

[Frank den Butter – The next recession](#)

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A major flaw in the policy debate on the current recession is to identify it with previous recessions. Characteristic for recessions is that they all have a different cause. For that reason, Haberler has already in 1937, in its book Prosperity and Depression, collected for the League of Nations a comprehensive list of the various causes and mechanisms responsible for the succession of good and bad economic times. The current recession, with the credit crisis as a prime cause, can thereby be allotted to the class of the purely monetary theories of the cycle. The variability of the cycle makes the economic tides hard to predict. As a result, it is also difficult to conduct an appropriate cyclical policy. When all cyclical fluctuations would be similar and lookalikes, economists should by now be successful in dampening these fluctuations as much as possible. Ideally, there would be no recessions anymore.



Uncertainty

Uncertainty is the major problem for the policy response to the next cyclical fluctuation. Economists have learnt to deal with certain types of uncertainty. This is the case when economic time series data show some regular and recurrent patterns so that they can be described by stochastic processes. Then the parameters of these processes can be estimated, given the assumptions on the probability distributions of the data. Even in case probability distributions are unknown, there are parameter free methods to be used. And in most cases of risk, the odds are known. However, there are many other and more fundamental types of uncertainty (Van Asselt, 2000). The most far-reaching, and for the analysis of future events most troublesome type is what Wynne (1992) labels 'ignorance'. It is when we do not know what we do not know. In the Netherlands the Scientific Council for Government Policy (WRR) advises the government on

long term policy issues, based on scientific information. When I was a member of that council we discussed possible future developments which would impose problems to the government and on which we were 'ignorant'. Among others, space trash and nanorobots were mentioned. On second thought, however, it seemed that there was too little information and that it was too uncertain to dedicate a scientifically based study to these subjects. Moreover there is no complete ignorance about space trash and nanorobots.

Solar storm

We are also not completely ignorant about the next recession. The periodicity of the cyclical movements in the past makes us presume that after the current recession and following upswing, eventually a new recession will come. However, it is uncertain when that will happen and what the cause and nature of it will be. Here we know what we do not know; the cause will be another one than in the past. Perhaps we must revive, in a modern look, an old and somewhat curious economic theory on the cycle, namely Jevons' theory on sunspots. It may be that within a couple of years a solar storm hits the earth with the same intensity of that of 1859 (Mols, 2009). Let us suppose that it happens in 2012 when the Maya calendar ends. Some see that as the end of times or as the beginning of the new times. By the way, in its new solar cycle prediction of May 29th, 2009, NASA now forecasts the peak of the sunspot activity of 'solar cycle 24' for May 2013. So there may be some postponement of the end of times. Moreover, the activity of solar cycle 24 is predicted to be rather mild as compared to other periods of high solar activity. Yet, that may not prevent the new solar storm to be the beginning of a serious recession. The top of the solar cycle in 1859 was also below average. Its intensity was the result of a coincidence of circumstances where the magnetic field of the electrified gas that took off from the sun interfered with the magnetic field of the earth and hence disturbed its protection. Such a geomagnetic storm will cause much damage to the electricity distribution as it will expose many transformers in the system to permanent damage. It will also disturb all kinds of wireless communication. In 1859, the societal impact of the storm was not yet large because the uses of electricity and radio communication were in its infancies. In 2012 or 2013 it is very different. Nowadays distribution networks for electricity are much interconnected so that the storm may cause a large scale blackout of supply. Moreover, electric power is modern societies' cornerstone technology, the technology on which virtually all other infrastructures and services depend. So, apart from the electricity supply, a severe solar storm will cause an enormous collateral damage. In 2008 a Committee on the Societal and Economic Impacts of Severe Space Weather Events made, under the auspices of the National Research Council in the US, a scenario for a 'severe geomagnetic storm'. The scenario estimates the economic and societal costs to be \$1 to \$2 trillion during the first year alone, with recovery times of 4 to 10 years (National Research Council, 2008). So the overall economic and societal costs of the storm may exceed that of the US subprime mortgage crisis.

Avoid contagion

Another candidate cause for the next recession is when the successor of the Mexican flue will become really dangerous and pandemic. Seemingly, cyclical policy is unable to prevent recessions which such different external causes. Indeed, recessions are inevitable just because the cause of the next recession is unknown. Yet, we can see some similarity in the propagation

mechanisms of the initial shocks. In the all three cases, the credit crisis, the solar storm and the pandemic flue, the large worldwide interdependence in the economic system brings about an enormous amplification of the initial shock. In case of the present recession it is the fast growth of the worldwide mutual dependence of the banking system which has the subprime mortgage shock amplified towards a systemic crisis. This ‘contagion’ acts as an externality in case of a negative shock (Gallegati et al. 2008). Therefore, the deepness of the present recession is mainly the result of the market failure associated with that externality, and of insufficient macroprudential supervision to repair that failure. So, the time has come to think about how this negative externality of contagion can be mitigated in the future. How can the economic system be rearranged so that the far-reaching impact of an inevitable external shock is less strong? How can we avoid that all domino stones in the economic system fall at the same time without doing harm to the enormous welfare gains that globalization has brought us? That knowledge will not prevent a next recession, but will make it less deep.

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