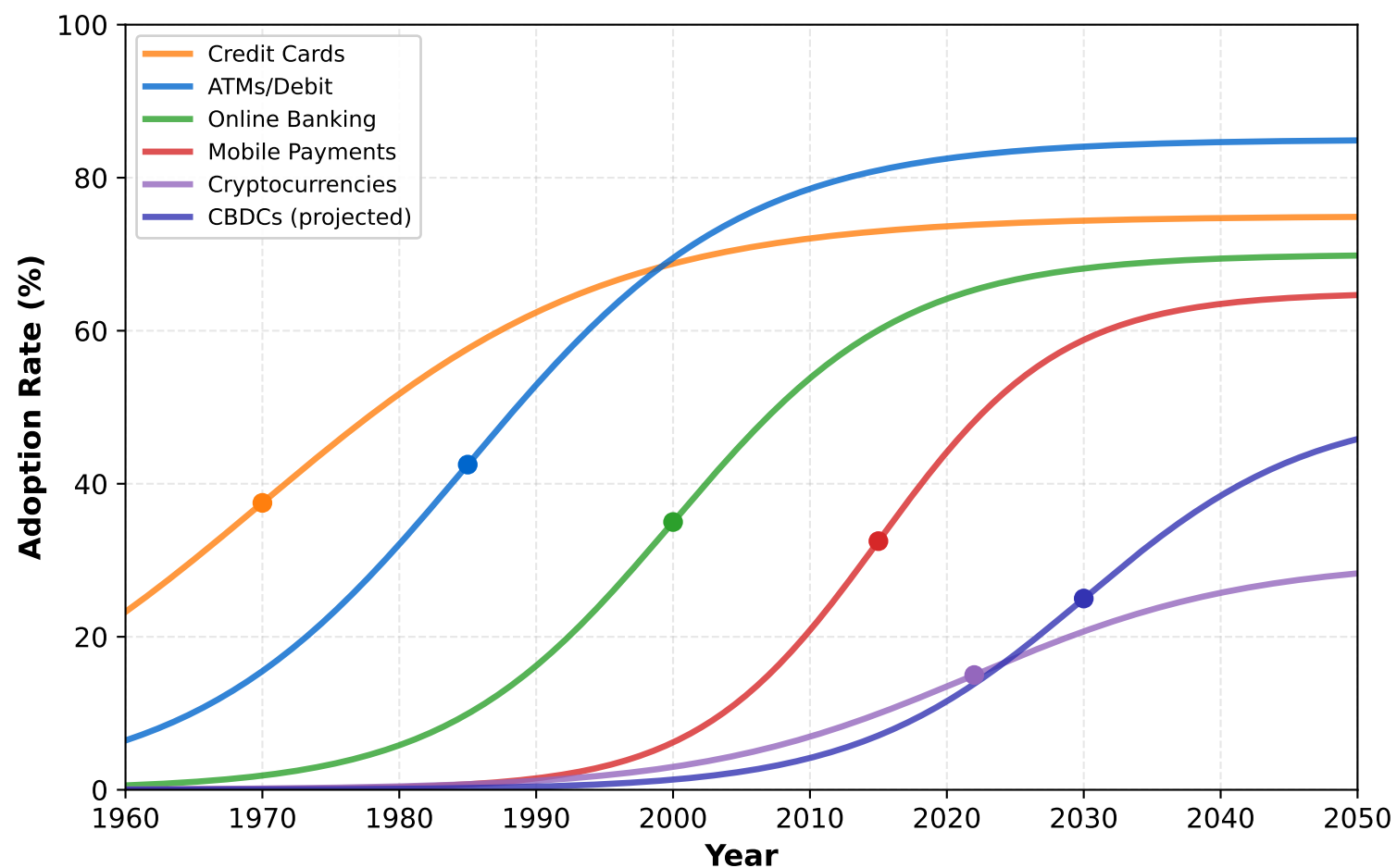# Payment Technology Adoption: Parameter Sensitivity Analysis
Rogers (1962) S-Curve Model
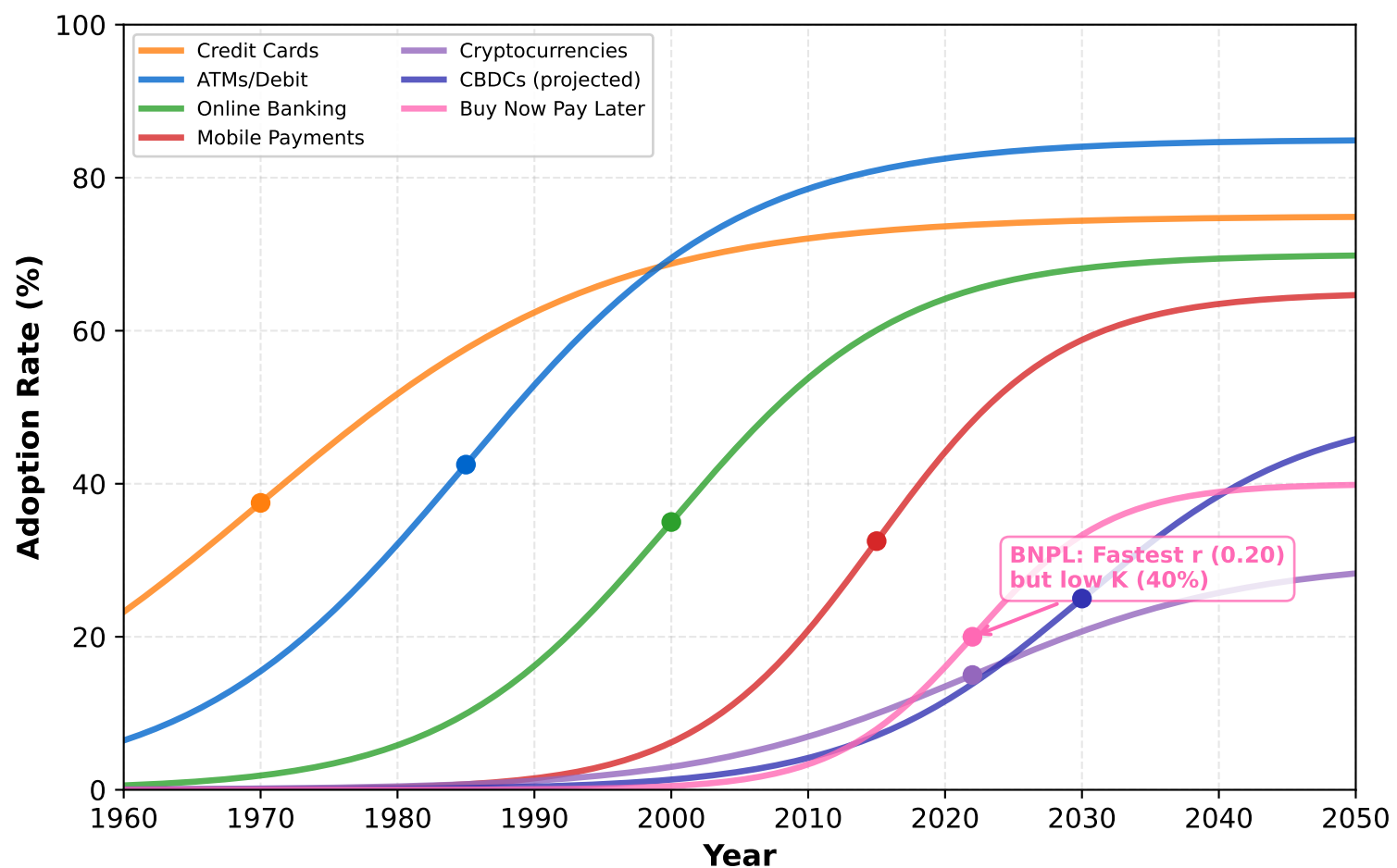
BASELINE: Six Payment Technologies
Rogers (1962) S-Curve Model
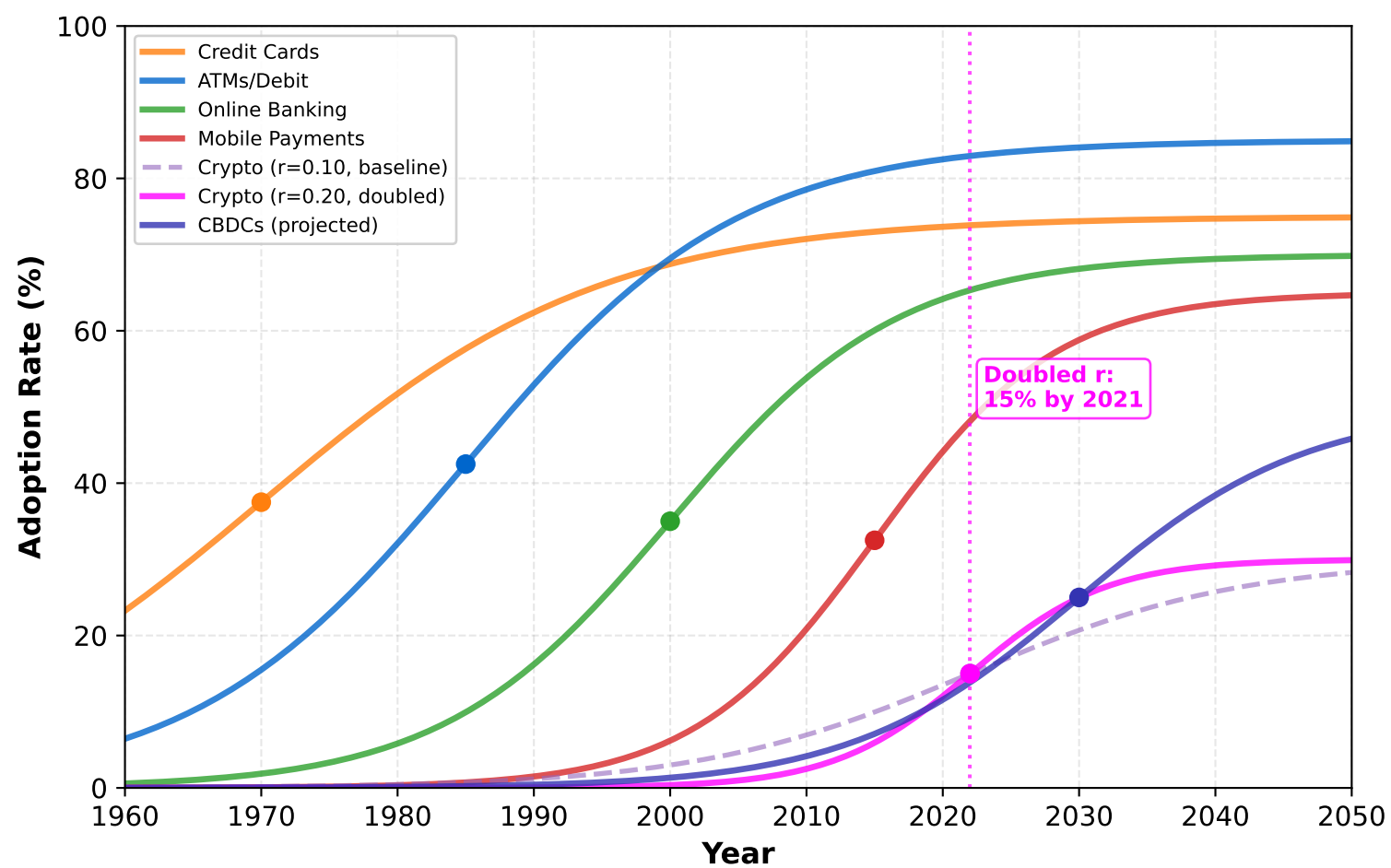
Legend: Credit Cards, ATMs/Debit, Online Banking, Mobile Payments, Cryptocurrencies, CBDCs (projected)

VARIATION 1: Adding Buy Now Pay Later
(K=40%, r=0.20, t0=2022)

Legend: Credit Cards, ATMs/Debit, Online Banking, Mobile Payments, Cryptocurrencies, CBDCs (projected), Buy Now Pay Later

BNPL: Fastest r (0.20) but low K (40%)

VARIATION 2: Faster Crypto Adoption
(Growth rate r doubled: 0.10 -> 0.20)

Legend: Credit Cards, ATMs/Debit, Online Banking, Mobile Payments, Crypto (r=0.10, baseline), Crypto (r=0.20, doubled), CBDCs (projected)

Doubled r: 15% by 2021

VARIATION 3: CBDC with Higher Ceiling
(Carrying capacity K: 50% -> 90%)

Legend: Credit Cards, ATMs/Debit, Online Banking, Mobile Payments, Cryptocurrencies, CBDC (K=50%, baseline), CBDC (K=90%, increased)

CBDC overtakes mobile payments ~1965