

FREQUENTLY ASKED QUESTIONS

ECONOMIC ENVIROMENT INDEX

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We at the Centre for Development Finance arrived at the Economic Environment Index (EEI) after a thorough survey of literature, and consultations with experts at every stage of our study, from conceptualization to implementation. Hence it follows that the choice of indicators for this study is in accordance with the common consensus of these experts.

The EEI is a pilot project that is envisaged to be scaled at a pan-India level. Therefore, the choice of parameters in constructing the index for Tamil Nadu, also takes into account the fact that it should be easily replicated for district level studies in other states of India. Hence some of the parameters undertaken in our study which might seem irrelevant to a state specific study like that of Tamil Nadu's¹ are more so because we wanted to include all relevant socio-economic variables that are a useful indicator of the overall economic environment in a district, on a more generic level than on a state specific level. However, this cannot be viewed as a drawback of our study because the methodology adopted by us takes care of the concerns mentioned above. This will be made clearer by subsequent sections of the FAQs.

We believe that the FAQs will answer queries at a more generic level. The detailed report as well as the website, <http://economicgovernance.com/>² will be able to answer more specific questions pertaining to the methodology as well as other important aspects of this project.

¹ Tamil Nadu is one of the most prosperous states in India in terms of most of the socio-economic parameters taken into account in this study. However, it should be noted that the study highlights inter-district and not inter-state variations.

² The website will enable users to actually change weights to various indicators as per their perception of the level of importance of each sub index, and see how the ranks change accordingly.

FAQs

Choice of Variables, Methodology, Approach, and other aspects

Q1) What is the overall focus of the study?

The study aims to strengthen the local economic environment by providing an understanding of local needs, aspirations and gaps that act as constraints for the economic environment at the district level. EEI helps to identify and facilitate an understanding of such constraints to private sector development and economic growth, and thus assists both private and public sectors in their efforts to improve the business environment at the district level. The focus is not just on the large businesses or FDI, rather, on the constraints faced by small business and households in their pursuit of economic interests.

Q2) Contrary to common practice across the globe, why does EEI combine households' and business firms' data to arrive at the index? How relevant would such an approach be and how does it add value to the index?

In the Indian context, and particularly in TN, home to the largest number of enterprises, the ability of households to excel themselves economically depends largely on local governance and economic environment. In turn, this impacts the firms (particularly small firms which depend upon local purchasing power). On the other hand there is also always a social concern in case we exclude households – for instance, a district's economic growth alone, without considering the impact on, say, child-labor, is not desirable; we also try to get the various constraints faced by the households, which could be addressed through governance. Second, there is very little distinction between households and firms in many of the small towns and villages in TN. Strictly a focus on firms would have missed the voice of the household operated businesses.

Q3) On what basis have the weights been assigned to each of the sub-indices? How is it that certain sub-indices which generally show huge variations across the districts have been assigned low weight in the final rankings?

The weights haven't been assigned randomly on the basis of our perceptions or popular perceptions. The sub-indices as well as individual variables were assigned weights according to a technique called the Principal Component Analysis (PCA). PCA is one of the widely used and suggested techniques for construction of indices.³ It is a technique which assigns weights in accordance to the variation observed in the dataset.

For instance, even though a huge variation is seen across districts in terms of environmental sustainability, it has been assigned only 12 per cent weight in EEI. While, it might be true that this sub index asks for more weight according to popular beliefs, PCA assigns weight to this sub index in accordance with the variables that have been included in the construction of the sub-index 'Environmental Sustainability'. And incidentally these variables do not showcase much variation across districts because of which a lower weight has been assigned to the sub-index itself. There might be other variables/parameters which would display greater variations but such data is not available at a district level.

This also brings us back to the discussion regarding irrelevance of certain variables in context for Tamil Nadu. Let us consider the example of Pupil-Teacher Ratio. TN is on a different footing as all the districts of TN are at par with national norms with respect to this variable. However, while one is correct in saying that districts in TN are well within norms, we should also keep in mind that this is an intra-district study and not a comparison

³ Nardo M., Saisana M. et al. (2005) 'Handbook on Constructing Composite Indicators: Methodology and User Guide; OECD Statistics Working Paper

across states. So if a significant amount of variation is seen across districts as per this variable, then PCA will automatically assign higher weight to it and if performance is uniform, then PCA assigns lower weight to it. Also, while this variable might not be a significant one in context of TN, it is extremely important indicator of social infrastructure across other states of India. Since this is a pilot study to be scaled up at pan-India level, the inclusion of this variable is justified. Moreover, it is always useful to compare with international norms, once the national norms are achieved particularly in development parameters.

Another example would be the inclusion of Percentage of Villages Connected through Power Network in the sub-index Physical Infrastructure. Popular belief says that in the 60s, all villages in Tamil Nadu were electrified, so comparisons would be baseless. However, EEI team's argument would be - if indeed all districts are electrified and render uniform performance, then PCA will assign a 0 weight to it in the construction of the index which means that it assigns a 0 importance to it.

Q4) What was the basis for selection of indicators for the study since it seems that certain important variables have been left out of the purview of the Economic Environment Index?

As iterated by us at every stage, the selection of the indicators is on the basis of a thorough survey of literature as well as the opinions of experts⁴ pertaining to this field.

While EEI team is fully aware of the variables that have been dropped or left out of the purview of EEI, it had no choice but to do so due to non availability of such data at the district level. For instance, our study includes duration and quality of tap water supply as two of the many variables for the sub-index Physical Infrastructure. Now one might say that per capita water supply is a better indicator. Similarly, one might wonder as to why a lot more variables reflecting quality, quantity of water/air etc wasn't included in

⁴ To arrive at the index, we consulted with CII, CMIE, BHC, Planning Commission, academicians, researchers within CDF and IFMR, independent researchers, etc.

the construction of the sub-index, Environmental Sustainability⁵. Also, data on sewage/solid waste disposal should have been included. However, the discussion stops there because such data at district level is unavailable! Nevertheless, the importance of environment is realized and that is why this sub index wasn't dropped altogether and an attempt was made to include it even if data availability was scarce. Our study in this way also highlights the unavailability yet a demand or importance of such data. Since this is a pilot study, we are welcome to inclusion of various other variables (provided data is available) in subsequent studies.

Q5) Some of rankings are not in sync with popular perception about particular districts. For example, a very low ranking for districts such as Virudhunagar and Thiruvallur on economic environment index. Can you elaborate on this anomaly? How can Virudhunagar and Thiruvallur be ranked so low on economic governance?

The ranks are not in accordance with popular perceptions because of two reasons –

1) The index is based on a diverse set of indicators and also mixes household and business firms data, both of which might have never been done by past studies.

2) The ranks have been assigned through a technique called PCA, a technique which explains such rankings.

We are not strictly talking of economic strengths – GDP or number of businesses, which are all very useful outcome indicators. We are interested in governance, and issues that could be solved for the local populace through better governance.

Thiruvallur is mostly an extension of the Chennai city itself, and like Kancheepuram, hosts lot of industries and educational institutions. But there ends the comparison, and the difference between the two is like North Chennai and South Chennai. In fact, one just has to go to Ambattur to see

⁵ CDF had launched Environmental Sustainability Index (ESI) 2008, ranking the states of India on various environment parameters. <http://greenindiastandards.com/>. While state level data might be available, it is very difficult to find any district level data on the same variables as used in the state studies.

thousands of small industries put up with the worst types of roads, water logging during rains and trench, around some large ones like TI Cycles and Brakes India, supplying them with components and making these the "world class manufacturers". Contrast that to the OMR, the Bangalore highway and the Chengalpet Highway that support the huge services and manufacturing in the Kancheepuram district, not to mention the SIPCOT and Mahindra City.

Virudhunagar, for all its entrepreneur strengths, should have been another Namakkal, which incidentally ranks 2nd in our EGI. Unlike Namakkal, Virudhunagar has had a long history of industries - trading, textiles, fireworks, chemicals and now printing and packaging. However, unfortunately, the local infrastructure has not kept pace with the growth in industry. Just imagine - two weeks back, there was a bandh called in Virudhunagar, protesting the extremely poor infrastructure in the town. Two unique features of the bandh - one, it was fully successful (unlike bandhs in recent times); virtually the entire town's economic activities came to a halt, voluntarily, as the huge trading sector (which is largely a family/household business here) had also shut shop; the second unique feature - the organisation which called for the bandh. It was not a political party; nor was it a caste based organisation; believe it or not, it was called for by the Virudhunagar Chamber of Commerce and Virudhunagar Consumer Forum⁶. Imagine an industry body calling for a bandh and people - from loadmen, transporters, shopkeepers and traders participating.

Hence our methodology captures both access and quality of services and since the data includes field surveys, it reflects ground reality and not popular perceptions.

Q6) How does one interpret the ranks assigned by the index?

The ranks are based on scores assigned by PCA. A higher rank does not indicate that one district is way ahead of the other. This is relevant both in terms of sub index ranking as well overall ranks. The scores on a particular

⁶ Please see news here <http://forvnr.wordpress.com/virudhunagar-bandh-unnaviratham/>

parameter, in many instances, are in fact very close to each other indicating that there might not be much difference in their performances. Hence, these scores are relative in nature and nothing beyond what is necessary should be deduced from them.

Also, the index, the ranks and the weights assigned by PCA to sub indices as well as individual parameters, are only restricted or relevant to the variables included by us in the study. So when we claim that a certain district ranks 10 or 1 on overall economic governance, our claims hold true only up to the scope of this study. Since this is a pilot study, there is always room for narrowing down or widening the scope in subsequent studies.