Global Finance since the Asian Financial Crisis

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The credit system accelerates the material development of the productive forces and the establishment of the world market. It is the historical mission of the capitalist system of production to raise these material foundations of the new mode of production to a certain degree of perfection. At the same time credit accelerates the violent eruptions of this contradiction – crises – and thereby the elements of disintegration of the old mode of production. The two characteristics immanent in the credit system are, on the one hand, to develop the incentive of capitalist production, enrichment through exploitation of the labour of others, to the purest and most colossal form of gambling and swindling, and to reduce more and more the number of the few who exploit the social wealth; on the other hand, to constitute the form of transition to a new mode of production. It is this ambiguous nature, which endows the principal spokesmen of credit from Law to Isaac Pereire with the pleasant mixture of swindler and prophet. (Marx 1894, 441)

Talk about centralization! The credit system, which has its focus on the so-called national banks and the big money-lenders and usurers surrounding them, constitutes enormous centralization, and gives to this class of parasites the fabulous power, not only to periodically despoil industrial capitalists, but also to interfere in actual production in a most dangerous manner – and this gang knows nothing about production and has nothing to do with it. (Marx 1894, 544-545)

I. Introduction.

Hong Kong was returned to China on 1st July 1997. The Asian Financial Crisis erupted in the same month. Its impact on Asia is well-known. It had a tremendous impact upon Hong Kong. However, it appeared to have had little effect upon Mainland China. It seemed to outside observers that China was insulated by tight controls over the country's capital account and the fact that the RMB was non-convertible. In fact, the crisis threatened China's financial system stability through the pathway of Hong Kong's financial sector. In the 1990s, mainland Chinese firms operating in Hong Kong contracted huge debts. The Asian Financial Crisis exposed their fragility, which had been hidden by the booming economy of the preceding period. During the crisis, a large fraction of these institutions, including the numerous 'red chip' and 'trust and investment companies', became insolvent: 'As the tide goes out, the rocks appear' (*shui luo shi chu*). Bringing the financial crisis in Guangdong under control required decisive, immensely complicated and inter-linked policy decisions involving both Hong Kong and Guangdong province.[1] The crisis had a profound impact on the Chinese government's approach to financial system reform. It demonstrated the dangers for China of comprehensive integration with a weakly regulated global financial system. It demonstrated the extreme rapidity with which a financial crisis could develop and the 'fire' spread across national boundaries. It demonstrated that non-bank financial institutions ('shadow banking') can play a key role in causing financial system instability. It demonstrated the challenges involved in regulating Chinese financial institutions operating outside the mainland's borders. It was a cause for deep reflection that such serious difficulties had arisen for Chinese financial firms operating in Hong Kong, which

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[1] Nolan and Wang Xiaoqiang, 2008

was a territory governed by British law and financial regulation. Resolving the crisis involved a huge effort by the Chinese government and the CPC. The traditional philosophy of the Chinese bureaucratic system required government officials to assume full responsibility for their decisions. Government officials were expected to take independent decisions in the light of local conditions (*yin di zhi yi*) and not expect that the central bureaucracy would provide detailed instructions. Resolving the crisis required great skill and courage. The successful resolution of the crisis provided the Chinese financial system with a breathing space in which to implement reform. Unlike much of the developing world and unlike the high-income economies China has not had a financial crisis during the four decades of reform and opening up, despite repeated predictions from foreign commentators of an impending Chinese financial collapse.[2]

Has regulation of the global financial system improved since the Asian Financial Crisis? Have the dangers stemming from deep integration with the global financial system increased or reduced?

II. The bubble inflates.

The symbiotic inter-relationship between the financial economy and the non-financial ('real') economy is at the heart of political economy. Regulation of the financial system in order to serve the common interest is a crucial task of public

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[2] Chang (2001) is the best known of the numerous publications that have predicted the 'impending collapse' of the Chinese financial system. Magnus (2018) is the most recent in this extensive genre of 'prediction' about the impending collapse of China's financial system. Stent (2017) provides a strikingly different and balanced evaluation of China's financial reforms, based on deep on-the-ground practical experience within the Chinese financial system.

policy at both the national and the global level. However, it is hard to regulate something if it cannot easily be defined. In fact, 'money' is an elusive concept. Identifying the functions of money (unit of account, store of value and means of exchange) is far easier than defining what it is. Throughout economic history an almost limitless array of instruments of debt and credit have been a necessary adjunct to narrowly defined money. Keynes observed that 'for many purposes the acknowledgements of debt are themselves a serviceable substitute for money proper in the settlement of transactions' (Keynes, 1930: 5). Mainstream economists mostly believe that financial markets are fundamentally efficient and based on rational expectations. They fail to provide arguments as to why feedback loops supporting speculative bubbles cannot occur. Typically, they do not even mention bubbles or Ponzi schemes, conveying instead a sense of orderly progression and mathematical precision in financial markets. In fact, asset bubbles have occurred repeatedly. Economists such as Keynes, Galbraith, Kindleberger and Minsky, argued that fluctuations in the supply and use of money are 'endogenous' to the economic system. During a speculative boom in asset prices, despite the efforts of monetary authorities, both money supply and the efficiency of its use expand to meet the needs of asset speculation. Once the speculation process gets under way, powerful feedback loops drive markets ever higher. Credit is extended on the basis of increased collateral asset prices, which supports further increase in asset prices, and further credit expansion. Unregulated financial markets are subject to crises, due to periodic and alternating bouts of irrational exuberance and pessimism of investors, which are largely unrelated to economic fundamentals. The counterpart of the tendency of financial markets to produce self-reinforcing 'bubbles' is the tendency

to produce self-reinforcing market collapse: bubbles tend to burst, rather than deflate slowly (Shiller, 2000).

Intelligent regulation of the financial system needs the expertise of professional bankers. However, the 'revolving door' between government and financial institutions, both in the USA and in Europe, opens opportunities for 'regulatory capture' (Johnson and Kwaak, 2010).

After the 1980s the influence of powerful financial firms upon government policy in the West increased alongside the relentless advance in industrial concentration in the financial sector, with the USA at the core. A group of super-large global banks emerged in this era. To a considerable degree this was the result of an explosive process of merger and acquisition. The share of the world top 25 banks within the total assets of the top 1000 global banks rose from around 20 per cent in the early 1990s to 28 per cent in 1997, reaching 41 per cent in 2006 (*The Banker,* 2007).

From the 1970s onwards a long chain of policies was enacted by governments in the West, led by the USA, which progressively freed financial institutions from the constraints under which they had operated since 1945. These included the end of convertibility for the US dollar into gold; relaxation of the controls on issuing mortgages; the end of exchange controls and restrictions on international capital movements; abandoning fixed currencies in favour freely floating exchange rates; relaxing controls on cross-border mergers and acquisitions; ending the separation of retail and investment banking; relaxing limits on market share within national

boundaries; and opening up the financial markets of large parts of the developing and transition economies. There took place a simultaneous technological revolution in the financial services industry. These changes set the scene for a revolutionary increase in the size of the financial sector relative to the rest of the economy, built upon the foundation of a relentless increase in the ratio of debt and credit to national output. Corresponding to these dramatic changes there took place an explosive advance in the economic and social role of 'capital markets', with the USA at the epicentre of the changes.

A key factor permitting asset price growth in the West has been the focus of monetary policy upon consumer price inflation. This determination was crystallised in the 1990s with the decision to establish 'independent' central banks. Their mandate was to control price inflation by manipulating the short-term policy interest rate in order to provide an 'anchor' for consumer price inflation by limiting inflationary expectations. In other words, the degree of central bank independence was tightly constrained. Asset prices were not included in the index of consumer prices. Asset price inflation was considered to be outside the domain of the central banks. By far the most important asset price is housing. Up until 1983 the US government's consumer price index included house prices. In 1983 these were replace by an estimate of how much owners could charge to let their homes and in 1998 all links to the real estate market were severed. Endless debate surrounded minute changes in the rate of interest by the so-called 'independent' central banks. The 'fire' of asset price inflation raged around them, advancing in leaps and bounds, not small increments. However, their mandate required them not to take notice of the raging asset price fire. Policy-makers and financial regulators in the high-income countries permitted debt to expand into forms and to an extent that were

unimaginable before the 1980s. Between 1980 and 2003 the total global financial stock (including bank deposits) increased from 109% to 326% of global GDP (Tables 1). The combined stock of government debt, private debt securities and equity securities increased from 67% of global GDP in 1980 to 230% in 2003. This represented a revolutionary transformation of the role of capital markets in the high-income economies. The mass of the population was a willing accomplice in the de-regulated asset bubble, especially that in property, which formed the foundation for an explosive growth of 'wealth' and credit with which to fund both speculation and consumption. The relationship between the financial and the 'real' economy became hugely unbalanced. In the high-income countries a cultural revolution occurred in attitudes towards personal debt and consumption driven by the asset price bubble.

Table 1. Growth of global financial stock relative to GDP, 1980-2003.

	1980		2003	
	$Tr	% global GDP	$Tr	% global GDP
Total financial stock	12	109	118	326
Bank deposits	5.4	53	35	97
Government debt securities	2.2	22	20	55
Private debt securities	1.7	17	31	85
Equity securities	2.8	28	32	89
World GDP (nominal)	10.1	-	36.1	-

Source: McKinsey, 2005

There developed a growing confidence that the high income countries had entered a new epoch of sustained economic growth with low inflation, from which the risk of a financial crisis had been banished, brought about through the application of modern, sophisticated, scientifically-guided economic management techniques. In

2004 in a celebrated speech Ben Bernanke commented: ‘The Great Moderation, the substantial decline in macroeconomic volatility over the past twenty years, is a striking economic development…Improved monetary policy has likely made an important contribution not only to the reduced volatility of inflation but to the reduced volatility of output as well’ (Bernanke, 2004).

III. The bubble bursts.

In August 2007 the global financial crisis began to unfold. Fear entered the financial system in the high-income countries as the asset bubble began to move into reverse, spreading out from the sub-prime market. There began a flight from debt that was as potent as the rush towards it was in the upswing. Liquidity started to dry up as banks became afraid to lend even to each other, since they were uncertain of where the final credit risks lay. A credit squeeze developed across the high-income countries. In autumn 2008, the crisis entered a new and far more dangerous phase. Between early September and mid-October the global financial system was shaken to the core. In the United States a series of shattering blows hit the country’s leading financial institutions. Over the weekend of 6-7 September, Fannie Mae and Freddie Mac were placed under direct government control. On 15 September Lehman Brothers filed for bankruptcy, the largest in US history. On the same day Merrill Lynch was acquired by Bank of America. On16 September Federal Reserve announced that it would lend AIG up to US$ 85 billion in emergency funds in return for a US government stake of 79.9%. On 25 September US regulators closed Washington Mutual and took direct control of the bank. Simultaneously, JP Morgan agreed to acquire WaMu for US$1.9 billion. On 29 September, faced with bankruptcy, Wachovia agreed to be acquired by Wells Fargo for US$ 15.1 billion.

In March 2007 the market capitalisation of Washington Mutual had been US$37 billion and that of Wachovia had been US$ 108 billion. Europe's leading financial institutions experienced equally shattering blows.

On 4th October, *The Economist*, which had been one of the principal cheerleaders for de-regulated capitalist globalisation, featured a front cover with a lone figure staring into a black abyss, with the caption 'World on the edge'. During the week of 6-10 October the dam burst. The stock market fell by 23 per cent in New York, 21 per cent in London, 25 per cent in Tokyo and 22 per cent in Frankfurt. The emerging markets stock market index fell by 26 per cent, with a decline of 57 per cent from the peak of one year previously. The share price of leading banks fell precipitously. The world's financial markets faced Armageddon. The *Financial Times* editorial of Monday 13 October was entitled: 'The minute before midnight for banks': 'The banking system of the western world is suffering the equivalent of cardiac arrest. It is virtually impossible for any institution to finance itself in the markets any longer than overnight…The heart of the world's financial system has stopped beating. It must be re-started'.

After years of lecturing to the developing world about the unfairness of state support for their national firms and the inefficiency of state ownership, there was a rich irony that the governments in high income countries were forced to provide vast sums of money to support their respective national banks and take large ownership shares in them. Having lectured developing countries about the importance of a 'hard budget constraint' and 'moral hazard', the governments of high income countries were now perpetrating a 'soft budget constraint' and engaging in 'moral hazard' on a gigantic scale. The self-confident ideology of the era of 'free market

fundamentalism' and 'self-regulating financial markets' was jettisoned. The past, pre-2008, was indeed 'a foreign country'.

IV. Towards global financial regulation or another global financial crisis?

Despite the damage inflicted upon global financial firms during the GFC, they remained immensely powerful in influencing the national and international policy response to the crisis. During the crisis in 2008/9 an extraordinary set of mergers and acquisitions took place. By 2009 the share of the top 25 banks in the total assets of the world's 1000 largest banks had risen to 45 per cent (*The Banker,* 2010). Moreover, aggregate statistics conceal an even higher degree of industrial concentration in sub-sectors of global banking. By 2016 the top 500 asset managers had a total of US$ 81 trillion assets under management (AUM). Between 2007 and 2016 the share of the top 20 asset managers in total AUM increased from 38% to 42%, and the share of the top 50 asset managers increased from 60% to 65% (Willis Towers Watson, 2017). All of the top 50 asset managers are from the high-income countries. The share of North American asset managers in total AUM increased from 46% in 2007 to 58% in 2016. In 2017 the top 10 investment banks accounted for 50% of total global investment banking revenues. The top five investment banks are all American and the top 10 are all from the high-income countries. In 2016 the top 10 financial firms accounted for 65% of the total foreign exchange market. Three of the top five firms are American and the top 10 firms are all from the high-income economies. In 2014 there were US$123 trillion of financial assets under custody. The top four custodians were all American and accounted for 66% of total assets under custody.

Some progress in international bank regulation was achieved. The Bank of International Settlements (BIS) produced the first set of Basel Capital Accords in 1988 and the second set in 2004. Each of the Basel Accords made recommendations about banks' capital requirements and leverage ratios. Basel III, which was produced in 2010, introduced even more stringent capital requirements, including a counter-cyclical buffer during periods of high credit growth, a more stringent minimum leverage ratio, and a more stringent liquidity coverage ratio. It also placed severe restrictions on the use of complex mathematical models to evaluate capital requirements. Overall, Basel III regulations and their implementation by national bank regulators forced banks to reduce risk-taking, strengthen their balance sheets, decreased their leverage and strengthen their capital bases. These measures were supplemented by additional measures to contain risk in 32 'systemically important financial institutions' (SIFIs), which were required to have higher loss absorbency requirements, as well as special group-wide resolution planning.

The regulations introduced by the BIS requiring banks to increase their capital buffers accentuated the demand for 'high quality' securities. The BIS acknowledged that this created the possibility for an 'adverse feedback loop' due to the close link between banks and public sector balance sheets (BIS, 2016: 83). Under Basle III sovereign debt was given favourable treatment in relation to bank capital. This failed to reflect accurately the risks involved in government debt and encouraged perverse behaviour by banks through their acquisition of government debt. In the wake of the GFC regulation has become increasingly harmonised across countries, 'generally in the direction of favouring public over private debt' (BIS,

2016: 89). Under Basle III rules, the weights assigned to public sector debt were often close to zero. However, ‘no asset is truly default-free’ and ‘current prudential treatment of sovereign exposures is no longer tenable’ (BIS, 2016: 92). There may be a limit to the level of public debt beyond which ‘sovereign spreads may soar’ and ‘stabilisation policies may become severely constrained’ (BIS, 2016: 84). Sovereign debt defaults are not confined to the history of developing countries. Although they are less common than defaults on international debt, defaults on domestic debt are ‘far from rare’ (BIS, 2016: 86). A loss in the sovereign’s perceived creditworthiness can have pervasive effects on banks, not only through capital losses, but also through the broader impact on the economy. The BIS warned that the ‘doom loop’ of contagion feedback between sovereign risk and financial system risk was ‘stronger for countries with a larger financial sector’ (BIS, 2016: 87).

The main plank of policy response in the high-income economies was to use monetary policy in order to re-ignite the asset bubbles that were punctured during the global financial crisis and thereby stimulate consumer spending: ‘Monetary policy has reduced interest rates and supported asset prices in order to stimulate spending and avoid an even deeper and more prolonged recession following the financial crisis’ (Bank of England, 2012: 11). The availability of cheap debt worked in favour of the wealthy. Alternative approaches to the crisis were given short shrift. These might have involved redistribution by means of fiscal policy, stimulating consumer demand through income redistribution, financed by increased taxation of income and wealth, alongside state-organised public infrastructure investment, in order to improve the provision of energy-efficient transport, buildings, and electricity supply, and raise educational levels in order to develop the skills needed

to compete in the global labour market. Moreover, long-term investments with secure yields might have been an attractive source of investment revenue for pension funds, insurance companies and asset managers. The alternative approach would have helped to cement the fabric of societies that had been undermined by the combined forces of globalisation and technical changes since the 1980s. Refusal to implement this approach reflected a failure of political imagination. In the absence of this approach, after 2007 social cohesion in the high-income countries was undermined. The era witnessed the rise of populist political forces of both the right and the left across the high-income countries and psycho-social displacement of popular discontent into growing hostility towards China.

In the 1990s the central bank's policy rate of interest had been around 6-7 per cent in the UK and USA, and 3-4 per cent in the countries that became the Eurozone. Following the collapse of the dot.com bubble in 2001, the Federal Reserve sharply lowered its policy interest rate, reaching 1 per cent in 2004, with the objective of re-igniting the asset bubble.[3] The ECB and Bank of England followed suit, the former falling to 2 per cent and the latter to 4 per cent in 2003. All three entities gradually increased the policy rate, reaching 4-6 per cent in 2007-8. Following the global financial crisis, the three sets of central banks lowered the policy rate of interest to below one per cent. In the wake of the GFC, central banks in the USA, the UK, Japan and eventually, the Eurozone, implemented large-scale 'quantitative easing' (QE), which consisted of massive purchase of government bonds issued by the national treasury. By 2014 the central banks of the USA, the UK, and Japan

[3] The relationship between the short-term 'policy' rate of interest and the long-term rate of interest is a vast area of research, without a clear consensus among either academics or practitioners. The relationship between Asia's high savings rate and interest rates in the West is an equally complex and heavily disputed area of research.

held 16, 24 and 22 per cent respectively of government bonds outstanding in their countries (McKinsey, 2015: 33), mainly due to the quantitative easing programmes. The large volume of central bank purchase of bonds from the national treasury stimulated bond price increases, which pushed down bond yields to close to zero.

During the GFC, the governments of the high-income economies supported the banking system by purchasing bad assets. They also continued to implement social welfare spending, albeit at a reduced level, mainly through automatic stabilisers, which were crucial for social stability during the shocking disruption to normal economic activity. As a result across the high-income countries government spending sharply increased its share of GDP. In the G7 countries the share rose from 38% in 2007 to 44% in 2009, and remained at 39% in 2018. However, government revenue in the G7 countries declined from 36% in 2007 to 34% in 2009, before recovering to 36% in 2018. The gap between government spending and revenue yawned to around 9-10% of GDP in 2009-2010, and there was a substantial gap between revenue and spending throughout the decade after the GFC. In the 1970s gross government debt in the G7 countries stood at around 30% of GDP. During the era of globalisation, government budget deficits, which formerly had been mainly confined to wartime, became the norm across the high-income countries. Between 2008 and 2018 the total amount of government debt rose from 58% of global GDP to 87% (Table 2). Since 2008 governments have benefited from exceptionally low interest rates. If the extraordinary world of ultra-low interest rates were to be reversed to any significant extent and economic stagnation was to persist, it would have serious consequences for government debt in the high-income countries, including the possibility of accelerating levels of debt relative to GDP, so that the high-income countries as a whole might begin to approach the debt levels

in Japan. The way in which this might affect the evolution of the high-income countries as a whole is an unknown territory in public policy, fraught with uncertainties and risk: 'The "Great Unwind" is a journey into the unknown' (Deutsche Bank, 2017: 31). By early 2019 that process had hardly begun.

In the wake of the global financial crisis, the financial sector in the high-income economies de-leveraged significantly, mainly due to the increased regulatory controls implemented through Basel III. Between 2008 and 2018 financial sector debt declined from 91% of global GDP to 81% (Table 2). Non-financial corporate sector debt increased from 72% of global GDP to 90%. The huge increase in corporate debt was driven by the decade-long unprecedented low interest rates. It contributed to a boom in share buy-backs, which helped to boost share prices, and contributed to a boom in mergers and acquisitions. There was wide apprehension that if interest rates returned to their long-term level, a significant fraction of corporates would find it difficult to service their debts.

Table 2. Global debt, 1997-2018.

	1997		2008		2018	
	$ Tr	*% Global GDP*	$ Tr	*% Global GDP*	$ Tr	*% Global GDP*
Total	74	*235*	178	*280*	247	*318*
Non-financial corporates	21	*66*	46	*72*	74	*90*
Government	19	*61*	37	*58*	67	*87*
Financial corporates	19	*61*	58	*91*	61	*81*
Households	15	*48*	37	*58*	47	*60*

Source: IIF, 2017 and 2018

Mortgages account for 74 per cent of household debt in the advanced economies (McKinsey, 2015: 40). Rising real estate prices driven by readily available mortgages explains most of the growth in household debt prior to the GFC. As house prices rise, households must take out larger loans in order to buy them, while banks are more willing to lend against collateral the price of which is increasing. There is a strong positive relationship across all countries between house prices and household debt-to-income ratios (McKinsey, 2015: 42). In most high-income countries house prices and household debt continued to increase after 2008. Between 2008 and 2018 household debt increased from 58% of global GDP to 60% (IIF, 2018). Household de-leveraging since 2008 is rare across the high-income economies. Low interest rates helped to sustain demand for mortgages, which also enabled house owners to borrow for personal consumption against the increase in house prices. Simple measures that could have contained house price increases, such as strict limits both on mortgages as a proportion of the value of properties and debt repayment levels relative to household income, and prohibition of interest-only mortgages, have not been widely implemented. Moreover, successive changes under the Basel Accords have helped to stimulate increased mortgage debt and asset price inflation. Prior to the GFC Basel I and II deemed mortgages to be increasingly less risky, reducing the bank risk weighting on mortgages. Under Basel I, 50 per cent risk weightings were applied to mortgages and under Basel II the risk weighting for mortgages was reduced to 35 per cent. Moreover, Basel II introduced an option for banks to calculate their own internal risk weightings (Watling, 2017). Under Basel III, agreed in 2010, the standard mortgage weightings were further reduced. The huge increase in mortgage debt is the main reason for the relentless increase in house prices and the principal driver of the increase in household debt

across the high-income countries. Mortgages that are sustainable at near-zero interest rates would be unsustainable if interest rates returned to their long-run average level, which would have serious economic and political consequences.

The toxic inter-play between asset price increase and credit expansion based on the increased asset prices was the core mechanism responsible for the global financial crisis. In the 1960s and 1970s the total global stock of debt was roughly 1.3 times global GDP. In the early 1980s it began its relentless increase relative global GDP. By 1997 it had reached 235%, rising to 280% in 2008 and today it stands at 318% (Table 2). In other words, up until the early 1980s, the 'real' economy and the financial economy were more or less in balance. In the intervening period the financial economy has increased to over three times that of the 'real' economy. Even after thirty years of globalisation and financial market liberalisation, it remains the case that the main part of global debt is located within the high-income economies. In 2018 'mature' markets accounted for 72% of total global debt compared with 28% in 'emerging markets' (IIF, 2018).

The impact of government policy on asset prices was broadly in line with the policy-makers' hopes. The effect on stock markets was dramatic. Despite growth of stock markets in developing countries, in 2017 the stock markets of the high-income economies accounted for 79% of total world stock market capitalisation (WB, 2018). In the high-income economies stock market capitalisation increased from 52% of GDP in 1990 to 126% on the eve of the GFC, before plunging to 63% in 2008. By 2017 it had rebounded far beyond the pre-crisis peak, reaching 138% of GDP. The USA is by far the most important stock market, accounting for 41% of total world stock market capitalisation in 2017. The US stock market increased from 53%

of GDP in 1990 to 148% in 2006, plunging to 80% in 2008, before recovering to 166% in 2017 (WB, various years). Between 1980 and 2000 real house prices in high-income economies nearly doubled. Between 2000 and 2007 real house price inflation in global cities accelerated. In New York, Paris and London the increase was around 80-100% (Economist, 2019). After plunging during the GFC real house prices in global cities resumed their upward trend. By 2017 real house prices in most global cities had surpassed their pre-crisis peak and stood at two to three times their level in 2000. After the 1980s the bond market in the high-income countries grew much faster than GDP. Between 1990 and 2009, in high income countries the total bond market increased from around 98% of GDP to 198% (Gruic and Woolridge, 2012). By 2016 total global bonds were estimated to be the equivalent of 215% of global GDP (BIS, 2018). Despite the growth of bond markets in developing countries, in 2016 developed country bond markets accounted for 88% of the total global bond market. In most high income countries, government bonds accounted for around 50-70% of the total.

Across the high income countries, the large volume of central bank purchase of bonds from the national treasury under the so-called QE programme stimulated bond price increases, which pushed down bond yields. In the USA the yield on 10-year Treasury Bills fell from 4 per cent in 2008 to 0.02 per cent in mid-2016 (*FT*, 2 August 2016). By July 2016 the volume of negative-yielding government bonds had reached a global total of US$ 13 trillion, amounting to around 30 per cent of global government debt (*FT,* 3 August, 2016). There was a 'voracious investor appetite for sovereign paper' in pursuit of 'supercharged returns' from bond price increases (*FT,* 4 June 2016). The deputy head of the Norwegian sovereign wealth fund commented: 'We have seen decades of falling rates and that has given bond

investors a capital gain. There is a question mark over how much further rates can fall and if you can expect to have that kind of capital gains in the future' (quoted in *FT*, 18 August 2016). As the price of sovereign bonds across all the high income economies continued its relentless rise the possibility increased that at some point the bond bubble would burst and the 'snap back' would contribute to sharply increased interest rates. The BIS was fearful that there is a 'liquidity illusion' and that liquidity in the bond market could 'evaporate under stress, as it has always done in the past' (BIS, 2016: 34). Financial market analysts spoke increasingly of the possibility of a 'great rotation' in sovereign bond markets, marking the end of the sovereign bond bubble.

The growth of capital markets in the high-income economies since the 1980s is inextricably connected to the generation and distribution of wealth. Global wealth has grown faster than global GDP, increasing from 348% of global GDP in 2000 to 394% in 2007. In 2018 it reached 419% of global GDP (Credit Suisse, 2018). In the USA the ratio of wealth to GDP reached 452% and in the UK it reached 488%. The distribution of wealth is hugely unequal. In 2018 the top the top 10% of the world's population owned 85% of global wealth, while the top 1% owned 47%. The global Gini coefficient of wealth distribution is 92.7%. Wealth management has become an increasingly important business for global investment banks, asset managers and fund managers. The main beneficiaries of their expertise have been relatively wealthy people from the high-income countries. Between 2000 and 2016 the average (mean) increase in wealth in North America was over $174,000 and in Europe it was over $75,000. In India the increase was around $4,000 and in Africa it was around $1,200. There are around 42 million adults with wealth of over US$1 million. They account for around 0.8% of the world's total number of adults, but

own 45% of global household wealth. Thirty-seven million adults have wealth of between US$1-5 million. Around 5 million adults are in the ultra-rich category with wealth of over US$5 million, of whom around 1.8 million have over US$10 million (Credit Suisse, 2017). A significant fraction of the world's ultra-rich work in the financial services industry.

Most economists argued that financial market liberalisation and deepening capital markets would improve economic performance through more efficient allocation of savings. The era after the 1980s witnessed tremendous de-regulation of financial markets and a revolutionary change in the role of capital markets in the high-income economies. However, the results in terms of economic performance failed to meet expectations. While financial 'investment' in capital markets grew at high speed, greatly outstripping the growth of GDP, the share of real investment in fixed and working capital gradually declined after the 1970s, from an average of 25% in 1980-84 to 21% in 2014-18 (IMF, 2018). The share of world GDP produced by the G7 economies fell from 51% in 1980 to 38% in 2007, before slumping to 30% in 2018. The steep decline in the relative position of the G7 countries, which accelerated in the wake of the GFC, caused profound anxiety within the G7 countries. The average annual growth rate of real GDP p.c. in the G7 countries fell from 2.6% in 1980-1990, to 1.8% in 1990-200, to 1.4% in 2000-2007, slumping to 0.7% in 2007-18 (IMF, 2018). There took place a simultaneous large rise in average household wealth alongside stagnation in real household median income. Between 1990 and 2000 US median real household income increased by less than 10% and after 2000 there was barely any increase at all (US Bureau of the Census). The increase in household wealth was to a great extent due to the increased price of assets, especially houses and equities.

The high-income economies may face, at best, a long period of low investment rates and diminished growth. Many economists argue that this reflects 'secular stagnation' brought about by long-run forces, including an ageing population, technological progress and changes in the distribution of income.[4] Similar arguments were made to explain inter-war economic stagnation in the USA, including the 'exhaustion of investment opportunities', 'adverse changes in the distribution of income' and 'under-consumption'. However, by far the most important secular trend in the high-income economies since the 1970s has been the relentless increase in debt and asset prices, which were made possible by financial market de-regulation: 'Debt has been acting as a political and social substitute for income growth for far too long' (BIS, 2016: 8). This has diverted investible and human resources away from the 'real' economy into a hugely inflated financial sector.

However, there is a more disturbing scenario for the high-income countries than secular stagnation. The BIS cautions that 'financial markets have grown increasingly dependent on central banks' support…After so many years of exceptional accommodation and growing financial market dependence on central banks, the road ahead is bound to be bumpy': 'Should this situation be stretched to the point of shaking public confidence in policy-making, the consequences for financial markets and the economy could be serious' (BIS, 2016: 17). The BIS warns of the dangers involved in the 'relentless increase in the debt-to-GDP ratio, both public and private' alongside the decline in real interest rates: 'This raises the

[4] In fact, it is hard to demonstrate unambiguously that these long-run forces cause 'secular stagnation', and the forces each have a different and complicated effect on economic growth.

risk of a debt trap, whereby as rates increase it becomes harder to raise rates without causing damage.. And one should not underestimate the risk of a 'doom loop', whereby weaknesses in public and private sector balance sheets feed into each other.' (BIS, 2016: 17-18). In 2018 financial markets in the high-income economies were fraught with uncertainty. There was a real possibility of another financial crisis in the West. It is hard to imagine that the type of policy response adopted in the last financial crisis would be effective.

V. Conclusion.

The relentless growth of the financial economy compared to the real economy raises profound questions about the nature of economic systems in the era of globalisation. At the heart of financialisation is a vast edifice of financial institutions that inhabit the world of 'capital markets'. The world's financial commentators routinely refer to 'markets' and 'investors' as if they were abstract, neutral entities. In fact, they are concrete institutions. A vast terrain of capital markets business has grown into being in the world's financial centres in the high-income economies, with New York and London at the centre, closely bound together by global financial firms. The firms that inhabit different overlapping segments of capital markets include not only retail banks and investment banks, but also a panoply of inter-connected nonbank financial institutions, including asset managers, mutual funds, money market funds, pensions funds, insurance companies, asset custodians, hedge funds, private equity, and sovereign wealth funds. Surrounding these firms is a thick layer of firms that work with capital markets, including financial hardware and software providers, law firms, audit firms, trading platforms, analysts, data providers, consultants and head-hunters. The share of these institutions in terms of

employment and income within the high-income economies has marched forward in lock-step with the increase in relative importance of capital markets.

During the era of globalisation tremendous pressure was exerted by powerful financial firms to liberalise regulation of the financial sector in the high-income economies. Liberalisation in turn permitted a group of giant international financial firms to emerge, with their headquarters in the high-income economies. The financial firms that dominate global capital markets mostly have their headquarters in the USA. A core aspect of their business is meeting the needs of global firms in the non-financial sector, as they have 'gone out' and built their business systems across the world. Increasingly, global financial firms meet the needs of the wealthiest groups among the global population. In key segments of the financial services industry, including investment banking, foreign exchange dealing, asset management, project finance, trade finance, and custody, high levels of industrial concentration emerged. As financial firms increased in size, especially through merger and acquisition, they were able to exercise even greater pressure on governments to liberalise the financial sector. 'Independent' central banks were required by governments to concern themselves only with consumer price inflation and ignore asset price inflation. Under de-regulated financial markets, asset price inflation took off. Credit and debt expanded in proportion. The mass of the population was a willing accomplice, happy in the 'wealth illusion' and the increased borrowing capacity that it produced. The era witnessed a cultural revolution in the high-income countries, intimately linked to the revolution in asset prices, debt and credit.

This has resulted in a revolutionary transformation of the relationship between the financial and the non-financial sector. The system's stability is critically dependent on asset prices. Its inherent instability exploded violently in 2008-9. The method of 'resolving' the West's financial crisis was to re-ignite the asset bubble. The financial system has demonstrated its capacity to cause immense harm to the 'real' economy and there is a high chance that it will do so again. Instead of the human species controlling its own destiny through intelligent regulation of the financial system in the common interest, the financial system has become a 'Frankenstein' monster, created by our collective endeavour, but out of our collective control, setting the direction of travel for the whole structure of political economy: 'Modern bourgeois society with its relations of production and of exchange, is like the sorcerer, who is no longer able to control the powers of the nether world whom he has called up by his spells' (Marx and Engels, 1848: 49). The financial system of the high-income economies stands in a precarious position. There is high probability that the vast superstructure of 'capital markets', which is built upon the non-financial economy, will encounter serious turbulence and cause heavy damage to the 'real' economy.

The GFC had a profound impact upon the political economy of the high-income countries and, thereby, upon the whole world. The crisis helped to produce stagnation in the economies of the West and accelerated the long-run decline in their relative position in the global economy. The policies to deal with the crisis exacerbated wealth inequality. The crisis undermined the confidence of citizens in the high-income countries in the competence of their governments. It produced profound anxieties about the draining away of the West's 200 years of global dominance. Rising hostility towards China is partially a psycho-social displacement

mechanism arising from deep insecurity in the West. The crisis accelerated awareness that we are living at a crossroads of civilisation in which the era of the West's global dominance is entering a prolonged and acutely complicated period of transition (Nolan, 2018). In 50 or 100 years' time, let alone beyond that, the world will look very different. The era of comprehensive Western dominance will increasingly be seen as a brief interlude in world history. The GFC had a profound impact upon the political economy of the high-income countries and, thereby, upon the whole world. It is unsurprising that this era witnessed the rise of populism across the high-income countries.

Universal adult male suffrage in the West did not come about until the late 19th century. The West's democracies wholeheartedly supported the colonial conquests of the half-century before World War I. The democratic system was functionally 'fit for purpose' in terms of ruling the vast colonial territories and dominating the post-colonial political-economic system after World War II. It is questionable whether this system is 'fit for purpose' in terms of dealing with the West's relative decline. The system was tested severely by the GFC and its consequences. Serious financial turbulence in the West would place the political-economic system under even more severe strain, with unpredictable and potentially dangerous results. The 'incoming tide' of asset price inflation conceals deep socio-economic fissures hidden beneath the calm surface of the water. As the tide of asset price increase reverses direction the 'rocks' appear (*shui luo shi chu*).

Between 1626 and 1628 Sweden built the warship Vasa. The richly decorated ship was one of the world's most powerfully armed vessels. However, it was dangerously unstable with too much weight in the upper structure of the hull. On its first voyage

out of the harbour in Stockholm it toppled over and sank only a few minutes after encountering a wind stronger than a breeze.[5]

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[5] There is a museum in Stockholm devoted to the Vasa. Perhaps in future generations there will be a museum of financial history, which will include an account of the bizarre top-heavy structure of financial globalisation before the era of intelligent regulation of the financial system.

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