

Economics and Random Walks

In this research we study World Economics using theory of Random Walks in two dimensional space in the limited black box.

Let us call by Money - the whole World amount of money and by Prosperity - the average prosperity of a person in the world. One can see that World Economics is a typical Random Walk in the limited black box where the first dimension is Money (abscissa) and the second dimension (ordinata) is Prosperity.

The black box is limited because World Economics is bounded by Earth and its resources.

Pic. 1 shows the typical two dimensional Random Walk in the black box.

Current World financial situation and relation between money-prosperity exhibits crisis, ie money and prosperity stay about the same already for decades.

Using theory of Random Walks the World Economics crisis can be described as a loop.

Pic. 1 shows such loop schematically.

There are many ways to erase the loop. One way is to start to move to the edges (walls) of the black box.

Overall there are four ways to move in two dimensional space (east-west-south-north).

This is shown by arrows marked 1-2-3-4 on Pic.1.

Since People of Earth would like always to have Prosperity growths, the only way to move in this situation is marked as number 4, ie moving to the Roof of the black box.

It means increasing Prosperity with constant amount of Money the current

World Economics currently has.

Other choices 1,2,3 lead to the disasters because they were already tried in the history of Human Race and we all still remember the consequences of those choices.

