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"Secular stagnation": Precise definition, and possibility that it could occur

"Secular stagnation" is a situation in which a shock triggers a massive decline in demand[(1)], i.e. a situation of* ex ante *excess savings, and in which this situation persists because the real interest rate cannot fall to the level which would restore the equilibrium of supply and demand at a high level of production; there is therefore a rebalancing via a fall in production.

The shock could be a "Minsky style" deleveraging shock, due for example to an asset price correction, a demographic shock, or an income distribution shock. If the shock is sufficiently great, the natural interest rate (the real interest rate which ensures full employment) becomes very negative and cannot be attained, resulting in a chronic situation of under-employment. This situation can be self-perpetuating, e.g. if unemployment continues to discourage borrowing. To come out of this situation, either there must be a monetary policy capable of boosting expected inflation, or a redistributive policy that is favourable to borrowers and unfavourable to savers.

We seek to determine whether the euro zone could be in a "secular stagnation" as it is precisely defined here. The answer is twofold:

- ***There is indeed a slump in demand and an insufficient decline in real interest rates, which are characteristics of secular stagnation;***
- ***But there is also a weakness of supply due to the decline in potential growth. It is therefore necessary, in the euro zone, both to exit secular stagnation and then stimulate supply.***

(1) This definition was first given by Alvin Hansen in 1939, and was then used again in the recent period by Paul Krugman, Larry Summers and John Taylor.

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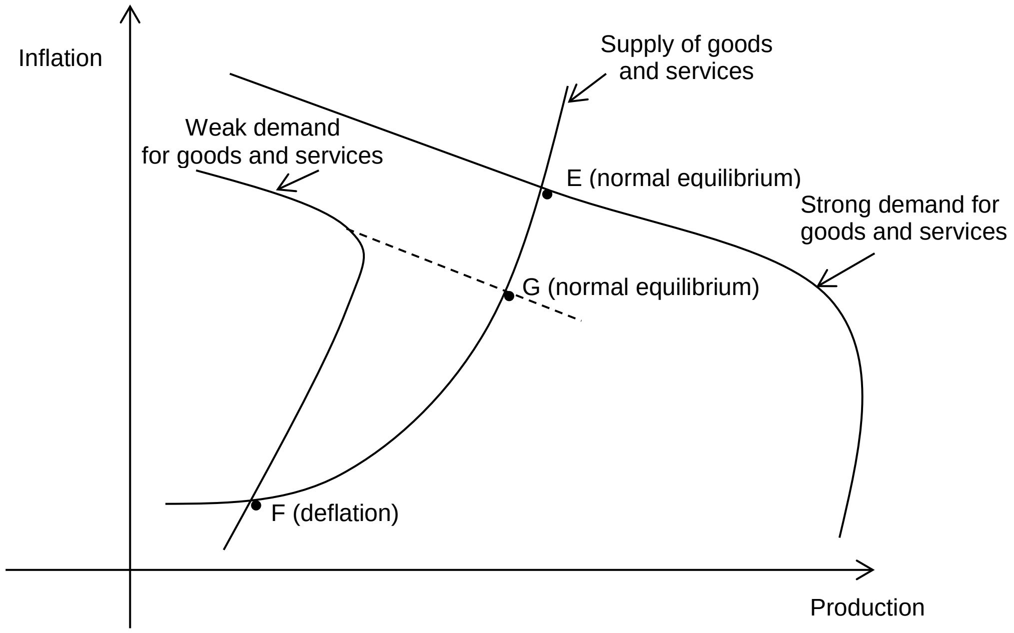
The precise definition of "secular stagnation"

The precise theoretical definition of "secular stagnation" is as follows: a negative demand shock leads to a situation in which **the full employment equilibrium of supply and demand is reached at a highly negative real interest rate that it is impossible to achieve.**

Let us show this in chart form:



The supply of goods and services increases with inflation.

If demand for goods and services is sufficiently strong, equilibrium occurs at E, **with a demand for goods and services which decreases with inflation** (a rise in inflation reduces demand directly and also because it pushes up the real interest rate).

If demand for goods and services is weak, nominal interest rate rigidity appears: a fall in inflation pushes up the real interest rate because inflation falls and the nominal interest rate does not. **The fall in inflation then leads to a fall in demand: this explains why, for weak demand and low inflation, demand increases with inflation:** in that case we have equilibrium F which is a deflation equilibrium.

When demand is weak, the real interest rate would have to be able to continue decreasing with inflation, which is not the case due to nominal interest rate rigidity. **If the nominal interest rate could continue to fall by more than inflation, equilibrium G could be reached** with a high production level.

For there to be **secular stagnation,** the following conditions must be met:

- **The real interest rate cannot fall sufficiently** for there to be an equilibrium of supply and demand at a high production level; and
- **This situation persists.**

Is this the situation seen at present in the euro zone?

Is the euro zone in secular stagnation (in the theoretical sense seen above)?

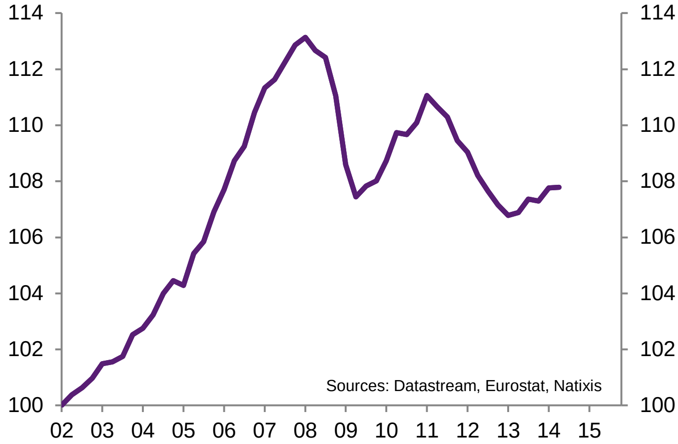
For the euro zone to be in secular stagnation, therefore, the following conditions must be met:

1. There has been a negative demand shock, hence, *ex ante*, a situation of excess savings;
2. The correction of the *ex ante* excess savings could not be achieved by a sufficient fall in the real interest rate, but was achieved by a decline in production, and hence employment;
3. This situation persists, e.g. due to the effects of high unemployment (precautionary saving, low investment).

(1) Negative demand shock

Domestic demand in the euro zone has declined significantly since the crisis (Chart 1).

Chart 1
Euro zone: Domestic demand
(in volume terms, 2002:1 = 100)



This is due to **two forms of deleveraging:**

- **Private-sector deleveraging (Chart 2),** following the sharp domestic increase in loans to households and companies;
- **The halt in external borrowing by the peripheral euro-zone countries (Chart 3A),** which until the 2008 crisis had very large external deficits **(Chart 3B)**.

Chart 2
Euro zone: Household and corporate debt and credit

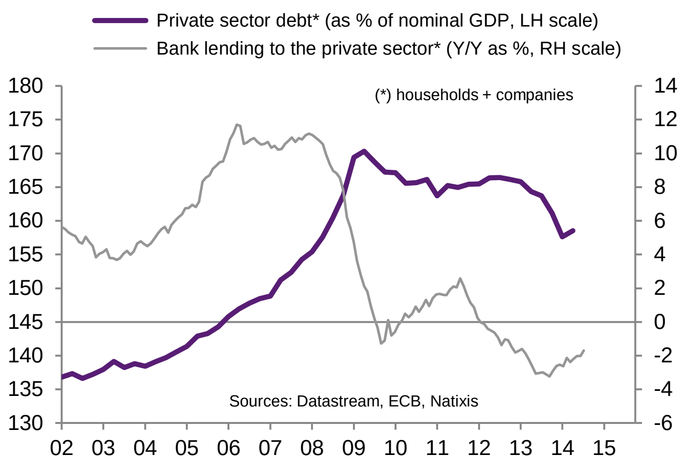


Chart 3A
Net external assets* or debt* (as % of nominal GDP)

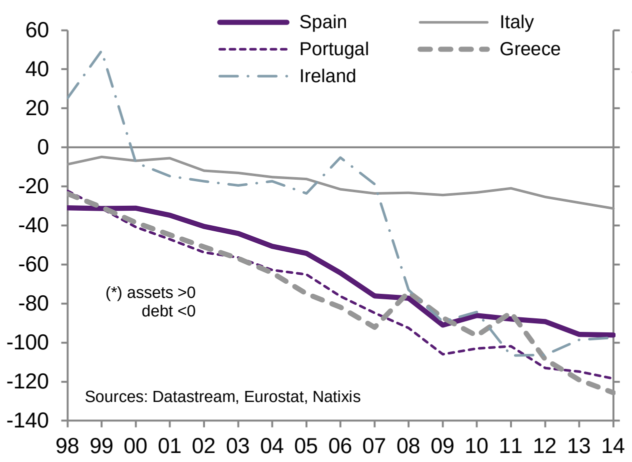
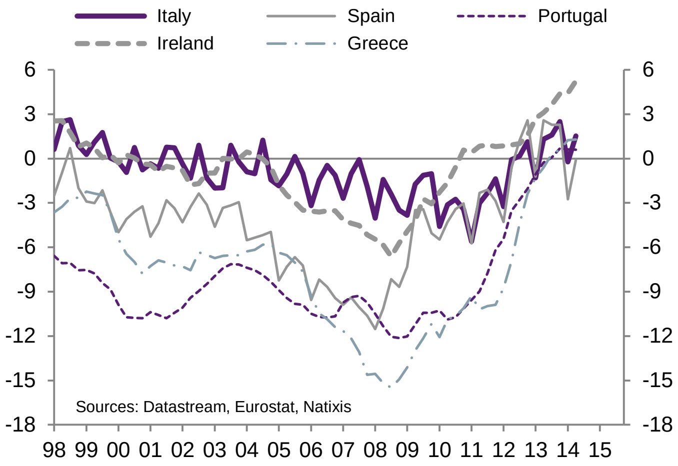


Chart 3B
Current-account balance (as % of nominal GDP)



Deleveraging is definitely the cause of the fall in demand in the euro zone:

- In the case of private-sector deleveraging, it is related to the fall in asset prices **(Chart 4)**, as is suggested by the secular stagnation theory;
- In the case of external deleveraging, it is related to the euro zone's institutions: in the absence of federalism, there is a limit to the external debt that countries can have.

There is therefore clearly *ex ante* excess savings in the euro zone, as is confirmed by the trends in the current-account balance and the capacity utilisation rate **(Chart 5).**

Chart 4
Euro zone: Stock market index and house prices
(2002:1 = 100)

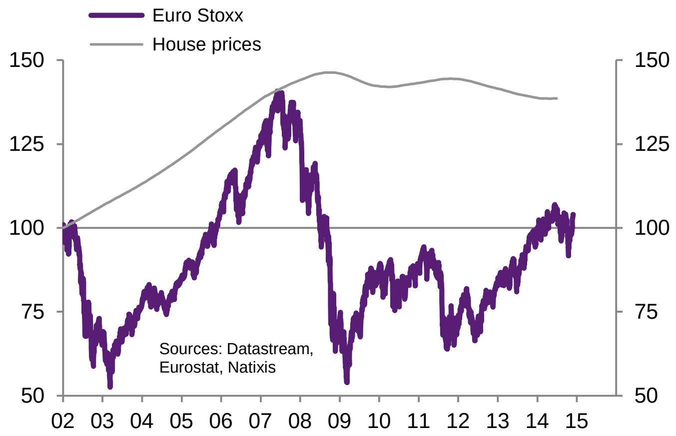
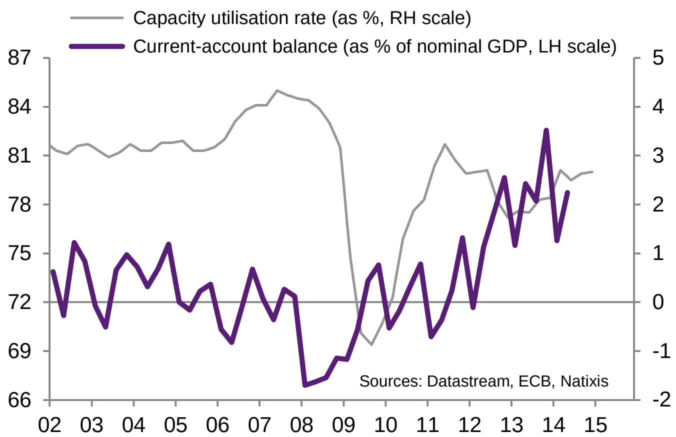


Chart 5
Euro zone: Current-account balance and capacity utilisation rate



(2) Impossibility of having a sufficiently low real interest rate

When there is *ex ante* excess savings, a sharp fall in the real interest rate would be needed to bring the economy back to full employment: this would stimulate demand, cause a decline in savings and increase investment.

If this sharp fall in the real interest rate is impossible, due to nominal interest rate rigidity, there is a move, as seen above, towards a deflationary equilibrium in which the rebalancing of savings and investment takes place via a steep fall in production.

How have real interest rates moved in the euro zone? For the short-term interest rate (Chart 6A), we can use actual inflation; for the long-term interest rate, we use inflation swaps (Chart 6B).

Chart 6A
Euro zone: Inflation and repo rate

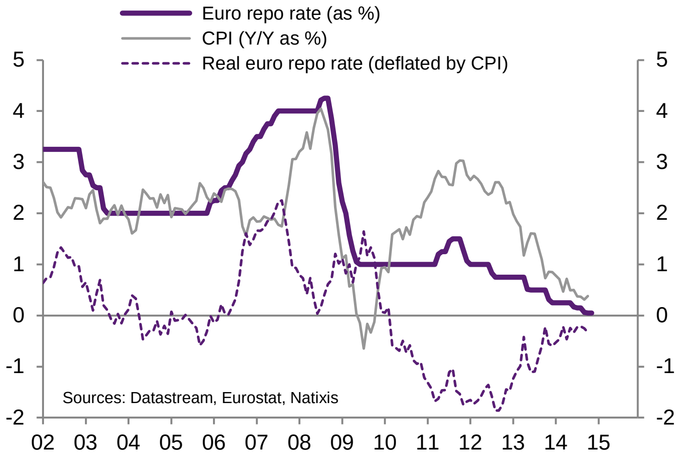
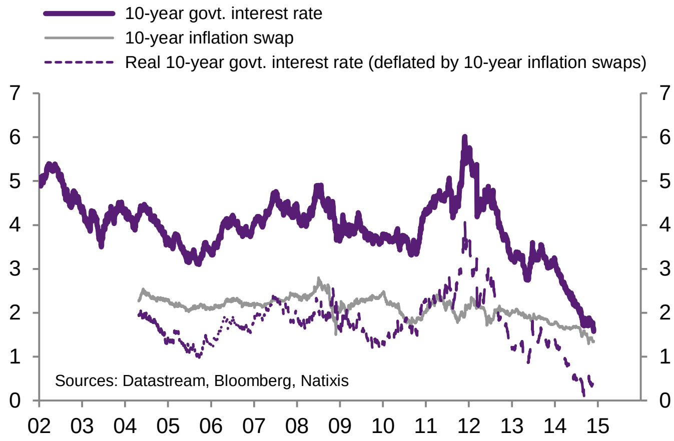


Chart 6B
Euro zone: Interest rate on 10-year government bonds and 10-year inflation swaps



It is clear that the real repo rate is at present slightly negative and the real 10-year interest rate on government bonds is slightly positive, whereas a very negative real interest rate would be needed to rebalance demand and supply in a non-deflationary equilibrium.

(3) Perpetuation of the situation of excess savings

The situation of weak demand and an insufficient fall in the real interest rate could persist:

- If there is precautionary saving by households, due in particular to the high level of unemployment (Chart 7); the savings rate of euro-zone households is high but has fallen slightly;
- If there is a low level of investment, due to the weakness of employment, income and the growth outlook, which is the case (Chart 8).

Chart 7
Euro zone: Gross household savings rate (as % of GDI)

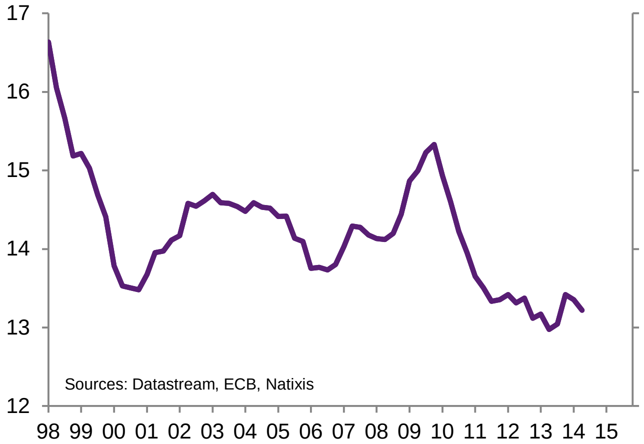
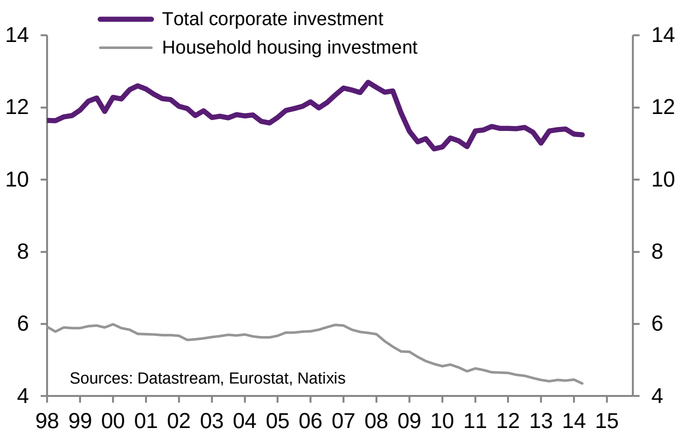


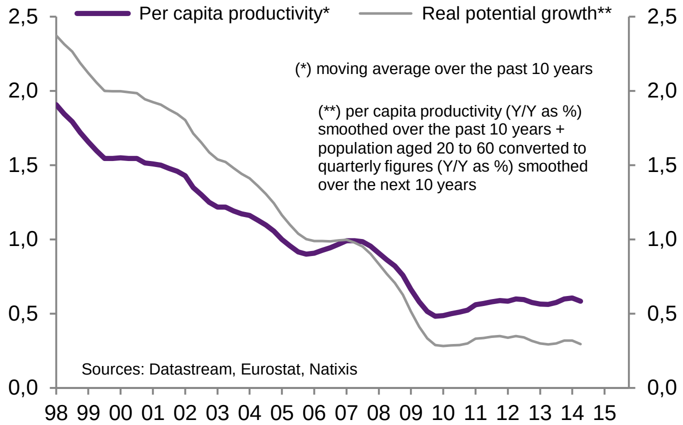
Chart 8
Euro zone: Corporate and housing investment (in volume terms, as % of real GDP)



(4) But the euro zone is also suffering from supply problems

The euro zone has seen a continual decline in its potential growth, which is due to the slowdown in productivity gains (Chart 9).

Chart 9
Euro zone: Per capita productivity and potential growth (Y/Y as %)



So the euro zone's problem is complex:

- **A fall in demand;**
- **The inability to have a sufficiently low real interest rate to rebalance supply and demand at a high production level;**
- **But also a decline in supply (potential growth).**

Conclusion: How can "secular stagnation" be corrected?

The euro zone is clearly in secular stagnation: a negative demand shock, *ex ante* excess savings, equilibrium at a low (deflationary) production level with an insufficient fall in real interest rates.
One could therefore attempt to use the appropriate solutions:

- **A very expansionary monetary policy aimed at boosting inflation expectations;**
- **A policy of income redistribution in favour of borrowers and at the expense of savers** (which is similar to a redistribution for the benefit of the young).

But the situation is complicated by the weakness of the supply of goods and services in the euro zone, due to the decline in potential growth.

Even if the situation of "secular stagnation" were corrected, a "normal" equilibrium would be regained but with a low production level due to the weakness of supply. Stimulation of supply would also be needed in the euro zone.