# Comparing PMI and IIP

## What are they?

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- The PMI for December 2017 is a highly encouraging 54.7, which along with a 6.8% growth in the “core sector” also indicates a big positive for IIP.
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- While PMI and IIP have both been used for gauging the health of the economy, it is prudent to understand what they actually stand for.
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## What is “Purchasing Managers Index” (PMI)?

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- PMI is calculated on the basis of information received on a monthly basis from companies on various factors that represent demand conditions.
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- A standard questionnaire is administered to 500 private companies (PSUs are excluded) and the comprehensive score is arrived at.
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- 5 parameters in PMI are - new orders (30% weightage), output (25%), employment (20%), supplier’s delivery (15%) and stock of purchases (10%).
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- The respondants can either give a “Positive, Neutral or Negative” response and each resposponse is marked as “1, 0.5 or 0” on the score card respectively.
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- Hence, if there is unanimous positivity across all parameters, then the PMI score would be 100 (percentage) and an unanimous negative would mean 0.
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- While an absolute score of 50 would mean neutrality, anything above it is perceieved as an improvement and less than it would mean detoritation.
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- Intuitively, it can be seen that the purpose of the PMI is to indicate some degree of confidence level in manufacturing based company perspectives.
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- Notably, as PMI is a market sentiment tracker that compares the current month with the previous, it is season sensitive.
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## What is “Index of Industrial Production” IIP?

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- IIP measures actual production output across the industrial sector.
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- Significantly, IIP for December 2017 would be reckoned with the same month in 2016, unlike PMI, which is monthly comparision.
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- As it is a comparison over the previous year, it is season neutral.
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- Therefore, as the basis of IIP and PMI are different, a comparison between the two is really not appropriate.
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- However, as the PMI is released on the 1st of every month and the IIP is known on the 12th, the PMI score is assumed to be a precursor to the IIP.
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- But the correlation between PMI and IIP isn’t strong and the relationship between the two variables is quite low and insignificant.
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## What is the reason for the lack of correlation?

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- A sample of 500 companies for PMI is too small to be representative of what is happening at the aggregate level.
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- Also, as these companies tend to be the bigger ones, SMEs are under-represented in PMI, whereas IIP is more comprehensive.
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- The responses in PMI are of an ‘either or’ variety and is not graded to any number, which inherently marks 2% positivity and 20% positivity as same.
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- Also, PMI has only one component, namely “output” (with a weight of 25%) which can be directly related with IIP.
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- Also, even with the PMI new orders increasing, it would not necessarily

mean that output would increase in a subsequent period.
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- Exclusion of the PSUs is another significant aspect as there is a very high contribution by this segment, especially in capital goods and infra areas.
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## What is preferable?

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- Hence, it may be said that the PMI is not a leading indicator of the state of industry which is better represented by IIP growth.
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- While the IIP growth calculation has its challenges, it is to be noted that the number is used for GDP calculations to account for the unorganised sector.
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- But nonetheless, there is room for both concepts in the set of economic indicators that have to be tracked continuously.
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**Source: Business Line**

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