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# **A Gravity Theory of Subordinate Financialisation**

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CITYPERC Working Paper No. 2022-06

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# A Gravity Theory of Subordinate Financialisation

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## Abstract

Recent decades have marked both the globalisation of capitalism following the collapse of communism and its financialisation following the rapid growth of the world's securities markets. These developments have impacted the core-periphery divide in capitalism. In the case of globalisation, the entry of the ex-communist countries into the world capitalist system has swelled the ranks of the emerging capitalist economies (ECEs) that are kept subordinate through the pressures from the advanced capitalist economies (ACEs). In the case of financialisation, the growth of the securities markets has led to a palpable change in the pressures that perpetuate subordination. Where previously the use of authority was the chief source of those pressures, it now plays a secondary role. Absent that authority, and the ECEs would still be held in a subordinate position in global capitalism through the gravitational pull of the ACEs' financial securities markets. The central purpose of this paper is to explain this gravitational pull.

**Key words:** subordinate financialisation; gravitational pull of the financial securities markets

## 1. Introduction

Recent decades have marked two new stages in capitalism's unfolding trajectory as an international economic system, one being the globalisation of capitalism following the collapse of communism and the other the financialisation of capitalism following the rapid growth of the world's securities markets relative to the growth of the world's material output base. These twin developments have each in their own way impacted the core-periphery divide that has long been a characterising feature of capitalism's international dimension. In the case of globalisation, the entry of the ex-communist countries into the world capitalist system has swelled the ranks of the emerging capitalist economies (ECEs) that are kept subordinate in that system through the pressures emanating from the advanced capitalist economies (ACEs). In the case of financialisation, the scale growth of the securities markets has led to a palpable change in the source of the pressures that perpetuate today's core-periphery divide. In previous eras of capitalism, the exercise of authority in one form or other by agents based in the core capitalist countries constituted the principal means by which other countries were kept subordinate. While still extant, the exercise of authority now plays a secondary role in the core-periphery divide. Absent that authority, and the ECEs would still be held in a subordinate position in global capitalism through the gravitational pull of the ACEs' financial securities markets.

The central purpose of this paper is to explain this gravitational pull. In so doing, the paper both parallels and complements the theory of subordinate financialisation that has recently been advanced by several authors, most notably by Bonizzi et.al (2019).<sup>1</sup> The parallelism lies in emphasising the secular, as distinct from cyclical, nature of the financialisation process: the current phase of financialisation is not a repeat of any previous phase when financialisation gave way to de-financialisation but rather marks an entirely new stage of capitalism, financialised capitalism. Thus, any understanding of how the ECEs are kept pinned to a subordinate position in this new financialised capitalist system must recognise the nature of the new pressures emanating from the ACEs at the core of this system. The complementarity lies in the different aspects of subordinate financialisation that are chosen for sustained analysis, a difference that then explains the different angles of approach. As the central concern of Bonizzi et.al is to advance an understanding of "how subordinate financialization emerges from and plays out in the realms of production, circulation and finance in ECEs" (Bonizzi et.al.2019, p.3), they are entirely correct to approach today's financialised global capitalism from a highly aggregative macroeconomic perspective. By contrast, as the central preoccupation in this paper is to understand the dynamics of subordinate financialisation, the favoured methodological approach is a more reductionist one that concentrates attention on the individual equity and debt securities that comprise the stuff of the financial markets.

For the corporations and governments that issue securities, it is their flow dimension that is important: they raise funds at one point in time on the promise to return the funds with a premium at another point in time, and in the meantime the funds are used to finance various expenditures. For institutional asset managers, it is both the flow and stock dimensions of securities that are important: they spend funds in purchasing securities on the understanding that they will be repaid with a premium at a future point in time but, in the meantime, they use the securities as value containers where they can store their clients' monies. To help solidify securities' prices and hence their ability to hold determinate quantities of value, institutional investors have instigated the imposition of new constraints on security issuing organisations that help ensure the level and regulatory of cash disbursements. The main argument of this paper is that it is this solidification of securities' prices and thus of their

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<sup>1</sup> See also Bonizzi et.al.(2021). For an overview of the recent literature on subordinate financialisation, see e.g. Lapavitsas and Soydan(2020).

quantitative value storage capacities that holds the key to the scale growth of the financial securities markets and thus also the key to the pivotal role played by the force of gravity in subordinate financialisation.

The structure of the paper is as follows. Section two explains the interplay between the solidification of securities' value storage capacities and the scale growth of the financial securities markets. Section three explains how this interplay promotes the role of gravity as the central dynamic in subordinate financialisation. Section four explains why global economic crises serve to further consolidate subordinate financialisation. Section five concludes.

## **2. The solidification of securities' value storage capacities and financial market scale**

If financialisation is broadly defined as the growing weight of the financial sector relative to the real sector<sup>2</sup>, nowhere is this weight disparity more pronounced than in respect of the relation between the world's financial securities stocks on the one hand and the world's annual material output flows on the other. In 1980 the combined stocks of equities and bonds totalled \$11 trillion<sup>3</sup>, a figure roughly on a par with nominal world GDP in that year. At no point in history prior to that time was there such parity. Conversely, at no point since that time has the growth rate of global output kept up with the growth rate of global securities stocks. Thus, where over the four decades between 1980 and 2020 these stocks had grown over twenty-fold from \$11 trillion to \$234 trillion (\$129 trillion worth of bonds and \$105 trillion worth of equities), world GDP had only registered an eight-fold increase from \$11 trillion to \$84 trillion over the same period<sup>4</sup>. This unprecedented scale growth of the financial

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<sup>2</sup> In the most frequently cited definition of financialisation as given by Epstein: “financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.” (Epstein (2005), p. 3). In Stockhammer's later and more succinct definition: "Financialisation summarises a broad set of changes in the relation between the ‘financial’ and ‘real’ sector, which give greater weight to financial actors or motives” (Stockhammer (2012) p. 121)

<sup>3</sup> Karltunbrunner and Lysandrou (2017)

<sup>4</sup> SIFMA, (2021)

securities markets attests to deep-seated structural changes in both the supply and demand sides of these markets<sup>5</sup>.

As regards the supply side, the growth of the securities markets has coincided with a change in the nature of corporate and government dependence on them. Where previously that dependence was either permanent, but small, or large, but temporary, (e.g., to finance a large-scale infrastructure project or to help the meet the costs of coping with an emergency) that dependence has now become both large and permanent due to the increasing financial pressures that have accompanied the increasing size and complexity of modern-day capitalist economies. In the case of private corporations, these pressures principally relate to those of production. In an era of rapid technological innovation and of ever intensifying market competition, corporations must have constant access to large external sources of funds to finance research and product development, or to finance mergers and acquisitions, or to finance any of the other measures needed for survival. In the case of governments, the rising financial pressures on them pertain to a broader array of socio-economic changes, the most significant of which is demographic change. The trend rise in population ageing and in old age dependency ratios over recent decades has seen a corresponding rise in government social spending both as a percentage of GDP and as a percentage of total government expenditure<sup>6</sup>. While there may be scope for further tax increases, any rise in tax income would still fall far short of the sums needed to cope with the costs of financing pension and health care provision in addition to those of other government expenditure commitments. Thus, it is the continually urgent need to bridge this gap that explains why governments will remain major suppliers of bonds. The pressure of demographic change is also an important reason why commercial banks are among the leading issuers of bonds (classified as 'financial bonds'). Banks have traditionally relied on household deposits to fund their loans to businesses and households, but because of recent changes in household savings behaviour

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<sup>5</sup> For a general discussion of the recent structural changes in the supply and demand sides of the financial markets and their portents for financialisation see e.g. Lysandrou (2016) or Lysandrou and Ranjbaran (2021)

<sup>6</sup> From an average percentage share of government expenditure of just 8% in 1960, that share had risen to an average of 17% across the OECD countries by 1990 and to an average of 20% in 2018. The average share for the EU-28 countries in 2018 was 40%, but closer to 50% for the UK and other northern European countries, a figure similar to that for the US (OECD (2019))

(households that are living longer after retirement than was previously usual are attracted by the higher yields on financial market investments) banks are having to increase their issuance of long-term bonds and short-term money market instruments to fill the gaps in the liability side of their balance sheets.

As regards the demand side of the equity and debt securities markets, the most significant change here in recent decades has been the displacement of small household savers by large institutional asset managers such as pension funds and insurance companies as the dominant type of investor<sup>7</sup>. For long a small cottage industry catering for the very wealthy, asset management has become in many countries a mass industry catering for the retirement and other welfare arrangements of large sections of the population. With this growth in asset management scale has come a corresponding growth in the need for investables, assets in which clients' monies can be stored and from which monies can be extracted to pay clients. Although there are other types of assets that serve as stores of value for asset managers, including cash, real estate, gold and other material commodities, financial securities necessarily comprise the majority proportion of their portfolios because what sets them apart from other asset classes is their ability to combine a large value storage property (because they are available in abundance) with relatively high liquidity (defined here as ease of trading with minimal impact on price) and portability (securities can be traded away from their initial conditions of issuance unlike, say, bank deposits). A substantial volume of demand for corporate and government securities is thus ensured, but what is also to the point is that this volume demand will remain permanent given that the economic costs of population ageing will likely force governments to increasingly shift away from universal welfare provision towards more selective forms, thus forcing increasing numbers of households to enlist the services of asset managers when making their own private welfare arrangements.

While the large size of institutional asset managers' demand capacity for securities is to the benefit of security issuing organisations, the obverse side of this demand capacity is that it is exercised on condition that borrowers adhere to new transparency and information disclosure

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<sup>7</sup> For further detail, see e.g. Grahl and Lysandrou (2006) or Haldane (2014). According to SIFMA (2021), institutional investors currently hold over 90% of all US bonds and about 80% of all US equities. According to OECD data, the world average percentage share of equities held by institutional investors is 41%, while the bulk of the remainder is held by governments and other public bodies (OECD Capital Markets (2019)).

standards on the one hand and to new governance standards on the other whose combined effects are to narrow down any discretion over cash disbursements to investors. Borrowers had far more discretion over cash disbursements when households were the dominant type of investor the reason being not only that the latter, as small investors, had less power to assert control but also because they had far less motivation to do so. For households who invest for personal welfare considerations, the allocation of any part of their savings to financial securities is always a matter of choice and never one of necessity: should the returns on securities look favourable then that is where they will invest but should returns on other asset classes such as real estate look more favourable there is nothing preventing them from allocating all their savings to these alternative asset classes. What is true of household investors was also true of institutional investors when asset management remained a small profession merely providing personal advisory services to the wealthy. All this has changed with the growth of asset management into a mass industry because, as already noted, institutional investors are now constrained to hold the bulk of their assets in the form of liquid financial securities, a constraint that then explains why they must in turn constrain the actions of the organisations whose securities they hold through the imposition of transparency and governance constraints that are far tighter than any that have existed in the past<sup>8</sup>.

The heart of the matter is that as financial securities are promissory notes with no intrinsic value, it is only through their prices that they can acquire and maintain a quantitative value storage capacity. Given that securities' prices are nothing other than the discounted value of expected future cash returns, it follows that if these prices are to remain solid enough to preserve a determinate quantity of value over time the cash returns must be made with a certain degree of consistency. It is to ensure this consistency that institutional investors demand in the first place that security issuing organisations provide full and accurate information that is in any way relevant to their ability to generate income flows of a certain size and stability against which financial claims can be made. However, while necessary to the solidification of securities' prices, transparency and information disclosure standards are

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<sup>8</sup> When, in a recent publication, Simon Deakin posed the question as to why it is now "a widely taken view that company law underpins the norm or practice of shareholder primacy", his answer was that "it is not so much the result of the core content of company law, but rather the cumulative impact of changes in complementary regulation of corporate governance in recent decades. The relevant changes are mostly to be found in 'soft law' codes and standards, made by financial actors themselves, principally institutional shareholders, to which governments have ceded rule-making authority"(Deakin, 2018, p.26)



not sufficient. Corporations can excel in production and be seen to be doing so but still decide not to distribute cash to investors for one reason or other. Similarly, governments can excel in service provision and generate tax revenues accordingly but still give a low priority to the payment of interests on bonds. Thus, governance standards are an additional precondition for the solidification of the prices and hence of the value storage capacities of securities. Broadly put, the governance of organisations concerns how they conduct their affairs to meet the different priorities of their various stakeholders, but for institutional investors the question of good governance ultimately comes down to the level of priority given to their interests as shareholders or bondholders: high priority means that there is a reasonably good guarantee that cash will be returned to them in the required amounts and at the required intervals, whereas a low priority means that there is no guarantee that cash will be returned.

In the final analysis, it is because of the new transparency and governance constraints insisted upon by security buying institutional investors and complied with by security issuing corporations and governments that it has become at all possible for the world's securities stocks to grow to a size out of all proportion to the world's material output base. This base must ultimately set an upper limit to how far the securities markets can grow, but the fact that they have been able to grow to historically unprecedented levels without imploding attests to the way that the new behavioural constraints, standards and rules of conduct in the financial markets are such as to broadly maintain confidence in the value storage capacities of securities. Thus, it can be said that quantity begets quantity in that it is because, at the micro level, individual securities now have reasonably solid value storage capacities due to the solidification of their prices based on the financial market standards now in place that, at the macro level, the aggregate quantities of securities can scale ever new heights. It is here that we come to subordinate financialisation and to its inner dynamics because the same interplay between security price solidification and security volume growth, whose chief functional purpose is to accommodate the rising financial pressures faced by capitalism's major private and public organisations, is also that which perpetuates a core-periphery divide in today's financialised global economy through the force of gravity.

### **3. The role of gravity in subordinate financialisation**

A visual representation of subordinate financialization is provided by the highly uneven breakdown of the global securities markets by geography and by currency. Thus, of the total

global securities stocks of \$234 trillion outstanding at end 2020, all the emerging capitalist economies accounted for just 15% of this total as compared with the 85% share of the advanced capitalist economies, with nearly half of this amount at 40% being contributed by the US on its own. Translated into currency terms, the only currency areas with a sufficient financial market size as to be able to come anywhere near matching the size of the US dollar market are the euro, the yen, the pound sterling and the Swiss franc areas while most of the other currency areas shrink to fragments by comparison. These financial market size disparities are in turn closely correlated with the large size disparities that separate national currency shares in daily foreign exchange turnover that is now in the region of \$6.6 trillion. Thus, where at one extreme the US dollar accounts for about 44% of this turnover, at the other extreme the combined share of all the ECE currencies is just 13%<sup>9</sup>.

To visualise subordinate financialization in terms of the scale disparities separating the different regional financial markets is not to explain the cohesive substance that keeps most ECE markets firmly glued to the dollar market, by far the largest of the ACE markets. On the contrary, it is perfectly possible to take note of these scale disparities and still not see any such cohesive substance. Recent debates over the future of the dollar's international status give good illustration of this point. It has long been common knowledge that the sheer abundance of dollar securities available for use as investable assets is a source of attraction for the world's investors, and that it is this attraction that plays a key role in sustaining the US dollar's supremacy in the international currency system. Yet this knowledge has not prevented periodic predictions to the effect that dollar supremacy will soon end because of a loss of foreign investors' confidence in the US' ability to service the repayments on its mounting financial liabilities in face of its mounting trade deficits<sup>10</sup>. In other words, the huge

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<sup>9</sup> BIS (2019)

<sup>10</sup> Chinn and Frankel, (2008), for example, argued that the dollar would lose its position as the leading international currency by 2015, not only because 'the euro now exists as a more serious potential rival than the mark or yen were', but also because 'the United States by now has a 25 year history of chronic current account deficits and the dollar has a 35-year history of trend depreciation' (2008, p 51). Similarly, Benjamin Cohen (2009) stated that "I do not consider the persistent build-up of America's foreign debt as sustainable for long. Unless reversed by significant policy reform in Washington, the US economy's dependence on foreign capital must be expected in time to erode the advantages historically enjoyed by the greenback, creating an opportunity for challengers" (2009, p.143).

size of the dollar securities markets in comparison to that of other currency denominated markets is seen to be as much a source of repulsion as one of attraction for foreign investors. What obviously underpins this line of reasoning is the assumption that there is no fundamental difference between household investors and institutional portfolio investors (an assumption made explicit in all current macroeconomic models in that these still take the household to be the representative investor): thus, just as households can always abandon financial securities in favour of other asset classes should they be concerned about the prospective returns on securities, so can portfolio investors always abandon dollar financial securities in favour of other currency denominated securities should they be concerned about the US' worsening macroeconomic fundamentals.

A very different conclusion is reached when one does allow for a fundamental difference that separates today's institutional investors from households in that one can then foreground the constraints on these investors to always the bulk of their portfolios in the form of financial securities and thus also foreground the remarkable transformation undergone by securities on the back of the transparency and governance constraints that are now binding on security issuers. In the absence of these latter constraints, the promises made by security issuers of returning cash are always in danger of remaining just promises, fictitious entities, but, with the systematic imposition of these constraints, securities are transformed from mere promissory notes into genuinely safe stores of value. From being particles without matter, they become particles filled with matter, and what this means is that when all the securities of a country's organisations are aggregated together, this aggregation gives that country's financial markets mass and a corresponding power of attraction for institutional investors: the greater the mass, the greater the power of attraction, and nowhere is this power greater than that exerted today by the US securities markets. The fact that the US issues huge amounts of bonds alongside its huge issuance of equities, far from repelling foreign investors, on the contrary acts as a further source of attraction in that this issuance provides them with extra amounts of value containers where they can store their funds. Some foreign investors may still withdraw from the US securities markets for whatever reason, but not all foreign investors taken in the aggregate can do the same because there are simply not enough

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alternative supplies of securities at the global level that can serve as safe and portable stores of value. It is this fact that the US' equity and bond markets are large not only in absolute terms but also in relative terms in that most other financial markets shrink to the size of fragments in comparison to those of the US that explains the unequal distribution of the gains and losses resulting from cross-border portfolio investments, with the US reaping most of the gains and many other countries, and most notably the ECEs, incurring most of the losses.

These gains and losses basically take on two forms, one pecuniary-related and the other policy-related. The source of the pecuniary-related form is the correlation between the risks on securities and the corresponding yield premiums that must be factored into their prices: the higher the risks, the higher the yield premiums. To illustrate the point, consider the US securities markets. These are by far the largest and deepest in the world, and as such they are highly attractive to foreign investors in that not only is there an abundance of securities in which to store their funds, but also a wide choice range of different security classes across which they can move funds according to economic circumstances. However, these advantages to foreign investors must be paid for in the sense that they will on average earn comparatively low returns on their dollar assets. Thus, for example, they will earn no currency risk premium (due to the range of choice of US dollar asset classes across which investments can be moved according to any change in economic conditions without being subject to exchange rate frictions); low credit risk premiums (due to the general strength and reputation of the US legal and governance infrastructure); low liquidity risk premiums (due to the depth of the US securities markets and hence the ease of trading with minimal price impact); and a low sovereign risk premium (due to the scale of US domestic economic activity and hence the corresponding government power of taxation). By contrast, foreign investors can on average earn comparatively high returns on investments in countries that host small local currency-denominated securities markets because in these cases there will be currency risk premiums (any cross-security flows generated by any change in economic conditions will also typically take on a cross-currency dimension), high credit risk premiums (that may reflect a weak legal and governance infrastructure as much as a small domestic production base for local corporations), and high sovereign risk premiums (reflective of small domestic tax bases whose smallness may again be the result of a small domestic economy as also of a weak legal infrastructure). It is testimony to just how wide is the gap separating the yields paid out on US securities and the yields paid out on foreign securities

that, year in and year out, the US extracts far greater sums of monies from foreign countries than it pays out<sup>11</sup> even while the total amounts of foreign investments in US securities are far greater than the total amounts of US holdings of foreign securities<sup>12</sup>.

The source of the policy-related form of the gains and losses resulting from cross-border portfolio flows lies in the correlation between security market size and the extent to which exchange rate volatility is factored into the conduct of monetary policy. Let us again start with the US that has the largest security markets. Any fluctuation in the dollar's international value will have a differential economic impact on the US's exporting and importing firms, an impact that then sets in train portfolio investment shifts across US financial securities with monies flowing into the securities of firms that have benefitted from the dollar's fluctuation and out of the securities of firms that have been adversely affected. As these investment shifts occur within the same dollar-denominated mass of securities they do not further aggravate the fluctuation in the dollar's value thus limiting its negative effects on the underlying real economy. It is this fact that the large mass of financial securities behind the US dollar acts as a currency shock-absorber that explains why the US monetary authorities can treat the dollar's international value with 'benign neglect', a fact which in turn explains why they can conduct their domestic monetary policy without reference to the monetary policy of any other country. By contrast, everything is reversed in countries with small securities markets. Any investment shifts across securities triggered by the impact of any exchange rate change on exporting or importing firms will likely also take the form of cross-currency shifts that will in turn amplify the initial exchange rate change and hence its effects on the underlying real economy. Thus, policy makers in countries with small securities markets, the very smallness of which can cause them to be currency shock amplifiers, do not have the luxury of treating their currencies' international value with benign neglect. On the contrary, that value must be fixed against the currency most heavily used in an international role, namely, the dollar,

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<sup>11</sup> For further detail on this point see e.g. Forbes (2010) or Darvas and Hultl (2017)

<sup>12</sup> In 2006 US investors held \$5.7 trillion worth of foreign securities as compared with the \$8.3 trillion worth of US securities held by foreign investors, a gap of nearly \$3trillion. By 2020 that gap had doubled to \$6 trillion, with US investors holding \$14.1 trillion worth of foreign securities as compared with the \$20.1 trillion worth of US securities held by foreign investors (SIFMA (2021)).

which not only means that policy makers must keep an eye on US monetary policy but also that substantial dollar reserves be held for currency market intervention purposes.

As regards this latter point, it should be noted that, statistically speaking, the dollar's role as an official reserve currency is even more significant than its role as an international vehicle currency in the private sector. From barely \$0.5 trillion in 1995, the total amount of allocated reserves held by central banks had risen to \$5.4 trillion by 2010, an amount that was more than doubled again to \$11.8 trillion by 2020.<sup>13</sup> For most of this period, the dollar's share of central bank reserves averaged 60%, with the euro's share (after its introduction in hard form in 2002) averaging 20% and a variety of other smaller currencies accounting for the remaining 20%. The fundamental reason for these developments can again be traced back to the new solidity of securities' prices and thus of their quantitative value storage capacities. While the huge growth of the world's stock of securities in recent years has provided institutional asset managers with abundant supplies of safe value containers, the flip side of this growth in financial value storage capacity is that it has also provided hedge funds and other speculative vehicles with massive financial fire power when targeting national currencies that are perceived to be vulnerable. The European currencies felt the scale of that pressure in the EMS crisis of the summer of 1992, while all the Asian currencies (bar the yen) felt the scale of that pressure in the summer of 1997. Indeed, it was largely because of the unnerving experiences of these crises that there was a subsequent sharp increase in central bank foreign exchange reserves. The basic reason why the dollar has continued to maintain a 60% share of foreign exchange reserves even as these continue to grow exponentially in absolute terms is because of the large mass of US Treasuries. In today's era, when the world's financial securities markets are deep and highly integrated and when cross-currency financial movements can accordingly combine huge scale with high mobility, central banks that are concerned to minimise the impact of these movements on their domestic currencies need to have in reserve financial securities that (i) have a large and safe value storage capacity, (ii) are available in abundance, and are thus (iii) highly liquid. No other financial securities can match US treasury bonds as regards these criteria.

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<sup>13</sup> IMF (2017)

The upshot of the foregoing discussion is that if equities and bonds constitute the solid matter of the financial markets through which the ECE's with small financial markets are held subject to the gravitational pull of the large US dollar market, the pecuniary and policy related consequences of that gravitational pull are such as to have the reverse effect of further compounding those financial market size asymmetries. Foreign portfolio investors and foreign central banks are drawn to the US' corporate and government securities markets because these are the world's largest and deepest, but in being so drawn to these markets they then contribute to their further growth in size and depth, thus contributing to the ease with which the US' corporations and federal government can issue substantially more securities before coming up against repayment constraints. Thus, the large mass of dollar securities continually begets an even greater mass as foreign institutional investors are continually willing to trade low returns on their dollar assets off against the various benefits accruing from these assets thereby enabling the US to continually issue increasing amounts of securities on an affordable basis. By contrast, a small mass of local currency denominated securities produced by a country perpetuates continuing smallness as foreign portfolio investors holding these securities demand such high returns as compensation for the various risks attaching to them as will seriously constrain the amounts of securities that can be safely issued by the country's organisations. In short, international portfolio flows serve not only as the medium through which the large dollar financial market controls small ECE financial markets through its gravitational pull but also as the medium that ensures that the respective sizes of these markets and hence the respective positions of controller and controlled lock together in a mutually reinforcing dynamic. This dynamic is not disturbed by global economic crises so much as given further consolidation by their destructive impact as we shall now see.

#### **4. Global economic crises and the consolidation of subordinate financialisation**

It is a general rule that when an industry grows in scale it must make radical changes in its internal organisation and mode of provision. Professional asset management is no exception. The key change in its case is the move away from broad based portfolios towards more narrow portfolios that are managed to a target risk-return ratio. For the very largest of the asset management firms, the typical practice is to divide portfolios according to a 'core-satellite' arrangement, where the core portfolios merely seek to generate average market

returns while accepting average market risk and the satellite portfolios attempt to generate above average returns while also accepting above average risk<sup>14</sup>. Of the various advantages conferred by this tiering and narrowing of portfolios, the following stand out. One is the facilitation of a more cost-efficient way of providing asset management services to a large public: rather than personally advise household clients on how best to invest their monies, what managers now do is to place on offer a variety of standardised investment products that are run to different target combinations of risk and return and invite clients to choose those products that match their risk appetites. Another advantage is that managerial remuneration costs are more effectively contained in that individual portfolios managers are payed according to the respective difficulties associated with their separate investment tasks: thus, managers of portfolios that passively track market indexes (the so-called 'beta factories') tend to be paid less than are the managers of portfolios that actively seek to generate extra yield (the 'alpha creators'). A third advantage of the core-satellite investment paradigm is that asset management firms are placed in a better position to vary investment fund allocations in line with any variations in the general economic climate: thus, in periods of economic upturn when confidence is high relatively more funds will be allocated to the high-yield and high-risk satellite portfolios while in periods of economic downturn, when confidence is low and safety takes precedence over yield, relatively more funds will be diverted into the core portfolios.

It is this latter advantage of the core-satellite paradigm that explains why it now tends to be used by the large US and other ACE based asset managers as the overarching framework for the international diversification of their asset portfolios. Although home-currency securities continue to comprise the bulk of these portfolios, substantial amounts of funds are now allocated to ECE securities in the search for extra yield. Although the sources of the risks that underpin the extra yields on ECE securities can vary quite considerably (some will carry higher than average currency risk, others higher than average sovereign credit risk and so on), these securities tend to be grouped together into portfolios that are assigned satellite status alongside other high-risk/high-return asset classes such as junk bonds in the bond universe and small cap equity in the equity universe. In effect, what the core-satellite organisation of the internationally diversified portfolios under management in the ACEs does is to replicate

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<sup>14</sup> For a detail review of core-satellite portfolio management see e.g. Clay Singleton (2005) or Grahl and Lysandrou (2006).



in miniature the core-periphery divide in the global financial landscape. In so doing, it also serves to further reinforce that divide. Recall from the previous discussion that central to the mechanisms through which the US financial market keeps many ECEs in its gravitational field is the asymmetric quantitative impact of international portfolio flows in that heavy flows into the safety of US securities in times of an economic downturn serve to give a comparatively greater boost to their quantities because of the comparatively lower yields that have to be paid out while any reverse heavy inflows into ECE securities in times of an economic upturn give comparatively lower boost to these quantities because of the higher yields that have to be paid out. What the internationalisation of the core-satellite asset management paradigm essentially does is to regularise these asymmetric quantitative impacts by regularising international portfolio flows in line with the regular swings in the general economic environment.

It is here that global economic crises come into the picture because what these do is to further strengthen by orders of magnitude the dynamics of subordinate financialisation that are already being strengthened on a regular basis through the internationalisation of the core-satellite paradigm. Consider, for example, the effects of the great financial crisis of 2007-8 that was triggered by the collapse of the market for collateralised debt obligations (CDOs) in the summer of 2007. Although the crisis originated in the US, the subsequent fall-out did not see any financial outflows from the US but the exact opposite as the spread of fear and panic throughout the whole global financial system led to heavy inflows into the US, as also into several other ACEs, in the search for safety. The greatest beneficiaries of these inflows were the US and other ACE governments who were at the same time also benefitting from the domestic redirection of private sector investments into the safety of their debt securities. It is testimony to how far the financial crisis shook the foundations of the global capitalist economy thus putting a long-held premium on safety that the average yields on ACE government bonds, which had fallen sharply in 2008-9, then continued a trend decline over the following decade even while their outstanding volumes continued a trend rise over the same period. According to OECD estimates, the average yield on OECD 10-year government bonds fell from an average of 5% in 2006 to an average of 1.5% in 2019, even while total outstanding OECD central government bond volumes had tripled from just over \$10 trillion

to about \$33 trillion between the two dates<sup>15</sup>. The comparative statistics for ECE government bonds were very different. Total ECE government bonds outstanding rose from about \$2 trillion in 2006 to about \$5 trillion in 2019<sup>16</sup>, a quantitative increase not only much lower in absolute terms as compared with the increase in ACE government bonds but also one that was accompanied both by a higher average yield spread over ACE government bond yields and by a larger variation range within this higher yield spread. Bearing in mind that ECE government bonds broadly divide into investment grade (A, AA and BBB) and non-investment grade (BB, B and CCC), we find that yields on the BBB and the BB rated bonds (that between them comprised about 60% of all ECE government bonds throughout the 2009-2019 decade) averaged around 5%, while the yields on the A and AA rated bonds (that accounted for about 24% of the total ECE government bonds outstanding over this decade) averaged between 3% and 4%, and while the yields on the remaining BB, B and CCC rated bonds fluctuated far more wildly around averages of between 10% and 30%<sup>17</sup>.

Turning to the financial consequences of the covid pandemic that broke out at end-2019, we first note that the pandemic generated crisis placed ACE government finances under strains that were heavier than was the case in the financial crisis of 2007–2008 for reasons that included the fact that the economic costs of the covid pandemic came on top of the health care costs that had to be borne by governments, the fact that it was not just one group of firms in just one economic sector that had to be protected from bankruptcy by government bailout loans but a whole range of firms drawn from across the entire domestic economy, and the fact that on this occasion governments had to fund not only business bailouts but also the wages of employees that had been temporarily laid off while also the bearing the financial costs of the soaring levels of unemployment. The inevitable result of these multiple strains on ACE government finances was a sharp upward spike in the rate of ACE government bond issuance. Thus, in the space of one year, 2020, the total amount of outstanding ACE government bonds rose by \$5trillion, from \$33 to \$38 trillion, with the US federal government being by far in the lead as it raised its outstanding bond volumes by over \$3trillion from \$16.67 trillion to \$20.97 trillion. However, such was the intensity of investor

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<sup>15</sup> OECD, (2020a)

<sup>16</sup> OECD (2020b)

<sup>17</sup> OECD (2020b)

search for safety that the yields across the treasury bond maturity spectrum averaged below 1% in 2020 (0.36% and 0.39% for 3-month T-bills and 2-year treasury bonds respectively, and 0.89% and 1.56% for 10-year and 30-year treasury bonds respectively)<sup>18</sup>. This experience was repeated in the case of other ACE government bonds in that while their volumes also rose significantly in 2020, their average yields continued a downward trend with those on 10-year bonds, for example, averaging around 1% all through 2020 as compared with an average of 1.5% in 2019<sup>19</sup>.

The situation could not have been more starkly different for the ECEs whose domestic economies were hit by the covid pandemic to an extent that has been far greater than was the case during the financial crisis when they then continued to function relatively normally even while there was a temporary contraction of their overseas markets. In addition to the huge disruption to their domestic production and employment levels caused by the pandemic, they faced sharp falls in their export earnings caused by the contraction of their overseas markets, falls in the price of oil and in other commodity prices, falls in remittances from abroad and last, but not least, falls in incomes from a range of tourism and other travel-related services. Quickly becoming aware of the extent of the covid pandemic's damaging impact on ECEs, foreign portfolio investors withdrew over \$100 billion in funds from ECE securities in the space of a few weeks in March, 2020<sup>20</sup>. Several ACE central governments benefited from these outflows, but none more so than that of the US that saw foreign investors increase holdings of their securities by more than \$300 billion from \$6.69 trillion to \$7.03 trillion in 2020<sup>21</sup>. In April, 2020, portfolio flows back into ECE securities resumed because institutional investors, having directed the bulk of their funds into the safety of ACE government bonds, needed to find extra yields elsewhere and that elsewhere was principally ECE government bonds. Recall that upwards of three quarters of these bonds fall into the BBB-rated class (the lowest investment grade class) and into the BB, B and CCC rated classes (together comprising the non-investment grade class). Where at the beginning of January 2020, the yields on the BBB, BB and CCC rated bonds were around 5%, 7% and 8% respectively, by

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<sup>18</sup> SIFMA (2021)

<sup>19</sup> ICMA (2020)

<sup>20</sup> Hordahl and Shim (2020); ICMA (2020)

<sup>21</sup> SIFMA (2021)

April, 2020 these respective yields were now around 7%, 11% and 15%. It shows how wide was the gap between ACE and ECE government bond yields all through 2020 that the FTSE World Index of 10-year government bond yields rose by 1% from 2% to 3% even while the aggregate amount of ECE government bonds issued over this period was a small fraction of the world total amount of government bond issuance. Indeed, so onerous were the financing terms faced by ECE governments in 2020 that (leaving aside the case of China's government) the aggregate amount of ECE sovereign bonds outstanding at end-2020 was roughly the same as it had been at end-2019<sup>22</sup>.

In repeatedly amplifying the portfolio investment shifts between the ACE and ECE securities markets, and hence the quantitative size asymmetries separating these markets, the global crises of 2007-8 and of 2020-21 have also thereby amplified the pressures on ECE central governments to always keep track of ACE monetary policy, most notably that of the US, and to always maintain (where economically feasible) substantial foreign exchange reserves, most notably dollar reserves. Two examples serve to illustrate the point. The first pertains to the so-called 'taper tantrum' of 2013. Aside from the heavy domestic and foreign private investor inflows into the safety of US treasury bonds in the period following the financial crisis of 2007-8, a further important factor that helped the US federal government to keep increasing its borrowing levels while also containing its borrowing costs were the Federal Reserve's substantial purchases of US treasury bonds as part of its monetary loosening ('quantitative easing') programme. Although this programme was not actually reversed in 2013, Ben Bernanke's announcement in May of that year that the Federal Reserve intended to gradually wind down the programme by tapering its purchases of US treasury bonds was enough to cause panic selling of these bonds in the fear that their prices might collapse<sup>23</sup>. Although the panic had in the end no substantial negative impact on the US treasury bond market, the opposite was true of many of the ECE sovereign bond markets as large sums of foreign portfolio investments were withdrawn from these markets in panic-driven flights to safety. While the negative impact of these withdrawals on the ECE's currencies' rates against the dollar was significant, it would have been even more so had ECE central banks not have been able to draw massively on their dollar reserves to support their currencies. The second

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<sup>22</sup> OECD (2020b)

<sup>23</sup>Hordahl and Shim (2020)

example of the extent to which ECE governments and their central banks are especially subject to the vagaries of US monetary policy in periods of crisis relates to the events surrounding Russia's invasion of the Ukraine in early 2022. While the US Federal Reserve had again embarked on a quantitative easing programme following the outbreak of the covid pandemic (a fact that helps explain why the foreign portfolio outflows from ECE securities in March, 2020, were then reversed from April that year as portfolio investors poured funds into these securities in the search for yield), it was always known that there would come a point where that programme would be reversed and thus always feared that substantial amounts of foreign portfolio investments in ECEs would be withdrawn as a consequence. That point came sooner than expected as the sudden sharp rise in energy prices caused by the West's sanctions on Russia and the ensuing disruption to its oil and gas supplies necessitated an abrupt switch to monetary tightening to counter the inflationary impact of these price rises. With that abrupt switch, it was only a matter of when ECEs, whose domestic economies were just recovering from the effects of the covid pandemic and were also now being hit by the fall-out of the Ukraine crisis, would experience another mass exodus of foreign portfolio investments. That mass exodus duly occurred over the months up to June, 2020, when over \$50 billion worth of fixed income funds were withdrawn from ECE securities<sup>24</sup>.

In the end, one of the most striking facts about the crises of 2007-8 and of 2020-21 is that despite breaking out in very different locations and despite having completely different causal origins they yet had the same result of further reinforcing the dynamics of subordinate financialisation. This fact must beg the question that if global crises cannot undermine the dollar's power that is central to these dynamics, then what can. The answer is that at a time when the US dominates the world's financial securities markets to the same degree that these dominate the world's product markets, one of two things must happen: either the scale growth of the financial markets is reversed, which is to say that subordinate financialisation is ended with de-financialisation, or ECEs expand their domestic financial markets to a large enough size as can enable them to break free from the gravitational pull of the US dollar markets. The

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<sup>24</sup> In an article published by the Financial Times on July 10th under the heading "Investors pull \$50 billion from emerging market bond funds in 2022", it was noted that among the key catalysts for this large withdrawal of funds from emerging market fixed income securities were the policy actions of the US Federal Reserve. As was stated: "The Federal Reserve's rate rises this year and plans for more in the offing, are particularly toxic to emerging markets, because they have increased the fixed returns investors can earn on holding ultra-safe US debt, eroding some of the appeal of bonds sold by issuers with weaker credit profiles".

reality is that neither of these developments is going to happen in the foreseeable future: the former because there will inevitably be a continuing increase in security supplies to accommodate the increasing financial pressures of the present, and the latter because there are simply too many barriers, ranging from the economic and institutional to the political and cultural, that impede ECEs' ability to expand their financial markets. In short, a gravity powered system of subordinate financialisation looks set to remain a component part of global capitalism's unfolding trajectory.

## 5. Conclusion

To draw this conclusion is not suggest that nothing can be done to counter the negative consequences of subordinate financialisation. On the contrary, there is much that can be done providing that the governments of all the major capitalist economies, both advanced and emerging, take concerted action to achieve this end. What precise form that concerted action should take, and what difficulties it will face, is the subject of another paper. The purpose of the present paper has been to help give such action theoretical and empirical justification.

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