

## The Salmon Industry in Chile

Read the article below. Based on the information in the article, what do you think is the "economic exposure" to currency risk of Chilean salmon exporters?

### Swimming upstream

SANTIAGO

**N**OT many investments are billed as a battle between Norway and Chile fought out in Japan. Nevertheless, Tokyo's eaters of sushi and sashimi may decide the fate of Chile's attempt to rival Norway as a salmon-farming power. The Japanese consume nearly half the world's output of salmon. In less than a decade, Chile's salmon industry has become the second-biggest producer—selling some 61,000 tonnes last year, over half of it in Japan. Norway is the industry leader, with 170,000 tonnes.

Chile has contributed to a growing salmon glut. Worldwide, farmed output of salmon and trout has more than doubled, from 184,000 tonnes in 1988 to 420,000 tonnes last year; it now amounts to a third of the total world catch of 1.3m tonnes. Consumption has not kept pace, so prices have dropped by about 25% in

the past five years—from roughly \$8 a kilogram (\$3.60 a pound) to \$6 a kilogram in the American market.

Labour in Chile's salmon industry, which is concentrated in the thinly populated south of the country, is not substantially cheaper than in Europe. Chile's chief advantages are relatively cheap feedstocks and steady water temperatures all year round: these allow the fish to feed and grow constantly rather than hibernating as their Norwegian cousins do.

Nevertheless, through dramatic cost-cutting, Norway claims its average production costs are around \$3 per kilogram—about the same as Chile's. And it costs the Chileans more to get their fish to market. They sold a mere 828 tonnes of salmon in Latin America last year, compared with 19,000 tonnes in the United States and 34,000 tonnes in Japan. In

America the Chileans can produce fresh salmon, while the Norwegians have to send frozen fish; in Europe, on the other hand, the Chileans' frozen salmon must battle against fresh fish from Norway and Scotland.

Champions of Chilean salmon claim their fish taste better when eaten raw. This is a crucial advantage in Japan. Norwegian farmers feed their salmon on fishmeal made from ground-up herring, whose flavour filters through into raw and semi-raw dishes. Chilean salmon fatten on less intrusive jack-mackerel meal. And, unlike their wild peers, farmed salmon tend to be free of worms.

The neatest solution to the glut would be to persuade people to treat salmon as less of a treat. More than 70% of salmon is cooked outside the home by professional chefs. The International Salmon Farmers' Association will start a \$1m campaign in America next month to sell salmon to amateur cooks. That may keep the farmers happy, at both ends of the earth.

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