

BAYESIAN GROWTH RATE PREDICTOR

Introduction:

Bayesian networks represent the dependencies among variables .They can represent any full joint probability distribution in a very concise way. A bayesian network s a directed acyclic graph in which each node corresponds to a random variable. Arrows connects parents to children and each node has a conditional probability distribution that quantifies the effect of the parent on the node. Bayesian networks are used heavily in financial sectors.

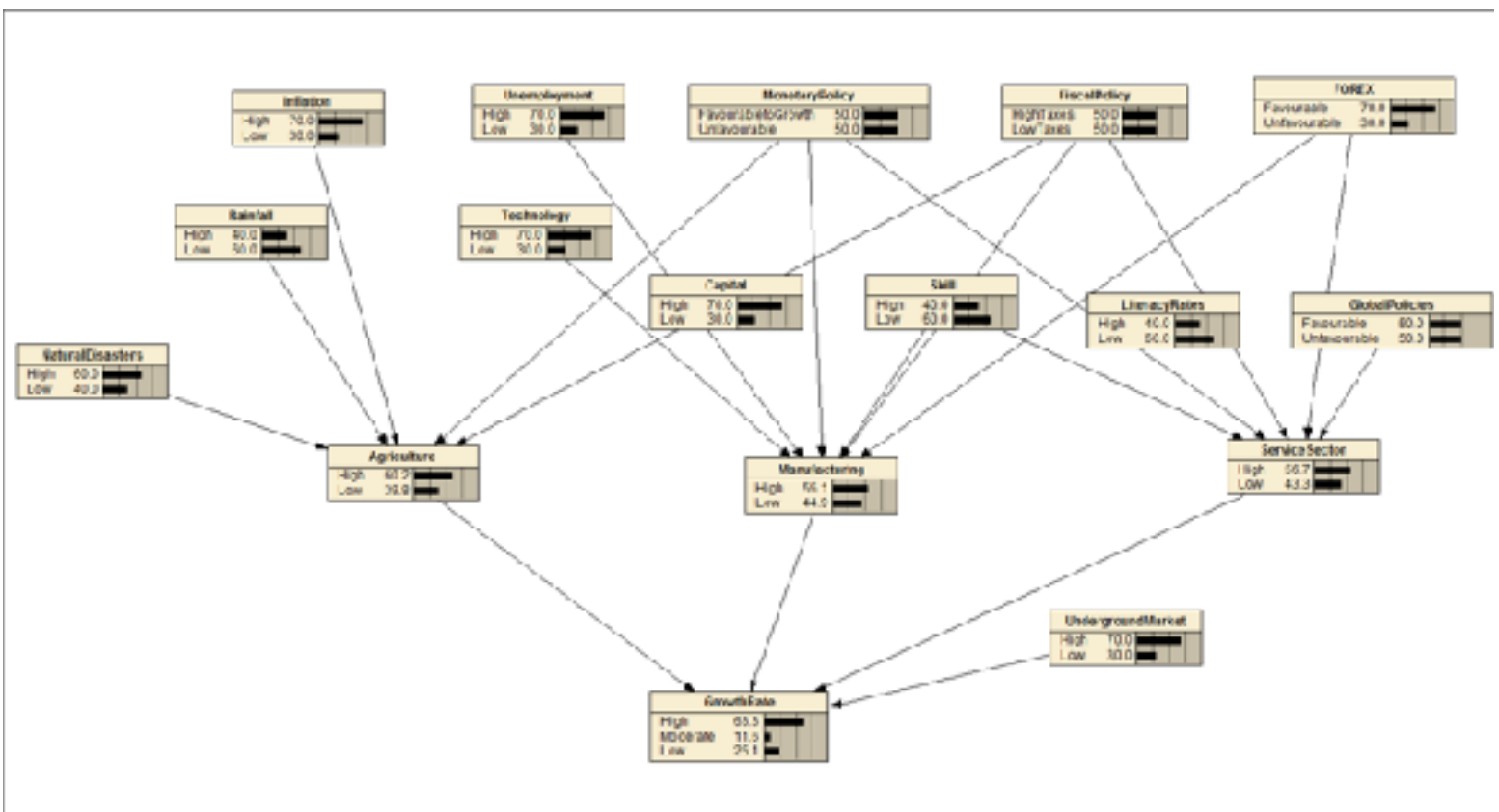
Bayesian growth rate predictor is a probabilistic inference system that predicts the whether growth rate would be high, moderate or low and gives the probability of them happening.

The growth rate of any economy is based on its major sectors- agriculture, manufacturing and services sector. These sectors growth rate in turn depends on various root node factors like monitory policy(Federal Bank policies), fiscal policy(governmental policy), inflation level, unemployment rates and external factors like FOREX investment flows.

Since the statistics for each country differs, I have used the statics of India for my project.

Screen shots:

1. The initial display



- When you make changes to the probabilities of some nodes, the changes are reflected in the growth rate

