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# Secular stagnation and monopoly capitalism

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## ABSTRACT

The paper opens with a brief review of economic growth in industrialized economies over the past four decades, indicating a general slow-down in growth. This is followed by a brief review of the mainstream views on 'secular stagnation'. The major section of the paper is based on outlining elements of approaches to secular stagnation within the monopoly capital literature associated with authors such as Steindl, Kalecki and Cowling, followed by consideration of evidence in broad support of those dimensions. This includes the recent, generally upward, trends in industrial concentration, profit margins, and relationship with investment and innovation. Brief remarks are made on the effects of financialization, globalization and climate change on economic growth.

## KEYWORDS

Secular stagnation;  
monopoly capital;  
investment; financialization

## JEL CLASSIFICATION CODES

E22; L13; O30; O40

## 1. Introduction

The focus of this paper is the monopoly capitalist perspectives on secular stagnation and related evidence. Secular stagnation is viewed in terms of slow growth of GDP per capita (say less than 1%) and corresponding slow growth of GDP in total. GDP is a measure of market output, and slow growth of GDP does not necessarily mean a corresponding slow growth of economic and social well-being which may be slower or faster than growth of GDP. Secular stagnation has often viewed as also involving high rates of unemployment and low capacity utilization, though the emphasis in this paper is only on the rate of growth of GDP (per capita).

The paper opens (Section 2) with a brief consideration of growth rates in industrialized countries in recent decades with mention also of experiences of unemployment. Section 3 considers elements of what may be termed the mainstream perspective on secular stagnation. Section 4 is organized around the monopoly capitalism perspective on secular stagnation coming from the work of authors such as Steindl, Kalecki and Cowling. It summarizes the main ideas within that perspective which are related to empirical

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observations on those ideas. [Section 5](#) raises some factors such as climate change which may be contributing to the slow down of economic growth.

## 2. Evidence for secular stagnation

The postwar period through to the mid-1970s has attracted the label of the ‘golden age of capitalism’ (Marglin and Schor, 1990) for the Western industrialized countries with historically high rates of economic growth and low rates of unemployment (particularly compared with the inter-war period). The period since circa 1980, in comparison with the pre-1980 period has been, for the Western industrialized countries, generally characterized by somewhat slower and declining growth rate, and often higher rates of unemployment.

Some illustrative figures on GDP per capita income are given in [Figure 1](#) for the OECD member countries and for each of the G7 countries. The trend rate of growth is estimated for successive ten-year periods (the date in the figure refers to the first year of the ten year period). The data cover 1960–2021, and the general downward movement of the trend rate of growth is clearly evident.

Ayhan Kose and Ohnsorge (2023) report growth of potential GDP for advanced economies for 2000–2010 of 2.2%, for 2011–2021 of 1.4% and for 2022–2024 1.2%, and for emerging and developing economies are 6.0%, 5.0% and 4.0% respectively. Their Table A1 gives emerging markets and developing economies (EMDEs) actual growth in 2000–10 of 6%, 2011–2021 4.4%, and 2022–2024 3.6%; corresponding figures for middle income countries (MICs) 6.3%, 4.6%, 3.6% and for low income countries (LICs) 6.0%, 4.8% and 4.9%. The corresponding per capita growth figures are for EMDEs 4.6, 3.2, 2.7; for MICs 4.9, 3.5, 2.8 and for LICs 2.9, 1.7 and 2.1.

Li and Mendieta-Muñoz (2020) ask (in terms of the title) “are long-run output growth rates falling?”, and answer that their results “show a permanent reduction in long-run output and technical progress growth rates that is not associated with the detrimental effects of GR [great recession]”. The G7 countries are covered over periods since 1960 (dependent on data availability), and they show that long-run output growth rates began to fall from the late 1960s, and their findings are that the growth rates of long-run technical progress have tended to decline since the early 1960s. They point to the slowdown in productivity as the main driver of long-run GDP growth decline, rather than factors associated with labor force growth.

[Table 1](#) of Gordon (2015) reports that for the period 1920–1950 real GDP grew at annual rate of 3.58%, based on aggregate hours of work rising at 0.61% per annum and output per hour 2.97%: total factor productivity recorded at 2.17%. The corresponding figures for 1950–1972 are 3.89%,

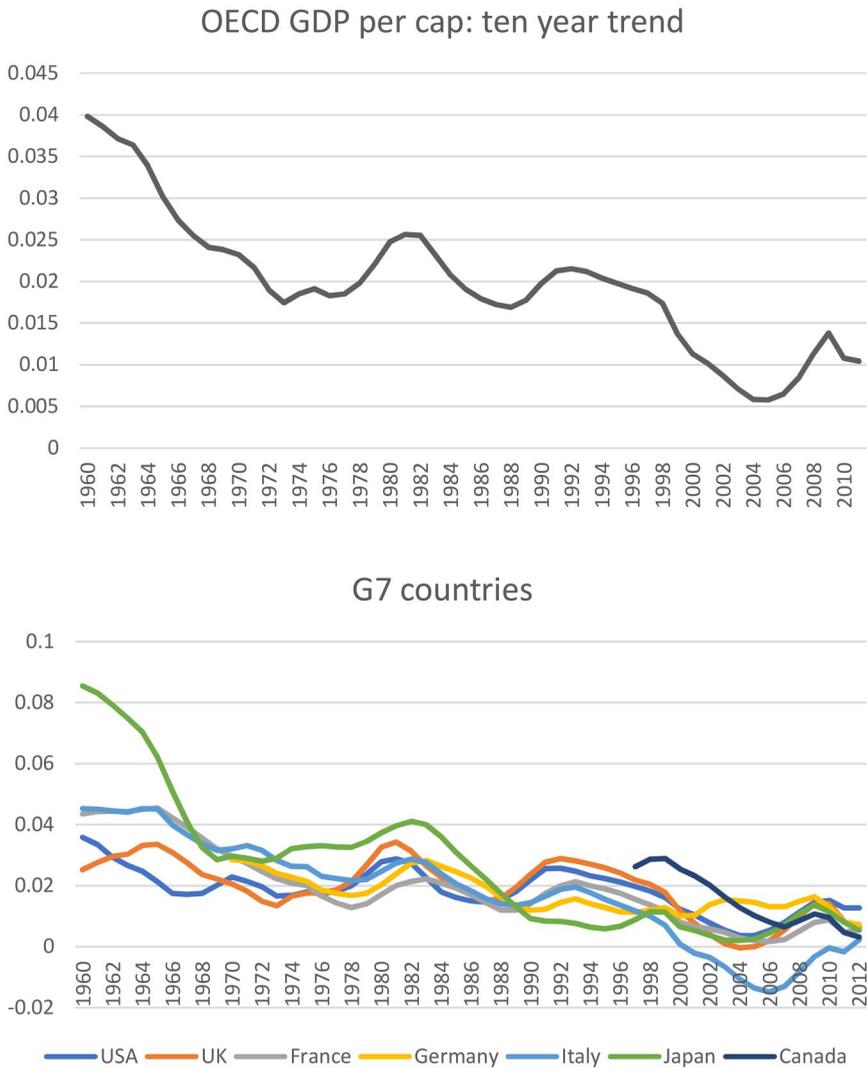


Figure 1. Source: calculated from World Bank data (GDP in constant US dollars).

Table 1. Slowdown of total factor productivity growth in the USA circa 1950 to 2014: annual average %.

Period	Fernald (2014)	Furman (2015)	Gordon (2015)	Jones (2015)
c. 1950–1973	2.1	1.9	1.79	3.2
1972/3–1995	0.4	0.4	0.52	0.7
1995–2007/8	1.4	1.1	1.43	2.3
2007/8–c. 2014			0.54	1.1
c.1948–2014	1.3	1.2		2.0

Source: Storm (2017).

1.24, 2.65 and 1.79; for 1972–1996 3.01, 1.63, 1.38 and 0.52. 1996–2004 3.32, 0.81, 2.51 and 1.43; and 2004–2014 1.56, 0.36, 1.22 and 0.54. Focusing on output per hour shows a decline period to period with the exception of 1996–2004; and similarly for total factor productivity.

**Table 2.** Budget deficits/GDP ratios.

Budget deficit/GDP (%)	1995–2021	1995–1999	2000–2004	2005–2009	2010–2014	2015–2020
Japan	5.53 <sup>a</sup>	n.a.	n.a.	4.83	7.90	4.14
UK	4.12	2.12	1.29	4.71	7.14	4.51
USA	5.71	2.32	3.80	6.44	8.70	7.02
EU	2.87	3.65	2.31	2.45	3.82	1.96
Euroarea	3.01	3.74	2.37	2.63	3.98	2.10

Source: Calculated from OECD National Account Statistics (net lending/borrowing) database.

<sup>a</sup>Japan: 2005–2021.

Table 1 below is based on Storm (2017), and his Table 2 provides a breakdown by industrial sector of the Solow residual and labor productivity growth. He remarks “it is clear that both share-weighted factor productivity and factor prices started declining in the 1970s, but the process was interrupted in the second half of the 1990s as both measures exhibited significantly higher growth during the New Economy boom of the late 1990s as well as the debt-led and misunderstood Great Moderation of the early 2000s” (p.178).

Phillipon (2022) is focused on total factor productivity (TFP). He compares the view that growth is exponential  $(1/A).dA/dt = g$  with growth is linear  $dA = b.dt$  where  $g, b$  broadly constant over extended time periods. Phillipon (2022) uses data on the postwar USA and on 23 industrialized countries covering 129 years 1890–2019. He concludes that total factor productivity growth is better described by the linear model than by the exponential/geometric model for both developing and developed countries. An illustration is that using the estimates based data from Bergeaud et al (2016), Hicks-neutral total factor productivity for the USA is estimated to rise by 2.45 per annum when TFP in 1947 is normalized to 100. My calculation as illustration that ten year average annual growth rate declines to 1.018% by 2010, and 0.9% by 2022, with a further decline to 0.723% by 2050 and 0.531% by 2100.

The statistics quoted largely relate to GDP per capita. As a measure of productivity this does not allow for demographic change, variations in labor force participation rates and in annual hours worked. GDP itself may well have little connection with economic and social welfare, and may be subject to the Easterlin (1974) paradox. Environmental depletion, loss of bio-diversity, climate change etc are not allowed for. The growth of inequality and the shift from wages to profits likely to mean that lower income groups have seen their income growth lag behind that of GDP per capita.

The rate of unemployment has ups and downs, but the OECD average has been 7% since 1991, and with no trend. Employment rates overall have similarly been flat lining (around 55 percent for OECD) with rising female employment rates and declining male rates (expressed in terms of the population over 15).

The four plus decades since 1980 have for industrialized countries been generally characterized by trends in income distribution which contrast

with the trends during the ‘golden age’. The distribution of income has generally moved in the direction of profits and away from wages. UNCTAD (2022), for example, indicates (Figure 3.2) a downward trend in labor share for both developed and developing countries: for the former a trend from 63% share in 1980 to less than 52% in 2020; for the latter corresponding figures of 62% down to around 48%. Inequalities of income and of wealth have tended to widen over the past decades, though global inequality has tended to narrow within country inequalities have tended to widen (see, for example, Chancel et al, 2021 for extensive evidence).

### 3. Mainstream analysis of secular stagnation

The issues raised by Hansen (1939) on slower growth arose from declining population growth, changes in character of technical progress and the falling availability of new territory in the USA, which he perceived would lower the demand for investment goods.

Summers (2015, 2016, 2020) views secular stagnation in terms of a dearth of investment and a savings glut. This perspective draws heavily on a loanable funds approach and the existence of a ‘natural rate’ of interest which balances savings and investment. The ‘natural’ rate of interest balances saving and investment at full employment, and secular stagnation is viewed as occurring when central bank policies cannot achieve sufficiently low real interest rates (which may well be negative). Desired savings are viewed as exceeding desired levels of investment putting downward pressure on demand. Summers (2016) argued for “an expansionary fiscal policy can reduce national savings, raise neutral real interest rates, and stimulate growth” (Summers, 2016), though it is not clear why growth (investment) would be thereby stimulated. Summers (2015) indicates that higher saving driven by increases in inequality of income and wealth, increased uncertainty about length of retirement, reductions in the ability to borrow and a greater accumulation of assets by foreign central banks and sovereign wealth funds.

Gordon (2015) views stagnant growth is a supply-side phenomenon, with the problem arising from a slow-down in productivity growth. Slower growth in potential output is viewed as arising from the supply side including slow productivity growth, slower population growth and declining labor-force participation and reduced need for capital formation.

The shifts in saving and investment behavior are often treated as in effect ‘exogenous’ shocks – starting from Hansen’s closing of the ‘western frontier’, demographic factors notably the aging of the population, and (perhaps) technological changes. Gordon and others approach on the ‘supply side’ is a more technological oriented approach, but again treats

any slow-down in technology as arising from the supply-side. The studies in Ayhan Kose and Ohnsorge (2023) call for policies such as boosting human capital formation and labor force participation and raising investment in the context of robust macroeconomic frameworks to reverse recent slow-downs in growth.

#### 4. Monopoly capitalism and secular stagnation

Foster (2018) described Steindl (1952) in terms of exploring causes of the 1930s great depression with the contention that growing monopolization raised profit margins in core industries. “This led to excess capacity as large firms protected their higher margins in the face of weaknesses in demand by reducing capacity utilization rather than prices. Excess capacity dampened the rate of growth of investment, Hence, stagnation, or slow growth and widening unemployment and underemployment and idle capacity represented the general economic trend”.

Dutt (2005), Steindl (1979) and others present models which focus on saving and investment decisions and shifts in those decisions which come from shifts in the distribution of income arising from rising concentration and the degree of monopoly. “Steindl’s contribution is based on the notion that modern capitalist economies are facing aggregate demand constraints, and that saving adjusts to investment through changes in capacity utilization and income growth in the long run. It allows for potential growth to become endogenous to actual demand-driven growth” (Hein, 2016, 160). This is well summarized by Cowling (1995) when he wrote of “monopolization tendencies within the older industrialized countries of the world would lead eventually to a stagnation tendency due to a deficiency of aggregate demand. ... Rising concentration leads to rising gross profit margins, which implies a potential for the share of profits to rise, but whether or not this is realized depends on the impact of the process on aggregate demand” (430), leading to downward revisions of planned investment, and a reduction in the level of profits.

Bloch (2005) views Steindl’s analysis as having a number of channels through which there emerges a tendency toward the concentration of industry. These include the influence of risk on firm growth, the influence of technical progress and of random processes. In the case of technical progress there are advantages to large firms due to economies of scale. Improvements in productivity occur at uneven pace and there are differences in level of production costs across firms, and differential rents arising from differential costs. “Steindl then analyses the impact of the cost differences on firm growth and on the concentration of the industry” (Bloch, 2005, p. 25). As the degree of monopoly rose, capacity utilization fell,

having an adverse effect on investment, and consequent effects on output and growth. The pressures on oligopolies to invest may slacken despite the rise in profitability through the easing of competitive pressures.

Kalecki (1954, p. 159) saw the slowing down in the growth of capitalist economies “probably accounted for, at least partly, by the decline in the intensity of innovations”. He ascribed one of the reasons for such a tendency as “the hampering of application of new inventions which results from the increasing monopolistic character of capitalism”.

Innovation, new products and processes and research and development have roles to play in the analysis of stagnation. There can be relationships with a ‘long wave’ perspective with waves generated by new major innovations which stimulate investment and consumer demand, and the maturity/exhaustion of such innovations bringing a slow-down. The long wave approach based on major innovations would have a bearing on boom and stagnation. The long wave approach may have overtones of some semi-automatic mechanisms whereby major new innovations come on stream at relatively regular intervals. The major new innovations though do not arise exogenously.

Steindl (1990), for example, discussed the exhaustion of investment in the context of railways in USA in the late 19th century. The present era of digitalization etc. may have stimulated a boom of the mid-1990s to mid-2000s, e.g. the dot.com bubble. But it has not brought continuing high rates of growth. As Solow remarked in 1987, “You can see the computer age everywhere but in the productivity statistics”<sup>1</sup>. This can be extended to the digital age, and perhaps add digitalization appears not to have brought an investment boom and overall faster growth.

The next stage is to consider whether recent trends in industrial concentration, profitability, innovation and technical change and the distribution of income are supportive of the monopoly capital perspectives on secular stagnation.

#### **4.1. Industrial concentration<sup>2</sup>**

The past decades have generally seen rising industrial concentration across many countries. Pryor (2001) used weighted concentration ratios for the whole USA economy and argued that concentration, having decreased from 1960 to early 1980s, had increased subsequently, and he saw rising concentration as likely to continue<sup>3</sup>. The subsequent rise was confirmed by

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<sup>1</sup>In New York Review of Books, July 12 1987.

<sup>2</sup>This section draws on and adds to material in Sawyer (2022b).

<sup>3</sup>In contrast the general trend in the UK had been one of rising concentration during the 1950s, 1960s and 1970s (see, for example, Aaronovitch and Sawyer, 1975).

Grullon, Larkin, and Michaely (2016) who found that over three quarters of US industries experienced an increase in concentration levels over prior two decades.

Davis and Orhangazi (2021) report “an increase in average concentration has taken place across U.S. industries between 1997 and 2012, with much of it occurring in the late 1990s and the early 2000s. ... a notable share of concentration growth is in fact driven by industries in the retail and information-services sectors” (23). They do not find a uniform relationship between the level of industrial concentration and profitability, markups, or investment rates. “Highly concentrated industries are not the most profitable (instead mid-concentration industries earn the highest profit rates) and, with a couple of sector-specific exceptions—namely, *in information services*- do not have the highest markups.” (Davis and Orhangazi 2021, *EMPHASIS* added, 23)

Autor et al (2017) also report on concentration in US four digit industries 1982–2012, and find “a remarkably consistent upward trend in concentration”. Manufacturing four-firm sales concentration ratio are found to rise from 38%–43%, in finance 24%–35%, in services 11%–15%, utilities 29%–37%, retail trade 15%–30% and wholesale trade 22%–28%.

Barkai (2020, Table 3) reports mean sales share of four largest firms increased from 30.57% in 1997 to 35.85% in 2012; largest eight from 40.09% to 45.86% for 750 six-digit US industries.

Grullon, Larkin, and Michaely (2019), using the Herfindahl-Hirschman index (HHI), find that industrial concentration declined from beginning of the 1980s reaching its lowest point in 1996–1997, but then rose until the end of the period studied (2014). Between 1997 and 2014, the HHI rose by almost . They found “that firms in industries with the largest increases in product market concentration show higher profit margins and more profitable mergers and acquisition deals” (697). There was find no evidence for a significant increase in operational efficiency. The higher profit margins were reflected in higher returns to shareholders.

Davies (2021, 1) reported the Herfindahl Hirschmann Index for producer concentration ignoring imports and exports for over 300 UK industries at the 4-digit level and found that, on average, concentration rose steadily from 1998 to 2011 and remained high thereafter (through to 2018). About 30% of industries could be classified as ‘concentrated’ or ‘highly concentrated’ (“using traditional competition authority definitions”, 1). Early results suggest there was an increasing tendency for the largest firms to retain their leadership positions over the period 2000–2018.

Bajgar et al (2019) report a noticeable increase in industry concentration for both Europe and North America over the period 2000–2014, with concentration increasing in 77% of 2-digit industries in Europe and 74% in

North America. Concentration levels increased by 4 percentage points in the average European industry (8% is the corresponding figure for North America).

Meagher (2020) argues that “the evidence shows that competition is giving way to monopoly across the economy” (20). Further, she argues that “markets inexorably tend toward concentration, and we seem incapable of enforcing the restraint to prevent the accumulation of money and power.”

A blog on the IMF web-site reports that “global price markups have risen by more than 30 percent, on average, across listed firms in advanced economies since 1980. And in the past 20 years, markup increases in the digital sector have been **twice as steep** as economy wide increases” (emphasis in original, Georgieva et al. 2021). They see growing signs that market power is becoming entrenched in many industries with dominant firms with few competitors. Mergers and acquisitions are seen as one of the factors contributing to these trends. Their “analysis shows that M&A by dominant firms contributes to an industry-wide decline in business dynamism—as competitors across the board take a hit to growth and research and development spending”.

The shifts in the structure of production have been away from manufacturing which had been the heartland of concentrated industries to services, and notably industries of information technology. Rikap (2021) notes that the leading corporations of the 21st century are intellectual monopolies, with eight of the top ten companies in market capitalization in that category. “The private appropriation of knowledge results in intangible assets, triggering what has been dubbed intellectual knowledge or technoscientific rents... and concentration of intangible assets has become the main driver of capital concentration.” She views this as a “stage within capitalism where we see a continuous reinforcement of knowledge monopolies. The result is a broken tie between innovation and growth explained – at least in part— by the perpetuation of intellectual rentierism and predation” (Rikap, 2021).

#### **4.2. Industrial concentration and income distribution**

Gutiérrez and Philippon (2017) argue that in the US case, concentration and profitability have increased across most U.S. industries, and that business investment has been weak relative to measures of profitability, funding costs, and market values since the early 2000s. The breaking of links between profits and investment has been widely observed. They test four explanations of decreasing domestic competition, increases in the efficient scale of operation, intangible investment, and globalization. They conclude that decreasing domestic competition has resulted in a shortfall of nonresidential business capital of 5–10% by 2016.

In a global study, Diez, Fan, and Villegas-Sanchez (2019) find the increase in markup is broad-based across countries and sectors, and driven by a small number of firms. The increase in average markup in a sector is seen as explained by increases in the average markup of incumbents and reallocation effects toward new firms who gain market shares.

De Loecker, Eeckhout, and Unger (2020) find for the USA that “from 1980 onwards, markups have risen from 21% to nearly 61% in 2014, an increase of 40 points. For the same period, average profit rates have increased from 1% of sales to 8%.” They attribute the rise almost entirely to the increase for those firms initially with highest markups. The rise in revenue-weighted markups is ascribed to a rise in markups themselves and to the extent of two thirds of the rise to reallocation of share of sales from low- to high-markup firms.

Eeckhout (2021) provides many examples of rising concentration in the US over the past four decades. He relates this to the rise in “the average markup ... from 1.21 in 1980 to 1.54 in 2019. There was a particularly sharp rise in the 1980s and the 1990s, followed by a decade of markup stagnation in the 2000s, followed in turn by a new sharp rise in 2010s after the Great Recession” (28). He identifies three major factors leading to market power. The first is economies of scale in supply noting new technologies that are difficult to copy or reproduce which give rise to permanent technological superiority. Second, demand returns to scale, “where economies of scale are created by usage instead of cost of building” (47) and a third source of market power comes from learning by doing effects. Eeckhout particularly mentions the creation of dominant firms through mergers and acquisitions and “killer acquisitions” companies buying up promising startup companies which could become potential rivals.

Davis and Orhangazi (2021) do not find a uniform relationship between the level of industrial concentration and profitability, markups, or investment rates. “Highly concentrated industries are not the most profitable (instead mid-concentration industries earn the highest profit rates) and, with a couple of sector-specific exceptions—namely, in information services- do not have the highest markups.” (23)

Autor et al. (2020) explain the decline of the labor share in terms of the rise of ‘superstar firms’. They analyze micro panel data from the U.S. Economic Census since 1982, and document empirical patterns to assess a new interpretation of the fall in the labor share based on the rise of “superstar firms.” They find sales concentration is rising across a large set of industries and that industries where concentration has risen the most exhibit the sharpest fall in the labor share. These broad patterns are observed not only in U.S. data but also internationally in other OECD countries. “A final set of results shows that the growth of concentration is

disproportionately apparent in industries experiencing faster technical change as measures by the growth of patent intensity or total factor productivity” (Autor et al. 2020, 703).

Barkai (2020) investigates the decline in labor’s share and in the capital share (calculated by reference to rate of return on capital) in the USA over the period 1984–2014, with a large increase in ‘pure profit share’. Barkai (2020) finds that increases in industry concentration are associated with declines in the labor share. He interprets his results in terms of “the decline in the shares of labor and capital as a whole arising from a decline in competition” (2460).

### **4.3. Innovation and technical change**

Cowling (1995) asked whether the development of major innovations been enhanced by the growing dominance of the transnationals and what is the nature of these innovations in a monopoly capitalist world. He argued that “the available indicates that technological progressiveness will not normally be promoted by the monopolization of the system of production” and cites Scherer and Ross (1990). Further it is argued that although large corporations control most of the recorded research and development, they have not provided the origins of the major technological innovations. As the work of Mazzucato (2013) and others have stressed, major technological innovations often originated in public sector and publicly funded research. Cowling (1995, 440) quotes Geroski and Stewart (1991) that innovations in UK over period 1945–1983 gave “strong support to the view that innovative activity has been retarded by high levels of concentration and restrictions on entry.”

Innovation of new products was viewed as attempting to bolster their market positions and contribute to the tendency for the degree of monopoly to rise. This may give a boost to investment in the short term but contributes to a stagnationist trend in the longer term.

Cowling (1982, 21) argued that “in attempting to secure their monopoly positions, firms will invest in, say, R & D but having done so, they simply put the inventions on the shelf” and this can be optimal behavior for the firms involved, and suggests that protective R & D can be a significant component of planned excess capacity aimed at maintaining positions of monopoly power. Further, the Marxian imperative to accumulate under competitive capitalism in order to survive is “severely qualified” in conditions of monopoly or oligopoly.

A recent study concludes that “these trends suggest possible causes of current and future stagnation in the US economy due to declining competition, increasing market concentration, less job creation (although perhaps

greater job stability for those who work in larger firms), less net business investment, and greater worker productivity which may reduce the need for more workers and at the same time can yield greater profit margins for large corporations” (Lambert, 2020, 36). Further, R & D “fails to generate a lot of innovation of a transformative nature. ... R&D efforts regarding job creation, new firm creation, and net business investment show either mixed results or even negative connections. ... these findings also hint that R & D is used in a monopoly capital situation to further monopolization” (Lambert, 2020, 44).

Lambert (2019) explores the relationship between monopoly capital and entrepreneurship. In his empirical work, monopoly capital includes the scale of large firms, but also household and corporate debt levels and government regulation. He argues that there is declining entrepreneurship in the USA, and that “monopoly capital and its attendant features may be stifling US entrepreneurship” and suggests “there may be a heightened tendency toward long periods of US economic stagnation” (1589).

The general trend in spending on research and development has been upwards over the past three decades. For example, the ratio of R&D expenditure to GDP in the G7 countries rose from 2.065% in 1990 to 2.592% in 2020 (calculated from OECD 2022). Such a trend is suggestive that research and development is not stimulating output or productivity and may be undertaken for a range of other reasons some of which have been suggested above.

#### **4.4. Distribution of income and aggregate demand**

The arguments concerning the shifts in the distribution of income and effects on aggregate demand are based on differential propensities to spend out of wages and of profits. In recent years, these arguments have featured in the debates on wage-led vs. profit led regimes<sup>4</sup>. The general (though not universal) finding there has been that economies are wage-led, meaning that the shifts in the distribution of income over the past decades in the direction of profits have negative effects on growth and employment rates.

Alcobia and Barradas (2023) relate functional income distribution and secular stagnation in all EU countries over the period 1981–2021. Their estimates indicate that wage share, along with property prices and financial asset prices, exerts a positive influence on economic growth in EU countries, with credit and public spending exerting a negative influence. They conclude that “the decline of the wage share has represented one of the

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<sup>4</sup>See, for example, Lavoie and Stockhammer (2013), Oyvatt et al. (2020) among many others.

main growth constrainer in all EU countries and, particularly, in the euro area countries” (24).

Although there are, no doubt, many factors at play, monopoly capitalism analysis finds empirical support from the wage-led versus profit-led literature that the shift from wages to profits consequent on rising concentration and market power has slowed demand.

#### **4.5. Fiscal policy and deficits**

Ideas of a widening gap between the propensity to invest and the propensity to save have a strong presence in the secular stagnation literature. This is so for both the mainstream view and the monopoly capitalism view, though the mechanisms and effects are rather different. But there is the potential for greater use of budget deficits (and fiscal policy more generally) to address the savings-investment gap. However, although budget deficits and other mechanisms “are available to mitigate any stagnationist tendency, precipitated by a tendency for the degree of monopoly to increase, none of the mechanisms are automatic” (Cowling 1995). Kalecki (1943) had warned that although budget deficits could be used to secure full employment there would be strong resistance from the economic and politically powerful.

Table 2 indicates that budget deficits have been significant throughout the period since 1995 with no tendency to decline despite the thrust of public policy (particularly in the euro area) toward reduction of budget deficits, and of course raised by the effects of the global financial crisis of 2007/09 and the responses to the COVID-19 pandemic of 2020.

The statistics in Table 2 are suggestive of a substantial but not widening gap between savings and investment (though for any single country the capital account position would need to be factored in). The budget deficits have though not been sufficient to secure full employment in general.

### **5. Some other forces and growth**

In this Section 1 offer some remarks on three forces which may have contributing to declining growth – globalization, financialisation and climate change. The first two mentioned have generally been seen as a stimulus to growth (or at least an accompaniment of growth). However, the relationship may well have changed in recent times.

#### **5.1. Globalization**

In the past four decades (and before) monopoly capitalism has internationalized – in the words of Cowling and Sugden (1987) evolved into

transnational monopoly capitalism. Globalization in terms of the growth of international trade and of foreign direct investment has been closely related with monopoly capitalism.

The past four and more decades have involved globalization (or as some would say hyper-globalization) with expansion of international trade at a faster pace than global GDP (and hence the international trade to GDP ratio rising), rising foreign direct investment and the operations of multinational enterprises, and the rapid growth of international supply chains. The rapid growth of international trade may be more a consequence of growth of GDP than a cause. Globalization has often been promoted as a stimulus to growth. The focus here is on the role of globalization with growth, and specifically whether globalization has tended to be supportive of economic growth.

Heimberger (2022) covers over 500 studies conducted over different time periods some dating back to the 1870s. He finds evidence for publication selection bias in favor of positive growth effects of globalization. He finds that after bias correction the size of effect of economic globalization on output growth is more than halved. The growth promoting impacts of globalization are reported as arising from the growth of international trade. It is reported that a zero effect of financial globalization cannot be rejected. The growth effects of globalization have varied over time.

The period since 1980 has been described as hyperglobalization, and such may well have tended to bolster growth and offsetting the effects of monopoly capitalism. The trends since the global financial crises of slowing growth of international trade and of foreign direct investment may have contributed to slower growth

## **5.2. Financialisation**

Financialisation, particularly in the form of the growth of the financial system and so-called ‘financial development’, has also been promoted as favoring growth. The rapid growth of debt can form a temporary stimulus for growth of demand: Streeck (2016) argues that “Financialization’ ... seemed the last way to restore growth and profitability to the overextended hegemon of global capitalism’. The rapid growth of loans and debt, the development of new financial instruments, can provide a stimulus to economic activity, albeit one which proves to be unstable”. The experiences from the mid-1990s to mid-2000s provide an example of this in that on some measures (cf. [Figure 1](#)) economic growth picked up and there were some declines in unemployment. The global financial crises of 2007–2009 brought that credit expansion to a halt.

While a rapid expansion of finance may bring with it upswings in economic activity and employment, there is also the question of the longer-term effects of financialization. Financialization has been conceptualized in a range of ways (see, Sawyer 2022a, Chapter 2 for discussion). Financialization can be viewed in terms of the growth of financial institutions and of financial markets (relative to the size of the economy), and the developments of shadow banking, securitization and derivatives etc. Sawyer (2022a) details this dimension of financialization. The ‘pursuit of shareholder value’ and the focus on profits have also been viewed as major dimensions of financialization (van der Zwan 2014, for example). The broad question here is how financialization may have impacted on growth.

It has often been argued (e.g. Levine 2005) that what was termed financial development (which relates to the growth of financial institutions and markets) is positively associated with the rate of economic growth, with financial development facilitating savings and the channeling and monitoring funds into investment. The bulk of evidence (surveyed in Sawyer 2017, 2022a) for recent decades is for a cessation of such a positive relationship. A number of explanations can be provided for the emerging negative relationship between financial deepening and economic growth. The growth of household debt including mortgages would be recorded as an increase in the activities of the financial sector with growth in loans and deposits. Household debt may provide short-term if unsustainable stimulus but would not contribute to longer-term growth. As the financial sector has shifted toward the generation of, and then high volume trading in, derivatives, securitization etc., it has shifted away from the facilitation of savings and the financing of real investment. The emphasis on (short-term) profits is viewed as having negative effects on investment and on innovation.

The processes of financialization may well have tended to reduce the rate of growth, especially through discouragement of investment and innovation. While credit booms provide temporary and unsustainable boosts to growth, the longer-term and more general effects of financialization appears to slow down growth.

### **5.3. Climate change**

The environmental effects arising from higher GDP and continuing growth (e.g. climate change, pollution) may well contribute to a slowing down of growth. de Oliveira and Lima (2022) explore the interactions between the operation of the Kaldor-Verdoorn law that the growth of productivity and growth of output (presumed to be demand driven) are positively related and the effects of environmental change on output production. Their

estimates suggest that a rise in pollution concentration decreases labor productivity in many sectors, including agriculture, manufacturing, and service sectors. Graff Zivin and Neidell (2012) find a causal relationship between variations in the atmosphere ozone concentration and the productivity of a sample of agricultural workers: a 10 parts per billion decrease in ozone concentration increases labor productivity by 5.5%. Chang et al. (2016) study the effects of outdoor air pollution on the productivity of indoor workers at a pear-packing factory, and find that Increases in fine particulate matter leads to significant decreases in productivity. The effects of outdoor air pollution on the productivity of industrial workers at large call center in China were shown by Chang et al. (2019). Kahn and Li (2020) document that the productivity of high skilled officials working indoors is lowered as a consequence of air pollution. Colacito et al. (2019) document that seasonal temperatures have significant and systematic effects on the U.S. economy, both at the aggregate level and across a wide cross section of economic sectors. A 1°F increase in the average summer temperature was found to be associated with a reduction in the annual growth rate of state-level output of 0.15%–0.25% points.

Burke, Hsiang, and Miguel (2015) show that overall economic productivity peaks at an annual average temperature of 13.6°C, and declines at higher temperatures. They argue that “the relationship is globally generalizable, unchanged since 1960, and apparent for agricultural and nonagricultural activity in both rich and poor countries” (235).

Ayhan Kose and Ohnsorge (2023, 29) note that the frequency and severity of weather-related natural disasters have increased as a result of climate change, and over the past two decades, these natural disasters have caused a significant decline in potential output. They argue that “there is growing evidence that climate change-related weather events are causing increasingly frequent and severe damage to output and that they have consequences for potential growth”. Drawing on the work of Dieppe, Kilic-Celik, and Okou (2020), it is estimated that global and EMDE potential growth over 2022–2030 would be almost 0.1%age point a year lower than in 2011–2021. Dieppe, Kilic-Celik, and Okou (2020) report that climate disasters tripled in frequency between 1960–1979 and 2000–2018. In their empirical work they find that “climate disasters have been particularly detrimental in terms of lost labor productivity. The estimates for both advanced economies and EMDEs indicate that climate disasters contemporaneously reduced labor productivity by about 0.5% and have persistent effects in both advanced economies and EMDEs” (20).

There is then an expanding body of evidence that climate change and environmental degradation may well be factors which have served to slow down the growth of GDP.

## 6. Concluding comment

The generally declining growth rate of per capita GDP in the capitalist industrialized countries is clearly evident from the statistics summarized in [Section 2](#). The mainstream approach to secular stagnation has been to invoke a range of factors from the nature of technology and its impacts on growth and demand to demographic factors. The propensity to save is viewed as enhanced and the propensity to invest lowered, and a decline in the so-called ‘natural rate of interest’ invoked. Secular stagnation (or at least some slow-down in rate of growth of GDP) comes from what may be seen as essentially exogenous factors. The monopoly capital perspective offers a range of factors which can feed into slower growth – the rise of industrial concentration, rising profit margins and profits, adverse effects on aggregate demand from the shift toward profits (and rising inequality), and the adverse effects of oligopoly on innovation and investment. These are factors which come from the behavior of large corporations in pursuit of profits and power, and are postulated to tend to lower rate of growth. Other factors may also contribute including those mentioned by mainstream authors. Globalization and financialization can be seen as closely related with monopoly capitalism and were forces which had been promoting growth. However, financialization has come to be seen as a drag on growth, and globalization has slowed. Climate change has slowing effects on productivity growth, and activities of monopoly capital have been major contributors to climate change. In this paper I have considered a range of evidence on the factors highlighted by the monopoly capital perspective, and would argue that the evidence on those features is supportive of the monopoly capital perspective on secular stagnation.

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