

## Methodology: Chinese gold price premium/discount data set

### 1 Introduction

#### 1.1 What is this data set?

The Shanghai gold price premium/discount is measured as the difference between the reference prices of the Shanghai Gold Exchange and the LBMA Gold Price AM (US\$/oz).

#### 1.2 Why is this data important?

Local gold prices are determined by local demand and supply dynamics, as well as any local regulations which might affect that dynamic, and can thus differ from the international price of gold. This data set helps users to see how the gold price faced by Chinese consumers has evolved in relation to the international price of gold. The data will also reflect the difference in gold specifications between the two benchmark prices. In London, the minimum purity of gold that can be accepted is 99.5% (400oz bar), while in Shanghai it is 99.99% (1kg bar).

### 2 Process

#### 2.1 Where is data sourced?

This data set uses publicly available data. The main sources include the Shanghai Gold Exchange (SGE) and ICE Benchmark Administration.

#### 2.2 What frequency of data is available?

We publish the data monthly, but the file contains daily data. Where there is a difference in public holidays, for smoothing purposes we will roll forward the previous available data point.

#### 2.3 How is the data compiled?

Prior to the launch of the Shanghai Gold Benchmark price on 19 April 2016<sup>1</sup>, the premium/discount data was calculated using the Au9999 - the most liquid spot contract. To determine the data, the below formula was used:

$$\text{Premium/Discount (US\$/oz)} = \text{Au9999 (US\$/kg)} \times 31.1035\text{oz/kg} - \text{LBMA Gold Price AM (US\$/oz)}$$

Following the introduction of the Shanghai Gold Benchmark, our formula was amended to:

$$\text{Premium/Discount (US\$/oz)} = \text{Shanghai Gold Benchmark PM (US\$/kg)} \times 31.1035\text{oz/kg} - \text{LBMA Gold Price AM (US\$/oz)}$$

Note: Importing gold does not incur any import tariffs or taxes, which simplifies the calculation. But the above formula doesn't consider freight charges, thus the realised premium/discount would be lower than the calculated results.

#### 2.4 How are revisions to data handled?

Given the nature of the data, revisions will be rare. In the event of a revision to either of the input data series, our data would be corrected accordingly.

#### 2.5 How is the data checked or verified?

Before it is published, the data is rigorously checked and reviewed to ensure that any errors are caught so users can have confidence in it. These checking and reviewing process includes:

- **Cross-checking raw data with secondary sources:** by cross-checking with secondary sources, we can identify any potential issues with the data before publication. In some

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<sup>1</sup> For an explanation on the Shanghai Gold Benchmark, please see our gold price primer: <https://www.gold.org/goldhub/research/market-primer/gold-prices>



instances, this may involve contacting either the SGE or ICE Benchmark administration for confirmation of the data.

- **Manual review:** data is double-checked before publication to minimise the risk of errors, in both the data and the process used to collect, manipulate and aggregate it.

### 3 Timings

#### 3.1 **When is the data set released/published?**

Chinese premium/discount data is calculated and reported weekly. To be notified of when this data is available, you can register for our newsletter [here](#).