Please Turn Off Cell Phones

Thank You For Your Cooperation

Flextronics International

Nasdaq:FLEX :: Rahat Ahmed & Joshua Li :: IAG :: October 26, 2001

The Problem

How does Microsoft penetrate the highly competitive gaming console market in 15 months compared to 30 for Sony's Playstation 2?

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The Solution

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The Industry

Electronics Manufacturing Services (EMS)

Electronics Manufacturing Services

- Contracted by OEMs to “manufacture products”
  - OEM: Original Equipment Manufacturer
    - Sony, Toshiba, Ericsson, Motorola, Nokia
- Average growth rate of 25% per year
- Bear Stearns estimates:
  - 1999 Market: $73.2 billion
  - 2003 Market: $149.4 billion
  - Total Market Potential: $500 billion

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What Do They Do?

- Past: Simply (sub)assemble products
- Present: Begun adding…
  - Custom components
  - Design services
  - Supply chain management
- Future: One-Stop Shop
  - Everything from concept design to ultimately taking orders from customers and then directly delivering them

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Why Are They Hot?

- Margins are gaining in importance
  - OEMs stick to their best areas
    - Research & Development
    - Sales, Marketing & Branding
  - Outsource the rest
    - Manufacturing & Logistics
    - Support
- EMS industry is becoming full-featured
  - “One-Stop Shop” equates to lesser hassle

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Leading Companies

- Solectron (Milipitas, California)
  - HP, Ericsson, Cisco Systems, Compaq, IBM
- Celestica (Toronto, Canada)
  - HP, IBM, NEC, Sun Microsystems
- SCI Systems (Huntsville, Alabama)
  - HP, Nortel, Nokia

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The Company

Flextronics International (Nasdaq:FLEX)

Quick Company Profile

- Incorporated in Singapore in 1990
- Went public in 1994
- Active in 28 countries across 4 continents
- Clientele includes:
  - Alcatel, Cisco Systems, Compaq, Ericsson, Hewlett Packard, IBM, Lifescan, Microsoft, Nokia, Nortel, Palm, Philips, Siemens, AG, Sony, Xerox

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Quick Financial Profile

- #1 EMS company in market capitalization ($11.91 billion > 9.52 billion)
- #2 EMS company in revenue
- Growth from 2000 to 2001
  - Revenue: 74% ($12.1 billion)
  - Cash operating income: 82% ($552 million)

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Leader in Innovation

- Taking EMS to new levels…
  - Taking orders directly from customers
  - Producing products in multiple markets
  - Handle logistics of delivering the end result directly to customers

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Acquisition Frenzy

- DII Group
  - Increase in manufacturing capacity
- Palo Alto Products, Chatam Technologies and JIT Holdings Ltd.
  - Industrial design services
- Lightning Metal Specialties
  - Injection molding, metal stamping and integration

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Five Fingers On Each Hand

- Flextronics Design
  - Industrial, electrical and mechanical product development support
- Flextronics Enclosure Systems
  - Integrating custom electrical housings
- Flextronics Semiconductor
  - Providing new design and manufacturing services
- Flextronics Network Services
  - Copper and Fiber optic telecom switch installation, engineering and testing services
- Flextronics Photonics
  - Photonic design and manufacturing
- Multek
  - Printed Circuit Board (PCB) fabrication

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Putting It All Together

- Product design and technology services
- Logistics services
  - Materials procurement
  - Inventory and vendor management
  - Packaging and distribution
  - Automation of key components of the supply chain through advanced information technologies

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Who Needs That Anyway?

- Multiple plant closings in Fiscal 2001
  - Short-term: Loss of $534 million
  - Long-term:
    - Forced consolidation of resources
    - Better economies of scale
- Has led to multiple “one-time” charges

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Product Catalog

- Exclusive manufacturer of…
  - All Ericsson cellular phones
  - All Microsoft Xboxes
  - Good percentage of Motorola phones

Telecom	34%
Servers, Peripherals and PDAs	26%
Networking	19%
Consumer & Medical	8%
Others	13%

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Looking Forward

- 2002 Implementations
  - Increase design capabilities
  - Expand IT tools
  - Drive logistics management
- Industrial Parks Strategy
  - Consolidation of raw materials, suppliers and manufacturing
  - Low-cost regions (labor, land & capital)
  - Mexico, Brazil, Hungary, Poland, Czech Republic, China

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Looking Smarter

- Industrial Parks should lead to…
  - Decrease logistics costs
  - Reduce time-to-market
  - Decrease shipping costs
  - Improve communication and quality

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Soothing Words

- End markets are weak, but Flextronics is winning tremendous amounts of new business
  - Result: record second quarter for the ongoing fiscal year
    - $3.324 billion
  - Expects third quarter to hit $3.3 - $3.5 billion
    - Would have been higher, but…
      - Plastic enclosures supplies are limited (-$100 million)
      - Xerox deal facing regulatory issues (-$100 million)
  - Getting more wins than competitors, including Selectron
    - Example: Microsoft

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Risks

More Talent Than The Los Angeles Lakers: Can They Put It Together?

Market Risks

- In a depressed economy…
  - Less demand for clients' products
  - Resources and inventories may go to waste

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Company Risks

- Dependent on…
  - Certain credible, management figures
  - Stability in foreign currencies
  - Good relations and reputation with clientele

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Valuation

Three-Stage Free Cash Flow to Firm Model (FCFF)

DCF? Sure. But how?

- Revenues are the easiest to predict
  - High fixed costs cause net income to be volatile
- Heavy reinvestments are needed
  - Is EBIT (operating cashflow) enough to cover the costs?
  - How will FLEX cover Capital Expenditures in the future?

FCFF (*not* FCFE) is a much better DCF valuation method for FLEX

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FCFF? It is not in the Workshops?

- Allows you to valuate the whole firm
  - No need to worry about capital structure
- Once firm value is obtained, getting the equity value is easy
  - Add back cash
  - Take out value of debt

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Recurring One-Time Charges

- For the past 3 years, FLEX has recorded unusual charges as a part of COGS
  - In the most recent quarter, FLEX recorded a one-time charge of $380MM
- All charges have been restructuring-related

Relocate these charges as capital expenditure

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Capitalizing Operating Leases

- Operating leases are really PPE LT financing
- Find the PV, and include it in Liabilities
- Get the "interest payment" and add it into Interest Expense

Assumed cost of borrowing 10%

Year		Lease	PV	
2002	1	117,171	106,519	
2003	2	101,714	84,061	
2004	3	70,801	53,194	
2005	4	35,463	24,222	
2006	5	16,456	10,218	
Thereafter	6 and after	16,848	50,737	*
Debt Value of Leases			**328,950**	

** Treated as annuity lasting 8 years beyond 2006*

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Three-Stage FCFF

- High growth phase: Years 1-3
- Transition phase: Years 4-10
  - Revenue growth slows
  - Operating margin increases
  - Efficiency increases
- Stable growth phase: Year 11 till forever

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Assumptions, Assumptions…

Inputs	
Tax Rate in High Growth Phase	10.00%
Tax Rate in Stable Growth Phase	20.00%
Cost of Debt	7.80%
Riskfree Rate	4.60%
Risk Premium	5.50%
Beta in high growth stage	2.21
Beta in stable growth stage	1.20
High Growth Phase Revenue Growth Rate	70.00%
Stable Growth Phase Revenue Growth Rate	5.00%
High Growth Phase Operating Margin	4.00%
Stable Growth Phase Operating Margin	6.50%
High Growth Phase Sales/Capital Ratio	2.50
Stable Growth Phase Sales/Capital Ratio	5.00
Debt Value (000)	3,870,244
Market Value of Equity (000)	11,331,068
Firm Value (000)	15,201,312
Debt/Firm	25.46%
Equity/Firm	74.54%

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Given the Assumptions…

Equity Value Calculation		
PV of High Growth Phase and Transition Phase		(26,010,387)
Terminal Value of Stable Growth Phase		165,288,208
PV of Terminal Value @ 14.5%		42,676,324
Intrinsic Value of FCFF		**16,665,937**
Cash		631,588
Debt		3,870,244
Value of Equity		**13,427,281**
Shares Outstanding		482,810
Value per Share	**$**	**27.81**

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GIGO / Plenty of Risks

- Model requires a lot of estimates
  - If my assumptions are wrong…
- Notice how PVs of Years 1-8 are negative
  - You are betting far out into the future
  - Extremely risky

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Recommendation

Putting Our Mouth Where Our Money Is

Go Long

- ST Hold
  - Down turned economy is bad for company
  - Taking time out for restructuring
    - Lots of unusual charges
    - Supremely volatile
- LT Buy
  - Industry is still a baby
  - Leader in industry's innovation

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Any Questions?

Please Be Nice

Thank You

Come Again!