Redistributing Risk & Value in Equity Derivatives: a Virtuous Cycle

BNP Paribas

London

November 29, 2006
BNP Paribas Equities & Derivatives

Covering a Wide Range of Clients & Products

Redistributing Risk & Value

Adding Value to the Group

Redistributing Risk & Value in Equity Derivatives: a Virtuous Cycle
## A Sustainable Franchise Developed Over 20 Years

<table>
<thead>
<tr>
<th>80’s – Mid 90’s</th>
<th>Mid 90’s - 2000</th>
<th>Since 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Prop. Trading Years</strong></td>
<td><strong>Opening up to Clients</strong></td>
<td><strong>A Global Integrated Business</strong></td>
</tr>
</tbody>
</table>
| ● 1987: start of BNP Equity Derivatives Trading | ● Development of sales force  
● Client-driven business growing from 10% to over 60% | ● Since 2004: BNP Paribas ranks among the top 3 global leaders in the business  
● Client-driven business growing even further |
5 main offices with local branches implanted where relevant

800 Front-office staff:
- 450 in R&D, Trading & Structuring
- 350 in Sales & Marketing
Over 200 newly hired staff in 2006
- Top-level Quants (engineering schools + financial maths + PhD)
- All traders with a quantitative background
- High profile Sales from many different nationalities

Development of new Trading Desks
- New arbitrage desks
- Risk transfer desks

Strong growth of our sales coverage
- More countries
- New segments
European Banks Reassessment

Equity derivatives: value unlocked - OW French Banks

Table 11: BNP Paribas - Equity derivatives Cost/Income ratio 2005

<table>
<thead>
<tr>
<th></th>
<th>BNP (CIB)</th>
<th>BNP (Capital markets division)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total CIB</td>
<td>Eq. Der</td>
</tr>
<tr>
<td>Revenues</td>
<td>6,422</td>
<td>1,440</td>
</tr>
<tr>
<td>Cost</td>
<td>-3,711</td>
<td>-727</td>
</tr>
<tr>
<td>Cost/Income</td>
<td>58%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: JPMorgan estimates, Company data.

On the other hand the relative positioning at the top of the market has remained more or less constant over the past 5 years. Société Générale and BNP Paribas remain at the top.
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Covering a Wide Range of Clients & Products

Redistributing Risk & Value

Adding Value to the Group
A Fast Growing Industry, With an Evolving Client Mix

<table>
<thead>
<tr>
<th>INDUSTRY WISE</th>
<th>80’s</th>
<th>90’s</th>
<th>Since 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Networks</td>
<td></td>
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<tr>
<td>Asset Managers</td>
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<td></td>
<td>Hedge Funds</td>
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<tr>
<td></td>
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<td></td>
<td>Own-Account Investors</td>
</tr>
<tr>
<td>Private Banks</td>
<td></td>
<td></td>
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<tr>
<td>Corporates</td>
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</tr>
</tbody>
</table>

Clients in 25 countries in 1995

Clients in 50 countries in 2000

Clients in more than 65 countries in 2006

- 70% of our client-revenues in 2006 come from clients that weren't ours 5 years ago
### A Developing Product Range, Driven by Client Needs

#### 80’s
- Plain Vanilla Options
- Swaps
- Futures

#### 90’s
- Exotic features for option payoffs:
  - Lookback
  - Ladder
  - Barrier
  - Outperformance, etc.

- New underlying assets:
  - Hybrids (fixed income and equity)
  - Mutual & hedge funds

#### Since 2000
- Alpha strategies:
  - Correlation
  - Dispersion
  - Dividends
  - Etc.

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**Innovation as the key differentiating factor for our clients**

**Organisational change for us:**
- Trading / Sales ➔ Trading / Structuring / Sales
Cross-Fertilization Clients/Products Drove the Market Growth

- Diversifying Risks: a Virtuous Cycle
- Covering a Wide Range of Clients & Products
Cross-Fertilization Clients/Products Overlaps

Redistributing Risks: a Virtuous Cycle
Covering a Wide Range of Clients & Products
BNP Paribas

Redistributing Risk & Value in Equity Derivatives: a Virtuous Cycle

BNP Paribas Equities & Derivatives

Covering a Wide Range of Clients & Products

Redistributing Risk & Value

Adding Value to the Group
Key Factors of Success of Our Risk Redistribution Business

- Large & diversified client base
- Strong quantitative structuring team
- Cutting-edge trading platform
The Ideal Business Model: Redistributing Risks & Value Among Clients

BNP PARIBAS EQUITIES & DERIVATIVES
Risk booking
Risk keeping
Risk selling

MARKET / INTERBANK
delta, vega, smile, repo, dividend, ...

HEDGE FUNDS / ASSET MANAGERS
variance, dispersion, dividend, ...

INSTITUTIONS
All types of risk

RETAIL AND PRIVATE BANKS
gap risk, correlation, smile, vega, ...

CORPORATES
counterparty risk, smile, gap risk, volatility, ...

INSTITUTIONS
All types of risk
Selling and Buying Risk to Create Value: The Gap Note

**BNP PARIBAS EQUITIES & DERIVATIVES**
- Risk booking
- Risk keeping
- Risk selling

**GAP NOTE**
- 1Y Gap Note linked to the occurrence of a down gap (i.e. 1-day downside move)
- Pays Libor 12M + 200 bps provided the underlying hasn’t dropped by more than 8% in one day

**RETAIL AND PRIVATE BANKS**
- Capital protection
- Leverage
- Dynamic management

**STRUCTURED NOTES**
- CPPI structured Note

**INSTITUTIONS**
- Money-market like investment with higher potential returns
- Liquidity
- Diversification

Redistributing Risks: a Virtuous Cycle
Selling and Buying Risk to Create Value: Talisman

BNP PARIBAS EQUITIES & DERIVATIVES
Risk booking
Risk keeping
Risk selling

TALISMAN
- 3Y Capital protected bond
- Minimum return
- Uncapped potential performance, linked to dispersion of assets within a basket

RETAIL AND PRIVATE BANKS
- Capital protection
- Leverage
- Dynamic management

HEDGE FUNDS / ASSET MANAGERS

STRUCTURED NOTES
- Wide range of structures

INSTITUTIONS
- Diversification: Performance decorrelated from equity markets
- High upside potential
Covering a Wide Range of Clients & Products

Redistributing Risk & Value

BNP Paribas Equities & Derivatives

Adding Value to the Group

Redistributing Risk & Value in Equity Derivatives: a Virtuous Cycle
A fast growing and evolving market

A business model generating recurrent revenues

A key asset and growth lever for BNP Paribas