

Global Atlantis

Science-based Pragmatism for Survival

Hardy Hanappi
VIPER – Vienna Institute for Political Economy Research
and
Technical University of Vienna, Economics, Institute 1053
Hanappi@gmail.com www.econ.tuwien.ac.at/hanappi/

Abstract

During the different stages of the capitalist mode of production, the evolution of the human species has led to an outstanding ability of our species to master dangerous crises, to grow in numbers and to develop a stock of knowledge that increases our capacity for flexible response. Nevertheless, we are currently confronted with an accumulation of impasses for the omnipresent capital algorithm (in brains as well as in larger social entities), which leads to seemingly hard-to-prevent environmental disasters and continuously more severe local wars. This sinister general outlook underscores the need for some optimistic pragmatism: There are ways to safeguard human survival by *replacing* the capital algorithm that governs most current decisions with different decision-making mechanisms.

Contrary to the seemingly universal applicability of the capitalist algorithm, these mechanisms have to be tailored differently to fit the respective field of application, which they shall cope with. Above all, they have to combine the global dimension of human reproduction (we still plan to live in a global Atlantis built on the global division of labour) with the locally visible and manageable cultural environments, which are still the prime origins for the motivations of human individuals. This task concerns, e.g., institution-building to achieve a democratically organised, generally accepted global governance, as well as a transparent yet creative mechanism to allocate the surplus achieved in different production spheres.

In the background of all the urgent flexible responses to the upcoming problems, there has to be a globally organised class of scientists, of organic intellectuals.

Introduction

All human practice starts with the anticipation of what will happen in the future. It combines three elements: (1) What is to be achieved? (2) What are our tools? (3) Who are we and what is surrounding us? The less we can answer these questions, the more we have to rely on intuition, which does not necessarily reduce our chances of succeeding. All practice relies on some kind of theory; intuition is just the extreme case of a theory we are not aware of. The relation between theory and practice is scalable; it ranges from completely inadequate, useless theories to more successful, more adequate theories.

The development of knowledge - the movement from inadequate to more adequate theories - rests on their repeated use. Failures and successes of their application have to be remembered and recorded¹ to weed out bad theories and to spur new ideas as candidates.

Fruits of the historical mission of capitalism

Since its early days in merchant capitalism, the capitalist mode of production has brought about a substantial advance in living standards for the average human individual. The problem is that the average human individual does not exist. This concept is only a theoretical concept, which hides the important internal dynamics that have caused the proclaimed advance of living standards. First of all, three questions arise: (1) Whose living standards? (2) How can the living standard of a population be measured? (3) What have been the essential mechanisms with which the capitalist mode of production was able to achieve its historical mission?

Starting with (2), the measurement question, it can easily be seen that the rise in living standards of different parts of the global mankind has followed stupefying different trajectories. An obvious biological measure of the standard of living is how many individuals can live in a geographical region for which (average) life span². The divergence of life expectations between the rich North and the poor South shows how unequal the long-run trend towards increasing overall life expectations (the success of capitalism) proceeded. This is a first hint at a common property of capitalism: It proceeds by producing and *amplifying inequality* and *shifting contradictions*. It has to be understood that, as a mode of production, this basic property produces pulsations of the system - locally and globally - but also has the merit to imply a long-run improvement of the overall biological success³. The number of human individuals has been increasing sharply.

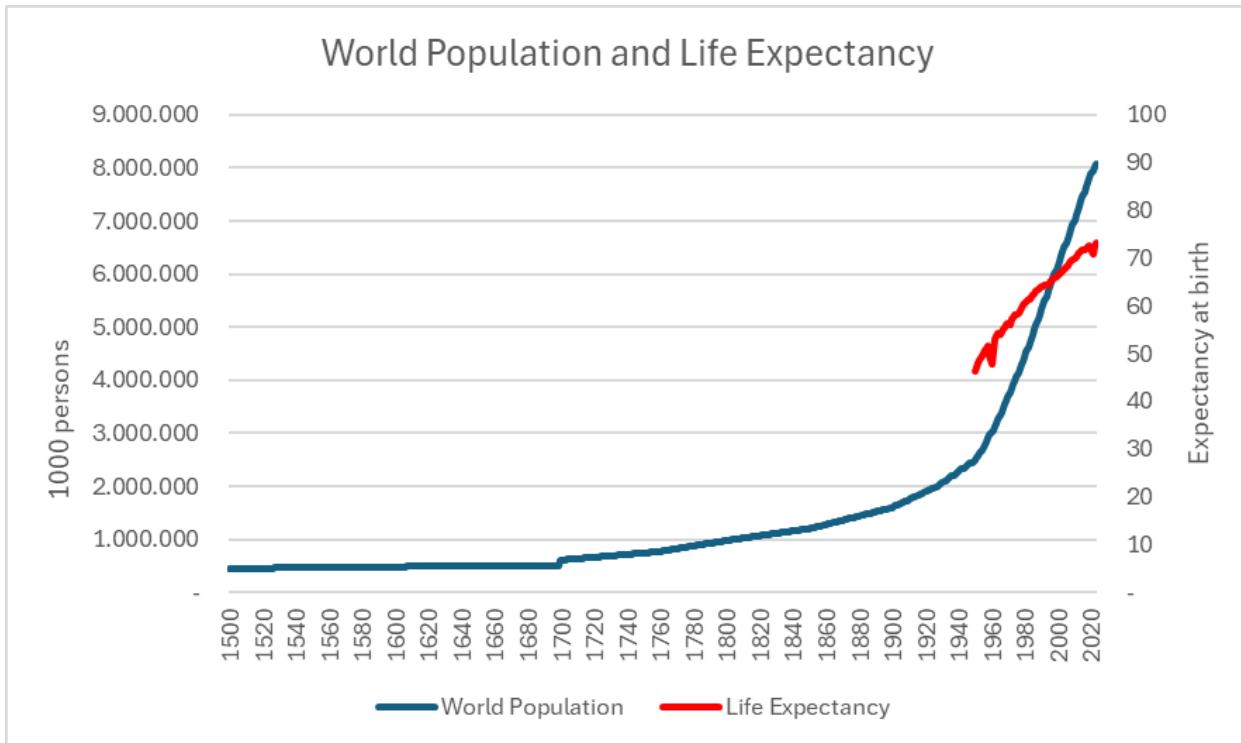
¹ In this sense all science rests on recorded history.

² An extended description of the so-called demographic transition during capitalism can be found in (Smil, 2021).

³ Joseph Schumpeter's catchy description of this property as 'creative destruction' summarizes the violent turbulences produced by reoccurring disequilibrating forces in political economy, compare (Schumpeter,

Around 8000 years BC, when the agricultural revolution set in, the number of human individuals is estimated to have been a modest four million individuals. During the era of capitalism⁴, starting with merchant capitalism around 1500, it exploded to a level of more than 8 billion people in 2025.

Diagram 1



Source: United Nations, Department of Economic and Social Affairs, Population Division.

In Diagram 1, the life expectancy at birth since 1950 is shown (right-hand vertical axis), too, which makes it plausible that even on a global scale, the lifetime of individuals will approach an upper limit⁵. But, as a glance at the difference between rich and poor countries immediately reveals, this upper limit of the global average will be reached in high-income countries much faster than in low-income countries.

Following the split between high-income and low-income countries proposed by the World Bank, Diagram 2 shows that since 1950, the number of people living in low-income countries has risen much faster than that in high-income countries. During the past 75

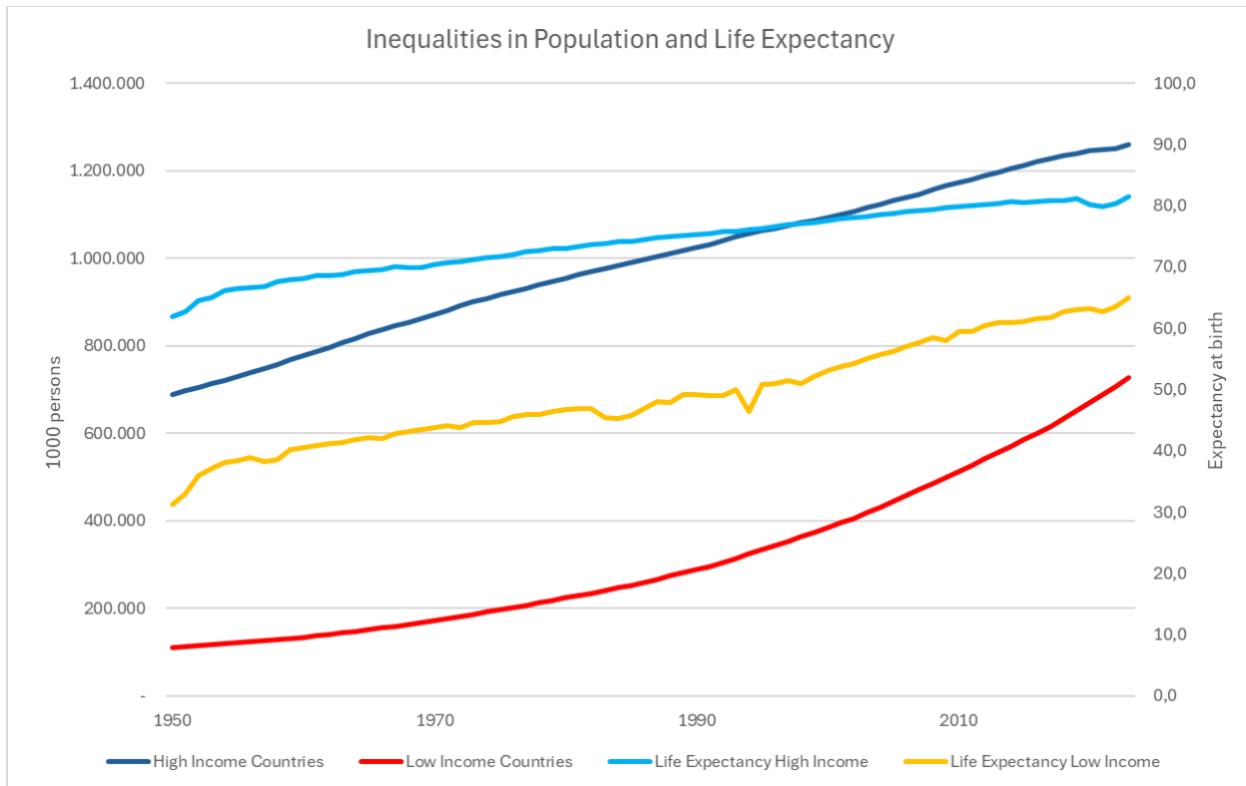
1911). Of course, Schumpeter as an apologist of capitalism underlined the positive trend of increasing welfare, of creativity overcompensating destruction in the longer run.

⁴ For the structure of different stages of the capitalist mode of production compare (Hanappi, 2018).

⁵ Current estimates indicate that such a biological limit for human individuals will be between 120 and 130 years.

years of globalising exploitation in capitalism, a fast-increasing share of poor individuals is confronted with a slower-increasing share of rich individuals. In that sense, global inequality is rising. The good news is that despite this bad news, life expectancy at birth in the poor part of the world is slowly approaching the levels of the rich part (right-hand scale).

Diagram 2



Source: United Nations, Department of Economic and Social Affairs, Population Division.

The biological success of capitalism is clearly bought by its implicit disequilibrium dynamics. It is interesting to consider the inner dynamics of this mode of production along the lines of two eminent economists: Schumpeter and Keynes.

The common wisdom of learned economists has it that Schumpeter saw capitalism as economically stable, but politically unstable, while Keynes thought that it is politically stable, but for economic stability needs intervention by state action. Though this contradiction contains a grain of truth concerning the attitudes of the two economists, it is somewhat misleading.

Keynes' intellectual merit was to reintroduce the macroeconomic point of view into economic theory⁶, which enabled him to consider the full circuit of monetary exchanges within a larger political-economic entity. To stabilise the aggregate working of a nation's capitalist system, the demand side had to be supported repeatedly by additional public demand. No single production unit could escape the prisoners' dilemma situation of generally lacking effective demand; only an entity representing the complete exploiting class, the government of a capitalist country⁷, could step in to solve the crisis. As a consequence, public debt had to become a regular element of macroeconomics. With this simple extension that added a political instrument to the seemingly perfect market equilibrium of Walras, the stability of *financial* capitalism could eventually be saved. In the same vein, Keynes initiated the installation of an *International Monetary Fund* for the case of problems of national funds - if a certain nation's public debt would reach its limit - to act as a lender of the global capitalist class. Evidently, this was Keynes' reaction to the Great Depression of 1928. Repeatedly occurring disequilibria between national accounts of capitalist countries⁸ had to be politically corrected by a globally acting capitalist institution, the IMF. The most remarkable property of Keynes's theoretical innovation is its method: Disequilibria at the lower level of economic units (e.g. firms, nation states) can be stabilised by intervention of an institution at the next higher level (e.g. the nation state, a global institution), which can represent the common intentions of all the units at the lower level. Moreover, Keynes was not only proposing a theoretical extension of economics, Keynes also *acted as a politician*, initiating the installation of statistical offices and other more universal institutions of the global capitalist class. In this sense, Keynes's approach basically proposes stepwise, extensive **growth** of the capitalist system. These steps, the limits of a capitalist system at a certain geographical extension⁹, are the mystery behind the connection between Keynes and Schumpeter. Each break is a point where escalating Schumpeterian disequilibrium provokes a new Keynesian institutional framework.

Schumpeter is famous for his concept of interdependent cyclical behaviour of different wave lengths of pulsating economic activity, compare (Schumpeter, 1939). Each of the three waves he stylised as 'inventory cycles', 'business cycle, and Kondratieff cycle; each describes a different economic disequilibrium process. Later, Schumpeter's follower Richard Goodwin was the first to provide a mathematical framework which united Schumpeter's ideas (Goodwin, 1990). The essence of Schumpeter's innovation in

⁶ Classical British political economists of the 19th century already had been 'macroeconomists', but the marginalist school of 1874 (Walras, Jevons, and Menger) had destroyed their heritage.

⁷ It was Marx who had anticipated this role of a government of a capitalist state in financial capitalism by dubbing such a state the 'executive committee' (in German: 'geschäftsführender Ausschuss') of the capitalist class.

⁸ Disequilibria between capitalist countries show up by different variables, public debt, trade, exchange rates, migration, and the like.

⁹ David Gordon introduced a broader concept for these steps. He framed them as a sequence of 'Social Structures of Accumulation', (Gordon et al., 1994).

economic theory is that he insists on the importance of the disequilibrating force of a subset of actors in the dynamics of a society's political economy. He calls this subset of all firm owners in a capitalist country the *entrepreneurs*. In the jargon of the marginalist schools of Schumpeter's times, they do not produce along a production function, they rather *shift* the production function to a new, unknown position¹⁰. Along the waves of economic activity in such a permanently disturbed economy, specific market equilibrium positions occur only rarely. General equilibrium – the mantra of contemporary mainstream economists – is an unknown phenomenon. What drives capitalist evolution is the creativity of a limited set of outstanding socioeconomic characters at the level of production units, of firms. Note that the empirical data available to Schumpeter in 1911, in principle, were the success stories of firms during the 19th century. His abstract 'entrepreneur' indeed was framed in the sight of successful role models in 19th century's real life.

With Schumpeter's idea of a class subject that continuously – though stepwise – disequilibrates capitalism, a seemingly contradictory element to Keynes' growth of ever larger political units with a steadily growing institutional setup had been introduced. But the contradiction does not exist: Schumpeter and Keynes only put different spotlights on the *same* capitalist process. For **Keynes**, the ***growth of the units of political economy***, growth or at least keeping of the national territory, combined with the growth of the richness of its institutional backup, is the core of his stability program. For **Schumpeter**, the justification for the existence of capitalism is its ***capacity to introduce new products and new production technologies***. The surprising fact is that neoclassical economic theory, as it emerged out of the marginalist school of Walras, Menger and Jevons, had ignored both types of pivotal elements of capitalism just mentioned. Neither Keynes's idea of ***growth with an adjusting institutional setup***, nor Schumpeter's ***growing labour productivity with a growing set of products and techniques***, was dealt with. As a consequence, neoclassical economic theory retreated into a mathematical ivory tower, desperately trying to adjust its role model of Newtonian mechanics to the needs of a qualitatively different environment of human societies¹¹.

Returning to the fruits of capitalism's historical mission, it is nevertheless evident that technological innovation, growth of labour productivity, growth of institutional setup, and growth of political units go hand-in-hand. Schumpeter's characterisation as a stepwise progression has become visible on Keynes's larger scale of growing state units when a fall-back to an imperialist world war occurred in 1914, as well as in 1939. In both cases,

¹⁰ Remember, that this function describes how a whole set of products emerges. Therefore, such a shift, i.e. innovation, consists of both: introduction of new products as well as introduction of new production methods.

¹¹ This explains why John von Neumann in the first chapter of his path-breaking book on game-theory complains about the pitiful state of economic theory (Neumann, 1944). His game-theory was meant to provide a new language to tackle political economy and social science in general.

groups of countries built a military alliance - a step towards a united political-economic entity - to gain global hegemony. With WW1, the death knell for the political role of the feudal class had sounded. But soon, the new system of financial capitalism ran into the catastrophe of the Great Depression of 1929. Fascist movements under the lead of an imperialist and nationalist 'strong man' dragged finance capitalism back into a war-leading command economy¹². After WW2, a bipolar global system had been established. In Western Europe, under the influence of the social democratic variety of the labour movement, the European Social Model had been established, which was a first step towards a general institutional framework to enhance the living standards of all social strata. This European Social Model indeed can be interpreted as an example for how far capitalism can fulfil its promise of advancing labour productivity, generating new products and services, and at the same time keeping exploitation and unemployment at bay.

Taking a look at the increase of labour productivity (an essential fruit of capitalism), it is useful to start with the ratio between *quantitative output* and *labour time* needed to produce it. But this is only possible for a well-defined specific product or service: How much time is needed to produce a pair of shoes? This type of consideration in fact contradicts the basic feature of capitalism, namely that it is a socially embedded *commodity* production system. The increase in labour productivity stems from specialisation of workers to produce certain outputs *and the following exchange of these outputs as commodities*. Division of labour is the mystery behind the increase of labour productivity¹³! The total output produced by the labour time of the species is always a *social* product of specialised labour mediated by exchanges that use a form of money.

To take this difficulty for empirical issues concerning labour productivity into account, three important issues have to be mentioned: (1) Not all economically relevant labour time appears as an amount of money at a market exchange. The outstanding two examples are the family work done by housewives and the many activities in the poor South that also never imply monetary exchanges. (2) The monetary equivalent of a creditor's cost of granting a credit is always a very rough estimate, which in the current era of highly developed finance-capitalism can heavily distort the overall picture of the state of the economy¹⁴. Given these two caveats, the gross domestic product in real terms nevertheless seems to be the best guess for the size of human output per year. (3) All illegal activities as well as activities performed outside the control of the state are not included in GDP. Since illegal activities often use bitcoins to escape state control or taxes,

¹² In (Hanappi, 2025b) a comparison of the interwar period and the current geopolitical situation is provided.

¹³ Compare the two classics on this topic: At the macroeconomic level Adam Smith explained the wealth of Great Britain (Smith, 1776), and at the microeconomic level Frederic Taylor (Taylor, 1911) explained the emergence of profits.

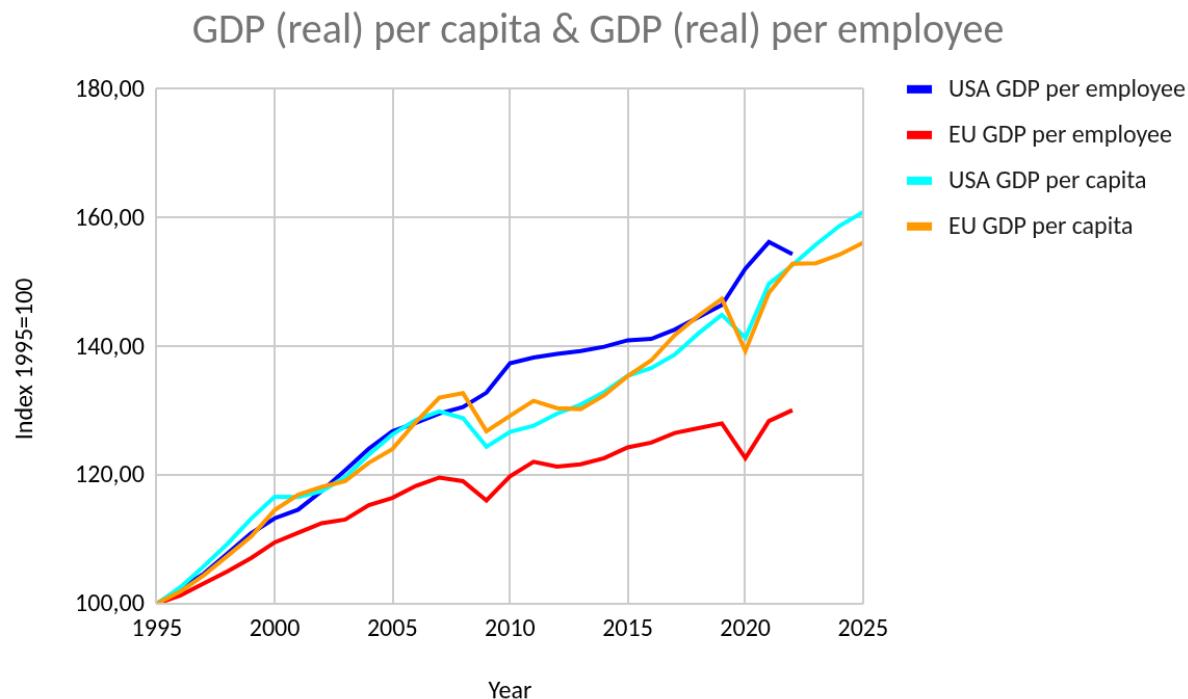
¹⁴ *Imputed banking costs* are never measured by market exchanges but are simply assumed by estimating the gain, which other investment opportunities would have provided.

the growing importance of that field is not reflected in GDP. But alas, GDP in constant terms seems to be the best we can get in the moment as an index for overall economic activity of a country.

Therefore, when Keynesian macroeconomics emerged after the Great Depression and led to the systematic monitoring of economic aggregates by statistical offices, the GDP numbers quickly started to play a central role in a state's economic policy. On the other hand, the size of the population of a country also has an alternative measure for labour time input, namely the number of persons employed via official labour markets. In this case, the two distortions of GDP figures by unemployed (but labour time spending) housewives, and the officially unemployed workers who partly participate in black labour markets, play a role.

Despite its shortcomings, GDP is still the best empirically available number to measure economic activity mediated in a society by commodity production. As shown in diagram 3, for the USA (the hegemonic capitalist economy), from 1995 to 2025 the development of GDP per capita and GDP per employee is predominantly parallel.

Diagram 3

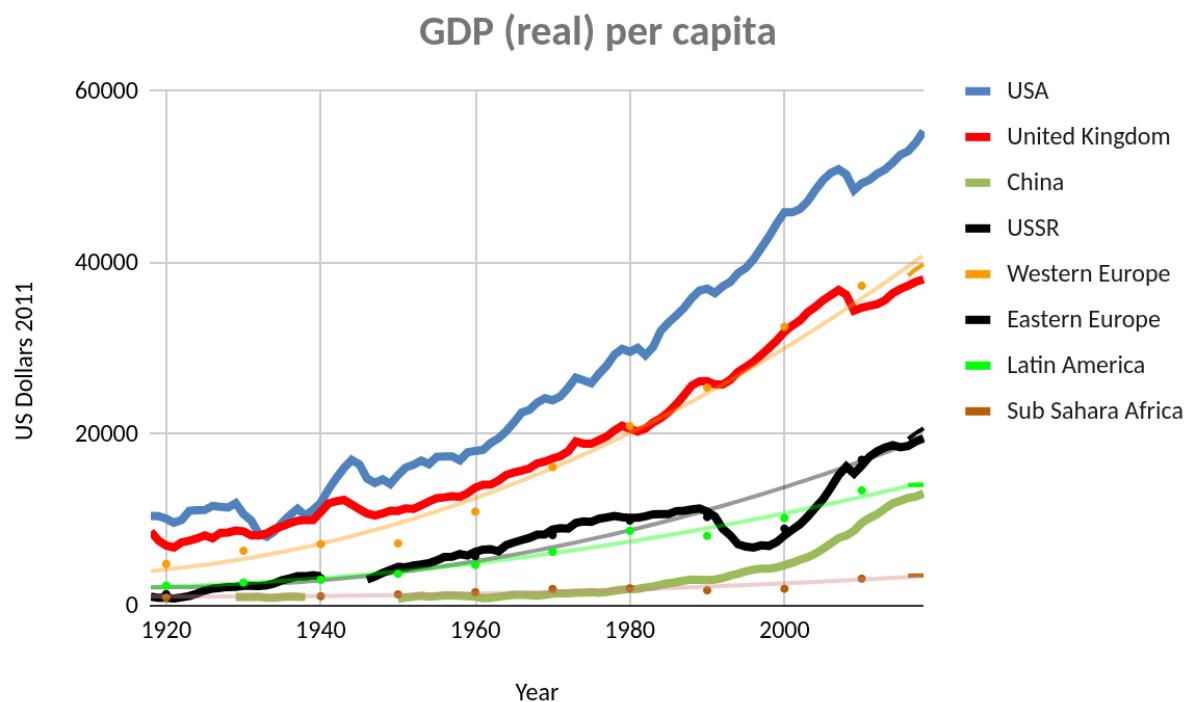


Source: AMECO database

The comparison to the development in the European Union reveals an interesting additional insight: While the GDP per capita of the EU largely follows the trend in the USA¹⁵, the GDP per employee in Europe demonstrates an important characteristic of the European Social Model. Since 1995, the enlarging EU has kept more workers in employment and has enabled less GDP growth than the USA. Thus, capitalism in Europe favoured European employees with respect to job security, but it was less attractive for capital accumulation. Of course, the steadily increasing share of financial services in GDP, which is now monopolised in the US financial markets, plays an important role in this dynamic too.

The global drawback of the still flourishing dynamism of US capitalism in the last three decades can be seen if the longer run perspective since 1918, the end of World War 1, is considered, compare diagram 4.

Diagram 4



Source: [Maddison Project Database \(MPD\) 2020](https://www.maddison-project.info/), University of Groningen

With finance capitalism the old hegemon (the United Kingdom) was replaced by the new hegemon (the United States) and this is also reflected by the average of the GDP per capita of US citizens. The UK after WW2 also lost its advantage over the rest of Western

¹⁵ Note the two parallel crises in 2009 (Great Financial Crisis) and 2021 (Corona pandemic).

Europe and now both follow similar trajectories. The most interesting - and disturbing - fact is that with **financial capitalism, exploitation** now mainly **takes place at the global level**. The rest of the world (excluding the USA and the EU), where a large majority of human individuals live, earns a permanently slower-growing per capita GDP. The two minor exceptions are Russia (the former USSR), now due to its oil and gas reserves, and China. They now both seem to manage to be included as **necessary intermediaries** in the global financial capitalist production system. Clearly, China's average GDP per capita has caught up remarkably, but is still way lower than in the Rich North.

The **first fruit of capitalism's historical mission**, increased **labour productivity** and the accompanying variety of commodities, does exist, but it came at the price of a **globally polarised exploitation regime**.

The **second fruit of capitalism's historical mission** is harder to grasp and less visible to the unscientific observer: It is the development of an institutional framework, which sometimes is summarised by the notion of '**democracy**'. This concept is remarkably self-contradictory, since it proclaims that, instead of the exploitation of one class by another class, the whole species turns its self-exploitation into self-governance. That is, the concept of 'exploitation' itself is revolutionised by the emergence of an all-embracing **consciousness of the species**. On the way towards this consciousness, a kind of central nervous system of the species, connecting this conscious core with the different parts of the species, has to be developed. And this is exactly where the role of *the development of democratic mechanisms* enters.

Schumpeter had explained the growth of labour productivity (fruit 1) by the recurring, disequilibrating activities of entrepreneurs. The processes he used as empirical templates for his narrative were the activities of firm owners in the 19th century. In their totality, these innovations and their links via production chains and communication produced pulsations of economic activities at different wave lengths¹⁶. In the 20th century, with an emerging full-fledged financial backbone of capitalism and enormous drive towards larger production units and more fluid financial transfers, these pulsations erupted in the years of the Great Depression, 1928 to 1932. The main agents controlling capitalism now were the members of a conglomerate that was later dubbed by President Eisenhower the 'military-industrial complex'. The leader of such a complex now was typically the leader of a nation-state, a representative of its government. With the disaster of the Great Depression in front of his eyes, John Maynard Keynes realised that it needed interventions from this governing institution to stabilise Schumpeter's ever larger waves of downturns, which had drawn the whole of financial capitalism into the abyss. To introduce such stabilising policies, it needed an aggregate accounting system of a whole

¹⁶ Compare (Schumpeter, 1939).

nation-state, statistical offices and macroeconomic modelling. And to implement policies, it also needed national class compromises. The pivotal impact that Keynes provided thus was an entire package of theory, macroeconomic theory¹⁷, plus a practical toolbox of institutions, which enabled the nation state to turn *short-term* economic advices into effective, real-world policy. It is the latter **institutional framework**, which spans from the choice and collection of meaningful aggregate variables to the design of regulating social institutions, which has to be considered as the '**second fruit of capitalism's historical mission**'. It offered a nation-wide regulating device to tame the exploding forces of Schumpeter's innovation dynamics. The main threat of accelerating economic downturns, of self-defeating speculation spirals, could be found in two properties of the advanced innovation process in finance capitalism: (1) The drive towards ever decreasing unit cost favours larger and larger production units, oligopolisation speeds up. (2) Capital in its form of finance capital becomes extremely fluid and fast. It can leave whole production spheres as well as geographical locations often very quickly – leaving less mobile production elements as ruins behind.

With his analysis, Keynes saw that these evils that endanger a capitalist nation state had become a global monster during the Great Depression. As a consequence, in the 40-ties he proposed elements of a global institutional framework needed to save global capitalism: The International Monetary Fund and the World Bank. Soon both global institutions became dominated by the new hegemonic capitalist nation state of Western capitalism¹⁸: the USA. Nevertheless, parts of their design reflect long-run necessities of democratic global governance. The IMF has been designed to react on short-term imbalances in some countries that easily can occur if the dynamics of a global currency, at the time the US Dollar bound to the new hegemon's policy, are running wild. The World Bank was designed for long-run intervention. It should ameliorate the increasing divergence between poor and rich parts of the world. It exemplified Keynes' awareness of the necessity of effective demand for a long-run survival of capitalism: One has to assure that the cow one wants to milk should not be starved to death prematurely.

Parallel to Keynes' institutions, which meant to save integrated capitalism¹⁹, another democratic global institution was revived, the United Nations. Despite the disappointing results of a similar institution dedicated to prevent a world war in the interwar period – the League of Nations - the UN was established in 1945. Currently, in its general assembly the heads of state of 193 countries are gathering (each country has one vote) and its security council includes five permanent members (China, France, Russian Federation,

¹⁷ The celebrated mathematical Keynesian macroeconomic model indeed stems mainly from his colleague Sir John Hicks (Hicks, 1939). Keynes himself was one of the last economists working almost exclusively with plain text.

¹⁸ To characterise the details of the varieties of capitalism that emerged in Russia and China goes beyond the scope of this paper.

¹⁹ For a clear description of *integrated capitalism* compare (Hanappi, 2019).

the United Kingdom, and the United States) and ten non-permanent members. Since it also includes members from Russia and China in the security council, its main setup is more general and points more directly towards democratic global governance even beyond capitalism's survival. Unfortunately, its main deficiency, which recently became only too visible, is that it lacks a strong military force to implement its decisions.

Schumpeter's disequilibrium approach during the age of finance capitalism, after WW1, evidently took hold of larger entities of *political economy*, namely of nation states. The concept 'political economy' does not only cover *economic* entities like firms, which try make extra profits by innovations, economies of scale or unfriendly take-overs of competitors. There also always exists the possibility to use pure coercive power (political science is the science of power relations) to dispossess weaker entities. Larger political agents, like nation states, can fall back on this crude exertion of coercive power to acquire more territory and a larger capital stock. In short, they can choose to lead disequilibrating wars²⁰. If due to ongoing oligopolisation only few large capitalist political entities are remaining (USA, China and Russia), then the emergence of local wars at their borderlines can be expected as far as the military elites inside each military-industrial complex are stronger than then the economically minded industry leaders. If the latter prevail, steps towards an organised global exploitation of the richly populated rest of the world, might be a solution without another world war²¹.

These last ideas already show how the fruits of capitalism's historical mission might turn into a catastrophic end of this mission. Keynes stabilizing institutional framework typically has to grow to accommodate the growing reach of oligopolistic corporations. Institutionalized global governance is a precondition for the full blossoming of a global democracy, which can serve the goals of a surviving human species. Seen from this perspective, the development of Keynesian macroeconomic frameworks indeed is a step towards a mode of production that can overcome the impasse of the capitalist algorithm. Maybe the possible next step would be to turn *useful* privately owned global corporations like Amazon or Wikipedia into publicly owned units? In total, the interplay between Schumpeterian disequilibrium processes and Keynesian accommodation of capitalist growth by growing institutional frameworks was the source of the two highlights that capitalism gave to the development of mankind.

²⁰ In (Hanappi, 2025b) the classical example of such a social step backwards – the takeover of Fascism in Germany in the 1930-ties – is described in more detail. The necessary and sufficient conditions for a fascist turn of capitalism have changed somewhat since then, but the underlying logic has survived to a frightening extent.

²¹ Such a solution still is prone to develop into global racism: A governing elite of **superhumans** exploiting the currently powerless fourth global agent of workers living in the vassal states of the three leading empires.

Given the accelerating **dangers of environmental collapse**, these achievements can only endure if some of their basic characteristics are radically inverted. Schumpeter's force of disequilibrating innovation has to be redirected: Away from the search of maximum expected profit guided by the capitalist algorithm, and towards technology and products, which are compatible with the limiting conditions given by planet earth. In accordance to these limited – but necessary – innovation possibilities its monetary evaluation system must be migrated towards a measurement system that follows the rules of democratic global governance²². The state of affairs that the Keynesian attempt to establish democratic survival of capitalism was meant to head for, is much more difficult to develop. Cum grano salis it is the quest for a democratic global governance framework. From an evolutionary perspective it is straight forward to assume that the democratic mechanisms, which will build its core should emerge out of the battle against the radical fascist tendencies, which capitalism in its death throes produces²³.

Toxic capitalism at the end of its mission

Capitalism has left its mark not only in the global production system it has produced. But the globalized production sphere is clearest example of a hierarchical system that prevents the development of full-fledged democratic mechanisms. The decisions on what is produced, and where and at which price it is sold, today usually are made by *central* agents – humans, usually supported by electronic devices – applying the capitalist algorithm. An enormous apparatus of marketing machinery then is added to adjust demand – in particular in the rich North – to the needs of industry. As 19th century political economists would have argued: The owners of the means of production own the products and, in the sequel, have to sell them to whomever to transform products into money, which then can be used to increase their stock of means of production. In the end, it is the imperative of maximum capital accumulation – the command of the 'dead labour' capital over the 'living labour' of human individuals – that determines all economic and political details involved in this process. As with oligopolisation its reach becomes global, there are ever fewer and larger firm agglomerations, hierarchical command necessarily becomes stronger. The corresponding political units, the nation states, also are concentrating. Today there are three capitalist hubs, China, USA and Russia, and a reservoir of potential vassal states, which could be considered as a pivotal fourth power centre²⁴. This is the global macroeconomic setting the human species currently is confronted with.

²² See (Hanappi, 2025a) for some ideas on a complex future world money.

²³ Though some revolutionaries involved in the Russian revolution did mistake the events of 1918 as the end of capitalism, the following seventy years of Stalinism showed clearly that Stalin's concept of 'Socialism in one country' was not a democracy enhancing project.

²⁴ The formation of the BRIC group is the attempt of Russia and China to give this fourth power centre a progressive role, which they still can control.

Parallel to this crude picture of the evolution of the global macroeconomic state, capitalism also has transformed the way in which *human individuals experience themselves*. Individual experience always is local, the working of the globalised production system remains necessarily beyond the capacity of perception of a single human individual. In fact, this total alienation of the awareness of the material conditions of the existence of the human species - as a species – produces the individually growing illusion that a human individual is in essence the nucleus of a capitalist firm. Of course, the wannabe one-person firms are still stuck within their local environments, even if these environments in the last decades have been enlarged by electronic devices, electronic echo chambers. The indicators of pain and lust are still bound to their local cultures. The interplay of these indicators manifests itself in a *mood*, a mood that is amplified via communication as the mood of a local culture and mostly remains unrelated to, alienated from, its material basics. If global macro-dynamics happen to throw a local culture on a particularly dire material trajectory, then the ideological superstructure of such a local cultural community shows how vulnerable its alienated nature has made it. The *non-existence of universal humanism*, which would need a fulfilment of the aspirations of general enlightenment, will turn into a retrograde renaissance of religious leadership²⁵. Or, if a local culture is technologically further developed, it may lead to the ascent of a local nationalist, even fascist, political dictator. The followers of such a strong leader then have to be quickly ideologically streamlined – a process, which needs a strictly supervised military command, a police state. The classical forerunner of this currently reviving scenario evidently has been Hitler's Nazi regime.

It can be expected that - with a somewhat less aspiring territorial reach and eventually mixed with religious traits – such processes soon will also be found in vassal states. Leaders of vassal states will have to be loyal followers to the leader of the respective super power, but they will also need a tough management of their subordinated gentry leaders, which must secure that the workers down the line do their jobs²⁶.

It is evident that with the capitalist algorithm still being the central motivation for actions at all levels, from the core of an empire via high nobility vassals down to the lower gentry at the factory level, the approaching climate collapse cannot be prevented. In the short term some forms of neo-fascism in some vassal states might be able ascent to state power, and it even might be possible that a unifying absolute global authoritarian capitalism emerges, which carries features of neo-fascism. But history does not repeat itself, it only rhymes. Feudalism will not experience a second life. The last toxic phase of capitalism will be rather short, profits generated by robbery within a closed global system

²⁵ This explains, why in particular in parts of the poor South religious belief, e.g. Islam, is surging.

²⁶ Yanis Varoufakis has a point, when he calls this new development 'technofeudalism' (Varoufakis, 2024). It is indeed a return to power structures known from feudalism. See also the forthcoming paper (Hanappi, 2026).

without continuing labour productivity increase, will vanish. After universal confusion resistance can quickly become overwhelming. The historical mission of capitalism will be over.

It is clear where the subject, the social class, carrying the resistance will be located: the so-called 'Global South', referring to the globally exploited new slaves. It is also clear that this part of the global population will need a *highly educated complementary class* – call it the ***global class of organic intellectuals***²⁷ – which is able to partly preserve and to transform the fruits of capitalism (high labour productivity and sophisticated institutional framework) into the ingredients necessary to build the **central nervous system of democratic global governance of the whole human species**.

Lessons for Survival of the Human Species

Five hundred years of capitalism have been a long way to teach mankind a long series of lessons. In particular, the 20th century saw two World Wars: The first marking the end of political leadership of the feudal class and simultaneous blossoming of nationalism within Europe; the second showing how with collapsing financial capitalism nationalism turns into the catastrophe of fascism with its imperialist aspirations. From 1945 onwards a long period of the hegemony of the USA in the West, embedded in a mainly bipolar world order saw the emergence of the nucleus of a *global* institutional framework. It still was a mode of production built on capitalist exploitation, though it has transformed a major part of the extraction of surplus value to the global exchange rate mechanisms.

The step towards a global production system has not been followed by an accompanying turn towards global governance. The acquisition of the surplus value mainly remains in one of the three superpowers (China, USA, and Russia). What is next on the agenda of the evolution of the human species thus is to advance to a **Global Atlantis**, to a self-governing entity of human political economy. Contrary to Thomas More's vision in 1516 not as an imagination with no place in reality – Utopia – but this time as the next step of the human species.

Europe, the peninsular military outpost of the USA, served mainly as important demand component to transform material and service surplus into monetary profit. To enable this function a sophisticated credit system built on household, firm and government debts had been established. In the shadow of this 'welfare' evolution the *European Social Model*, a blueprint for an institutional framework promising soft exploitation without escalating class struggles, has been established. Keynes' dream of a capitalism tamed by institutionalised compromises seemed to emerge. But from 2000 onwards, starting with the rise of Putin in Russia and continued by the election of Trump in the USA in 2016, a new type of

²⁷ Compare (Hanappi, 2020).

nationalist surge became visible in global politics. It reminded on a question that had been posed many years earlier.

'Is socialism in one country possible?', was an intensively debated issue in the early years of the Soviet Union. Stalin's answer was a clear '**yes**', which sharply contradicted the view of Karl Marx, the poster boy of Marxism-Leninism, which Lenin and Stalin used to justify their bolshevist strategies. At the same time a parallel question popped up in the West: 'How is capitalism possible in one country?'. The new hegemon, the USA, together with a Europe devastated by the war, was confronted with the Great Depression – a signal that financial capitalism does lead to global crisis. Hitler's answer to the question also was radical: **Yes**, the capitalism of national industrialists is possible if it is supported by a hierarchically organised military police state! Instead of household-demand-oriented market processes a warfare-oriented command economy aiming on the conquest of global dominance has to be envisaged. Despite the many differences between Stalinism and Fascism, the common denominator of over boarding nationalism cannot be ignored. What is frightening is that the question of nationalism, including the answers of possible military dictatorship, nowadays is on the agenda again. History rhymes.

Even if a compromise between the ruling classes of the three national superpowers becomes feasible during the coming decade, the deeper question if capitalism can overcome the limits set by natural finiteness (compare the opening paragraphs), remains. Will absolute global authoritarian capitalism (AGA capitalism) be able to handle the accelerating climate catastrophe? Its authoritarian as well as its global character might be helpful, but its *absolute* motivational reliance on the capitalist algorithm – aligning everything on all decision levels according to short-term profit maximisation – assures complete failure with respect to environmental sustainability of the human species. As an example, consider one of the most remarkable properties of capital, its high mobility, its fluidity: When class struggles in advanced countries started to become nasty, capital could escape to exploitation on a global level, 'Rich North' exploits 'Poor South'. But now the exploitable terrain is all taken, finiteness strikes. The capitalist algorithm does not work anymore, its promoters become visible enemies of humanities survival²⁸.

²⁸ The substitutes for the money-based maximisation imperative of the capitalist algorithm will have to be diverse, adaptive flexible responses to quantitative limits encountered the earth's environment. It is only the second step to embed them in the monetary framework of global governance, which still will be necessary to maintain *commodity* production, i.e. global division of labour. In this context it has to be noted that the often-misused term 'market economy' is *not* a synonym of 'capitalism'. The *diversity* of market *mechanisms*, which are needed to distribute commodities in any production system with global division of labour are to be distinguished from the capitalist algorithm. For a mathematical treatment compare (Takayama, 1973).

It might be the case that this visibility is undermined by the growing possibilities of mass media manipulation, in particular in the Rich North. The confusion of alienated populations, of people who indeed are threatened to lose part of their welfare to the Poor South, might turn great enough to seduce them to support fascist leaders. In this respect Europe again – sadly - will be an experimental laboratory: Europe's nationalist right-wing movements so far have not achieved to combine into a unique successful party able to govern. Which nationalist leader should be the ultimate leader still is a fierce competitive process. For the logical candidate, for US president Donald Trump, Europe so far is only a side issue on his way to global supremacy. And mass manipulation in all of Europe is more difficult than in the USA due to the many different languages, which still are the basis of communication (and the individuals' thoughts) in Europe.

The deeper issue hidden by this critique of the capitalist algorithm is, if the latter somehow is inscribed in the human DNA. Is there indeed an alternative to the capitalist algorithm at all? The most prominent supporter of the speculation that there is no alternative is biologist Richard Dawkins²⁹ (Dawkins, 1976). If he is correct, then all efforts to overcome capitalism are obsolete; mankind then will vanish rather soon due to its inborn 'capitalist' property. But as long as this is just a speculation, it makes sense that scientists work on all the mechanisms that could help to maintain the survival of the human species for a world after capitalism – for a global Atlantis.

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²⁹ Apart from this speculation, Dawkins is a staunch representative of atheism condemning all forms of mysticism and religion.

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