The Decoupling of Debt from Productivity

(Unproductive Debt and the Impairment of the Real Economy)

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ABSTRACT

Unproductive debt and a broken banking system are identified as the main reasons why the real economies of developed countries are experiencing financial crises. It highlights concentration of money and power and largely unregulated financial markets as the main drivers impeding the efficient allocation of economic resources into productive uses. The pursuit of return without risk inevitably leads to the transfer of wealth through a failing banking system which collaborates with hedge funds and global wealth management groups who seek low risk and high returns for the benefit of their wealthy clients. It is argued that conditions conducive to economic development hardly exist in highly indebted countries and that wasteful finance inevitably brings about financial crises and recessions. The promise of a return without risk leads financial intermediaries to direct funding towards the capture of existing assets rather than being invested back in the real economy to create new wealth.

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JEL Classification: D61, G17, G21, G32, G33, H43

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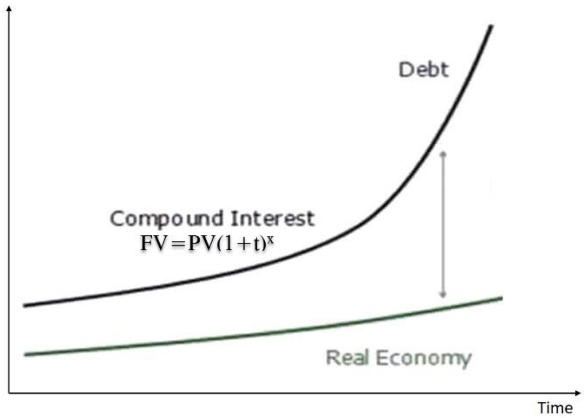
Debt and the impairment of the real economy

Debt is often portrayed as the instrument that powers the economy and maintains economic growth. What is not widely understood is that without the expansion of the money supply through debt it would not be possible to pay the interest accrued. Therefore, if one starts out from the premise that all debt and interest must be repaid, there is really no choice but to continue pumping more debt into the economy. Strange as it may sound, in conditions of excessive debt, more debt is what provides the funding necessary to pay the accrued interest. However, the more lending that is injected into the economy the greater the need for the existence of potentially viable investments so as to generate value added and result in real economic growth. Accordingly, the crucial question is really how can this exponentially growing debt, and the equity that accompanies it, be channelled towards productive capital investments? The short answer is that it is not possible. Real growth in developed countries, even under normal circumstances (where the economic agents are not heavily indebted), can at best only grow on an approximately linear path (see Figure 1). The gap creates bubbles and financial crises with the lingering debt hampering the recovery of the real economy.

Figure 1 - Debt grows exponentially



Moreover, as it is argued, this explosive and out-of-control growth of debt ends up being directed increasingly towards wasteful spending and into wealth extraction activities that benefit the few rather than in creating new wealth for society at large. This is why economies across the globe today are expected to be slowly sliding towards economic recession.

The uncontrolled growth of world debt

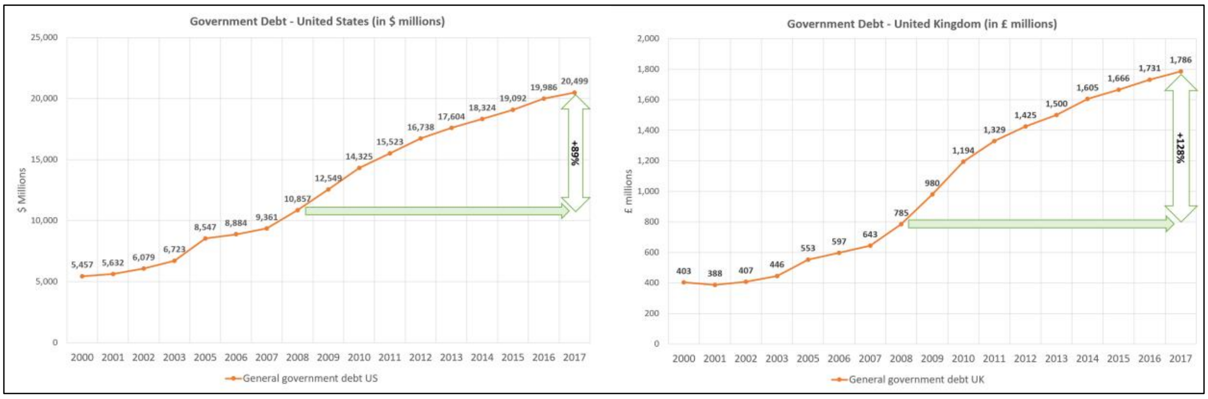
A rather worrying observation is that debt has continued to grow since the financial crisis of 2008. As pointed out in a McKinsey Global Institute (MGI) report (2015)[1], from 2007 to 2014 global debt had grown by $57 trillion, raising the ratio of debt to GDP by 17 percentage points. It is also pointed out that “no major economy has decreased its debt-to-GDP ratio since 2007”.

The analysis further highlights the ominously huge increase in Government debt which in 2014 was growing at a compound annual rate of 9.3%. And this does not include the “invisible” unfunded debt (such as pensions and social insurance contributions). According to Kotlikoff (2013), the US is facing over $200 trillion in unfunded liabilities which is about nine times higher than the official Government debt. Unfunded government debt is not only shockingly high but also alarming as Governments will have to resort to taxing the people in order to be able to repay what they “borrowed” from them in the first place. The steep increase in Government debt is illustrated typically in the cases of the United States and the United Kingdom in Figure 2, where Government debt has about doubled since the 2008 financial crisis

[1] Dobbs, Lund, Woetzel and Mutafchieva (2015)

(increased by 89% and 128% respectively). Moreover, if one compares the level of government debt in 2017 to what it was in the year 2000 the increase is closer to 400% (increased by 376% and 443% for the US and UK respectively).

Figure 2 - Increase in Government Debt (USA and UK) 2000-2017

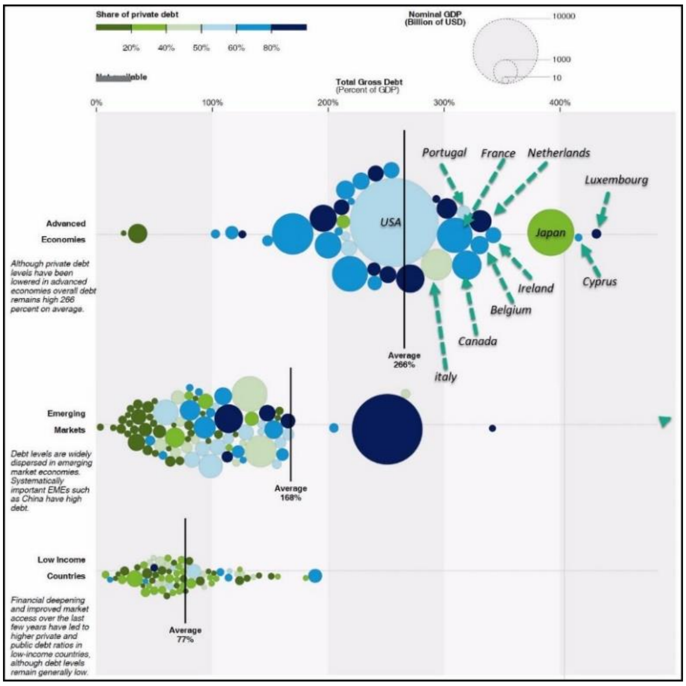


Source: Mbaye, Badia and K. Chae (2018). "Global Debt Database: Methodology and Sources" IMF

In a more recent report, the International Monetary Fund (IMF) reports that global debt has reached an all-time high of "$184 trillion in nominal terms or the equivalent of 225 percent of GDP in 2017". It is further remarked that "on average, the world's debt now exceeds $86,000 in per capita terms, which is more than 2½ times the average income per-capita".

It is also noted that private sector debt has tripled since 1950 which makes it the driving force behind global debt. Another important finding is that of the $184 trillion in total global debt at the end of 2017, close to two-thirds was private debt and the remainder public debt. As is illustrated in Figure 3[2], another finding of the IMF research is that the most indebted economies in the world are also the richer ones.

Figure 3 - Debt around the world



Source: Global Source Databases (IMF).

(Note: Each circle represents a country sized by the nominal GDP. Names of countries entered by author).

[2] Mbaye and Badia (2019)

The most staggering and frightening deduction from these gargantuan levels of debt is that the proportion of debt to GDP in advanced economies is fast reaching the point that would be considered not repayable (on average at 266% in 2017). For some countries such as Cyprus and Japan total debt is over 400% of GDP. As illustrated in the IMF report (Figure 3), many countries show a Gross Debt of over 300% of GDP. The list includes, among others, France, Italy, Ireland, Portugal, Netherlands and Belgium. Even more disturbing is the fact that this represents 2½ times the average per capita income.

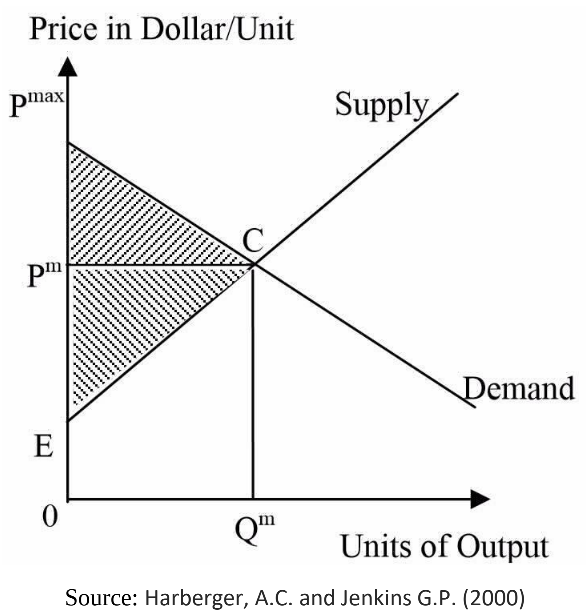
Such a huge debt is impairing and derailing the real economy as it ends up being increasingly invested in speculative financial and unproductive assets. The consequence is that excessive debt, if left untreated, will choke up the real economy and accommodate in a vicious circle of mounting non-performing debt and a dysfunctional banking and financial system the transfer of existing assets from low earners and the public at large to high wealth individuals and financial intermediaries.

Unproductive debt

A productive investment is defined as one where it is *adding to the net wealth of the economy*. The methodology adopted for defining a productive investment is one by which the economic benefits and costs of projects are evaluated on the three postulates of applied welfare economics as summarized by Arnold Harberger[3]. These postulates in turn are based on a number of fundamental concepts of welfare economics as quoted by Harberger (1987):

"i) The competitive demand price for an incremental unit of a good or service measures its economic value to the demander and hence its economic benefit. ii) The competitive supply price for an incremental unit of a good or service measures its economic resource cost. iii) Costs and benefits are added up without regard to who the gainers and losers are."

Figure 4 - Total economic benefits and costs



Source: Harberger, A.C. and Jenkins G.P. (2000)

As illustrated in Figure 4, which shows the demand and supply curves for the project's market the economic costs and benefits are added to determine the net gain or loss. The benefits are represented by the area $OP^{max}CQm$ and the costs are given by the area $OECQ^{m}$. This results in

[3] Harberger (1987)

a net economic benefit given by the triangle $EP^{max}C$. As noted, "*it is clear from this analysis that the industry is adding to the net wealth of the economy*[4]"

Unproductive debt is the main reason why economies in the 21st century are failing. Lending on the basis of collateral rather than on a proper assessment of the ability to repay creates a huge economic distortion that corrupts the real economy and inevitably causes it to fall into a recession. Current bank wisdom dictates that since the collateral is considered to be "sufficient" security there is no need to worry about the repayment and that the debt issued is therefore practically risk free. This logic is, however, misplaced, not only for the economy, but also for the banks themselves as the value of the collateral itself is affected by deteriorating market conditions and financial crises, as the sub-prime mortgage crisis strikingly demonstrated in the United States. Inevitably, when the economy goes into a recession the collaterals and guarantees also drop below what was initially valued to be an acceptable cover.

But more importantly from the point of view of economic development, the proper role of banks is not so much to avoid risk for their shareholders, but to prudently assess and guide debt finance into productive investments. This is how an economy grows and prospers. The critical role of banks in a free economy is the undertaking of a proper assessment of risk and return for loans extended and not just the realisation of a risk-free return to their shareholders.

The pursuit of economic development

Risk and return are the twin cylinders of the engine driving a free market economy. In the real economy, there is no such thing as a return without risk. Risk is simply the uncertainty that encompasses an entrepreneurial capital investment project as its future cash flows cannot be determined with certainty. Economic development is attained by taking on risks that are part and parcel of productive capital investments. Where the priority is to contain or even eliminate investment risk while attaining a good return, inevitably the end result is not wealth creation but wealth extraction. This is because only in situations of forced wealth transfers can one hope to find such conditions of a return without the risk. These forced acquisitions of other people's assets serve only the "rentiers" rather than the productive sectors of the economy and inevitably result in increased inequality in the world. It is taxpayers that ultimately bear the cost of such forced acquisitions and transfers of wealth.

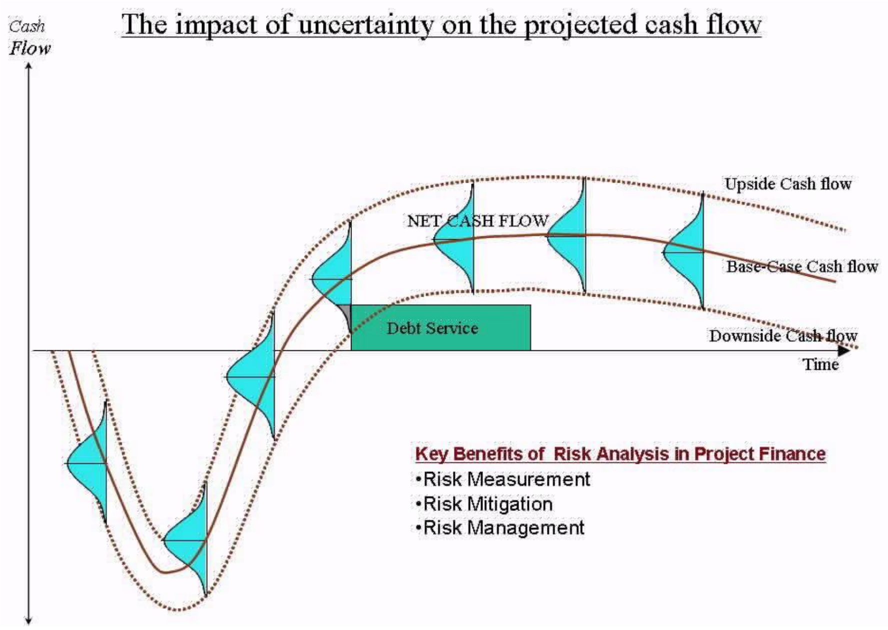
The original meaning of a free market, as discussed by classical political economists, was a market free from all forms of rent. By contrast, current economic thinking seems to be in the service of rentiers and financiers. It also almost completely neglects to consider, let alone analyse and research, the role of money and debt. Economic policy is therefore formed using flawed economic models and leads to erroneous policies by governments and regulatory authorities around the world. This was a lesson learned in the Great Depression in the United States and led to the *Glass Steagall Act of 1933*, which separated commercial banking from investment banking. However, lobbying and pressure applied by special interests in Wall Street on the Clinton government led to the repeal of Glass Steagall and the introduction of the *Financial Services Modernization Act of 1999*. This let the genie out of the bottle and it is now probably impossible to put it back in.

Economics is about using economic resources to maximise the utility (or welfare) of a society. In order to move an economy closer toward this goal it is necessary to employ capital and labour and other factors of production, such as land, as near as possible to their best and most efficient uses. However, the efficient employment of labour and other factors of production and the raising of the pace of economic development depends crucially on the productive employment of capital which equates to obtaining an adequate return on capital investments.

[4] Harberger and Jenkins (2000)

This in effect means that a capital investment project when appraised for the economy through cost-benefit analysis should have a positive net present value (where the net cash flows of the project discounted at the opportunity cost of capital is higher than zero). A viable investment should also be expected to service the debt it undertakes (Figure 5).

Figure 5 - Cash flow projections and risk assessment[5]



Moreover, because with any new project the outcome is by definition uncertain it is also desirable to evaluate the impact of alternative possible scenarios in light of the risks that are intrinsic to the project and ask whether there is the capacity to overcome them. In other words, any new investment project should have a manageable risk profile and the decision on whether to undertake and provide the financing for it should depend on the outcome of this risk analysis.

Sustainable economic development therefore can only be attained if capital investment and financing is channelled towards funding the most viable and therefore also competitive projects. Real economic development comes from building on solid grounds and from funding projects which add net customer value and are cost effective. This holds true for both foreign and local investment projects. Only viable projects serve the cause of economic development. An investment in a project which is likely to foreclose before its expected life span or which is likely to be unable to repay its loans only drags the economy even further into recession. This is a lesson the world should have learned by now as the vast majority of the loans that have been granted by banks in countries such as Cyprus, Ireland, Portugal and many others in the past 20-30 years have become non-performing, while businesses close and mortgaged assets are subsequently sold to aid the recovery process of banks.

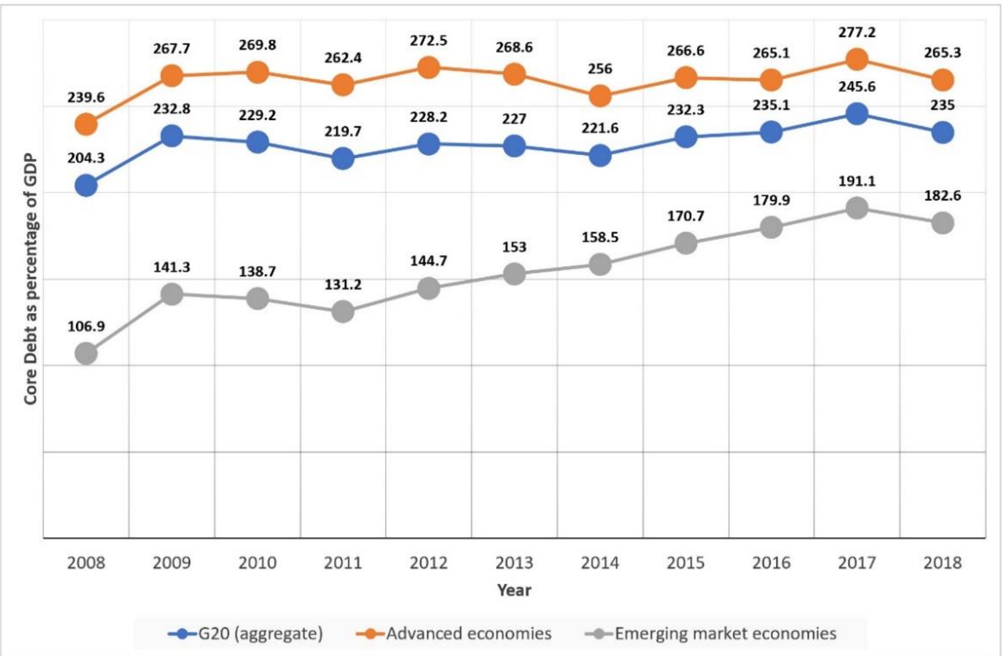
Broken balance sheets and the depletion of equity

Wasteful lending leads to the depletion of equity and negative net worth of firms and households. Rising debt levels were largely responsible for the economic crisis in 2008. Yet, as indicated by the BIS Statistics on credit to non-financial corporations (NFC) core debt has continued to rise in both emerging as well as advanced economies since 2008 (Figure 6). NFCs in the advance economies are about 235% of GDP. This is exceedingly high as it becomes

[5] Savvides (2011), Savvides (2000), Savvides (1994)

questionable whether repayment of such loans is sustainable. In effect, it raises the debt to equity ratios[6] of non-financial corporations and hence equity funding is replaced by debt.

Figure 6 - Total credit to the non-financial sector (core debt)

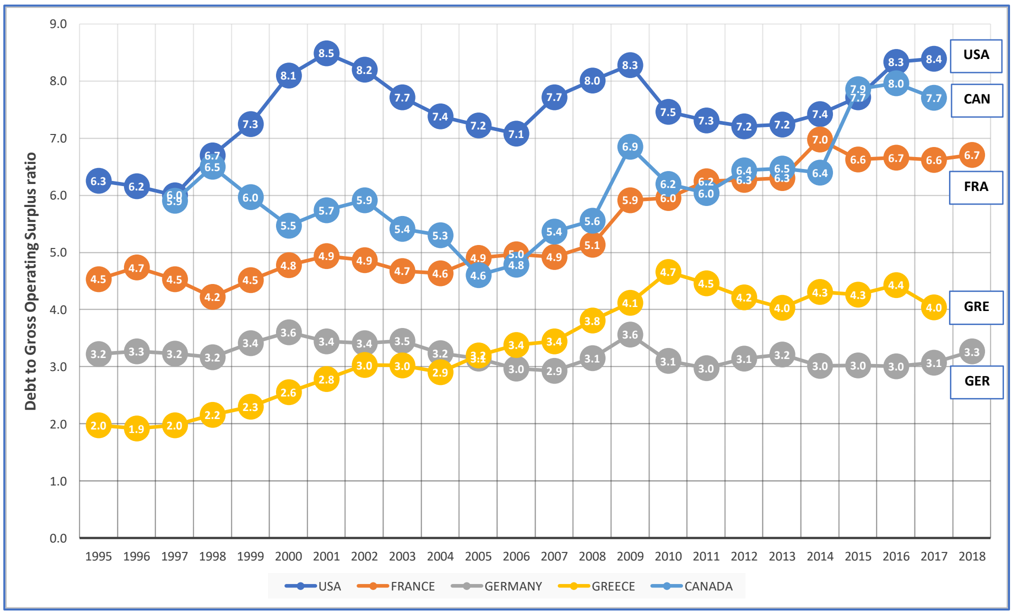


Source: BIS Statistics (2019a)

Prudent lending practice dictates that debt should not exceed the level of equity. This is because it is unlikely that such high debt will be repaid but also because the bank itself becomes a higher stakeholder than the owner of the project or business itself. As illustrated in Figure 7, developed economies have built up very highly leveraged corporations. The rising debt to gross operating surplus (GOS) ratio in these countries suggests that corporations are increasingly depending more on debt for their funding and that the repayment of this growing debt is depleting equity in the real economy. These very high and rising levels of debt for non-financial corporations confirm that equity has been eroded by excessive and unsustainable levels of debts. As it is argued, this has grave consequences because it impacts the real economy. It inevitably leads to the extraction of rents and the transfer rather than the creation of new wealth.

[6] The debt-to-equity ratio is a measure of a corporation's financial leverage, and shows to which degree companies finance their activities with equity or with debt. It is calculated by dividing the total amount of debt of corporations by the total amount of equity liabilities (including investment fund shares).

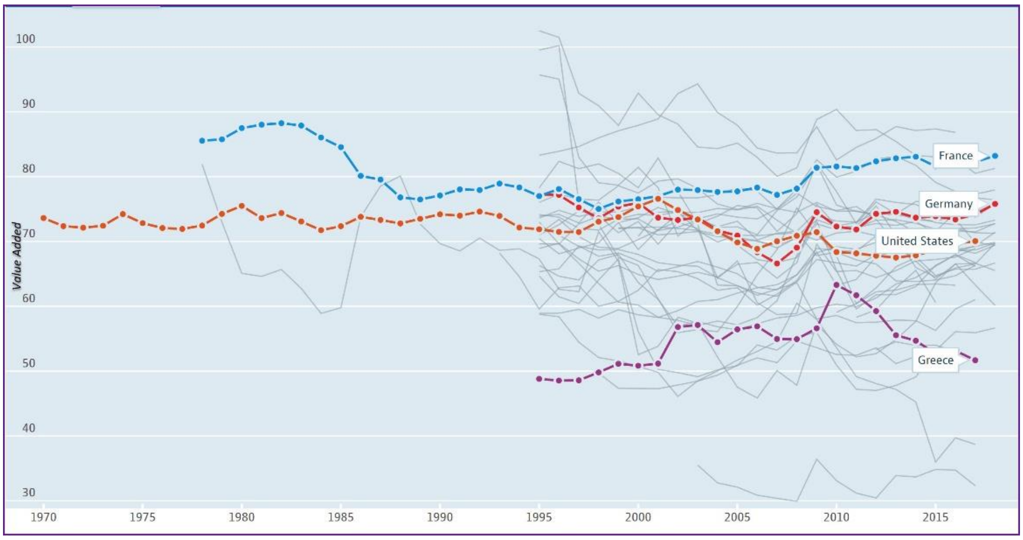
Figure 7 - Non-Financial corporations' debt to surplus ratio



Source: OECD data - OECD (2019b)

Private debt (corporate and household) is also growing at unsustainable rates. Corporate debt in particular is increasing at rates which are higher than the GDP growth of most developed countries. This is particularly precarious as even a very small rise in interest rates would severely impact the ability to pay off these debts. The notion that increasing levels of debt lead to unproductive investments seems to be supported by the data. As illustrated in Figure 8, the value-added[7] by non-financial institutions seems to be decreasing over the years and as private debt increases. The expanding gap represents income through rents (interest mostly)[8]. In Greece for example, only about half the income is value added with the rest being overhead that goes towards serving the enormous accumulation of debt.

Figure 8 - Value-added in non-financial corporations



Source: OECD data - OECD (2019c)

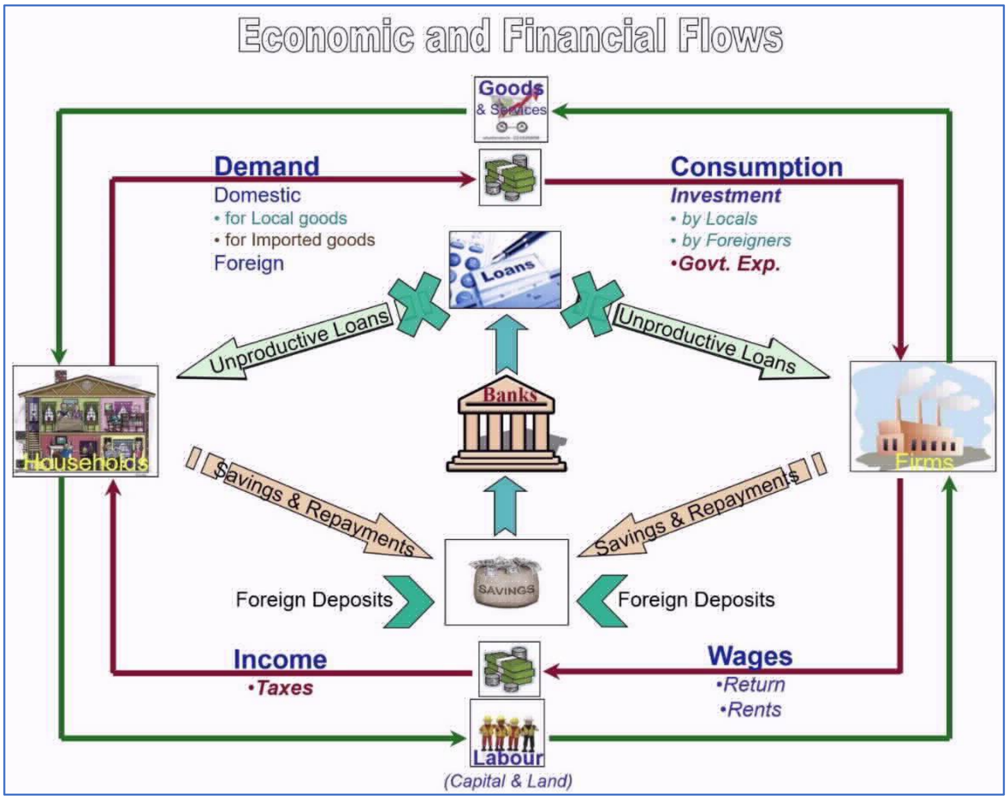
[7] OECD (2019c), "Value-added in non-financial corporations presents the shares of income earned by labour and capital. The indicator is presented net of depreciation. The non-financial corporations' sector includes all private and public entities." The remaining gap to 100% represents income accruing to rents (interest mostly). For example, income accruing to rents in the United States in 2017 was about 30%.

[8] Manison and Savvides (2017)

Extreme private debt leads to balance sheet recession

Excessive debt for both corporations and households result in what Koo (2015) calls broken balance sheets where the economic agents of a country are no longer creditworthy because they cannot service their debts. This also means that they are not in a position to take up, or for the banks to justify the granting of, new loans. As illustrated in Figure 9, domestic demand suffers because a large part of income is channelled into savings as loan repayments.

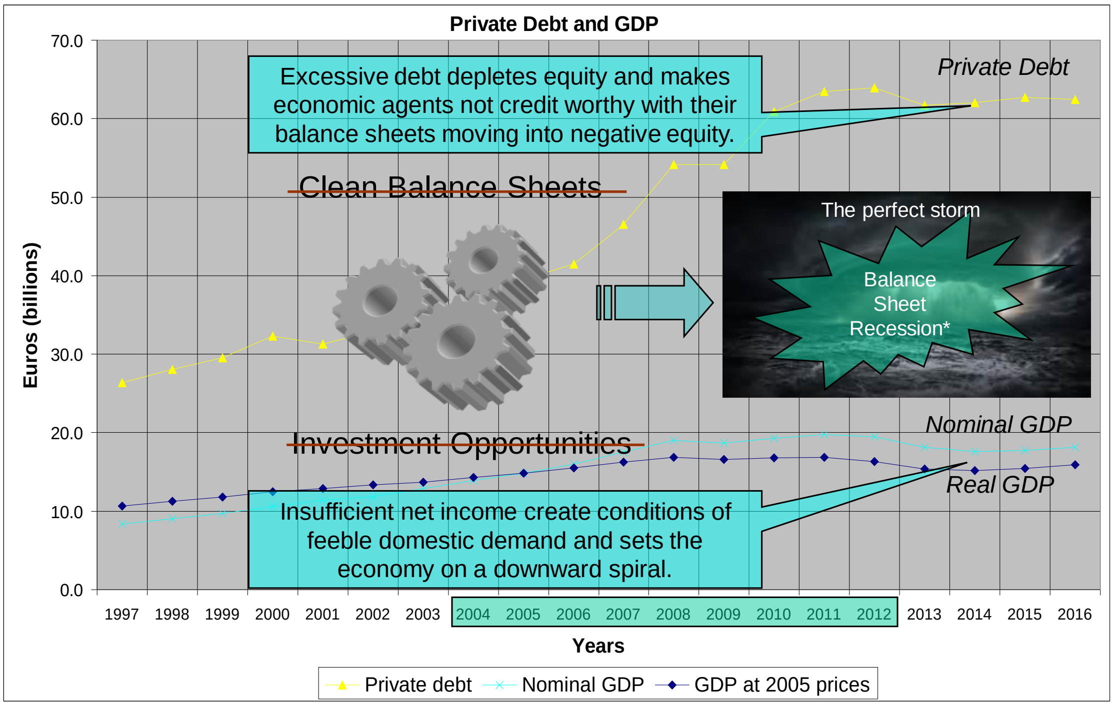
Figure 9 - Unproductive debt shrinks the money supply and paves the way for wealth transfer[9]



The lack of spending power further exacerbates the problem as new investment opportunities become scarce. In turn, not having creditworthy borrowers and ample investment opportunities means that banks cannot justify new approvals and hence position back into the economy the loan collections. This creates a slippery recessionary spiral where reduced economic flows cause the money supply to contract. If left unchecked as Koo (2015) points out, because of broken balance sheets and a lack of investment opportunities, the economy inevitably falls into a balance sheet recession (Figure 10).

[9] Kavvadia and Savvides (2019)

Figure 10 - Private debt disrupts the foundations for wealth creation and leads to balance sheet recession[10]



Note: Constructed by the author based on Koo's balance sheet recession theory.
The Private Debt and GDP curves represent the Cyprus experience leading to the 2013 bail-in. (Source: Eurostat).

Existing unrepayable debts deplete the equity (or net worth) position of firms and households. Therefore, a recovery through on-balance sheet lending is not possible. Even in the few cases where a capital investment may be deemed economically viable, firms are too indebted to undertake and fund it through their own equity or by taking up additional debt. The only way to proceed with such projects is through more complex project finance using "off-balance sheet" arrangements. Moreover, austerity measures that are often prescribed by multi-lateral financing institutions (such as the World Bank or IMF) as a cure in highly indebted countries only exacerbate the problem and drag the economy into a long recession, as countries such as Japan found out when they adhered to the predominant neo-classical economic thinking for more than two decades.

From wealth creation to wealth extraction

Current economic thinking does not distinguish between newly created and existing wealth. The reason is mainly because the GDP of a nation is considered to be the total value added in a calendar year. In *The Wealth of Nations* Adam Smith described wealth as "the annual produce of the land and labour of the society". The emphasis on the word "produce" is the key to what wealth creation really is. It is about the creation of new wealth through productively combining the factors of production. Money has no intrinsic value and does not automatically create wealth. This only happens when money is used productively to fund new products and services which add real economic value (utility/consumer surplus) and thereby enhance economic and social welfare.

The world has however moved away from this fundamental premise of economics. Even economists who were defending the existence of rentiers at the end of the 19th century could only do so on the premise that banks finance productivity. The writings of Adam Smith, Stuart Mill and Alfred Marshall led to the idea that economic resources should be directed towards

[10] Koo (2015)

industry instead of supporting landlords and the parasitic financial classes. The classical economists were arguing that rentiers were getting a free lunch, by extracting rather than creating wealth. Rentiers and neoclassical economists fought back by denying that economic rent was unearned. For example, John Bates Clarke argued that this income is a payment for the landlords' labour and enterprise and not, as J. S. Mill had characterised it, accruing "in their sleep.". Interest was depicted as a payment for the "service" of lending productively, not as exploitation[11]. Defining and justifying interest as the "*earned payment for the service of lending productively*" was the moral justification for viewing banks as performing a vital economic role and in serving society. The departure from this fundamental premise is possibly the root cause of economic crises and the main reason why real economies are frequently in distress.

The gist of the debate about rentiers at the end of 19th and beginning or the 20th century, as it relates to banks, was whether banks provide a social service rather than extract rents. If banks lend only with respect of their own security (guarantees and collaterals available) considerations rather than by prudently assessing the project's or business' ability to repay, then debt can become wasteful and extractive. Such lending, if done in excess, leads to financial bubbles and cause economic crises.

As a result of the deregulation of financial markets and the widely accepted misconception that structured assets and derivatives add to economic development world economies have become more unstable. The consequence of this is that money's vital role as a medium of exchange for goods and services has shifted towards one where it is now perceived as having its own intrinsic value. This has led to an unprecedented concentration of money in the hands of the few.

Concentration of money and power breeds inefficiency and inequality and leads to a misallocation of economic resources. Those financial intermediaries handling a huge accumulation of funds (pensions and private wealth) inevitably promise a safe and high return to acquire the management of these funds. The only way to deliver on that promise, however, is through acquisition of existing and often distressed assets (wealth transfer) rather than investing in the creation of new wealth. The amount and level of risk inherent in new projects cannot meet the expectations of those in charge of enormous private funds and their wealthy clients. Particularly when the economic agents of a country end up highly indebted as a result of past wasteful lending. In such circumstances, the economy becomes prisoner to the debt holders whose only resort is to grab existing assets rather than undertaking the risk of investing in the real economy and in new wealth creating projects. The only way they can hope to deliver on the promise of a risk-free return is by using the funds of their wealthy clients to acquire existing, often under distress, wealth. This is usually facilitated through a failed banking system that provides them with the opportunity to sell off their non-performing loans at heavily discounted prices.

Financialization and the corruption of capitalism

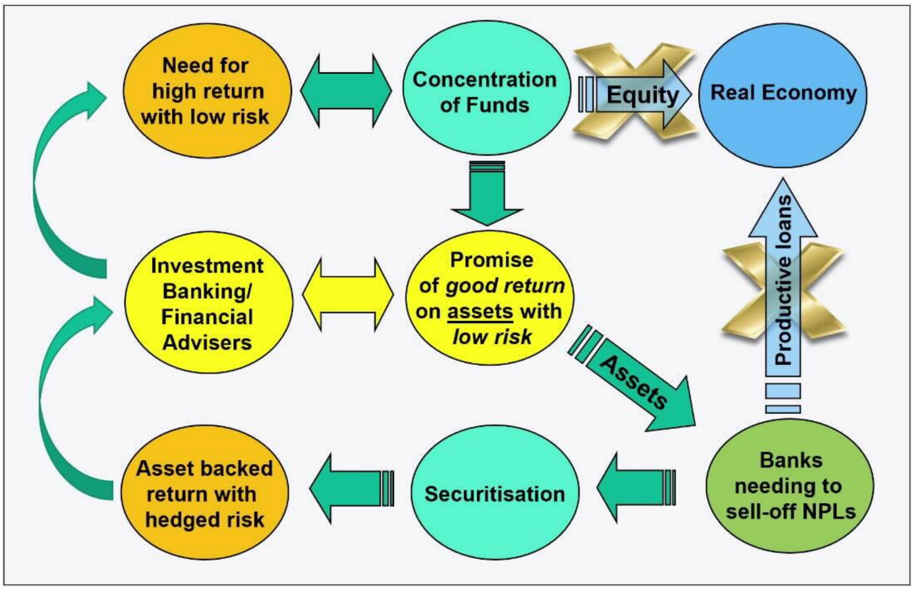
The current financial system is parasitic in that it extracts rather than creates wealth. The growing inequality of wealth and income in the world has shifted the focus and direction of new capital investments to the narrowly perceived needs of those who already own a highly disproportionate share of the wealth in the world. These consist of pension funds, high net worth individuals, trusts, public sector organisations and even oligarchs and dubious elites around the world. Avoidance of risk is at the top of the agenda of these wealthy investors. There is, therefore, a growing desire for relatively risk-free investments at the cost of lower returns. The financial liberalisation has made it possible for wealth managers, hedge funds and investment banks to promise to their wealthy customers "a return with no risk". A failed

[11] Hudson (2018)

banking system (one that does not perform the vital role of banks of prudently channelling savings into productive funding in the economy) and a largely unregulated world financial market provide the means by which financial intermediaries are able to deliver on their heroic promises for "a return without the risk" to wealthy investors such a promise.

The separation of risk from return and the huge concentration of money behind this has had a huge impact on the real economy. It has resulted in a large shadow banking system and the rise of "finance capitalism",[12] which corrupts capitalism and impedes the real economy to fulfil its potential in creating new wealth. Figure 11 demonstrates how concentrated funds seeking low risk returns impairs the real economy and destabilises the financial system.

Figure 11 - Concentration of money and the suffocation of the real economy



The diagram demonstrates how the focus has shifted from wealth creation to wealth extraction. It allows the massive transfer of existing assets rather than the creation of new ones in the real economy. To a large extent, this is enabled through a process of securitisation and selling of the assets of banks and other financial institutions.

The situation has been aggravated by the liberalisation of financial markets. The value of derivatives in the world is now many times higher than the total global GDP. Moreover, the regulatory authorities and obliging governments fearing the huge impact that such enormous levels of derivatives collapsing have disingenuously enacted legislation that assigns such bank obligations higher priority than those of depositors and other creditors in the event of bank liquidation. The latter in effect means that the finance alchemists hold the world to ransom.

Fund and wealth advisors (managing pension funds, trusts and high net worth individuals) seek to find a good return without taking on any significant risks. Investment banks and financial advisors try to secure this lucrative business by promising an elusive return without risk. The only way, however, that this can be achieved is through the transfer of assets rather than through the creation of new wealth. The acquisition of an existing asset is more immediate and less subject to uncertainty and business risk. And a broken and ailing banking system provides the means to achieve this. The banks, who build up non-performing loans mostly because of their irresponsible lending practices, find themselves in need to bring down their NPLs within the limits allowed by the regulatory authorities. Investment banks and wealth funds provide them

[12] Hudson (2012)

with the means to get these NPLs off their balance sheets while satisfying their own need to secure relatively risk-free assets for their wealthy clients.

Creating asset backed securities through the acquisition of these loan assets enables the financial intermediaries to offer their clients a modest return to what is perceived as a well-diversified and secured package of assets. The rating agencies provide the icing on the cake by being recruited and commissioned to assign an "appropriate" rating which enables the sale of these securities in the bonds market.[13] Thus, the fund managers and investment banks are able to deliver the Holy Grail to their clients as they buy these loans at huge discounts from the banks and then serve them on a silver plate as risk free securities. In countries like Cyprus, Greece and Portugal these NPLs are sold at no more than 25% of their loan value. Current economic wisdom favours the dressing up of the banks' balance sheets over the borrowers' right of first refusal (the option to pay off their loans at the reduced discounted prices are offered to third parties). This in effect means that the enormous and often unrepayable private debt weighing on an economy, which is the prime cause holding back recovery, is exacerbated rather than reduced. Moreover, this practice serves the requirements of the rentiers looking to take advantage of the debt situation rather than the real need of the country to restore sound balance sheets and rebuild the economy on sound foundations.

Conclusions and lessons <u>not</u> learnt

The first conclusion to be drawn is the distinction between finance and investment. Availability of funding is not wealth. Finance that is not invested in viable projects and businesses does not generate sustainable economic development and does not foster social welfare. On the contrary, wasteful finance brings on financial crises and long-term recessions. This takes place primarily through the banking system by making possible a huge transfer of wealth from the many and poor to the few and rich.

The second conclusion is that wealth is created in the real economy by new capital investment projects that add value and utility to society at large and where there is sufficient and effective demand. In highly indebted countries, however, where private debt is beyond the point that it is repayable, these conditions do not exist. It is therefore imperative for governments to intervene and take corrective action to reduce debt and to stimulate domestic demand. National Development banks can play a vital role in this respect to lead by example and guide the financing of economically viable projects[14].

The final but equally important conclusion is that there is no real return without some risk. The promise of a return without risk leads towards wealth transfer and the confiscation of existing assets through a broken banking system as well as a loosely regulated financial market which impairs the real economy and harms social welfare.

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