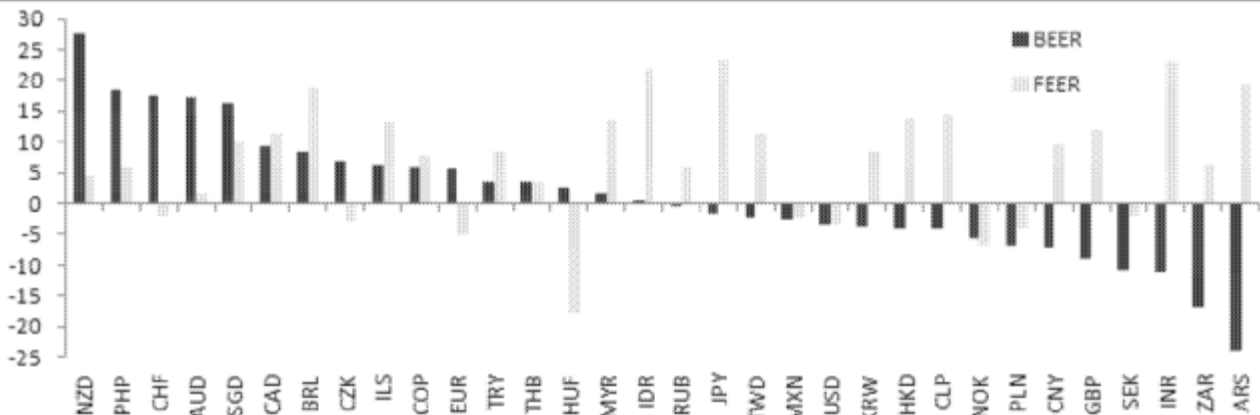
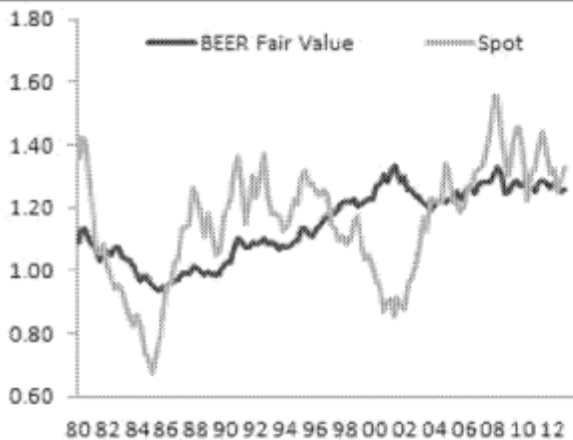


FX Behavioral and Fundamental Equilibrium Exchange Rates (BEER and FEER)***Figure 1: USD-cross BEER and FEER valuations**

Source: DB FX Research

Figure 2: EUR/USD is a bit expensive vs. BEER FV

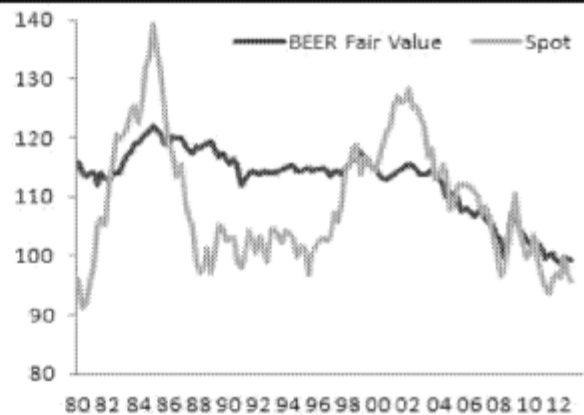
Source: DB FX Research

Figure 3: USD/JPY is now fair value vs. BEER FV

Source: DB FX Research

Figure 4: GBP/USD is very undervalued vs. BEER FV

Source: DB FX Research

Figure 5: USD BIS TWI is a bit cheap vs. BEER FV

Source: DB FX Research

*Sources: BIS, Bloomberg, Deutsche Bank. Notes: For details on model, see Exchange Rate Perspectives, Jan-13. BEER model is relative PPP adjusted for terms-of-trade and productivity effects. Relative FEER model is based on current account surpluses/deficits relative to long-term (structural) surpluses/deficits. Over/undervaluation calculated off TWIs and converted to USD-crosses using matrix algebra. EM graphs available upon request.