

## Neutral Tandem (TNDM)

Neutral Tandem (TNDM) is a company whose stock has been oversold to all-time lows on fears of slowing growth, increasing competition, and patent issues. This has driven shares to fall from a high of \$34.56 to \$11.98 as of last close (7/12/2010). However, Neutral Tandem's healthy free cash flows and strong financial position (over \$170M in cash and no debt) make the company an attractive investment opportunity at these prices. Although headwinds such as competition are legitimate, I believe that TNDM shares are currently priced for a worst-case scenario in the company's future and should offer at least a 25-35% return at current prices.

### Background

Some background is necessary to understand Neutral Tandem's core business of interconnecting voice carriers. Calls made from one voice carrier to a different voice carrier require either a tandem switch to route the call or a direct connection between the carriers in the relevant markets. Due to the high costs of establishing direct connections, most voice carriers will choose to transit their calls with tandem switches. Before Neutral Tandem entered the market, this meant most carriers used the network of tandem switches owned by the "Baby Bells", called the incumbent local exchange carriers (ILECs). By law, ILECs were required to route all traffic, including the calls of competing carriers, with their tandem switches. ILECs charged competing carriers by the minute for calls requiring routing by their tandems at rates regulated by state commissions and the FCC. Not only were the ILEC tandems inefficient for operating with competing carriers since they had been designed by for a monopolistic carrier, but ILECs were in general unhappy about having to give up use of their overburdened tandem networks to competitors and had an incentive to not "fully cooperate" in establishing the interconnections competing carriers required.

### Neutral Tandem's Operations

Neutral Tandem was founded in 2003 to provide an alternative to the ILEC tandem switching network. Over the course of 6-7 years, it has built its own national tandem switching network that offers three main advantages over the ILECs:

- 1.) Neutrality. Its eponymous neutrality refers to the fact that it does not compete with voice carriers like an ILEC does, thus ensuring that carriers do not need to route calls through their biggest competitors.
- 2.) Cost savings. Since Neutral Tandem designed their tandem switch scheme to maximize efficiency for routing calls from many different carriers it is able to undercut the ILECs' rates by 20-25%.
- 3.) Quality and services. Finally, Neutral Tandem has built a higher quality product than the old ILEC tandems using new IP soft-switch tandems and offering features such as quality of service reporting, traffic reports, and redundancies in the network to ensure more reliable service.

With its first mover advantage, Neutral Tandem has managed to grow its network into the largest alternative tandem switching network in the US. Neutral Tandem routed 87.8 billion minutes of calls in 2009 and currently serves almost all of the major carriers, with the exception of the wireline ILECs such as AT&T and Verizon wireline (Although it does serve AT&T and Verizon wireless). Its network also handles all types of voice carriers: wireline competitive local exchange carriers (CLECs), cable companies, VoIP, wireless, and long-distance carriers interexchange carriers (IXC). Wireless carriers and cable companies account for 65% of revenue, IXC carriers account for 20%, and the rest is from CLECs and VoIP.

Like the ILECs, Neutral Tandem charges carriers on a per minute basis for calls that go through their tandem switches. Revenue recognition is straightforward and is recorded each month based on the number of minutes trafficked for each specific tandem switching service Neutral Tandem offers. The tandem switching business is highly scalable and as Neutral Tandem's network expands, operations become more efficient, capex decreases as a percentage of sales, and margins increase. This had led to rapid growth in the sales, profits, and margins in the past 3 years:

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2009	2008	2007
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<b>Sales</b>	168,906	120,902	85,555
<b>Net Income</b>	41,315	24,020	6,258
<b>Net Profit Margin</b>	24.5%	19.9%	7.3%
<b>EBITDA</b>	78,560	49,418	28,804
<b>EBITDA/Sales</b>	46.5%	40.9%	33.7%

### Future Growth

Neutral Tandem's core business of voice tandem switching is benefiting from the secular trends of consumers increasingly moving towards wireless, cable, and broadband carriers. As fewer consumers use wireline ILEC services, more calls will be routed through Neutral Tandem's network. Beyond these secular trends, there are several services that are potential drivers of growth for Neutral Tandem (and potential catalysts for the stock).

60-70% of Neutral Tandem's revenues currently come from providing tandem routing services for local calls. While Neutral Tandem is still expanding into new markets to grow its local call services, it is now entering mainly smaller less profitable markets. Interconnections within larger existing markets also provide room for Neutral Tandem's local tandem services to grow. However, the drivers of Neutral Tandem's future growth in its core voice business are in two different areas: terminating switched access and originating services.

1.) Terminating switched access. In the terminating switched access business, Neutral tandem uses its network to terminate long-distance calls for long-distance carriers, or interexchange carriers (IXC). This is currently 20% of Neutral Tandem's revenue and management has stated that it may double within a year. Neutral Tandem is also seeking to grow its business by providing terminating services for international long-distance carriers. Neutral Tandem has recently solved the technology aspects of this international service, and is currently working to resolve the contractual aspects with international carriers.

2.) Originating switched access. Originating switched access services essentially serve 800 number calls. 800 number calls need to be translated by a tandem to determine which carrier to send it to. Recently, TNDM has begun to offer originating services. However, management has said growth in this area is currently stalled since Neutral Tandem cannot match the marketing fees often paid to carriers. Future growth of originating services will depend on whether a number of current lawsuits filed by others will lead to the FCC restricting the marketing fee practice.

Neutral Tandem has also begun a service outside its core business of voice tandem switching in late 2009. It is a joint venture with TelX to launch an Ethernet exchange network. I won't spend too much time describing this venture since it is a very new venture in a very young industry that will likely interest growth investors more than value investors. The basic concept of this service is to provide efficient interconnection services for companies using the Ethernet system. The Ethernet interconnection industry has been projected to be worth twice as much as the voice tandem business, but this remains to be seen. Neutral Tandem is behind the main competitors in this new space, CENX and Equinix, by roughly 8 months. That being said, Neutral Tandem has two large advantages in the Ethernet interconnection industry: 1.) its existing network that it can leverage, and 2) existing business relationships with many of the potential Ethernet exchange customers. As a value investor, I would not necessarily invest in TNDM on the potential prospects of the Ethernet exchange network, but growth investors may, which I will discuss in the catalysts section.

### Current Concerns

Three main concerns have been contributing to the recent selloff of TNDM :

**1.) Competition.** Over the past year, Neutral Tandem has seen increasing competitive pressure from firms such as Level 3 and Peerless Networks that has led to a large sell-off. While management has said

that they have retained all major customers, they have admitted that there has been increased price pressure. This is reflected by the decreasing average rate per minute from 0.19c/minute in 2009 to 0.18c/minute in Q1 of 2010. (While this decrease is occurring partly because of competition, part of the decrease can also be attributed to Neutral Tandem entering new smaller markets that generally yield lower rates.) Management was quoted as saying that they had "seen some of the toughest pricing that I pretty much expect to see". Regardless of whether this is the case, management appears to be taking the competition seriously and stated that it is competing aggressively to retain customers and gain new ones with long-term contracts and leveraging its ability to provide comprehensive solutions to customers (e.g. broader geographic coverage, more capacity to handle call traffic).

Even with increasing competition, Neutral Tandem has several competitive advantages. First, no competitor has a tandem network approaching Neutral Tandem's network's size. This means that competitors can only offer a partial solution to carriers at best and makes it unlikely that Neutral Tandem will lose business with carriers that have a national presence (No major customers have been to competitors thus far). Second, Neutral Tandem has built a network with very few quality issues while it is reported that some competitors have had issues with their tandem switching quality. Therefore, large scale defections of Neutral Tandem's customers are unlikely, and the main legitimate concern is margin compression in local markets.

However, as I'll discuss in my valuation, even if the easy days of growth are over and margins decline, Neutral Tandem is priced so that in most scenarios it remains a compelling buy. Furthermore, as I discussed previously, the international long-distance, originating access services, and Ethernet exchange are both potential growth areas for Neutral Tandem that could counteract competition in the tandem market.

**2.) Patent Litigation.** In June 2008, Neutral Tandem sued Peerless Networks for patent infringement of its tandem network design, but Peerless Network responded by questioning the validity of Neutral Tandem's patent and calling for the USPTO to re-examine the patent. Initial action by the USPTO in March 2010 has been to reject Neutral Tandem's patent claims, although the USPTO's final decision on the re-examination and the Court's final ruling will not likely be until this fall. This patent dispute and the unfavorable developments have contributed to the sell-off of TNDM in 2010. However, I believe that concerns regarding the patent are overblown.

First, remember that Peerless Networks and likely other competitors have already been infringing on Neutral Tandem's patent for over a year to date. An unfavorable ruling for Neutral Tandem would therefore not materially alter the competitive environment. Second, the company's balance sheet is immune to an unfavorable ruling since the company does not appear to assign its patent any value on its books. (Or if they do, it is negligible and filed under "Other assets" which is valued at \$511,000.) So while Neutral Tandem may lose its patent battle, it will not fundamentally change its competitive environment. Any favorable ruling on the patent case, while unlikely based on recent developments, will be a catalyst for TNDM and a deterrent against Neutral Tandem's competition though.

**3.) Fear of Obsolescence.** Similar to the issue of competition, I believe that growth investors have also steadily fallen out of favor with TNDM because of the fear of eventual obsolescence due to VoIP. VoIP relies on IP-switching technology that greatly reduces the cost and complexity of creating direct connections between carriers, thereby bypassing the need for tandem switches. However, even assuming a constant high growth rate of 31.1% CAGR in residential VoIP lines, based on past growth in VoIP lines, it will still be approximately 7-8 years before VoIP overtakes the number of current US residential wirelines. This also assumes that there will be no slowdown in VoIP growth due to necessary infrastructure investments or regulatory hurdles.

Even if adoption occurs at this high rate, it is important to remember that establishing direct connections between VoIP carriers will still take time and that tandem switching will still be necessary for connecting VoIP with wireless carriers and the remaining wireline carriers. Therefore, while the terminal value of Neutral Tandem's core business of tandem switching should be discounted for the risks of VoIP adoption, an all-VoIP network that makes tandem switching obsolete is still years away.

## Valuation

Based on 2009 results and today's prices, TNDM is attractively valued with a 9.8% FCF yield, FCF/EV of 18.5%, and a low 2.6 EV/EBITDA multiple.

	2009
<b>Current Price per Share</b>	11.98
<b>Diluted Shares Outstanding</b>	33,852
<b>EV</b>	221,552
<b>EBITDA</b>	78,560
<b>FCF</b>	38,317
<b>FCF/Share</b>	1.13
<b>FCF Yield</b>	9.4%
<b>EV/EBITDA</b>	2.8
<b>FCF/EV</b>	17.30%

Note: EV and all following calculations use an adjusted cash measure that includes auction rate securities (ARS). Neutral Tandem currently has \$171M in cash and cash equivalents and holds par value \$12.9M of ARS. Beginning on 6/30/2010, it will have the right to sell these ARS back to UBS at par value. Therefore, I use an adjusted cash figure of \$184M.

I consider two useful scenarios in valuing Neutral Tandem: 1.) "worst-case" scenario and 2.) a "normal" scenario. Both scenarios use the low ends of management guidance given for FY2010. In the worst-case scenario, I assume that revenue steadily declines and that EBITDA margins decline 17% by 2014 (compared to 2010) due to competition and pricing pressure. To approximate the risk of faster-than expected VoIP adoption and competitive pressures I substantially discount the terminal value based on 2014 FCFs:

	2010	2011	2012	2013	2014
<b>Sales</b>	185,000	184,075	178,553	172,303	165,411
<b>EBITDA</b>	82,000	77,057	70,349	65,765	61,098
<b>Less: Capex</b>	(22,000)	(22,089)	(21,426)	(20,676)	(19,849)
<b>Less: Taxes</b>	(27,880)	(26,199)	(23,919)	(22,360)	(20,773)
<b>Less: Interest Expense</b>	250	300	350	450	550
<b>FCF</b>	32,370	29,069	25,354	23,179	21,025

After adding back cash to the DCFs, I estimate that this "worst-case" scenario implies a fair value for TNDM at approximately \$10.90-\$11.20 per share. This implies a decent margin of safety with a 6%-9% downside risk at current trading levels of \$11.98.

In the more likely "normal scenario", I model very modest growth occurring at declining rates until 2014 but that EBITDA margins will decline by 14% in 2014 (compared to 2010) from pricing pressure. Terminal value is increased from the worst-case scenario to approximate a more modest level of expected risk:

	2010	2011	2012	2013	2014
<b>Sales</b>	185,000	199,800	213,786	226,613	237,944
<b>EBITDA</b>	82,000	83,640	86,863	89,284	90,819
<b>Less: Capex</b>	(22,000)	(23,976)	(25,654)	(27,194)	(28,553)

<b>Less: Taxes</b>	(27,880)	(28,438)	(29,533)	(30,357)	(30,878)
<b>Less: Interest Expense</b>	250	300	350	450	550
<b>FCF</b>	32,370	31,526	32,025	32,184	31,937

After adding back cash to the DCFs, I conservatively estimate that under normal circumstances TNDM's fair value should be at least \$15-\$16.20, representing a 25%-35% upside from the current price of \$11.98.

Note that the 2010 guidance figures used in both valuations assume there is no sales contribution from the Ethernet exchange project. These guidance figures do assume a \$4M operations cost and \$4M in capex related to the Ethernet exchange project. Therefore, if the Ethernet exchange development is stopped after 2010 (due to poor results or low revenue) actual EBITDA and FCFs will be higher than I estimated. If the Ethernet exchange project is continued, one would hope that it provided enough FCF to offset its costs though. Given the competent management of Neutral Tandem thus far, I feel the risk of a serious capital budgeting mistake with respect to the Ethernet exchange is low though.

In summary, TNDM shares are oversold mainly due to fears of competition, lawsuits, and future growth. These are all legitimate concerns, but TNDM shares are trading at worst-case scenario prices. Estimates of the fair value of Neutral Tandem's business suggest that TNDM shares are conservatively worth at least \$15-\$16.20, representing a 25-35% upside from current prices.

### Catalysts

**1.) Value/Activist investor attention.** In a May 13, 2010 13D filing ValueAct Small Cap Partners disclosed that they had purchased 6.2% of Neutral Tandem at an average price of \$15.15. ValueAct has a reputation for being long-term value-oriented investors with an activist bent. Barron's reports that ValueAct sits on roughly half of their holdings' boards. While I do not know their exact plans for their TNDM position, a potential board seat or further acquisitions of Neutral Tandem's stock could be a catalyst for the stock.

**2.) Growth in core business:** Management has outlined how their terminating business and originating businesses could see increased growth this year. Management has already set expectations low by predicting results at the lower range of its guidance. If the core business can grow better than expected, catalysts could include beating guidance expectations and analyst upgrades.

**3.) Positive Ethernet exchange news.** There may be surprise revenues from the Ethernet exchange being developed. Management has not factored in any potential Ethernet exchange revenue, but has noted it is possible to see Ethernet revenue this year. Neutral Tandem has also been stressing the exchange's growth opportunities to growth investors recently, devoting an entire presentation and conference call this May to the Ethernet exchange. If growth investors begin to buy TNDM based on potentially favorable developments in this Ethernet venture, I believe that value investors could exit their positions at share prices at or above the fair value of TNDM's core tandem switching business.

**4.) Share buyback.** With a mountain of cash, if TNDM decides not to aggressively pursue the Ethernet exchange venture for whatever reason, another share buyback could occur. In the latest 10Q, the company reported that \$15.4M of shares was still available for repurchase as of 3/31/2010. Given the high FCF and large cash position of Neutral Tandem, it is certainly possible that more buybacks could be announced.