

## Metals Strategy: How well do known precious inventories (ETFs) hold into yearend and what are the seasonal trends, if any...

There's been some decent oscillations in ETF Gold flows (decent inflows in 1H, large liquidations post June which were offset by some recent inflows) and some interesting flows in PGMs (strong Palladium ETF outflows coupled with price appreciation). Therefore, it's worthwhile to explore any seasonal patterns to historical flows, with which to compare 2018 trends because 1) it's the final 3 weeks of the year, 2) there's an upcoming rate hike, 3) investor flow (ETF & paper) are always the marginal player

### CONTACTS

Nicky Shiels

Commodity Strategist (Metals)

212-225-6724

Commodities Derivatives

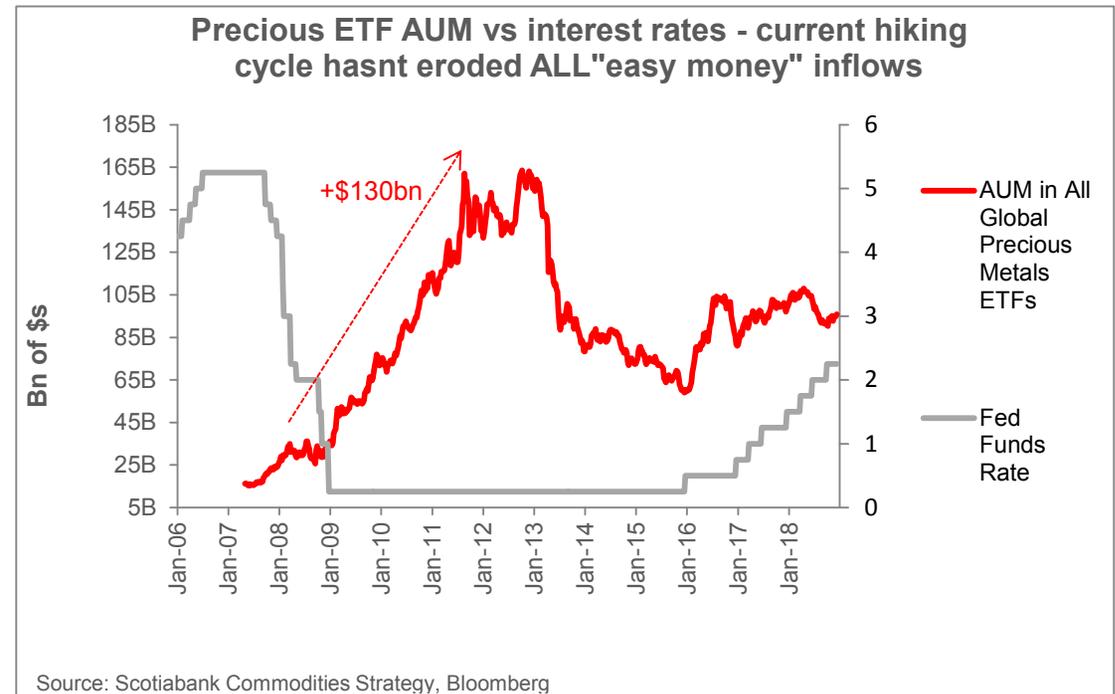
[nicky.shiels@scotiabank.com](mailto:nicky.shiels@scotiabank.com)

### The below dives into each precious metals ETF trends. Takeaways:

- AS a core backdrop, peak AUM dedicated to the **PRECIOUS ETF** sector was >\$160 bn in 2012, not surprisingly at the peak of the commodity (well, China) boom, where a max of ~\$130bn was added from the start of the Fed rate bottom (2008). However only 50% of these “easy money” inflows have been withdrawn during and into the lead up of the Fed kicking off its current hiking cycle (beginning in 2015), underscoring the fact that whilst precious have fallen out of favor with the larger investment community, there's still some dedicated and committed money within the space.
- **GOLD** ETFs have attracted ~1.3m oz of inflows in Q4'18 (vs the ~500K oz of historical average Q4 *outflows* the past 10 years, largely led by December). These unseasonal inflows highlight a shift in sentiment amongst investors as they search for a late-cycle safe havens outside of the \$.
- While there are large differences between the current and pre-2008 late cycle, **GOLD** ETF holdings more than doubled in the 2006-2007 period with most of the inflows occurring when the Fed ‘paused’ hikes from July '06 to Sept '07. As such, given the resilience of ETF inflows during historically sluggish Q4 seasonal trends, and the ability for it to capitalize on equity volatility, there's a decent chance of further “Fed pause” inflows.
- 4.6m oz has already bled out of Global **SILVER** ETFs MTD, where seasonal trends should ensure December puts in small gains (on average inflows of ~800K oz). It's unlikely there's any further ETF outflows given flows have already put in what they should in Q4 and a steepening contango curve is historically suggestive of inflows. Historically, Q1 (February & March in particular) sees very steady strong inflows of around 7.5m oz on average into Silver ETFs.
- The ~230K oz of outflows in the **Platinum** ETF in 2018 (selling occurred in May and September) is rather counter-seasonal—historically, May is meant to see the largest monthly inflows of almost 51K oz. However, investors who bought during the large inflow period (2015-2016) seem to be unsatisfied with price action and are losing hope in the Platinum story and cutting losses — US Platinum ETF holders are currently out of the money by 44%, and ZAR ETF holders by 21%.
- **Palladium** ETF have liquidated 522oz in 2018, as it's widely perceived that this ‘unwanted’ metal is redirected (well capitalizes on soaring borrowing costs) to feed an immediate need from end-users. There were larger ETF liquidations in 2016 (630K oz) and 2015 (730K oz), but smaller liquidations in 2017 (460k oz), but if the past 4 years selling pace is kept up (on average yearly outflows of 585K oz), then known inventories of Palladium will run out by the end of next year. That ‘stat’ clearly hasn't gone unnoticed as evidenced by the tightening of the forward curve and the overreach for metal now leading to a steep backwardation.
- Overall, **Q1** is generally viewed as the investor greenlight and data confirms that—over the past 10 years, on average during Q1, Gold added ~900K oz (its strongest quarter, almost x2 inflows vs Q2), Silver added 5.2m oz (2nd best quarter of inflows after Q3 of 6m oz), Platinum added ~36K oz (its strongest quarter of inflows) and Palladium added 33K oz (also its strongest quarter of inflows). Expect some supportive inflows across most metals (ex Palladium) in Q1'19 especially if the Fed pause rhetoric amps up further

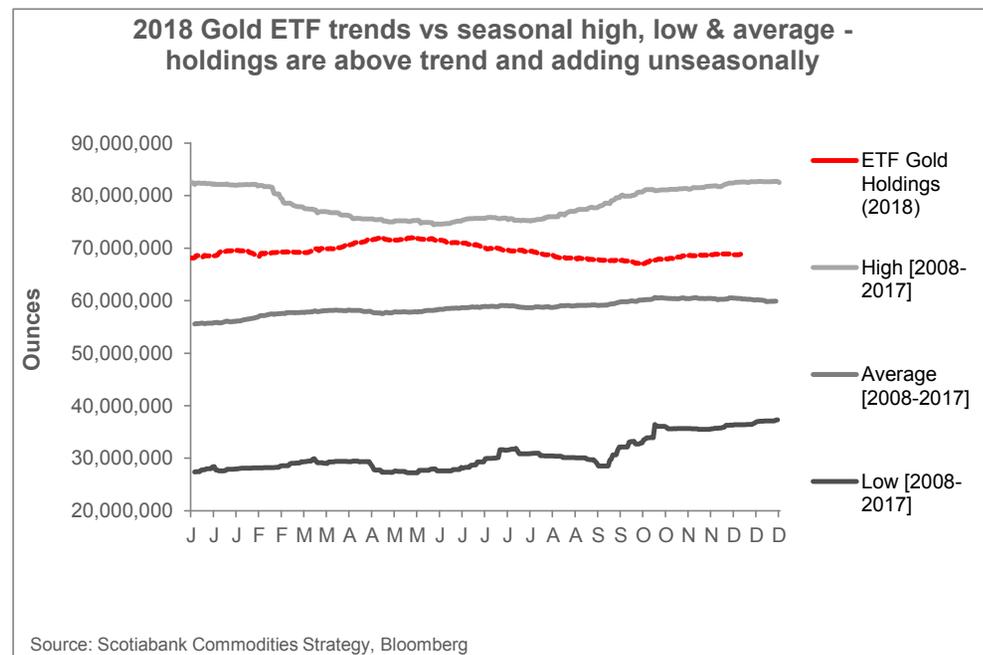
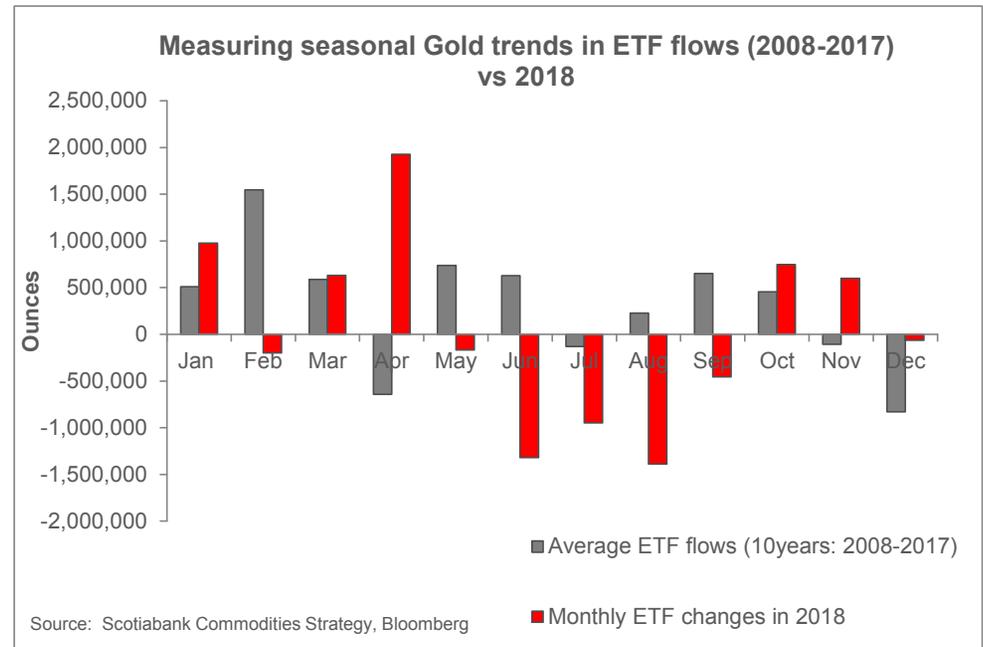
### All Precious Metals ETFs: a backdrop

- Peak AUM dedicated to the precious ETF sector was >\$160 bn in 2012, not surprisingly at the peak of the commodity (well, China) boom and the trough of global financial interest rates and peak liquidity (the Fed launched QE-infinity in 2012 injecting certainty around quantitative easing and monetary policy).
- A max of ~\$130bn was added from the start of the Fed rate bottom (2008), but only 50% of these inflows have been withdrawn during and into the lead up of the Fed kicking off its hiking cycle (beginning in 2015), underscoring the fact that while precious have fallen out of favor with the larger investment community, there's still some dedicated and committed money within the space.
- Precious AUM has actually grown when the Fed first started hiking in 2015, from a cyclical base of ~\$60bn to current AUM of \$96bn.



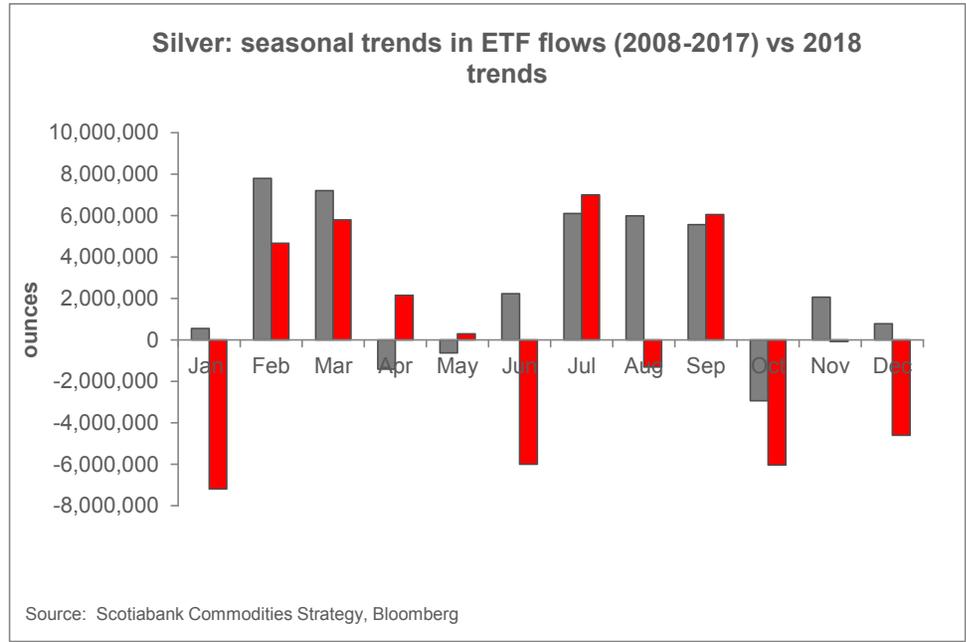
**GOLD**

- Gold ETFs have seen some small outflows in December (64K oz), but on a quarterly basis, ETFs have attracted ~1.3m oz of inflows in Q4'18 (vs the ~500K oz of historical average Q4 *outflows* the past 10years, largely led by December). ).
- Overall, 2018 ETF flows have bucked every seasonal trend, where only January (inflows) and March (inflows) matched up with historical patterns.
- The Q4 ETF inflows have been somewhat surprising in light of the September hike, and expected December hike— the Fed has hiked every December since 2015, providing another impetus to unwind into yearend besides the traditional reason to shore up cash/\$s. The average pace of Gold ETF liquidation (over 1.5m oz) during December 2015, 2016 & 2017, pretty much aligns with the monthly liquidation pace seen in the summer this year.
- However, equity market volatility beginning in October, was enough to override any seasonal trend, as investors searched for a late-cycle safe haven outside of the \$.
- Unfortunately, there is no convincing historical context of how well Gold ETFs perform in a late and hiking cycle (eg: 2006-2008) as arguably the ETF market was very immature then (globally they owned less than 20m oz). But as a rough guide, Gold ETFs added 16m (+142%) in the 2006-2007 period with most of the inflows (9m oz) occurring when the Fed 'paused' hikes from July '06 to Sept '07.
- As such, given the resilience of ETF inflows during historically sluggish Q4 seasonal trends, and the ability for it to capitalize on equity volatility, theres a decent chance of further "Fed pause" inflows. Unless macro deteriorates substantially, its unlikely ETF holdings overtake peak holdings of 83m oz (seen in 2012).



**SILVER:**

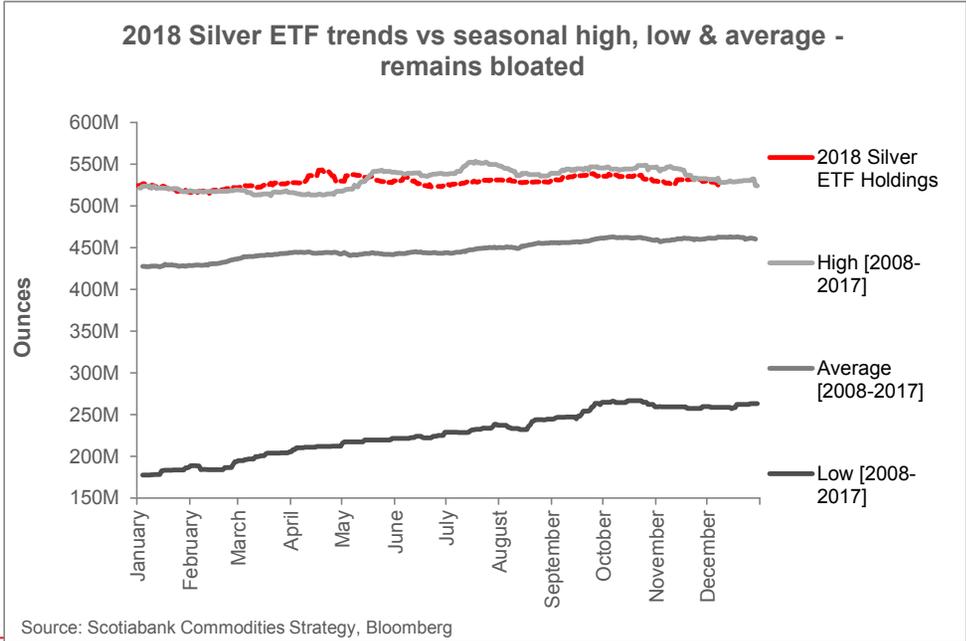
- 4.6m oz has already bled out of Global Silver ETFs MTD, where seasonal trends should see December put in small gains (on average inflows of ~800K oz).
- Historically, Silvers worst month for ETF outflows is October, with almost 3m oz exiting, while Q1 (February & March in particular) sees very steady strong inflows of around 7.5m oz on average.
- Overall, given Silver ETFs have consistently held near the top end of cyclical ranges (over 500m oz) and have run countercyclical to the general trend in Gold (and Platinum) ETFs, its clear other factors are driving the flows outside of general macro and rates outlook for metals.
- 1 potential reason: its very clear that ETFs are rather lofty when Silver is in a steep contango (or *because* Silver is in a steep contango) - table below. So long as Silver remains structurally oversupplied, ETFs could be a key core part of the contango carry-trade (long spot or ETFs vs short futures) and flows within ETFs will be driven more so by interest rates, storage costs and the curve movement, than by investors interest for owning actual Silver.



	Average Silver spread*, US/c
Silver ETFs >500m oz	6.5
Silver ETFs 400-500m oz	3.9
Silver ETFs <400m oz	2.4

Source: Scotiabank Commodities Strategy

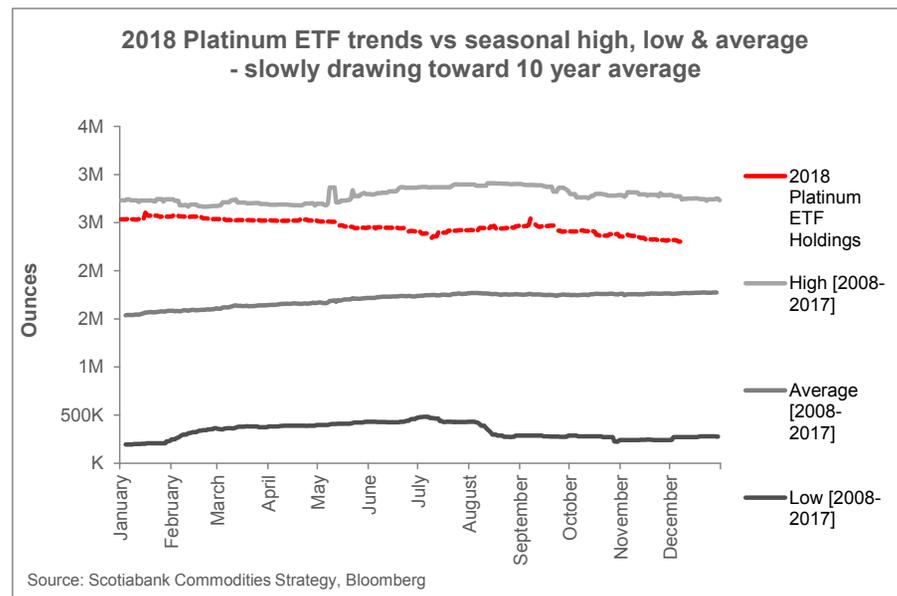
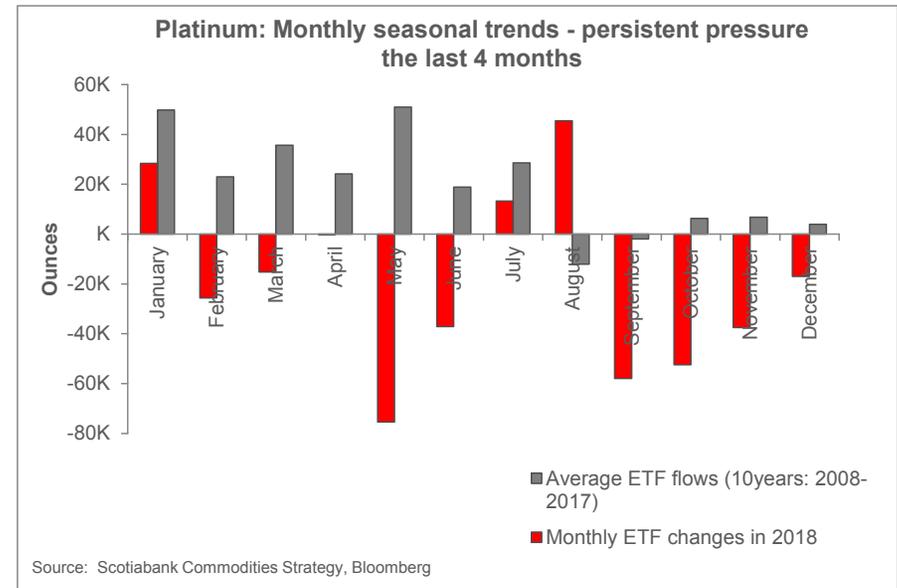
\*2nd Silver vs 1st Silver Future



PGMs:

Platinum:

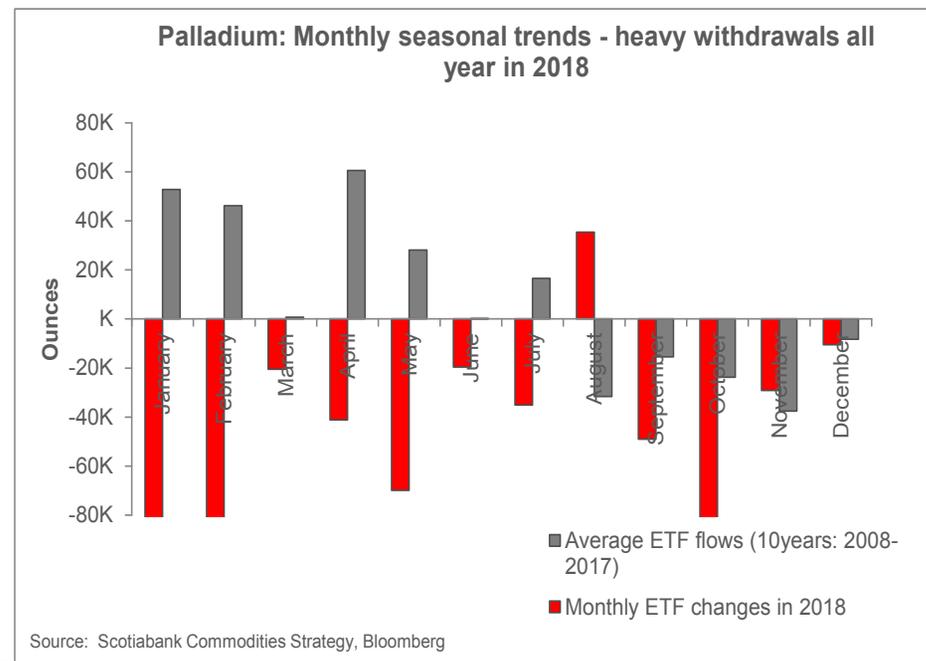
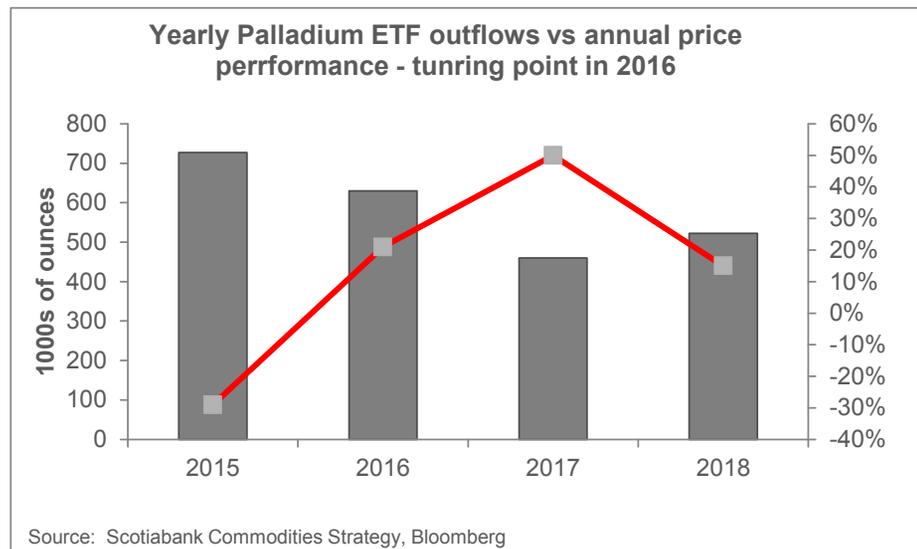
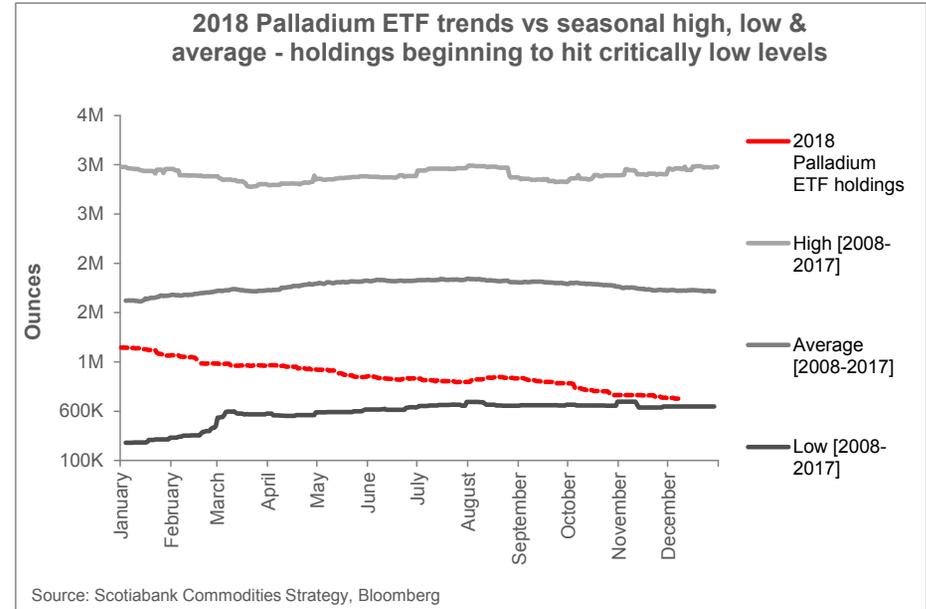
- There's been over 230K oz of outflows in the Platinum ETF in 2018, with the majority of selling occurring in May and September, which is rather counter-seasonal (historically, May is meant to see the largest monthly inflows of almost 51K oz).
- Platinum ETFs hold 2.3m oz, the lowest holdings since 2013. The bulk of the last large inflows occurred over 2013/2014 with the launch of the South African ETFs which provided an accessible vehicle for local investors to hedge against ZAR depreciation. Back then Plat inflows were largely correlated with ZAR depreciating from 10 to 14 (vs the US\$) over 2013-2015; however, in 2018 large ZAR depreciation in 1H (from <12 to >15 vs the US\$) has been associated with ETF liquidation, perhaps because holders are not in-the-money.
- Just assessing the period of large Platinum ETF inflows (May 2015—September 2016) where over 1.3m oz was added bringing total ETF holdings to a peak of almost 3m oz, investors who bought then are long at a weighted average of \$1397 (in \$ terms) and/or at R14,250 (ZAR terms). IE: US ETF holders are currently out of the money by 44%, and ZAR ETF holders by 21%, which perhaps helps to explain away the current liquidations



**PGMs:**

**Palladium**

- Palladium ETF have liquidated 522oz in 2018, as its widely perceived that this 'unwanted' metal capitalizes on soaring borrowing costs to feed an immediate need from end-users. There were larger ETF liquidations in 2016 (630K oz) and 2015 (730K oz), but smaller liquidations in 2017 (460k oz)
- Nevertheless, the turning point was 2016 when large ETF outflows were associated with bull market price gains, a counter-intuitive trend which has continued for 3 consecutive years, overall highlighting the structural tightness.
- On a seasonal basis, Palladium ETFs should see inflows in 1H of each year. On average the past 10years (2008-2017), Palladium ETFS added >31K oz in 1H vs an average of 17K oz of outflows.
- If the past 4 years selling pace is kept up (on average yearly outflows of 585K oz), then known inventories of Palladium will run out by the end of next year. That 'stat' clearly hasn't gone unnoticed as evidenced by the tightening of forward curve and the overreach for metal now leading to a steep backwardation.



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