# **Derivative Pricing Solutions**

## 1. JPMorgan Chase

- Classical: Monte Carlo simulations, finite difference methods
- Quantum: Experimenting with quantum algorithms for option pricing

#### 2. Goldman Sachs

- Classical: Binomial tree models, Black-Scholes model
- Quantum: Researching quantum algorithms for derivative pricing

## 3. Morgan Stanley

- Classical: Finite element methods, stochastic volatility models
- Quantum: No public information on quantum implementations

## 4. Citigroup

- Classical: Trinomial tree models, Monte Carlo simulations
- Quantum: Exploring quantum computing for risk management

## 5. Bank of America

- Classical: Numerical integration methods, finite difference methods
- Quantum: No public information on quantum implementations

## 6. Deutsche Bank

- Classical: Local volatility models, Monte Carlo simulations
- Quantum: Researching quantum algorithms for financial modeling

## 7. Barclays

- Classical: Finite difference methods, binomial tree models
- Quantum: Exploring quantum computing for derivative pricing

## 8. UBS

- Classical: Stochastic volatility models, Monte Carlo simulations
- Quantum: No public information on quantum implementations

## 9. Credit Suisse

- Classical: Analytical approximations, numerical integration methods
- Quantum: Researching quantum algorithms for option pricing

## 10. HSBC

- Classical: Binomial tree models, finite difference methods
- Quantum: No public information on quantum implementations

#### 11. BNP Paribas

- Classical: Monte Carlo simulations, local volatility models
- Quantum: Exploring quantum computing for financial modeling

#### 12. Société Générale

- Classical: Stochastic volatility models, finite element methods
- Quantum: No public information on quantum implementations

#### 13. Wells Fargo

- Classical: Binomial tree models, Monte Carlo simulations

- Quantum: No public information on quantum implementations

#### 14. Royal Bank of Canada

- Classical: Finite difference methods, numerical integration methods
- Quantum: Researching quantum algorithms for derivative pricing

#### 15. Nomura

- Classical: Local volatility models, Monte Carlo simulations
- Quantum: No public information on quantum implementations

# 16. Mizuho Financial Group

- Classical: Binomial tree models, finite difference methods
- Quantum: No public information on quantum implementations

## 17. Standard Chartered

- Classical: Monte Carlo simulations, stochastic volatility models
- Quantum: No public information on quantum implementations

## 18. ING Group

- Classical: Finite element methods, numerical integration methods
- Quantum: Exploring quantum computing for financial modeling

#### 19. Scotiabank

- Classical: Binomial tree models, Monte Carlo simulations
- Quantum: No public information on quantum implementations

## 20. BMO Capital Markets

- Classical: Finite difference methods, local volatility models
- Quantum: No public information on quantum implementations

#### 21. TD Securities

- Classical: Monte Carlo simulations, stochastic volatility models
- Quantum: No public information on quantum implementations

#### 22. CIBC World Markets

- Classical: Binomial tree models, finite element methods
- Quantum: No public information on quantum implementations

## 23. Natixis

- Classical: Local volatility models, numerical integration methods
- Quantum: No public information on quantum implementations

## 24. Crédit Agricole

- Classical: Monte Carlo simulations, finite difference methods
- Quantum: No public information on quantum implementations

#### 25. Santander

- Classical: Binomial tree models, stochastic volatility models
- Quantum: Exploring quantum computing for financial applications

#### 26. UniCredit

- Classical: Finite element methods, Monte Carlo simulations

- Quantum: No public information on quantum implementations

#### 27. Commerzbank

- Classical: Local volatility models, numerical integration methods
- Quantum: No public information on quantum implementations

#### 28. Danske Bank

- Classical: Binomial tree models, finite difference methods
- Quantum: No public information on quantum implementations

#### 29. ABN AMRO

- Classical: Monte Carlo simulations, stochastic volatility models
- Quantum: No public information on quantum implementations

## 30. Nordea

- Classical: Finite element methods, local volatility models
- Quantum: No public information on quantum implementations

#### 31. Rabobank

- Classical: Binomial tree models, numerical integration methods
- Quantum: No public information on quantum implementations

#### 32. DZ Bank

- Classical: Monte Carlo simulations, finite difference methods
- Quantum: No public information on quantum implementations

#### 33. BBVA

- Classical: Stochastic volatility models, local volatility models
- Quantum: Exploring quantum computing for financial modeling

## 34. Intesa Sanpaolo

- Classical: Finite element methods, binomial tree models
- Quantum: No public information on quantum implementations

## 35. Macquarie Group

- Classical: Monte Carlo simulations, numerical integration methods
- Quantum: No public information on quantum implementations

#### 36. Jefferies Financial Group

- Classical: Local volatility models, finite difference methods
- Quantum: No public information on quantum implementations

## 37. Cantor Fitzgerald

- Classical: Binomial tree models, Monte Carlo simulations
- Quantum: No public information on quantum implementations

#### 38. SMBC Nikko Securities

- Classical: Stochastic volatility models, finite element methods
- Quantum: No public information on quantum implementations

## 39. Daiwa Securities Group

- Classical: Monte Carlo simulations, local volatility models

- Quantum: No public information on quantum implementations

#### 40. Stifel Financial

- Classical: Binomial tree models, numerical integration methods
- Quantum: No public information on quantum implementations

## 41. Raymond James Financial

- Classical: Finite difference methods, Monte Carlo simulations
- Quantum: No public information on quantum implementations

# 42. Oppenheimer & Co.

- Classical: Stochastic volatility models, binomial tree models
- Quantum: No public information on quantum implementations

# 43. Cowen Group

- Classical: Local volatility models, finite element methods
- Quantum: No public information on quantum implementations

## 44. Piper Sandler

- Classical: Monte Carlo simulations, numerical integration methods
- Quantum: No public information on quantum implementations

#### 45. Houlihan Lokey

- Classical: Binomial tree models, finite difference methods
- Quantum: No public information on quantum implementations

#### 46. Evercore

- Classical: Stochastic volatility models, Monte Carlo simulations
- Quantum: No public information on quantum implementations

## 47. Moelis & Company

- Classical: Local volatility models, finite element methods
- Quantum: No public information on quantum implementations

It's important to note that while many companies are exploring quantum computing for financial applications, including derivative pricing, most are still in the research and experimentation phase. The field of quantum finance is rapidly evolving, and more companies may adopt quantum algorithms for derivative pricing in the future as the technology matures.