

SPOTLIGHT ON THE TURKISH GOLD MARKET 2021

August 2021

Contents

Chapter 1 – Introduction	2
Chapter 2 – BIST	4
Chapter 3 – Official Sector	7
Chapter 4 – Investment	10
Chapter 5 - Jewellery	14

Chapter 1

- Unlike many countries specialising in a single or a few areas of gold, Turkey has a well diversified and active gold habitat involving official and private sector.
- The history of gold's usage in daily life in Anatolia goes back at least 5,000 years, anchoring modern day attitudes to gold with ancient traditions.
- The Turkish banking sector has developed a wide range of gold-related banking products, many of which leverage off of physical gold.

Introduction & Summary

Turkey is home to one of the world's most vibrant gold markets. In terms of the key headlines, the country's central bank – Central Bank of the Republic of Turkey (CBRT) – has become increasingly active in the gold market over the past decade or so. This started in 2013 with the introduction of the Reserve Option Mechanism (ROM), which has helped Turkish commercial banks to free up lira liquidity. In 2017, the CBRT then started to buy gold and added a net 325t through to July 2020. After its own gold reserves peaked at 441t, the CBRT embarked on a series of disposals worth 106t in Borsa Istanbul (BIST) between August-December in 2020.

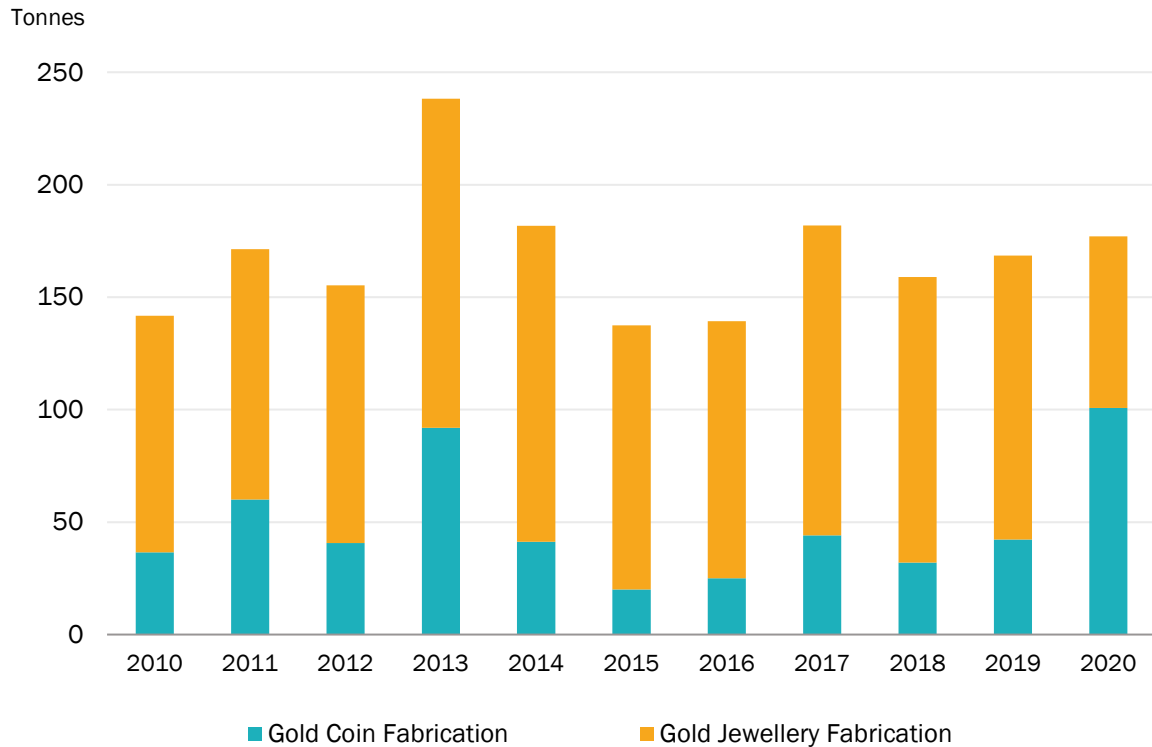
Much of the gold acquired by the CBRT has been imported, which helps explain the elevated level of bullion imports, culminating in last year's record high of over 500t. This gold was brought in through BIST, which serves as the gatekeeper for precious metal imports. Launched in 1993 as the Istanbul Gold Exchange, it merged in 2005 with the Istanbul Stock Exchange to create BIST. The Borsa's remit now extends to ensuring imported gold meets the newly introduced chain of custody legislation.

The infrastructure supporting the Turkish gold market extends well beyond BIST. Of note is the Kuyumcukent industrial complex, which was opened in 2006. Sitting on the outskirts of Istanbul (near the old Atatürk airport), this was partly designed to relocate the trade away from, and so help preserve, the Old City. Its tenants now include all aspects of the supply chain, including one of Turkey's two GDL refineries. The complex is a high-profile example of the long-standing support provided by the Turkish authorities to its gold market.

This infrastructure has also helped Turkey to develop its jewellery export business, at a time when a struggling economy and exceptionally strong lira gold prices have weighed on the domestic jewellery market. As a result, Turkey is now an established top-10 gold jewellery exporter, which accounts for local jewellery manufacturing comfortably outperforming Turkish jewellery consumption.

Even though retail purchases have weakened in recent years, the country has still built up a sizeable above-ground stock of gold jewellery. Known locally as 'under the pillow' gold, this could exceed 3,500t. Over the years, the government has attempted to monetise this gold to help reduce bullion imports and, in turn, benefit the current account deficit. As a result, the authorities introduced a gold monetisation scheme. Although this achieved only modest results, it reached two outcomes. First, it helped to galvanise gold banking in Turkey, paving the way for a raft of gold-related banking products. Second, it acted as a template for other monetisation schemes, notably in India.

Turkish Gold Jewellery and Coin Fabrication



Source: Metals Focus

Less visible, but still extremely important to the inner workings of the country's gold market is the gold accounting system adopted during the early 1970s. First introduced to contend with the effects of rampant inflation, it uses the Milyem system to convert all transactions into units of gold. This helps explain why many family-owned retail jewellers (who dominate the retail landscape) still measure their success by how many kilos of gold they own at year-end. It is also testament to how traditional and more modern principals work together in the Turkish gold market.

Chapter 2

- Borsa İstanbul (BIST) Precious Metals and Diamond Markets (PMDM) has been the cornerstone of the Turkish gold market since its founding in 1995 as the İstanbul Gold Exchange.
- The PMDM is a strictly physical gold exchange, with trading volumes reaching a record high in 2020.
- Since the regulatory change in February 2021, only members of the PMDM of BIST can import standard and non-standard gold bars.

Development of PMDM of Borsa Istanbul

Prior to the abolishment in 1993 of the Gold Control Act and amendments in Decree numbered 32 concerning the “Protection of the Value of Turkish Currency”, determination of the gold price, gold imports and exports were heavily regulated by the government. Following the liberalisation, 1995 saw the opening of the İstanbul Gold Exchange (IGE), which allowed members of the IGE and the CBRT to import gold.

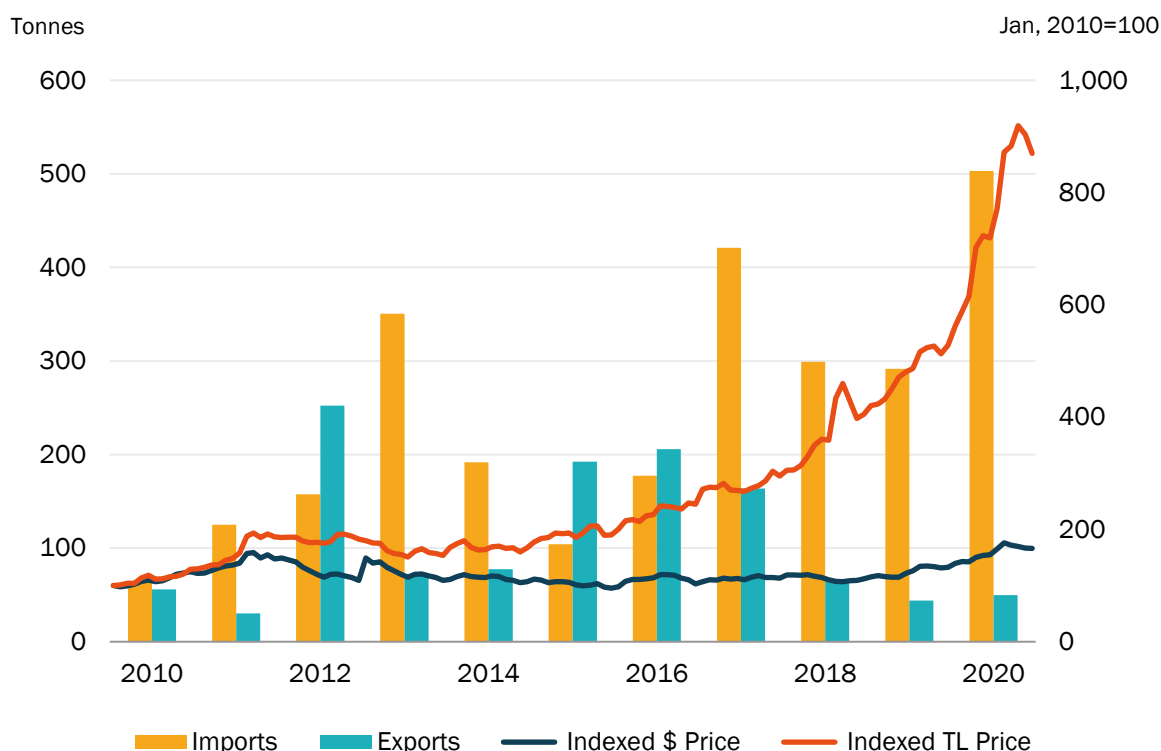
The freeing up of the gold trade paved the way for other changes, which contributed to a period of rapid growth across much of the Turkish gold market. As a result, there are now an estimated 5,000 fabricators, of which more than 50 employ between 200-1,500 workers, with a further 35,000 gold retail outlets employing around 250,000 people. Finally, some 12,000 work in the country’s gold mining industry, which in 2020 produced 41.5t of gold.

After the formation of the IGE and abolishment of the import duty, the IGE facilitated the flow of gold, adhering to international standards, without limitations. This helped the industry to become more transparent, with flows in and out of the country becoming clearer as there was no longer an incentive to unofficially bring in gold. In terms of the shipments themselves, gold bullion exports have averaged 134t/y during the past five years (excluding COVID-affected 2020), while imports during the same window averaged 259t/y.

The IGE further helped promote the development of several gold-based financial products. In particular, it allowed banks to trade in physical gold in a more structured way as opposed to using the over-the-counter (OTC) market. The IGE also helped the trade to take advantage of arbitrage opportunities, for example, during times when İstanbul has traded at a sizeable premium or discount to London. In other words, through membership of the Exchange, the IGE brought together the Turkish commercial banks, gold bullion dealers in Kapalıçarşı (where most tend to be headquartered) and ultimately the CBRT.

After the IGR and İstanbul Stock Exchange merged in 2013, forming the Borsa İstanbul (BIST), Precious Metals and Diamond Markets (PMDM) was established to take responsibility for the activities of the former IGE. Currently, only members of the PMDM of BIST can import standard (of at least 995 purity) and non-standard gold bars. However, prior to regulatory changes in February 2021 (see below), most non-standard gold had been imported outside the exchange to avoid exchange trading and withdrawal fees.

Turkish Gold Bullion Imports/Exports



Source: Metals Focus

Key Changes in Legislation & Tax Framework

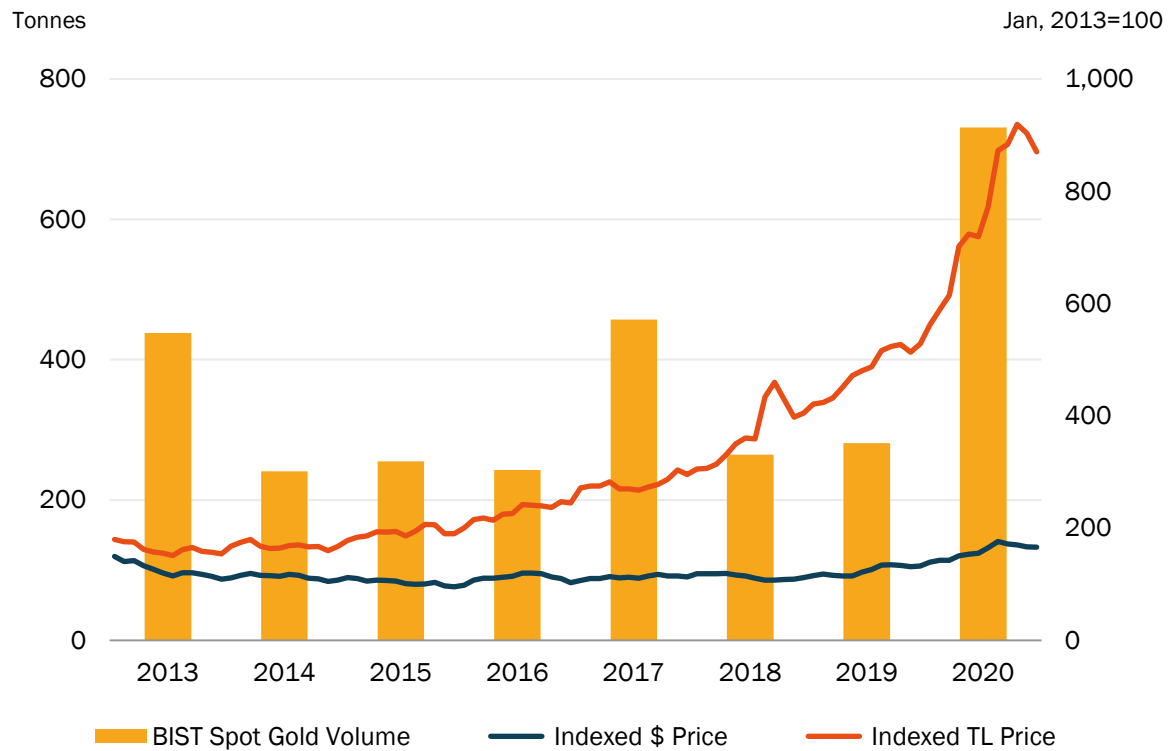
On February 21, 2021, the Turkish Ministry of Trade made some noteworthy changes to the regulations governing the BIST's PMDM membership, to which all members must comply, including the import of bullion, according to international criteria on responsible gold guidance. As all gold refineries and/or their affiliated precious metals companies trading at the BIST are members of the Turkish precious metals market, this covers both GDL and non-GDL operations.

BIST's role in the Turkish Gold Monetisation Scheme

The PMDM has also been closely involved in the Turkish Gold Monetization Scheme, which aims to attract "under the pillow" gold held by Turkish households, estimated at around 3,500t. The principal is for local banks to collect some of this gold, which will feed into gold deposit accounts, that are registered at the PMDM and utilised according to the banks' requirements. Since their inception in mid-2012, more than 100t of gold has been collected from the public (through to end-2020).

The country's precious metals refineries play a key role in helping to run this scheme. There are two GDL refineries (Istanbul Gold Refinery and Nadir Metal Refinery) and three non-GDL refineries in Turkey. The two GDL operations provide the assaying experts to the banks who effectively act as gatekeepers before the metal can be refined.

BIST Spot Gold Volumes



Source: Metals Focus, Bloomberg

Chapter 3

- CBRT's gross gold reserves, which stood at 436t in 2017, have risen sharply to reach 716t by end-2020.
- However, its own reserves, which remained stable at 115.8t until 5th May 2017, peaked at 440.6t in July 2020, before dropping to 334.7t by the end of last year.
- The Treasury's issuance of gold bonds and lease certificates were reflected in the CBRT's gross gold reserves, reaching 60t by the end of 2020.

Official Sector

Introduction

Turkey's long standing and increasingly active participation in the gold market extends to the country's central bank. Over the past two decades it has become increasingly involved, whether this relates to outright purchases (and more recently disposals), or in terms of using gold to help boost commercial bank liquidity.

Gold Reserves

In Turkey, the CBRT's core activities, in terms of its management of its gold and foreign exchange reserves, are guided by Article 53 of the CBRT Law. Specifically for gold, this governs how the Bank may execute forward and/ or spot purchases and sales of gold and lending/borrowing transactions.

Until September 2011, the CBRT's gross gold reserves (as reported to the IMF) had remained essentially flat at 116.1t. Since then, its gross holdings have risen sharply, to reach 716.3t by end-2020. The increase largely reflects the adoption of more gold friendly policies by the Turkish government, which has increasingly promoted the role of gold in the financial system, while at the same time trying to lessen the country's dependence on the dollar. To help achieve these goals, aside from the CBRT making direct gold purchases from local and international markets, it has increasingly used other tools, including the Gold Monetisation Scheme, the Treasury's gold bond and gold lease certificate issuances and the CBRT's gold swaps programme with local commercial banks.

1. CBRT's Own Reserves

Focussing on the CBRT's own reserves, it was not until May 2017 that the central bank started to raise its holdings. In other words, the 320t increase in the CBRT's gross holdings between October 2011 and April 2017 was driven by the commercial banks' gold held through the reserve option mechanism (ROM).

From 115.8t in April 2017, the CBRT's own holdings peaked at 440.6t in July 2020. This was followed by a period of disposals during August-December which totalled over 105t, these accounting for the largest share of global central bank sales at that time. This left the CBRT's own reserves at 334.7t by end-2020. These sales were largely driven by a deteriorating economic backdrop and currency crisis. After Turkish foreign exchange reserves dropped to a multi-decade low over the summer, some gold holdings are believed to have been mobilised to support the lira and/or repay international debt.

2. Treasury

Part of the growth in the CBRT's gross gold reserves also reflected the issuance of gold bonds and lease certificates by the Turkish Treasury, as gold collected via these programmes was transferred to the central

bank's account. In September 2017, the Treasury decided to issue both an interest-bearing gold bond and also a gold sukuk (the Islamic equivalent of a bond, generating a return while still being compliant under Sharia law). Both were sold to the public in return for their physical gold.

Under this mechanism the public deposited their gold with the state-owned Ziraat Bank and, in return, the Treasury issued a gold bond or sukuk, both of which pay dividends in Turkish lira (TL) at regular intervals. At the point of maturity, investors have had two options. First, they can take back their gold in the form of Republic coins struck by the State Mint, Darphane. Alternatively, these instruments can be sold back before maturity to the Treasury with payment made in TL. Starting with a volume of 1.9t in October 2017 and, with the subsequent involvement of financial institutions, the total amount of these two instruments reached 60t by the end of 2020; with further auctions in 2021 boosting this figure to 94.7t by end-June 2021.

CBRT's Gross Gold Holdings, by Location¹

	31 December 2020		31 December 2019	
	Pure Gram	Amount	Pure Gram	Amount
Gold in International Standards	716,334,553	319,703,047	553,193,013	160,904,576
CBRT's own gold ²	458,189,589	204,491,891	411,815,077	119,782,659
Held at BOE	45,551,642	20,329,883	5,939,152	1,727,492
Held at CBRT	34,015,936	15,181,452	34,015,937	9,894,050
Held at BIST	378,622,011	168,980,556	371,859,988	108,161,117
Required reserves of the banks ³	172,181,552	76,845,333	14,068,436	40,919,329
Held at BOE	53,914,217	24,062,136	42,959,521	12,495,428
Held at BIST	118,267,335	52,783,197	97,721,915	28,423,901
Given as Collateral	22,425,310	10,008,508	696,500	202,588
Held at BIST	22,425,310	10,008,508	696,500	202,588
Banks gold depository	3,578,020	1,596,885	-	-
Held at BIST	3,578,020	1,596,885	-	-
Treasury's gold	59,960,082	26,760,430	-	-
Held at BIST	59,960,082	26,760,430	-	-
Gold in Non-International Standards	2,832,327	1,264,079	28,322,327	823,825
CBRT's own gold	2,832,327	1,264,079	28,322,327	823,825
Held at CBRT	2,832,327	1,264,079	28,322,327	823,825

1. All holdings are taken from the CBRT's Annual Financial Statements without any adjustment
2. The reported CBRT's own gold includes gold swap with non-official entities. This explains why end-year figure in this table is higher than Metals Focus' estimate (334.7t at end-2020)
3. Under the Reserve Option Mechanism (ROM)

Source: CBRT Annual Financial Statements for the year ended 31 December 2020

3. Reserve Option Mechanism (ROM)

The reserve option mechanism (ROM) has its roots in gold banking's evolution in Turkey. For many years, this was a niche area in the Turkish financial sector, with only one bank working on Islamic finance principles, Kuveyt Turk Katılım Bankası, which introduced the first gold account in Turkey. However, there was little other commercial bank involvement until the CBRT started its gold monetisation scheme in 2012 through the ROM. This was first introduced in 2011 and its purpose was communicated by the CBRT as to limit the negative effects of excessive volatility of capital flows on the country's macroeconomic and financial stability, as well as also boosting the CBRT's gross gold reserves.

After the gold monetisation scheme was launched, banks started to use the ROM more effectively. Simply put, as part of the ROM banks are allowed to hold a certain ratio of Turkish lira reserve requirements as foreign exchange and/or gold in increasing tranches. This affords an opportunity to use gold as a tool to create more room for lira credit lines. As a result, gold collected through the country's gold monetisation scheme and through gold banking accounts (offered by Turkish commercial banks) are channelled towards this use.

In terms of how the ROM applies to gold; since end-2012 and until 3rd October 2016, a maximum of 30% (known as the reserve option coefficient, ROC) of a bank's reserve liabilities could be offset against gold. This 30% was broken down into three tranches, each involving a different reserve option ratio. For the first 20% bracket, the ratio was set at 1.2, which meant that, for example, TL1.2m of gold was required to free up TL1m of Turkish Lira (TL) reserves. For the next 5% bracket, the ratio rose to 1.7, and for the last 5% the ratio stands at 2.2. The value of the gold is marked-to-market every 15 days.

A new incentive announced by the CBRT on September 1, 2016 defined a further tranche of 5%, in addition to the existing 30% facility. This 5% also featured two new elements. First, it allowed only bullion refined from scrap gold collected by banks from the public after October 3, 2016 to be utilised, and excluded all other bullion from other sources.

Second, the reserve option ratio will be set to 1, which means there is a one-to-one conversion towards the ROC. The lower ROC suggests that banks will now be incentivised to attract consumer-held gold stocks since other forms of gold, such as metal acquired via electronic purchases, will not qualify.

This ruling was then amended on 18th January 2020, with the 30% ceiling reduced to 20%. On 24th February 2021, this was again reduced, this time to 15% and the scrap gold related tranche, which was first introduced as 5% and raised to 10% on 16th February 2019, has been further increased to 15%. Under this scheme, commercial banks have been allowed to use gold against a portion of their reserve liabilities. In turn, this encouraged banks to start gold collection days where they bought back gold from the public. Beforehand, gold deposit accounts did not pay interest, but it then became more common to do so, with interest rates peaking at around 2.4% by mid-2018. However, this trend then reversed. Today, interest can range from as low as 0.15% up to 1%, with some commercial banks offering interest-free gold bank accounts. This change reflects the increased reserve requirement ratios, which by 19th November 2020, stood at 18% for maturities of at least one-year and at 22% for lower maturity dates, depending on the bank in question. Furthermore, investor returns are subject to a 15% withholding tax for account holders over a minimum term starting from three to six months.

4. Gold Swaps

In May 2019, the CBRT started to use gold swaps as another tool to regulate money supply and manage foreign exchange reserves. Under this new policy, commercial banks can swap a portion of their gold holdings with the CBRT in return for lira and foreign currency or vice versa. Gold swapped under this route will be transferred to the CBRT's account. To put this new policy into perspective, from 12.3t in May 2019, the total amount of gold swap jumped to 123.5t by end-2020.

Chapter 4

- Turkish physical investment touched an all-time high of 121t in 2020 amid rising lira gold prices.
- Both coins struck by the Turkish State Mint and private label bars and coins attract extremely thin margins.
- First introduced more than two decades ago, the availability of gold banking products has since grown notably.

Investment

Introduction

Turkey has a long-standing tradition of striking coins, dating back around 2,500 years. In the present day, the Turkish State Mint (known as Darphane) produces legal tender Cumhuriyet Altını (Republic Coins, made up of Ziyet and Ata versions with the same fineness, but different designs and slightly different weights). In addition, refineries and other producers manufacture small bars and coins. These products are then distributed across approximately 35,000 retail jewellers and also through online channels.

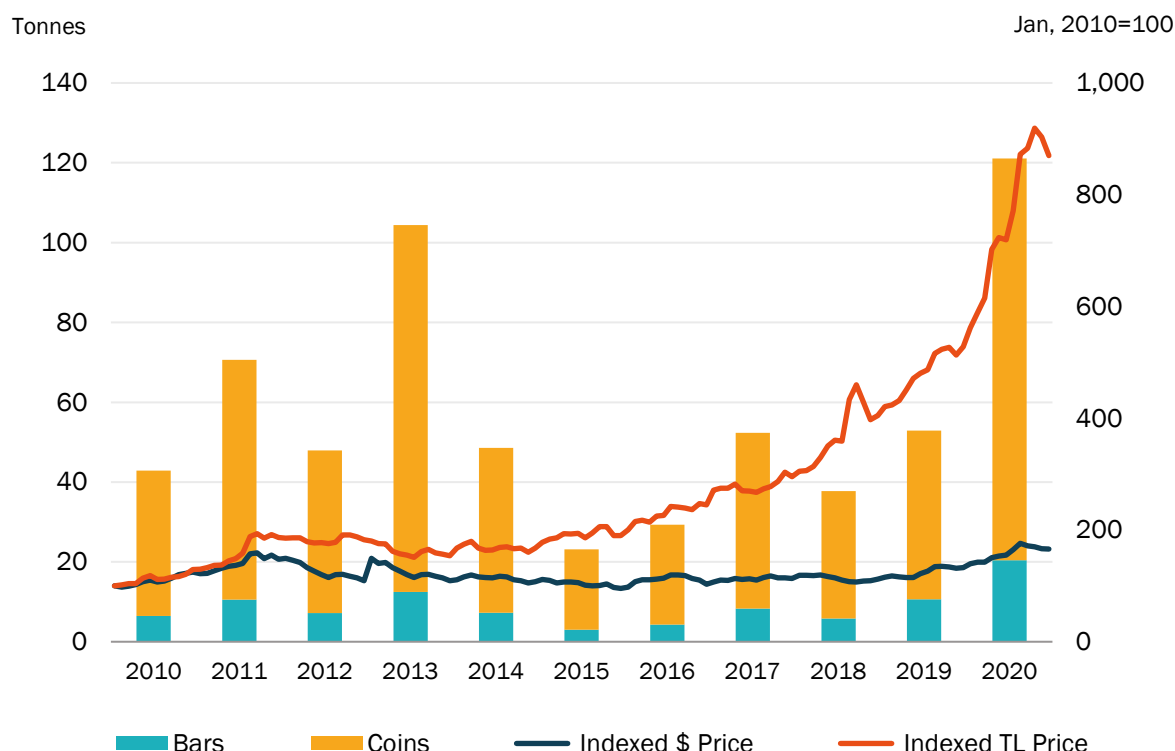
The Republic coins are all 22k (0.916 milyem), while private label bars and coins are mostly 24k (0.995 and 0.9999 milyem), with a small quantity of 22k coins. Both Republic and private label coins attract extremely thin margins. At the retail level, the typical gross profit margin on Republic coins is between 2% and 3.5%, depending on the retailer and the size of the coin (the most is a quarter weighing 1.754g and 1.804g depending on whether it is a Ziyet or an Ata coin respectively), while the labour charge for comparable private label small bars and coins typically ranges between 4%-5% (as they all come packaged). For heavier sizes, the margins can fall to as low as 2.5%.

Having this much exposure to gold, it is not surprising that physical investment is extremely popular in Turkey. However, investor motives for change according to market conditions, expectations for the Turkish lira gold price, and other anticipated investor returns, such as real estate and stocks. Two periods stand out, which highlight markedly contrasting performances of coin and bar demand. Looking first at 2015 this witnessed a collapse of the lira, which led to a bout of sustained weakness in the local gold market. The political crisis back then had seen domestic gold prices surge, by around 25% within six months, against a 4% rise in dollar gold.

This afforded consumers the opportunity to liquidate some of their gold holdings, resulting in physical investment for the year slumping to 23t, the lowest total in Metals Focus' series (which dates from 2010).

Fast forward to 2020, and Turkish physical investment touched an all-time high of 121t amid rising lira gold prices. The initial motive behind last year's strong appetite for gold (and silver) was the lira's weakness against the dollar, which in turn was fuelled by a flight to quality as the pandemic spread. The impact of this was exacerbated by the backdrop of almost one year of negative real interest rates in Turkey. As the dollar gold price started to advance, investors increasingly looked to buy physical gold (and, to a lesser extent, silver) to help preserve their savings against a sharply weaker lira, and also to profit from the gold rally. Another factor behind the strength in physical investment was the cheap credit scheme offered by state to combat income loss suffered by the public and banks businesses.

Turkish Physical Investment



Source: Metals Focus, Bloomberg

Gold Banking Products

First introduced over two decades ago, the market for gold banking products has grown appreciably. These are summarised below, although some may be exclusive to a particular bank. In addition, gold amassed via collection days from the public contribute to various type of gold products:

1. Gold-to-Gold Participation Account

Offered by Islamic banks where the deposited gold earns a return in gold via the bank's investment of this gold in products allowed by its Sharia Board. Although in theory there is a profit-sharing mechanism, in practice a return is guaranteed within a certain scale. The minimum deposit varies, but can be as low as 10g; there is a 15% withholding tax from the earnings.

2. Gold Account

Gold is traded in TL or US\$, without the issues associated with taking delivery. The entry cost is minimal, either TL1 or \$1. It is not mandatory for all gold accounts to be physically backed. Gold is bought and sold via bank branches, mobile banking, internet branches and phone banking.

3. Gram Gold and Quarter Coin

These products are exclusive to Kuveyt Turk Bank via its partnership with IGR (İstanbul Gold Refinery) and Darphane. The bars produced by IGR are all with a 995 purity and range between 1g to 100g. Private label

quarter coins, weighing 1.75g in 22-carat gold are struck by Darphane for Kuveyt Turk. Both gold bars and coins are sold across their branch network.

4. Gold Cheque

Typically given on special occasions. Gold cheques can be bought using a TL, US\$ or a gold account; they are offered by various banks.

5. Gold Current Account

Gold can be bought or sold at any time. There is no interest rate and no maturity date. The minimum transaction is just 0.01g. Some banks allow gold to be withdrawn in physical form, or the investment can be converted into other gold banking products.

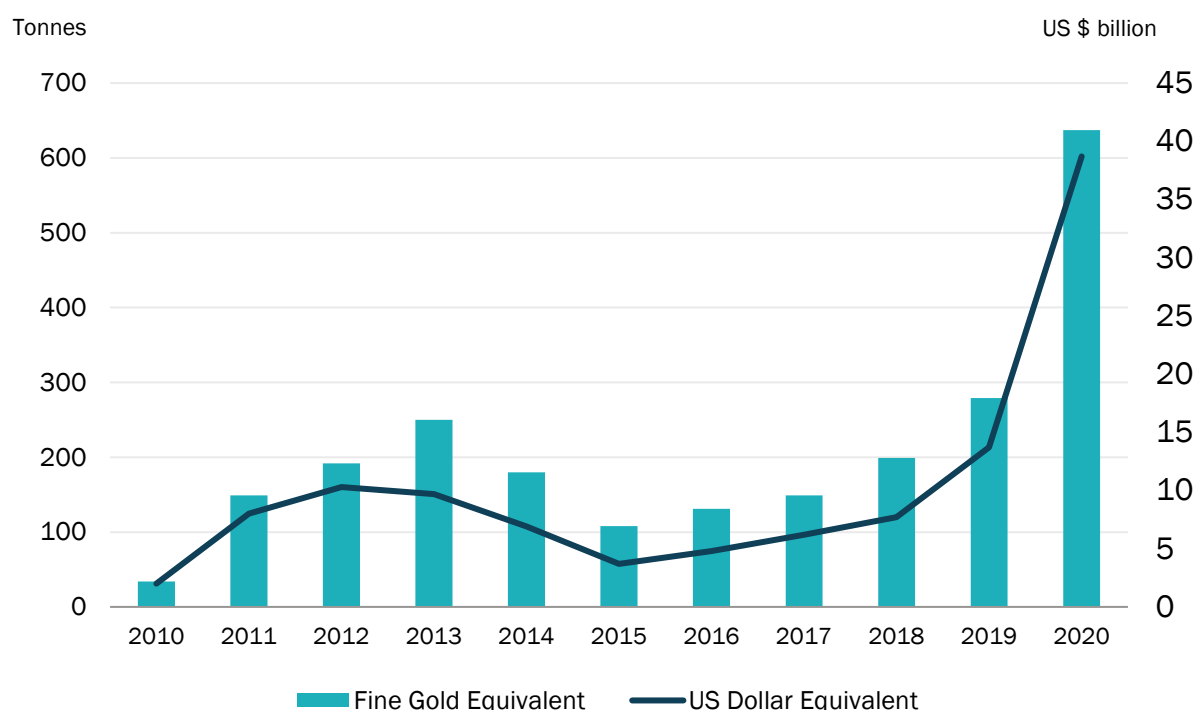
6. Gold Savings Account

Can be opened with a maturity date ranging from one month, through to three months or one year. Non-Islamic banks pay interest, while this works with a profit-sharing mechanism at Islamic Finance Institutions in a similar fashion to the gold-to-gold participation account. In both cases, there is a 15% withholding tax. The minimum account opening amount is usually 50g.

7. Accumulated Gold Savings Account

Here, banks automatically buy or sell the specified amount of gold, depending on pre-arranged buy/sell instructions. These can be on a one-off or repeat basis and can be altered or cancelled if not yet executed. Accounts earn interest or a share of the profit (with Islamic Finance Institutions) at the maturity dates. Many banks already offer this product with interest rates of up to 1%. The minimum opening amount is usually 50g and there is a 15% withholding tax from the earnings.

Precious Metal Deposit Account Holdings



Source: BDDK

8. Gold Order

An order to buy or sell gold based on a pre-agreed price. The number of transactions within a certain time period can also be set.

9. Gold Exchange Traded Product

There are 12 traditional and four participation (Islamic finance version) type precious metals securities (mostly investing in gold), one exchange traded silver fund, one exchange traded gold fund and one exchange traded participation gold fund. While some directly invest in precious metals, others also hold treasury issued gold bonds and/or gold lease certificates.

10. Gold Transfer

A gold account can be used to transfer metal to a third party who has a gold account at the same bank, who can then collect physical gold from the bank branch as early as the same day. Offered by various banks.

11. Gold Kilobars

Some banks also offer kilobars, which are mostly Swiss made.

12. Gold Bonus Credit Card

This is a co-branded credit card offered by Atasay Jewelry and Garanti Bank. Card users earn Atakulche (Atasay's gram gold brand) from everyday purchases. The accumulated gold can then be physically redeemed at Atasay Jewelry stores in denominations of 0.5, 1, 2.5, 5, 10 or 20g. The gold can also be accumulated in a Garanti Bank gold savings account through automated monthly regular purchases from a credit card.

13. Gold Milyem Card

Offered by TEB (a subsidiary of BNP Paribas) to jewellers to help finance their purchases. Jewellers' payment dues are charged as spot gold credit or divided into gold instalment credit within the credit limits designated for the jeweller using a specially designed POS machine. The minimum transaction amount is 20g. For the spot gold credit, the maximum maturity is 90 days. For the gold instalment credit this extends to 12 months.

14. Gold Forwards

Used by a small number of jewellers, investors and gold dealers.

15. Gold Indexed Finance

Developed by Kuveyt Turk Bank as an alternative to TL and foreign exchange indexed credits. It is designed for companies wishing to make their credit repayments on equal instalments which are indexed to gold.

Chapter 5

- Annual average gold jewellery consumption during the past five years (excluding the pandemic affected 2020) declined compared to the prior five year period.
- Turkish gold jewellery fabrication has outperformed jewellery consumption reflecting the growing success of the jewellery export industry.
- The gold accounting system is unique to Turkey and was developed to help simplify accounting by using gold in transactions between gold market participants.

Jewellery

Introduction

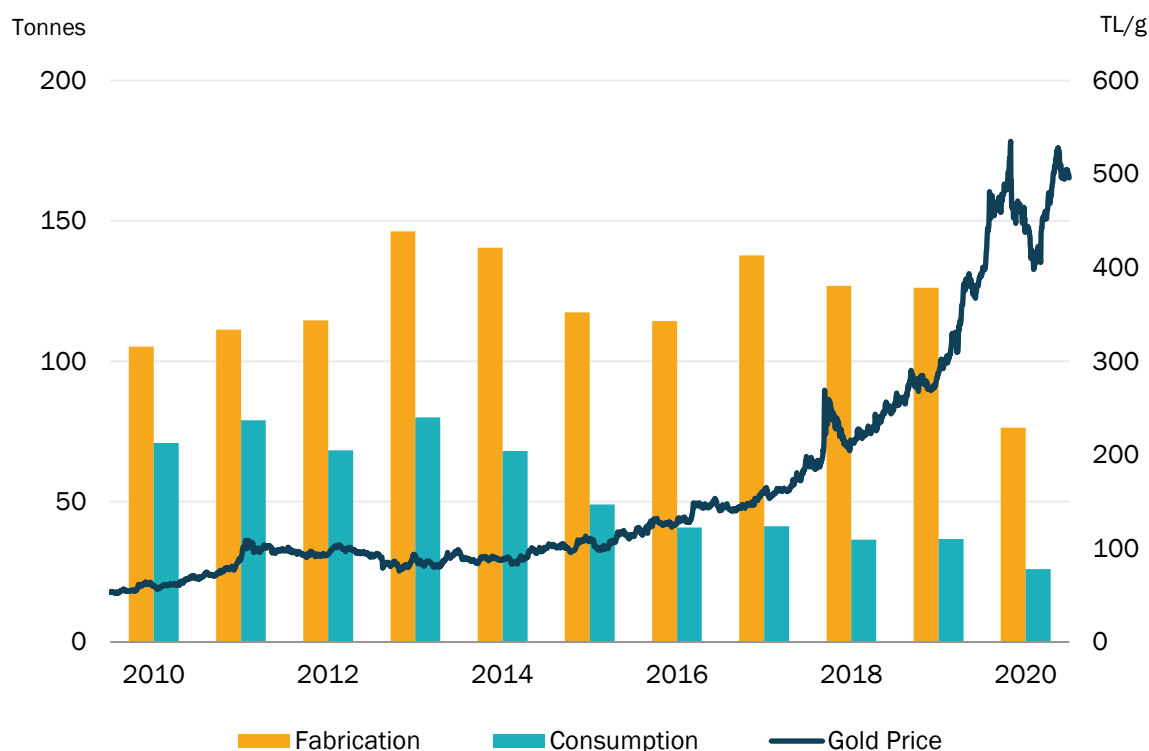
The jewellery sector is one of the main pillars of the Turkish gold industry, which has its roots from a tradition dating back at least 5,000 years. Underpinned by a deep cultural heritage and used in almost all weddings, births, certain religious ceremonies, as well as for daily wear, it continues to play an important role in modern day Turkey. However, gold jewellery consumption has recently been affected by the secular rise in lira gold prices because of high inflation, economic difficulties and the lira's depreciation against the dollar. With consumption averaging just 41t/y during the past five years (excluding a pandemic affected 2020), compared to 73t/y over the prior five year period, Turkish gold jewellery fabricators have had to increasingly look to export destinations to make up for the shortfall at home.

The changing landscape of Turkish jewellery manufacturing

Not surprisingly, with such a strong background in gold, Turkey also features a vibrant gold jewellery manufacturing sector. This is concentrated in and around Istanbul, including in the Kuyumcukent complex (which is explained below). The industry's long-standing success, in gaining market share overseas, explains why jewellery fabrication has averaged 125t/y during the past five years (to 2019), well in excess of Turkish gold jewellery consumption. Over the same period, export shipments have averaged 94t/y. Put another way, in 2019, Turkey ranked ninth globally (in terms of export value), compared with a twelfth placed standing back in 2010. The two maps overleaf show the key export destinations over the past two years. To summarise, the top five export locations are Iraq, the UAE, Germany, the US and Hong Kong.

The growth in the Turkish export industry and the decline in local demand have been accompanied by some structural changes in the manufacturing sector. In particular, there has been a shift as large-scale operations, employing over 1,000 workers, have slowly given way to small to mid-sized fabricators as the former, dominant players, have increasingly focussed on retail operations. As a result, their manufacturing headcount has often fallen to less than a hundred workers, specialising in top-end products and repairs, with the bulk of their jewellery requirements therefore outsourced to smaller operations producing items on-demand.

Turkish Gold Jewellery Consumption and Fabrication



Source: Metals Focus, Bloomberg

While this transformation has characterised the jewellery manufacturing sector, the previous heart of operations, in the centuries old Kapalıçarşı (Grand Bazaar) in the Old City in Istanbul, has largely been replaced by a grand project, known as Kuyumcukent, which literally translates as The Jeweller City. Kuyumcukent is a giant sprawling complex, covering the entire gold value chain. Under one roof in different sections, there are wholesale and retail jewellers, stores with wedding concepts, accountants specialised in the jewellery sector, small and mid-size jewellery fabricators, the LBMA GDL İstanbul Gold Refinery, stores selling precious and semi- precious stones, equipment and other jewellery related supplies, secure logistics, office complexes, and the liaison office of the İstanbul Chamber of Jewellery.



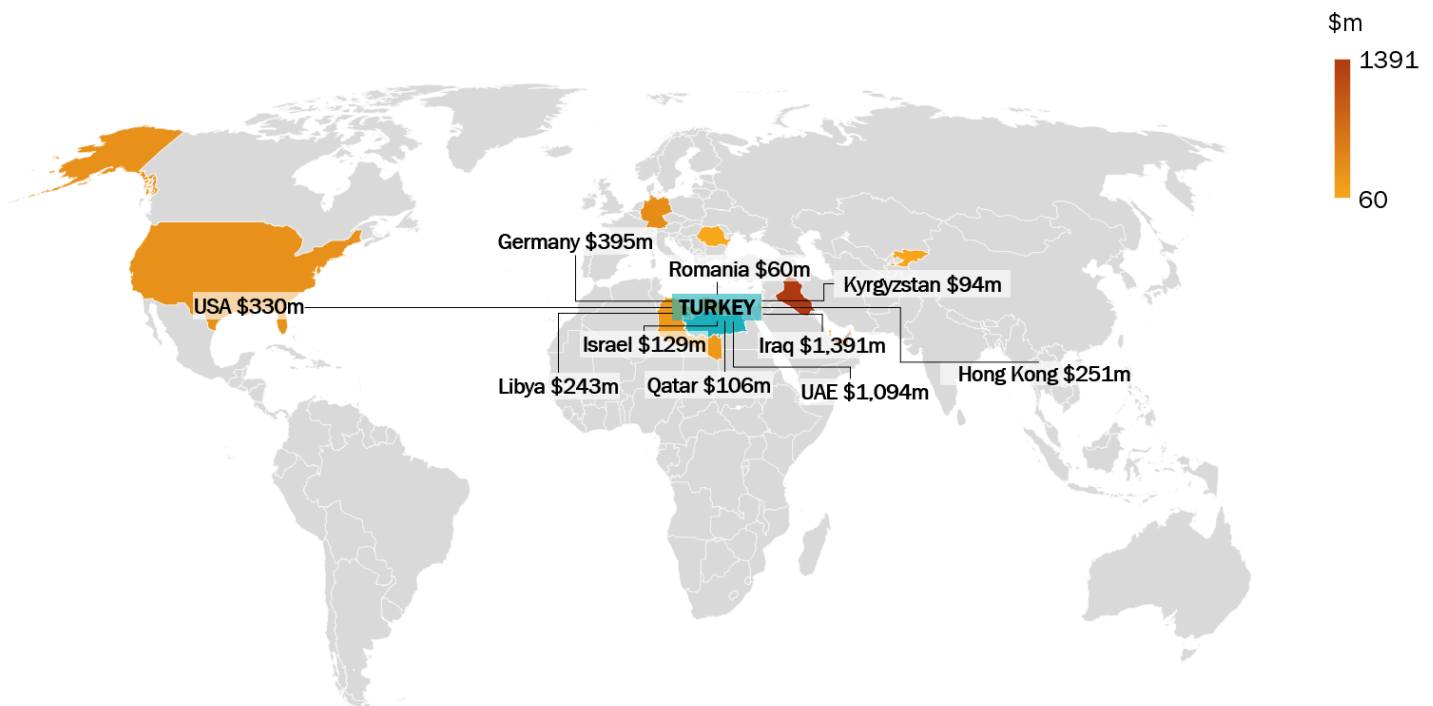
Kuyumcukent in Istanbul

Gold Accounting System

Gold is integral to many parts of Turkish life, from ceremonial events through to day-to-day expenses; this includes its role as a unit of account in the Milyem system. This process was created to help simplify accounting by using gold in business deals between gold market players where almost all transactions, profit and loss calculations have been calculated in gold terms including, rent, real estate deals and sales team bonuses. Although this has been a long-standing tradition, during recent years there has been a gradual shift to using fiat currency (notably the dollar and euro) and salary-based bonus systems. This is because of record high lira gold prices over the past few years, which have started to impact profit margins.

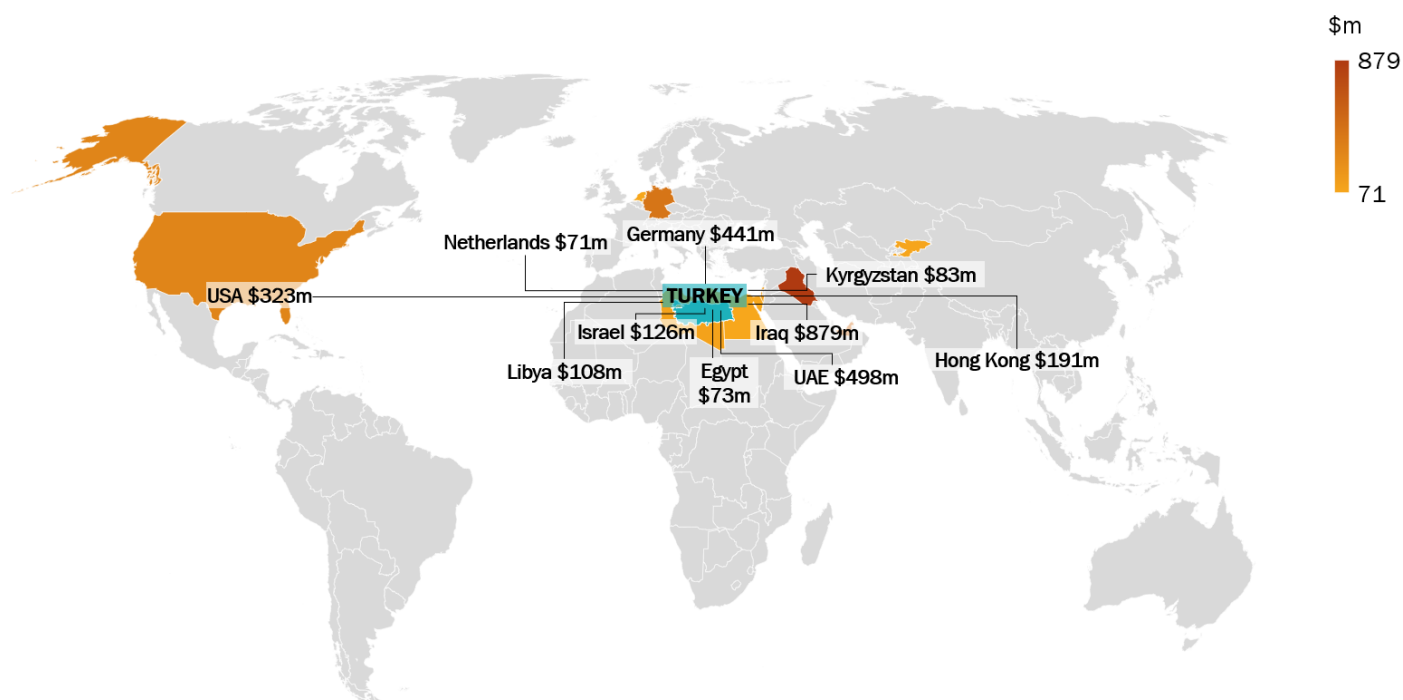
In essence, the milyem is a unit of measurement that expresses the amount of gold in the alloy in thousandths. To explain the carats in terms of milyem, the starting point is to divide 1 by 24. Carats explained in thousandths are shown as 0.333, 0.585, 0.750, 0.875, 0.916, 0.995 and 0.999, which are the most widely produced jewellery and retail investment products. Gold jewellery fabricators tend to measure their profit margins by how many grams of gold they earn. For example, a gold jewellery producer operates with a 25g wholesale profit margin for 1kg of sales of 22k (0.916 milyem) bangles.

Turkish Gold Jewellery Exports in 2019



Source: Various, Metals Focus

Turkish Gold Jewellery Exports in 2020



Source: Various, Metals Focus

Sample Milyem Table

Carat	Milyem	Carat	Milyem
1	0.041	9	0.375
2	0.083	10	0.416
3	0.125	14	0.583
4	0.166	18	0.750
5	0.208	21	0.875
6	0.250	22	0.916
7	0.291	24	1.000
8	0.333		

*The most widely used carats by manufacturers and their corresponding milyems are shown above in bold

LBMA acknowledges Metals Focus' contribution to this report.