economic instabilities

What is an instability?

Suppose that we have some system. There exists a situation of equilibrium. This means that all processes in the system are attuned so that the system can persist in its situation. As an example we consider a ball on a horizontal floor. The ball is at rest and remains at rest. Is a system stable when it is in equilibrium? This is easily seen when we bring the system a little bit out of equilibrium. Will it return to its equilibrium situation? Then it is stable. As an example we consider a ball in a valley between two hills. We kick the ball. It will return to the lowest point. So that situation is stable. An unstable situation is the ball on the top of a hill. Wen kicked, it rolls away and will not return to its initial position. This is an unstable equilibrium.

Economic instabilities.

An economy is a large system that is brought out of equilibrium day after day. Permanently all kinds of influences cause small changes. Most of them are small responses on small disturbances. No violent reactions will occur. When an economy is unstable however, any small disturbance may lead to large consequences. Then the whole system may walk away from its equilibrium. In an economy this is a crisis.

As an example of a crisis we consider the period after the stock market crash of 1929. The pessimism caused a decrease of consumption. That led to unemployment. People became more pessimistic and even needy. So the consumption decreased further and unemployment increased. The Great Depression was typically an instability. The economy could not return to its initial state. Ultimately an intervention by governments and central banks was necessary.

A second example of an unstable economy is a country with a long lasting shortage of export. It attracts foreign capital to pay for the import excess. After some time the country is bankrupt and foreign investors withdraw. This leads to a lower exchange rate of the currency. Foreign investors lose a part of their money. They will withdraw on a larger scale. And so on. The economy cannot return to its initial equilibrium. Interventions by central banks or the IMF may manage this type of instability.

Now there is the instability of government bonds in the euro area. After the recession of 2008/09 the states have large debts. The confidence among international investors decreases. They withdraw from weak euro countries. There the interest rates for government bonds increase, which leads to lower values of existing bonds. Banks possess these bonds and will get a lower rating. This affects the confidence further and more foreign capital will withdraw. And so on. There is no free exchange rate anymore. The confidence in the whole eurosystem is at risk. It will be unevitable that the governments regulate the capital flows.

Fatal cycles and a general receipt.

Is there a general receipt to manage economic instability? The first importance is to understand the fatal mechanism. A cause C leads to some result R1. This causes a result R2 and so on. After, say, 5 steps we obtain R5 which is again C. We have a fatal cycle between a cause and the same cause, but now stronger. A self amplifying mechanism is the core of each instability.

C → R1 → R2 → R3 → R4 → R5 = **C** →
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Politics waits usually until a crisis is acute. It is not easy to stimulate the public or politicians when a possible instability is seen in the study. But the investigator may do two things.

First he may look for fatal cycles and design interventions into them. He should communicate them. When a crisis becomes acute, there is at least an idea on what to do. Be prepared before an instability occurs. Just know the instruments before an instability surprises you.

The second action is to monitor economic markets and to construct indicators, numbers that are a measure for the stability of an economy. Predicting indicators for markets that may become unstable are useful tools to see the risk of instability, and to manage it.

Future action.

What can we do against unknown economic instabilities in future? The worst policy is to wait in fear and see, hoping that problems will fade away. Just look for possible fatal cycles. Open a competition for young people and reward generously at every reported unstable cycle. Next a second competition should be begun to design intervention measures or detecting indicators. It should be a sporting event among young economists to find instabilities and to design measures. These things should not be left to tired old people. The result will be a manual with instabilities and countermeasures. Then politicians do not need to think deeply anymore. The general public may be confident that for all instabilities there exists a known policy.

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