

Hoarding, Low investment, and the Great Recession A Vicious Circle:

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Abstract

Despite the fact that corporations seem to be making handsome profits, they have not been willing to invest the surplus in new and long term projects for expansion. In this paper, I briefly look at this problem and discuss some of the arguments put forward to explain this rather strange phenomenon. It is argued that there is an internal and relatively strong link between the Great Recession, low investment and hoarding which if left to its own mechanism, would only reproduce the same outcome. That is, the Great Recession raises the tendency for hoarding and low investment, and likewise, low investment and high hoarding would in turn perpetuate the Great Recession. It will be further argued that this combination is indeed a manifestation of some serious structural problems of Neo Liberal capitalist model that would not go away by market forces and requires effective and serious exogenous shocks by the state.

Key words: Hoarding, Great Recession, Capacity, Investment

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Hoarding, Low investment, the Great Recession: A Vicious Circle

1. Introduction

The tenth anniversary of the collapse of Lehman Brothers is round the corner. During most of this period, the global economy is supposed to have been in a recovery mode, but trillions of dollars have been added to global debt. According to McKinsey Global Institute (2015, 1) between the final quarter of 2007 and second quarter of 2014, \$57 trillion have been added to global debt. Duncan (2016) gives the global debt at \$300 trillion for 2016, and this is \$101 trillion more than the estimate given by McKinsey Global Institute for the second quarter of 2014. If these estimates are true, this means that since 2000, the global debt has increased by \$213 trillion. During the same period, the global GDP grew from \$33.5 trillion in 2000 to a little more than \$74 trillion in 2015². This means that while GDP more than doubled during these years, global debt has increased nearly 3.5 times. As a result, the global debt to GDP ratio is now greater than 400 percent. Undoubtedly this situation is not sustainable and further, it also shows how deep the global recession is.

This explosion of debt happened despite the fact that most countries implemented fiscal austerity to reduce deficits and consequently, prevent the level of debt from rising further. But it did, as indicated by more than doubling of the global debt since 2007. An immediate conclusion must be that whatever the supporters of austerity claim, the policy has failed miserably in achieving its main objectives. Furthermore, this volume of debt at global level is too high and could potentially ignite another round of very serious global financial crisis. It also confirms the view that 'recovery' from the meltdown may have been a lot less than what is being claimed by politicians. As a further factor pointing to a less than robust recovery, firms in the leading capitalist economies have been investing a declining proportion of their

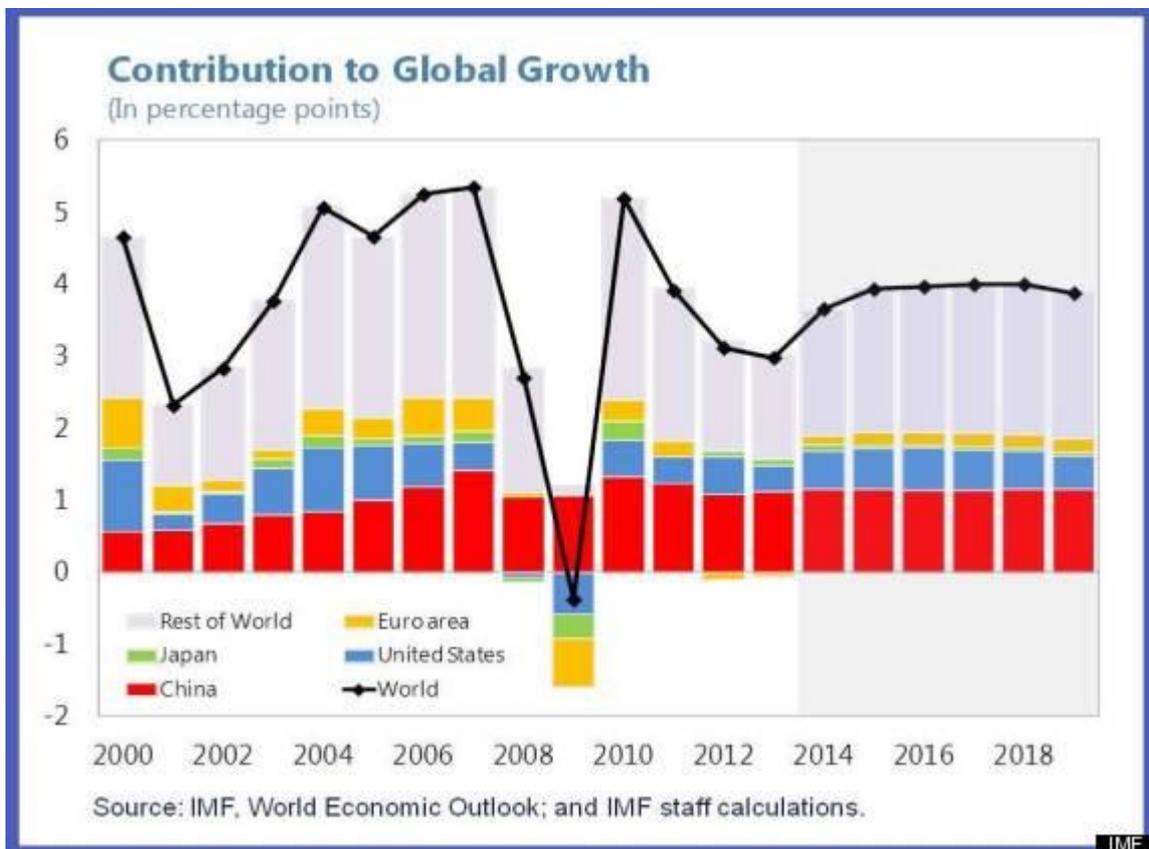
² Available at: <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2015&start=1960&view=chart>. Accessed on 26 Feb. 2017

profits. This combination, i.e. growing debt, and declining share of investment, is a toxic mix that could potentially be dangerous for the health of the world economy. Are these issues linked with one another? As we shall discuss later in this paper, some of this un-invested profits have been distributed to shareholders or used to buyback shares and some have simply been hoarded by non-financial corporations. First, let us briefly review the situation.

2. A brief review

We begin with the US as the leading economy in this mix. For decades, the US economy played the role of the prime mover of the global growth. But it looks as if the situation undergone changes in more recent times. Barnett's (2014) has shown that from 2001- with one exception- China has been making a bigger contribution to global growth than the USA and this situation is unlikely to change in the next few years.

Figure 1: Contribution to World GDP Growth



Source: Barnett, 2014.

Looking at the current situation, the US growth rate for 2016 was one full percentage point less than its growth in 2015, 1.6 percent vs 2.6 percent in 2015. Per capital GDP growth has been even lower, 1.9 percent in 2015 and only 0.9 percent in 2016 (Ross, 2017). In the EU, the estimated growth for 2016 is slightly higher than the US, i.e. 1.9 percent but within this group, the precarious condition of Eurozone is a real concern. In the early years of 'recovery', there was a common belief that 'the high growth' BRICS economies would be able to pull the world economy to a higher growth path. For China, except immediately after the 2008 crisis, annual growth rate has continuously declined and the growth rate for 2016, is 6.7 percent, showing 0.2 percent fall compared with 2015. It should be pointed out that Chinese growth rates, while high by western standards, has been continuously declining since 2010 as can be seen in Figure 2.

Figure 2: China GDP Annual Growth Rate



Source: <http://www.tradingeconomics.com/china/gdp-growth-annual>

The growth situation in Russia and Brazil are particularly poor as these two economies have been actually shrinking in the last few years. South Africa, technically speaking is not in recession, but its growth rate is too low for comfort. India is the only member of this group which enjoys a healthy annual growth. Given this overall situation, how can this recession-like global condition be explained?

3. Low Investment

As a starting point, let us look at investment. First, it should be pointed out that an 'object focused' definition of investment is favoured in this paper. Under this definition, investment means allocating resources to infrastructure, equipments or people. In short, following 'object focused' investment, our economy will be able to produce more use values, i.e. becomes more productive.

However, a more commonly used definition of investment is 'investor focused', i.e. here the focus is on financial gains to the 'investor' from any kind of spending, lending, saving or purchase of financial assets or speculation regardless of the production of use values. In this paper, our reference to 'low investment', focuses on the 'object focused' investment which is not forthcoming and this, to a large extent, go a long way explaining the miserable rates of growth that has been pointed out earlier.

As a proxy for 'object focused' investment, the ratio of gross fixed capital formation to gross operating surplus will be utilised to shed further light on this issue. According to Burke (2013) in the US, this ratio was 62 percent in 1971, but went up to 69 percent in 1979. However, by 2000, this ratio declined to 61 percent, and declining further to 56 percent in 2008. By 2012, this ratio declined even further to 46 percent. In the Euro Area, the ratio was 51.7 percent in 1995 and went up to 53.2 percent in 2008. By 2012, however, this ratio was down to 47.1 percent. In the UK, this ratio peaked in 1975 at 76 percent, but by 2008, it has fallen to 53 percent. Four years later, in 2012, there was further fall and this ratio was only 42.9 percent.

A number of points must be made here:

- More than 50 percent of the operating surplus is not being productively utilised across the board.
- Almost in line with these developments, cash hoard has expanded too. In the Euro Area it rose to \$1.76 trillion in July 2013, and two-thirds of this was

overnight deposits. In the UK, however, the non-financial corporations' bank deposits increased from £76 billion at the end of 2008 to £419 billion by July 2013 (Burke, 2013).

Let us note that there is no reason to prevent this ratio to exceed 100 percent, i.e. in expanding and rapidly growing economies, firms could borrow to invest and enhance their productive capacities in order to meet the market demand. Nevertheless, it is an interesting issue for further examination as to why firms leave more than 50 percent of their surplus uninvested. This point is confirmed by Lazonick (2014) who asserts that the real bottom line is "corporate profits are high, but corporate reinvestment is low". In the next section, we examine why this is the case, and what are its possible implications and causes.

4. Hoarding, reasons and consequences

On the face of it, it goes without saying that the immediate result of investment strike by firms will be more cash that would then be accumulated by these corporations. Two issues should be examined further. First, why firms are not investing, and second, what do they do with this extra cash, when it is not reinvested? The first question will be examined later, but, as it is well established in the literature (see for example, Baker, 2014, Johnson, 2014, Keightley, 2013, Lazonick, 2014, Oak, 2012, Sheppard, 2013, and Sanchez and Yurdagul, 2013), the uninvested surplus will be used in the following manner:

- A segment is used to buyback shares.
- Some will be paid as higher dividend.
- Cash hoard is likely to increase too.

It should also be added that for reasons discussed later, most of this cash is parked offshore for tax reasons.

The buyback scheme – which is effectively a mechanism to create and enhance financial bubbles- may be useful in the short term, but will lead to the neglect of long term investment projects. This in turn will have serious implications not only for the economy at the national level, but for the shareholders too. While it may be accepted in law, the whole scheme is nothing but an effective means to manipulate share prices. In the US, for instance, up to 1982, this practice was illegal, as the buyer, buying his own share was supposed to have 'insiders' information', but since then, the restriction had been removed. By reducing the number of shares outstanding, buyback schemes can artificially boost a corporation's earning per share.

The second potential risk of this measure is despite high profits, many corporations are financing these schemes through debt. Roberts (2017) pointed out that in the case of Apple, for instance, with no debt in 2012, its debt now reached \$80 billion. This quick upsurge of debt did not prevent Apple to pile up cash and securities overseas. The worrying development, as indicated earlier is the sharp rise in debt level and according to Roberts (2017) not only some of the buybacks but also dividend paid to shareholders are financed by debt. Low interest may be the main driver of higher debt, but, it is also true that while corporations hoard of cash is rising, their debt is rising too. There is no doubt that this would increase the systemic risk facing the world economy. So long as the interest rates remain low there may be no problem. But if these rates start to increase, financial crisis would become likely as some of these corporations may not be able to service an increasing levels of debt which is not being used to create an income stream for the borrowers.

In a way, using Minsky's classifications, borrowing to buyback shares has all the features of Ponzi type loans and for this very reason, is highly risky. Whatever it might do, buyback shares will not generate new stream of income which could be used to finance the debt. Hence, if there is an external shock and the rate of interests rise, these corporations would face financial difficulty. This possibility is not lost by some observers of the market. In this regards, it was reported by the

Economist (2014) that in 2013, 38 percent of corporations paid more in buybacks than their cashflows could support. It is clear that this position is not sustainable. According to the same report in the Economist (2014) these corporations are dangerously lopsided. They are borrowing heavily at home to pay to buy-backs while keeping cash abroad to avoid America's nominally high corporate tax rate. Given the neglect shown towards long term investment projects, artificially inflated share prices will eventually tumble. The payment of higher dividend is unlikely to help the economy, as most of those who receive these dividends are high income individuals or groups with a low propensity to consume and a relatively high propensity to save. A drag on aggregate demand is likely to continue.

The third component, hoarding, would also produce adverse effects. It is obvious that when profits are not recycled throughout the economy, its engine is likely to decelerate. If investment in new plant or equipment is not forthcoming, or, if research and development are undermined, and last, but not least, if wages are not growing, the process of slowing down will intensify. Historically speaking, the US lawmakers as early as 1909 understood these issues. While introducing corporate income tax, they have also introduced a 15 percent penalty tax on hoarding. However, during the 1986 tax reforms, the penalty for domestic hoarding was maintained but US multinational firms were allowed to continue hoarding cash overseas for unlimited time period.

The usual tax on corporate profit will only apply if they decide to repatriate the hoarded cash into the US jurisdiction. This reform, in turn, incentivised the massive growth of offshore tax avoidance facilities. It should be pointed out, however, that there were other factors helping the emergence of growth of offshore tax facilities. Shaxson (2012, 40) believes that one of the main reason for the emergence and subsequent growth of offshore facilities was the rise in taxation in the post World War 1 years. In more recent times, globalisation has also helped this growth.

Following greater movements of capital and goods, and growth of trade, corporations have increasingly become integrated global entities while their tax

obligations remained national. It may have been the case that initially there was a justifiable concern as to how to avoid double taxation, but in the process “ a system designed to avoid double taxation had, via the use of the tax havens, turned into one of double nontaxation” (Shaxson, 2012, 42). It is likely that this development, i.e. the gradual erosion of tax bases of capitalist states may also explain the sharp rise in global debt, and in particular, global public debt as we indicated earlier. As one supporting evidence of this view, we know that between 2007 and 2014, global debt has increased on average by 5.3 percent per year, but the government’s debt during these years increased by 9.3 percent annually (McKinsey Global Institute 2015, 1).

5. Tax avoidance and deflation

As indicated above, parking cash offshore is more complex and widespread than it appears at first. It has serious implications for public finance and further; reinforces the tendency to distort the domestic market. Johnson (2014) speaks of an ‘epidemic of tax inversions’ due to which ‘ many corporations create ways of avoiding, dodging, shirking and generally not paying taxes’. In order to do this, US corporations buy or merge with a non-US company and claim to no longer be based in the US. Small wonder that the share of corporation taxes in Federal revenue which was around 32 percent in 1952 declined to 8.9 percent in 2014 (Johnson, 2014). Likewise as a share of GDP, it has fallen from 6 percent of GDP to less than 2 percent in 2015³.

This means that the non-corporate American will have to pick up the bill, i.e. pay relatively more taxes. The US Senate (2008, 1) reported that “ each year the United States loses an estimated \$100 billion in tax revenue due to offshore tax abuses”. Van Heeke et. al. (2014, 1) gave a much higher revenue losses of \$184 billion of federal and state revenue each year “ due to corporations and individuals using tax havens to dodge taxes”. In addition, it is estimated that every American tax payers “ would need to pay an additional \$1259 in taxes to make up for the revenue lost”.

³ Available at: <https://economicfront.wordpress.com/2016/04/22/disappearing-corporate-taxes/>. Accessed in 27 February, 2017.

Similarly, “ every small business would need to pay an average of \$3923 in additional taxes if they were to pick up the full tab for income lost to corporations exploiting tax havens”(op.cit. 1). The current system allows US corporations to indefinitely defer taxes on profits made outside the country. This is what the law says, but in practice, this rule is stretched and is effectively applied to where the profits are actually reported. It is here that accounting techniques become ‘useful’. Oxfam (2016, 5) revealed that for 2012 the US multinational corporations reported \$80 billion of their profit in Bermuda, a location with a GDP of less than \$6 billion in 2015⁴, and that was more than profits reported in Japan, China, Germany and France combined.

Overall, estimates of how much profits are reported and subsequently parked offshore varies but it is surely in several trillion dollars. As it stands in practice, taxes only apply to where profits are reported and not where the sale is actually taken place. Among other things, the US markets is distorted as a result, because corporations that use offshore breaks gain a big advantage over purely US corporations. Not to mention, in reality this also acts as a powerful incentive to locate jobs, manufacturing operations and profits centres in tax heaven countries. There are ways that this could be addressed but lobbying and political forces seem to prevent this from happening. One possible solution is to levy taxes on where sales actually are made not where profits are reported. So if 50 percent of a company’s sales are made in the US, no matter where profits are reported, then the US should tax the company on 50 percent of its worldwide profits.

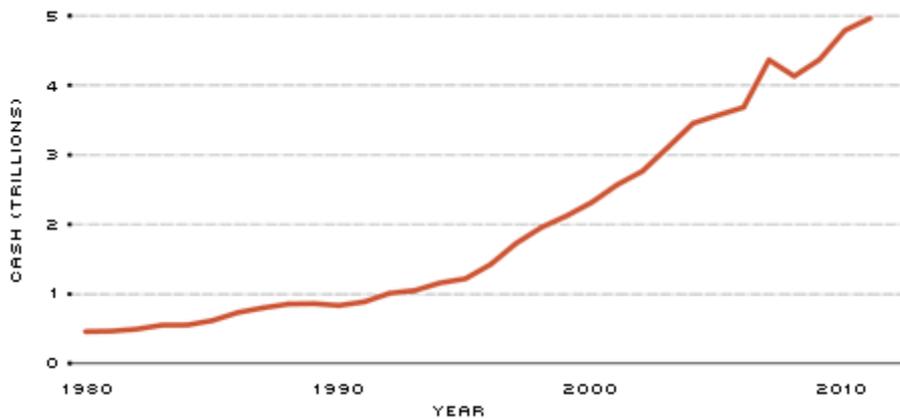
6. Why companies hoard? A brief history

The average cash to assets ratio seems to have increased for most firms in the western capitalist economies. While this is not a new trend, it seems as if it has increased since the Great Financial Crisis of 2008. The cash hoarding, however,

⁴ Available at: https://www.gov.bm/sites/default/files/GDP_2015.pdf, accessed on 11 March 2017,

seems to have started before the Great Financial Crisis of 2008. In the case of the USA, for instance, we know that this ratio increased by 129 percent from 1980 to 2004 (Bates et al 2006, p. 8). In the past thirty years, the aggregate cash of US firms has increased from under \$1 trillion to nearly \$5 trillion as can be seen in the chart below.

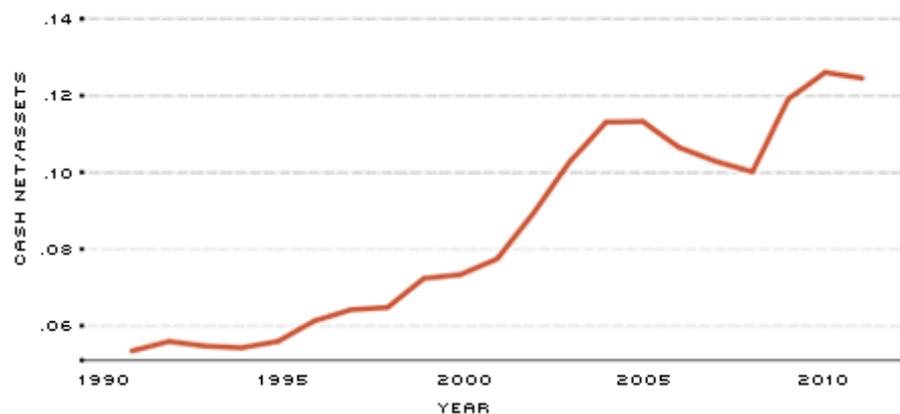
Figure 3: Aggregate Cash and Equivalents of U.S. Firms



Source: Sanchez and Yuragul, 2013, p.6

Furthermore, as it can be seen from our next chart, the ratio of cash to net assets has been rising in the last two decades too.

Figure 4: Ratio of Cash to Net Assets



Source: *ibid*, p. 6

In the remaining pages of this paper, I would like to examine two interrelated issues: First, why do firms hold so much more cash than they used to? Second, how

the Great Recession, or to be more precise, the recovery may be affected by this extra hoarding that seems to be taking place across the board?

Isfled (2014) refers to hoarded cash as 'dead money' and points out that it is this accumulation that helps explain the lack of business investment despite record corporate profits. He went on to add that for Canadian corporations this hoard went up from \$621 billion in 2013 to more than \$630 billion by the end of first quarter of 2014. Johnson (2014) points out that corporations are not investing their windfalls in business expansion nor are they paying profits out to shareholders as dividends.

From two different channels this practice is delaying recovery and slowing down growth.

- Jobs that would not be generated due to insufficient investment.
- Aggregate demand will not grow enough due to low dividends paid to shareholders.

Oak (2014), however, believes that one reason why corporations are accumulating too much cash is the US tax system. If multinationals park their profits offshore, they pay no taxes. At the same time we know that corporation taxes are at a 60 year low (Oak, 2014). The nominal tax rate is 35 per cent but multinational corporations never pay this rate even when they repatriate these offshore held cash back into the United States (Gardner, et. al. 2017). Some say the reason for mounting cash hoard is outstanding debt. It was indicated earlier that not only cash hoard is rising, but corporations' debt is rising too. Others blame the growth of money supply, i.e. when there is more money in the system, more would be accumulated.

Johnston (2012) suggests that according to estimate made by the FED, US non-financial companies held \$1.7 trillion in liquid assets at the end of March 2012, however, Internal Revenue Service [hereafter, IRS] figures show that in 2009 these companies held \$4.8 trillion in liquid assets, which equals \$5.1 trillion in 2012 dollars. Reasons for hoarding:

- Congress lets overseas profits accumulate untaxed, so long as offshore subsidiaries own the cash.
- Companies have a hard time putting cash to work because fewer jobs and lower wages mean less demand for product and services.
- Thick piles of cash gives risk adverse chief executives a nice cushion if the economy worsens. Here the main motive seems to be uncertainty avoidance.
- A further important reason, for the period since the introduction of unorthodox monetary policies is the near zero rates of interest.

In view of the fact that over the two years, profits went up by nearly \$1 trillion' while actual taxes paid rose less than a tenth as much' (Johnston, 2012) , it is unlikely that higher tax could be blamed for the growth in hoarding. Dividends, wages, capital expenditure all grew less than profits, hence, undistributed profits rise; therefore, companies are left with more cash. The growth of hoarding is, however, causing problem elsewhere in the economy too. Untaxed profits lower corporate tax burdens and increase the tax burdens on individuals and small businesses as discussed earlier. This in turn could potentially contribute to the recession that seems to be around.

On the other hand, the state pays interest on its debt but its account receivable- delayed tax- depreciates in value over time. If there is a tax relief, the same as the one offered in 2004, companies may bring some money home- usually they do not- but use money to buyback company stocks and continue destroying jobs in the US. Shaxson (2012, p. 112) refers to 2004 tax holiday and adds that over \$360 billion rushed back to the country, under a claim that this would "provide jobs" but " much of it went into share buybacks, boosting executive bonuses" and further" there is no evidence that the amnesty added a single job to the US economy".

It is also true that in most cases, this extra cash is being parked offshore. This means in effect that this cash is taken out of circulation altogether.

Drum (2014) pointed out that corporations had been increasing their cash holding about 15 percent per year since 2008. In 2013 corporate cash increased another 12

percent. In his view, American corporations are holding something like \$7.9 trillion in liquid assets. Ever since the Great Financial Crisis to 2014 both cash holding and profits were rising “without a correspondingly dramatic increase in capital expenditure” (Drum, 2014). On the other hand, owing to extra low interest rates, debt is increasing too and this is despite the fact that cash overseas is piling up because companies do not wish to repatriate it and pay taxes that would be due.

Philips et.al (2016, 2) reveal that if all the 298 Fortune 500 companies with offshore earnings, repatriate their cash hoarding overseas to the US at once, “ they would collectively owe \$717.8 billion in additional federal taxes”. In the same study, (op. cit. p.7) it is further pointed out that “the practice of shifting corporate income to tax haven subsidiaries reduces federal revenue by an estimated \$100 billion annually”. It has already been stated that other estimates give this loss at a higher level. It is conceivable that one important factor causing the growth of global debt- discussed earlier- is the erosion of tax base in most capitalist economies. It is to be noted, that the growth of debt seems to be more serious in the emerging market economies. McKinsey Global Institute (2015, 15) points out that while the debt of advanced capitalist economies accounted for 33 percent of the increase, developing countries’ debt accounted for 50 percent of the rise. China’s debt has quadrupled since 2007 and is now more than \$28 trillion, accounting for 37 percent of growth in global debt. It is worrying that debt increase happened in all sectors of the economy. The following table shows this situation.

Table 1: Global debt in \$trillion

	Q4 2000	Q4 2007	Q2 2014
Household	19	33	40
Corporate	26	38	56
Government	22	33	58
Financial	20	37	45
Total	87	142	199
% of GDP	246	269	286

Source: McKinsey Global Institute, 2015, p. 1

If we look a little closer at the changes since the end of 2007, total debt increased by 40 percent, whereas, the debt of government had the highest percentage growth, 76 percent and the household and financial institutions had the lowest growth, i.e. 21 percent.

In their study of a sample of 47 countries, McKinsey Global Institute (op.cit.) found that only 5 developing countries have reduced the ratio of debt to GDP, 14 countries have increased this ratio by more than 50 percent. It is to be noted here that in addition to hoarding which has a depressing impact on the levels of economic activities, high levels of debt lead to a vicious cycle of falling consumption and employment, causing and prolonging long and deep deflation. Baker (2014) suggested that untaxed profits held overseas by major US corporations in 2013 totalled \$2.1 trillion, and that is twice as much as they had stashed in 2008. In short, profits that are not recycled through the economy through investment, research and development or by giving workers wage rises, slows the economy as a whole.

As we have already mentioned, the accounting techniques used to limit taxes on profits and income shifts the tax burdens onto others, slowing down the economy in other ways too. It is to be noted that for every \$ of cash they held in 1994, they now held \$2.30 and one of the reasons for such growth may be lack of confidence in the economy as a whole (Baker, 2014). It seems to us that the growth of hoarding may in fact be an indication of more serious structural problem that we have in the global economy and little, if anything has been done to address these problems.

7. Inequality and Hoarding

For money to remain 'idle', i.e. being hoarded, the owners of money much have good enough reasons. On top of the list, I may mention the growing inequality of income and wealth, which by all accounts have widened since the Great Financial Crisis of 2008 (Seyf, 2017). The issue may be simpler than it appears at first. Given this sharp rise in inequality, there is not enough aggregate demand that warrants

expanding business operations. Holding too much cash is clearly slowing down economic growth but itself, in my view, is caused by the shortage of attractive opportunities for investment, which in turn is related to pessimism among the investors about profit rates.

One way that this problem may be tackled is by giving workers a pay rise that is sufficient enough to create this extra demand, hence, acting as a powerful motive for investment. Oak (2012) while confirming that American Corporations have nearly \$2 trillion in untaxed profits overseas points out that at least 60 percent of their cash is held overseas. He provides the following information which shows that tax burdens on corporations could not be a real issue.

Table 2: Tax distribution in the US

Year	Corporate Tax	Individual tax	Payroll Tax
1952	32.1%	42.2%	9.7%
2012	8.9%	41.5%	40%

Source: Oak (2012)

As can be seen above, while the corporation tax seems to have declined significantly, individual tax remained more or less the same and payroll tax jumped from 9.7% to 40%. It seems that corporations are using other measures to avoid tax payment. Phillips et. al. (2016, 2) state that Fortune 500 companies are holding nearly \$2.5 trillion profits offshore “for tax purposes”. By the end of 2015, Apple, for instance, booked \$214.9 billion offshore, if these profits were not ‘officially’ held offshore Apple had to pay \$65.4 billion in taxes, Citigroup, reports officially \$45.2 billion offshore for tax reasons, on which it would owe \$12.7 billion in taxes (ibid. 2).

The case of Pfizer is more interesting. Robins and Surke (2016, 7) point out that the world largest drug maker “paid nothing overall in US income taxes between 2010 and 2015 because the company reported losses in the US in those years while earning \$78 billion worldwide”. By the end of 2015, the company parked \$193.6 billion offshore. Woo and Smith (2015, 7), however, revealed that despite massive

global profits, and the fact that 40 percent of Pfizer's sale is in the US, the company showed a loss in the country and "received more than \$2 billion in federal tax refunds". The irony of the situation is that as we have seen above, Pfizer paid not a single cent taxes for the period between 2010 and 2015, so hence, what has been "refunded" remains a mystery!

As it can be seen it is sales that enables big corporations to park cash offshore, and further, it is mainly the use/ abuse of international corporate tax codes, assisted by transfer pricing that complete the picture. How do corporations shift cash overseas? When a corporation sells or licenses the foreign right to intangible assets developed in the US to its subsidiary in a low tax country, for instance, a US parent company licenses the economic rights of its intellectual property to a subsidiary in Bermuda.

Any profits made will be thus shifted to Bermuda. Subsidiary has to pay a fee to the parent company and this could be set at any level. This is, of course, taxable. Foreign subsidiaries can give short loans to parent company without having to pay any taxes. So long as tax time window is respected, nothing happens. The international corporation tax code gives a permanent tax break to corporations if they invest their offshore profits in foreign countries.

Nevertheless, of the funds declared permanently reinvested offshore, Rubin (2014) found that 46 percent of it was sitting in US bank accounts, buying up stocks in other US companies or US treasuries. Sheppard (2013) provides further details on how this type of activities are organised. In her view, all these activities of trying to park profits offshore are a big part of 'tax avoidance' and discusses Apple, in some details. Sheppard (op. cit.) suggests "Apple, a consumer products company that sells beautifully designed gadgets, pays very little tax anywhere in the world, including the United States". It seems as if Apple somehow figured out how to legally avoid paying any corporate income tax on its \$ 30 billion of overseas profits. Apple has an Irish holding company with no operations or employees at the top of its foreign operations. What is interesting about this holding company, it does not claim tax residence anywhere, hence, 'has not paid tax for five years" (Sheppard, 2013).

Robins and Surka (2016, 2) revisit the same issue and declare that “Apple has structured two Irish subsidiaries to be tax residents of neither the United States—where they are managed and controlled—nor Ireland, where they are incorporated. This arrangement ensures that they pay no tax to any government on the lion’s share of their offshore profits.” In Sheppard (op. cit.), there are more details about the tax evasion operation, which should not concern us here, but the fact remains that this practice is widely used and its financial implications must be enormous for public finance in countries affected by this practice.

Sanchez and Yurdagul (2013) focused on taxes as the main factor encouraging corporations to park their surplus offshore. One issue in their view is the repatriation tax and the other concerns the uncertainty about future taxes. Oak (2009), however, believes that tax could not be the main factor, as in 2004, when a tax holiday was offered by the US government, US multinationals paid \$16 billion of US tax on \$700 billion of foreign active earnings, giving an effective US tax rate of about 2.3 percent which is too low to be detrimental. In 2009, it was revealed that 83 out of 100 largest US multinationals had subsidiaries in tax heavens. As of 2015, 367 Fortune 500 companies disclosed as having subsidiaries in offshore tax havens and Phillips et.al. (2016, 8) believe these companies maintain at least 10366 tax haven subsidiaries.

In the Cayman Islands one address, Uglund house, alone houses 18857 corporations, very few of which have a physical presence in these islands. To get some idea of the scale of tax avoidance, it is on record that nearly one third of all foreign profits reported by US corporations in 2003 came from just three small low tax countries, Bermuda, Netherlands, and Ireland. In 2008, Congressional Research Service found that the US corporations collectively reported 43 percent of their foreign earnings in five small tax havens (Quoted by, Phillips, et. Al. 2016, 6). By 2012, IRS reported that 59 percent of foreign earnings were “earned” in 10 notorious tax havens (quoted *ibid.* p.6).

The question that begs an answer is simple. As we have seen corporate profits are high, and stock market is booming, then why corporate profitability is not translating into widespread economic prosperity? Lazonick (2014) provides a partial answer and points out that 449 companies in the S&P 500 index used 54 percent of their earnings during 2003-2012- a total of \$2.4 trillion – to buy back their own stock. Dividends absorbed an additional 37 percent of their earnings and that left very little, 9 percent, for investments in productive capabilities or higher income for employees. We also know that too many companies have cut capital expenditure and even increased debt to boost dividends and increase share buybacks. The following table shows this situation in a number of well-known US big corporations.

Table 3: Buybacks in the US (\$ billion)

Company	Net income	Repurchase	Dividends	Total	% of net income
Microsoft	148	114	71	185	125
IBM	117	107	23	130	111
Cisco System	64	75	2	77	121
Procter & Gamble	93	66	42	108	116
HP	41	64	9	73	177
Intel	79	60	27	87	109
Pfizer	84	59	63	122	146

Source: Lazonick, 2014

All these corporations spent more than their net income on these two components, i.e. repurchase and dividends. Why are they doing this? A simple answer in my view is the fact that stock-based instruments make up the majority of the managers' pay, and in the short term buybacks drive up stock prices. In 2012 the 500 highest paid executives in the US received on average \$30.3 million each annually, 42 percent of their compensation came from stock option and 41 percent from stock awards. It also appears that there might have been a change in the management direction of these companies.

From the end of the Second World War until the late 1970s it appears that the 'retain and reinvest' approach to resource allocation prevailed at major US corporations. The end result of this approach was higher income for workers, greater job security hence sustainable prosperity for most people. Then came a different approach, i.e. the 'downsize and distribute' regime in resource allocation. This may have been brought about by greater competition that resulted from globalisation.

What happened next, intensified by globalisation, was every attempt was made to reduce costs and any freed up cash was used to repurchase shares or to pay to shareholders. Overall it seems that a process of value creation was replaced by a process of value extraction. The end result is employment instability and growing income and wealth inequality. As a matter of fact, trillions of dollars that could have been spent on innovation and job creation in the world economy over the past three decades have instead been used to buy back shares for what is effectively stock price manipulation.

Apart from personal greed, Wall Street was in the act too, putting pressure on decision makers to maximise returns to shareholders. This in turn led to an attempt to align the interests of management and shareholders by making stock-based pay a much bigger component of executive compensation. As a matter of fact, the main objective of firm has become to maximize shareholders value and combined with this, the Wall Street's expectation for ever higher quarterly earnings per share. This in turn added to the impetus of stock repurchase becoming top in the list of corporation's aims and objectives.

The end result is the market would become not only inefficient but misleading as the stock prices are actually managed and manipulated by these activities. Buybacks often come at the expense of investment in productive capabilities and other projects for the enhancement of firm's specific advantages. Hence, while attractive in the short term, these buybacks are not certainly efficient for the long term interests of shareholders.

This said, however, cash hoarding has a longer history. Sanchez and Yurdagul, (2013, 5) briefly describe this background. From 1980 cash holding by multinationals was growing at 7 percent per year between 1980 and 1995, and then the annual growth rate went up to 10 percent between 1995 and 2010. In the years immediately before the Great Financial Crisis, the rate of annual growth went up further to 19 percent between 2002 and 2004. After the crisis, between 2008 and 2011 the rate of annual growth was 11 percent. While for the post crisis period, one could blame the recession and the shortage of attractive investment opportunities as the contributing factor for the cash hoarding; this is unlikely to explain this behaviour that has been with us for a longer time period.

In the 1990s the ratio of cash holding to assets was consistently less than 6 percent but in the post-1995, this ratio increased to 12 percent. It is generally believed that R&D intensive companies tend to have higher cash to asset ratio. The reason given is a kind of internal insurance against inherent uncertainty associated with research activities (ibid. p. 7). Oak (2014), however, on the other hand claims that much of the R&D activities is being outsourced too and he specifically singles out IT technology and pharmaceutical firms which are at the forefront of outsourcing.

These companies transfer patents, copyrights or trademarks to foreign subsidiaries and realise the profits accruing to them in lower tax jurisdictions. In short, it seems as if the main motive is linked with taxes rather than greater risk that may be involved in research activities. Keightley (2013) seems to confirm this view. In his view, American companies can use tax deferral and other techniques to avoid or delay taxes by moving profits out of high-tax countries (or out of the U.S.) and into low-tax countries with little corresponding change in business operations, a practice known as 'profit shifting'. Furthermore, the ability to defer taxes on income earned abroad allows American companies to reinvest earnings in foreign markets and expand business operations alongside foreign counterparts.

As we have seen in previous pages, all the available evidence seems to show that profit shifting has generally tended upward overtime.

American companies are shifting profits in an attempt to reduce their tax liabilities and as a result, it is clear that U.S. tax revenues suffer as a result, as discussed earlier. For example, Clausing (2009, 2011) has estimated that profit shifting by American companies cost the government between \$57 billion and \$90 billion in lost revenue in 2008.

Employing a different approach, Christian and Schultz (2005) have estimated that in a single year, 2001, net \$87 billion was shifted out of the U.S. which, at a 35% tax rate would imply a revenue loss of about \$30 billion. Recent data give a higher estimate of the lost revenue. Whatever the real extent of the revenue loss, the fact that US tax authorities are negatively affected by shifting profits is not in doubt. The practice of profit shifting is confirmed when two groups of countries are compared. The first group consists of the five countries commonly identified as being 'tax preferred' or 'tax haven' countries, and includes Bermuda, Ireland, Luxembourg, the Netherlands, and Switzerland.

The second group, which provides a baseline for comparison, consists of the five more traditional economies. This group includes Australia, Canada, Germany, Mexico, and the United Kingdom.

The share of overseas profits reported in tax preferred countries has fluctuated around 40% since 2002 after increasing from a low of 24% in 2000. In 2008, American corporations reported 43% of their overseas profits in the first group of countries.

In comparison, in the same year, i.e. 2008, American corporations reported 14% of all profits earned abroad in Australia, Canada, Germany, Mexico and the United Kingdom. While employment and investment have fallen over time in the traditional economy group, they have remained nearly constant in the tax preferred group at

around 4% and 7%, respectively. It is interesting to note that despite the stability of employment and investment in these countries, reported profits have increased roughly 60 percent in the tax heaven countries over the same period. Undoubtedly such a massive increase in reported profits without a similar increase in employment or investment is an indication of profit shifting into tax heaven countries.

It should be noted that profits reported in the five traditional county group of economies have decreased approximately 60% over the sample period.

In 2008, for example, American companies hired 40% of their foreign labour, and made 34% of their foreign investments in the traditional countries. In comparison, 4% of the workers hired outside the U.S. by American companies and 7% of the investments made abroad were in the first group, i.e. tax heaven countries.

American companies began curtailing employment and investment in the traditional group's economies in the early 2000s. Given this trend, it is expected that the level of economic activities and profits would be affected. But this decline will not explain all the changes that have been taking place.

For instance, we know that in 2003, American companies were reporting profits of \$158 per employee in tax heaven countries for every \$1 in profit per employee they were reporting in the traditional economies. Five years later, reported profits in tax heaven countries is slightly down, but still the figure is quite impressive. In 2008, the US corporations in the tax heaven group were reporting \$142 per employee for every \$1 per employee in the traditional economies. There is further evidence showing profit shifting. For instance in 2005, American firms reported \$64 of profit per investment dollar in tax heaven countries for every \$1 of profit per investment dollar that they reported in the traditional economies. The final factor that might be of interest is the ratio of reported profits to the GDP of the host countries. In the traditional group of countries, this ratio has been between 1 percent and 2 percent and has been relatively stable since 1999.

In the case of tax heaven countries, this ratio has been constantly rising, reaching 33 percent in 2008. This ratio was 27 percent in 1999. This is the average, and the

situation in individual country shows further developments among the tax haven countries themselves. For example, in Bermuda, profits reported by U.S. corporations' affiliates have increased from 260% of GDP in 1999 to over 1000% of GDP in 2008. In Luxembourg, the US corporations' profits went from 19% of GDP in 1999 to 208% of GDP in 2008 (for further details see, Keightley 2013). That is to say, American companies are now reporting more business profits in Bermuda and Luxembourg than the reported value of all goods and service these two countries produce in a year.

To see how serious the implication may be let us point out American based companies reported earning \$938 billion profits overseas in 2008. US authorities cannot tax this until it is repatriated. Pinkowitz, et. al. (2013) while supporting the impact of taxes on offshore cash holding introduces two additional factors in their assessment. Companies may fear another Lehman-like credit crisis, hence trying to hold more cash for that rainy day. The second factor in their view is weak demand which translates into poor investment opportunities.

Bates, et.al.(2006) point out that the cash to assets ratio for US industrial firms was consistently rising after 1980; in fact by 2004, this ratio increased by 129 percent. At the same time, they observed that the following factors tended to impact cash holding negatively.

- Improvement in financial technology tends to reduce the need for cash holding and hence, would depress the ratio.
- Firms can hedge more effectively as more types of derivatives become available. As a result of this factor precautionary demand should fall.
- Given the massive improvement in information technology and forecasting, companies should be better able to forecast their cash needs.

Despite these developments that should have reduced corporations' desire to hold more cash, the actual trend seems to be moving in a different direction. It is my view that there must be stronger factors, for instance the Great Recession, at work contributing to greater cash hoarding by corporations. For the time being, let me

briefly look at some additional factors that may play a role in this process. Another misguided policy which is helping this process of generating this surplus cash, as well as influencing where to park them, is the US administration of corporate taxation.

Available data reveals that American corporations are reporting record profits, but inter alia, this record profit is not reflected in higher investment in new facilities, hence the phrase 'jobless recovery', which is being used frequently. It is true that part of the reason may be that rising income and wealth inequality is contributing to a sense of pessimism among investors but there are other factors at work too. It is also well known that biggest companies are putting a big chunk of their profits into the corporate equivalent of a mattress. That is to say, that as discussed above hoarding by corporations has increased. The rising of hoarding will hold back economic recovery and growth. If profits are not recycled through the economy the economy's engine would sputter.

This is a summary of different channels that this would work.

- Profits are not invested in new plant and equipment.
- Profits are not invested in research and development.
- Profits are not paid as higher wages- to workers- or in some cases, as higher dividends to shareholders.

It is further argued that among these channels, the weakest link is probably the payment of dividends. That is that even if payments of dividends are restored, this would still not have serious impact on aggregate demand for reasons of low propensity to consume among the richest groups in the economy.

The accounting techniques that multinational firms use to siphon profits out of the US, delay their taxes for as long as they wish, shifting tax burdens to everyone else in the country. This in turn would hold back economic recovery and growth. In another twist, cash siphoned out could not be used to expand productive activities in the US, such as new equipment, but Congress in a strange move does

permit the money to be used to buy federal debt. It is estimated that American multinationals held almost \$7.9 trillion of liquid assets, hoarding worldwide. The average tax payer gets a raw deal as this will reduce the taxes that big corporations pay but Congress spends the money anyway. Multinationals then loan Washington the money they did not pay in taxes, and collect interest. Examining this further will go beyond the scope of this paper.

In my view, however, there are two main factors that encourage firms to hold more cash. While I will not deny the importance of taxes on repatriated profits, I would argue that these two factors are by far the most significant factors leading to this unwarranted situation that we witness.

- The rate of profit- not total profits - has been declining.
- Growing inequality of income and wealth continues to depress aggregate demand, hence, adding to companies' pessimism about the future.

Falling profit rate and pessimism about future demand are a lethal combination leading to greater hoarding by firms, hence, contributing to the maintain the very low economic growth that we witness in most economies.

8. Summary and Conclusions

Having provided some evidence on the scale of hoarding by multinational corporations, we have briefly looked at investment trends as well. On the face of it, tax evasion seems to be a powerful incentive for Multinational Corporation to park their surplus offshore in order to avoid paying taxes. While this may explain parking the surplus offshore, but it does not help us to understand why investment is down. However, the gap between the actual rates of corporation taxes as compared with the nominal tax rate is so vast that, in my view, it would undermine the validity of this hypothesis (Gardner, et.al. 2017). A stronger explanation of excessive hoarding is in fact the depth of the Great Recession which is adding to the propensity to hoard by the capitalists. At the same time, it has also been argued that excessive hoarding itself is contributing to the depth of the Great Recession.

To deal with this situation, we recommend following measures:

- A serious re-examination of international tax system is required to close so many tax loopholes that are being abused.
- Progressive taxation should be brought back.
- There has to be specific policies to tackle the rising inequality of income and wealth so that there would be sustainable and growing aggregate demand.
- In order to combat misallocation of surplus, I suggest a penalty tax on excessive pools of cash irrespective of its geographical location. A similar policy as practiced in the USA- excluding cash that is parked offshore- has clearly failed to achieve its objectives.
- As a further incentive, I recommend tax forgiveness on the basis of the number of jobs created by multinational corporations who bring their hoarded cash for the purpose of investment in the economy. The number of jobs created would be the basis for giving tax forgiveness, rather than the act of just bringing the cash in, irrespective how that surplus cash is being utilised.

In the absence of these measures a vicious circle of deflation would set in, that is, absence of investment opportunities encourages more hoarding and more hoarding would in turn intensify the forces creating further deflation.

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