Understanding Precious Metal Pricing

Obtaining the value of precious metals is not quite as straightforward as pricing assets such as equities or fixed income. In this white paper, we demystify precious metals pricing, answering questions such as:

- What are “the fixings” and who sets these prices?
- What are spot and futures prices?
- What are the sources of spot and futures prices?

In addition, we also describe the existing solutions available for accessing metal prices and discuss the pros and cons of each alternative.

**What are precious metals?**
Precious metals are rare metallic elements, including gold, silver, platinum, iridium, rhodium and palladium.

**What types of firms deal with precious metals?**
The industry is comprised of four types of firms:
- Exploration/development
- Mining
- Consumers
- Recyclers

**Who are the consumers?**
Consumption is broadly classified into three categories:
- Industrial consumers
- Jewelry producers
- Investors

**What are the fixings?**
The fixings are a daily process that sets the benchmark prices of precious metals. At the fixings, participants transact business on the basis of a single quoted price. Orders are changed throughout the proceedings as the price is moved higher and lower until such time as the orders are satisfied and the price is said to be ‘fixed’. Table 1 on the next page lists when, where and who is responsible for precious metals fixing.

**What are spot & future prices?**
There are two types of prices associated with precious metals: spot prices and future prices.

The spot price (also called the cash price) is the current market price of a precious metal that is bought or sold for immediate payment and delivery. It is differentiated from the futures price, where delivery and payment is to be made on some future date.

**What are the sources of pricing?**

**Spot Prices**
- **OTC Markets:** OTC markets are computer and telephone-linked networks of dealers who do not physically meet. Clients in OTC markets trade on a principal-to-principal basis, which means that all risks, including those of credit, are taken on by the transaction’s two parties. Financial institutions act as market makers in these markets and offer a bid/ask which acts as the spot price.

- **Large Banks & Bullion Traders:** Banks and bullion traders trade large volumes of precious metals for their clients. They buy and sell precious metals as part of the trading process and as a result are reliable sources of precious metals spot pricing.

**Futures Prices**
- **Exchanges:** Precious metals future contracts are traded in major exchanges across the globe. These exchanges are a key source for precious metal future prices. The major precious metal exchanges are listed in Table 2 on the right.

With escalated growth in China and India, the industrial demand for precious metals has
spiraled further. There are now a number of major precious metal exchanges in Asia. These exchanges are also an important source of precious metal prices.

Is there an official closing price for precious metals?
Unlike stocks, which are listed on venues (e.g. NASDAQ, NYSE) with official trading hours and closing prices, precious metals trade all around the world in multiple over-the-counter markets, for nearly 24 hours a day. As a result, there is no “official closing price” for precious metals.

Firms that require the capture of a daily “closing price” as a part of their business process have two options:

1. Use the Fixing price for the metal.

2. Use the “closing price” calculated by their data vendor. Most data vendors calculate closing prices using a specific, documented methodology. For instance, one of the methodologies used is to take a snapshot of spot prices at a precise time during trading. As long as the methodology is reliable, consistent and documented, such an alternative should be acceptable to any business.

What are the official trading hours for precious metals?
Precious metals trade in OTC markets across the globe. The trading starts at 18:00 EST on Sunday, when the Japan markets open, until 16:30 EST on Friday, when the U.S. markets close. There is also a 45-minute period from 17:15 EST to 18:00 EST, Monday through Friday, when trading is closed.

Where do I get precious metal prices?
There are a number of data providers that offer access to precious metal prices. Which to choose depends on a few different factors. This section discusses the ways in which you can import and render precious metal prices. It also lists the leading solution providers in each space.

1. Data Feeds
A data feed is a mechanism for users to receive updated data from multiple sources. It requires structured data and a centralized data management system to collect, normalize and integrate multiple data feeds. Major providers include Thomson Reuters, FactSet, Capital IQ, and Bloomberg.
Table 3: What Technology is Typical for Different Industries?

<table>
<thead>
<tr>
<th>Technology Solution</th>
<th>Consuming Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Feeds</td>
<td>Financial institutions; hedge funds; trading firms</td>
</tr>
<tr>
<td>Widgets</td>
<td>Online portals; blogs</td>
</tr>
<tr>
<td>API/Web Services</td>
<td>Online portals; research firms; investor relations; mining companies; retailers; processing companies</td>
</tr>
</tbody>
</table>

When are data feeds used?
Data feeds are suitable for applications that require very low latency custom data. They are generally used in financial institutions like investment banks and trading firms.

2. Widgets
Widgets are small programs that can be installed and executed within any HTML-based web page. They are limited to very specific functionality and are pre-programmed to be used “as is.” Major providers include Kitco, WidgetBox, and Coininfo.

When are widgets used?
They are used to improve the interactivity of web pages by providing functionality such as price tickers or charts.

3. API/Web Services
An API (Application Programming Interface) allows your application or service to talk to other products or services. API-based architectures give businesses the ability to connect to a market data vendor and fetch data. The coding effort required is minimal and web services need only a few lines of code to integrate. The major provider of cloud-based web services is Xignite.

When are web services used?
Web services are a viable solution for applications that don’t require ultra low latency. Web services allow you to fetch data in a few hundred milliseconds without setting up a centralized data management system.

Also while developing your application, web services provide you the flexibility to use the data exactly the way you want to.

What is the most popular solution in my industry?
The data needs of every industry are different. It is important to consider which technological solution would interface best with your application. Table 3 on the left lists how various solutions typically map to different firm types.

Conclusion
Precious metal prices are highly volatile. It is thus vital to understand precious metal pricing. It is also crucial to understand which technology solution will fit your organizational needs.

Gaining a thorough understanding of both these aspects of metal pricing will enable you to add value to your business and give you a competitive advantage.

Request a consultation
Have additional questions about precious metals pricing? Xignite’s data experts are standing by to help answer your questions. Contact us using the email address or phone number listed at left.

You can also find more information and live data demos by visiting the Precious Metals section of Xignite’s Product Catalog.