The Great Stagnation as the Crisis of Investment

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Abstract

The industrialised economies grouped together in the OECD have experienced a very sharp recession. Unusually, the depth of the downturn has not been matched by the pace of the recovery. The economies have instead exhibited exceptionally weak growth and individually some no recovery at all. The sharp downturn was also preceded by a prolonged slowdown in the rate of growth over several decades. This culminated in the current phase, which can best be described as the Great Stagnation.

Gross Fixed Capital Formation (GFCF) experienced the sharpest decline of all main components of GDP. It is also now the only component which has not recovered and so acts as the main brake on a more robust recovery. The fall in investment accounts for the Great Stagnation. The declining rate of growth in GFCF also led the slowdown in GDP from the 1960s onwards.

Net Fixed Capital Formation (NFCF, that is GFCF minus capital consumption) shows an even more pronounced fall. The major capitalist economies are not generating much new capital. While that remains the case, the prospects for a more robust and sustainable are slim.

The crisis of 2007-2008 is not over. In standard national accounting terms there has been an economic recovery of sorts in the OECD area as a whole. In volume terms OECD GDP recovered its prior high-point reached of Q1 2008 by Q2 2011 and has since expanded to stand 5 per cent above that level by the final quarter of 2013.

The peak-to-trough decline in GDP during the recession was 4.75%. The current recovery after such a sharp decline is exceptionally weak by historical standards, lacklustre enough to have been dubbed 'secular stagnation' (Summers).

Accounting for the source of this weakness is a straightforward matter. In the OECD, consumption has risen more strongly than aggregate GDP. Private consumption has risen by 6.1 per cent over the same period and government consumption is slightly stronger still at 6.3 per cent.

World trade continued its long-term trend of growing more rapidly than GDP, as OECD imports have risen by 8.2 per cent while exports rose at nearly twice that rate, up 16.2 per cent. The OECD therefore continues to act as a laggard or brake on world growth, but the consequence is that net exports from the OECD have made a small positive contribution to growth since the beginning of 2008.

The only component of the national accounts which remains below its pre-crisis peak is investment, Gross Fixed Capital Formation. GFCF has fallen by 5.2 per cent, almost a mirror image of the rise in aggregate GDP for the OECD as a whole. In 5 years, investment as a proportion of GDP in the OECD has fall from just over 22 per cent to under 20 per cent. Investment as a proportion of GDP reached a new low in the course of the current crisis (on OECD data back to 1960). It has not recovered since.

The change in OECD GDP and its components is shown in Fig. 1 below.

OECD GDP & Components,
Change in PPP US\$ bn Q1 2008 to Q4 2013

2000
1500
1000
500
GDP Private Consumption Net exports Government Consumption GFCF

Fig.1 Changes in OECD GDP & Components, Q1 2008 to Q4 2013

Source: OECD

These same general features are evident in each of the major economies. First, the US economy is now 6.3 per cent above its pre-recession peak (which was one quarter earlier, in Q4 2007). Private consumption and net exports are also both above their prior peak and government consumption is flat. But GFCF remains US\$140bn below its peak and is the main drag on recovery. Secondly, at the end of 2013 the Euro Area economy had not fully recovered and remained 2.7 per cent below its peak level in Q1 2008. The shortfall in GDP was US\$276bn, whereas the decline in GFCF was much larger at US\$427bn. The rise in other components of the national accounts has been led by net exports and government consumption. Thirdly, Japan too has failed to climb out of recession, and justified the criticism that 'Abenomics' was unlikely to restore growth (Koo). At the end of 2013 GDP was Yen 420 trillion below its Q1 2008 level. The shortfall in GFCF more than accounts for the aggregate decline, with a fall of Yen 1,258 trillion. Both private and government consumption have climbed above their pre-crisis peak.

Taking the G7, the recession ended in Q2 2011 and GDP is now 4.3 per cent higher than its pre-recession peak in Q1 2008. While this remains exceptionally weak, the recovery added US\$1,653 billion by the end of 2013 compared to the beginning of 2008. Again, private and government have risen, as have exports. Net exports have subtracted US\$35 billion from growth, as imports have risen more rapidly. However, it is investment which is the main drag on output. In the G7, GFCF remained US\$487 billion below its prior peak, a decline of 5.7 per cent.

There are partial exceptions to this pattern, especially amongst the peripheral countries of the EU which have experienced the sharpest declines in output. But the overall situation

retains this key characteristic- the crisis is accounted for by the weakness of investment. It therefore seems improbable that any meaningful recovery, one which is broadly felt and sustainable, can be achieved without a revival of investment.

Explanations of the Orisis

The widespread explanation that it was excessive government spending which caused the crisis, and that the remedy is to cut government spending, could be derided if it did not have such a pervasive and malign effect (Alesina). The rise in government consumption expenditures in the 8 years preceding the crisis was precisely the same as the rise in GDP. There was no excess, so it could hardly have been a cause. Before that time, taking the whole period from 1960 to 2010, government consumption expenditures were the weakest of all components of GDP and fell from 22.9 per cent of GDP at the beginning of that period to 17.4 per cent. Whatever the cause of the crisis, it cannot possibly have been excessive government consumption.

More credibly certain mainstream explanations for the cause of the crisis tend to overlap with those of more radical critics. If the cause of the crisis can be located in the excessive levels of speculation and borrowing directed towards the housing market (FRB St Louis), perhaps this can be developed to argue there has been a widespread 'financialisisation' of the economy, which has entailed the complete dominance of the unproductive financial sector over all other sectors of the economy (Dumenil & Levy).

That this latter explanation has some evidential support makes it clearly superior to the fiscal hardliners of the mainstream. However, in terms of the immediate crisis it ignores the important fact that in the US (the main locus for the early phases of the crisis) new housing construction began to fall in early 2006 and new construction permits fell in mid-2005). This is long before house prices did, which in turn after a further time lag led to the collapse of a number of financial markets and the generalised financial crisis. It was events in the real economy which led to a financial crisis, not vice versa.

Housing construction fell before house prices fell. House prices fell before the mortgage-backed loans (as well as other instruments such as CDOs and CLOs, all based on housing and house prices) began to fall. It was this latter fall the caused the banks to stop lending to each other which in turn caused the financial crash.

Therefore the cause of the crisis was located in the real economy. The link which broke was the weakest one, the finance sector.

Declining Investment

Irrespective of which sector acts as the economic agent (private households, government, overseas) there are ultimately only two uses of output, consumption or investment. From their inception (Kydland and Prescott 1982) the builders of DSGE econometric models have tended to downplay or even eliminate this distinction. Both the original and main

subsequent refinement the DSGE models that dominate mainstream economics have tended to regard investment as simply deferred consumption (Christiano, Eichenbaum, and Evans, 2005).

In the most basic sense this is true, as all investment ultimately serves to increase consumption, in the final analysis. But consumption is not a factor in growth, which is function of capital and labour employed plus changes in productivity (Vu, 2014). Only one of these three can increase the productive capacity of the economy, that is, to grow it. For thousands of years farmers understood that, in order to increase next year's crop, an increased proportion of this year's crop had to be reserved for seed. While their ultimate aim was increased consumption (either their own or in wider society) the mechanism was to increase investment.

Economic growth depends on a high or rising proportion of output devoted to investment. Ancient farmers understood fundamental economics at a more advanced level than our modern mainstream DSGE modellers.

Seen from this perspective, it is clear that the long-term decline in investment as a proportion of GDP is the fundamental factor behind the long slowdown in activity in the OECD area, which itself created the conditions for the crisis.

Taking the OECD as a whole, growth rates for the economy have been in a secular slowdown over a very prolonged period. Every successive decade has seen slower growth than the preceding one. In the 10 years to 1970 OECD real GDP growth was 65.5 per cent. In the subsequent three decades it slowed successively to 40 per cent, 35.8 per cent and 30.7 per cent. In the 10 years to 2010 (which includes the exceptional period of the crisis itself) the growth cumulative level of GDP growth was just 18 per cent. In effect the growth rate of GDP has been falling by nearly half every twenty years.

In 2013 the G7 still accounted for 75 per cent of total OECD output, although it represents a declining share of world output. The G7 has led the slowdown in growth in the OECD. In the 1960s its growth rate was fractionally below the OECD as a whole. Within the overall decline to 2010, the slowdown in G7 growth is even more pronounced. The cumulative GDP growth rates for both the OECD and the G7 are shown in Table 1.

Table 1. Cumulative Real GDP Growth Over Five Decades, % Change

Decade to:	1970	1980	1990	2000	2010
OECD	65.5	40.0	35.8	30.7	18.0
G7	63.9	43.8	37.5	29.1	14.2

Source: OECD data

The stronger GDP growth rates of the 1960s were associated with an even more robust growth rate in GFCF, as shown in Table 2 below. However the subsequent decline of investment has been even more pronounced. While OECD GDP growth in the most recent decade was little more than a quarter of the earliest decade under review, GFCF growth in the decade to 2010 was little more than one-twentieth of its earlier pace.

The performance of the G7 group within the OECD is even more extreme. Although it began the period with a very similar rate of growth it ended with more severe slowdown than the G7 as a whole. The G7 has also experienced a remarkably poor performance in terms of GFCF, which fell in absolute terms in the final decade to 2010.

Table 2. Cumulative Real GFCF Growth Over Five Decades, % Change

Decade to:	1970	1980	1990	2000	2010
OECD	85.6	34.2	40.7	36.2	4.7
G7	82.3	34.5	42.5	35.7	-2.9

Source: OECD data

Over the same period 1960 to 2010, consumption has risen as a proportion of GDP. This is the counterpart to the fall in investment. Yet it cannot be said that the current crisis is caused by excessive or over-consumption. The argument that the fall in 'effective demand' or 'aggregate demand' runs entirely counter to this (Skidelsky). However, this designation is itself insufficiently clear in this instance, as it fails to distinguish between consumption, which has risen somewhat, and investment which has fallen.

Net Fixed Capital Formation

However, the crisis of investment is actually more pronounced than the bare GFCF data suggest. Capital is consumed in the course of production. To stretch the agricultural analogy further, if the farmer's fence needs repair or falls down and she builds a new fence, the restoration of the fence is certainly new activity, but there is no additional fence. Only if the fence is extended is there an addition to the capital stock.

To arrive at a measure of the net addition to the capital stock it is therefore necessary to deduct capital consumption from GFCF, to arrive at Net Fixed Capital Formation (NFCF). The data relied on here is from the World Bank and begins in 1980. Table 3 below shows NFCF for the G7 countries individually and in aggregate.

Table 3. Net Fixed Capital Formation, % GDP

	1980	2012
US	11.8	5.9
Japan	17.7	-1.8
Germany	11.1	5.3
France	10.3	7.4
UK	6.2	2.2
Italy	12.7	0.4
Canada	11.2	10.1
Total	13.6	4.9

Source: World Bank, author's calculations

The G7 comprises the most of the leading capitalist economies. Yet they are barely generating any new capital. Without an increase in the productive capital of an economy it falls primarily to an increase in labour to produce growth. In this way, it may be possible for GDP to grow, but per capita GDP growth becomes extremely difficult.

Without an increase in the productive forces of the economy, or with just minimal growth, the economy as a whole cannot sustainably grow and the Great Stagnation will continue. It might be possible to delineate the limits of growth under this condition. If the G7 Output/Net Capital Ratio of the 1980s as represented in the data above as 3.125 per cent (calculated as the ratio between 42.5 per cent GDP growth and 13.6 per cent NFCF), we could expect G7 cumulative growth from 2012 onwards to be 15.3 per cent, or approximately an annual average 1.5 per cent. Less speculatively, anything more than minimal growth under conditions of minimal net investment is not sustainable, as it relies on drawing forward future output and incomes through increased indebtedness.

Conclusion

The Great Stagnation is accounted for by the fall in investment. GFCF is the only component of GDP in the G7 or OECD which has not shown at least minimal recovery. Falling investment was also the immediate cause of the general financial crisis, as the fall in housing output preceded the financial crisis and the recession.

The rate of investment has been declining over several decades. Since investment is a decisive factor in growth, this is the main factor in the long run slowdown of the OECD and G7 economies.

The rate of Net Fixed Capital Formation has declined even more precipitately, close to the point of outright stagnation (and in Japan's case below). Since the accumulation of productive forces is decisive in increasing the productive capacity of the economy, there is as yet no clear sign that the Great Stagnation is coming to an end.

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