulated through monitorable international systems, and how much they accumulate from the huge amount of gold mined in their countries each year without international statistics knowing about it. Such a process is probably taking place since the best way to increase gold reserves is for a country—which has gold deposits on its own—to refine the gold it has mined to 0.999 purity and hoard it in the form of gold reserves.

#### 4.3 GOLD PRODUCTION IN AFRICA

Perhaps the best summaries of African gold production in recent years have been published by Swissaid.<sup>96</sup> We need to write about this topic separately because, as mentioned earlier, all four types of gold production—1) artisanal; 2) small-scale; 3) semi-industrial; and 4) industrial—can be found in Africa, and the control of at least the first two of these encounters numerous problems, and therefore the official gold production data for Africa also vary significantly: according to USGS data (Figure 26), **659.608 tonnes** of gold were mined in 2022 (which is 20.57 per cent of global gold production, Figure 27), according to the World Gold Council and Gold Focus 2024 data (Figure 26), **1,004 tonnes** of gold in 2023 (which is 27.5 per cent of global gold production, Figure 27), while according to the Swissaid reconstruction, the amount of gold mined in Africa in 2022 could have been between **991** and **1,144 tonnes**, which could represent nearly a third of global gold production in 2022. Of this, **505.966 tonnes** of gold were mined using semi-industrial and industrial methods in 2022.<sup>97</sup> Swissaid's detailed study accurately reconstructed the trends in African gold production by country.<sup>98</sup> According to its most important findings:<sup>99</sup>

In Africa, the amount of gold that is mined annually through 'artisanal' or 'small scale' methods and is not reported is estimated to be between **321** and **474 tonnes**. This represents 72–80 per cent of the ASM (artisanal and small scale) gold mined in Africa and 32–41 per cent of all gold mined (artisanal, small-scale, semi-industrial, and industrial). Namely, there is a huge latency in African gold production, meaning that a significant part of it goes 'under the radar', only to reappear elsewhere.

In 2022, more than **435 tonnes** of gold were smuggled out of Africa, worth 30.7 billion dollars. The vast majority of the smuggled gold went to the United Arab Emirates and then was exported to other countries.

It is claimed that **66.5 per cent (405 tonnes)** of all gold imported into the UAE from Africa in 2022 was smuggled gold. Between 2012 and 2022, **2,569 tonnes** of gold imported from Africa to the UAE were not registered for export in African countries. This was worth an average of 115.3 billion dollars.

The largest African gold importers were the United Arab Emirates, Switzerland, and India. In 2022, 80 per cent of gold exported from Africa went to these three countries, with 47 per cent of this going to the UAE. Looking at the industrial gold component, the vast majority of this went to South Africa, Switzerland, and India, while 80–85 per cent of African ASM gold was exported to the UAE. Between 2012 and 2022, the destination of reported intra-African gold trade was South Africa, from where it was re-exported to non-African countries.

<sup>96</sup> UMMEL-NEYAGA 2022; UMMEL-SCHULZ 2024.

<sup>97</sup> UMMEL-SCHULZ 2024, 13, FIGURE 1.

<sup>98</sup> UMMEL-SCHULZ 2024, 1–139.

<sup>99</sup> UMMEL-SCHULZ 2024, 3.



1–2. *Staters of Croesus*, Kingdom of Lydia (ca. 560 – 546 BC)  
3. Gold coin of *Darius*, the Dareikos, Persia (ca. 505 – 480 BC)

SOURCE: WIKIPEDIA





Nikolaus Knüpfer, *Solon before Croesus*  
(between ca. 1650 and 1652). Getty Center – J. Paul Getty  
Trust, Los Angeles, California, USA

SOURCE: WIKIMEDIA COMMONS

Concerns about smuggled gold have led most Swiss gold traders/refiners to stop importing gold from the United Arab Emirates. This leaves a significant amount of African gold in the BRICS world (United Arab Emirates, India, and South Africa), which could have strategic significance in the future. Another study<sup>100</sup> discusses in detail how Russia’s expansion into Africa (the Wagner Group) was partly intended or achieved to gain control of gold production in certain African countries (primarily the Central African Republic, Sudan, and Mali).<sup>101</sup>

According to public and perhaps ‘publicly credible’ data in the Western world, the BRICS countries—if they really want to strengthen their gold reserves as the basis of a new international

<sup>100</sup> BERLIN ET AL. 2023.

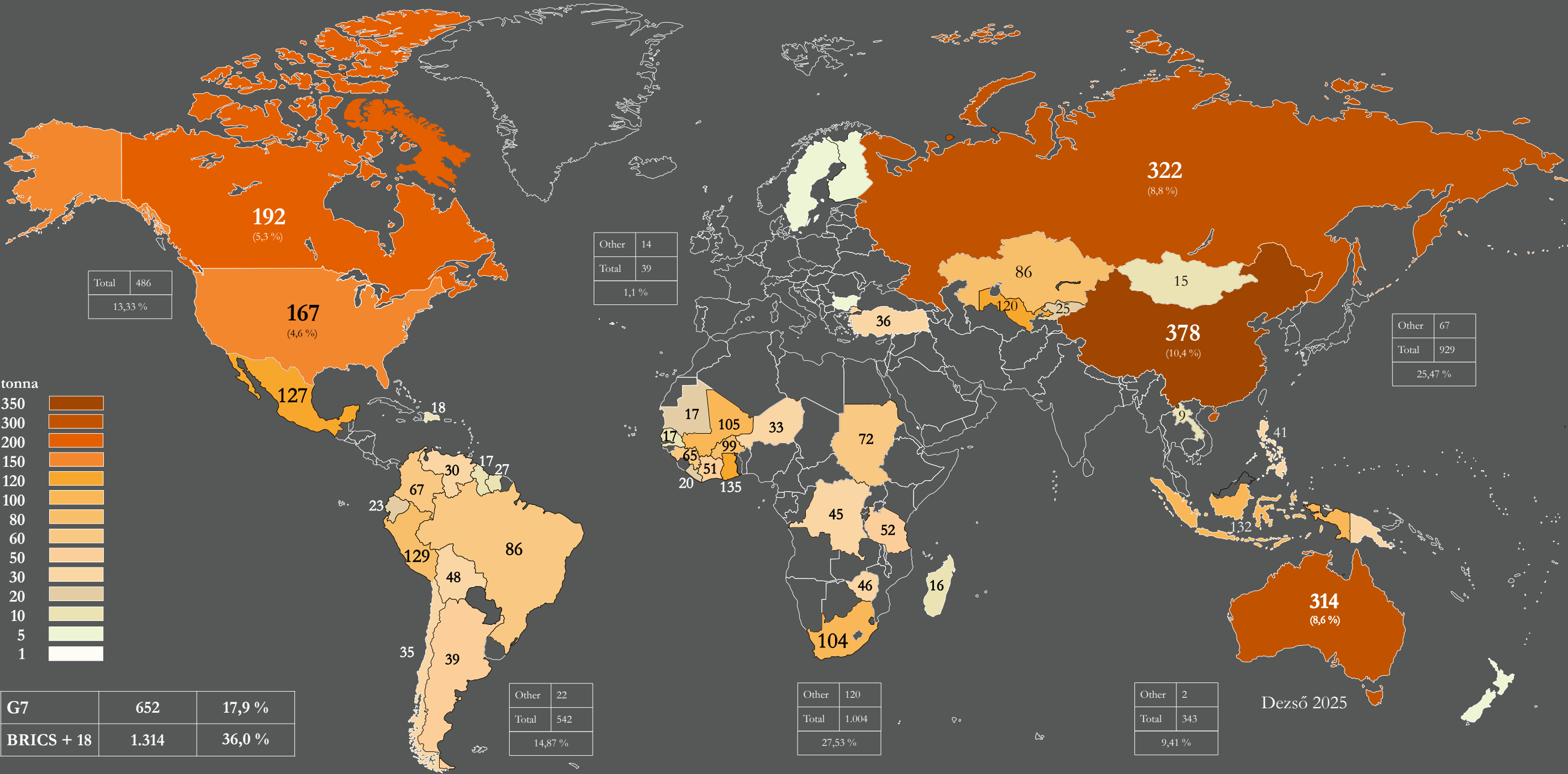
<sup>101</sup> They extracted 290 million USD worth of gold annually from the Central African Republic, 2 billion USD worth of gold annually from Sudan, and 10.8 million USD a month in Mali for supporting the government with military advice and protection. BERLIN ET AL. 2023, 3.

settlement system—will have to make serious efforts to catch up with the Western world in terms of accumulated gold reserves (22,270.91 tonnes versus 7,990.39 tonnes, see *Figures 11–14*). Closing the threefold disadvantage (14,280.52 tonnes) could take several years, even if the real difference is ‘only’ 10,000 tonnes, and even if they reduce the difference by as much as 1,000 tonnes per year. The double production capacity of the BRICS world (*Figures 26–27* and *Charts 1–2*) means that the BRICS+18 countries, with their annual production of 1,313.9 tonnes of gold out of the 3,206.6 to 3,646.1 tonnes of gold produced worldwide (*Figure 26*), have produced 661.5 tonnes more gold per year than the G7 (652.4 tonnes). This difference, if all the gold produced is accumulated as central bank gold reserves, will not be sufficient for a rapid catch-up. This is true even if the leading countries of the BRICS world start buying up the gold available on the market (thereby reducing, for example, the amount of gold processed as jewellery and driving up the price of gold), and if the approximately 400 tonnes of gold smuggled out of Africa annually also enriches the countries of the BRICS world (see below).



8.

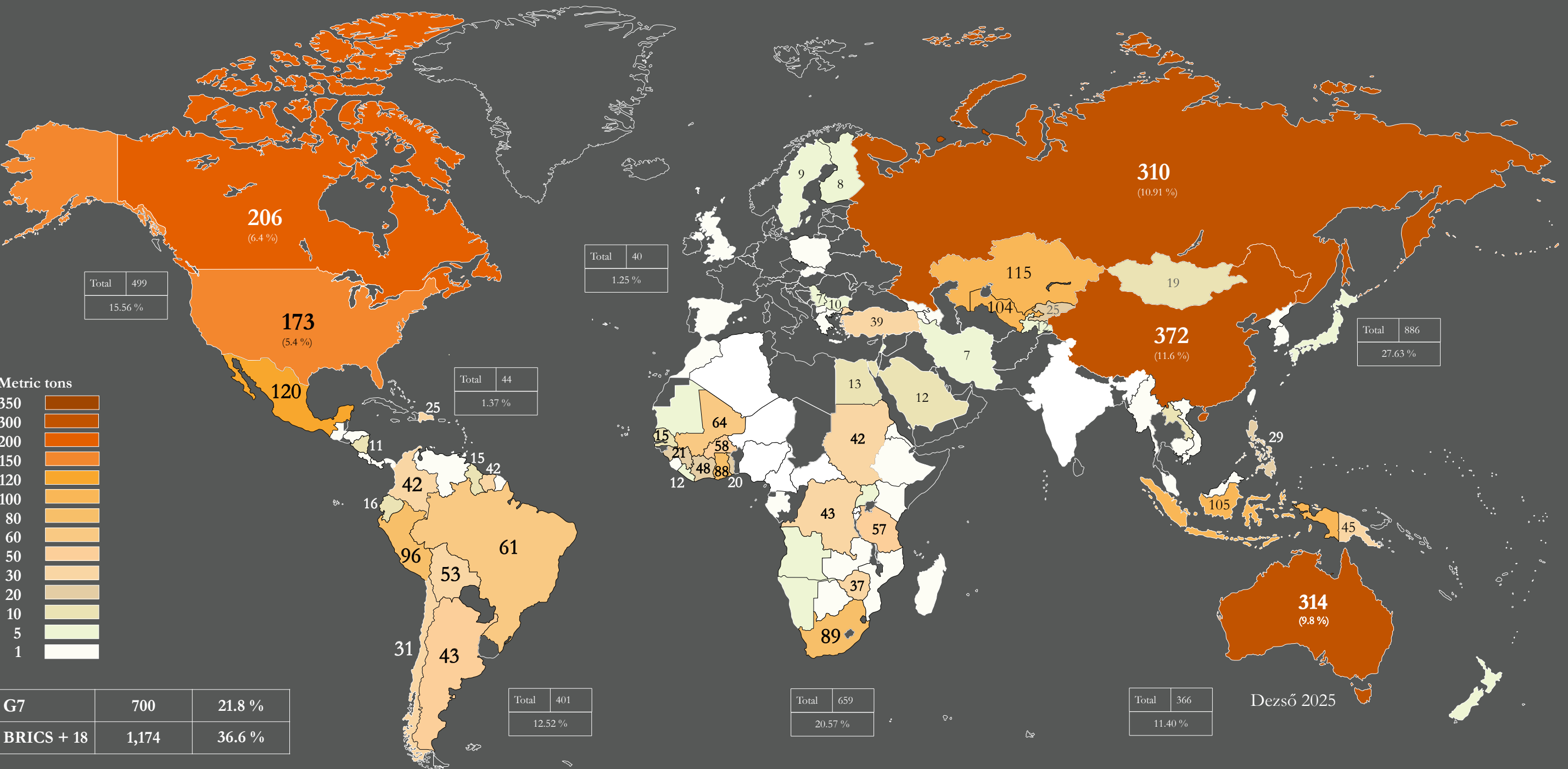
Gold mine production (metric tons)  
(World Gold Council 2023)



9.

## Gold mine production (metric tons)

(U. S. Geological Survey National Minerals Information Center 2022)





	U.S. Geological Survey		World Gold Council	Gold Focus 2024
	2021	2022	2023	2023
Europe				
Bulgaria	9.50	10.00	9.7	9.7
Finland	9.08	8.39	9.0	9.0
France				
Greece	2.20	3.0		
Germany	61.85			
Italy				
North Macedonia	0.50			
Poland	0.76	0.80		
Russia	313.83	310.00	321.8	321.8
Serbia	1.66	7.29		
Slovakia	0.30	0.39		
Spain	1.40	1.40		
Switzerland	2.23			
Sweden	8.80	8.80	6.7	
UK	0.05	0.05		
Other			14.0	20.6
Subtotal 1 (with Russia)		350.12	361.2	
Proportion		10.91 per cent	9.9 per cent	
Subtotal 2 (without Russia)		40.12	39.4	39.3
Proportion		1.25 per cent	1.1 per cent	
Central Eurasia				
Armenia	2.50	4.00		
Azerbaijan	3.34	3.17		
Georgia	3.51	4.90		
Kazakhstan	114.84	115.00	86.3	86.3
Kirgisistan	24.90	25.33	25.5	25.5
Tajikistan	8.07	11.90		
Türkiye	39.29	39.00	36.5	36.5
Uzbekistan	103.60	104.00	119.6	119.6
Subtotal		307.32	267.9	267.9
Proportion		9.58 per cent	7.34 per cent	7.34 per cent
Middle East				
Iran	7.00	7.00		
Lebanon	8.00			
Saudi Arabia	12.41			
UAE	—	—	—	—

Subtotal	27.413			
Proportion	0.8 per cent		0 per cent	
Assia				
Burma	0.77	0.77		
Cambodia	1.40	3.30		
China	328.98	372.04	378.2	378.2
India		1.20		
Indonesia	65.90	105.46	132.5	132.5
Japan	7.50	7.50		
Laos	9.94	9.90	8.8	8.8
Malaysia	1.80	1.80		
Mongolia	19.05	19.00	14.9	14.9
North Korea	1.00	1.00		
Philippines	25.33	29.03	40.8	40.8
South Korea	0.16	0.12		
Thailand				
Vietnam	0.60	0.60		
Other			49.8	49.8
Subtotal		551.74	625.0	625.0
Proportion		17.20 per cent	17.14 per cent	17.14 per cent
Oceania				
Australia	315.05	313.87	293.8	293.8
Fiji	1.10	0.58		
New Zealand	5.81	5.80	6.1	6.1
Papua New Guinea	45.00	45.00	41.3	41.3
Solomon Islands		0.54		
Other			2.0	2.0
Subtotal		365.80	343.2	343.2
Proportion		11.40 per cent	9.41 per cent	9.41 per cent
Africa				
Algeria	0.11			
Botswana	0.64	0.42		
Burkina Faso	45.00	58.13	98.6	98.6
Burundi	0.56	0.04		
Cote d'Ivoire	21.00	48.00	51.5	51.5
Egypt	12.91	13.71		
Eritrea	4.40	4.20		
Ethiopia	3.48	3.48		
Gabon	0.10	0.10		

Ghana	87.64	88.00	135.1	135.1
Guinea	13.66	21.23	64.9	64.9
Cameroon	0.33	0.30		
Central African Republic	0.85	1.00		
Congo (Kinshasa)	43.00	43.00	45.4	45.4
Kenya	0.39	0.56		
Liberia	7.80	11.70	19.9	19.9
Madagascar	2.10	1.50	15.9	15.9
Mali	50.65	64.00	105.0	105.0
Mauritania	8.10	19.30	21.8	21.8
Morocco	0.14	0.14		
Mozambique	0.76	1.26		
Namibia	7.10	6.81		
Niger	2.00	2.00	33.4	33.4
Nigeria	0.16	0.35		
Rwanda	2.90	2.90		
Senegal	14.13	15.80	17.1	17.1
Sierra Leone	0.12	0.06		
South Africa	105.18	88.88	104.3	104.3
Sudan	85.10	41.80	72.5	72.5
Tanzania	48.40	56.94	52.0	52.0
Togo	20.00	20.00		
Uganda	9.60	3.20		
Zambia	3.98	3.40		
Zimbabwe	31.47	37.35	46.6	46.6
Other			120.0	120.0
Subtotal		659.608	1004.0	1004.0
Proportion		20.57 per cent	27.53 per cent	27.53 per cent
North and Central America				
Costa Rica	4.60	0.86		
Canada	174.97	205.83	191.9	191.9
Cuba				
Dominican Republic	31.80	25.00	17.6	17.6
Guatemala	0.20	0.20		
Honduras	2.84	2.80		
Mexico	111.40	120.00	126.6	126.6
Nicaragua	11.14	11.00		
Panama	4.40	4.40		
USA	173.00	173.00	166.7	166.7
Subtotal		543.09	502.8	502.8
Proportion		16.93 per cent	13.79 per cent	13.79 per cent

South America				
Argentina	53.09	43.00	39.1	39.1
Bolivia	42.04	53.28	48.4	48.4
Brazil	89.98	61.00	86.3	86.3
Chile	38.45	30.96	35.4	35.4
Colombia		42.14	67.4	67.4
Ecuador	12.61	16.00	23.1	23.1
French Guiana	1.18	0.91		
Guyana	15.52	15.12	17.4	17.4
Peru	98.40	96.74	128.8	128.8
Suriname	18.38	41.80	26.8	26.8
Uruguay	0.09			
Venezuela	0.48	0.48	30.0	30.0
Other			21.9	21.9
Subtotal		401.459	542.1	542.1
Proportion		12.52 per cent	14.8 per cent	14.8 per cent
Total		3,206.5	3,646.1	

Figure 26. World gold production (BRICS+18 in brown, G7 in blue, figures in tonnes).  
SOURCE: US Geological Center (<https://www.usgs.gov/centers/national-minerals-information-center>);  
World Gold Council (<https://www.gold.org/goldhub/data/gold-production-by-country>);  
Gold Focus 2024. Newman et al. (2024).

Global gold production by region/continent				
	US Geological Survey		World Gold Council	
	tonnes	per cent	tonnes	per cent
Europe	40.13	1.25	39.4	1.1
Russia	310.00	10.91	321.8	8.8
Central Eurasia	307.33	9.58	267.9	7.3
Middle East	27.41	0.80		
Asia	551.74	17.20	625.0	17.1
Oceania	365.80	11.40	343.3	9.4
Africa	659.60	20.57	1004.0	27.5
North and Central America	543.10	16.93	502.8	13.8
South Amerika	401.46	12.52	542.1	14.9
Total	3,206.6		3,646.1	

Figure 27. Global gold production by region/continent.  
SOURCE: US Geological Survey (<https://www.usgs.gov/centers/national-minerals-information-center>);  
World Gold Council (<https://www.gold.org/goldhub/data/gold-production-by-country>)



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
BRICS+5+13										
Russia	252.7	255.3	262.4	280.7	295.4	327.2	331.7	330.9	330.0	321.8
China	462.0	460.3	463.7	429.1	404.1	383.2	368.3	332.0	375.0	378.2
India	1.6	1.4	1.4	1.5	1.5	1.9	1.2	1.2		
Brazil	90.4	95.4	98.9	95.4	97.0	100.0	98.9	93.1	86.6	86.3
South Africa	168.6	157.0	155.0	147.3	126.1	113.2	102.5	113.6	92.6	104.3
Subtotal	975.3	969.4	981.4	954.0	924.1	925.5	902.6	870.8	884.2	890.6
Iran	3.3	3.5	3.7	7.0	7.6	8.5	7.0	7.0		
UAE	—	—	—	—	—	—	—	—		
Egypt	11.7	13.6	17.1	16.9	14.7	14.9	14.0	12.9		
Ethiopia	12..0	9.0	8.6	5.4	3.5	3.5	3.5	3.5		
Saudi Arabia — pending	4.9	5.0	7.0	10.3	12.9	12.6	11.8	12.4	11.4	
Subtotal	31.9	31.1	36.4	39.6	38.7	39.5	36.3	35.8	(36)	(36)
Algeria	0.08	0.10	0.10	0.13	0.12	0.05	0.071	0.110		
Belarus	—	—	—	—	—	—	—	—		
Bolivia	34.7	22.1	21.8	28.6	31.3	42.0	23.2	45.7	53.4	48.4
Indonesia	93.5	115.1	118.4	117.6	153.0	92.3	100.9	104.9	131.8	132.5
Cuba	—	—	—	—	—	—	—	—		
Kazakhstan	42.6	52.0	58.7	67.2	73.9	74.6	79.2	76.6	81.9	86.3
Malaysia	4.3	4.7	2.2	2.1	2.5	3.1	1.7	1.8		
Nigeria	0.01	0.02	0.02	0.07	0.03	0.16				
Thailand	—	—	—	—	—	—	—	—		
Türkiye	31.2	28.2	24.4	24.7	22.9	37.1	41.5	39.4	30.9	36.5
Uganda	3.0	3.0	3.0	2.5	1.5	2.4	3.2	3.6		
Uzbekistan	79.5	79.0	90.0	91.1	91.6	93.2	100.2	108.2	110.8	119.6
Vietnam	0.56	0.54	0.58	0.56	0.56	0.54	0.55	0.60	0.60	
Subtotal	289.46	304.77	319.20	334.57	377.42	345.45	350.52	380.91	409.4	423.3
Total	1,296.66	1,305.27	1,337.0	1,328.17	1,340.22	1,310.45	1,289.42	1,287.51	1,329.6	1,313.9
G7										
USA	210.0	216.7	229.1	236.3	222,6	200.4	193.4	186.8	172.2	166.7
Canada	151.2	157.7	163.1	171.2	191,9	185.2	173.3	192.9	194.5	191.9
Germany	—	—	—	—	—	—	—	—		
France	—	—	—	—	—	—	—	—		
Italy	—	—	—	—	—	—	—	—		
United Kingdom	—	—	—	—	0,003	0.05	0.02	0.05		
Australia	274.0	279.2	287.7	292.5	313,0	325.1	328.0	307.2	306.3	293.8
Total	635.2	653.6	679.9	700.0	727,5	710.7	694.7	686.9	673.0	652.4

Figure 28. Global gold production (BRICS+18 versus G7) with time series data (2104–2023).

SOURCE: Gold Focus 2024. Newman et al. (2024), 21–22.

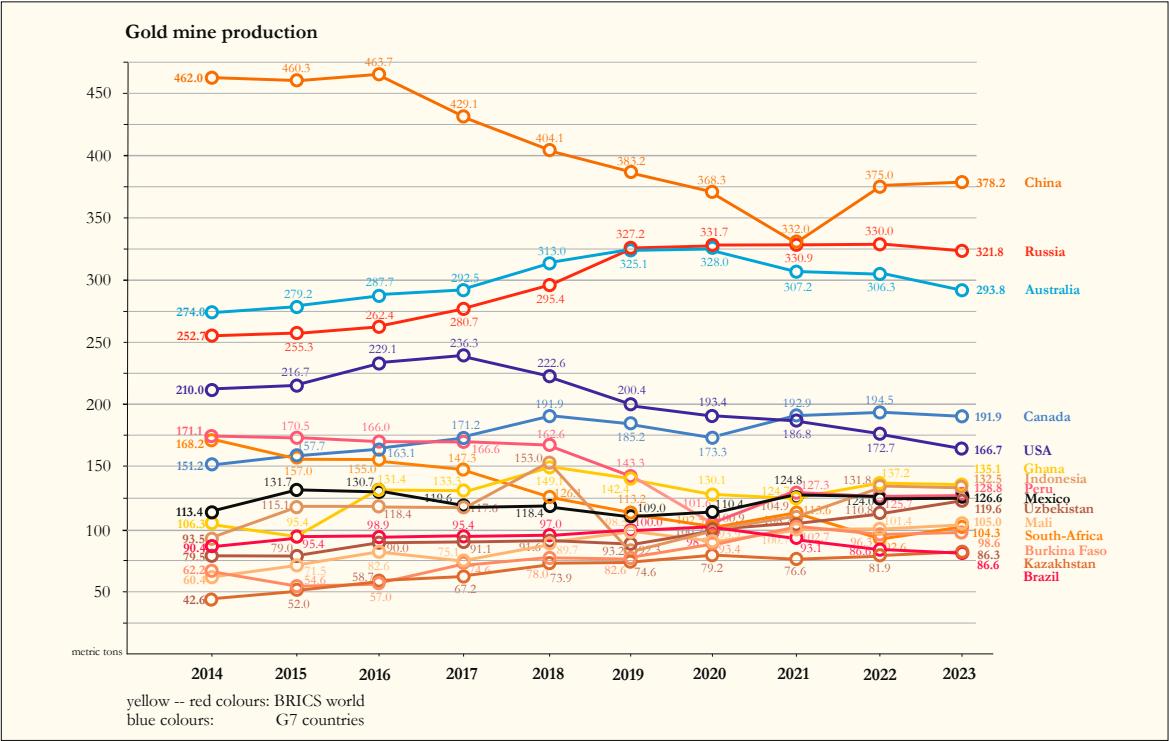


Chart 1. Gold produced by the world's largest gold producers, with a focus on production in the G7 and BRICS+18 countries

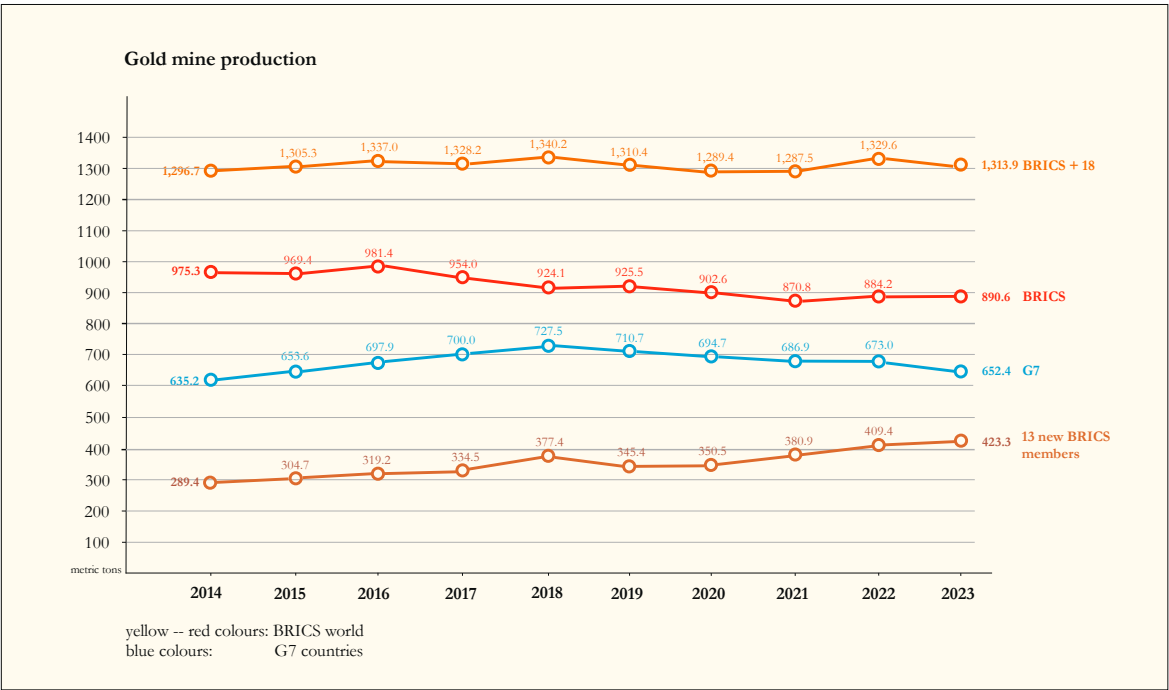


Chart 2. Volume of gold production in the G7 and BRICS+18 countries



Coin card drawn by Bonifacio Bembo for the Tarot deck of the Visconti – Sforza Duchy of Milan (mid-15th century).





# 5

## Conclusion

Simon Vouet, *Allegory of Wealth*  
(between 1625 and 1650). Louvre Museum,  
Paris, France



It is conceivable that in a geopolitically and economically unstable and changing world, where traceable shifts in the centre of gravity (e.g., the sanctions on Russia, the blocking of its foreign exchange reserves, and its exclusion from SWIFT) will force global actors to begin strategic planning (see Chapter 1 for details), a stable, universally accepted unit of payment, which can be a link above and between national currencies, will be needed—and this could be gold.

5.1 BRICS WORLD GOLD-BASED DIGITAL CURRENCY<sup>102</sup>

This was identified earliest by the BRICS countries (BRICS+18), who are far ahead of the ‘Global West’ in terms of population and GDP (*Figures 3–4*), but whose national currencies are still under-represented in world trade, 83 per cent of which is settled in US dollars.

For the BRICS countries, a gold-based digital currency could be the solution, eliminating all the disadvantages of trading within the BRICS national currency system. So there is a good chance that one of the foundations of BRICS reasoning is not to sort out the diverse national currencies within the BRICS currency system, to elevate a leading BRICS currency to the status of a common benchmark within the system that all other countries must accept, but much rather to develop a new system that all BRICS countries can accept:

1. Developing the principles for a new gold-based digital currency.
2. To be adopted by all BRICS countries.
3. Within this system, the value of each BRICS country’s currency should be benchmarked against the gold-based BRICS digital currency, creating the equilibrium in a new settlement system.
4. It must be open, acceptable, and even attractive to countries outside the BRICS world.
5. It needs a transfer system to replace SWIFT, at least within the BRICS world, which could be the BRICS Cross-Border Payment Initiative (BCBPI)<sup>103</sup>, but also reform the international monetary and financial system (IMFS).<sup>104</sup>

It would be even better if this gold-based digital currency operated within a central bank digital currency (CBDC) system set up by central banks, where central/national banks and their gold reserves would guarantee the stability of the system.

<sup>102</sup> See Alexej Jordanov in MIDDELKOOP–MARSH 2024.

<sup>103</sup> See in particular the following points of a policy study by the Russian BRICS Presidency: ‘7) Payments system could be protected from external influence by putting central banks in the middle of transactions. Establishing direct links between individual countries’ central banks may minimize risks; in essence this mechanism builds on the approach that commercial banks continue to utilize the correspondent network that is linked via the central bank. This means that no single commercial entity that is part of the network can be excluded from the system as that would entail restricting the central bank itself. 8) BRICS Cross-Border Payment Initiative (BCBPI) project offers a potential option for cross border settlement. The Bank of Russia as the acting Chair of the BRICS Payment Task Force has presented to the BRICS countries’ central banks a proposal to explore the establishment of a common multilateral settlement platform based on modern technologies named BCBPI – the new supranational infrastructure could greatly reduce risks and accelerate cross-border payments initiatives.’ YAKOV AND PARTNERS 2024.

<sup>104</sup> KAZAN DECLARATION 2024, SECTION 12.

Such a digital (central bank) currency (currency system) could have major advantages in addition to replacing the US dollar. Even if it saves only 1–2 per cent per transaction, it could be a huge amount<sup>105</sup>, moreover, it cannot be a means of exerting political pressure on other powers through monetary regimes (weponization) and can set a new arc in the global financial world in its partial or total independence from previous regimes. This scenario, which has been suggested by many (and has certainly been layed out on the BRICS drawing board), fits in with the suggestion of this paper that the transformation of the existing equilibria will require unorthodox methods, the introduction of new rules, and the creation of a new playing field where the emerging BRICS world can compensate for the dominance of the ‘Global West’ and continue or restart the global chess game on terms more favourable to it.

5.2 THE GOLD-BASED DIGITAL CURRENCY OF THE ‘GLOBAL WEST’

There is a lively debate in the ‘Global West’ about

1. the possible future of ‘re-importing’ the gold standard<sup>106</sup> (post-canonical phase);
2. the introduction of a central bank digital currency (CBDC);<sup>107</sup>
3. and the creation of a hybrid (post-canonical) system, a gold-based central bank digital currency.<sup>108</sup>

The two projects (the possible revival of the gold standard in some form or other and digital money, above all the central bank digital currency) seem to be running independently of each other, but the ripples generated by the renewed role of gold seem to be being channelled by the planners on the drawing board into the gold-based central bank digital currency.

There are a number of pitfalls to the implementation of this system (e.g., cross-border transactions need to be safely delivered not only in a homogeneous system but also to countries outside the system), but it seems to have been identified by both major players (‘Global West’ and BRICS+18) as one potential answer to the challenges of the future.

The question is what and how much credibility needs to be built up behind the CBDC to gain the trust of domestic and international actors. This confidence can come from two sources, the ‘state guarantee’ and the size of the gold reserve. Therefore, the accumulation of gold in the form of central bank reserves could play a crucial role in establishing the new system and guaranteeing its stability. In determining the pace of planning and ad absurdum implementation, at least two things must be taken into account:

1. According to the ‘publicly available’ audited data, the ‘Global West’ still has a decisive superiority in the size of gold reserves (71.31 per cent versus 25.51 per cent, *Figure 14, Map 4*).
2. The ‘Global West’ dominates world trade through the US dollar and SWIFT (83 per cent).

<sup>105</sup> See Alexej Jordanov in MIDDELKOOP–MARSH 2024.

<sup>106</sup> See, in particular, two papers by the Research Department of the Federal Reserve Bank of the United States in Philadelphia: ‘A Model of the Gold Standard, Working Papers’, in FERNÁNDEZ–VILLAVÉRDE–SANCHES 2022, 1–27; ‘PRICE-LEVEL DETERMINATION UNDER THE GOLD STANDARD’, in FERNÁNDEZ–VILLAVÉRDE–SANCHES 2024, 1–47.

<sup>107</sup> See the first two chapters of a study by OMFIF: ‘Introduction: Why Central Banks Are Considering Digital Currency’, Chapter 1; ‘Characteristics of CBDC’, Chapter 2, in ORTLIEB (2021), 4–10.

<sup>108</sup> See chapter 6 of the OMFIF study cited above: ‘Conclusion: Future of Digital Money and Gold’, in ORTLIEB 2021, 19.



## Conclusion

3. A significant part (57 per cent) of the world's foreign exchange reserves are still in US dollars and therefore sanctionable (weponization of USD).
4. At the same time, the world demographic trends (here only in terms of market size) do not play to the advantage of the 'Global West' (Figure 3).
5. Furthermore, the position of the 'Global West' in the production of total world GDP is deteriorating year by year (BRICS+18 world has taken the lead, Figure 2), which will have the effect of upsetting the balance of economic power in favour of the 'Global West'.

Therefore, the 'Global West' must make the following efforts:

6. It has to develop the framework for a new global monetary logic, at least at the drawing board, in conditions favourable to it.
7. It has to design the new CBDC system under favourable conditions, if possible on a gold basis, because this seems to be the composite (post-canonical hybrid) solution of the future that can finally bring gold—the most abundant in the 'Global West'—back into the equation and the 'Global West', with its gold dominance, can insert the gold component into the equation in the way that is most favourable to it.
8. Global trust in gold does not require a government guarantee, so it is a value that can be used by everyone and every country—regardless of how their economy and national currency performs.
9. In an international environment that is changing day by day, and with the negative trends for the 'Global West', in particular for the United States, being considered as a serious risk (over 5 per cent probability), President of the United States Donald Trump has a strong vision to shape the international political, economic, and market environment in order to at least halt the decline of the US and the 'Global West'.

## 5.3 STABILITY INDEX

The present author considers it a worthwhile suggestion to incorporate the various measures of the gold reserves of individual countries into international credit rating systems or into a 'stability index' that is partially or fully independent of the latter, until the above changes (CBDC) become widespread:

1. Net gold reserves (in tonnes) (Figure 21, first column: Hungary is ranked 32nd in the world ranking).
2. Per capita gold reserves (in grams) (Figure 21, second column: Hungary is 18th in the world ranking).
3. Gold reserves as a percentage of total reserves (ForEx+gold) (Figure 21, third column: Hungary is 24th in the world ranking).
4. The ratio of the value of gold reserves to the sum of GDP (in per cent) (Figure 22: Hungary is 11th in the world ranking).



Such an index can be a useful compass for building investor confidence. Until the United States, Germany, Italy, and France have thousands of tonnes of gold reserves, accounting for more than 70 per cent of their total reserves (Figure 8), the economies of these countries will be anchored to the ground by thousands of tonnes of gold and protected from various storms. Thus, we have no idea how the HUF exchange rate would be affected if Hungary's significant gold reserves were not 110 tonnes but, say, 500 tonnes.

On the grounds of principle, the author of this paper has not relied on the advantages and disadvantages of artificial intelligence.

The approach used in this study is not economic but historical/geostrategic, with all its advantages/freedoms and disadvantages. There may be some 'difficult to understand' elements/thoughts from an economic point of view. But, if, as the expert reader progresses in reading the text, the feeling arises in their mind that the 'difficult to understand' elements/thoughts are beginning to form a coherent picture, ad absurdum, a coherent system of an alternative approach, or if I have made them think at least, I have achieved my goal.

BIBLIOGRAPHY

		FERNÁNDEZ-VILLVERDE – SANCHES 2024	Fernández-Villaverde, J. – Sanches, D.: Price-Level Determination Under the Gold Standard, pp. 1–47. <i>Federal Reserve Bank, Working Papers</i> , Research Department, Philadelphia
ALIMUKHAMEDOV 2024	Alimukhamedov, K., <i>Gold Investing Handbook for Asset Managers</i> , The World Bank, 2024, <a href="https://documents1.worldbank.org/curated/en/099610302282427760/pdf/IDU136aee178198b114722197d515b4a9f9ef84a.pdf">https://documents1.worldbank.org/curated/en/099610302282427760/pdf/IDU136aee178198b114722197d515b4a9f9ef84a.pdf</a>	GOLDMAN 2024	Goldman, D.: \$10,000 Gold?. <i>Asia Times, Global Risk-Reward Monitor</i> , <a href="https://asiatimes.com/2024/10/10000-gold/">asiatimes.com/2024/10/10000-gold/</a>
BANAI – KOLOZSI – LADÁNYI 2021	Banai, Á. – Kolozsi, P.P. – Ladányi, S., „Az arany szerepe a digitális korban”, <i>Hitelintézeti Szemle</i> 20/3 (2021), pp. 138-146. <a href="https://hitelintezetiszemle.mnb.hu/hsz-20-3-szc2-banai-kolozsi-ladanyi">https://hitelintezetiszemle.mnb.hu/hsz-20-3-szc2-banai-kolozsi-ladanyi</a>	GOSH – LEVIN – MACMILLAN – WRIGHT 2001	Gosh, D. – Levin, E. J. – Macmillan, P. – Wright, R. E.: <i>Gold as an inflation hedge?</i> . <i>Studies in Economics and Finance</i> 22(1) (2001), 1–25., doi. <a href="https://doi.org/10.1108/eb043380">org/10.1108/eb043380</a>
BARISHEFF 2012	Barisheff, N.: \$10,000 Gold: Why Gold’s Inevitable Rise Is the Investor’s Safe Haven. John Wiley & Sons Inc., 2012	IMF 2024	How did the IMF acquire its gold holdings?, <a href="https://www.imf.org/en/About/Factsheets/Sheets/2022/Gold-in-the-IMF#:~:text=The%20IMF%20holds%20around%2090.5,of%20gold%20at%20designated%20depositories.">www.imf.org/en/About/Factsheets/Sheets/2022/Gold-in-the-IMF#:~:text=The%20IMF%20holds%20around%2090.5,of%20gold%20at%20designated%20depositories.</a>
BAUR – SMALES – LEE 2018	Baur, Dirk G. – Smales, Lee A.: Gold and Geopolitical Risk (2018. 01. 24.), <a href="https://ssrn.com/abstract=3109136">ssrn.com/abstract=3109136</a> , <a href="https://dx.doi.org/10.2139/ssrn.3109136">dx.doi.org/10.2139/ssrn.3109136</a>	JÜTTEN – FALKENBERG 2024	Jütten, Marc – Falkenberg, Dorothee: <i>Expansion of BRICS: A quest for greater global influence?</i> , pp. 1–12, <a href="https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)760368">www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)760368</a>
BECKMAN – CZUDAJ 2012	Beckman, J. – Czudaj, R.: Gold as an Inflation Hedge in a Time-Varying Coefficient Framework. <i>Ruhr Economic Paper</i> , 362 (2012), <a href="https://dx.doi.org/10.2139/ssrn.2144781">dx.doi.org/10.2139/ssrn.2144781</a>	KOLOZSI 2021	Kolozsi, P.P., „Amire nyugodt szívvel büszkék lehetünk - Tényszerűen és csúsztatások nélkül az aranytartalékról.” Magyar Nemzeti Bank, 2021. szeptember. <a href="https://www.mnb.hu/kiadvanyok/szakmai-cikkek/devizatartalek-es-serulekenyseg/kolozsi-pal-peter-amire-nyugodt-szivvel-buszekek-lehetunk-tenyszeruen-es-csusztatások-nelkul-az-aranytartalékrol">www.mnb.hu/kiadvanyok/szakmai-cikkek/devizatartalek-es-serulekenyseg/kolozsi-pal-peter-amire-nyugodt-szivvel-buszekek-lehetunk-tenyszeruen-es-csusztatások-nelkul-az-aranytartalékrol</a>
BERLIN, ET AL. 2023	Berlin, Jessica, et al.: <i>The Blood Gold Report: How the Kremlin is using Wagner to launder billions in African gold</i> . Democracy 21, 2023, <a href="https://bloodgoldreport.com/wp-content/uploads/2023/12/The-Blood-Gold-Report-2023-December.pdf">bloodgoldreport.com/wp-content/uploads/2023/12/The-Blood-Gold-Report-2023-December.pdf</a>	KOLOZSI 2024A	Kolozsi, P.P., „Vissza a jövőbe: a pénz forradalmi átalakulása az aranyra irányítja a figyelmet - Gondolatok az aranypiac és a pénzforradalom lehetséges összefüggéseiről”, Magyar Nemzeti Bank, 2024. május. <a href="https://www.mnb.hu/kiadvanyok/szakmai-cikkek/penzforgalom/kolozsi-pal-peter-vissza-a-jovobe-a-penz-forradalmi-atalakulasa-az-aranyra-iranyitja-a-figyelmet">www.mnb.hu/kiadvanyok/szakmai-cikkek/penzforgalom/kolozsi-pal-peter-vissza-a-jovobe-a-penz-forradalmi-atalakulasa-az-aranyra-iranyitja-a-figyelmet</a>
BUNKER BLOG 2023	Central Banks that Keep Their Gold in Another Country, <i>Report Change of Money</i> (2023. 03. 13.), <a href="https://bunker-group.com/en/blog/central-banks-that-keep-their-gold-in-another-country">bunker-group.com/en/blog/central-banks-that-keep-their-gold-in-another-country</a>	KOLOZSI 2024B	Kolozsi, P.P., „Újra az aranyra figyelnek a jegybankok”, Magyar Nemzeti Bank, 2024. október. <a href="https://www.mnb.hu/kiadvanyok/szakmai-cikkek/devizatartalek-es-serulekenyseg/kolozsi-pal-peter-ujra-az-aranyra-figyelnek-a-jegybankok">www.mnb.hu/kiadvanyok/szakmai-cikkek/devizatartalek-es-serulekenyseg/kolozsi-pal-peter-ujra-az-aranyra-figyelnek-a-jegybankok</a>
CENTRAL BANKING NEWSDESK 2024	Switch to gold standard could stabilise prices – Philadelphia Fed research. Hypothetical return to monetary system would only lead to short-term price movements, study finds. <i>Central Banking Newsdesk</i> (2024. 03. 26.), <a href="https://www.centralbanking.com/central-banks/monetary-policy/7961027/switch-to-gold-standard-could-stabilise-prices-philadelphia-fed-research">www.centralbanking.com/central-banks/monetary-policy/7961027/switch-to-gold-standard-could-stabilise-prices-philadelphia-fed-research</a>	KAZAN DECLARATION 2024	XVI BRICS Summit Kazan Declaration. <i>Strengthening Multilateralism for Just Global Development and Security</i> (2024. 10. 23.), <a href="https://static.kremlin.ru/media/events/files/en/RosOySvLzGajtmx2wYFv0lN4NSPZploG.pdf">static.kremlin.ru/media/events/files/en/RosOySvLzGajtmx2wYFv0lN4NSPZploG.pdf</a>
CONLON – LUCEY – UDDIN 2015	Conlon, T. – Lucey, B.M. – Uddin, G.S.: Is Gold a Hedge Against Inflation? A Wavelet Time-Scale Perspective. <i>Review of Quantitative Finance and Accounting</i> , 2015, <a href="https://dx.doi.org/10.2139/ssrn.2670896">dx.doi.org/10.2139/ssrn.2670896</a>	LAHIRI 2024	Lahiri, Indrabati: <i>Preparing for the worst? Polish central bank becomes biggest buyer of gold</i> . Euronews (2024. 08. 23., 12.14 GMT+2, updated 12.47), <a href="https://www.euronews.com/business/2024/08/23/polish-central-bank-becomes-largest-buyer-of-gold-in-second-quarter">www.euronews.com/business/2024/08/23/polish-central-bank-becomes-largest-buyer-of-gold-in-second-quarter</a>
FERNÁNDEZ-VILLVERDE – SANCHES 2022	Fernández-Villaverde, J. – Sanches, D., „A Model of the Gold Standard, Working Papers”, <i>Research Department, Federal Reserve Bank</i> , Philadelphia, WP 22-33, pp. 1-27.		



**MIDDELKOOP – MARSH 2024** | Middelkoop, Willem – Marsh, David: *Gold and the New World Disorder. Consequences of Central Banking Shifts. 2025–26 Perspectives*. OMFIF (2024. 12. 10.), [www.omfif.org/2024/12/gold-and-the-new-world-disorder/](http://www.omfif.org/2024/12/gold-and-the-new-world-disorder/)

**NEWMAN, ET AL. 2024** | Newman, Ph., et al.: *Gold Focus 2024. Metals Focus*, 2024, ISBN 978-1-7394228-5-1

**NIEUWENHUIJS 2022** | Nieuwenhuijs, Jan: *Europe Has Been Preparing a Global Gold Standard Since the 1970s. Part 2* (2022. 10. 14.), [www.gainesvillecoins.com/blog/europe-preparing-gold-standard-part-2](http://www.gainesvillecoins.com/blog/europe-preparing-gold-standard-part-2)

**NIEUWENHUIJS 2023A** | Nieuwenhuijs, Jan: *Polish Central Bank Buys Gold According to Secret EU Plan* (2023. 12. 06.), [www.thegoldobserver.com/p/polish-central-bank-buys-gold-according](http://www.thegoldobserver.com/p/polish-central-bank-buys-gold-according)

**NIEUWENHUIJS 2023B** | Nieuwenhuijs, Jan: *Dutch Central Bank Admits It Has Prepared for a New Gold Standard* (2023. 11. 17.), [www.gainesvillecoins.com/blog/dutch-central-bank-admits-prepared-new-gold-standard](http://www.gainesvillecoins.com/blog/dutch-central-bank-admits-prepared-new-gold-standard)

**NIEUWENHUIJS 2023C** | Nieuwenhuijs, Jan: *Estimated Chinese Official Gold Reserves Cross 5,000 Tonnes* (2023. 09. 05.), [www.gainesvillecoins.com/blog/estimated-chinese-gold-reserves-cross-5000-tons](http://www.gainesvillecoins.com/blog/estimated-chinese-gold-reserves-cross-5000-tons)

**NORTON 2024** | Norton, B.: *BRICS plans ‘multi-currency system’ to challenge US dollar dominance: Understanding Russia’s proposal*. *Geopolitical Economy* (2024. 10. 19.), [geopoliticaconomy.com/2024/10/19/brics-russia-multi-currency-system-us-dollar/](http://geopoliticaconomy.com/2024/10/19/brics-russia-multi-currency-system-us-dollar/)

**ORTLIEB 2021** | Ortlieb, Pierre, et al.: *Central bank digital currencies and gold: implications for reserve managers*. OMFIF Digital Monetary Institute, [www.omfif.org/wp-content/uploads/2021/11/Central-bank-digital-currencies-and-gold-1.pdf](http://www.omfif.org/wp-content/uploads/2021/11/Central-bank-digital-currencies-and-gold-1.pdf)

**PISTILLI 2024** | Pistilli, M.: *Top 10 Central Bank Gold Reserves (Updated 2024)*, *Investing News Network* (2024. 05. 20.), [www.nasdaq.com/articles/top-10-central-bank-gold-reserves-updated-2024](http://www.nasdaq.com/articles/top-10-central-bank-gold-reserves-updated-2024)

**REUTERS 2024A** | Reuters: *China’s central bank resumes gold purchases after six-month hiatus in Nov* (2024. 12. 07., 3.46 GMT+1), [www.reuters.com/markets/commodities/chinas-central-bank-resumes-gold-purchases-after-six-month-hiatus-nov-2024-12-07/](http://www.reuters.com/markets/commodities/chinas-central-bank-resumes-gold-purchases-after-six-month-hiatus-nov-2024-12-07/)

**REUTERS 2024B** | Reuters: *China finds \$83 billion worth of gold reserves in Hunan* (2024. 11. 21., 9.09 GMT+1), [www.reuters.com/markets/commodities/china-finds-83-billion-worth-gold-reserves-hunan-2024-11-21/](http://www.reuters.com/markets/commodities/china-finds-83-billion-worth-gold-reserves-hunan-2024-11-21/)

**SHAEFFER 2024** | Shaeffer, Kristin N.: *Gold*. In: *U. S. Geological Survey, Mineral Commodity Summaries* (2024. 01.), pp. 82–83, [pubs.usgs.gov/periodicals/mcs2024/mcs2024-gold.pdf](https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-gold.pdf)

**SHARMA 2015** | Sharma, F. S.: *Unleashing the True Potential of Gold- Lessons from Turkey*. ICRIER Think Ink, Indian Council for Research on International Economic Relations, 2015, [icrier.org/publications/unleashing-the-true-potential-of-gold-lessons-from-turkey/](http://icrier.org/publications/unleashing-the-true-potential-of-gold-lessons-from-turkey/)

**THE CONVERSATION 2021** | *How the US government seized all citizens’ gold in 1930s*, [theconversation.com/how-the-us-government-seized-all-citizens-gold-in-1930s-138467](http://theconversation.com/how-the-us-government-seized-all-citizens-gold-in-1930s-138467)

**THORSON 2023** | Thorson, A. G.: *Gold Price Forecast – Expert Predicts \$10,000 Gold and \$300 Silver*. *FXEmpire* (2023. 10. 23.), [www.fxempire.com/forecasts/article/gold-price-forecast-expert-predicts-10000-gold-and-300-silver-1382665](http://www.fxempire.com/forecasts/article/gold-price-forecast-expert-predicts-10000-gold-and-300-silver-1382665)

**USGS 2024** | United States Geological Survey, National Minerals Information Center, International Minerals Statistics and Information, *Minerals Yearbook (Volume III – Area Reports: International)*, [www.usgs.gov/centers/national-minerals-information-center/international-minerals-statistics-and-information](http://www.usgs.gov/centers/national-minerals-information-center/international-minerals-statistics-and-information)

**UMMEL – NEYAGA 2022** | Ummel, Marc – Neyaga, Delphine: *Alarming rise in gold imports from Dubai*. Press release of the Swissaid (2022. 05. 17.), [www.swissaid.ch/en/media/grosses-risiko-von-russischem-goldimport/](http://www.swissaid.ch/en/media/grosses-risiko-von-russischem-goldimport/)

**UMMEL – SCHULZ 2024** | Ummel, Marc – Schulz, Yvan: *On the Trail of African Gold: Quantifying Production and Trade to Combat Illicit Flows*. Swissaid (2024. 05.), [www.swissaid.ch/en/articles/on-the-trail-of-african-gold/](http://www.swissaid.ch/en/articles/on-the-trail-of-african-gold/)

**WORLD GOLD COUNCIL 2024** | *The ECB and gold*, [www.gold.org/what-we-do/official-institutions/central-bank-gold-agreements/european-central-bank-and-gold](http://www.gold.org/what-we-do/official-institutions/central-bank-gold-agreements/european-central-bank-and-gold)

**YAKOV AND PARTNERS 2024** | *Improvement of the International Monetary and Financial System, (BRICS Chairmanship Research – BRICS 2024 Russia*. Yakov and Partners, [yakovpartners.ru/upload/iblock/9c2/ci594n0ysocxuukw7iliw6qtr4xz6cc4/BRICS\\_Research\\_on\\_IMFS.pdf](http://yakovpartners.ru/upload/iblock/9c2/ci594n0ysocxuukw7iliw6qtr4xz6cc4/BRICS_Research_on_IMFS.pdf)



---

Manuscript closed on April 25, 2025.



