

Trimble Navigation Limited (NASDAQ: TRMB)

Joshua Li & Sushil Bathija

TRMB



What Is GPS?

- Global Positioning System
- Uses 3 satellites to track an object
- Example: roadside assistant, hiking equipment, fleet management, electronic tolling

TRMB



Trimble = GPS

- Develops, manufactures, sells GPS technology
- 4 industry Segments
- 2 business Units:
 - Precision Positioning Group (PPG)
 - Mobile and Timing Technologies Group (MTT)

TRMB



Sales & Marketing

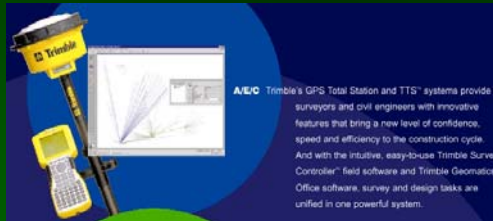
- Sales force located in 15 countries
- Domestic sales = 48% of total revenue
- Some products are country-specific
- Alliances and OEM relationships to penetrate certain markets

TRMB



PPG

- *High-end, value-added* markets
- **Key strategy: interoperability**
 - Combining GPS with other technologies
- **Product example:**



TRMB



MTT

- *High-volume* applications
- **Fleet management market**
- **Telecommunications infrastructure**
- **Product example:**



TRMB



The Battlefield

Non-GPS technologies

- Principle competitive factors:
 - Product properties
 - Size of installed base
 - Vendor reputation
 - Financial resources

TRMB



Solectron

**Philips VDO,
Nortel,
Caterpillar,
CNH Global**

TRMB

**Motorola,
Rockwell,
JRC, Magellan,
Sony**

TRMB



Plenty of Risks

- Dependent on Solectron
 - Recently worked out their differences
- Holds 280 US patents, 18 foreign patents that expire 2005 and thereafter
- Dependent on GPS demand
- Diminishing margins
 - Current gross margin > 50%
- Chipset replacing complete systems

TRMB



Plenty of Potential

- Agreement with Solectron
- > 180 US and foreign pending patents
- Strong growth in demand
- US Government's support
- Strong industry sales growth
 - Currently \$2 billion
 - \$10 billion by 2005

TRMB



Acquisition of Spectra

- Expected to add \$51 mil in revenue in Q3 and \$56 mil in Q4
- Grow at roughly 9% per annum
- Synergies
 - Economies of scale in R&D
 - Cross-marketing

(Source: Banc of America Securities)

TRMB



Basic Facts & Figures

- Average 5-year gross margin > 50%
- Revenue growth has not been phenomenal: 9.6% for past 5 years
- Income growth to jump to 18.7% next 5 years *(Source: Yahoo! Finance)*

TRMB



Relative Analysis

	TRMB Dec-99	Industry Dec-99
ROE	21.4	4.2
ROA	11.9	2
Price/Book	4.88	7.44
PE	26.4	316.7
Price/Sales	1.81	3.36
Current Ratio	3.4	2.1
Quick Ratio	2.9	1.2

TRMB



P/E – What Is It?

$$P = \text{Expected EPS} * 1 / (r - g)$$

$$P/E = \text{Actual EPS} * (1 + g) / (r - g)$$

* Growth rate must be **long term sustainable** growth.

TRMB



PE Analysis

$$\begin{array}{l} \$20 \\ \text{PE} \\ 24 \\ 46 \\ \$38 \end{array} = \begin{array}{l} (1 + g) \\ (1 + .06) \\ (1 + .08) \end{array} / \begin{array}{l} (r - g) \\ (.1035 - .06) \\ (.1035 - .08) \end{array}$$

TRMB



Time Value of Money



Today

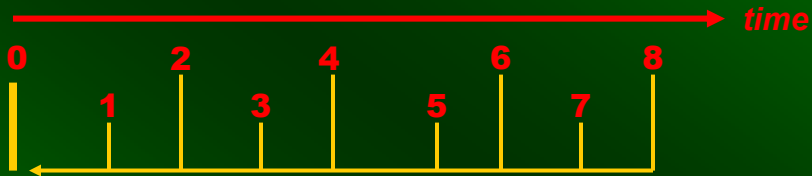


Tomorrow

TRMB



FCFE Discount Model



PV = Sum of all expected future CF / Discount Rate

TRMB



Intrinsic Value from FCFE

- Assumed stable stage growth rate = 7%
- Where high growth rate = 18%
 - Intrinsic value = approximately \$34
- Where high growth rate = 25%
 - Intrinsic value = \$44.00

TRMB



Rating: Buy

- Value from PE = \$38
- Value from FCFE = \$44
- Our price target = \$35 - \$40
- Recommended entry point = \$20
- Price as of 9/22 = \$30.00

TRMB

