OUTLOOK FOR DAIRY 2005

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The dairy industry in 2004 was covered with records: matching 2003 for record output; setting commercial use records for both milkfat and skim solids; and seeing average prices hit a record. In 2005, the industry may not need quite as many superlatives, but it is shaping up as a memorable year. Production and use probably will again set records with prices declining only moderately.

2004 Output Matches 2003

Milk production in 2004 struggled somewhat but managed to total essentially the same as in 2003. Output started the year weak but recovered slowly as strong returns buttressed cow numbers, the reverse of the prior year when low returns sapped cow numbers as the year progressed. Meanwhile, growth in milk per cow was erratic and generally weak.

Low returns during 2002 and the first half of 2003 boosted farm exits and discouraged expanding farms throughout 2003, resulting in steadily declining cow numbers during 2003. However, higher returns during the second half of 2003 and rapidly improving price prospects during the winter turned cow numbers around in early 2004. Milk cows rose fractionally to a late summer peak before easing slightly in autumn.

The reaction of cow numbers to the increase of about one-third in returns over concentrate costs was quite muted. The number of farms leaving dairying apparently did shrink in a relatively typical manner. However, producers were very cautious about expanding their farms. The very strong milk prices probably were interpreted as based on a unique and transitory set of factors, not fundamental changes in long-run prospects. In addition, the increases in milk prices were partially offset by smaller payments under the Milk Income Loss Contracts (MILC) for the smaller farms.

Other forces helped to limit the response to record milk prices. The number of dairy replacement heifers was significantly smaller at the start of 2004, particularly for heifers due to calve in 2004. The ban on imports of Canadian breeding stock aggravated the heifer shortage. In addition, the 2 exercises in cooperative supply management not only removed capacity early, but also kept those cows from becoming part of the replacement pool.

Growth in milk per cow, already relatively weak through most of 2003, was hit by sharply reduced availability of bovine somatotropin (BST) in 2004. For the March-November period, producers could buy no more than half their normal purchases, with less restrictive allocations in place earlier and later. In addition, no new customers were accepted. Milk per cow was significantly reduced by the lack of the hormone, particularly early in the year.

However, softness in milk per cow was more deeply rooted than just the lack of BST. Most major dairy areas had forage quality problems during part of 2004. Although most areas had fairly large forage

supplies, a substantial share was not dairy quality. In addition, the normal boost to average milk per cow because of structural change was lessened because the number of new and expanding farms and the number of exiting farms were relatively small.

Milk production in 2004 totaled virtually the same as 2003's record, as the decline in milk cow numbers of less than 1 percent was about offset by a less-than-1-percent rise in milk per cow. Output was particularly weak during the first quarter, but then managed to post small increases during summer and autumn.

Milk Production To Expand

The herd of dairy replacement heifers was 3 percent larger than a year earlier on January 1, 2005, with the same increase in heifers expected to calve in 2005 as for younger heifers. This increase should significantly ease the heifer tightness this year and has already resulted in a small moderation in heifer prices. Even so, 2005 heifer prices are likely to remain relatively high. Without imports from Canada, even the larger heifer numbers may be less than desired. The difference between replacement and slaughter values probably will stay large enough to erase any significant influence of cull cow prices on milk cow numbers.

Returns in 2005 are expected to be considerably below 2004's very high levels but still relatively strong. Dairy farm exits probably will accelerate a little as the year progresses, particularly if the MILC expire as scheduled at the end of September. However, even weaker operations likely will be relatively well positioned to resist exit after 2 years of strong returns. Stronger farms probably will stay cautious about expanding until the size of recovery in milk production is seen. But, the accumulated earnings will tend to spur some expansion as 2005 goes on.

Milk cow numbers are projected to slip fractionally in 2005. The loss of cows associated with farm exit and culling of those cows whose milking life was extended beyond normal criteria in 2004 is expected to slightly outweigh the effects of added capacity.

Allocations of BST will rise on March 1 from the current 85 percent of normal to 115 percent, although new customers still are not welcome. Return to near-normal availability of BST and relatively strong economic incentive for its use should have a substantial impact on milk per cow. In addition, relative milk and concentrate feed prices will provide considerable incentive to boost feeding. A presumed return to more normal culling may also provide a boost, although positive effects are not assured.

Uneven forage quality might be a negative influence on milk per cow, particularly if spring forage growth is slow. Weakness should be limited though, because large supplies of mediocre hay and good milk prices probably will eliminate feeding of poor forage. Heavy winter rains on the West Coast may have had some negative effect on milk per cow early in 2005.

Milk per cow is projected to grow about 3 percent in 2005, a significant but far from complete recovery from the sluggish expansion of the last 2 years. This higher milk per cow would push milk production up about 2 percent, the first real growth since 2002.

Commercial Stocks Comfortable

Excess dairy stocks were dissipated during 2004. Commercial stocks of butter, and cheese to a lesser extent, had been pushed to large levels by the sluggish demand of 2002 and most of 2003. However, last year's tight markets reduced warehouse holdings to modest levels. In fact, unreported pipeline stocks may have been low at yearend.

January 1 stocks were down about 1 billion pounds, milk equivalent, milkfat basis, from a year earlier and almost 3 billion pounds from 2 years earlier. On a skim solids basis, commercial stocks were slightly below the moderate levels of the 2 preceding years.

The huge stocks of Government nonfat dry milk are essentially gone. Holdings on January 1 were only about one-third those of mid-2003 and represented powder that almost entirely was in the process of moving into specific donation uses. Aggressive use of nonfat dry milk in domestic and foreign donations combined with a rapidly diminishing current surplus to slash Government stocks.

A 2004 dairy surplus essentially did not exist, as growth in milk production paused and demand was strong. Milkfat removals were actually negative, as small sales of butter for unrestricted use outweighed the modest removals of nonfat dry milk. On a skim solids basis, net removals were equivalent to slightly more than 1 billion pounds of milk, less than 1 percent of marketings and down drastically from the 8 to 10 billion pounds of 2003, 2002, or 2000.

Milkfat removals are expected to be again negligible in 2005. Demand should be able to absorb additional milk production without strain. Removals of skim solids will depend on the strength of export demand. If international powder markets remain tight as expected, removals probably will total close to last year's with most of the small surplus in the second half.

Cheese and Butter Demand Amazing, with Powder Catching Up

Commercial use of dairy products rose to records in 2004 despite sharp jumps in most dairy prices. On a milkfat basis, use rose more than 1 billion pounds milk equivalent even though butter prices averaged above $1.60 per pound every month other than January. Commercial exports of nonfat dry milk and much more moderate price increases for skim solids let sales of skim solids rise more than 3 billion pounds milk equivalent.

Dairy demand in 2004 clearly was extraordinary, even if it might not have been quite as strong as it appeared. Growth in the economy and consumer incomes was strong, and the unemployment rate decreased. In addition, consumer spending shifted back towards more normal patterns after the unusual 2002-03 period. This change particularly benefited restaurants, boosting demand for butter and cheese. However, consumer price response might have been more pronounced if the sheer spring price increases had not reversed course so quickly. Buyers barely had time to react before prices fell.

Commercial use of cheese rose 3 percent from 2003 in the face of wholesale cheese prices more than one-fourth higher. This was the largest increase in the amount of cheese sold since 2000 and may be the greatest jump in apparent cheese demand ever recorded. In some ways, butter demand was even more impressive. Commercial use rose only fractionally—but wholesale prices averaged more than 60 percent higher than a year earlier.

Commercial disappearance of nonfat dry milk jumped more than 40 percent in 2004, posting strong gains throughout the year. Commercial exports undoubtedly were the key factor in the size of the sales increase. Without the export surge, the sizable unrestricted sales of Government powder during the first half (and the resulting boost in apparent use) probably would have displaced fresh product during the second half. As it turned out, export sales easily absorbed any powder that became available.

Not all sales boomed in 2004. Fluid milk sales fell about 1 percent, with particularly large declines during the much publicized spring price peaks. Sales of soft products were about the same, with sales of lowfat ice cream and cottage cheese increasing enough to offset declines in the full fat versions.

Dairy demand is expected to stay good in 2005. The economy and incomes are projected to continue to grow at a relatively strong pace. In addition, food and restaurant spending seems to have shaken off the doldrums of 2002 and most of 2003. Commercial use of milkfat is expected to increase more than 1 percent in 2005, while commercial use of skim solids is projected to rise 2 percent, in part because of commercial exports of powder.

Tight International Markets and a Weak Dollar Equal High Prices

International dairy markets remain tight, and the weak U.S. dollar is translating this tightness into relatively high prices. Prices of nonfat dry milk ran about $2,400 per metric ton at the late November peak, up about $600 from a year earlier and $200 since late summer. Meanwhile, butter sold for about $2,100 per ton, up about $500 from a year earlier and slightly from summer levels. But, the truly remarkable recent event was the near absence of seasonal price declines in early 2005. In fact, Oceanic prices have been flat

Demand has been generally strong. Milk powder demand from eastern Asia has been brisk, reflecting the region's generally good economic performance. Latin American imports have stayed fairly large in spite of the high prices. Higher oil prices have boosted demand in the Middle East, North Africa, and other oil producers, as have rebuilding efforts in Iraq and Afghanistan. Higher oil prices have also had an important impact on butter demand in the Middle East. Russian butter demand reportedly has been fairly robust but not extraordinary.

Export supplies have been limited. European Union (EU) milk production has been down slightly, and domestic use has been strong. Intervention stocks are quite moderate. As a result, the EU has been relatively slow to compensate for the strength of the euro by raising export restitutions. Australia's recovery in milk production has been modest thus far in their season. Meanwhile, cool, wet conditions foiled pre-season predictions of another sizable increase in New Zealand output. Season totals continued to lag year-earlier levels into 2005. An annual increase seems unlikely after declines persisted this far. Meanwhile, the United States has about exhausted any extra stocks of skim solids, and further exports will be limited to the current domestic market surplus.

International prices for nonfat dry milk are expected to remain high through at least most of 2005 as the dollar is expected to stay weak. Export supplies are unlikely to expand substantially until at least the second half. Some further seasonal price weakening may occur, but demand is projected to stay firm. The same general picture is projected for butter prices, but butter prices may not be quite as strong because of less certain demand strength.

2005 Exports To Be Strong While Imports Slip

Commercial exports of nonfat dry milk are projected to be sizable in 2005. Even with some possible softening of market conditions, international markets probably will need substantial quantities of U.S. powder. Prospects for cheese exports are more uncertain. The weak dollar will certainly aid exports, but domestic prices are projected to be high enough to limit attractiveness of U.S. supplies.

U.S. imports of dairy products may slip in 2005 on a milkfat basis. However, decreases in imports likely will be modest. Imports of milkfat within the tariff-rate quotas (TRQ) will be attractive but high-tier imports probably will be considerably smaller. Within-TRQ imports of cheese will generally be

attractive, although imports of some unsubsidized European cheeses could be affected by the exchange rate. Imports of skim solids products might decrease even within TRQ.

Prices Adjust Downward

Wholesale prices of butter and cheese got a post-holiday bump in early 2005 on the strength of a slight softness in the milk production expansion, a likely larger than normal pipeline refilling, and, possibly, some early precautionary buying. Cheese prices have come down considerably recently as seasonal increases in milk supplies boosted cheese production. Butter prices have fared better, possibly because of the effects of a very early Easter. However, some declines in butter prices are expected once Easter needs are met, and cheese prices could be somewhat erratic.

Demand is not expected to be able to absorb the projected milk production without a substantial price adjustment. However, a $1 to $2 decrease from $16 per cwt still leaves relatively attractive milk prices. Early 2005 milk prices have been above a year earlier but this spring's prices will be much below last year. Prices are projected to stay below a year earlier during the second half. For the year, milk prices are expected to decline $1 to $2.

Key uncertainties in the price outlook include the recovery in milk per cow, an acceleration of the number of farms expanding, the strength of butter and cheese demand, and the path of international powder prices. Given the history of recent years, even the relatively full return of BST is no guarantee of strong milk per cow. On the other hand, the accumulated returns from 2004 and the first half of 2005 may encourage producers to do whatever has to be done to get new facilities built and filled.

If the domestic demand for cheese and butter and export demand for nonfat dry milk all stay brisk throughout 2005, the struggle for the milk supply could keep price declines smaller than expected. On the other hand, significant softening in 2 of the segments or a sharp break in any one could accentuate the price drop.

Retail dairy prices rose more than 7 percent in 2004, despite the second straight decline in farm-to-retail spread. Like other dairy prices, retail prices rose at a blistering rate between early 2004 and summer before easing somewhat during the second half. In 2005, retail dairy prices are projected to increase fractionally to 2 percent as a moderate expansion in the spread outweighs the decline in farm prices.

Lessons From Recent Markets

Dairy markets in recent years have rather strongly highlighted some aspects of the current dairy industry and markets: the strength and potential vulnerability of dairy demand, the susceptibility of milk per cow to fall below a year earlier, and price volatility. These factors are noteworthy because they generally represent some break with the past. However, their continuing effects on dairy markets in the intermediate run likely will be substantial.

Dairy demand is fundamentally sound. Although some recent years have seen stronger demand than others, any faltering in the growth of milk production has generated a quick and substantial price response. However, this strong demand has not been based primarily on retail sales and has not covered all products. Restaurant usage has become prominent, and purchase decisions in this segment result from a complex process. Recent demand growth has been built on butter and cheese and very few other products. Even within cheese, the vast bulk of the increase in per capita consumption during the last 10 years has come from a few cheeses, while use of some other cheeses has declined.

Declines in milk per cow have ceased to be rarities. Larger shares of the national cow herd are located in key pockets of dairying. Local weather or feed conditions can have a much greater impact on the national picture. Rations cannot be adjusted as quickly in response to economic incentives. During periods of slow structural change, a shock may easily send milk per cow negative.

Price volatility in spot markets is here to stay. The efficiencies of steady flows, abetted by concentration at all levels, has encouraged contracts and other arrangements that pull products out of traditional spot markets. Without much product easily available for spot trading, actions by individual companies can affect prices in the immediate run. These “thin market” conditions lessen dairy markets’ ability to adjust to shocks. And shocks will continue to come from unexpected places and groups.

Outlook for Dairy 2005

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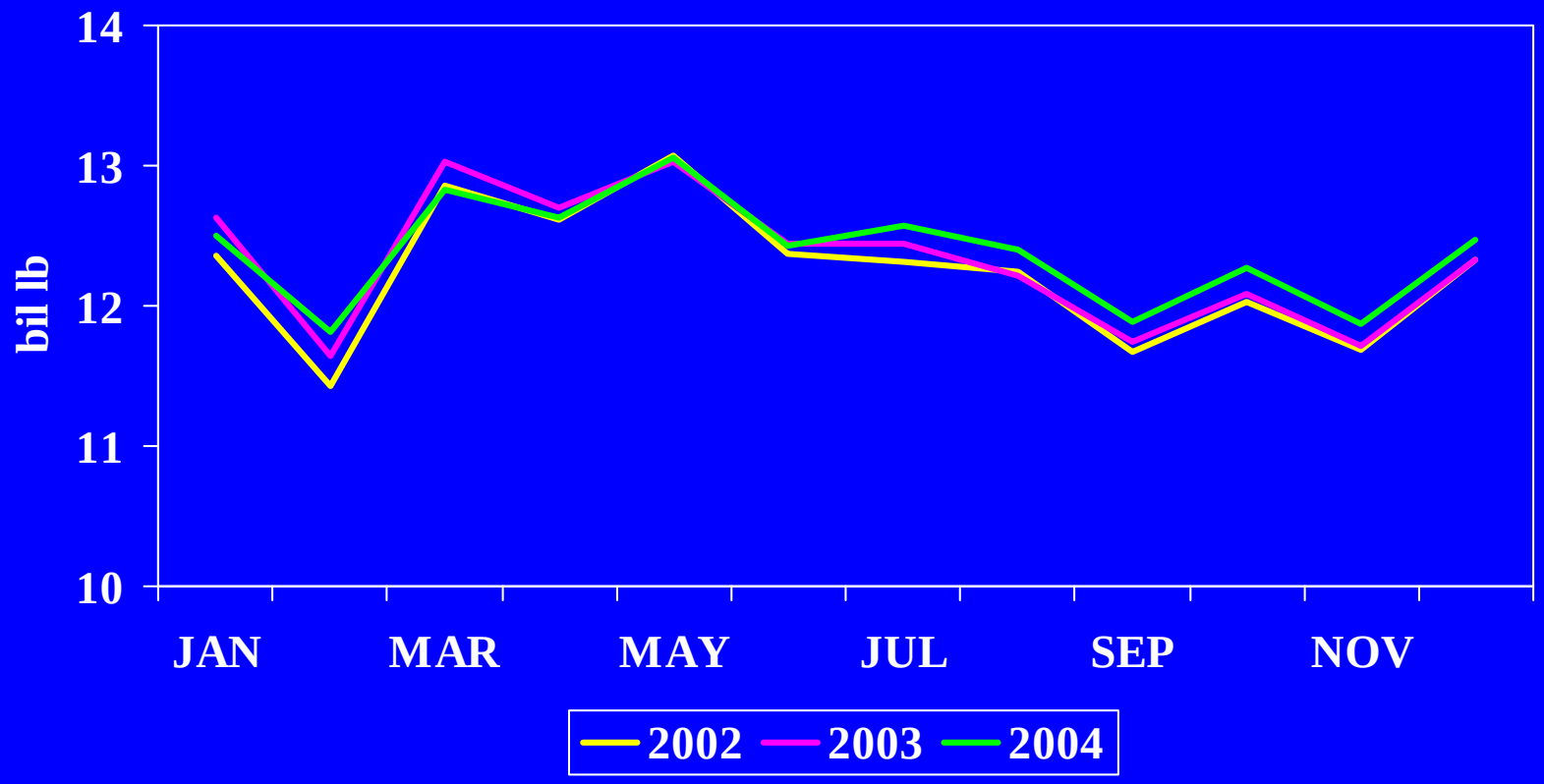
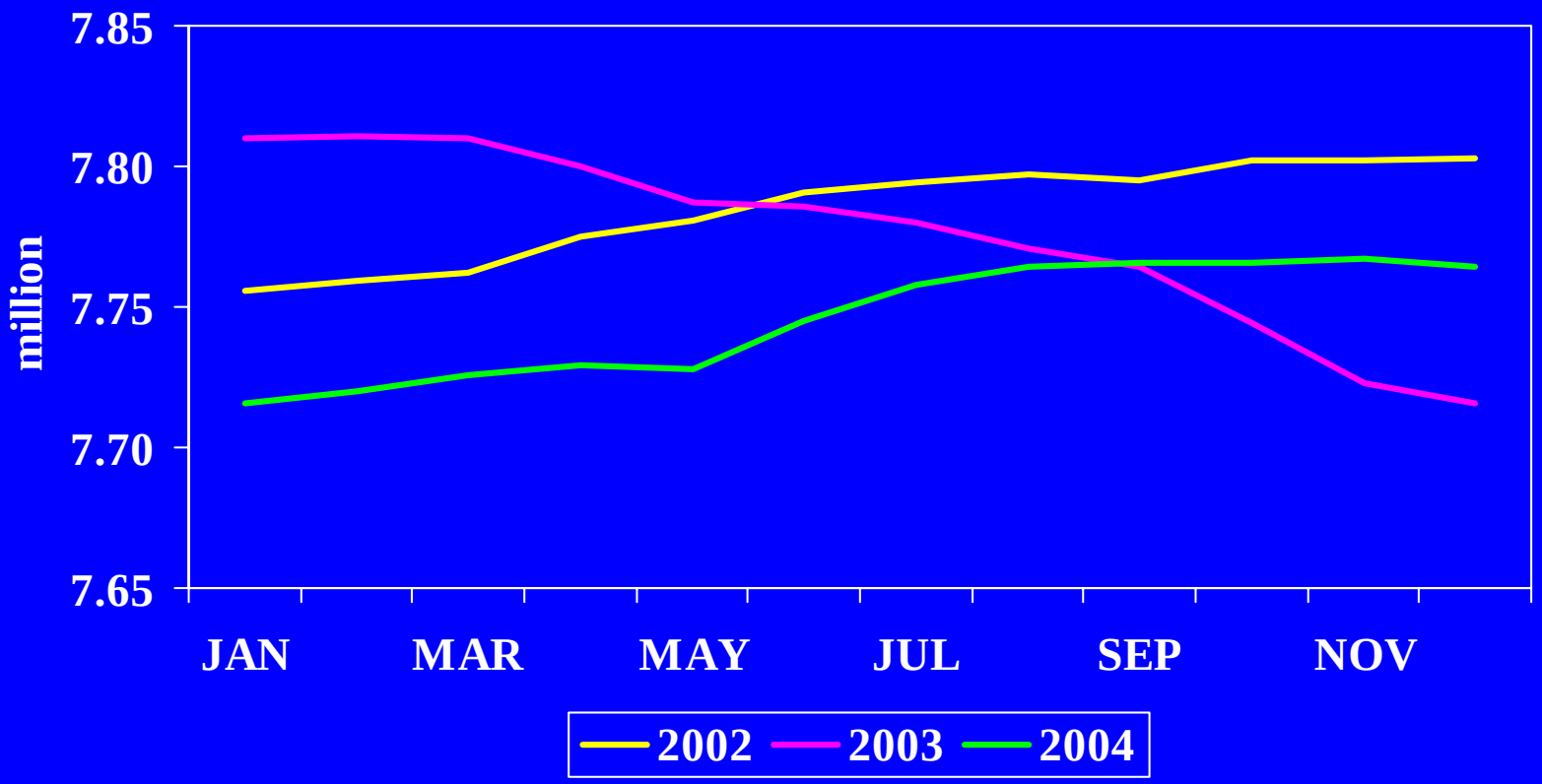
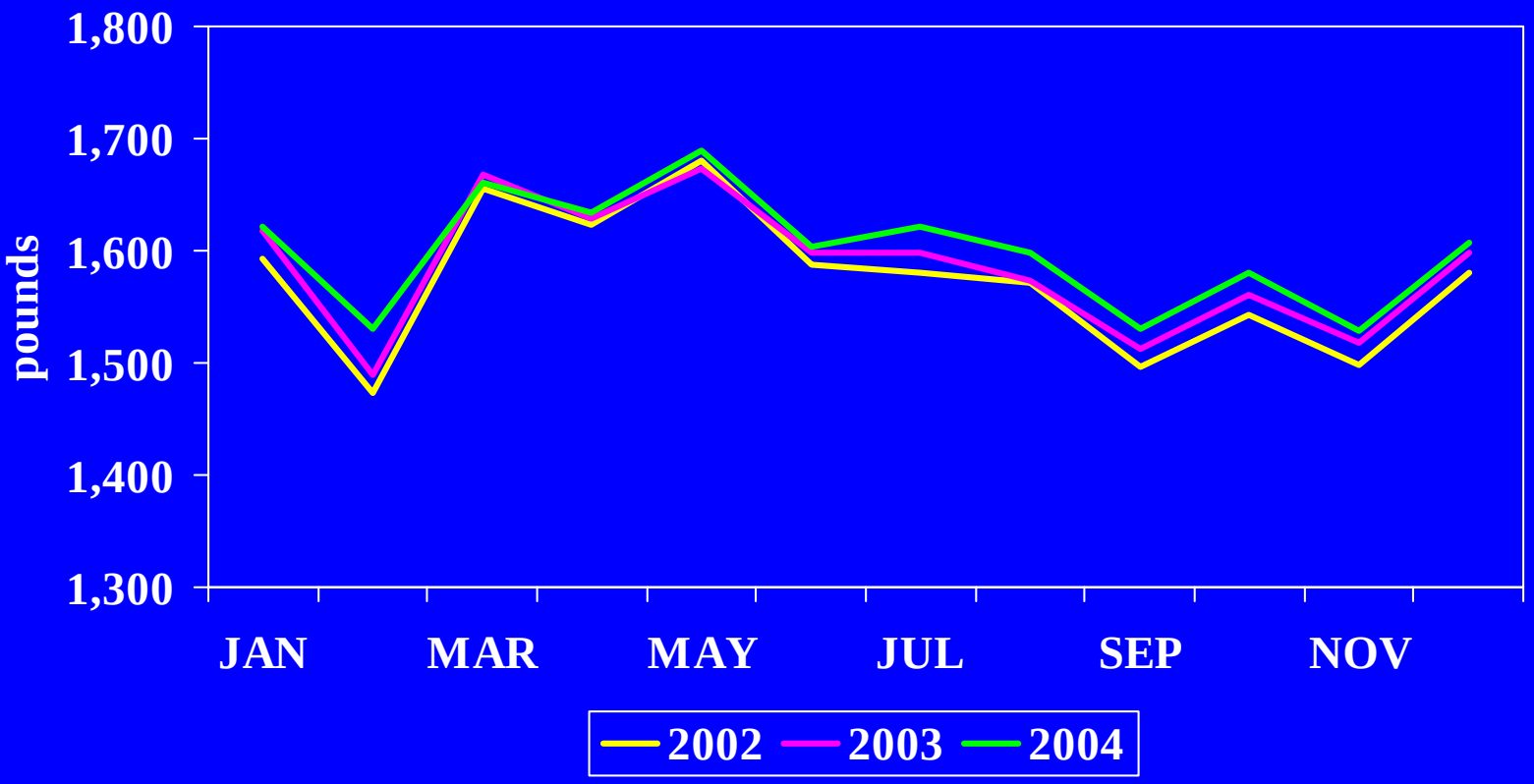
Milk production, 20 States



Milk cow numbers, 20 States

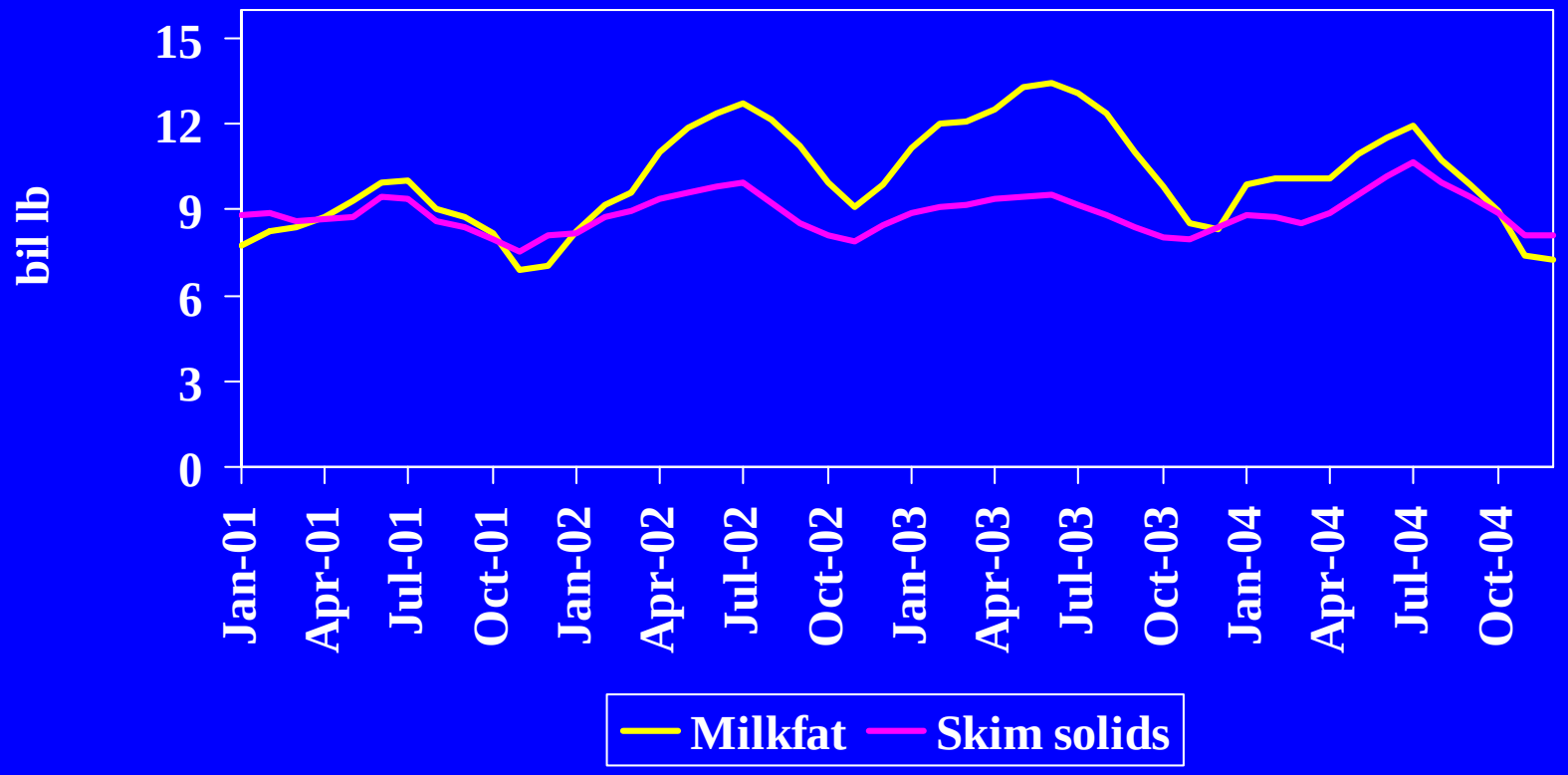


Milk per cow, 20 States



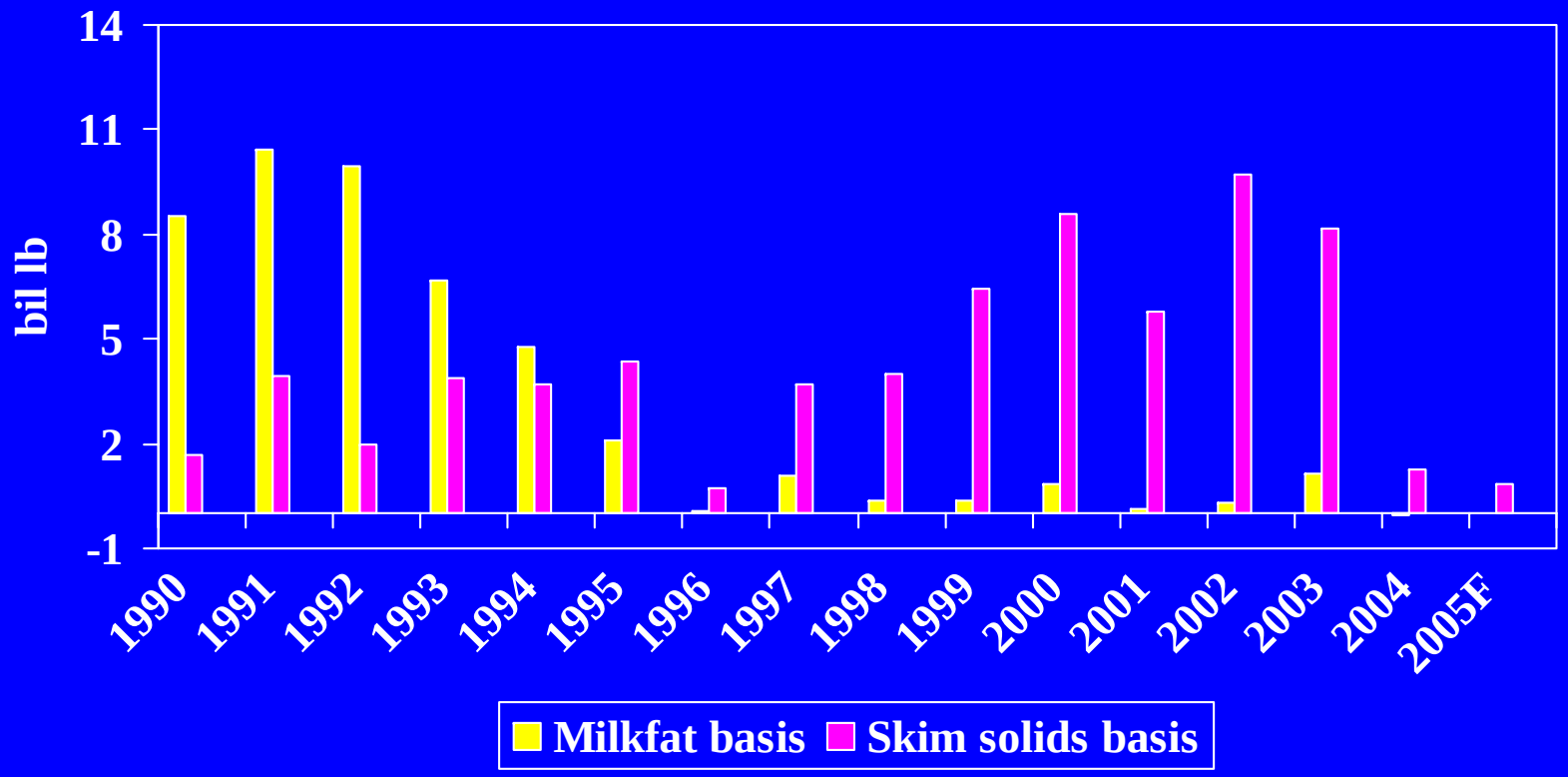
Commercial Stocks

Milk equivalent



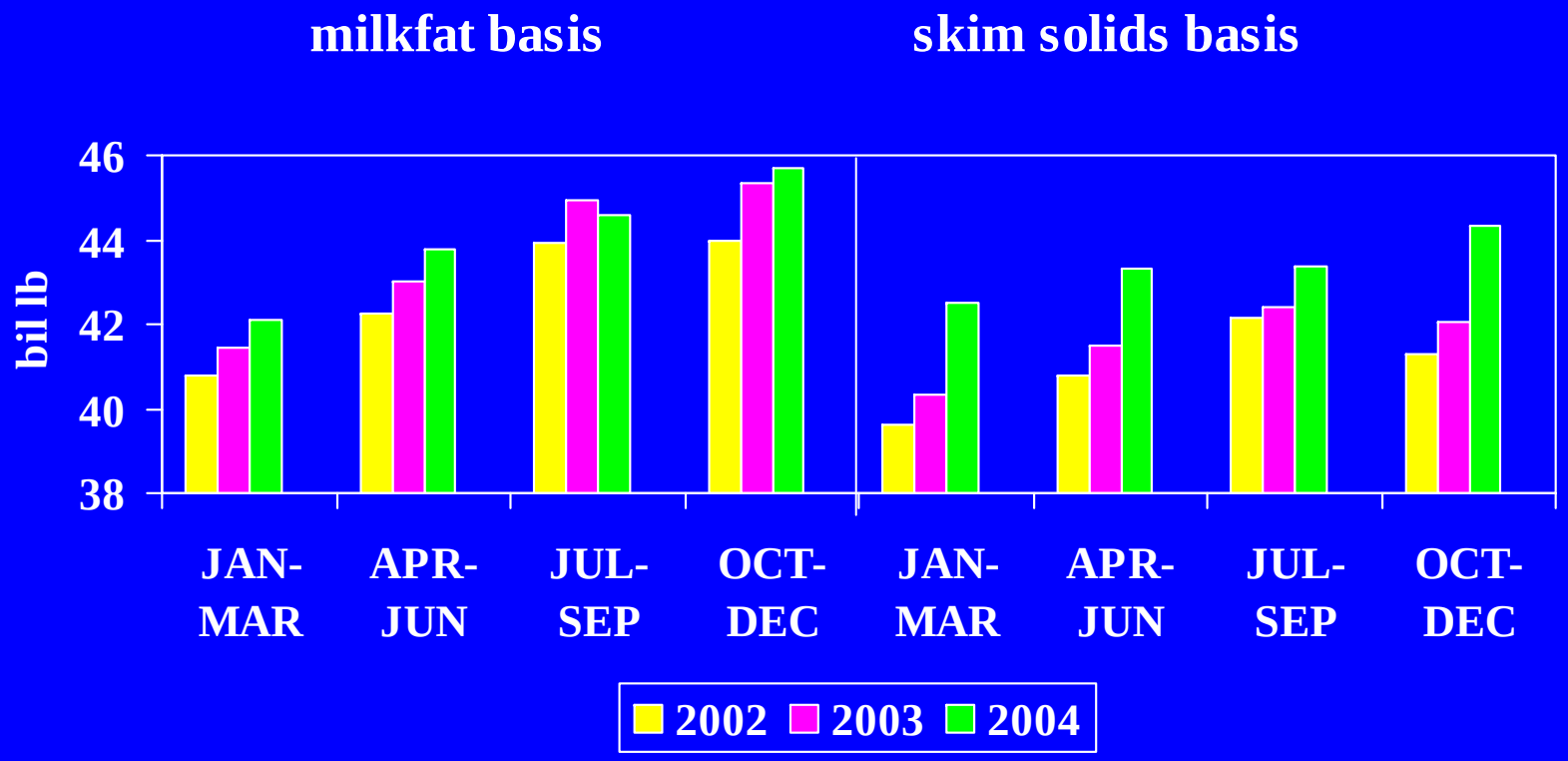
CCC net removals

Milk equivalent



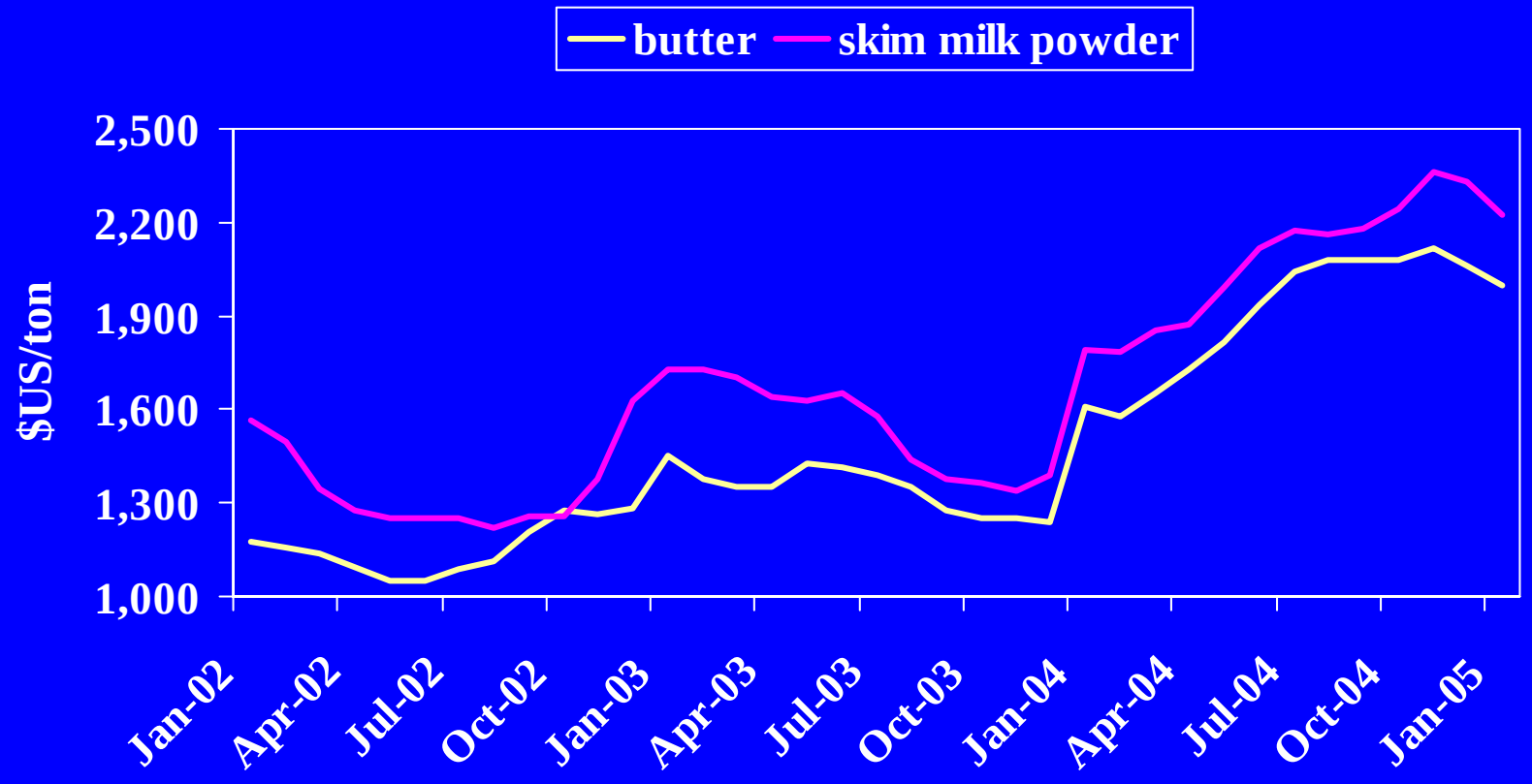
Commercial use

Milk equivalent

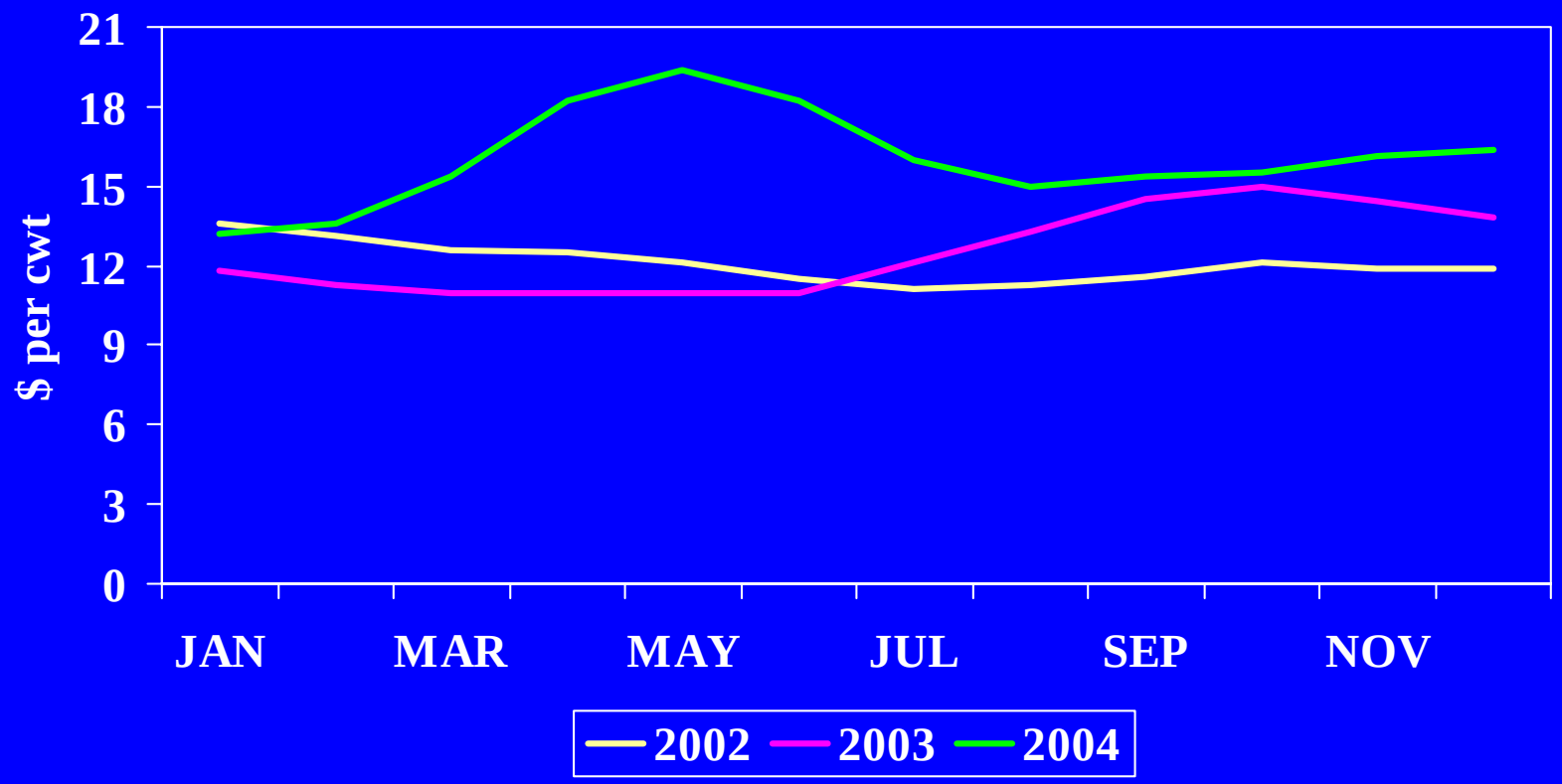


International dairy prices

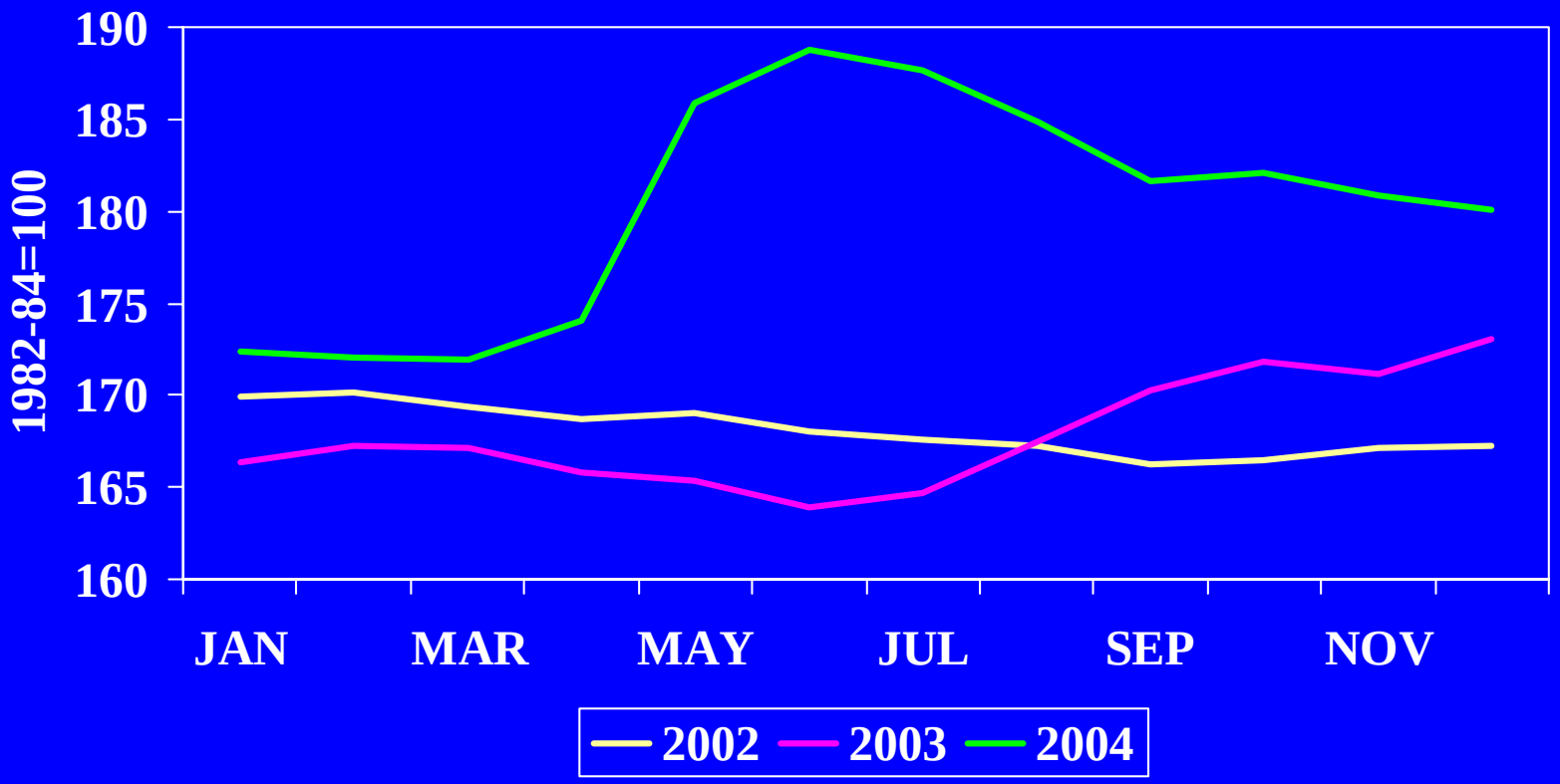
fob northern Europe



All milk price



Retail dairy prices



Lessons learned from recent markets

Lesson 1

- Dairy demand is robust. No production increase means price jump.

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- **BUT…**
- The base of demand growth is narrow.

Lesson 2

- Year-to-year drops in milk per cow are no longer a rarity.

Lesson 3

- Price volatility is here to stay.