

**Title of the paper :** A STUDY ON THE EFFECT OF ZOMBIE FIRMS ON ADVANCED ECONOMIES

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### Abstract

Zombie firms have recently attracted increasing attention in both academics and in the circle of the policy makers all over the world, especially in the advanced countries. There is a reason behind this increased attention. Zombies refer to those companies which can not earn enough profits and do not have the required cash to continue their operations with smooth payment of their debt capitals. As a result, the unproductive assets of the lending institutions, especially banks, increases. Also the rate of growth of GDP (Gross Domestic Product) of a country falls. But still it is found that many banks and financial institutions are eager to rollover the debt with these types of firms. In this paper we will try to find out what are the factors which make a firm a zombie firm and what are the easy way-outs for them to become a normal firm or whether it is at all possible for them to leave the tag of zombie behind them.

**Key words :** Zombie firms, Banks, lending institutions, debt capital, cheap credit, Debt servicing, GDP, Profitability, PBR (Price to Book ratio), Debt Service Coverage Ratio (DSCR)

**Introduction**

Zombie firms, all over the world, especially in advanced economies have recently attracted increasing attention in both academics and in the circle of the policy makers. The reason for this attraction is not for any positive or vibrant contribution to the economy but for the highly negative effects on the economies of advanced countries or on world economy as a whole. Now, let us know, what a zombie firm is?

Zombie firms refer to those companies which cannot earn enough profits and do not have the required cash to continue their operations with smooth payment of their debt capitals. But this statement basically does not give a clear picture of the real characteristics of these types of firms. Let us be little elaborative about the concept. Such companies somehow manage to maintain their operations by meeting their various overhead expenses such as payment of rent, salaries, other indirect expenses and only the interest portion which accrues on the total debt capital. Since these firms only pay interest on the debt but do not repay the principal amount on a regular basis, they cannot bargain for a cheap credit for any of their further projects because of their inability to bring down their total debt exposure. So it can be said that zombie firms often fall into debt trap. No bank or finance companies are ready to give them further exposure.

Zombies neither generate surplus cash to fund an expansion project nor they are able to create reserves for the business or able to build capital. They always remain highly leveraged with zero repayments of debt and as a result the companies invite liquidation or declaration of bankruptcy.

In this paper we will try to find out what are the factors which make a firm a zombie firm and what are the easy way-outs for them to become a normal firm or is it at all possible for them to leave the tag of zombie behind them.

**Reasons for converting into a zombie firm from a well run normal firm**

Let us consider few big names in the corporate world of USA. Exxon Mobil Corporation, Boeing Company Delta Airlines Inc. etc. As per a review of Bank of International Settlements (BIS), the

companies like Exxon, Boeing and Delta are being labeled zombies because they are currently unprofitable and have taken considerable fresh debt to support extreme downturns in their businesses. At the same time, all these three big-shot firms are expected to return to profitability or at least break even in 2021. The economic downturn and subsequent government stimulus measures in 2020 has led some analysts to use the phrase ‘zombie companies’ to describe companies that would not be surviving without financial support from the government. It is partially true because only the bail-out measures of the Government may not help them to return to normalcy. The basic reason behind the conversion of normal firms to zombie firms are nothing but the extreme failure of debt management as a result of which the Debt-Service Coverage ratio falls way below the minimum expected ratio to maintain normalcy. That is why they need constant support from bank especially to meet up their Working Capital Needs. The working capital facilities, such as overdraft or bill discounting, enable them to keep the operations running. In such cases the banks are also helpless. Because if the banks do not want to give further exposure to these firms, they will not be able to continue their day to day operations which will surely push them towards insolvency. Now, it is well understood that it creates a vicious cycle where banks have to extend financial support to these firms to maintain a ray of hope of getting back their lump-sum principal amount which they lent.

We can say that the increase of zombie firms in terms of number have started since late 1980s as observed by Banerjee and Hoffman (2018). But it is not a stray incident, rather it is a gradual improvement side by side the economic downturn worldwide. Basically these less productive firms eat up precious investible capital of more productive firms. Moreover as discussed in the previous paragraph that why the banks cannot avoid further exposure to these firms. As a result imbalance is created in the field of lending portfolio of the banks. But banks were also responsible for the development of such zombies. Previous studies have highlighted the role of the weak banks that rolled over loans to non-viable firms rather than writing them off ( Storz et al (2017), Schivardi et al (2017)). This helped the zombies to exist under ventilation or life support. They further got the breathing space because of drop in interest rate since late 1980s because financial pressure on these zombies were reduced which made them reluctant to go for financial restructure and even with these policies they maintained their sustenance in this competitive business world.

Previous studies have also shown that the zombie firms are less productive (Caballero et al (2008), Adalet McGowan et al (2017)) which causes the adverse effect on the aggregate productivity of an economy. Survival of zombies essentially crowd out investment in and employment in more productive firms.

Lack of profitability over a fairly long period is obviously an important criterion which compels the firms to service their debt properly. The Debt-Service Coverage Ratio is extremely poor for these firms. Moreover a firm is identified as zombie if the Interest Coverage Ratio (ICR) of the firm is less than one for at least three consecutive years and if it is atleast 10 years old (Adalet McGowan et al (2017)). If this is the prime reason for a firm to become zombie, there is obviously a second reason also i.e age of the firms which states that young companies may need more time for investment projects to deliver returns. Finally, low expected profitability is also important. Presently profitability might be low because of a corporate restructuring or new investment that might eventually increase profitability.

Banerjee and Hoffman (2018) have shown in their studies that zombies must have comparatively low expected future growth potential. Specifically zombies are required to have a ratio of their assets' market value to their replacement cost that is below the median within their sector in any given year. But a significant observation of Banerjee and Hoffman (2018) is that the probability of a zombie remaining a zombie has increased significantly from 60% in the late 1980s to 85% in 2016. Now a pertinent question arises in this respect. How can corporate zombies survive for longer than in the past? Probably they seem to face less pressure to reduce debt and cut back their activities. It was observed that the main change does not coincide with worldwide financial crisis but took place in early 2000s. Basically the process of deleveraging slowed down heavily which is evident from the fact that zombies cut down their debt at a rate of just under 2% of total assets in a year relative to non-zombie firms. But actually, this rate should have been higher i.e 3%,4% anything. From after the year 2000 as deleveraging had slowed down, zombies significantly slowed down their asset disposals relative to the more profitable non-zombies. But the reduced pressure on zombies does not reflect a relative improvement in their profitability. There was no significant increase in zombies' EBIT i.e Earning Before Interest and Tax relative to total assets compared to non-zombies.

Few factors have been identified by the scholars, among which the weak banks were identified as potential key cause (Caballero et al (2008)). Because of the weak balance sheet, banks used to prefer to roll over loans to non-viable firms rather than writing them off. Formal evidence suggests that weak banks really played a significant role in the wake of the Great Financial Crisis (Storz et al (2017), Schivardi et al (2017)). It was fuelled by the poorly designed corporate restructuring (Andrews and Petroulakis (2017)). Another important factor was lower interest rate. Mechanically, lower rates help zombie firms as they improve ICRs by reducing interest expenses, all other things remaining equal. Banks and other lending institutions also expects recovery of principal component of debt capital from zombies which in turn encourages banks and other lending institutions to extend further loan to zombies with the expectation of recovery of their financial position by making fresh investment in profitable projects (if any). But usual inspection suggests that the share of zombie firms is negatively correlated with both the health of the bank and interest rates. But by contrast, there is a closer correlation between the rising zombie share and the fall in nominal interest rates. A higher share of zombie firms could reduce the productivity growth which in turn could reduce interest rate levels in the long run. There was a study taking 48 industries under consideration and it was found that the firms under those industries are more sensitive to financial pressure and the effect of weaker bank health or lower interest rates is stronger in those industries since they are more dependent on external funding.

Previous studies have found that zombie companies may weaken economic performance (Caballero et al (2008), Adalet McGowan et al (2017)). Zombies are less productive and may curtail the growth of more productive firms by locking resources (so called “congestion effects”). Specifically they depress the prices of those firms’ products and raise their wages as well as their funding costs by competing for resources. It was further observed that on an average, the labour productivity and total factor productivity of zombies are lower than those of their peers.

Another important point is very much pertinent in this respect. A question arises obviously that whether a firm is receiving “subsidized” credit. Caballero et al (2008) and Acharya et al (2018) identify zombie firms as companies that received subsidized credit at rates below those for the most creditworthy companies. This identification has three potential drawbacks. First, identifying such credit with precision is difficult. Secondly, banks may grant subsidized credit for other reasons such as long standing relationship. Finally when interest rates are very low for

a long time, subsidized lending rates would have to be near zero or negative. So, whether it is subsidized credit or not, main point of concern is repayment of existing loan or rollover. The decision depends on how the expected repayment from a loan compares with its liquidation value, which is nothing but its collateral value. So, for given collateral values, higher discounted repayments can induce more banks to rollover a larger part of their bad loans, in particular in crisis times when the market for collateral can be depressed and illiquid. Actually, there is a benefit for zombies in this rollover factor. Zombies need constant funding from banks for their working capital needs. The working capital facilities such as overdraft or bill discounting help the zombies to keep their operations running. Zombies carry a high risk, and listed zombie companies are known as zombie stocks. In certain cases, a zombie company ends up employing a huge number of people and build assets that may be too big to fail. The government makes an effort to bail out such zombies. Due to the risky nature and method of operations, zombie company stocks are riskier investments and their stock prices trade in a narrow range. Zombies are the result of ineffective government policies, asset price bubbles and high liquidity in markets. Economists believe that zombies eat into the success of good companies and deserve to perish despite their high job creation and other metrics.

### **Conclusions**

Zombie companies are responsible for stressing out resources, inflate asset prices and are also responsible for generation of bad loans in many lending institutions. Zombies are financially a burden on the economy of a country burning out capital. Zombie stocks carry high risk and are unpredictable in nature. Investors are less likely to receive any reward by investing in zombie stocks. Therefore only way to help a zombie firm to shrug off their zombie tag is Government intervention, financial support for bail out and rollover the subsidized credit by banks and lending institutions. So Government has a big role to play. But, side by side it must be ensured that the zombies will give enough positive efforts to improve their situation. Generally, the zombies are extremely reluctant to reduce the burden of principal portion of loan and they are pretty happy by paying just the interest amount. But this nature of zombies must be changed. Otherwise none of the efforts will be enough for helping them to leave the tag of zombie behind them.

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