Speculators' positions in futures markets contain useful information to forecast exchange rates. We extract such information by fitting a microfounded regime switching model, and forecast whether speculators will be increasing or decreasing their positions. We use this predicted state to form both directional and point exchange rate forecasts for the six most traded currency pairs. Over forecasting horizons from 6 to 12 months, our directional forecasts have a 58 percent average success ratio and most of our point forecasts are more accurate than those implied by the random walk models. Forecasting evaluation tests show that our empirical findings are significant.