

GOLD

By Gold Fields Mineral Services Ltd

The year 2000 was hardly an exciting year for the gold price. At US\$279.11/oz, the annual average was basically unchanged from 1999. What is remarkable, at first glance, is how this could have occurred despite some significant movements in the components of the supply/demand balance, the two obvious ones being producer hedging and investment.

Summary

There was a swing in hedging to accelerated demand of 10 t from net supply of 506 t in 1999. The fact that this did not boost prices owes much to the almost equally large swing from implied net investment of 170 t in 1999 to net disinvestment of 291 t last year. Miners and investors behaved differently in 2000 largely because the two groups had different price expectations. Many in the mining industry fully expected further upside to the price whereas most investors adopted the contrary view.

In 2001, mining companies are expected to increase moderately their hedging while private disinvestment should diminish. Attention could shift to the behaviour of other supply/demand variables, chiefly fabrication demand where the risk has grown of a US recession-induced fall in gold offtake this year. Yet, the irony is that an economic downturn represents both a threat and an opportunity for gold. The threat lies in the aforementioned danger of sharply lower fabrication demand, especially in jewellery, were the US to enter a recession that was transmitted to other parts of the world. The opportunity for gold lies in its historical role as a safe haven. Clearly, over the past decade this role has appeared to become increasingly 'historical'. It would be easy to recite a long list of political and financial events such as the recent collapse in the Nasdaq to which gold has failed to react in the traditional manner. Nevertheless, it could

be argued that none of the crises over the past decade really shook the global financial system and investors' confidence in the dollar.

The chances of something more exciting happening have therefore grown, raising the probability of gold moving out of the narrow US\$256-US\$273/oz trading range experienced in the first quarter of 2001. On balance, the risks are more to the downside but the scope for an investor-led recovery is arguably greater now than it has been for a number of years.

World Gold Supply and Demand (t)		
	1999	2000
<i>Supply</i>		
Mine production	2,568	2,573
Official sector sales	464	471
Old gold scrap	616	611
Net producer hedging	506	-
Implied net disinvestment	-	291
Total Supply	4,154	3,946
<i>Demand</i>		
Fabrication		
Jewellery	3,149	3,175
Other	595	563
Total Fabrication	3,744	3,739
Bar hoarding	240	198
Net producer hedging	-	10
Implied net investment	170	-
Total Demand	4,154	3,946

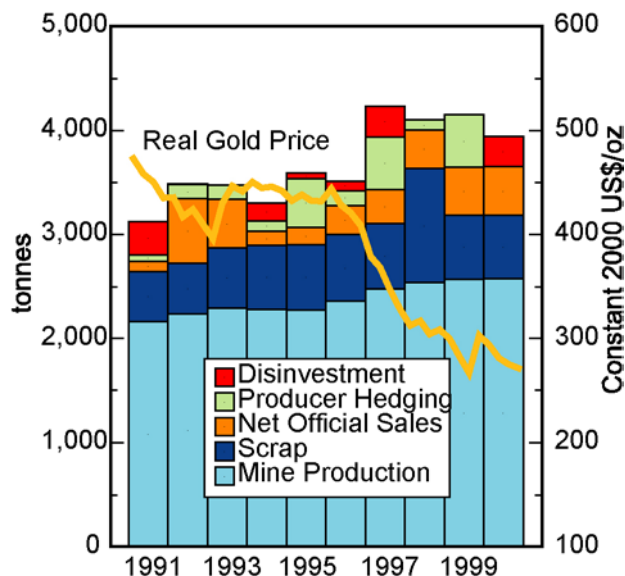
Totals may not add due to rounding. Net hedging incorporates producer forward sales, options and loans.

Price Commentary

2000 was the year in which gold was supposed to have found its feet as the transparency introduced at the end of 1999 regarding the official sector and its future actions was expected to help the market consolidate (and indeed provide a platform

upon which it could build). However, higher prices have not materialised and the market appears as uncertain as ever about what the future holds.

Figure 1
World Gold Supply



The most dramatic price event in 2000 was the February spike, which saw the London fix leap nearly US\$30/oz in two days. Prices had already been rising steadily since early December 1999 due to a variety of factors but it was a flurry of statements by producers regarding their hedging strategies in the first week of February that really set the market alight. These gains could not be maintained, however, and prices began sliding fast. There were again various immediate issues behind this reversal but it was the assertion of a series of longer-term fundamental factors, which brought about the period of prolonged price decline.

Two such fundamental factors were central bank selling and macro-economic concerns. The former, whilst shy of record levels, has become a 'structural' factor that helps undermine the desirability of all forms of investment in gold. The latter was not significant early on but became progressively more important as signs of a slowdown in the



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US became apparent during the second half of the year and as stock markets began their dramatic slide towards year-end.

The factor most often cited behind the steady fall in the price, however, was the progressive strengthening of the US dollar (and indeed the only interruptions to the steady price decline were largely currency driven). A degree of caution, however, needs to be exercised as regards this factor. Looking at this matter from a statistical point of view, there was a strong negative correlation in 2000 between the gold price and the dollar's value but, in addition to not forgetting that correlation does not imply causality, this relationship can work in the opposite direction. In some years, for example in 1998, the relationship was positive which implies that as the dollar strengthened so did the gold price. There was also substantial variation within 2000 itself. For example, January 2000's coefficient was strongly positive, December's strongly negative.

Currency links often prove significant only when other fundamental forces are weak or when they work in tandem with them and this appears to have been the case last year. One area in which the strong dollar contributed to important shifts in the fundamentals was private sector disinvestment. This is estimated at just over 290 t in 2000, the third highest level seen in the past 10 years. This represented a massive 461 t swing from the positive 170 t seen in 1999. There were three main reasons for such large-scale physical selling last year. First, and most importantly, was the rise in the gold price in euro terms, up by close to 16% on average year-on-year, as a result of that currency's weakness. There is little doubt that investors took advantage of high euro prices to sell bar and coin *en masse*. Second, underlying the price incentive to sell was a palpable sense that interest in bullion among the public in Europe has waned. Finally, post-'Y2K' disinvestment in North America contributed to the total last year.

Whilst dollar strength impacted most noticeably on disinvestment, its effects on other elements of the supply and demand balance were felt too. First, dollar strength limited the positive impact that producer restructuring of their hedge books could have had on the market over the entire year. For instance, the reduction in positions over the course of the first three quarters reversed in the December quarter on the back of substantially higher levels of Australian and South African producer activity. This was linked to the strength of the dollar which, combined with still subdued leasing rates, led to a flurry of hedging activity. Second, the boost to local gold prices given by the stronger dollar has played a part in postponing reductions in mine output. Finally, higher local gold prices were important in holding back consumption in the main consuming markets of Asia such as India or Indonesia.

Mine Production - Top 20 Producing Countries				
Rank			Production (t)	
2000	1999		1999	2000
1	1	South Africa	450	428
2	2	US	342	355
3	3	Australia	300	296
4	5	China	156	162
5	4	Canada	158	155
6	7	Russia	138	155
7	6	Indonesia	152	139
8	8	Peru	128	133
9	9	Uzbekistan	86	86
10	11	PNG	65	76
11	10	Ghana	78	74
12	12	Brazil	54	53
13	13	Chile	48	50
14	15	Philippines	33	35
15	17	Mali	25	30
16	18	Mexico	23	27
17	14	Argentina	35	26
18	20	Kyrgyzstan	20	22
19	16	Zimbabwe	30	21
20	19	Colombia	21	21
		Rest of World	226	231
		TOTAL	2,568	2,573

Supply in 2000

Dramatic shifts were recorded on the supply side as producer hedging disappeared and disinvestment returned to the market. Producers generated 65% of total supply, a major decline from 1999 due to the absence of new hedging and virtually no increase in mine production.

South Africa

Gold production fell again last year, down by almost 5% to just under 430 t. This continued decline means South Africa's share of the world total has halved in less than a decade to roughly 15%. The main factor behind this decline remains operational difficulties related to the maturity of the industry and the nature of the ore deposits but, in 2000, a reduction in the number of working shifts also hit output.

South African gold production is dominated nowadays by three large producers, namely AngloGold, Gold Fields Ltd and Harmony who between them produce close to 80 % of the country's gold. Last year, AngloGold and Gold Fields both faced difficulties at their local operations. For AngloGold, there were losses in the West Wits group, which reported a year-on-year decline in gold output of just under 10 t. Gold Fields recorded production losses at its Kloof mining complex. Closures in South Africa last year included Durban Roodepoort Deep's West Wits and Durban Deep mines where all underground operations at both mines and activities at the West Wits open pit were terminated.

The draft Minerals Development Bill proposing changes to South African mineral law was published in December 2000. The main point of contention appears to be the clause that allows the government to revoke the mineral rights to properties that are left undeveloped. This has raised concerns in some quarters about the security of tenure of mineral properties.

North America

Following a decline in 1999, US gold production increased by 4% to an estimated

355 t. This was in part due to gains for Newmont and Barrick, particularly in the December quarter when output exceeded expectations. Newmont's gains stemmed largely from its Deep Post mine, in Nevada, which contributed an extra 1 Mt of high-grade ore. Barrick benefited from a 16% increase in output at Goldstrike and a 46% rise in output from Betze-Post, which cancelled losses at Meikle, mine. Other mines where production gains were recorded included Bingham Canyon, Round Mountain and McCoy/Cove.

Not all developments were positive. The Cortez joint venture saw a 24% decrease in output due to lower grades whilst mining was completed at Nevada's Rosebud and Dee mines and operations were still on hold at Getchell. The 124-year old Homestake mine in South Dakota was the latest casualty of high costs with closure scheduled in 2001.

Canadian production, by contrast, fell in 2000 but by less than 2% to 155 t. The fall was mainly due to lower output from a number of the larger producers. Output losses are expected until 2002 at the Troilus mine whilst lower grades were responsible for a 20% drop for the Bousquet mine. Output was also hit by the suspension of activities at the Sigma-Lamaque and Joe Mann mines, in part due to the low gold price. These losses were part balanced by a major expansion at La Ronde mine, higher recoveries at the Kemess mine, the successful re-commissioning of Echo Bay's Lupin mine and the start-up at Goldcorp's new Red Lake mine.

Latin America

The region's gold production declined marginally in 2000, slipping to 378 t, though this still left it with an impressive share of around 15% of the world total.

Following spectacular growth of 40% in 1999, Peru's output increased 3% last year to 133 t. Production at Latin America's largest mine, Yanacocha, rose for the seventh consecutive year to just under 55 t and further growth is expected in 2001. The gains here and at

Orcopampa were enough to negate losses from Barrick's Pierina mine and at Sipan where output declined 2% and over 25% respectively. As for the medium-sized producers, both Compañía Minera Poderosa and Minera Aurífera Retamas were able to maintain output while Minera Horizonte's production increased 25% to 4 t.

Brazilian output continued to fall in 2000, down around 3% to just under 53 t. The losses mainly stem from the informal sector where production dropped 11% to roughly 12 t as a raft of factors such as higher fuel prices or stricter environmental controls continue to encourage garimpeiros to find alternative employment. This left the formal sector stable at around 40 t as gains from CVRD's Igarapé Bahia mine and the Serra Grande mine balanced losses at Eldorado's São Bento mine and CVRD's high-cost Almas and Caete mines (both slated for closure in 2001).

Chile enjoyed a 5% increase in gold output in 2000 to just over 50 t. This was despite a number of closures such as the Andacollo and El Tambo mines and production losses at other mines such as Guanaco or Fachinal (down 40%). These losses were outweighed by gains such as the strong performance from Meridian's new El Peñon mine and a doubling in output at La Coipa. Production in Mexico increased 13% last year. Mexico's gold output has more than doubled since 1992 from roughly 10 t to almost 27 t.

Many of the lesser producing countries saw output falls in 2000: lower grades contributed to a 9 t drop in Argentina to 26 t; Colombian production fell once more whilst smaller contributions from the informal sector fed through to declines for Bolivia and Ecuador. Venezuela stood out with an increase, up almost 3% to over 15 t.

Australia

Despite the continuing closures of high cost and mature mines, there has not been a significant reduction in gold output, which fell just 1% to 296 t. This has, in part, been due

to a strong performance at the Super Pit (Australia's biggest mine) where output rose 30% to over 24 t. Production gains were also recorded at Normandy's Tanami operations (up roughly 40% to almost 12 t) despite harsh weather. Some of the production gains were cancelled out by a fall of over 20% at Granny Smith (due to lower head grades) and the suspension of operations at Telfer due to high costs. Closures included Yimuyn Manjerr (formerly Mount Todd), Normandy's Tennant Creek, Resolute's Chalice and Homestake's Peak Hill mines.

China

An increase of almost 4% on 1999 to 162 t meant that in 2000 China became the fourth largest gold producer in the world. Official reports put Chinese production at 173 t last year but this has been adjusted to allow for the flows of "mine production" into the country and illegal mining.

The latter comprises small, mainly rural informal miners who do not deliver their gold to the PBOC (People's Bank of China) as required by law, chiefly when the international price is higher than the PBOC price. Since 1997, the PBOC has been making more frequent adjustments to its purchasing price, which is estimated to have led to a decline in informal volumes.

The incentive to smuggle gold into the country arises when the PBOC price is higher than international levels. Gold is then brought in illegally and presented to the PBOC as 'mine production' in order to gain the local premium. More frequent adjustments to PBOC prices last year again contributed to a fall in this inflow but only marginally so, despite stricter border controls as the PBOC premium over international prices for most of the year averaged around 3%.

CIS

Gold production in the Commonwealth of Independent States (CIS) increased by an impressive 8% in 2000 to 281 t.

A particularly strong performance was reported in Russia where output grew 12% to 155 t, making it the sixth-largest world producer. Two years of strong growth in Russia serve to confirm that the country has available reserves which could be mined, should their owners receive adequate financial backing. The recent liberalisation in the industry has seen a proliferation of commercial banks that obtain licences to trade and export gold. These banks provide more than sufficient funding to an industry still heavily reliant on credit over the winter when operations are dormant.

Gold production in Uzbekistan dropped back marginally to almost 86 t having expanded strongly the previous year. The fluctuation in output was primarily due to changes in production levels at the Zarafshan-Newmont joint venture where output dropped by 8% in 2000 due to lower grades. This was partly balanced by an increase at Navoi Mining and Minerals, which has also announced plans that should raise output in the future.

Strong growth was resumed in Kyrgyzstan last year with output increasing 9% to almost 22 t, mostly due to gains at the country's biggest mine, Kumtor. In Kazakhstan, output continued to recover with higher production reported by primary gold producers and even greater gains reported for gold as a by product from the giant copper and lead-zinc producers. A strong rise was also recorded in Tajikistan, up over 35% to just under 4 t.

Other Countries

Fiji saw production decline last year, mainly due to low grades and operational difficulties, whilst political violence in the Solomon Islands fed through to its gold output falling by more than 50%. In contrast, New Zealand's output rose, up 12% to almost 10 t. Papua New Guinea's also increased, up over 16% to roughly 76 t, reflecting a 20% increase in production from Porgera due to higher grades and improved recoveries.

Production in neighbouring Indonesia fell roughly 9% to almost 139 t. This was chiefly due to operational difficulties causing a 23% fall at Grasberg, the largest single gold producing mine in the world. This was compounded by the closure of the Rawas mine and by production disruptions at Kelian and Minahasa but part balanced by output gains from two new mines, Gosowong and Batu Hijau. Production also dropped back in Japan, but by less than 1 t, while Malaysian output recovered quite strongly with a 15% rise to just over 5 t of gold, due mainly to a record year at Penjom. Gold output also rose in the Philippines, up 6% as a result of an increase in output from Manila Mining's Placer Gold Project, Lepanto's Victoria mine and the copper-gold Padcal mine.

In Saudi Arabia, production was moderately lower in 2000 but future production is set to increase with the first gold expected from Al-Hajar mine later in 2001. Total European gold output fell for the second consecutive year by a significant 15% to 21 t with production declining in most of the main producing countries such as Spain and Sweden.

Ghana produced roughly 74 t in 2000, a year-on-year decrease of just under 6% due largely to losses at the Obuasi and Teberebie mines. Moderate increases at Bonte and at Damang were not sufficient to cancel out the losses. Output from Mali's new Morila mine contributed to a 20% increase in national production in 2000 to just over 30 t, making Mali Africa's third largest producer. In contrast, Zimbabwe had a difficult year with mine production declining by a staggering 30% from 1999 due to a worsening of the country's economic crisis. Tanzania's output surged to over 17 t in 2000, almost double that of the previous year. Both of Guinea's formal gold mines, Siguiri and Lero/Karta, reported higher production in 2000, contributing to a 20% year-on-year increase in that country's output.

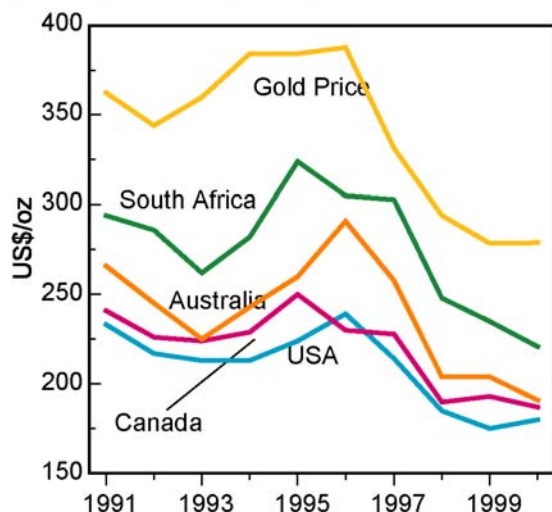
Production Costs

The average price of gold in 2000 was virtually unchanged from the previous year; on this front, there was no relief for producers from cost pressures. Extensive rationalisation during the course of 1999 had already resulted in impressive cost savings in that year; average total cash operating costs fell by US\$11/oz in 1999. Repeating the same feat last year was much more difficult. Yet, weighted average production costs reported by producers in the Western World (in US dollars) fell by a further US\$10/oz in 2000 to US\$186/oz, a drop of more than 5%. Costs declined in three of the four major producing regions.

Against the background of an unchanged gold price, the full benefit of the cost saving was felt in the bottom line in the form of a 12% widening of cash margins (at least in US dollar terms). This was in sharp contrast to 1999 when the US\$11/oz saving on costs was more than cancelled out by a US\$15/oz decline in the average gold price for the year, resulting in a narrowing of cash margins.

Reported average total costs (including depreciation, amortisation and reclamation costs) fell US\$19/oz to US\$238/oz. There were two main reasons for this very significant decline. First, sustained low prices have forced a number of producers to carry

Figure 2
Major Western World Mines[©] Cash Costs
(in money-of-the-day terms)



out large write-downs on the value of assets in their books thus reducing annual amortisation and depreciation charges. Second, focused near-mine exploration and targeted acquisitions have seen a number of mines report an increase in reserves. The effect of an increase in reserves is to extend the life of a mine, which means that amortisation and depreciation charges are written off over a longer period of time. This reduces, once again, the annual depreciation and amortisation charge.

Cash costs declined in South Africa last year to an average of US\$221/oz but production costs expressed in local currency terms actually increased by 6% during the year. It was only the rand's 13% depreciation that facilitated a decline in US dollar terms. Remarkable progress has been made in reducing cash costs over the last few years in South Africa, with rationalisation, often accompanied by reductions in the labour force, undoubtedly contributing to bringing traditionally high costs closer to international levels. However, the gold deposits in South Africa (hard rock/narrow veins) are most successfully mined by labour intensive drill-and-blast techniques which reduces the scope for further rationalisation on the scale seen in recent years.

Australian cash costs, as expressed in US dollar terms, fell by 8% last year to US\$191/oz. Last year, 50% of the reporting mines had cash costs less than US\$189/oz and 76% had total costs below the average spot price. The decline was almost entirely due to the weakening of the Australian dollar, which lost 11% on the US dollar during the year. In local terms, total cash costs rose 3% to a weighted average of AUS\$330/oz.

Cash costs in the US increased by roughly 3% last year to US\$180/oz but US mines still recorded the lowest average production costs in the world. The Cortez joint venture was the only mine that reported cash costs under US\$100/oz in 2000. Last year production at

Cortez fell 25% due to lower grades. However, cash costs were controlled as more oxide ore was processed through the low-cost leach pad and less through the oxide mill. Premature mine closures last year impacted negatively on costs in the US as operators were forced to fully depreciate the mine over a much reduced time span, pushing up total costs.

Average reported cash costs at Canadian mines declined 3% year-on-year in US dollar terms to US\$186/oz. Much of the decline in cash costs can be attributed to a change in the reporting method followed by Homestake at its Eskay Creek gold-silver mine. Last year production costs were calculated on a co-product basis but the 345 t/y of silver output is now treated as a by-product of gold which resulted in very low cash costs for the year of US\$30/oz versus US\$131/oz a year earlier when production levels were broadly similar.

Producer Hedging

One of the most significant differences between the gold market in 2000 compared with the previous year was the change in producer hedging activity. In 1999, producer hedging resulted in a net 506 t of accelerated supply. But last year, for the first time since GFMS started tracking producer hedging in the late 1970s, the global hedge book did not expand. A small decline in net outstanding producer positions actually resulted in some accelerated physical demand last year, in the order of around 10 t.

As a result, the contribution made by producers to the physical market – measured as the sum of mine production and net accelerated supply through hedging – dropped back to 65% of total supply from an average level during the 1990s of 71%.

The small decline in the overall global hedge book was brought about by a combination of contracting forward sales positions, lower delta-hedging associated with fewer producer options and lastly a marginal net repayment

of outstanding gold loans. None of these changes were significant in terms of volume. Producers did just enough hedging to maintain existing positions and replace deliveries into contracts but no net new or additional hedging was done. To put this into context, GFMS' data suggest that outstanding hedge positions increased by an average 242 t per year during the 1990s.

The dramatic shift in producer hedging behaviour was brought about by the equally dramatic developments in the gold market in September and October of 1999. In the wake of the European central banks' announcement about their gold reserves management, lease rates surged, especially for short-term borrowings, the price spiked sharply and volatilities soared. Most producers were wholly unprepared for such an extreme direction change in the gold market. Their reaction to this crisis determined the course of the hedging sector last year.

In the aftermath of the hedging crisis, a combination of caution as to the potential perils of hedging and optimism about the price outlook largely kept producers out of the forward market in spite of favourable hedging conditions – low lease rates and high local gold prices – which prevailed for most of the year. By the December quarter, however, there was evidence of a modest return to hedging, leaving the global hedge book down only 10 t by year-end. This number suggests that, on a global basis, producers did just enough hedging last year to replace positions that had been closed out or run down naturally; no new or net additional hedging was done.

Scrap

Total scrap volumes fell for the second year in succession to 611 t although the size of the decline was relatively modest at just under 1%. Not surprisingly, the biggest changes were seen in East Asia where relative currency and economic stability (in most countries at least) has seen scrap volumes

decline sharply from the highs of 1997-98. Indonesian scrap, for example, fell by around 5% in spite of the much higher rupiah price. Thai scrap also fell markedly last year and again in spite of the rise in the local price associated with the weakening of the baht.

The global scrap figure of just over 600 t globally was in fact below pre-Asian crisis levels, accounted for in part by some trending down of Middle Eastern recovery rates. This region's volumes were low for two principal reasons. Firstly, the growing market share of 18 ct and gemset (normally with associated high mark-ups) means the relative amount of jewellery that could become worthwhile scrapping is falling. Secondly, sub-US\$280/oz price levels were generally viewed as too low to attract much scrapping unless for distress reasons.

It is arguably the case that scrap flows were a more neutral influence on the gold market in 2000 compared with the two previous years. However, this is not to say that scrap did not influence the price; their timing last year was influential, especially at the time of the price spike in February. Certainly, it is probable that scrap would have fallen further than it did if it had not been for the spike in the price at this time. This would have taken scrap to below 600 t for the first time since 1993.

Official Sector

The September 1999 European Central Banks' Agreement (the "European Agreement"), currently well into its second year, was the leading influence on official sector gold market activity during 2000. On the lending side, even though the supply of liquidity from the signatories was capped in September 1999, this has not prevented them from having a major influence on gold leasing rates. The net 421 t of disposals from countries within the European Agreement constituted no less than 89% of the estimated net sales number of 471 t. The actual gold sales by the signatories in calendar 2000 were as follows: Switzerland 171 t; UK 150 t; the Netherlands 71 t and Austria 30 t.

Germany once again did not sell any of its monetary gold reserves last year though it is possible the country may do so in 2001.

The European Agreement has also made an enormous difference as regards transparency since the aggregate sales volume from signatories over a given year is largely predictable. Perversely, the greater certainty as to the actions of central banks in one geographic region puts into even greater contrast the lack of transparency in other parts of the world despite the best efforts of the IMF to encourage regular, accurate and systematic reporting of monetary gold reserves. Nevertheless, it is possible to identify 181 t of gross gold sales from countries outside the European Agreement. Of this quantity, 101 t were announced or published in some way. This came from Uruguay (23.3 t), Canada (19.6 t), Argentina (10 t) and an estimated 48 t for Brazil.

A total of 131 t of gross purchases in 2000 can be identified. Purchases were much lower than they had been in 1999 when the total was swollen by a large strategic acquisition. Although at least one similar transaction took place in 2000, it was on a far smaller scale. Also a little lower last year was the aggregate quantity of local mine production absorbed by official institutions.

It is estimated that the amount of bullion lent to the market by the official sector increased by some 80 t to 4,830 t in 2000. This compares with an average annual growth in swaps and deposits of about 360 t in the 1990s. Growth in this lending last year mostly came from existing participants rather than new entrants.

Demand in 2000

Jewellery

Jewellery fabrication rose almost 1% last year. The 10% recovery in the Middle East, mainly on account of Turkey, was sufficient to outweigh sizeable falls elsewhere in Asia. In Europe, jewellery fabrication fell by just over 1%, in spite of stronger economic growth

across most of the region whilst in India, fabrication demand declined marginally.

Jewellery consumption fell sharply across much of Asia due to economic problems and shifts in demand patterns. European consumption is also estimated to have fallen though gains were seen elsewhere, primarily in the Middle East but also in the Americas.

Electronics

Electronics' use of gold rose sharply in 2000, by around 15% year-on-year to over 280 t. All but one of the top ten fabricators of electronics products recorded double-digit growth last year. In Japan, higher production of bonding wire, plating salts and sputtering targets contributed to the 20% rise in demand. Higher export demand pushed up fabrication in the US by 8.5% although the growth rate was constrained by the ongoing drive to miniaturisation of electronic components.

Dentistry

Dental demand was 4.7% higher in 2000, as soaring palladium prices contributed to higher gold offtake in the leading fabricating countries. This development was most noticeable in the US where substitution of palladium, and to a lesser extent platinum, by gold, now regarded as the "economic alloy", pushed gold demand up by an impressive 12% to 21 t.

Other Industrial and Decorative Applications

Gains in Indian and Swiss demand outweighed a decline in the US. Indian demand for decorative applications rose by over 18% last year. The fabrication of gold-plated giftware was increasingly popular last year, especially in respect of consumer promotions. In Switzerland, strong export growth, notably to East Asia, contributed to the 2 t increase in demand for other industrial and decorative uses.

Medals and Imitation Coins

Demand in the medals and imitation coins sector increased by over 24% to a record level of 60 t. Indian fabrication was markedly higher in 2000 due in no small measure to a sharp rise in demand for corporate and promotional gifts.

Official Coins

Coin demand was sharply lower in nearly every major coin-producing country last year. The largest year-on-year decline, in both volume and percentage terms, was recorded in the US, with coin fabrication down by over 91% in 2000.

In 2000, a near 66% year-on-year drop saw coin related offtake fall to just 46 t. By far the most important development in the coin market last year, and the explanation for the fall in world coin demand, was the collapse in North American fabrication. As the Millennium passed without incident, the 'Y2K' purchases of 1998 and 1999 were replaced by widespread selling back in 2000. This was concentrated in the first half of the year when selling back significantly outweighed new purchases and it is likely that, for the year as a whole, coin disinvestment could have exceeded 20 t.

Bar Hoarding

Bar hoarding declined by around 18% in 2000 to under 200 t. By far the biggest change was seen in Japan where volumes fell by over 50 t, a decline of around 50% year-on-year. This was primarily a result of low and stable yen gold prices which ensured that investors' interests were directed elsewhere. Indian bar hoarding proper is also estimated to have fallen year-on-year though by only around 4% to 80 t, in part due to the poor state of the agricultural sector.

Many other Asian countries were net hoarders last year with Vietnam and Thailand amongst the strongest examples. There were, however, some key exceptions. Taiwan, for example, switched from being a hoarder in the first half to a substantial

dishoarder in the second. Latin America saw a second year of modest dishoarding whilst the scale of hoarding in the Middle East fell once again with dishoarding appearing in some countries, for example Kuwait.

Investment

Last year, for the first time since 1977, world investment (including bullion coin sales) was negative, contributing a net 47 t to global supply. The 'swing' in the total from 1999 amounted to no less than 590 t, a fact which helps to explain why the dollar gold price moved sideways in 2000 in spite of the lack of growth in producer hedge positions.

Implied net investment saw the greatest change, swinging from 170 t in 1999 to a negative 291 t in 2000. The majority of this - probably between 130 and 185 t - was in the form of physical sales of coins and bars by private holders in Europe and, to a lesser extent, North America. The European selling was to a large extent currency driven. In euro terms during 2000, gold at its height was up 24% on the 1999 average. This provided the opportunity for private investors to exit often long-held positions in physical bullion. Underlying the price incentive to sell was a palpable waning interest in bullion among the public in Europe. This phenomenon is in part a question of generational change - younger investors generally do not consider gold when

deciding where to park their savings. Thus, a sizeable amount of the gold sold back to dealers in Europe each year is, for example, from inheritances. But in addition to this longer run generational issue, investors' attitudes towards gold in recent years have become very negative, with an entrenched view among the majority that the gold price is doomed to stagnate under the weight of higher central bank sales.

Primary market coin sales slumped to 46 t, the lowest total recorded since 1969 and a little over one-third of 1999's 'Y2K'-inflated level. Purchases of bullion in the US, especially coins, had been exceedingly heavy in the two years prior to the feared 'Y2K' deadline. Once this passed without mishap, some of the gold bought as 'insurance' plus some previously existing bullion stocks were sold back into the market. Such 'Y2K' related sales were far less common in Europe last year.

Volumes on Comex, Tocom and the OTC markets all fell in 2000. Although the evidence points to some growth in short positions in the 'paper markets', their physical market impact would have been much less than that of the direct sales of bars and coins referred to above.

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