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**Transparency and Accountability Network**

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# **Community Accountancy**

**PUTTING ACCOUNTANCY TO  
WORK FOR ALL OF SOCIETY**

# **SPATIAL COMPARISONS**

**FOR DISCUSSION ONLY**

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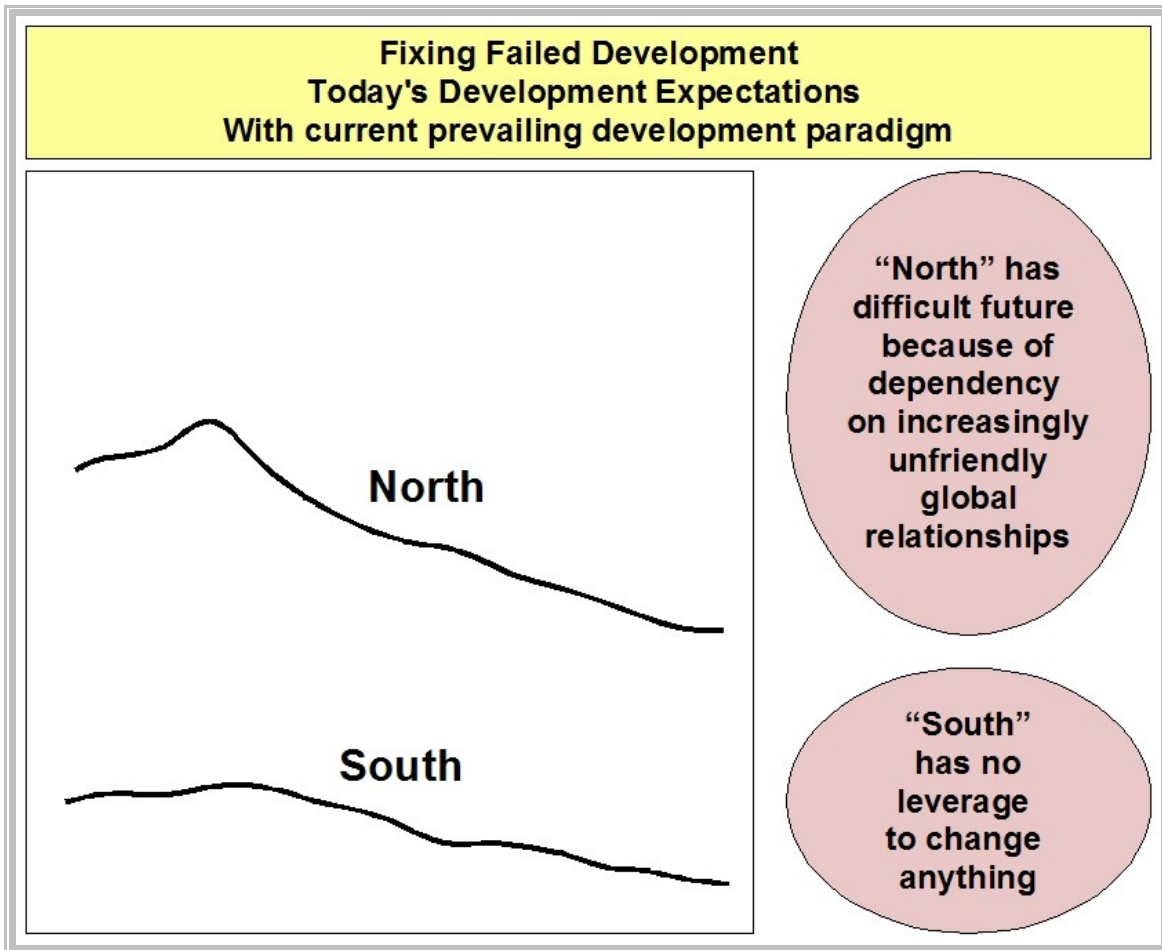
# SPATIAL COMPARISONS

## WHY SPATIAL COMPARISON?

### There are very big difference between places

There are very big difference between places ... and spatial comparisons helps to sort out the various causalities. The big difference between the socio-economic status of the industrial north with the under-developed south is just a very aggregate example of this.

Some of the lessons that can be learned are uncomfortable. What lesson should be learned from the fact that there is science and technology that has put man on the moon, but our society cannot organize itself so that there is enough food for people on the planet. Some places seem to have abundance ... and some places have critical shortages.



## Basic spatial metrics

The basic spatial metrics are nothing more than advanced common sense. The data are little more than what a middle school student might learn in a geography lesson. But nevertheless, the data are important. Some of the elements that have to be associated with the place include the following:

- Where is it,
- How big is it,
- What is the population,
- What are the physical geography characteristics,
- What is the weather,
- What are the natural resources,
- What are the characteristics of the land,
- What organizations are present,
- etc.

## Spatial metrics in Community Accountancy

The whole foundation of Community Accountancy is linked to the idea that a place ... the Community ... is the entity around which there should be reporting. The reporting should go beyond money reporting to something that embraces non money elements and the consumption of value and the creation of value in addition to the money costs and money incomes.

All of the elements that were referred to above are an integral part of Community Accountancy.

## Importance of multiple datapoints

The importance of multiple datapoints applies in spatial analysis just as it does in other techniques of analysis. It may not be easy to know exactly about something ... or the complete story about anything ... but most often, it is relatively easy to tell something by reference to what it is in another place.

### One datapoint ... and two datapoints

If you have one datapoint it is a whole lot better than having no datapoints. If you know a person is 4 feet tall ... that is a lot more information than not having any height measure at all.

If another person is 5 feet tall ... there are now more datapoints ... and more questions ... and the beginning of some answers.

Perhaps ... is one person taller than the other because of age difference? Or is it some other factor?

If someone weighs 70 kg that is a potentially useful datapoint ... if they weighed 50 kg a year before, then the two datapoints are very useful. One datapoint tells only the status at one point in time or place ... two datapoints enable one to know what is different between two datapoints.

If the datapoint shows a bad situation at one point in time ... a better datapoint later is progress in the right direction.

There is a substantial amount of mathematics and statistics around data analysis ... but there is a lot that can be learned by simple plots of comparative data. Simple plots answer some big questions very easily ... but the data are needed.

Accountancy argues for more data that are simple and easy to understand ... and Community Accountancy argues for having more and more of the data with a community focus. If you cannot understand what the simple data shows ... walk around the community and see what is missing.

## Spatial materiality

Materiality is a key to successful use of data ... but what is important in one place may not have the same importance in another place. It depends. While there may be an academic causality that can be identified using sophisticated analysis, most of the big questions can be answered using very simple data and very simple analysis.

### **Starvation**

There is no food ... the crops have failed ... people are dying. Very simple data are needed to figure out that there is a problem with starvation. More important very simple data would have shown what are the causes of starvation in a specific place, and what might be done about it

There is a substantial amount of mathematics and statistics being used to analyze data ... and the mathematics are academically rigorous ... but it does not seem to have had much impact. There is a systemic problem of methodology and materiality. Most of what is being done in terms of data and analysis has little practical value and has made little difference in the past ... and needs to change in order to do anything of use in the future.

While it may not be possible to have absolute numbers about many important things ... time series analysis helps to show whether progress is being made or not, and something about how fast it is happening.

### **Getting results**

I have always taken the position that fixing a big problem was a lot easier than improving a near perfect operation. If this is a valid reality, then it should be possible to make a big impact on the global relief and development industry.

## **Prices in different places**

Price time series have historic value in putting current prices in perspective ... but prices are also a key indicator of what might be going to happen in the immediate future, or over a longer time span.

A big part of the theory of economics concerns itself with prices and behavior in the market. It is very interesting, however, to try to understand what is happening to prices based on real world facts about costs, demands and structure.

Time series of prices are very powerful. Every major market has time series about prices, whether the market is for financial instruments, commodities or engineered items.

Price information is also used in small markets ... and is just as powerful. More of the small market data re needed to be collected and put into easily accessible form. The outcome will be interesting.

### **Shrimp prices in different markets**

I became the CFO of Continental Seafoods Inc. in June 1974. In the previous twelve months crude oil prices had increased from \$3.00 to \$13.50 and costs and prices for everything was in turmoil.

## **Costs in different places**

Cost time series are very interesting ... but much less accessible than price time series.

Cost is a result of productivity ... which in turn is a result of science, technology, organization, training and investment.

## **Cost estimating for the World Bank**

For several years I did financial analysis

Modern economic society has been blessed with amazing progress in science and technology that has translated into low costs for valuable things. But also high profit and low value for society as a whole.

Time series of costs may be very different from a time series of prices. Costs reflects productivity and it is costs that have the most impact on the socio-economic status of the planet.

Cost has multiple components, and one of the most useful data points for cost is the one that eliminates all the profit elements from the cost value chain. The socio-economic success of the last two centuries has been reduction in cost.

## **Productivity in different places**

### **Economic Value Adding**

Economic Value Adding (EVA) became a powerful tool to manage wealth perception. but it is only used in the process of personal wealth creation and ignores the impact that personal wealth creation activities are having on society as a whole.

Community Accountancy uses a similar accounting methodology to EVA but including all the impacts that economic activities of all sorts are having on the society.

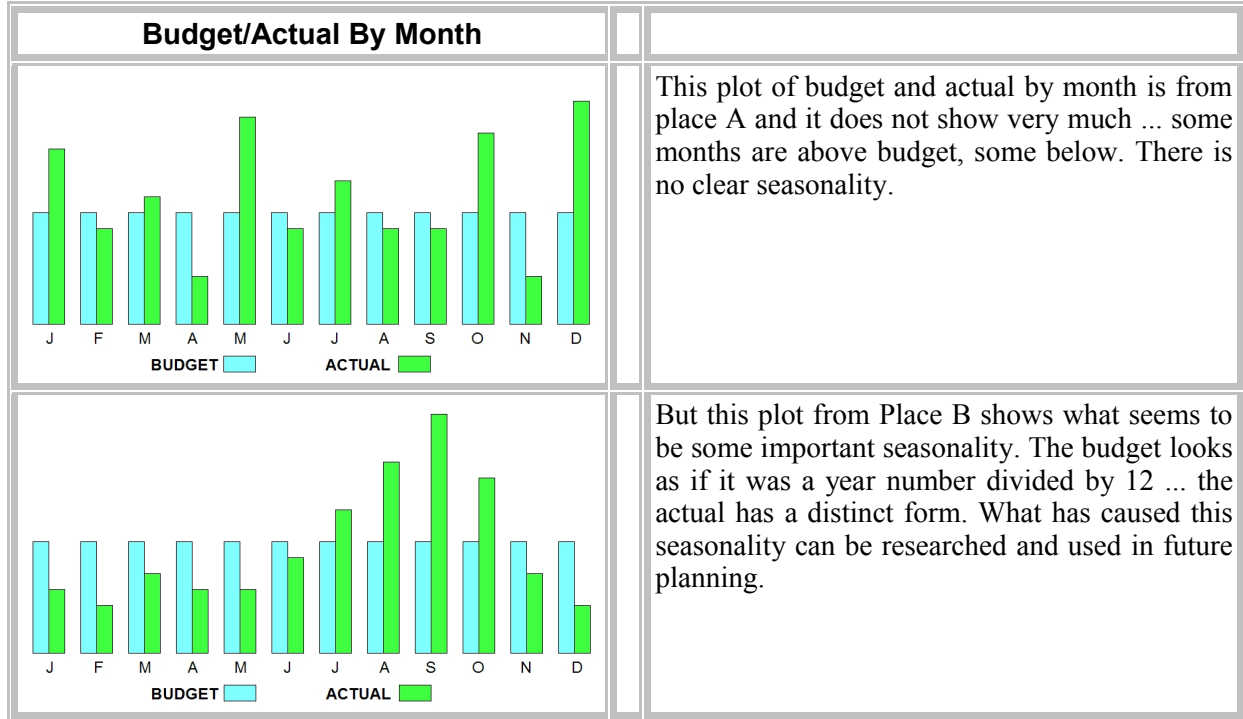
Economic Value Adding is used in the standard GAAP accounting world to optimize stockholder value. Impact on society is not taken into consideration.

Economic Value Adding in the Community Accountancy framework is concerned with the impact on society and answers the question whether or not economic activities are contributing to the quality of life of the community at large.

## **Enabling environment in different places**

## Comparing data from different places

Budget and actual by month is a commonly used plot. Sometimes it does not tell very much, sometimes it does.

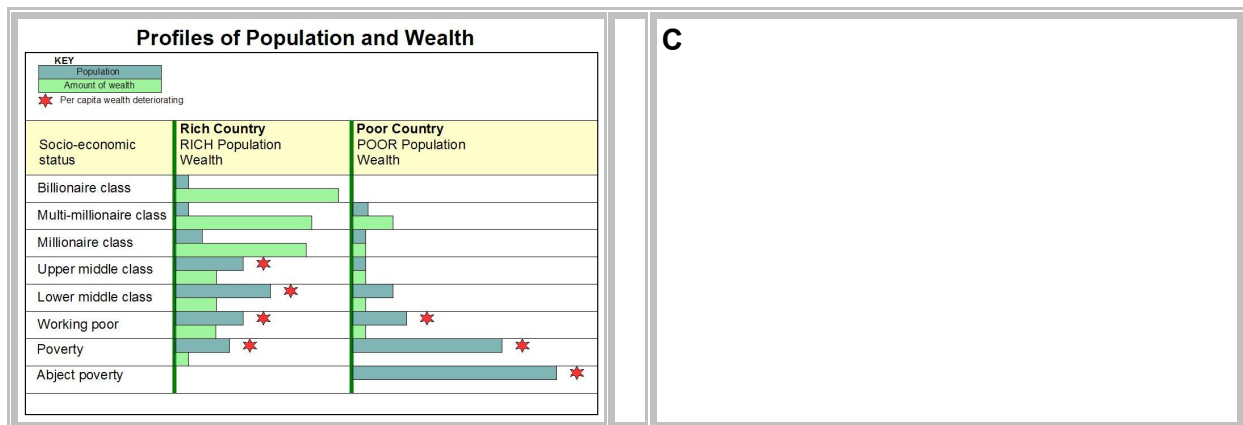


## Profile of the population

The profile of the population tells a whole lot about the community ...

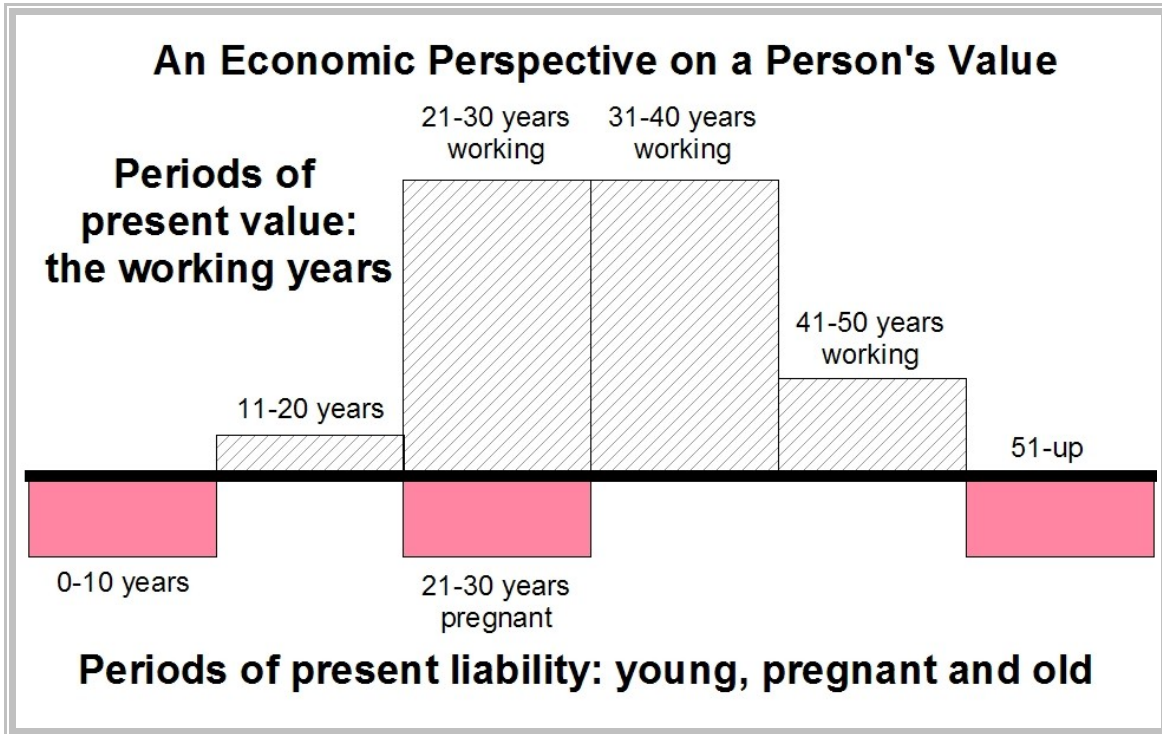
- There are the questions of how many:
- There are questions of health:
- There are questions of education
- There are questions of jobs, work
- There are questions of wealth
- There are questions of housing

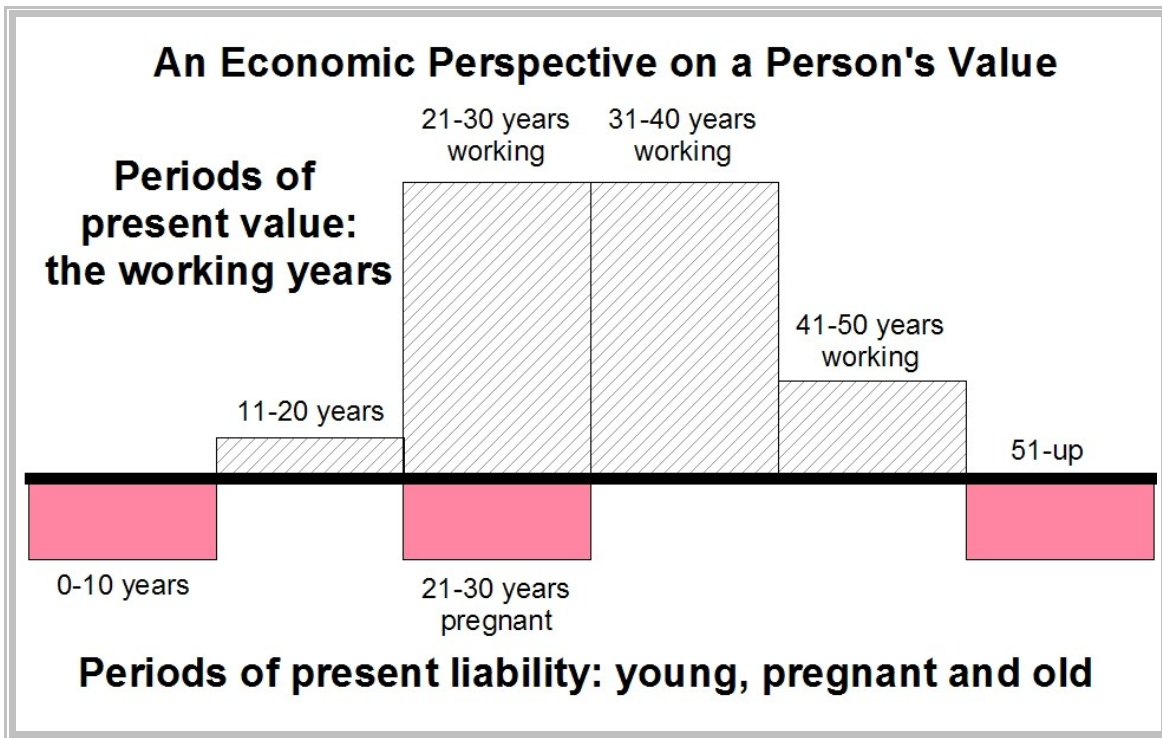
How to present this so that it is clear, simple but nor simplistic.



## The value of a human being

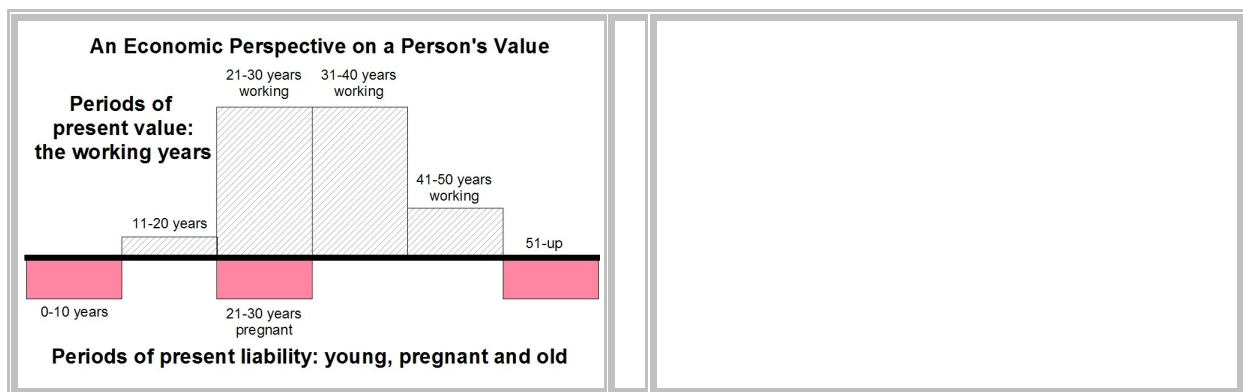
This is a stylized graphic that shows value from a developing country perspective. Young children represent an immediate liability as they must be fed ... as they get a bit older they have a net value positive because they can do essential chores like carrying water. The working adult has the most value, but offset when a women is pregnant and cannot work. Old people unable to work are again an economic liability.





It is helpful to understand the costs or investment associated with growing up, and the earning power and value of a working adult, and the increasing cost and liability associated with old age and sickness.

There are two graphics below which depict this ... the first shows lifetime value, and is nothing more than the cumulative cost of raising a child, and subsequently offset by cumulative earnings less annual lifestyle costs ... and then impacted by the cumulating costs of old age.

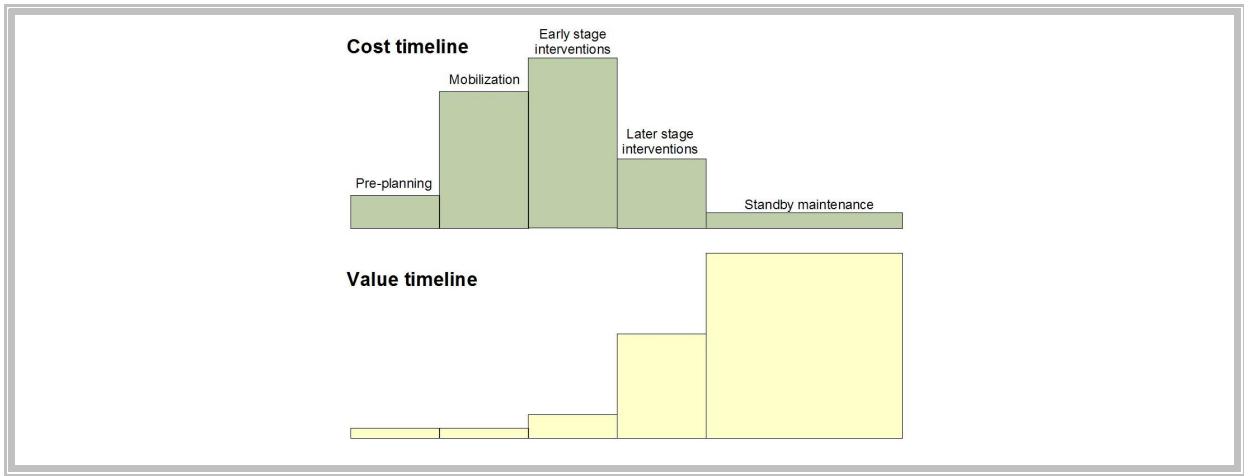


## Timeline of costs and values

The following graphic shows the very different timeline for incurring costs and realizing values. This is a critical problem in development and not central to much of the development planning process that is practiced.

As a practical matter most of the cost have been incurred before it can be shown that there are any benefits ... and this provides a dangerous opportunity for costs to be misused long before the lack of benefit raises questions about performance.





## Project performance impact by place

The following graphic shows the very different timeline for incurring costs and realizing values. This is a