

The Future of Gold



Consider the past
and the present
as our platform to the future

Gold



- The word "gold" most likely has its origins in the Indo-European word *ghel*, meaning "yellow."
- Chemical symbol of gold, *Au*, is short for the Latin word for gold, *aurum*, meaning "glowing dawn."
- Pure gold is described as 24 karats
- Because of its density, a small amount of pure gold can be surprisingly heavy. A one-foot square cube is about the size of one ton of pure gold.
- Measured in both tons and ounces

Historically a
store of wealth
from even
before trade



- Cortez in Mexico in 1519
- Inca Empire of 1532
- Knights Templar in the Crusade
- Marco Polo and the Silk Road: 1280
- Egyptian Pharohs: 2000-1500 BC
- King Solomon's mines: BC

Hypnotic effect in movies



- Bogart in “The Treasure of Sierra Madre”: 1948
 - *“I think I will go to sleep and dream about piles of gold getting bigger and bigger and bigger.”*
- Matthew McConaughey in “Gold”: 2016, the \$17 billion fraud that was Bre-X
 - *“I had a dream like I was being called by the god of gold”*
- DaVinci Code and National Treasure
- Indiana Jones and the Last Crusade

Gold is prized as a store of value because it is very rare and has amazing useful qualities

Very rare

- Only 200,000 tons produced in all of history compared to 900,000 tons of iron ore produced every year
- All of this gold over time would only fill about 70 tractor trailers
- Only one out of a billion atoms of rock in Earth's crust are gold
- One ounce of gold can be stretched into a super thin wire that would stretch a distance of 80 kilometers

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Amazing and Useful Qualities

- Store of value
- Prized for its rich color, luster and rarity
- Only yellow-colored native metal
- Resists chemical corrosion and tarnish
- Highly reflective
- Excellent conductor of electricity
- Dense but soft
- Can be readily stretched, beaten and molded

Formalizing the Mining Process to Extract this Precious Commodity



- De Re Metallica was the authoritative mining text for 180 years, originally published in 1556 by Agricola
- Name is Latin for “On the Nature of Metals” and published in Latin so could only be read by educated Europeans of the time
- Later published in German and Italian
- Translated to English in 1912 by a mining engineer, Herbert Hoover, who became President of the United States

Currently Supply Demand Fundamentals in Rough Balance

Q1 2017 Gold **SUPPLY**

Decreased 12% to 1032 tons

Mine Supply	764	Flat from 2016
De-hedging	(15)	
Recycled	<u>283</u>	Down 21% from 2016
	1032	tons

Q1 2017 Gold **DEMAND**

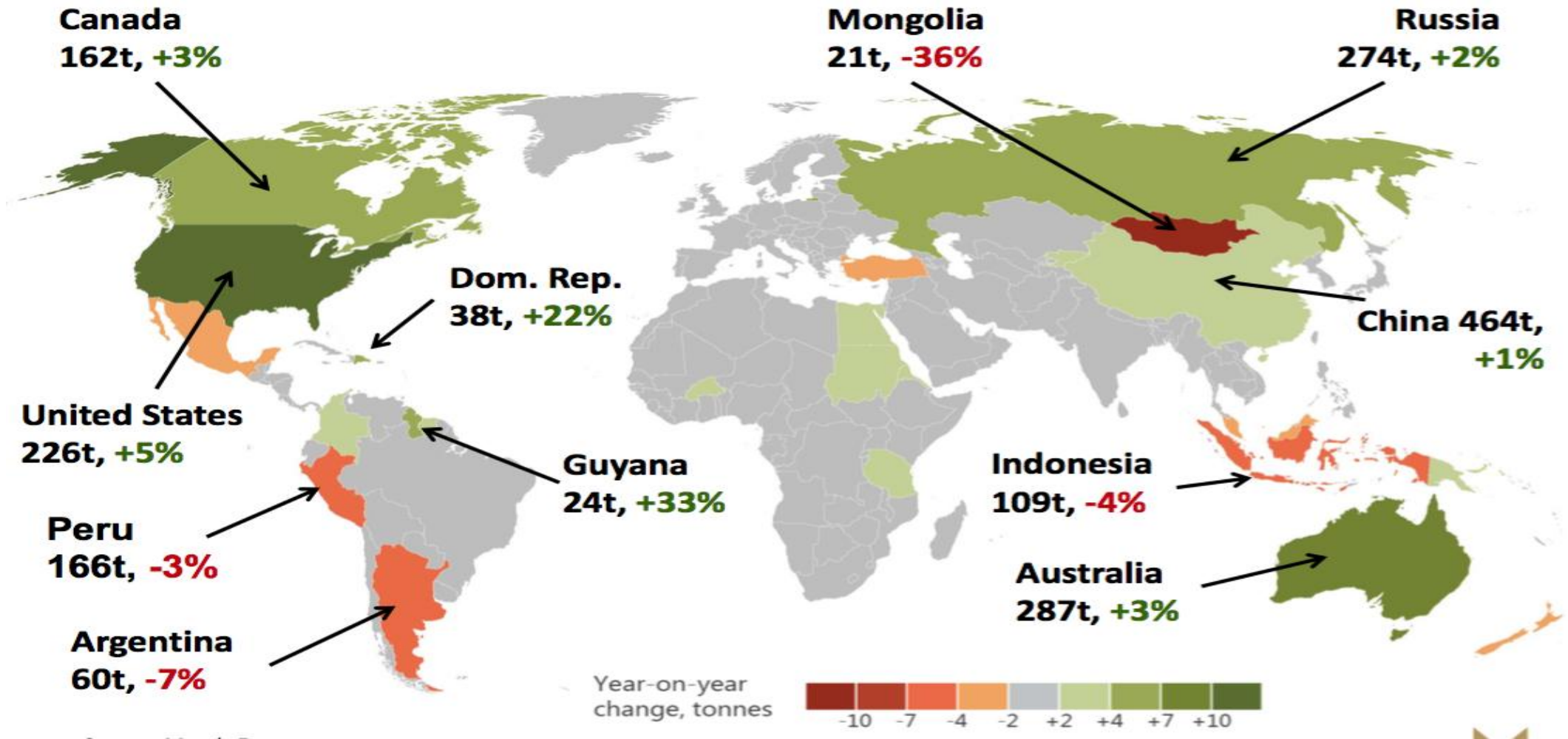
Decreased 18% to 1034 tons

ETF'S	399
Jewelry	481
Central Banks	76
Technology	<u>78</u>
	1034

tons

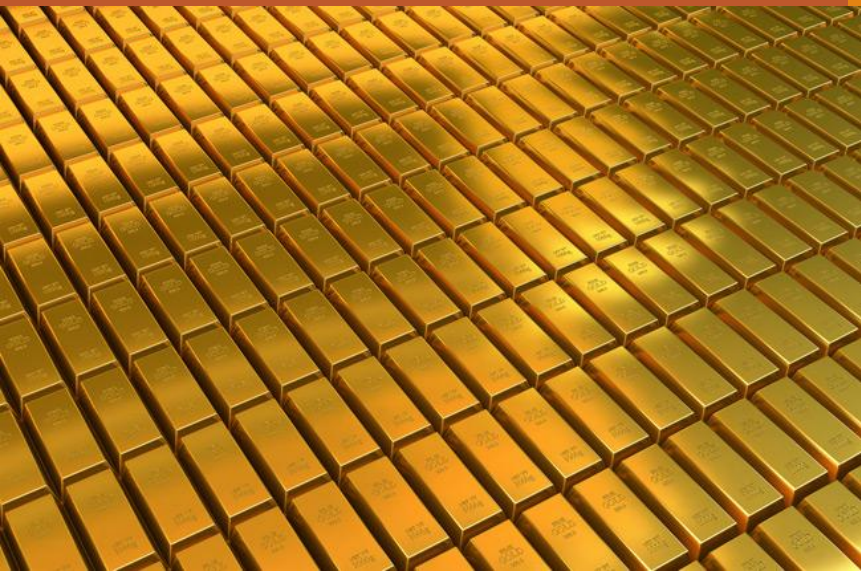
New mines in Canada and Australia will nudge production up in 2017 and 2018 but little after that and production will trend down.

Record High Mine Production

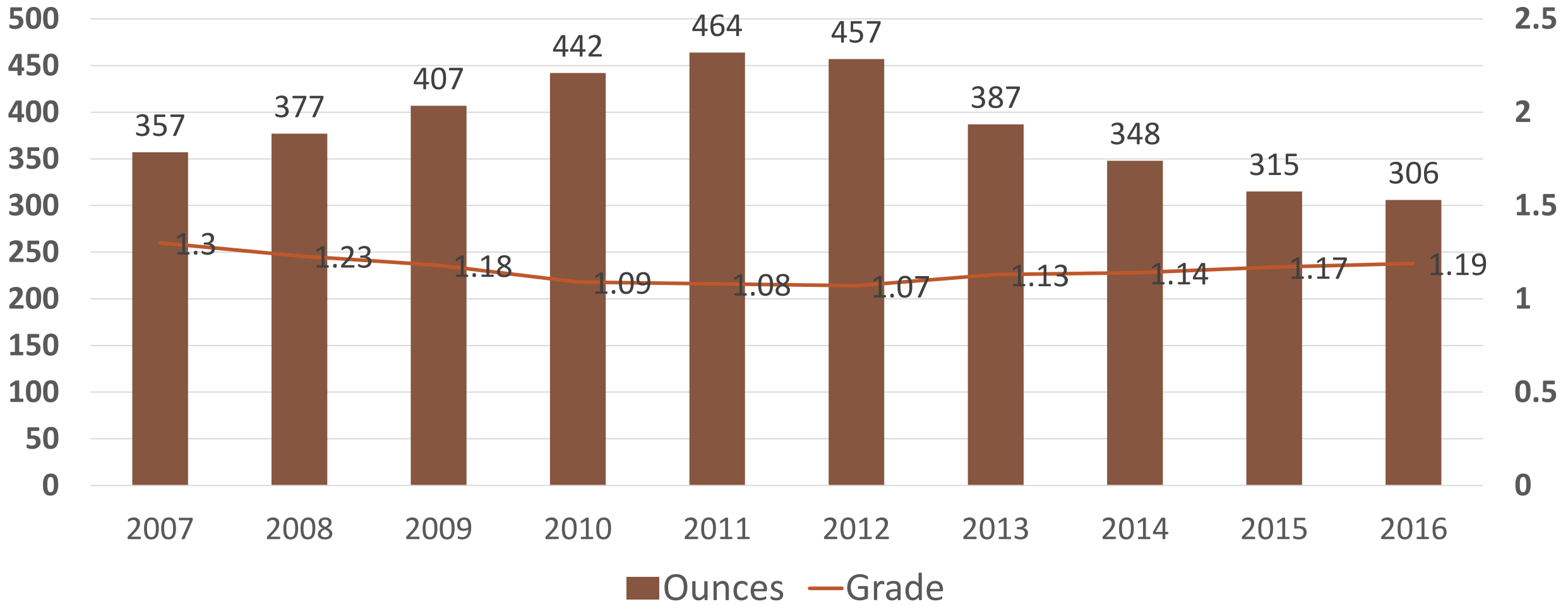


Record High Mine Production in 2016

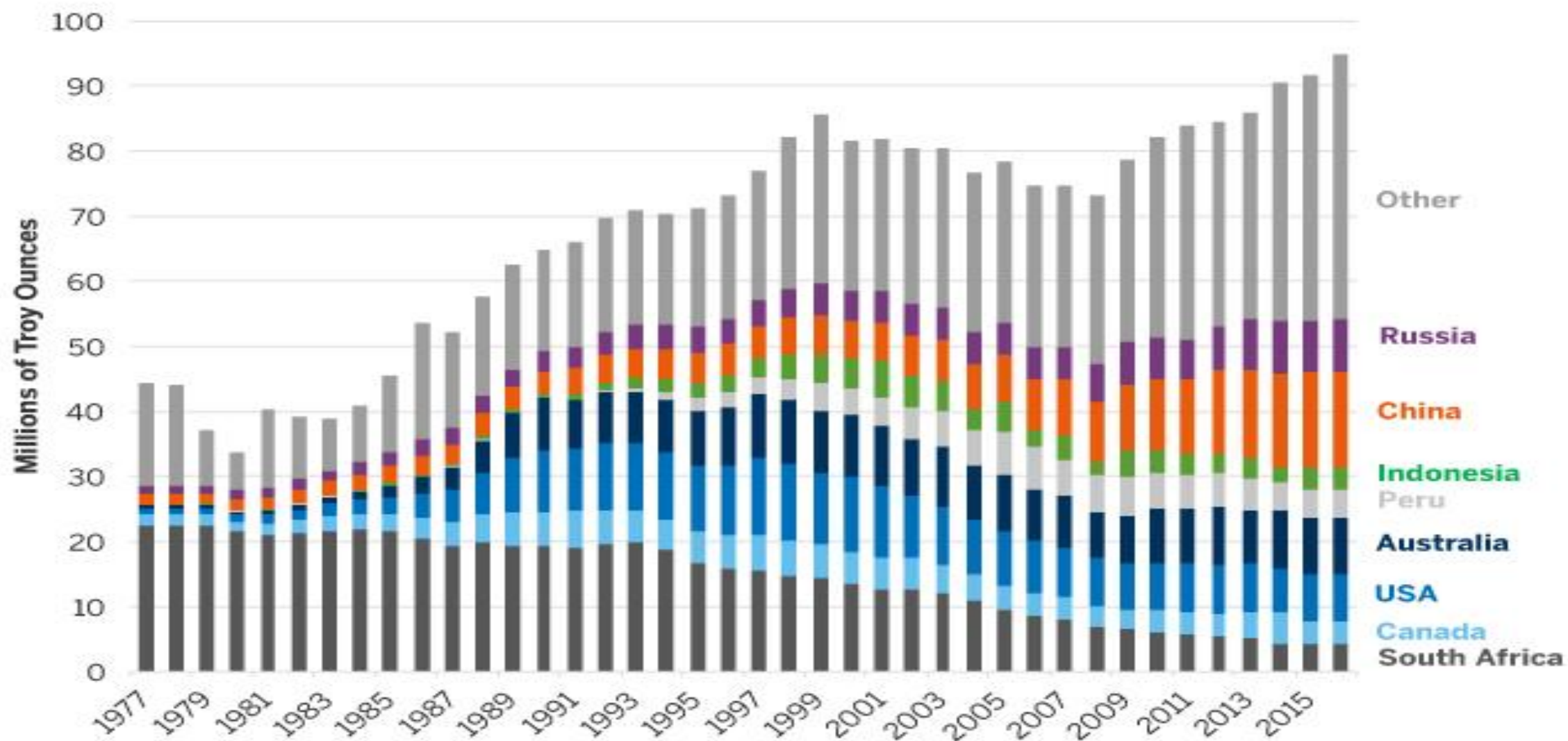
	Tons Produced	Year Over Year Increase
China	464	+1%
Australia	287	+3%
Russia	274	+2%
United States	226	+5%
Peru	166	+3%
Canada	162	+3%
Indonesia	109	-4%
Argentina	60	-7%
Dominican Republic	38	+22%
Guyana	24	+33%
Mongolia	21	-36%



Large Cap Total Gold Reserves and Average Grade



Gold Mining Production Worldwide



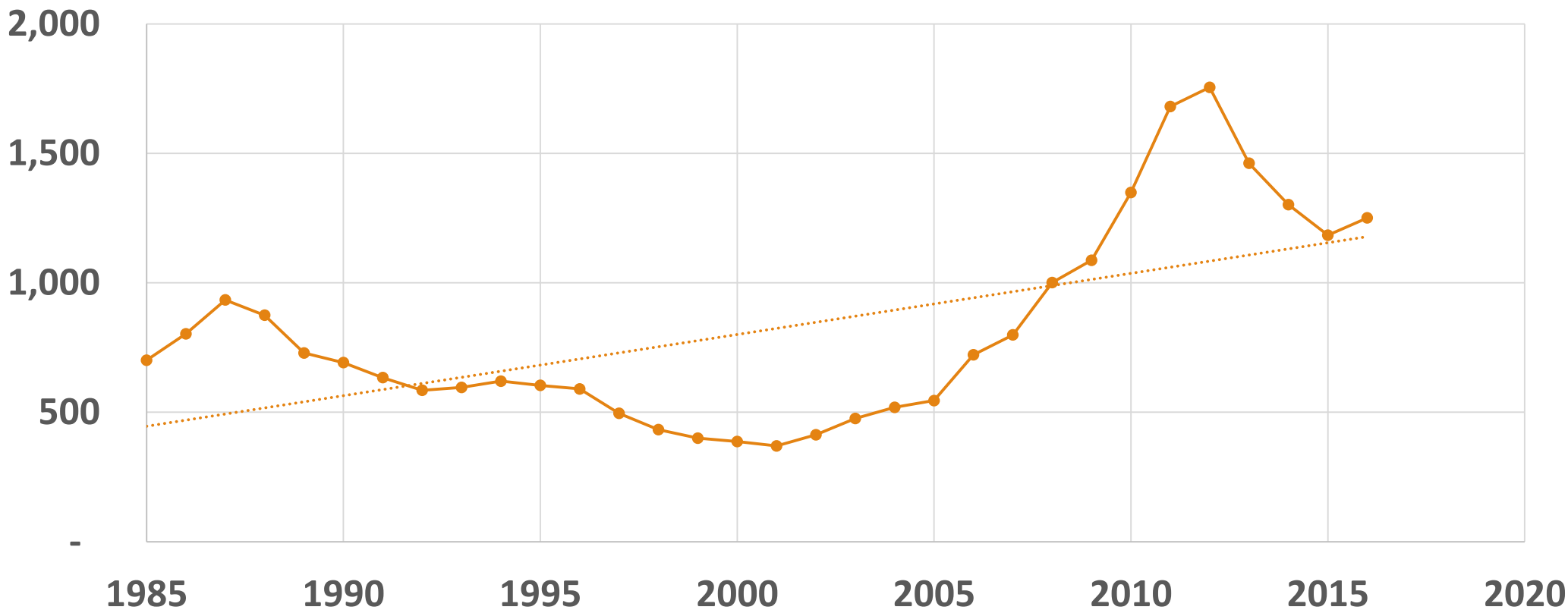
Source: CPM Group Gold Yearbook 2016

Ever Moving Price of Gold

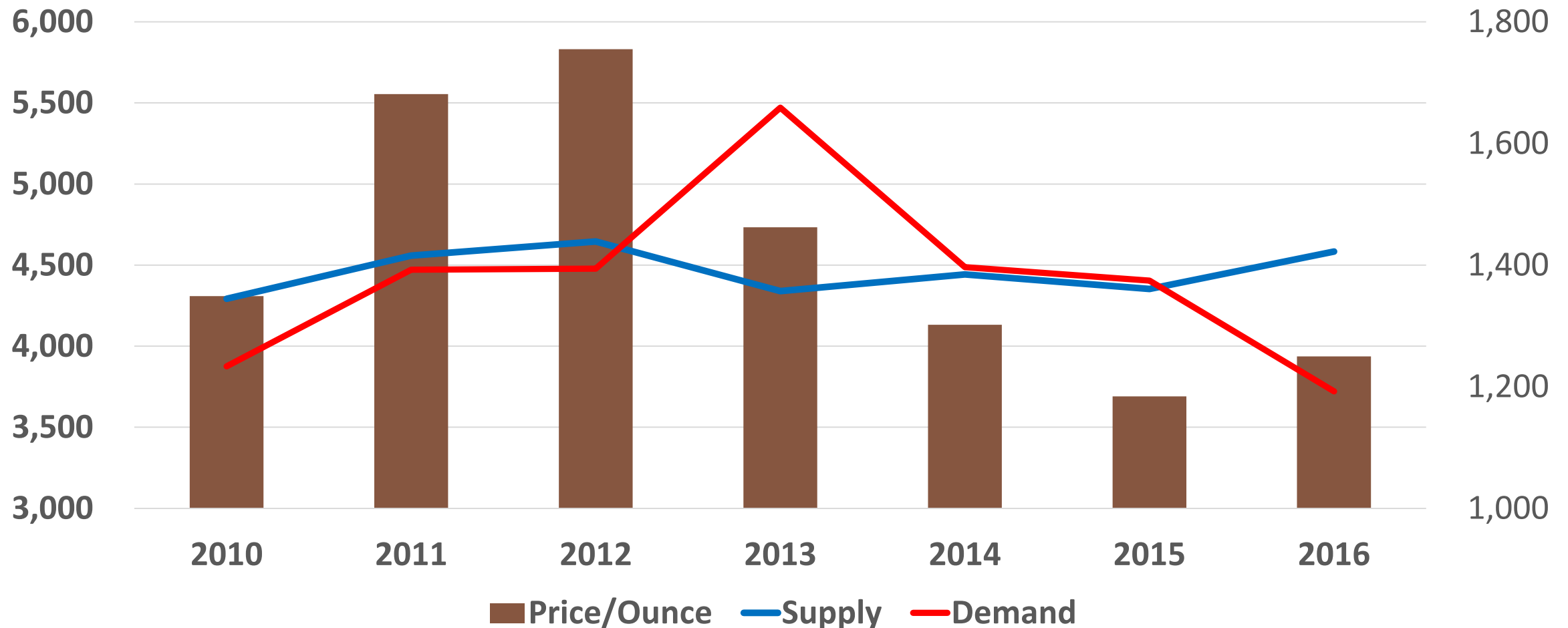


- The price of gold is highly-sensitive to changes in physical demand and changes in interest rates, the two factors often working in opposite directions.
- The higher the interest rate, the higher the opportunity cost of holding non-yielding assets such as gold bullion, and the stronger the US dollar in which gold is priced.
- A stronger US dollar then makes gold more expensive for holders of other currencies.

Gold: 30 Year Price per Ounce in \$US



Supply/Demand and Price of Gold



Looking to the Future



- Key element to the future is discovery of new mines
- Currently little investment in this search which entails long odds but holds great rewards if discoveries are made
- Certain countries are historically viewed as mining friendly:
 - Chile, Peru, Canada, USA, Mexico
- Conversely several jurisdictions have stalled projects:
 - Las Christinas—Venezuela
 - Rosa Montanna—Romania
 - Sukhoi Log--Russia

Future Growth for Gold



- Projects need to earn their capital as so much investment is required before cash flow is established
- Hurdle rates for projects generally 20% IRR at current gold price
- Valuations of companies generally in line with NPV of discounted cash flows, risk weighted
- Generally three biggest considerations for projects:
 - Politics
 - Project itself
 - People involved--reputational

There Will Always be Gold



- Gold remains one of the constants through the ages
- Gold will always hold its value
 - Extremely rare and highly prized
 - Physically tangible
 - Value readily validated through rigorous assay processes
 - Massive capital, expertise and political acuity required to explore, develop and bring a gold project into production