



## CANADA

Ticker	Price (CAD)		Target Price (CAD)		Rating
	12/16/2015	Previous	Revised		
MAG	\$9.14	\$18.00	\$18.00		OP
GOR	A\$0.36	A\$0.60	A\$0.60		OP
GSV	\$0.86	\$2.00	\$2.00		OP
ICG	\$0.31	\$0.80	\$0.80		OP
ER	\$0.33	\$1.15	\$0.90		OP
MAX	\$0.27	\$1.50	\$0.90		OP
ATC	\$0.28	\$1.50	\$0.85		OP
PLG	\$0.25	\$1.50	\$0.90		OP
PRB	\$0.37	\$0.75	\$0.75		OP

Prices as of close of 16 December, 2015

In US\$ unless otherwise noted

Source: Thomson ONE, Macquarie Research, December 2015

## Global Gold Developers & Explorers 2016 – Picking the winners

### Impact

- **We are Bullish on those explorers/developers with quality assets and cash** as we believe they have the best shot at being part of M&A and/or advancing assets – they are **ICG, GSV & GOR** as reinforced with no TP reductions. Otherwise, we reflect mainly downward NAV/TP revisions, on albeit good assets, driven by an ongoing difficult financing market & lack of exploration assets buys.
- We have also updated our Macquarie price deck and are maintaining a long-term real gold price of \$1250/oz and silver price of \$18/oz (Fig 1). In fact, our Commodities team views gold as one of the few commodities in 2016 to hide and seek refuge [\[LINK\]](#). Our CADUSD FX rate is maintained at 0.69 in 2H16 as [David Doyle continues to expect sequential weakness in the Canadian currency as part of his leading view \[LINK\]](#). We have also made some company-specific model adjustments to reflect updates/expectations and lower EV/oz valuations. **We maintain an Outperform rating on all our developer and explorer names.**

### Sector Thesis

- **Developers:** we are down to top pick **MAG Silver amongst the developers we cover as we have moved ROG and TXG up to producer status for 2016 [LINK]**. There continues to be a lack of developers globally with only nine single-asset precious metal companies (we are aware of) that are at least at the PFS stage and have any sight on production. EV/M&I oz for these companies range from ~\$9-\$300/ozAu (average of ~\$56/oz & median ~\$45/oz; Fig 6). We would specifically point to the Canadian developers PVG CN (not rated) and TMR CN (not rated) as likely drawing interest as leveraged by the CADUSD and safe jurisdiction themes.
- **Explorers: Outperformance from Canadian, US & Australian Gold Belt plays with Integra Gold up 61%, Gold Standard up 69% & Gold Road up 44% YTD. We continue to prefer high grade/high margin assets in safe jurisdictions.** Heading into 2016, our explorer themes based on our perspective & experience are: 1) strategic investments increase & underpin valuations via validation; 2) monetization of non-core assets to generate cash & shed high holding costs; 3) roll-up “Oban-strategy” continues as resource plays without cash capitulate; 4) safe jurisdictions with currency leverage will be the M&A focus; and 5) high grade/high margin projects continue to be coveted and attract a premium.

### Outlook & Top Picks

- **We think that “boldness” from the seniors will (eventually) creep back into the marketplace as the pressure increases to nail down future production pipelines. Will it happen in 2016 or does this not happen until 2017?**
- **Our top picks:** Amongst developers – **Buy MAG** for its world-class silver Juanicipio JV asset being developed by top-notch operator FRES with AISC projected at <\$7/oz and upside from deeper deposit drilling [\[LINK\]](#). Amongst explorers – **Buy ICG** for its well-located, near-permitted, high-grade Lamaque gold asset that is approaching critical mass and will have +100km of drilling in 2016; **Buy GSV** for its multiple targets on the +100moz Carlin Trend and advancement of Pinion to a PEA in 2016; **Buy GOR** for Gruyere’s potential for a +10-year mine life and +250kozpa with exposure to the weakening A\$.

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# The 2016 exploration landscape

## It has been a vicious period for the explorers...

We do not need to go into gory detail of the acute lack of funds available for the explorers, but we highlight some events that underscore the tough market in 2015 that will likely continue in 2016:

- **Assets were sold at a discount to exploration sunk costs** – Mega Precious Metals was acquired by YRI for only ~\$15m (TEV\$3/oz). The Monument Bay Belt asset in Manitoba, Canada had +\$20m spent on it over the past four years and a +4moz gold resource was documented. As highlighted in our M&A explorer/developer table, five transactions were at a low <\$10/oz TEV (Fig 1).
- **“Rollee” CEOs did not have any other options** – A number of companies have had to capitulate and take the only exit out there in being part of a roll-up strategy. Both Oban Mining (OBM CN, not rated) and First Mining Finance Corp (FF CN, not rated) have been the “Rollers” using mainly cash and shares respectively for their resource acquisition strategy.
- **Annual costs to run a junior are high** – Between the audit, legal and listing fees along with property holding costs, office costs and employees & contracts/consulting fees, the SG&A burn rate can vary from \$700kpa to +\$5mpa – and the \$700kpa is often without any exploration being conducted!

## ...but there are “glass half full” aspects going forward

We think the following positives for the exploration sector have been at work in the background:

- **Survival brings focus** – we think the majority of explorers that are still active have developed a stronger focus on potential value-creation activities.
- **Data is being crunched** – with millions of \$ worth of exploration data collected over the past cycle, there was often a rush to drill. Now targets are being massaged and honed for more surgical drill testing with fewer \$.
- **Currency leverage** – The weak Canadian and Australian currencies in particular are providing an advantage for developers and explorers that have potential for a mainly CAD cost structure and/or capex.
- **Strategic investments are being made** – We expect strategic investments will be in favour as ICG (ELD investment) and GSV (OGC investment) have significantly outperformed since these market validation investments were made. The runway for fully-funded programs in 2016 +/- 2017 is a breath of fresh air. Similar investments are also seen with buy-side funds such as Resource Capital Funds (a number of juniors) which continue to be very important.
- **New discoveries being made** – At the Sept/15 Beaver Creek Precious Metals Summit we highlighted new discoveries [\[LINK\]](#).
- **M&A is happening in the background** – Since Jan/14 there have been 16 non-producer transactions involving **45moz for an aggregate of \$2.7bn** (all \$3/oz - \$136/oz TEV). The highlight transaction was Goldcorp's acquisition of Probe's 4.4moz Borden asset in Ontario for \$442m.
- **Salaries are being cut** – We think the R&D business is all about being very low-cost and the innovators having lots of skin in the game. Several companies have slashed salaries in favour of long-dated, low-price warrants.
- **Drilling costs have come down** – We note that drilling costs are down in some cases +50% and allowing exploration budgets to be stretched.
- **Roll-ups provide cash & assets with a lower G&A** – Oban Mining & First Mining are on the other hand good examples of roll-up consolidation models where talent and cash are aligned for sustained exploration and/or holding cost funds to maintain projects. Investors like the move to one CEO & one CFO vs five of each as more funds are put into the ground or earmarked for additional asset searches.
- **Canadian Charity Flow Through (CCFT)** – This innovative CCFT structure is where: 1) the front-end buyer gets a flow-through and a charity tax credit; 2) the company typically gets equity at a significant premium to market; and 3) the back-end buyer gets a discount to market price. This structure has resonated and allowed a number of explorers to raise funds and mitigate dilution.

Fig 1 M&amp;A transactions in the precious explorer/developer metal space since Jan 1, 2014

Announcement Date	Target Name	Acquirer Name	Announced Value (US\$m)	Deal Premium (Last Px)	Deal Premium (20 VWAP)	Resource (m oz AuEq)	EV/Reserve (US\$/oz)	EV/Resource (US\$/oz)	Gold Price
<b>Explorers/Developers</b>									
20-Aug-15	King of the Hills/Kailis (SBM)	Saracen Mineral	\$3	n/a	n/a	0.4	-	\$8	\$1,152
30-Jul-15	Romarco	Oceana Gold	\$659	71.8%	72.7%	4.8	-	\$136	\$1,096
9-Jun-15	OBM/EAG/RYG/CRG	New Oban	\$46	n/a	n/a	6.4	-	\$7	\$1,178
24-Apr-15	Mega Precious Metals	Yamana Gold	\$15	150.0%	150.0%	4.4	-	\$3	\$1,193
19-Jan-15	Probe	Goldcorp	\$442	49.0%	57.0%	4.4	-	\$101	\$1,280
23-Dec-14	Murgor Resources	Alexandria Minerals	\$3	50.0%	52.5%	0.4	-	\$8	\$1,175
18-Dec-14	Caballo Blanco	Timmins Gold	\$25	n/a	n/a	1.0	\$0	\$25	\$1,199
17-Dec-14	Paramount Gold & Silver	Coeur Mining	\$154	43.9%	n/a	3.5	\$0	\$44	\$1,197
13-Oct-14	Orbis	Semafo	\$139	54.8%	n/a	2.6	\$0	\$53	\$1,242
8-Oct-14	Chaparral Gold	Goldrock/Waterton	\$19	19.6%	n/a	1.7	\$0	\$11	\$1,221
3-Sep-14	Cayden Resources	Agnico-Eagle	\$146	42.5%	n/a	n/a	\$0	\$0	n/a
19-Aug-14	Chucapaca (GFI)	Buenaventura	\$81	n/a	n/a	6.1	-	\$26	\$1,300
25-Jul-14	Kestanelik (Chesser)	Nurul Holdings	\$40	n/a	n/a	0.8	-	\$53	\$1,307
3-Jun-14	Papillon Resources	B2Gold	\$570	20.6%	42.4%	4.2	-	\$135	\$1,244
21-May-14	Sulliden Gold	Rio Alto Mining	\$273	43.4%	46.8%	2.4	\$267	\$112	\$1,415
10-Feb-14	Navachab (ANG)	QKR Corporation	\$110	n/a	n/a	1.9	\$57	\$25	n/a
<b>Average:</b>			<b>\$170</b>	<b>55%</b>	<b>70%</b>	<b>3.00</b>	<b>\$46</b>	<b>\$47</b>	<b>\$1,228</b>
<b>Median:</b>			<b>\$96</b>	<b>46%</b>	<b>55%</b>	<b>2.62</b>	<b>\$0</b>	<b>\$26</b>	<b>\$1,210</b>

Source: Company reports, Thomson ONE, Macquarie Research, December 2015

## Adjusting our price deck

Our global Commodities team's forecasts for precious metal prices has been updated and incorporated into our models [\[LINK\]](#). These forecasts call for a long-term \$1250/oz gold price (in real, 2015 dollars) by 2019 or \$1400/oz when adjusted for inflation. Overall, our team's **gold price forecasts** reflect "living with non-zero rates":

*"We have made only small changes to our gold price forecast. Our thesis for a number of years has been that gold should rally post the first Fed rate hike and that thesis is now about to be tested (unless the Fed causes a major market shock by not raising rates on Wednesday, when we would expect to see a substantial gold rally). We therefore see a stronger price in 1Q 2016 and a slightly firmer price in 2016 as a whole. That said, we have reduced our price forecast to reflect two things – monetary policy between the US and other currency areas, and two, the general malaise in commodity pricing, reflecting concern over Chinese demand, something which (at least at the retail level) appears to be affecting gold too."*

**For silver**, "Solar could be the saviour" is our theme as follows:

*"Meanwhile we have made more substantial changes to our silver price forecast, reducing our price expectations by between 5-11% between now and 2018. While we expect it to continue largely driving its direction from the gold price, we had thought that in the run up to the Fed it could outperform gold on the back of an improving global economy. The global economy hasn't improved, however, and silver hasn't outperformed. As with gold we are forecasting an improved 1Q 2016 post the first Fed rate hike, and some support should come from strong solar demand. With the Paris COP21 Summit set to give renewable a further boost, most notably in India, such that for the first time in a number of years we can make the case for relatively aggressive industrial demand growth. But whether silver can make gains is likely to depend on whether silver investors, who have bought it as it has gone down, remain keen."*

Figure 1 highlights the old vs new commodity price estimates. Note that our EPS/CFPS estimates are based on the nominal forecasts (include inflation expectations) while our valuations are driven by real prices (2015 dollars) and costs (excluding inflation expectations).

We have maintained our Economic Strategist David Doyle's forecast for a low 0.69 CADUSD FX by 2H16 [LINK](#). His view is driven in part by the continued weak performance from the Canadian manufacturing sector and subdued outlook for final domestic demand as business capex faces substantial ongoing headwinds from the energy sector and there is limited ability for further increases in real consumer spending and housing investment activity to drive broader growth.

**Fig 2 Macquarie commodity estimates drive valuations**

		Spot								LT
	Unit	12/16/2015		2015E	2016E	2017E	2018E	2019E	2020E	(2015 \$)
Gold	\$/oz	1069	Previous	1,150	1,149	1,256	1,344	1,400	1,400	1,250
			New	1,157	1,144	1,219	1,319	1,400	1,400	1,250
			Δ%	1%	(0%)	(3%)	(2%)	0%	0%	0%
Silver	\$/oz	14.11	Previous	15.90	16.81	19.38	22.00	22.56	23.00	18.00
			New	15.69	15.29	18.13	20.25	22.25	22.50	18.00
			Δ%	(1%)	(9%)	(6%)	(8%)	(1%)	(2%)	0%
Copper	\$/lb	2.07	Previous	2.57	2.59	2.60	2.93	3.33	3.52	3.15
			New	2.50	2.29	2.39	2.13	2.04	2.40	2.85
			Δ%	(3%)	(12%)	(8%)	(27%)	(39%)	(32%)	(9%)

Source: Bloomberg, Macquarie Research, December 2015

## Developers, few out there on the planet

Since our Mar/15 update of 12 covered & uncovered developers [LINK](#) there have been the following changes to that list: i) **Romarco** was taken over by **OGC**; ii) both **ROG** and **TXG** are still technically developers, but have been moved into our producer sub-sector [LINK](#) (both with production in 2016); iii) **MAG Silver** has been added to the group given its likely Juanicipio production in 2018; iv) **RMX** has suspended status after briefly flirting with production but encountered multiple issues at its Phoenix mine; v) Guyana's Aurora asset and Aureus's New Liberty assets are now pouring gold and thus removed; vi) **Midway** was removed as it has applied for receivership as its Pan resource was significantly flawed and it became a valuation land-mine; and vii) we have added **TMAC** (TMR CN, not rated) and **Red Eagle** (RD CN, not rated).

Our revised developer group is now comprised of nine companies as follows:

- 4 proposed open-pit projects (1 require conventional mills/ 3 heap leaches)
- 5 are designed as underground mines with mill processing
- 5 are expected to first pour gold in 2016
- 2 are projected to pour gold in 2017
- 1 is projected to have a Ag-Au-Pb-Zn concentrate in 2018 (MAG)
- Mix of geographies with 4 North American projects vs 2 in Africa, 2 in South America and 1 in Europe. These projects would contribute, on average, ~ 1.3mozAupa to global supply (if able to execute on PFS/FS parameters).
- We note that if RMX's Phoenix project does not work out then ~165kozpa production would be lost to the market.

Fig 3 Single-Asset Precious Metals Developer Universe

Ticker	Project	Location	Mine Type	Status	Pdn Start	LOM Avg. Pdn/Yr
PVG-T	Brucejack	BC, Canada	UG Mill	Financing	2H17	404
MAG-T	Juanicipio	Mexico	UG Mill	Development	2018	127*
RMX-T	Phoenix	ON, Canada	UG Mill	Suspended	2H15	165
AKG-T	Obotan/Esaase	Ghana	OP Mill	Pre-production	1Q16	200
TGM-V	Karma	Burkina Faso	OP HL	Pre-production	1Q16	97
GQM-T	Soledad	California	OP HL	Construction	1Q16	74
LYD-T	Amulsar	Armenia	OP HL	Financing	2H17	205
TMR-T	Hope Bay	NT, Canada	UG Mill	Construction	4Q16	160
RD-V	San Ramon	Colombia	UG Mill	Construction	2H16	71

\*Converted at a Au/Ag ratio of 81:1

LOM Avg. Pdn/Yr is based on published reports

Source: Company reports, Macquarie Research, December 2015

### MAG Silver (MAG CN, OP, TP: C\$18.00)

**NAV/TP no change with metal price deck having minimal impact – we think Juanicipio production will be in early 2018 and that there is strong “mine #2 potential”.** MAG in our view continues to stand out as having the best undeveloped precious metal asset in the world as located in the world-class Fresnillo Silver District. Time is MAG Silver’s friend as Juanicipio development advances each year closer to a likely production decision and the project is de-risked. MAG has no need to acquire other advanced assets in our view. MAG continues to be a takeover target in our view and note FRES owns 14.1% of MAG.

- ⇒ **Synopsis of 2015 results** – The focus continued to be on advancing the underground ramp at the 44% owned +200mozAg Juanicipio asset in Zacatecas State, Mexico, as operated by JV partner FRES (ramp-up at ~1800m) as of 3Q15, was at 1000m in Mar/15. However, the market was taken aback with spectacular exploration results at depth designed to “cut-off” the base metal-dominated portion of the Valdecanas vein. **Deep drilling in four holes yielded an average thickness of 23.1m ... with a highlight intersection of 405g/tAg over 26m** (including an interval with 2.7% silver).
- ⇒ **Cash position status** – MAG is well positioned to fund Juanicipio development & exploration with an estimated \$78m in working capital. This said, we estimate MAG will require +\$50m by 2017 to fund its share of Juanicipio development.
- ⇒ **Valuation**– Our C\$18 target incorporates both a DCF<sub>5%</sub> model for its 44% share of the main (upper) portion of the Valdecanas vein (est production mid 2018) and a conceptual lower mine DCF<sub>5%</sub> that would be accessed by a shaft [\[LINK\]](#). The decrease in our base metals price deck had only a minor negative impact on our valuation. We would be buyers of MAG and it is our top pick amongst the developers/explorers. **We remind investors that the Juanicipio asset and can withstand a \$10 silver price yet still deliver a 15% post-tax IRR. MAG is our #1 developer pick.**
- ⇒ **Outlook and catalysts** – The main catalyst we see in 1H16 will be the results from deep-drilling exploration of the Valdecanas vein to establish an inferred resource (10 holes) – this will drive further exploration and the ongoing shaft studies. Another key catalyst would be successful negotiation of Cinco de Mayo surface access agreements with the local Ejido (we are not anticipating any developments in 2016 – MAG has not been able to advance Cinco since late 2012).



## Explorer's resolve being tested, best of breed will thrive

The explorers will continue to have a tough time raising exploration capital in 2016. Most explorers are “**Have Nots**” and with battened-down hatches are in survival mode conducting very little exploration – many will wither and de-list. We cover the “**Haves**” that are the active explorers that either have top-quality assets, sufficient cash or top-shelf management (or all three). These attributes have allowed some to attract strategic investments (GSV, ICG, ATC). It has been more difficult for those explorers we cover without a *bona fide* discovery with resources (PRB) or permitting hurdles (MAX) or the perception of not attaining critical mass (PLG, ER).

**Overall valuations generally down & target prices lowered to reflect the weak appetite for early-stage assets.** As shown in Fig 4, our model adjustment and the new Macquarie price deck have varied impact our NAVs (overall down ~15%). Substantial target price drops are associated with lower EV/oz, longer timelines to production and dilution.

**We highlight ICG, GSV and GOR as our top picks.** We would also recommend exposure to the entire basket of eight companies given attractive valuations and overall quality. Target prices for our explorer group decreased by an average of ~18%, while average group P/NAVs increased by ~13%, as a result of the new NAVs.

**Fig 4 Explorers valuations generally declined with TPs following suit**

Expl. Ticker	Price C\$	Rating		NAV (C\$)			Target Price (C\$)				P/NAV		
		Old	New	Old	New	%	Old	New	%	Cons.	Old	New	%
ATC	\$0.28	Outperform	Outperform	1.38	0.99	-28%	1.50	0.85	-43%	0.80	0.20x	0.28x	39%
ER	\$0.33	Outperform	Outperform	3.48	2.60	-25%	1.15	0.90	-22%	0.90	0.09x	0.13x	34%
GOR*	\$0.36	Outperform	Outperform	0.63	0.63	0%	0.60	0.60	0%	0.58	0.57x	0.57x	0%
GSV	\$0.86	Outperform	Outperform	3.38	3.30	-2%	2.00	2.00	0%	1.52	0.25x	0.26x	2%
ICG	\$0.31	Outperform	Outperform	1.18	1.18	0%	0.80	0.80	0%	0.78	0.26x	0.26x	0%
MAX	\$0.27	Outperform	Outperform	4.28	3.72	-13%	1.50	0.90	-40%	1.05	0.06x	0.07x	15%
PLG	\$0.25	Outperform	Outperform	2.43	1.15	-53%	1.50	0.90	-40%	0.75	0.10x	0.22x	111%
PRB	\$0.37	Outperform	Outperform	0.87	0.86	-1%	0.75	0.75	0%	0.58	0.43x	0.43x	1%
<b>Average</b>						<b>-15%</b>			<b>-18%</b>		<b>0.25x</b>	<b>0.28x</b>	<b>13%</b>

\*GOR price, NAV and target price quoted in AUD

Prices & consensus estimates as of close of 16 December 2015

Source: Thomson ONE, Bloomberg, Macquarie Research, December 2015

## Snapshots of our explorers

### ATAC Resources (ATC CN, OP, TP: C\$0.85)

- ⇒ **Cutting NAV/TP to C\$0.99/C\$0.85 from C\$1.38/C\$1.50 due to lower catalyst flow on lower exploration budgets impacting EV/oz valuation.** Strategically, ATC continues to slowly advance its large +50km long, Nadaleen gold trend asset on its 100%-controlled Rackla gold belt, Yukon, Canada. We continue to think that a hard focus on detecting very high-grade Carlin-type deposits (Meikle-type +7moz at 20g/tAu) is likely the key to catalyse development of the region. ATC controls a Carlin-type district with the potential for company-making Tier One +20moz deposits.
- ⇒ **Synopsis of 2015 results** – ATAC focused on developing drill targets at its Anubis target area and conducted limited drilling (<1km) its Conrad deposit to test for expansion of the lower zone (missed lower zone but intersected 8.7g/t over 9.3m in the middle zone). We are still waiting for maiden resource estimate on Conrad. ATAC also completed 1.4km of drilling at its Tiger Deposit to complete optimization work recommended in the 2014 PEA.
- ⇒ **Cash position** – We estimate at YE15 ATC will have ~\$12m in working capital.

- ⇒ **Valuation** – Our valuation is underpinned by a probability-weighted average of the Macquarie estimated resource for Osiris under different scenarios (1-20mozAu) at \$50/oz (we estimate Conrad at 750kozAu). For the Tiger Zone, we have included a DCF analysis with a 4-year LOM. We also provide value for ATC's land position of \$800/ha [\[LINK\]](#).
- ⇒ **Outlook and catalysts** – We do not expect any exploration will be conducted until June-September. We think the eventual Conrad zone will be ~750koz at 6-8g/tAu (refractory) which will not be critical mass for the region. The most important catalyst will be the first systematic drilling of the Anubis cluster of targets. Given arsenic is such a strong pathfinder in the region, there is a chance that follow-up prospecting will eventually(?) detect a new raw Meikle-type discovery.

### Eastmain Resources (ER CN, OP, TP: C\$0.90)

**NAV/TP down modestly on our Eau Claire DCF model timeline delay and lower valuation on underground resources and land position (was \$1.15TP).** Can a PEA be delivered in 2016? ER's strategy is to increase its share price via the delivery of a PEA that is underpinned by its 1.0moz Eau Claire open-pit resource estimate that is part of a larger 1.6moz resource (including underground resources).

- ⇒ **Synopsis of 2015 results** – ER completed a significant revised interpretation of the 450W and 850W zones in the 100%-owned Eau Claire deposit, James Bay region, Quebec, Canada. It was applied to the new resource block model released Apr/15 [\[LINK\]](#). The key to the new interpretation was isolating the thick vein domains that link to the parallel vein zones. In 2015 ER drilled ~22km to mainly infill and expand the Eau Claire deposits.
- ⇒ **Cash position status** – We estimate ER will have ~\$3m in working capital cash at YE15 (including \$400k in flow-through funds raised in Dec/15).
- ⇒ **Valuation** – We value ER by a sum-of-parts NAV as underpinned by our DCF5% model for a **1moz at 4.05g/tAu open pit at the 450W zone (second highest grade open pit in North America)**. We also provide value for underground resources (\$30/oz) and 50% of the land position at \$1200/ha (both reduced from our previous valuation) [\[LINK\]](#). ER controls two gold belts on a 100% basis – Clearwater and Eastmain.
- ⇒ **Conviction** – medium
- ⇒ **Outlook and catalysts** – We think it is very important that the company deliver the PEA in 2016 and it is highly preferred that it be delivered in 1H16. There are no plans for a revised resource estimate for the 450W and 850W zones at Eau Claire. However, drilling off the “floor of the pit” for incremental oz to push the pit another +25m deeper appears to be a key value-creation activity that could enhance economics. We also see ER attracting producer attention as we believe critical mass could be reflected in the PEA.

### Gold Road Resources (GOR AU, OP, TP: A\$0.60 – covered by Ben Crowley)

**GOR is our preferred Australian gold explorer and developer (no change to NAV/TP).** GOR holds a substantial exploration portfolio in the Yamarna Trend of Western Australia's Eastern Goldfields. The company has already delineated the 5.6Moz Gruyere deposit, which it is now advancing in the PFS stage. GOR has also identified a large number of what we view as highly prospective camp-scale targets across its 5,000km<sup>2</sup> ground holding. At its planned 7.5Mtpa production rate, Gruyere is expected to yield 250kozpa over a 10- to 15-year mine life. We believe that as the understanding of Gruyere evolves further that mine life extensions are likely. We also expect GOR's extensive Yamarna ground holdings and exploration programme to deliver satellite discoveries and extend the life of a central processing facility at Gruyere.

- ⇒ **Synopsis of 2015 results** – GOR has completed an RC drilling programme at its Washburn target returning a best intersection of **3m at 13.45g/t gold from 24m**, including **1m at 36.76g/t gold** and a more modest **3m at 2.47g/t from 72m**. Gold mineralization is hosted in multiple parallel shear zones associated with intrusive contacts. All other holes in the programme returned assays of less than 1g/t but confirmed the structural interpretation. Follow-up Aircore, RC and Diamond drilling will be carried out to determine the full extent of mineralization. Diamond drilling

at the Smokebush Dolerite target on the South Yamarna JV continues to return encouraging results. The fifth and final hole of a recent diamond drilling campaign returned **6.76m at 15.85g/t gold from 167.71m** including short **0.4m** intersections at **191.36g/t** and **0.47m at 50.83g/t**. Mineralisation is hosted within quartz-sulphide lodes associated with the intersection of a discrete shear zone and a dolerite intrusive. Known mineralisation has now been defined over ~600m of strike and we remain encouraged by results to date.

- ⇒ **Cash position status** – We estimate GOR will have ~A\$33m in working capital cash at YE15.
- ⇒ **Valuation** – We value GOR at A\$0.63/sh based on a sum-of-the-parts valuation using a 9% WACC [\[LINK\]](#).
- ⇒ **Outlook and catalysts** – With the prospect of substantial processing capacity at Gruyere the development barrier for satellite deposits will be significantly lower. We believe that over time the Yamarna belt could become a substantial gold producing region. We look to FY16 as a company making year for GOR.

### Gold Standard Ventures (GSV CN, OP, TP: C\$2.00)

**We remain bullish long-term given results and milestones achieved in 2015. No impact on NAV from commodity/FX changes.** GSV has an enviable large land position in the South Carlin Trend – one of the only juniors globally with a 100%-owned on-trend position to 100mozAu. The company's strategy is to focus on creating value by both advancing the Pinion area oxide deposits toward a PEA and testing the numerous high-grade targets on the property, including North Bullion & Bald Mountain.

- ⇒ **Synopsis of 2015 results** – GSV was able to consolidate the Pinion property and its historical oxide gold resources at the Railroad-Pinion gold project, South Carlin Trend, Nevada, USA. GSV subsequently reported 43-101 compliant resources of **1.4moz at 0.59g/tAu (CoG of 0.14g/tAu) or 1moz at 0.80g/tAu** (CoG 0.5g/t). GSV has identified expansion potential at Pinion and is in the midst of a Phase 3 drill program. At Dark Star, GSV documented a 375kozAu inferred resource and also announced **a new oxide discovery to the north with 149.4m@1.38g/tAu** and reinforces that the southern segment of the Carlin Trend, which GSV has 100% control of, is still vastly underexplored [\[LINK\]](#).
- ⇒ **Cash position status** – We estimate GSV has ~\$10m in working capital as largely injected by OGC as part of a \$15m strategic private placement to own ~15% of GSV [\[LINK\]](#).
- ⇒ **Valuation** – We value GSV by a sum-of-parts NAV as underpinned by the North Bullion Macquarie-estimated resource of 700kozAu as well as our DCF<sub>5%</sub> model for the Pinion oxide heap leach [\[LINK\]](#) (assume ROM). We also value the Dark Star Deposit at 375kozAu at \$100/oz. In addition, we value the Railroad/Pinion land holding of 16kha at \$1,200/ha.
- ⇒ **Outlook and catalysts** – In 2016, GSV will deliver a PEA on Pinion and in doing so establish the gold characterization via advanced metallurgical work – if the oxide is amenable to ROM this would be similar to Newmont's Emigrant mine (18km to the N) and very positive; whereas if crushing is involved the economics would be more stressed at <\$1100 gold. We also expect a new resource from Dark Star (currently ~375koz at a CoG of 0.14g/tAu) given the potential new deposits discovered to the north (satellite to Pinion, 2.1km to the west) [\[LINK\]](#). The other key catalyst in 2016 will be follow-up drilling at North Bullion where step-out drilling to the west will test feeder zone structures for high-grade sulphide-bearing refractory gold mineralization. We also believe that given OGC's toe-hold investment and NMT's nearby and on-trend operations and processing facilities make GSV's favourable slice of the Southern Carlin Trend highly strategic (20km strike length).



### Integra Gold (ICG CN, OP, TP: C\$0.80)

**This Canadian Gold Belt in Val d'Or has produced ~10moz and is finally consolidated. NAV/TP remains unchanged.** We continue to view ICG's Lamaque underground project as one of the scarce high-grade 100%-owned assets controlled by a junior in a safe jurisdiction (with infrastructure & near-permitted status), associated with a significant size land position and multi-million ounce potential. The Triangle deposit will continue to be the centre of attention in the South Lamaque area a steady flow of exploration updates as well as the results of the Integra Gold Challenge will continue to grab much of the attention in the explorer sector.

- ⇒ **Synopsis of 2015 results** – ICG had a big year with **two revised resource estimates, a revised PEA, a \$10m bought deal private placement and a \$15m strategic investment by Eldorado Gold** (ELD CN, C\$4.08, Outperform, TP: C\$7.00, Michael Siperco) [\[LINK\]](#). In addition, ICG also launched the \$1m (in prizes) crowd-sourcing *Integra Gold Rush Challenge*, which in our view was an innovative move for ideas and investor attention in this mining market [\[LINK\]](#). The winners will be announced at PDAC in 2016.
- ⇒ **Cash position status** – We estimate ICG will have ~\$13m in working capital at YE15.
- ⇒ **Valuation** – We value ICG via a sum-of-parts NAV as underpinned by our DCF<sub>5%</sub> model for the Triangle and Parallel underground zones largely based on the Feb/15 UPEA. We also provide value for underground optionality resources at the other zones of Lamaque South (\$50/oz) and Lamaque Deep (\$25/oz).
- ⇒ **Outlook and catalysts** – ICG is about to embark on a major exploration drilling year in 2016 with +100km of drilling planned. The company will also announce the winners of its *Integra Gold Rush Challenge* at the PDAC in Mar/15. We also see ICG as an increasingly attractive takeover target for its belt consolidation for its safe jurisdiction status, its asymmetric leverage to the weakening Loonie, near-permitted with mill infrastructure, and growing discovery upside at the Triangle zone.

### Midas Goldcorp (MAX CN, OP, TP: C\$0.90)

**Donlin Creek-type Tier one +20moz geological setting (with infrastructure), but cutting NAV/TP to C\$3.72/C\$0.90 from C\$4.28/C\$1.50 on financing dilution risk and the need for permitting patience.** Midas continues to sequentially de-risk the Stibnite Gold project via ongoing discussions with stakeholders. We see the PFS as a document that has embedded MAX's philosophy of extensive stakeholder consultation and vision to remediate an historic mining site with environmental issues by mining them and repatriating the landscape. At 336kozpa and <\$750/oz AISC with expected LOM of 12 years, Stibnite Gold would be one of the top-10 gold mines in USA by annual production.

- ⇒ **Synopsis of 2015 results** – Midas spent the majority of 2015 preparing the ground to enter the Idaho Joint Review Process (JRP) to start permitting its 100%-owned Stibnite Gold project, Idaho, USA. The application to the JRP likely be by mid(?) 2016 and is underpinned by its Dec/14 PFS (capex \$907m, total recovered gold 4.04mozAu).
- ⇒ **Cash position status** – We estimate MAX has ~\$3m in working capital.
- ⇒ **Valuation** – We have updated our model to incorporate additional working capital dilution, which drove our target price decrease. Our DCF<sub>5%</sub> model emulates the PFS and assumes LOM of 12 years, average production of 336kozAu pa with start-up in 2021. We continue to value the 100%-controlled district-scale land position at \$1,200/ha for ~\$14m.
- ⇒ **Outlook and catalysts** – Midas should be in a position in early to mid-2016 to enter the Joint Review Process and begin to permit the Stibnite Gold project, Idaho, USA. Infill drilling at the Yellow Pine pit could convert ~400koz from inferred to indicated and allow them to be added to the PFS to reduce the strip ratio, increase overall recovered gold and enhance the project economics.

### Pilot Gold (PLG CN, OP, TP: C\$0.90)

**Goldstrike ramping up to #1 asset status...NAV/TP modestly lowered on lower EV/oz valuation metrics.** Pilot Gold is a spin-out from the \$2.2bn Fronteer transaction with Newmont. It has a top-notch management team that has made new discoveries in Nevada, Utah and Turkey.

- ⇒ **Synopsis of 2015 results** – In 4Q15 PLG delivered impressive oxide gold RC drill results from its **Gold Strike project in Utah including 39.6m at 1.01g/tAu**. These results are especially important given they are immediately lateral to past-producing open pits from a heap leach operation, there is high resource potential plus part of a large system with a **7km footprint**. Although we have not been to site yet, we are compelled to believe Goldstrike could have the highest near- to medium-term resource & economic potential of all PLG assets. At Kinsley Mtn, there was further technical success in documenting potential favourable stratigraphy and a 284kozAu maiden resource has been documented. However, deeper drilling is expensive to sketch in further sulphide mineralization. In Turkey, the revised PEA for Halilaga has provided a better lower-capex project, but our lower LT copper price deck has hurt potential economics. We are waiting for Teck to decide whether they will monetize their interest.
- ⇒ **Cash position status** – We estimate PLG will have a solid ~\$8m working capital position at YE15. PLG trades at a low 0.22x P/NAV and at 40% cash value.
- ⇒ **Valuation**– Our sum-of-parts NAV approach includes a DCF<sub>5%</sub> model for Halilaga and EV/oz components for TV Tower/Kinsley Mtn/Goldstrike. A 9% decrease in our long-term copper price forecast has significantly reduced our valuation on Halilaga, contributing much to the target price decrease [\[LINK\]](#).
- ⇒ **Outlook and catalysts** – We are focused on an initial Goldstrike resource as the main catalyst for PLG shares (1H16?). If a reasonable size resource is documented in 2016, given PLG's aggressive track on advancing assets, we would not be surprised to see a PEA in the medium term and a substantial drill program launched.

### Probe Metals (PRB CN, OP, TP: \$0.75)

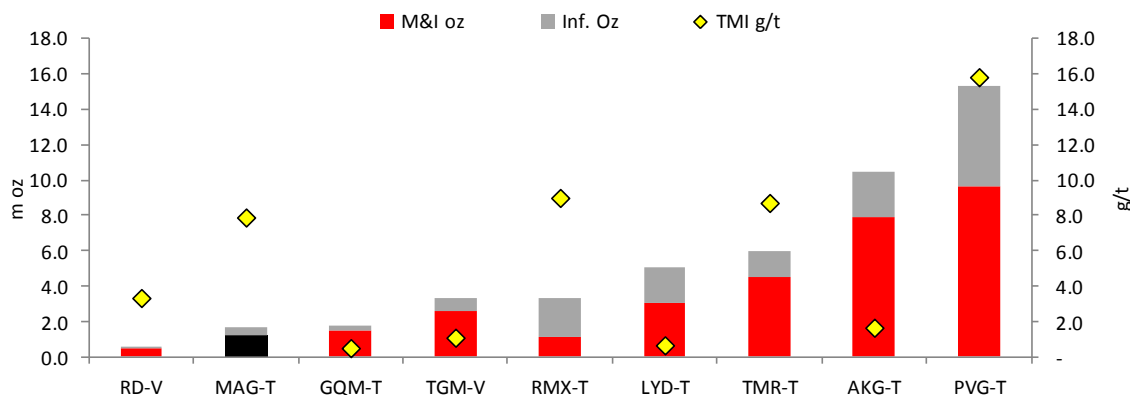
**Probe Metals: Still searching for a flagship asset post the 1Q15 G transaction – no change to target.** Probe Metals was spun out with C\$19m in cash and the Black Creek chromite asset in the Ring of Fire, Ontario, Canada. Both CEO David Palmer (winner of the PDAC Prospector of the Year for 2014) and Chairman Jamie Sokalsky (Ex-Barrick CEO) have signed-on to Probe Metals for at least until 2017.

- ⇒ **Synopsis of 2015 results** – Probe Metals has had a quiet remainder of 2015 and was presumably conducting extensive asset due diligence with \$1.3m in expenditures in the first nine months of 2015.
- ⇒ **Cash position status** – we forecast ~\$14m in working capital at YE15.
- ⇒ **Valuation** – PRB trades at 72% of its total cash. We value the stock via sum-of-parts NAV that includes a component of management goodwill.
- ⇒ **Outlook and catalysts** – Acquisitions of an asset of merit will continue to be a focus for the company and a key catalyst. If the right asset is acquired, the company will receive significant market interest, in our view.

### Appendix A – Developers peer analysis

The development assets have a significant range of grade (<1g/t -16g/tAu) and total oz (Fig 5). Note we have excluded the Snowfield project from PVG’s resource numbers.

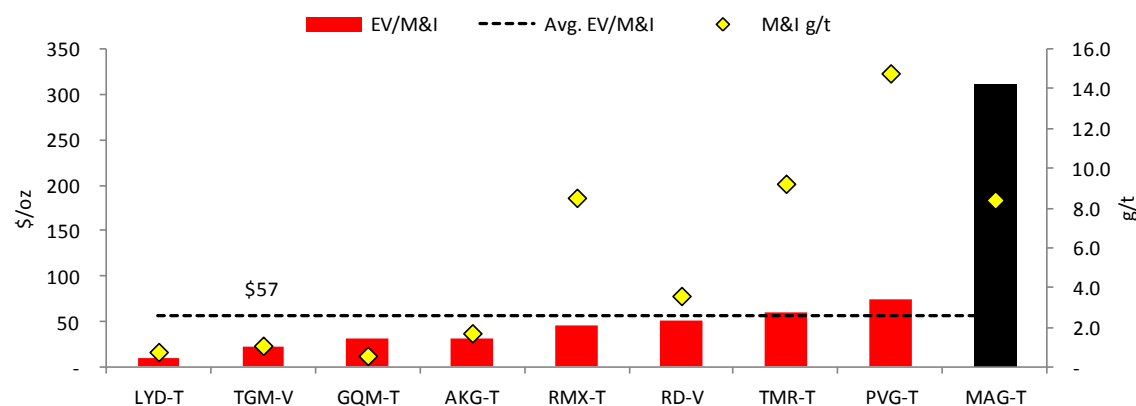
**Fig 5 Developer total mineral inventory (TMI) and grade curve**



Note MAG’s attributable resources converted from Ag to AuEq  
 Source: Company reports, Macquarie Research, December 2015

The developers highlight a significant range in EV/M&I oz, from ~\$10/oz to ~\$300/oz (Fig 6). The range is much bigger than the 47 gold producers we track, reflecting significant de-risking for the higher end valuation.

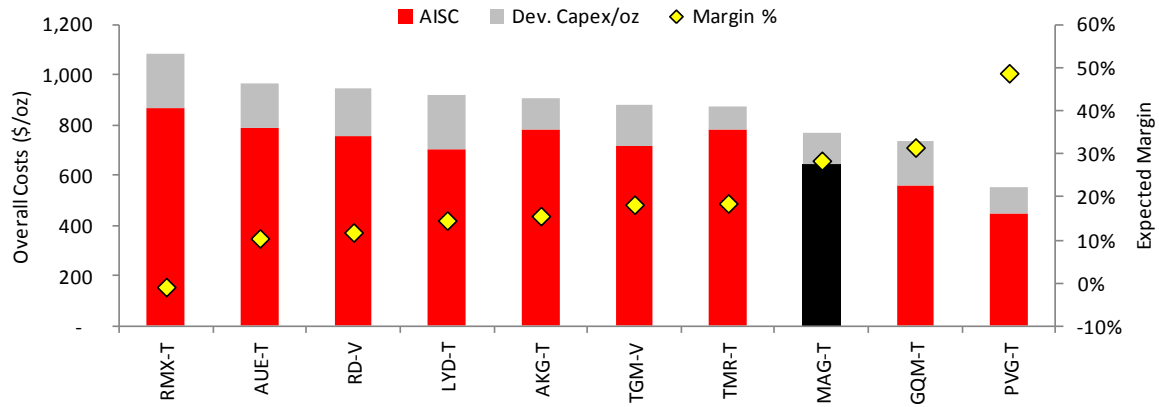
**Fig 6 Developer peer group EV/oz and grade**



Note MAG’s attributable resources converted from Ag to AuEq  
 Source: Company reports, Thomson Reuters, Bloomberg, Macquarie Research, December 2015

Another measure of the project quality is the total margin each generates using the published AISC together with the development capital/oz. This provides a proxy to the EBIT margin of the investment and demonstrates a project’s ability to withstand capital or operating cost over-runs and service debt in the current gold price environment. We like to see a +20% margin at the project to provide a reasonable level of confidence that the asset will contribute to the company’s bottom line.

**Fig 7 Developer expected margin curve based on spot gold price of ~\$1070/oz**



Note: MAG – Ag converted to AuEq  
 Source: Company reports, Macquarie Research, December 2015

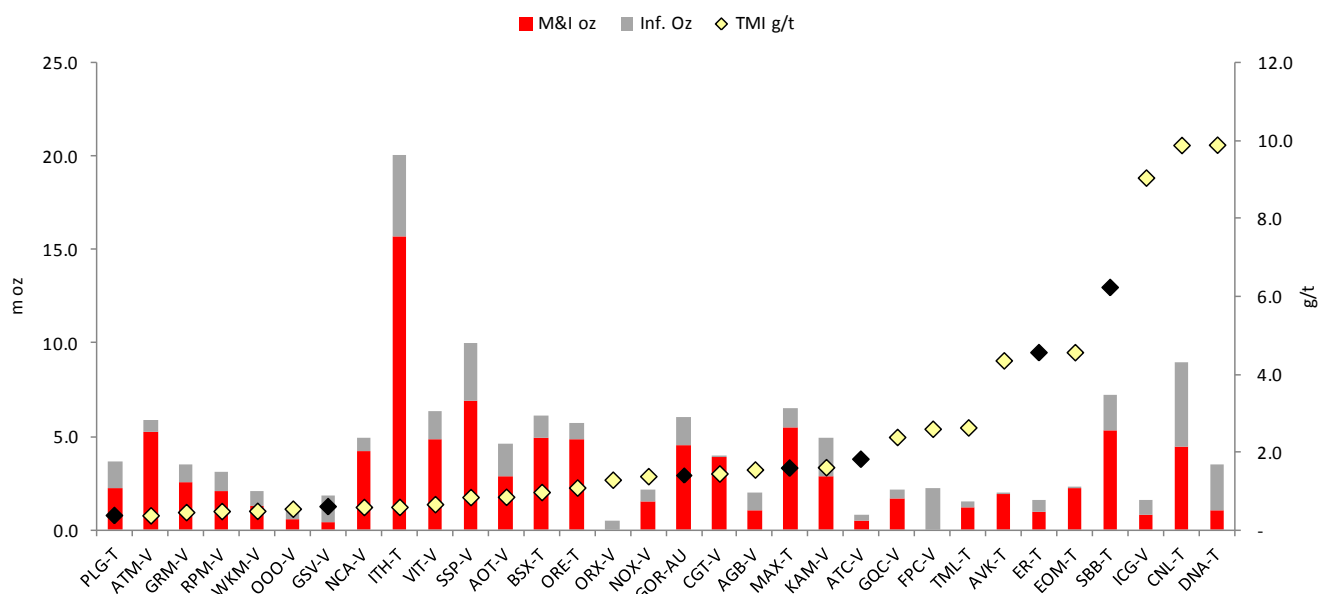
### Appendix B – Explorer peer analysis

In addition to our formal coverage, we track a universe of 26 other precious metal explorers (Fig 8 – exploration to the PEA stage projects). The group has a total mineral inventory (TMI) of ~131mozAu with assets from mainly <1moz up to ~20moz (ITH CN, not rated).

We highlight that:

- highest EV/oz related to the most active explorers with sizable resources (Fig 9)
- black diamonds/columns in Fig 8 and Fig 9 are companies covered by Macquarie

**Fig 8 Explorer TMI resources & grade curve**

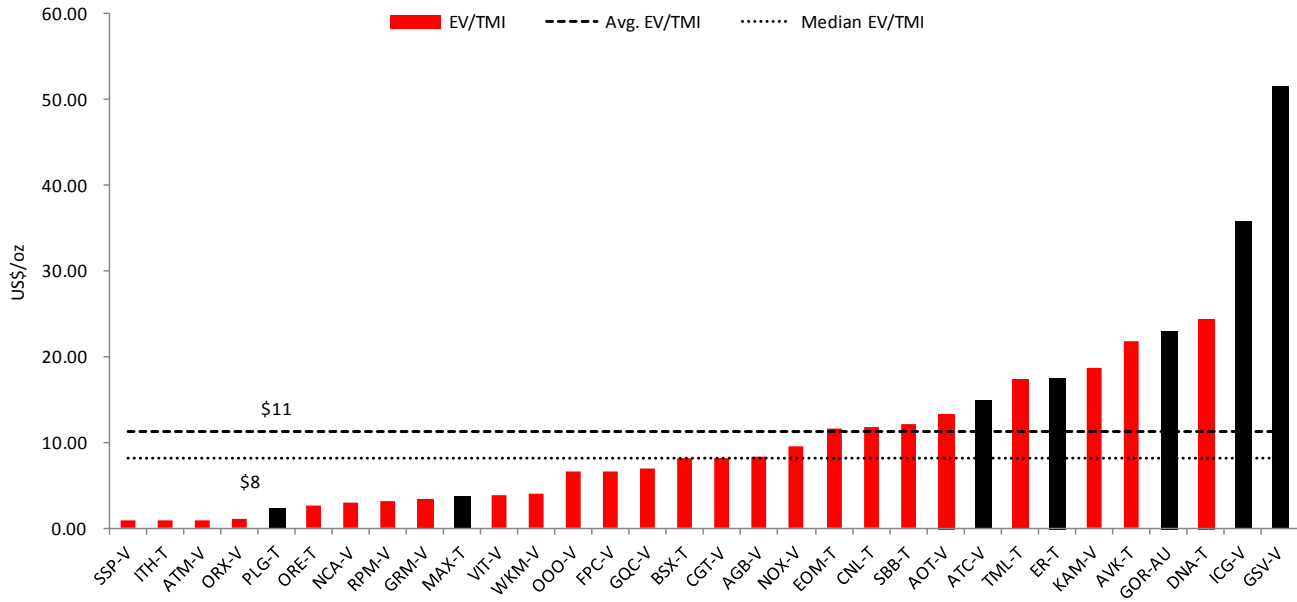


Grades denoted in black diamonds covered by Macquarie

Source: Company reports, Thomson Reuters, Bloomberg, Macquarie Research, December 2015



**Fig 9 EV/oz valuation curve for TMI**



Black columns are covered by Macquarie

Source: Company reports, Thomson Reuters, Bloomberg, Macquarie Research, December 2015

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## Recommendation definitions

**Macquarie - Australia/New Zealand**

Outperform – return >3% in excess of benchmark return  
Neutral – return within 3% of benchmark return  
Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

**Macquarie – Asia/Europe**

Outperform – expected return >+10%  
Neutral – expected return from -10% to +10%  
Underperform – expected return <-10%

**Macquarie – South Africa**

Outperform – expected return >+10%  
Neutral – expected return from -10% to +10%  
Underperform – expected return <-10%

**Macquarie - Canada**

Outperform – return >5% in excess of benchmark return  
Neutral – return within 5% of benchmark return  
Underperform – return >5% below benchmark return

**Macquarie - USA**

Outperform (Buy) – return >5% in excess of Russell 3000 index return  
Neutral (Hold) – return within 5% of Russell 3000 index return  
Underperform (Sell) – return >5% below Russell 3000 index return

## Volatility index definition\*

This is calculated from the volatility of historical price movements.

**Very high–highest risk** – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

**High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

**Medium** – stock should be expected to move up or down at least 30–40% in a year.

**Low–medium** – stock should be expected to move up or down at least 25–30% in a year.

**Low** – stock should be expected to move up or down at least 15–25% in a year.

\* Applicable to Asia/Australian/NZ/Canada stocks only

**Recommendations** – 12 months

**Note:** Quant recommendations may differ from Fundamental Analyst recommendations

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All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense

Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

**EPS** = adjusted net profit / efpowa\*

**ROA** = adjusted ebit / average total assets

**ROA Banks/Insurance** = adjusted net profit / average total assets

**ROE** = adjusted net profit / average shareholders funds

**Gross cashflow** = adjusted net profit + depreciation

\*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

## Recommendation proportions – For quarter ending 30 September 2015

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	48.87%	59.96%	35.63%	42.13%	59.44%	42.11%	(for US coverage by MCUSA, 3.54% of stocks followed are investment banking clients)
Neutral	33.44%	25.00%	39.08%	52.55%	37.06%	38.42%	(for US coverage by MCUSA, 5.05% of stocks followed are investment banking clients)
Underperform	17.68%	15.04%	25.29%	5.32%	3.50%	19.47%	(for US coverage by MCUSA, 0.51% of stocks followed are investment banking clients)

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