4

The Measure of Mistrust

African Artisanal Gold Mining and the Geopolitics of the Barbarous Relic

Keith Breckenridge

In conversation and in print, Vishnu Padayachee was fond of elevating professional economists who had completed quantitatively demanding degrees and worked in the real economy (Padayachee and Sender 2018: 150) above the ranks of other academics and activists. Who can blame him? Yet this admiration for the professional quantitative expertise of the economists had few meaningful echoes in his own thinking. Vishnu's intellectual interests were intensely scholastic and historical, an aptitude most obvious in the obsessive reconstruction of the events and drivers of the African National Congress's (ANC) economic policy that produced *Shadow of Liberation* (Padayachee and Van Niekerk 2019). He was also a prodigious collector and reader of old books, with a specialist's familiarity with the intellectual history of South African economics. His life and his politics gave him a distinctive interest in a cluster of problems that have defined the economic history of this country: the mining corporations, central banking, the gold standard, Keynes's theories of monetary policy and their weak local appeal, and the global effects of Indian monetary history in shaping all of this. In a string of papers written with Bradley Bordiss, Keith Hart and Jannie Roussouw he produced a set of arguments that will shape the future understanding of South African capitalism (Bordiss and Padayachee 2011; Hart and Padayachee 2013; Padayachee and Bordiss 2013, 2015; Padayachee and Rossouw 2019). In each of these areas – the politics of gold mining, the obsessions of South African central bankers, the social and intellectual foundations of Afrikaner capitalism – I think there is plenty of opportunity for productive and ongoing debate.

In this chapter I want to examine the monetary history of gold, which lies at the heart of the critique of hard money, and in particular the optimistic belief in institutional trust that underpins the Keynesian argument for 'scientific monetary policy' (Keynes [1913] 2013b: 51). As Padayachee and Bordiss (2013: 825) observed of his attempts to dissuade Indian politicians from restoring monetary gold, it was Keynes who moved the explanation of British 'success away from the "barbarous relic" of mistrust represented by the gold standard and towards the trust, co-operation and shared resources that was the British banking system'. Yet, after half a century of dollar-supremacy, and a global system of quantitative finance dependent on it, geopolitical conflicts are renewing global demand for gold as money – especially in the countries that Keynes, Lehfeldt and Jevons described as sinks of precious metals (Jevons 1879; Keynes [1913] 2013b). This apparently insatiable 'barbarous' demand for gold as money is shredding the institutional and infrastructural foundations of African economies.

African gold mining

A global system of value, with African mines at its centre, has distinguished monetary gold for more than a millennium. This often-fabulous association between the continent and bullion has cloudy roots in the ancient mining of gold in the Nubian desert, but the stylised fact of the African origins of gold dates from the *hajj* of the Malian emperor, Mūsā, in the fourteenth century. His arrival in Cairo around 1324, with tens of thousands of slave retainers and tons of gold, was measured long afterwards in the metal's depressed price, and an enduring obsession with the geography of the gold mines of the Sahel possessed Arab and Christian geographers. By the fifteenth century gold provided a common regime of value, denominated in the Arab's 4.5-gram *mithqal* measure of gold dust, on both sides of the Sahara, and in much of the Mediterranean region. It was the rumours of the riches of the mines of Senegal and the Gold Coast, fostered by centuries of trade across the desert, that first attracted the Portuguese travelling around the bulge of West Africa in the fifteenth century, and the British and the French who followed them two centuries later (Curtin 1973; Garrard 1982; Gomez 2018; Lopez 1951; Thornton 1992).

In the twentieth century, the epicentre of the global system of value that was organised around gold shifted emphatically south. For almost the entirety of the twentieth century, the international market in gold was a monopoly of the South African deep-level mines, and of the richly capitalised, vertically integrated corporations that owned and managed them. One driver of this strange South African monopoly was the low, fixed price of gold, which remained, under the terms of the Bretton Woods agreement, at $35 per ounce from 1934 to 1971. The remorselessly declining real value of gold in these decades encouraged the South African mines to depress African wages; it also discouraged gold mining everywhere else. Over the course of the 1950s and 1960s the proportion of gold produced outside South Africa fell from 60 per cent to 25 per cent. This meant a continuous decline in mining in the major producing countries like Australia, Canada and the USA. Importantly, it also constrained gold mining on the rest of the African continent – including in the historically important regions of the Sahel, where small-scale mining remained basically unattractive throughout the Bretton Woods era (D'Avignon 2018; Hirsch 1968).

Over the last decade, and especially over the last five years as the price of gold has approached $2 000 an ounce, a new global pattern of gold exploitation has emerged. South Africans have watched with growing despair as thousands of desperate migrants have crept into old and abandoned mines, scavenging their architectures – and the towns, public infrastructures and economies around them – to feed an illegal gold market. The discontent stirred by the local power of these *zama zamas*, combined with the obvious complicity of the South African Police Service, triggered a national crisis in July 2022 after an alleged outbreak of gang rape in Krugersdorp. The national panic, and the grandstanding arrests of more than one hundred illegal miners, all faded away to nothing in yet another collapsed prosecution. Conspicuous official incompetence has only added to the sense of a uniquely South African post-extractive catastrophe (De Greef 2023). But this feeling of a very specific, gold-induced crisis on the Witwatersrand ignores the significance of what artisanal mining is doing elsewhere.

Across Africa, illegal and informal gold mining is reshaping national economies, political power and bureaucratic capacity. Aside from South Africa, illicit mining and the illegal export of gold are significant, and well documented, in twenty countries on the continent. Countries that do not mine much gold, like Burundi, Cameroon, Kenya, Rwanda, Togo and Uganda, are the sites of refineries that channel the metal to the opaque markets in Dubai. Meaningful statistics on the size of the total African workforce employed in illicit gold mining do not yet exist (Geenen, Stoop and Verpoorten 2021; Verbrugge and Geenen 2019), but the national estimates for individual countries are very large: more than half a million people work directly in unlicensed gold mines in each of the twenty countries referred to above. In Burkina Faso, the Democratic Republic of the Congo (DRC), Ethiopia, Ghana, Madagascar, Sudan and Tanzania carefully produced estimates suggest that more than one million people are directly employed in illicit gold mining. In Zimbabwe, serious researchers estimate that the artisanal mining workforce numbers more than one and a half million people. By contrast, the South African *zama zama* workforce is officially estimated at around twenty thousand people; our taxi industry, the most visible and ubiquitous employer in the country, employs about half a million people (International Crisis Group 2020).

One popular explanation for the power of illicit mining has been based on the idea of conflict resources, especially in the gold mining areas of eastern Congo and, more recently, in a huge field across the Sahel, from Darfur in Sudan to the area around the Tasiast open-cast mine in Mauritania (Chevrillon-Guibert, Gagnol and Magrin 2019; Tooze 2023). Financing from new mine resources created, in Paul Collier's influential phrase, a new 'opportunity for rebellion' (Collier and Hoeffler 2004), and the increased prices paid for many mined commodities after 2001 encouraged and resourced widespread violence and civil war (Berman et al. 2017; Collier and Hoeffler 2004). Public enthusiasm for this argument in the wealthy countries – carefully fostered by influential non-governmental organisations (NGOs), and surreptitiously endorsed by mining companies looking to exploit their customers' desire for clean hands – motivated the inclusion of Section 1502 in the Dodd–Frank Act of 2010, which prohibited US companies from sourcing minerals from conflict zones. These restrictions effectively hastened Congolese artisanal miners' move away from the '3Ts' (tin, tungsten and tantalum) to gold (Geenen 2014; Stoop, Verpoorten and Van der Windt 2018). Gold was formally included in the Dodd–Frank restrictions, but, as I will explain, it has financial and material qualities that frustrate the kinds of supply-chain due diligence that NGOs demand of the other metals.

There is, undeniably, something to the argument that artisanal gold mining sustains (and is sustained by) civil war. Well-documented examples of paramilitary control over gold stretch from the Rapid Support Forces' control of the Jabel Amer mines in Darfur (Bartlett 2016) to the Wagner Group's seizure of the Ndassima pit in the Central African Republic (The Africa Report 2023). There is more contested evidence of the Ugandan military's involvement in small-scale mining in the DRC in the 1990s, and, more recently, of Al Qaeda-affiliated militants in Burkina Faso occupying hundreds of mining sites in the north of the country (Autesserre 2012; Lewis and McNeill 2019; UN Security Council Panel of Experts 2001). Yet the scale of mining, with tens of thousands of sites spread across vast territories over long periods of time, makes the claim that conflict is the driver of artisanal mining implausible. Illicit gold mining has become a form of subsistence – and in many places (the DRC, Ghana, Sudan, Madagascar) the main form of non-farming employment. 'How many people in Burkina Faso can pay the school fees without artisanal mining?' the head of Burkina Faso's national union of gold miners asked Reuters' reporters in 2019. 'Our economy is gold mining. There is nothing else' (Lewis and McNeill 2019).

A related popular explanation of the dominance of illicit gold mining on the continent highlights the organising activities of flamboyant gangsters, who look to control production with more constrained enthusiasm for violence than the militias. Some of the journalists' fondness for the flamboyant gangsters is simply the techniques of compelling investigative journalism. As the *Al Jazeera* documentary 'Gold Mafia' (2023) so clearly shows, the shenanigans of figures like Kamlesh Pattni (who was a central actor in Kenya's Goldenberg scandal and remains active in Zimbabwe), Simon Rudland (the flamboyant owner of the Golden Leaf Tobacco Corporation [see amaBhungane 2022b]), and Uebert Mudzanire (an apostolic prophet and President Mnangagwa's envoy) make for compelling storytelling. Kimon de Greef's excellent *New Yorker* story on the *zama zamas* of Welkom is organised around the impressive (and terrifying) entrepreneurship of David 'One Eye' Ndlovu (aka Khombi /Kumbi) (De Greef 2023). Yet, again, there is a danger in overstating the activities of these gangsters to the point of confusion.

In every case, what distinguishes illicitly mined gold (much more than any of the many other illegally traded commodities) is that it is money, and, especially, that it has the secure cross-currency value that states, in particular, require. In Zimbabwe, the central bank conspires with gold smugglers (and money launderers from around the world) to ship the gold produced by thousands of informal miners to the opaque metal markets in Dubai. In Sudan, the control that Hemeidti's Rapid Support Forces exercised over the miners in Darfur from 2016 was endorsed by a prohibition on exports that required all sales of unrefined gold to be made to the central bank. Following the coup in 2019, gold merchants were allowed to sell directly to the markets in Dubai, but their foreign exchange earnings must be sold to the central bank in Khartoum at a 50 per cent discount on the black-market rate. Until it was sanctioned by the US government in 2021, Alain Goetz's refinery in Uganda, which mines no gold, was sustained by the removal of all taxes on gold exports in 2017; the country was exporting more than $2 billion worth of the metal, or roughly 40 per cent of total exports. In South Africa, the Rappa refinery associated with Rudland has been charged by the revenue collector, the South African Revenue Service (SARS), with a scheme to earn value-added tax (VAT) refunds by melting down Krugerrands and then exporting them as raw gold. Rappa has claimed R7 billion in VAT refunds for the export of more than eighty tons of gold (much of it purported to be sourced from artisanal miners in South Africa and elsewhere in the subcontinent). SARS claims that the gold was purchased from the Rand Refinery, as Krugerrand coins, and then illegally melted down into bars to qualify for the refund. The 14 per cent VAT exemption on Krugerrands is allowed because they are legal tender in South Africa, but it is also a crime to destroy or alter them (amaBhungane 2022a).

While scholars, NGOs and policy advisers in rich countries have called for the harmonisation of gold export taxes across the region to discourage smuggling, and for powerful donors to compel African states to formalise small miners' rights, artisanal gold has continued to grow as a ~~powerful~~ driver of institutional mistrust and state failure on the continent. Ghana provides a succinct model of how this works. Thousands of Chinese traders now work with hundreds of thousands of *galamsey* miners who have invaded the gold-bearing hillsides radiating out from Obuasi, the huge property abandoned by AngloGold Ashanti in 2014. Ghana now exports more gold than South Africa (a third of it directly from more than five hundred thousand *galamsey* miners). As is the case in South Africa, these undocumented and untaxed exports are an opaque and potent source of political mistrust. In 2017, after the environmental costs of the widely dispersed alluvial mines became increasingly obvious across the Ashanti region, Ghanaian media began to focus on the lost revenues from licensing and export taxes. Meanwhile, in Washington, AngloGold had filed a formal (and potentially very expensive) dispute against the Ghanaian government for failing to protect the Obuasi property from the *galamsey* miners. In August of that year the state duly began to take a much more aggressive, and paramilitary, approach to controlling the informal miners. But, like the South African drama, the results of the blowhard policing have only weakened public confidence in the state's commitment to legal regulation. This pervasive public misgiving was reflected in a series of video documentaries titled *Galamsey Economy* released between 2019 and the end of 2022, in which a Ghanaian investigative journalist recorded officials taking cash bribes to bypass the newly onerous licensing requirements for small-scale miners (see Arcton-Tettey 2022). This series culminated in November with a public showing of the third episode at the Accra International Conference Centre in which hundreds of viewers were treated to the sight of the deputy finance minister, Charles Adu Boahen (son of the famous historian), apparently accepting a $200 000 cash payment from a putative Gulf investor looking to secure a meeting with Vice President Bawumi (Mcternan and Smith 2017; Mensah 2022). Boahen was promptly sacked by President Akufo-Addo, but the sense that the institutions of democratic government are too weak to withstand the corrupting effects of rents from gold money remained.

Supply

The ubiquity of artisanal mining on the continent prompts careful consideration of the financial and institutional capacities of gold in our current moment. This also suggests that we should rethink the most influential accounts of gold's place in modern capitalism. Some of the most common elements are now blindingly obvious. At nearly $2 000 per ounce, the current international price is eight times what it was at the end of the 1990s, when it reached a low of $250 after two decades of slow and steady decline. The unregulated markets in raw gold in Dubai are drawing exports from across the continent that match new, well-resourced private demand from many countries in the Gulf and across Asia. Recently, Reuters has reported that the refineries in Dubai (which receive no shipments from the continent's formal mining companies) processed nearly four hundred and fifty tons of illicit, unrefined gold during 2016, then valued at more than $15 billion, from African sources (Lewis, McNeill and Shabalala 2019; Lezhnev 2021; Marks and Alamin 2023). In the five years since that report was published, the gold price in dollars has nearly doubled – and many of the currencies of the supplying countries have collapsed.

On the supply side, hundreds of millions of potential workers on the continent have few compelling alternatives for employment. The wages earned by the manual labourers who do the actual mining – in Ghana, Sudan, eastern DRC, South Africa – are impressively constant at less than $5 per day. The $120 per month that millions of artisanal miners now earn across the continent in 2023 compares disconcertingly with the $220 per month (in 2023 dollars) that South African black miners earned (exclusive of their living costs) in 1969, *before* wages began rapidly to increase. Yet artisanal miners today are more likely to compare their work and wages with their kin working in agriculture, where earnings, often shared with a family, are generally closer to $1 per day. There is much, as I will show below, that distinguishes gold mining from the other forms of work available, but one element, in particular, is the seductive possibility of a bounty that will lift workers out of poverty. As the name *zama zama* (try, try) used in southern Africa suggests, one of the real drivers of the mass engagement with artisanal mining is a lottery effect, what Sandra Calkins has described as the dream of the lucky strike: 'that God-willing they would find cars, stone houses, or new wives in the soil' (Calkins 2016; Chevrillon-Guibert, Gagnol and Magrin 2019: 12). What makes this windfall strategy feasible is that workers are generally paid from their own ore. The popular technique of mercury amalgamation (although wasting as much as 50 per cent of the captured gold, and poisoning people and water sources) allows individual workers to control the final stages in the production of dense, high-value ore, and to capture any windfalls, however unlikely they may be (Bansah 2022; Calkins 2016; Crowley 2014; Geenen, Stoop and Verpoorten 2021).

Informal mining is also supported by a uniform network of informal finance. Migrant workers, traders and suppliers lend funds to miners to purchase the devices, chemicals and food they need. In Ghana much of the working finance is now provided by Chinese traders, who collaborate with local miners and land-controlling aristocrats to fund licences, excavators and the trommels used to separate grains of sand; in the Sahel (where the gold can appear in nugget form) migrant workers from the Gulf purchase expensive metal detectors; in the DRC gold traders provide advances for the basic equipment and provisions required by teams of miners; and in South Africa workers also borrow money from traders and gangsters to sustain long periods of work underground (Calkins 2016; Crawford and Botchwey 2017; De Greef 2023; Geenen 2014). It is these informal debts – paired with the hope of the lottery payout – that bind workers to the job under often intolerable conditions, including violence and brutal policing. Unlike the controls over foreign exchange and gold-money, what distinguishes these systems of finance is the absence of formal banks and the state.

A host of official and semi-official rent-seekers thrive above and around the miners' production. Aristocrats, gangs and politicians commonly tax the miners, and – in the DRC and South Africa – they have sometimes forced them to work without pay. The police and the military, everywhere, extract transit payments either directly from the miners, or from the traders and financiers who earn the real money from mining. Intriguingly, the most successful of the apex entrepreneurs who control regional flows of gold draw on elaborate forms of apostolic celebrity to repurpose their wealth. After the public drama of the Goldenberg prosecutions, Kamlesh Pattni was reborn in the Redeemed Gospel Church as Brother Paul, and became a pastor in his own congregation; Uebert Mudzanire, the protagonist in *Al Jazeera*'s gold-washing documentary, is a self-described prophet and founder of the Spirit Embassy ministry in Manchester, UK; David One-Eye Kumbi, sentenced to life imprisonment for murder over a failed gold sale, is organising prayer sessions of his apostolic church in prison. Sara Geenen's informants describe an ex-miner in Kamitunga, eastern DRC, a 'very rich person and role model', who is the president of the miners' association and 'pastor in the "Ministère du combat spirituel"' (Geenen 2014: 186). Nor is the religious reworking of gold mining a pentacostal monopoly: Calkins's informants in Sudan describe 'a divine being, an Islamic God, who was held with planting the nuggets in the ground for certain ordained prospectors' (Calkins 2016). Followers of George Simmel might argue that these entertaining variations on the prosperity gospel work to domesticate and normalise the disturbingly abstract and alienated powers of money – in particular, of gold's ability to act across time and place, without regard to the circumstances of its creation. They will certainly point to the similarities between the universal obsession with money and modern religious revivalism. As Simmel observes, the 'wild scramble for money, the impulsiveness that money – in contrast with other central values, for example landed property – spreads over the economy and indeed over life in general . . . approaches that of a religious mood' (Simmel 2004: 235). But it is also difficult to avoid the feeling that these religious entrepreneurs are simply scoundrels, scrambling for opportunities to leverage their success in raising rents from the gold trade.

The global supply of informally mined gold derives, principally, from a powerful match between the continent's geology and its distinctive demography. Gold is mined in tens of thousands of small sites, by relatively small numbers of workers, in each of these national regions. In eastern DRC, for example, there are more than two thousand seven hundred individual mines, each employing one hundred to two hundred workers. The same pattern of open, mobile, dispersed expansion and settlement is visible wherever gold is found in the ground. Katja Werthmann in Burkina Faso (2009, 2012), Boris Verbrugge and Sara Geenen in the DRC (2019), and Raphaëlle Chevrillon-Guibert, Laurent Gagnol, and Géraud Magrin in Sudan (2019) have separately described open mining frontiers developing beyond the administrative territory of already very weak states that overwhelm the property leases and titles of mining companies. These frontiers of work provide earnings to masses of unemployed and displaced people. Women, forced out of subsistence farming or formal work by conflict or poverty, participate actively on this frontier, with many researchers estimating that they make up a third of the total workforce. This is true in the Sahel, where women work in the mining camps and carry a specific reputational burden not shared with the male workers (Werthmann 2009). In each region an irrepressible human frontier exploits borderlands, surpassing shattered and dangerous transport infrastructures to move gold into well-established smuggling networks. While many states make a formal effort to register and regulate artisanal mines, none of these systems currently works in practice, and the miners (and officials) exploit their indifference to laws that derive from distant administrative centres.

Conflict over property rights arrangements – with contested claims of ownership between the state, aristocrats and local communities that share only their hostility to private, individualised and abstracted titles – creates the opportunity for these new subterranean claims. In occupying and working a claim, artisanal miners assert a strange, new, individualised right to the resources in the ground, but, in asserting this claim, they recognise a range of local institutions and tribunals – typically by paying fees and taxes. 'The gold miners, knowing they are technically "illegally" (according to the Mining Code) working in an industrial concession,' Geenen notes, 'therefore look for other sources of legitimacy' (Geenen 2014; 189; see also Klein 2022; Werthmann 2012). But there are also clear limits to the regulatory authority of these institutions. National and customary laws that have been designed to strengthen the claims of artisanal miners and local rights also contain clauses requiring the rehabilitation of agricultural land, which are observed only in the breach. The property claims of many large, industrial miners have been shredded by similar processes of mobile, distributed, individualised encroachment that dissolve boundaries and repurpose existing infrastructures. AngloGold Ashanti's decade-long unsuccessful struggle to control access to its large (and very expensive) Obuasi property in Ghana is probably the most visible of these processes of dispersed, and irresistible, encroachment. But similar unrelenting white-anting frontiers – where the informal miners and waves of violence have managed to turn employees and officials to their interests – have been documented in Burkina Faso, the DRC and South Africa (Faku 2023; Geenen 2014; Reuters 2022).

Demand

While the demographic and institutional features of African economies are important determinants of the main features of the gold frontier, the most potent drivers lie on the demand side of the global trade: in particular, in the sustained, elevated prices of the metal at source. It is gold's close monetary relationship with the dollar (half a century after the collapse of the fixed Bretton Woods dollar-gold exchange) that has created insatiable demand for the metal. Current demand, it is important to note, derives from countries that Jevons, Keynes and Lehfeldt described as the gold sinks of Asia: China, India, Turkey, Uzbekistan (Jevons 1879; Keynes [1913] 2013b).

The effects of this demand are felt on the gold frontier in an unusually double-sided manner. First, in the elevated, international prices for refined bullion in Dubai that attract miners, traders and smugglers to the gold frontier. And, second, in the local prices of unrefined gold at its source. For – quite unlike the global commodities like cocoa and coffee that African farmers produce, or the other metals that informal miners have generated – unrefined gold earns a price at source that is the same as, and *often higher* than, the metropolitan price (Calkins 2016; Crowley 2014; Geenen 2014; International Crisis Group 2019; Verbrugge and Geenen 2019). This price premium is a consequence of gold's many-sided uses as money – 'the choice it offers', as Simmel observes, 'increases its value' (2004: 212). The compact monetary form of gold in eastern DRC, Johannesburg, or western Sudan has specific additional uses for the illicit movement of private wealth, tax avoidance and, especially, money laundering: gold has an undiscounted capacity to wash the source of wealth, wherever it is generated.

The South African Chamber of Mines and the World Gold Council have long promised to provide a method for metallurgical fingerprinting of refined gold, without success. The most current forms of provenance endorsed by the London Bullion Market Association rely entirely on paperwork from the licensed refineries used by the large mines. These documentation systems have only been in existence since 2012, and cover only a small fraction of the total global supply. Gold passes continuously between jewellery, coins and bars, in private hands. That the Swiss and Emirati refineries, and private and central banks, all have a material interest in maintaining this anonymity makes it unlikely to change (Crowley 2014; Loeb 2018). As Khadija Sherife observed in her recent report, using the Panama Papers, on the transfer of wealth from the DRC, whereas 'currencies are attached to regulatory systems, reserve banks, and, ultimately, nationalities, gold is without identity, borderless and ever valuable' (Sharife 2016). Importantly and distinctively, these special features of gold are more valuable the greater the distance from the highly liquid, opaque, digitised and international financial markets in the metropolitan centres. That the local money supply – in countries like Zimbabwe and the DRC – has often been almost entirely dollarised by the collapse of central bank currencies only adds to the monetary functions and value of gold dust.

Half a century after divorce ended the unhappy marriage that (the reluctant) Maynard Keynes had negotiated with Harry Smith at Bretton Woods, the relationship between gold and the dollar remains geopolitically potent. Global dollar ascendancy, released from the constraints of the fixed price of gold, grew steadily – from the eurodollars of the 1960s and petrodollars of the 1970s to Japanese and Chinese purchases of exploding US government debts in the 1980s. The Federal Reserve Bank's use of dollar swap lines to manage regional liquidity crises after the 2008 crisis arguably created the global 'scientific standard' of central bank-managed money that Keynes had first proposed in 1923 (Keynes 2013a; Skidelsky 2005; Tooze 2018). Yet, this political arrangement, as Keynes well understood, depends on the delicate fabric of trust between banks, nationally and internationally. 'A preference for a tangible gold currency,' he argued in his defence of its prohibition in colonial India, was a 'relic of a time when governments were less trustworthy in these matters than they are now' (Keynes 2013b: 51; Skidelsky 2005: 196).

Yet, (as Keynes was reminded in the bitter negotiations with his American partners in the 1940s) institutional trust, especially across international boundaries, has long been wildly unevenly distributed in the global economy. In most developing countries, the private holders of financial assets have good historical reasons to mistrust the intentions and the capacity of their state-controlled monetary institutions. In many Islamic countries, doubts about the central banks' commitment to the 'scientific standard' are coupled with religious prohibition on interest-bearing assets. For the last twenty years, beginning long before the inflationary crisis in 2018, Turks imported more than one hundred and fifty tons of gold each year, including the largest global imports of gold coins. In much of Keynes's barbaric world, one of the key drivers of these enormous investments is a society-wide convention that sequesters gold wealth in the hands of women. Recently, these long-established conventions for private investments in gold have been bolstered by central bank purchases and by the falling values of dollar-denominated long-term debts (Dempsey 2022; Gülseven and Ekici 2016; Lex Populi 2023).

A more important measure of the enduring potency of geopolitical mistrust has been the return to gold of the central banks with the largest holdings of dollar-denominated assets in the months since the Russian invasion of Ukraine. Twenty-five years after Gordon Brown announced that nearly two-thirds of the gold reserves of the Bank of England would be converted into a 'profit maximizing portfolio of currencies' (The Times 1999), the dependence of the dollar-denominated financial order on the cooperation of states and central banks has suddenly become obvious again. The blocking of nearly $350 billion of Russian sovereign and corporate assets – and the prospect of additional global conflicts in the future – has triggered a historically unprecedented scramble to rebuild gold reserves. The central banks of Asia purchased nearly seven hundred tons in the course of 2023, and their large purchases continue. These sterile assets once again endanger the 'scientific management' of cross-border liquidity crises that obsessed Bagehot, Keynes and Tooze – as they did in the last years of Bretton Woods.

This sudden return to gold is particularly startling, because it comes in the wake of the success of a new monetary 'toolkit' that dominated emerging market economies in the aftermath of the Covid-19 crisis. Tooze has shown that central banks had mastered a common set of tools over the previous decade, which they used to manage the liquidity problems that were triggered by the pandemic and its aftermath: borrow in local currencies; allow foreign exchange markets to manage speculative investment (and firms to manage their risks with interest rate derivatives); accumulate massive foreign reserves to absorb shocks; work with regional trading partners to distribute liquidity problems and solutions; and, in the event of existential crisis, turn back to capital controls (Tooze 2021). Writers in the Bagehot tradition (including Tooze, Keynes and Vishnu Padayachee) will see this evidence that 'practice had moved ahead of theory' as evidence of the pragmatic drivers of modern, scientific monetary policy (Tooze 2021: 166). Yet, the sudden return to gold suggests the frailty of the fabric of institutional trust in the face of geopolitical conflicts. Keynesians will argue, of course, that the real driver of the resurgence of mistrust (and the restoration of the monetary value of gold) is the central bankers' austere interest rate regime that punishes the holders of long-dated dollar-denominated assets. Some of that is, no doubt, important, but it is difficult to imagine the Asian central banks rushing back to US government debt when interest rates begin to settle again. Most unexpectedly, the barbarous relic has re-established itself as one of the key instruments of value outside the metropolitan centres, and Africans, once again, are at the centre of this new financial order.

References

The Africa Report. 2023. 'CAR – Cameroon: An Investigation into the Wagner Group's African Financial Model'. *The Africa Report*, 18 January. https://www.theafricareport.com/275235/car-cameroon-an-investigation-into-the-wagner-groups-african-financial-model/.

Al Jazeera. 2023. 'Gold Mafia: Episode 1: The Laundry Service'. *Al Jazeera Investigations*. https://www.youtube.com/watch?v=evWEuVR1XIs.

amaBhungane. 2022a. 'Gold "Scam" Robs SA of Billions, Says SARS'. *amaBhungane*, 3 February. Blog post. https://amabhungane.org/stories/220203-gold-scam-robs-sa-of-billions-says-sars/.

———. 2022b. 'The Laundry: How Shape-Shifting "Money Launderers" Infiltrated SA Banks (Part One)'. *amaBhungane*, 25 October. Blog post. https://amabhungane.org/stories/the-laundry-how-shape-shifting-money-launderers-infiltrated-sa-banks-part-one/.

Arcton-Tettey, B. 2022. 'Ghana: Large Crowds Throng AICC to Watch "Galamsey Economy" by Anas'. *Ghanaian Times*, 16 November. https://allafrica.com/stories/202211160344.html.

Autesserre, S. 2012. 'Dangerous Tales: Dominant Narratives on the Congo and Their Unintended Consequences'. *African Affairs* 111 (443): 202–22. https://doi.org/10.1093/afraf/adr080.

Bansah, P.K. 2022. 'Ghana's Artisanal Miners Are a Law Unto Themselves – Involving Communities Can Help Fix the Problem'. *The Conversation Africa*, 14 October. https://allafrica.com/stories/202210140001.html.

Bartlett, A. 2016. 'Conflict Extractivism in Darfur's Gold Mines'. *Peace Review* 28 (1): 46–54. https://doi.org/10.1080/10402659.2016.1130378.

Berman, N., M. Couttenier, D. Rohner and M. Thoenig. 2017. 'This Mine Is Mine! How Minerals Fuel Conflicts in Africa'. *American Economic Review* 107 (6): 1564–610. https://doi.org/10.1257/aer.20150774.

Bordiss, B. and V. Padayachee. 2011. '"A Superior Practical Man": Sir Henry Strakosch, the Gold Standard and Monetary Policy Debates in South Africa, 1920–23'. *Economic History of Developing Regions* 26 (sup 1): S114–22. https://doi.org/10.1080/20780389.2011.586411.

Calkins, S. 2016. 'How "Clean Gold" Came to Matter: Metal Detectors, Infrastructure, and Valuation'. *HAU: Journal of Ethnographic Theory* 6 (2): 173–95. https://doi.org/10.14318/hau6.2.013.

Chevrillon-Guibert, R., L. Gagnol and G. Magrin. 2019. 'Les ruées vers l'or au Sahara et au nord du Sahel: Ferment de crise ou stabilisateur?' *Hérodote* 172 (1): 193–215. https://doi.org/10.3917/her.172.0193.

Collier, P. and A. Hoeffler. 2004. 'Greed and Grievance in Civil War'. *Oxford Economic Papers* 56 (4): 563–95. https://doi.org/10.1093/oep/gpf064.

Crawford, G. and G. Botchwey. 2017. 'Conflict, Collusion and Corruption in Small-scale Gold Mining: Chinese Miners and the State in Ghana'. *Commonwealth and Comparative Politics* 55 (4): 444–70. https://doi.org/10.1080/14662043.2017.1283479.

Crowley, K. 2014. 'Deadly Illegal Mining Booms below the City of Gold'. *Moneyweb*, 24 April. https://www.moneyweb.co.za/archive/deadly-illegal-mining-booms-below-the-city-of-gold/.

Curtin, P. D. 1973. 'The Lure of Bambuk Gold'. *Journal of African History* 14 (4): 623–31.

D'Avignon, R. 2018. 'Primitive Techniques: From "Customary" to "Artisanal" Mining in French West Africa'. *Journal of African History* 59 (2): 179–97. https://doi.org/10.1017/S0021853718000361.

De Greef, K. 2023. 'The Dystopian Underworld of South Africa's Illegal Gold Mines'. *The New Yorker*, 20 February. https://www.newyorker.com/magazine/2023/02/27/the-dystopian-underworld-of-south-africas-illegal-gold-mines.

Dempsey, H. 2022. 'Gold Buyers Binge on Biggest Volumes for 55 Years'. *Financial Times*, 29 December. https://www.ft.com/content/e0983ebb-bbe0-4d33-8517-e19fa06e1a77.

Faku, D. 2023. '"Criminal Justice System Failing Miners": Sibanye-Stillwater Says Illegal Mining by Zama Zamas Presents a Growing Material Risk to Its Operations'. *BusinessLIVE*, 30 April. https://www.businesslive.co.za/bt/business-and-economy/2023-04-30-criminal-justice-system-failing-miners/.

Garrard, T.F. 1982. 'Myth and Metrology: The Early Trans-Saharan Gold Trade'. *Journal of African History* 23 (4): 443–61. https://doi.org/10.1017/S0021853700021290.

Geenen, S. 2014. '"Qui Cherche, Trouve": The Political Economy of Access to Gold Mining and Trade in South Kivu, DRC'. PhD thesis, University of Antwerp.

Geenen, S., N. Stoop and M. Verpoorten. 2021. 'How Much Do Artisanal Miners Earn? An Inquiry among Congolese Gold Miners'. *Resources Policy* 70: 101893. https://doi.org/10.1016/j.resourpol.2020.101893.

Gomez, M. 2018. *African Dominion: A New History of Empire in Early and Medieval West Africa*. Princeton: Princeton University Press. https://doi.org/10.1515/9781400888160.

Gülseven, O. and Ö. Ekici. 2016. 'The Turkish Appetite for Gold: An Islamic Explanation'. *Resources Policy* 48 (June): 41–9. https://doi.org/10.1016/j.resourpol.2016.02.006.

Hart, K. and V. Padayachee. 2013. 'A History of South African Capitalism in National and Global Perspective'. *Transformation* 81 (1): 55–85. https://doi.org/10.1353/trn.2013.0004.

Hirsch, F. 1968. 'Influences on Gold Production (Les Influences s'exerçant sur la production de l'or) (Factores Que Influyen Sobre La Producción Del Oro)'. *Staff Papers (International Monetary Fund)* 15 (3): 405–90. https://doi.org/10.2307/3866297.

International Crisis Group. 2019. *Getting a Grip on Central Sahel's Gold Rush*. Africa Report 282. Brussels: International Crisis Group.

———. 2020. *All That Glitters Is Not Gold: Turmoil in Zimbabwe's Mining Sector*. Africa Report 294. Brussels: International Crisis Group. https://www.crisisgroup.org/africa/southern-africa/zimbabwe/294-all-glitters-not-gold-turmoil-zimbabwes-mining-sector.

Jevons, W.S. 1879. *Money and the Mechanism of Exchange*. New York: D. Appleton and Company.

Keynes, J.M. 2013a. *A Tract on Monetary Reform*. The Collected Writings of John Maynard Keynes, Vol. 4. Cambridge: Cambridge University Press.

———. [1913] 2013b. *Indian Currency and Finance*. Cambridge: Cambridge University Press.

Klein, B.I. 2022. 'Local Institutions and Artisanal Mining: Governance Forms in the Goldfields of Madagascar'. *Journal of Rural Studies* 92 (May): 269–83. https://doi.org/10.1016/j.jrurstud.2022.03.030.

Lewis, D. and R. McNeill. 2019. 'Special Report: How Jihadists Struck Gold in Africa's Sahel'. *Reuters*, 22 November. https://www.reuters.com/article/uk-gold-africa-islamists-specialreport-idUKKBN1XW11C.

Lewis, D., R. McNeill and Z. Shabalala. 2019. 'Gold Worth Billions Is Smuggled out of Africa – New Analysis'. *Reuters*, 24 April. https://www.reuters.com/investigates/special-report/gold-africa-smuggling/.

Lex Populi. 2023. 'Gold Shines as Rate Declines Come Closer'. *Financial Times*, 24 March. https://www.ft.com/content/7a4b7737-7ee8-430f-9268-d9681beee733.

Lezhnev, S. 2021. *Conflict Gold to Responsible Gold: A Roadmap for Companies and Governments*. Briefing. Washington DC: The Sentry. https://thesentry.org/reports/conflict-gold-to-responsible-gold/.

Loeb, J. 2018. 'Tracing the Story of "Tainted" Gold'. *Engineering and Technology* 13 (3): 20–5. https://doi.org/10.1049/et.2018.0300.

Lopez, R.S. 1951. 'The Dollar of the Middle Ages'. *Journal of Economic History* 11 (3): 209–34. https://doi.org/10.1017/S0022050700084746.

Marks, S. and M. Alamin. 2023. 'Post-Coup Plan Puts Spotlight on Sudan Army's Economic Empire'. *Bloomberg.Com*, 29 March. https://www.bloomberg.com/news/articles/2023-03-29/post-coup-plan-puts-spotlight-on-sudan-army-s-economic-empire.

Mcternan, B.A. and P. Smith. 2017. 'Galamsey Gamble'. *The Africa Report.Com*, 23 May. https://www.theafricareport.com/814/galamsey-gamble/.

Mensah, K. 2022. 'Ghana: Akufo-Addo Moves Decisively to Sack Ofori-Atta Deputy. Will It Be Enough?' *The Africa Report.Com*, 15 November. https://www.theafricareport.com/260295/ghana-akufo-addo-moves-decisively-to-sack-ofori-atta-deputy-will-it-be-enough/.

Padayachee, V. and B. Bordiss. 2013. 'Barbaric Gold and Civilised Banking: Keynes's *Indian Currency and Finance*. A View from the South after 100 Years'. *International Review of Applied Economics* 27 (6): 822–33. https://doi.org/10.1080/02692171.2013.839501.

———. 2015. 'How Global Geo-Politics Shaped South Africa's Post-World War I Monetary Policy: The Case of Gerhard Vissering and Edwin Kemmerer in South Africa, 1924–25'. *Economic History of Developing Regions* 30 (2): 182–209. https://doi.org/10.1080/20780389.2015.1051027.

Padayachee, V. and R. van Niekerk. 2019. *Shadow of Liberation: Contestation and Compromise in the Economic and Social Policy of the African National Congress, 1943–1996*. Johannesburg: Wits University Press.

Padayachee, V. and J. Rossouw. 2019. '"Volkskapitalisme" in the Transition to Democracy and Beyond'. *International Review of Applied Economics* 33 (1): 150–62. https://doi.org/10.1080/02692171.2019.1524040.

Padayachee, V. and J. Sender. 2018. 'Vella Pillay: Revolutionary Activism and Economic Policy Analysis'. *Journal of Southern African Studies* 44 (1): 149–65. https://doi.org/10.1080/03057070.2018.1405644.

Reuters. 2022. 'Burkina Faso: Gold Boom Vanishes as Militants Advance and Russians Leave'. *The Africa Report.Com*, 28 November. https://www.theafricareport.com/263843/burkina-faso-vanishing-gold-boom-puts-livelihoods-at-risk/.

Sharife, K. 2016. 'Panama Papers Reveal Dubious Behaviour by DRC's Gold Traders'. African Network for Centers of Investigative Reporting. https://panamapapers.investigativecenters.org/drc/.

Simmel, G. 2004. *The Philosophy of Money*, edited by D. Frisby. 3rd edition. London: Routledge.

Skidelsky, R. 2005. *John Maynard Keynes, 1883–1946: Economist, Philosopher, Statesman*. New York: Penguin.

Stoop, N., M. Verpoorten and P. van der Windt. 2018. 'More Legislation, More Violence? The Impact of Dodd-Frank in the DRC'. *PLOS ONE* 13 (8): e0201783. https://doi.org/10.1371/journal.pone.0201783.

Thornton, J. 1992. *Africa and Africans in the Making of the Atlantic World, 1400–1680*. Cambridge: Cambridge University Press.

The Times. 1999. 'All That Glisters Is Not Sense'. *The Times*, 7 July.

Tooze, A. 2018. *Crashed: How a Decade of Financial Crises Changed the World*. New York: Penguin.

———. 2021. *Shutdown: How the Coronavirus Made a Financial Revolution*. New York: Penguin.

———. 2023. 'Chartbook 209# The Sudan Crisis and the Sahel Gold Rush'. Substack newsletter. *Chartbook*, 18 April. Blog post. https://adamtooze.substack.com/p/chartbook-209-the-sudan-crisis-and.

UN Security Council Panel of Experts. 2001. 'Report on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of DR Congo'. *Reliefweb*, 12 April. https://reliefweb.int/report/democratic-republic-congo/report-panel-experts-illegal-exploitation-natural-resources-and.

Verbrugge, B. and S. Geenen. 2019. 'The Gold Commodity Frontier: A Fresh Perspective on Change and Diversity in the Global Gold Mining Economy'. *The Extractive Industries and Society* 6 (2): 413–23. https://doi.org/10.1016/j.exis.2018.10.014.

Werthmann, K. 2009. 'Working in a Boom-Town: Female Perspectives on Gold-Mining in Burkina Faso'. *Resources Policy* 34 (1–2): 18–23. https://doi.org/10.1016/j.resourpol.2008.09.002.

———. 2012. 'Gold Mining in Burkina Faso since the 1980s'. In: *Mining Frontiers in Africa: Anthropological and Historical Perspectives*, edited by K. Werthmann and T. Grätz. Köln: Rüdiger Köppe Verlag.