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Juniper Networks, Inc. (JNPR)
Earnings Quality Review

We are initiating coverage of JNPR with an initial earnings quality rating of 3+ (Minor Concern).

For an explanation of the EQ Review Rating scale, please refer to the end of this report.

Summary

Juniper Networks (JNPR) is tripping several red flags on traditional items such as inventories, receivables, payables, negatives on cash flow, and declining margins. We often refer to these items as “nick-and-dents” meaning any one of these negative items is probably minor and could be overlooked, but when there are many of them all at once, there may be more significant trouble. JNPR’s Non-GAAP EPS of $0.42 in 2Q22 missed by 3 cents and $0.32 in 1Q22 missed by 1 cent.

However, it may be possible that many of these red flags are all caused by one overriding issue that is skewing many of the ratios. In that case, the company may see many of its traditional metrics swing back to positive trends. That is what we believe could happen with JNPR as it has faced shortages of several parts that take longer to arrive and therefore orders cannot be fulfilled as quickly as in the past. The result is a growing backlog figure, which represents future sales to be booked:

	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20
Backlog	$2,400	$2,100	$1,800	$1,500	n/a	n/a	$420
Order rates	dbl dig	35%	50%	50%	record	mid-teen	n/a

Looking at conference calls, coming out of Covid – JNPR saw order rates accelerate to a record level in 2Q21 and continue growing at high rates including double-digit growth in 2Q22 against a record comp. Because it is missing key parts, orders have turned into backlog that has risen

from $420 million to $2.4 billion. Keep in mind, this is a company that normally does $4.5-$4.7 million in sales in a year. They have about 6 months of sales sitting in backlog. This is what is skewing several ratios and triggering red flags.

We want to look at what red flags appear to be false, which ones are still troublesome, and how this could play out:

Red Flags that Look OK

- DSOs on receivables jumped 15 days y/y in 2Q. We do not consider this a problem, as the company is clearly not "stuffing the channel" like that type of move often indicates. The slowness in obtaining some inventory to fulfill orders led to a back-loaded quarter. Inventory is the problem and could still impact the timing of sales in the future. (See Below)

- DSIs on inventory also jumped by 23 days y/y in 2Q. We believe JNPR's explanation that inventory was too low last year as the backlog started to build rapidly. Also, it is paying more for inventory on price, broker commissions, and expedited shipping. (See Below)

- Prepaid expenses rose as JNPR made a large deposit to secure more inventory from contract manufacturers. That is a normal part of JNPR's business. (See Below)

Potential Problems

- Gross margin is under pressure and that should last for some time. The higher-priced inventory will flow through the income statement and further pressure margins. With the backlog at about six months of sales, much of JNPR's announced price increase will not help when backlog flows through at previous pricing levels. FIFO inventory could also mean that as the log jam for supply is alleviated, JNPR will see cost drop and its pricing fall as it then has to expense inventory acquired at higher prices. (See Below)

- If sales are light because backlog is growing, then overhead costs like R&D and Sales and Marketing should be increasing as a percentage of sales. However, that is not happening. R&D in dollar terms has been flat for three quarters now. Is JNPR fully investing in its business? We believe JNPR is picking up about 3 cps in EPS from this area. (See Below)

- We also have seen capital spending consistently less than depreciation. Depreciation is also declining in dollar terms. This is adding about 1 cent to EPS per quarter. (See Below)

- With all these items interplaying – we think investors should expect 3Q and 4Q earnings to face several of the same headwinds. How receivables and inventory move is key in the near term. The difference between having 1 DSO in receivables is almost 2 cents to quarterly EPS. JNPR lost over 6 cents from the higher inventory costs in 2Q too and margin comps coming up are tough. We also think JNPR picked up at least 3 cents in EPS by underspending on R&D and Selling costs. (See Below)

- Non-GAAP EPS for JNPR is not outlandish. It adds back stock compensation and the amortization of acquired intangibles as the primary adjustments along with some minor actual one-time items. In terms of amortization of intangibles – they do this over a very short period and it quickly closes the spread between GAAP and non-GAAP.

- Deferred revenues dropped slightly last quarter but remain at very high levels. We attribute some of that to the seasonality of the business and weakness in the security product.

Def R	**2Q22**	**1Q22**	**4Q21**	**3Q21**	**2Q21**	**1Q21**	**4Q20**	**3Q20**
Sales	$1,269.6	$1,168.2	$1,299.9	$1,188.8	$1,172.3	$1,074.4	$1,222.6	$1,138.2
Def Rev	$1,462.6	$1,466.6	$1,413.6	$1,218.1	$1,331.3	$1,331.7	$1,285.8	$1,134.0
DSO	103.7	113.0	97.9	92.2	102.2	111.6	94.7	89.7

This is worth watching, but we're not flagging it at this time.

What Looks Strong or Like a False Flag:

Receivables are rising – in JNPR's case we believe this is NOT an actual red flag.

DSO	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
Sales	$1,269.6	$1,168.2	$1,299.9	$1,188.8	$1,172.3	$1,074.4	$1,222.6	$1,138.2
A/R	$1,048.4	$848.8	$994.4	$774.3	$768.3	$758.9	$964.1	$754.0
DSO	74.3	65.4	68.8	58.6	59.0	63.6	71.0	59.6

A nearly 15-day jump in DSOs can often indicate a company is having a tough time making sales and may be offering suppliers great pricing and volume deals at the end of a quarter to book the sales. That in turn makes it even tougher to make the following quarter's sales forecast because the suppliers are overstocked and they have been conditioned to wait for another super deal.

At JNPR, they readily admit they have been seeing longer time-frames between order and fulfillment. Also, the timing of when parts arrive to complete orders is taking longer. As a result, 2Q22 saw more orders completed near the end of the period. According to the CEO:

> *"We saw a very strong demand and bookings throughout the quarter. And we really didn't see any sort of abnormally from a linearity perspective. That said, from a shipping and therefore invoicing, we did see a pretty backend loaded quarter. As I mentioned in my prepared remarks, we had some supplier de-commitments and we had to kind of recover and react to that. So we did ship later in the quarter than we normally do that had an impact on DSO."*

As long as the backlog is growing, order rates are still increasing – this does not look like channel stuffing to us.

Inventories are jumping too – In JNPR's case, this also looks like a false flag.

DSIs	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
COGS	$575.5	$518.8	$549.5	$496.6	$490.4	$458.8	$505.6	$480.4
Inventory	$394.9	$317.0	$272.6	$223.2	$211.5	$259.2	$210.2	$175.8
DSO	61.8	55.0	44.6	40.5	38.8	50.8	37.4	32.9

Rising inventories (especially a 23-day jump y/y) is again a classic red flag that a company is having a tough time selling merchandise. That does not appear to be the case at all for JNPR.

What is happening here is the company has been forced to find alternative third-party suppliers for key parts, which means they are paying higher prices for the inventory. Also, when parts are located, JNPR is paying higher prices for shipping and expedited delivery. There is also general inflation going through too. Also, they are adding inventory where possible to start meeting some of the growing backlog.

Inventory DSIs are compared to Cost of Goods Sold, and that account moves with sales. When sales are lower than they should be due to unfulfilled orders, Cost of Goods is also lower. But, Inventory is reflecting future period demand that includes the backlog. When the backlog simply stops growing and/or starts to decline, Cost of Goods should rise produce a DSI figure that more closely matches past results.

The Jump in Prepaid Expenses – This also does not look like a red flag.

Days PrePd	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
COGS	$575.5	$518.8	$549.5	$496.6	$490.4	$458.8	$505.6	$480.4
PrePd Exp	$612.6	$480.3	$451.6	$410.3	$344.1	$311.1	$322.9	$277.3
Days PrePd	95.8	83.3	74.0	74.4	63.2	61.0	57.5	52.0

Prepaid expenses is an accrual account that includes a number of minor items such as deposits or annual purchases that hurt one period when they rise, but then the accrual is worked down with less expense flowing through the income statement. A sudden jump in prepaid expenses deserves close attention as it can be an indication that the company delayed the recognition of expenses that have already been paid in cash.

In the 2Q22, JNPR paid $165 million to its suppliers as additional deposits for contract manufacturing. This item jumped from $224 million at the start of the year to $359 million.

Despite the unusual increase, we don’t believe is a problem as this is not an unusual event for JNPR. The company occasionally makes such advance payments and it is noted in its SEC documents like this in the 2Q22 10-Q:

“In order to reduce manufacturing lead times and in the interest of having access to adequate component supply, the Company enters into agreements with contract manufacturers and certain suppliers to procure inventory based on the Company's requirements. A significant portion of the Company's purchase commitments arising from these agreements consists of firm and non-cancelable commitments.”

What Looks Weak – Real Red Flags to Watch

Gross Margin is declining and this could continue going forward

	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
Sales	$1,270	$1,168	$1,300	$1,189	$1,172	$1,074	$1,223	$1,138
Gross Profit	$694.1	$649.4	$750.4	$692.2	$681.9	$615.6	$717.0	$657.8
Gross Margin	54.7%	55.6%	57.7%	58.2%	58.2%	57.3%	58.6%	57.8%

According to the company, much of the gross margin decline is tied to paying more for inventory parts. So, this is the higher inventory DSI flag above playing through the income statement. It continues to source parts in more expensive methods too. In fact, the company does not expect to begin working down much backlog until late this year or into 2023. That indicates that they believe shortages of key parts will persist.

Let’s not go overboard here. Gross profit in dollar terms is still increasing which helps drive earnings higher overall. However, JNPR seems likely to continue paying higher than normal prices for inventory, which will keep pressure on the gross margin. While JNPR has been increasing prices as well to offset some of this – that will not help backlogged orders which are established at prices from one to four quarters in arrears. So it appears that $2.4 billion in future sales should flow through at lower margin.

On top of that, JNPR uses FIFO accounting. It normally turns inventory about 10x a year and now that has slowed to 6x. What is likely to unlock the backlog problem is the supply chain issues being corrected and inventory flowing at lower prices. But when that happens, we expect JNPR will need to lower its prices too as it then expenses inventory that cost more to acquire first. So the pressure on gross margins could last even longer than some anticipate and persist after the supply chain issues are correct.

Why Aren't Overhead Costs Rising as a Percentage of Sales?

The basic issue here is sales are hampered by a lack of inventory. The company is reporting $1.2-$1.3 billion in sales, but its customers are actually ordering $1.6 billion every quarter. JNPR has to run its sales department, its R&D department, and its overhead as if it was doing $1.6 billion in sales. On top of that, it is noting that employee pay is rising with inflation as well. This is easy math. If doing $1.6 billion in sales requires $400 million in overhead or 25% of sales, isn't overhead still $400 million when sales cannot be completely fulfilled, and on $1.2 billion in sales isn't it closer to 33%?

The below table shows operating expenses as a percentage of sales. For non-GAAP earnings, JNPR ignores stock compensation so we stripped that out. How can these cost figures (particularly R&D) not be going up as a percentage of sales?

	2Q22	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20
Sales	$1,269.6	$1,168.2	$1,299.9	$1,188.8	$1,172.3	$1,074.4	$1,222.6	$1,138.2
Cash R&D	$225.0	$232.0	$229.9	$228.1	$225.7	$230.5	$220.8	$219.5
R&D %	17.7%	19.9%	17.7%	19.2%	19.3%	21.5%	18.1%	19.3%
Cash S&M	$261.9	$260.8	$260.7	$247.0	$242.9	$236.2	$231.3	$212.8
Comm Exp	$42.1	$47.1	$60.0	$46.9	$42.5	$40.4	$53.2	$35.1
S&M%	20.6%	22.3%	20.1%	20.8%	20.7%	22.0%	18.9%	18.7%
Comm %	3.3%	4.0%	4.6%	3.9%	3.6%	3.8%	4.4%	3.1%
Cash G&A	$56.6	$50.0	$52.8	$46.4	$60.4	$50.1	$68.5	$51.8
G&A %	4.5%	4.3%	4.1%	3.9%	5.2%	4.7%	5.6%	4.6%

There is some seasonality to sales with 4Q being the highest and we'd expect some margin leverage from that. But look at some of these costs:

- R&D before the supply chain issues was 19%-20% of sales but they just posted a 17.7% figure for 2Q. 100bp is worth about 3 cents in quarterly EPS. This is supposed to be future investment in the business and it's been flat in dollar terms for three quarters.

- Selling and Marketing costs include the amortization of deferred commission costs. Sales just rose sequentially by $100 million. Employees are getting higher pay – yet cash selling costs were basically flat sequentially and the recognition of deferred commissions should tie closely to sales recognition – and it fell last quarter. Just that $5 million drop in recognized commission expense added 1 cent to EPS.

- General and Administrative may have benefited from some of the restructuring JNPR has done in the last year and could explain the y/y drops. But, with salary inflation, how long can this cost decline as a percentage of sales?

We fully expect some margin leverage here when the backlog levels off or declines because that should indicate sales are rising faster than costs and some of the costs for those incremental sales could have been incurred in prior quarters. But when we see margin gains in these types of costs when the company is NOT fulfilling 20% of orders received in a quarter, that makes us question if they are investing enough in the business.

On the Investing in the Business Question – We also see Depreciation is declining.

JNPR only reports its stand-alone depreciation expense in the 10-K, but this has been falling steadily and adding about 4 cents to EPS per year or 1 cent per quarter:

	2021	2020	2019
Depreciation	$151.0	$166.2	$184.0
Net PPE	$703.0	$762.3	$830.9
Cap. Exp.	$100.0	$100.0	$109.6

We can estimate the last two quarters by pulling the amortization of acquired intangibles that JNPR is adding back to non-GAAP earnings from Depreciation and Amortization on the cash flow statement:

	2Q22	2Q21	1Q22	1Q21
Depreciation	$35.78	$40.4	$36.6	$41.3
Cap. Exp.	$24.5	$21.4	$25.0	$19.7

Net PP&E continues to decline and capital spending continues to trail depreciation. The company is still picking up 1 cent in EPS in this area. At some point, capital spending may need to rise considerably.

How Does All This Fit Together?

On Earnings:

- In 2Q22, JNPR's non-GAAP EPS of $0.42 missed forecasts by 3 cents

- Backlog grew by another $250-$300 million. However, sales were still essentially in line with forecasts. The backloaded quarter from rising receivables helped JNPR hit top-line forecasts. One day of sales coming or not is worth close to 2 cents assuming the overhead costs stay the same. So 2Q could have missed by more very easily.

    - For the rest of 2022, this risk may still be in place. Shortages of parts could easily cost JNPR some EPS in either 3Q or 4Q.

    - At some point, this gets fixed. Then JNPR could have quarters where sales are elevated by bringing backlog down. It doesn't even have to grow new orders. JNPR could have new orders come down $40 million and backlog fall by $100 million and it's still a net positive $60 million to sales – or roughly 7-8 cents in EPS.

- Inventory pressures and higher costs are hurting gross margin. Product margins were down 520bp. JNPR highlighted $27.1 million in higher product costs and freight. That cost JNPR about 6.5 cents in EPS for just 2Q. They have very tough margin comps for 3Q and 4Q still – so this headwind should last in 2022. Price increases by JNPR may give some relief, when backlog starts to decline it will come through at lower selling prices. This looks like a headwind that lasts well into 2023. However, by then the comps should be easier and this pressure could ebb.

- We pointed out above that we believe lower depreciation and lower capital spending is adding about 1 cent to EPS per quarter. That looked to be the case for 2Q22 as well. That does not look like an area that can go on forever, and that could become a headwind.

- Then there's R&D and Selling costs. This is probably our biggest concern because these should be rising as a percentage of sales when sales are clearly light by backlog building. These are falling or flat in dollar terms despite the light sales. An incremental $10-$11 million in spending per quarter here would have cost JNPR about 2.5 cents.

- This all indicates that JNPR missed earnings in 2Q despite benefitting by at least 3 cents from unsustainable sources.

- The positive part of this process is that as the backlog starts to be filled, the higher sales growth should allow JNPR to boost overhead investments and should also offset some of the gross margin pressure.

- One final thing to watch, JNPR has considerable liquidity invested in bonds including corporates and asset-backed securities. The maturity for well over half of this portfolio is under 1 year. Higher rates could provide minor mark-to-market impacts in 3Q.

On Cash Flow:

- JNPR pays a nice dividend that at current prices is 3.2% and costs $270 million per year. It also has a history of spending $400-$500 million per year repurchasing stock to help drive EPS growth slightly. Normally free cash flow is about $500 million per year. The dividend seems quite safe, but we could see the buyback being scaled back in the short run.

- The first problem is while we see many of the working capital issues as benign overall, they are consuming much of the cash flow right now. From the first half of 2021's nearly $400 million of free cash flow, the first half of 2022 was -$123 million. That is all due to rising receivables, inventories, and prepaid expenses. JNPR is not broke and the deposit it put down on more contract manufacturing is unlikely to recur. However, inventory costs still seem likely to rise through this year and price hikes could mean receivables rise as well. The pressure will be there to hurt free cash flow this year and perhaps into 2023.

- We also believe JNPR needs to spend more on capital spending. Plus it seems likely to face pressure to spend more on R&D and Sales & Marketing. All of that would be positive in our view, but if sales are still pressured by growing backlog – more R&D and S&M will pressure earnings and cash flow.

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Explanation of EQ Rating Scale

6- (Exceptionally Strong)- Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises

5 (Strong)- Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.

4 (Acceptable)- Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement

3 (Minor Concern)- Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.

2 (Weak) Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.

1 (Strong Concern)- Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely

In addition to the numerical rating, the EQ Review Rating also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into upcoming quarters. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

Key Points to Understand About the EQ Score

The EQ Review Rating is much more than a blind, quantitative scoring method. While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

The EQ Review Rating is not comparable to a traditional buy/sell rating. The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

Disclosure

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