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How Profit-Oriented Motivation Can Impair Innovation and Growth: Norman Bowie’s Paradox of Profit from a Micro- and Macroeconomic Perspective

By Christian Hecker*

Abstract

This article is based on Norman Bowie’s idea of a “profit-seeking paradox,” which states that companies have the best chance of making profits if they do not place profit-making as such at the centre of their activity, but instead pursue a stakeholder-oriented business policy that focuses on creating meaningful jobs and serving customers. In this contribution, Bowie’s theory is complemented by a macroeconomic perspective. On the basis of considerations by Keynes, Schumpeter, and Phelps, it is demonstrated how entrepreneurial activity that is not primarily oriented towards financial goals can unfold positive external effects, increasing the productivity of the economy as a whole and thereby also improving the profit opportunities of the respective companies. Otherwise, profit maximization that leads to the neglect of investment can impair the growth potential of the economy and thereby also affect firms’ prospects for profits.

JEL Codes: B20, M14, P12

Keywords: Profit-Seeking Paradox, Shareholder Value, Financialization, Motivation, Entrepreneurship

1. Introduction: From the “Hedonistic Paradox” to the “Profit-Seeking Paradox”

Profit sometimes appears like happiness in life: Some people strive for it without achieving it, while for others it comes about without them actively having sought it. With regard to the search for happiness, the 19th century philosopher and economist John Stuart Mill, amongst others, formulated a so-called “Hedonistic Paradox” in his autobiography, based on a self-observation: “Ask yourself whether you are happy, and you cease to be so” (Mill [1873] 1924, 100). Accordingly, Mill suggested a different approach to the seekers of happiness. Instead of striving directly for their own pleasure, people should fix their minds on objects other than their own happiness, *e. g.* “on the happiness of others, on the improvement of mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end,” and find personal happiness as a side effect of dedicating their lives to these purposes.

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The French author Antoine de Saint-Exupéry also regarded happiness as a goal that should not be sought directly. Instead, people should work for higher goods, such as the realization of technological progress or the improvement of human living conditions, and achieve happiness as a side effect. Thus, he had the first-person narrator in his work *The Wisdom of the Sands*, a ruler over a fictitious town in the North African desert, say: “In the silence of my love, I have given much time to watching those of my people who seemed happy. And ever I learned that happiness came to them as beauty comes to a statue – by not having been sought after” (Saint-Exupéry 1950, 175).

Based on this “Hedonistic Paradox,” Norman Bowie developed a “Profit-Seeking Paradox,” stating that the more a firm consciously seeks to obtain profits, the less likely it is to achieve them (Bowie 1988, 97; Drummond Nauck 2016, 44–6). Correspondingly, he developed an “instrumental profit theory,” based on the consideration that companies can significantly improve their prospects of gaining profits by not making financial goals the focus of their activity, but instead concentrating on improving their products or services for their customers (Bowie [1999] 2017, 139–41). Companies that conduct their business along these lines would have good chances of generating extraordinary profits as a side effect of customer-oriented entrepreneurship.

The present contribution provides an extension of Bowie’s “Profit-Seeking Paradox” from a macroeconomic perspective. Bowie’s arguments are first analysed with regard to the managerial considerations behind them, leading to questions of motivation for economic activity. Subsequently, this microeconomic point of view is complemented by analysing how different types of motivation affect macroeconomic relationships, based on considerations by Schumpeter, Keynes, and Phelps. It is supplemented by a case study examining the impact of the change in the management of listed companies in Germany to shareholder value-oriented management approaches in the mid-1990s. Finally, the implications of these results for the achievement of economic policy goals are examined, particularly with regard to the transformation of the economy towards CO₂ neutrality and the implementation of innovation such change requires.

2. The Paradox of Profit at the Firm Level

2.1 Managerial Considerations behind Bowie’s Paradox of Profit

Bowie’s theory of business ethics is mainly based on Kantian philosophy. Accordingly, firms are regarded as “moral communities,” which are committed to the Categorical Imperative and thus obliged to treat the humanity of their employees and other stakeholders as an end and not merely as a means (Kant [1785] 1998, 38). From this core postulate, Bowie derives conclusions for business policy concerning both human resources management and the fundamental orientation of companies. In order to respect the human dignity of employees, work must be seen as useful and enable workers to develop their abilities and skills. Accordingly, the main purpose of corporations is seen in providing meaningful work for their employees (Bowie [1999] 2017, 41–81).

Moreover, the goal of providing meaningful work can only be achieved if the company's purpose goes beyond making profits for shareholders, as, from Kant's vantage point, working simply in order to make money is to display the vice of miserliness, a vice, which is even worse than the vice of avarice (Bowie 1998, 1084). According to Kant, meaningful work has to carry its value in itself as regards workers and the persons for whom the work is done. Thus, Bowie argues that the fundamental purpose of business is not to maximize profits, but to create value in the form of goods and services (Bowie 2013, 149). Business leaders should therefore regard themselves as professional providers of goods and services for other people's needs and thereby give meaning to their employees' work.

As Bowie (1988) points out, many conclusions derived from Kantian ethics can also be identified as means of enhancing productivity, leading to the question of whether their implementation in business policies can really be classified as moral behaviour. For instance, enabling employees to improve their personal skills usually makes them more productive, as human capital is essential for a company's success. In different case studies, Bowie highlights the value-enhancing effects of ethical treatment of employees, *e. g.*, regarding layoffs (Bowie and Werhane 2005, 56–9).

Besides these aspects of respecting employees' human dignity, Bowies refers to additional moral obligations, derived from Carroll's pyramid of Corporate Social Responsibility, many of which are also related to improving chances of success (Bowie [1999] 2017, 153–5). With reference to Carroll and Kant, he distinguishes between perfect duties, which have to be fulfilled under all circumstances, and imperfect ones, like philanthropic behaviour. In this context, perfect duties, *i. e.*, responsibilities required or expected by global stakeholders, can also be seen as preconditions for companies' long-term success.

Based on these considerations, Bowie concludes that managers can improve their companies' business perspectives by not focusing directly on making profits, but instead doing their business in a way that serves the needs of their internal and external stakeholders. Thus, managers should not primarily focus on shareholders' interests, but follow a stakeholder-oriented approach, addressing the concerns of different stakeholder groups, especially employees and customers. By doing so, as Bowie points out, management will, with a high chance of success, also serve the interests of their shareholders: "We cannot prove that managing for the long run will benefit the stockholders in the long run as well as the other stakeholders, but there is a reasonable case that it will" (Bowie and Werhane 2005, 38).

It is noteworthy that the obligations towards different stakeholders, in particular to employees and customers, appear to be inextricably linked in this approach. After all, a company can only fulfil its duty to its own employees if it also serves its customers and, indirectly, society as a whole, because meaningful jobs can only arise from a generally accepted corporate purpose. The interconnectedness of the claims of different stakeholder groups has already been described by Freeman in his stakeholder approach (see, *e. g.*, Freeman and Velamuri 2008). In agreement with Freeman, Bowie (2012, 182) emphasizes that corporate responsibility towards key stakeholders is a central component of value creation. With regard to the selection of relevant stakeholders from a corporate perspective, Bowie, like Freeman, is in favour of not using

a final definition of the term stakeholder in order to allow for the inclusion of other groups, depending on the company and the respective research agenda (see Bowie, 2012, 183; Freeman *et al.* 2010, 211). In view of the current challenges in the area of climate protection and the sustainable transformation of companies, it makes sense to include the interests of future generations in particular (see section 5.2).

Bowie's expectation that companies can increase their profits by focusing on stakeholder-oriented aspects beyond shareholder value has recently been proved by economic analysis, based on theoretical and empirical research. For instance, Kajackaite and Sliwka (2018) show in a formal model and in a series of lab experiments that managers with a preference to spend resources for social causes can increase employee motivation and thereby improve their companies' performance to an extent that offsets the expenditures for social purposes. Furthermore, Gartenberg, Prat, and Serafeim (2019) clarify in an empirical investigation of large U.S. firms that companies that are committed to a clear corporate purpose and also express this commitment in middle management experience better financial performance than others. From a business perspective, Malnight, Buche, and Dhanaraj (2019) have compiled experiences of company board members that have perceived the orientation towards a clear corporate purpose as a way to improve the success potential of their firms.

2.2 The Crucial Role of Motivation

In Bowie's considerations, motivation plays a decisive role, as managers must act out of intrinsic motivation and, in this way, also motivate their employees to regard their jobs not primarily as a source of income, but as a meaningful occupation. As several characteristics of providing meaningful work can also be seen as means to improve a company's performance, it often appears difficult to distinguish between intrinsically motivated and profit-oriented actions of business leaders. In this context, Bowie ([1999] 2017, 130–63) argues that management actions should be considered as ethical in the sense of Kant, even if managers are led by mixed motivations, *i. e.*, being aware of profit-enhancing consequences notwithstanding their intrinsic motivation. In practice, such mixed motivation can be found, for example, in the concepts of management consultancies for the implementation of purpose-oriented corporate strategies (see, *e. g.*, Simpson *et al.* 2020).

The theory behind the paradox of profit is based on the opinion that companies, striving for success, must embody a purpose that goes beyond making a profit (also see Malnight, Buche, and Dhanaraj 2019; Duska 1997). In deriving such a corporate purpose, Bowie refers to the expectations of significant stakeholder groups, especially employees and customers. It is of central importance that this corporate purpose, as opposed to profit-making, motivates management and employees.

In this context, managers and employees are by no means expected to be altruistic, but rather to have a substantive interest in their field of activity that goes beyond making money. Examples of such intrinsic motivation are, with regard to management, the establishment of new products, the acquisition of new markets, or the successful implementation of new technologies. Regarding employees, the improvement of personal competences and skills can be mentioned. It is to be accepted that even in intrinsi-

cally-motivated business behaviour, self-interest is usually involved, with power and public prestige often playing a decisive role.

Following Bowie's thoughts, this contribution regards managerial decisions as intrinsically-motivated as long as they, amongst others, are based on factors other than profit making. These factors need not necessarily be of altruistic nature, as they might be driven by personal objectives or status incentives, such as being appreciated by fellow citizens or in the media, becoming part of a country's business elite, or passing a leading company to one's offspring (see Kreps 1997).

3. Extension of the Paradox of Profit to the Macroeconomic Level

3.1 Preliminary Remarks

At the macroeconomic level, welfare-enhancing effects arise first of all in the total sum of the productivity gains in individual companies. Furthermore, additional welfare gains may result from positive external effects going beyond individual firm performance. In the following section, different economic approaches are analysed with regard to the question of which positive externalities can come from corporate decisions based on intrinsic motivation of company leaders. Among the classics of economic thought, reflections on the external effects of intrinsic motivation can mainly be found in the works of Schumpeter and Keynes. Of the representatives of modern macroeconomics, Phelps in particular has presented studies on the subject. The fact that these considerations do not currently represent the mainstream of economic theory becomes clear in section 4.1. If macroeconomic approaches without positive external effects of entrepreneurial behaviour are taken as a basis, the positive effects of intrinsic motivation are limited to the sum of the benefits at a firm level. Neoliberal economists such as Milton Friedman would also fear a loss of efficiency due to principal-agent conflicts in the case of non-monetary motives at management level (see section 4.3).

3.2 Schumpeter: The Role of Dynamic Entrepreneurs

Joseph Alois Schumpeter, who dealt with the vitality of capitalist economies in many of his works, attached great importance to the motivation of decision-makers. From his perspective, capitalism could only be successful as long as dynamic entrepreneurs were permanently introducing new technologies and therefore revolutionizing patterns of production and consumption. Schumpeter pointed out that entrepreneurs usually distinguished themselves by a high degree of intrinsic motivation, as they were mostly driven by creative impulses, which made them carry out new combinations of production factors and thus alter industrial structures in a permanent process of destruction and reconstruction (Schumpeter 1949, 68–9, 74). He regarded entrepreneurs as innovators acting out of personal ambition rather than from pecuniary motives. As causes of entrepreneurial behaviour, Schumpeter (1934, 92–4) identified three different sources of motivation:

- the will to found a private “kingdom,” providing space for personal leadership, which can be passed on to future generations, comparable to the foundation of a dynasty,
- the desire to conquer and to prove oneself superior to others,
- the joy of creating and of getting things done.

Though these sources of motivation are far from altruistic, Schumpeter emphasized that they indeed differed from mainly financial motives. He stated that for entrepreneurs, pecuniary gain was primarily an expression of success, but not success itself. Since the innovations they realized also benefited other enterprises in the medium term, Schumpeterian entrepreneurs created externalities from which society as a whole benefited.

A literary portrayal of this sort of person (in this case: a mining entrepreneur) and his motivation was provided by Stefan Zweig, who like Schumpeter had been socialized in the culture of Viennese modernism and came from a family of entrepreneurs: “And moreover: not just money alone, not just business, enterprise, games and responsibility – no, something incomparably more tempting reached out for him here. Here was design, creation, a high task, the begetting profession of drilling tunnels out of mountains where for millennia the rock had dozed in senseless sleep beneath the skin of the earth” (Zweig 2010, 98, author’s own translation).¹

In terms of motivation, Schumpeter distinguished between entrepreneurs, striving for the realization of new business ideas, and capitalists, who provided the funds for entrepreneurial investments and whose main interest was to achieve the highest possible returns on their capital (Schumpeter 1951, 251–2). Relating to conflicts of interest in capitalist societies, he accentuated that entrepreneurs and workers often pursued similar objectives, as both were interested in improving technologies and introducing new products, whereas capitalists primarily strived for investment returns, which were at risk through innovative, entrepreneurial dynamism (Schumpeter 1926, 347). Thus, based on their motivation, Schumpeter regarded entrepreneurs and workers as potential allies, opposed to the profit objections of capitalists.

Schumpeter was convinced that without dynamic entrepreneurs acting based on intrinsic motivation, capitalism would lose its ability to generate wealth for large parts of the population. In this case, business would develop into a stationary state economy without technological progress and growth. Moreover, from Schumpeter’s point of view, even positive real interest rates on financial investments or savings would be impossible without entrepreneurs showing demand for capital with the aim of financing innovations (Schumpeter 1934, 177).

Therefore, Schumpeter’s writings also embodied a normative appeal to the business elites of his time, whom he urged to behave in entrepreneurial fashion. In this way, he opposed the danger that social change connected with the success of capitalism would, over time, undermine the moral foundations of entrepreneurship. During World War II, Schumpeter described this danger, which he anticipated, with the following words:

¹ On connections between Zweig’s literary work and Schumpeter’s economic thinking, see Kurz and Storn 2012, 21–3.

“For, like any other system, capitalism cannot be expected to function efficiently except on its own terms, that is to say, in a social atmosphere that accepts its responsibilities and incentives and allows it sufficient freedom to action” (Schumpeter [1943] 2003, 178). In particular, Schumpeter feared a decline in the values of entrepreneurship, which in his eyes would lead directly to the decay of capitalism. As an example, he described how the emergence of joint-stock companies was accompanied by declining emotional attachment of business owners to their property (*ibid.*, 131–42). Hence, he demanded that business elites should espouse the role of entrepreneurship as part of their responsibility for the functioning of capitalism (Schumpeter [1929] 1993). In Schumpeter’s eyes, the survival of capitalism was seen as a precondition for economic and political freedom, making entrepreneurship even more valuable (Schumpeter [1943] 2003, 296–302, 363–80).

In Schumpeter’s view, the success of capitalism depended largely on decision-makers being guided by pre-capitalist, non-monetary motives. These motives and norms, whose origins Schumpeter partly traced back to feudal society, were in his eyes essential “protective strata” for capitalism, whose destruction would lead to the demise of market economies and the rise of socialist economic models (*ibid.*, 134).

In general, according to Schumpeter, the intrinsic motivation of entrepreneurs had an important economic function that went beyond the success of the individual company. Schumpeter emphasized that innovations realized by entrepreneurs would sooner or later take on the character of a public good, from which society as a whole would benefit. Thus, in addition to the personal benefit of the individual entrepreneur, there was a benefit for the economy as a whole, which further increased the national income. In this way, entrepreneurs guided by non-monetary motives could provide important preconditions for economic growth, with the consequence that the profit-making opportunities of enterprises also increased. This ultimately corresponds to the profit-seeking paradox, as Bowie put it at the firm level.

3.3 Keynes: Entrepreneurship versus Speculation

John Maynard Keynes, who revolutionized economic theory by redefining the role of the state in a market economy, left no doubt that he regarded profit making as an insufficient motivation for business people (for the contents of this section, see also Hecker 2021a). In his publication *The End of Laissez Faire* (1926), he outlined diverging motivations that can stimulate people to engage in economic activities, and he expressed his regret that one of these motives, money-making, had become increasingly relevant during the rise of capitalism, though “most religions and most philosophies deprecate, to say the least of it, a way of life mainly influenced by considerations of personal money profit” (*ibid.*, 51).

Ten years later, Keynes further substantiated his considerations about the role of motivation in his *General Theory of Employment, Interest and Money*. He explained that business people usually tended to act upon one of the following maxims: entrepreneurship, speculation, or rent-seeking, which were rooted in different types of motivation (Keynes 1936, 150–62).

According to Keynes, entrepreneurs acted out of intrinsic motivation and distinguished themselves by personal traits such as creative impulses, courage and initiative, as entrepreneurship was not just business, but rather a way of life (Keynes 1936, 150; Hecker 2021a). In this context, Keynes coined the term “animal spirits” in order to characterize “a spontaneous urge to action rather to inaction” (1936, 161). As a consequence, entrepreneurial activity was driven more by emotions and “animal spirits” than by rationally calculated profit-seeking, as Keynes emphasized: “enterprise only pretends to itself to be mainly actuated by the statements in its own prospectus, however candid and sincere. Only a little more than an expedition to the South Pole, is it based on an exact calculation of benefits to come. Thus, if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fade and die” (*ibid.*, 161–2). In Keynes’s eyes, “animal spirits” had the potential to create an action-bias, suited to overrule the results of “cold calculation” and, thereby, increase both investment and growth potential of the economy as a whole (Barens 2011).

From Keynes’s perspective, entrepreneurs motivated by “animal spirits” fulfilled an important function, as they formed long-term expectations despite omnipresent uncertainty and acted on this basis (Hecker 2021a). In this way, they contributed to economic stabilization and capital formation. Furthermore, they provided important preconditions for implementing innovations. Even investments that did not fulfil their return expectations could, according to Keynes, be welfare-improving from a macro-economic perspective if they brought about technological progress, created jobs, and enhanced human capital by enabling employees to develop their personal skills. Thus, Keynes warmly appreciated that not all investments were calculated in a strictly rational way: “If human nature felt no temptation to take a chance, no satisfaction (profit apart) in constructing a factory, a railway, a mine or a farm, there might not be much investment merely as a result of cold calculation” (Keynes 1936, 150). From Keynes’s vantage point, entrepreneurship, based on intrinsic motivation, generated positive external effects for the economy as a whole (Hecker 2021a).

Keynes contrasted the role of entrepreneurs with two other types of actors, whose motivation he was equally critical of, as both were driven only by the pursuit of profit: rentiers and speculators. The former were criticized by Keynes for just striving for risk-free profit without shaping economic activities. Thus, Keynes sympathized with the idea of low interest rates diminishing the revenues of rentiers, a process he described as “the euthanasia of the rentier, the functionless investor” (Keynes 1936, 374–7). Speculators were criticized by Keynes even more harshly, as he saw speculation as a major cause of instability. He pointed out that speculators intended to make profits by investing in financial assets with a short-term time horizon (*ibid.*, 153–61). Accordingly, Keynes expressed his fear that speculation might lead to increased instability due to financial crises and to reduced investments in the real economy, hampering growth and employment. Instead of bringing about positive externalities of entrepreneurship, speculators tended to cause negative external effects to economic growth and social peace.

Keynes’ considerations on positive external effects of entrepreneurship thus go in the same direction as those of Schumpeter (see Hecker 2020). From Keynes’ point

of view, too, an additional economic benefit was to be added to the personal profit that an intrinsically motivated entrepreneur could make through the success of his enterprise, which increased the overall growth potential. Thus, in Keynes' thought, a macroeconomic analogy to Bowie's profit-seeking paradox can be identified, too.

3.4 Excursus: Keynes, Schumpeter, and Capitalism in Their Time

Both Keynes and Schumpeter developed their thoughts on entrepreneurial motivation against the background of the business life of their time. Thus, the contrast between entrepreneurial action driven by intrinsic motivation and pure profit motivation, as presented by both authors, can also be found in the capitalism of the pre- and interwar period.

A world-renowned example of entrepreneurial action in the sense of Keynes and Schumpeter is provided by Henry Ford, who always emphasized that the main purpose of his business was to provide jobs and build affordable cars. He proclaimed the goal of "reshap(ing) business on the basis of service" (Ford 1922, 132), and he regarded innovation as the main task of the entrepreneur (*ibid.*, 42–3). In his book *My Life and Work*, Ford contrasted a purely profit-oriented business approach with the will to actively shape the future, clearly supporting the latter: "But if one has visions of service, if one has vast plans which no ordinary resources could possibly realize, if one has a life ambition to make the industrial desert bloom like the rose, and the work-a-day life suddenly blossoms into fresh and enthusiastic human motives of higher character and efficiency, then one sees in large sums of money what the farmer sees in his seed corn – the beginning of new and richer harvests whose benefits can no more be selfishly confined than can the sun's rays" (*ibid.*, 269). For an entrepreneur acting in this sense, profits were merely instrumental in that they enabled new investments.

Thus, Ford, whose moral weaknesses, *e. g.*, with regard to racism, anti-semitism, and militant opposition to trade unions, must not be concealed, can for good reasons be described as an entrepreneur in the sense of Keynes and Schumpeter, who put innovation and production goals above profit interests. It brought him temporarily into conflict with his fellow stockholders, whose claims for dividends Ford countered with the remark: "Business is a service, not a bonanza" (Snow 2013, 257; see also Ford 1922, 41). In his view, profits should be generated "incidentally" through optimal process flows and high-quality products. In a court case with shareholders who rejected his position, Ford expressed a view that came close to the profit-seeking paradox, as Bowie would put it decades later: "If you give all that (*i. e.*, high wages, good quality cars at a reasonable price), [...], the money will fall into your hands; you can't get out of it" (Snow 2013, 257).

From Ford's point of view, "stockholders, [...], ought to be only those who are active in the business and who will regard the company as an instrument of service rather than as a machine for making money" (Ford 1922, 161). Just like Keynes, he saw it as dangerous when financial interests dominated corporate decisions: "And that is the danger of having bankers in business. They think solely in terms of money. They think

of a factory as making money, not goods. They want to watch the money, not the efficiency of production” (*ibid.*, 176).

Against this background, Ford can be seen as an example of a Schumpeterian entrepreneur, although Schumpeter did not mention him directly in his writings on entrepreneurship, as he substantiated his theories exclusively through sources employed by economists and sociologists, without giving examples from business practice. However, in other writings, particularly on the labour market, Schumpeter explicitly referred to Ford, taking issue with the exceptionally high wages he paid (Schumpeter [1928] 1985, 183; [1928/1929] 1985, 199). Keynes also mentioned Ford’s considerations on wage policy, especially endorsing his rejection of wage cuts in times of crisis (Keynes 1931, 547).

In Germany, where Schumpeter lived and researched before moving to the United States in 1932, similar conflicts existed between profit-oriented shareholders and managers who were primarily interested in the further development of their companies. An example of this was a disagreement in the board of directors of HAPAG (Hamburg-Amerikanische Packetfahrt-Actien-Gesellschaft) at the end of the 19th century. At that time, Albert Ballin, who had just been appointed to the board of directors, vigorously demanded the resumption of dividend payments, while Carl Laeisz, the general director at the time, replied: “According to paragraph one of our articles of association, the purpose of this company is the operation of ships – not the distribution of dividends” (Wiborg 1992, 92, author’s own translation). With this opinion, Laeisz was able to assert himself in the board of directors at the time and continue the further expansion of the company, temporarily waiving profit distributions.

Another example of entrepreneurship in the sense of Keynes and Schumpeter is provided by the activities of various members of the Siemens family in the course of the 19th century, in particular Werner von Siemens and Sir William Siemens, who headed the Siemens companies in Germany and Great Britain. In the judgement of contemporary and later biographers, both brothers were equally distinguished by their inventiveness, creative spirit and entrepreneurial talent (König 2020; Pole 1888). In Werner von Siemens’ autobiography, there is even a direct reference to the profit-seeking paradox: “A business friend once teased me by saying that I was always guided in my undertakings by the general benefit they were supposed to bring, but that in the end I always found my profit that way” (Siemens 1943, 174, author’s own translation). His activities were also driven by the desire to establish a business dynasty, for he professed in a letter his intention to “found a lasting company which, perhaps under the management of our boys, could one day become a global company à la Rothschild *et al.* and bring our name into repute throughout the world” (quoted from Kocka 1979, 123, author’s own translation). His brother William Siemens, who repeatedly gave higher priority to technical goals than commercial calculations in his investments, described his personal motivation as follows: “irresistible desire to realize objects in applied science when once conceived, which objects have sometimes been pitched to high, and have led to fruitless expenditure of means and energy, although the principles have been proud” (cited from König 2020, 245). This motivation led him, among other things, to develop proposals to improve Britain’s energy supply by developing

renewable energy sources, given the limitations of available coal reserves. The losses he had to accept through investments in unsuccessful technological projects, however, did not change the fact that he was also successful as a businessman in the long run.

It can therefore be concluded that Keynes and Schumpeter in their reflections on entrepreneurship also took a stand on business debates of their time. They argued with a macroeconomic rationale in favour of a definition of entrepreneurship that should be based on personal motivation and not focus on profit maximization. Eventually, their remarks on entrepreneurship had both a descriptive and a normative connotation. On the one hand, they characterized different kinds of motivation, which could be identified in the business life of their time; and on the other hand, they assessed them in terms of their macroeconomic impact, which also resulted in a judgement on their preferability.

3.5 Edmund Phelps: A Theory of Dynamism

At the beginning of the 21st century, Schumpeter's thoughts on the role of entrepreneurs were significantly developed further by Edmund Phelps, who was awarded the Nobel Prize in Economic Science in 2006. In his reflections, Phelps clearly went beyond Schumpeter's theory by linking the function of the entrepreneur with that of the inventor (see Hecker 2024). In his reflections on "indigenous innovation," Phelps (2017) argued that significant innovations of the past were often developed through the experimentation and spirit of discovery in companies. As prerequisites for technological progress, he named so-called "modern values" such as individualism, vitalism (in the sense of trust in one's own strength), and self-realization (Phelps 2020, 9–17).

But for technological progress to be developed on the basis of modern values, Phelps (2013, 28–30) believed that a mixture of pecuniary and non-pecuniary motives was needed. In the first place, he named aspiration, curiosity, and self-expression, which he considered necessary for entrepreneurs, investors and consumers alike. Thus, "Schumpeter-type entrepreneurs" had to be complemented by prudent managers, far-sighted investors and consumers willing to experiment: "In sum, it takes a village for an innovation to be developed, launched, and adopted" (Phelps 2007, 553).

With regard to entrepreneurs and managers, this meant that they should be motivated not only by financial incentives but also by the desire to actively shape new developments. In Phelps' words, they should be "driven by their desire to make their mark" (Phelps 2013, 29). From his point of view, the success of capitalism depended essentially on the will of entrepreneurs and managers to shape the future, beyond the profit motive: "In modern capitalism, [...], the economy is largely driven by people who, while attending to the bottom line, want to make a difference – to contribute to society or to build monuments to themselves or connect with existing ventures – not just make money" (*ibid.*, 246). Accordingly, Phelps emphasized the danger that the pursuit of profit, if it dominated all other motives for action, could crowd out innovation, seeing the attractiveness of the financial sector and its short-termism as particular problems. Referring to John Dewey, he warned against a "money culture" that could endanger future prosperity just as much as overregulation by state authorities.

3.6 Ways of Classifying Entrepreneurial Motivation Based on Schumpeter, Keynes, and Phelps

By adding a macroeconomic dimension, as developed by Keynes, Schumpeter, and Phelps, to Bowie's considerations on the profit paradox, different types of motivation can be classified. It is obvious that even entrepreneurs with the attributes described by Keynes and Schumpeter (or in practise: Ford and the Siemens brothers) did not pursue goals oriented towards the common good, but were pronounced egoists. Nevertheless, they distinguished themselves by the fact that, in contrast to many of their contemporaries, they did not primarily focus on profit objectives, but were mainly interested in the growth of their companies or the implementation of technological progress; they regarded profits as a means to this end. Due to the positive externalities potentially associated with it, it seems legitimate to assess this kind of motivation similar to Bowie's justification of mixed motivation and to make a categorical distinction from primarily profit-oriented motivation despite the lack of altruism (see figure 1).

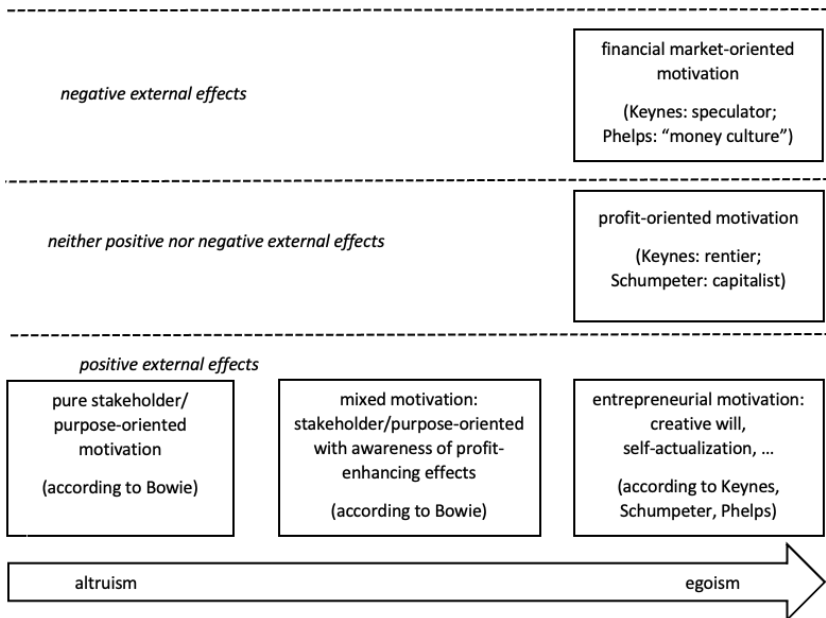


Figure 1: Ways of classifying motivation

Source: Own representation.

The differentiation of entrepreneurial motivation in the sense of Schumpeter, Keynes, and Phelps from pure profit orientation also reflects Kant's criticism of miserliness, which Kant considered more reprehensible than avarice or thrift because, in contrast to the latter, it represented a breach of duty not only towards others but also towards oneself: "Miserliness is not just mistaken thrift but rather slavish subjec-

tion of oneself to the goods that contribute to happiness, which is a violation of duty to oneself since one ought to be their master” (Kant [1797] 1991, 229; see also Bowie 1998, 1084). It is also a violation of the Categorical Imperative, since people whose activities are exclusively aimed at maximizing profit lose their character as subjects, making decisions based on reasonable and morally guided purposes and arguments, and thereby become pure objects of economic processes. If we combine Kant’s distinction with the approaches of these three economists, it becomes apparent that welfare gains due to positive external effects of entrepreneurship occur when human action does not exclusively follow the profit maxim and profit is primarily seen as a means to an end, but not as the ultimate goal of business activity.

4. 21st Century Corporate Management: Financial Benchmarks Instead of Entrepreneurial Motives

4.1 Lacking Attention for Thoughts about Motivation in Contemporary Economic Theory

In recent decades, however, Phelps’ perspective on dynamism has represented only a minority opinion compared to the mainstream of economic theory. Overall, reflections on the importance of entrepreneurial motivation largely disappeared from economic thinking. Remarkably, even textbooks based on Keynesian theory did not take up Keynes’s considerations about entrepreneurship. Specifically, the widely used textbook by Samuelson and Nordhaus mentioned the importance of entrepreneurship very rarely, and even then only with reference to governmental opportunities to promote entrepreneurial activity, in particular by creating an appropriate environment for investments or through low real interest rates (see, *e. g.*, Samuelson and Nordhaus [1948] 2010, 578–80, 650). The idea, which was present in the thinking of Keynes, that entrepreneurship has an intrinsic component which the state can only control to a limited extent, was not taken up by Samuelson and Nordhaus, nor by other standard textbooks (see Hecker 2023).

It seems remarkable that even George Akerlof and Robert Shiller (2009), who, against the background of the financial crisis, reintroduced the concept coined by Keynes of “animal spirits” into academic debates, did not use this term in its original sense, which was connected to entrepreneurial motivation. Instead of denominating entrepreneurial action in the sense of “a spontaneous urge to action rather to inaction,” as intended by Keynes, they interpreted the term “animal spirits” in a broader sense to describe a series of factors from the field of behavioural economics, such as financial market distortions and money illusion (Akerlof and Shiller 2009, 41–50; 131–48).

Therefore, mainstream economic theory saw no problem for decades in the change of management practices taking place since the 1980s, which led to companies being increasingly managed on the basis of financial market-oriented benchmarks. Many of the misaligned incentives anticipated by Schumpeter and Keynes became reality. This shift of paradigm was largely aimed at implementing new ways of motivating management. The perception of this development only changed in the early 2000s, with discussions about financialization commencing in the literature.

4.2 How Financialization Has Changed Global Business Since the Late 20th Century

Financialization describes the increasing importance of the financial sector for corporate decision making, connected with rising profits and incomes in financial institutions (see, e.g., Stockhammer 2015). Though there is no uncontroversial definition of this term, many aspects of what is commonly discussed as financialization are covered by Epstein: “financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (2005, 3). Remarkably, motivation is mentioned here in first place, indicating that Epstein considered this point as particularly important.

Epstein and other economists dealing with financialization analysed a development which started in the United States and transformed management theory and practice worldwide. In particular, the transition to shareholder value-oriented approaches to corporate management since the 1980s was accompanied by financial market-oriented benchmarks becoming increasingly relevant for management decisions (for the connection between financialization and the shareholder value-approach see Krippner 2011, 1–57). This happened in particular in the form of profit targets being derived from average capital market returns (Hecker 2021a).

Thus, largely uncommented by mainstream economic theory, a change in management has been taking place since the 1980s, which, in addition to an increase in the importance of capital markets, has also brought about new incentive mechanisms for management. In this context, business consultants and economic advisors often claimed that managers had not consistently been serving the interests of shareholders so far, but had been following their own objectives, such as increasing personal prestige by expanding the size of their companies or initiating spectacular investment projects. Therefore, incentive schemes were introduced that were based on financial market benchmarks (e.g. stock options) with the aim of tying management goals to the interests of shareholders (Kaen 2003, 117–48).

In her book *Makers and Takers*, Rana Foroohar (2016, 62–89) gave several examples of American car companies in which during the 1980s and 1990s “car guys” were replaced by “bean counters,” with management positions being taken over by people that were primarily interested in financial success, *i.e.* increasing share prices. As a consequence, corporate cultures changed and financial figures became more important than technological aspects, with product quality deteriorating. Thus, research and development in the car industry decreased, and newly developed cars often had technical defects. Referring to David Halberstam, Foroohar explained: “The impulse of product, to make the best and most modern cars possible, was giving way to the impulse of profit, to maximize the margins and drive both the profit and the stock up” (*ibid.*, 83).

4.3 Shareholder Value Orientation and Financialization as a Motivational Revolution

The transformation of corporate management on the basis of financial market-oriented benchmarks is inextricably linked to changes in the motivation of managers. During the transition to shareholder value-oriented approaches to corporate management, the previous motivation of management in particular was subjected to criticism.

In the early 1970s, the legitimacy basis for the exclusive consideration of shareholder interests was developed by Milton Friedman, who criticized the willingness of managers to take on political desires and social challenges, even if they conflicted with maximizing shareholder returns. In Friedman's (1970) account, managers following motives other than the profit interests of their shareholders clearly violated their obligations and failed at their jobs. In Friedman's view, the pursuit of goals that went beyond profit maximization (such as "social responsibility") was the exclusive right of shareholders as private individuals, while employed managers had to limit themselves to achieving maximum profits "while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom." Otherwise, Friedman feared principal-agent problems, which would be to the detriment of shareholders and through the associated exercise of power "harm the foundations of a free society." From an economic point of view, Friedman (1963, 135; 1977, 32–5) saw the risk of the destruction of the market economy and its replacement by a centrally controlled system, which would result in overall welfare losses, caused by managers or bureaucrats pursuing their own interests. With regard to figure 1, Friedman would therefore have emphasized that it was particularly important to limit the motivation of managers to profit-oriented motives by means of suitable incentive systems, as he regarded all forms of mixed motivation as potentially reducing welfare and as a threat to freedom.

Alfred Rappaport, who introduced the shareholder value-approach to business theory in the 1980s, called for a change in managers' investment behaviour, which should be oriented exclusively towards capital market-based profit ratios. Rappaport and other proponents of the idea of shareholder value-maximization criticized the investment behaviour of managers, they observed in manager-controlled firms in the 1980s and 1990s (see, *e. g.*, Rappaport [1986] 1998, 5–11; Currie 1998). They pointed out that instead of calculating investments based on profit targets, managers often pursued personal interests, driven above all by the motive of self-fulfilment. In particular, they mentioned the pursuit of company enlargement or the implementation of prestigious investment projects even in the case of below-average return expectations. From shareholders' point of view, it was therefore risky to give managers too much leeway for investments (Kaen 2003, 97–9).

Based on the shareholder value-approach, managers should preferably carry out share repurchases in order to increase shareholder value instead of investing in underperforming projects (Rappaport [1986] 1998, 94–8; Kaen 2003, 81–99). Accordingly, from Rappaport's perspective, it could be a problem if managers were prevented by non-monetary goals from consistently attending to the maximization of shareholder value: "(...), a CEO, pursuing product quality, customer service or other organizational change initiatives not directly linked to value may be concerned that a shareholder

value initiative will distract managers from these efforts” (Rappaport [1986] 1998, 166).

A central idea of the shareholder value-approach was that investments should only be made if the expected returns were above the costs of capital, which in turn were calculated with regard to financial market data. In this calculation, risk-adjusted average capital market returns were declared as the cost of capital and used as the central benchmark for investment decisions (see, *e. g.*, Copeland, Weston, and Shastri 2005, pp. 147–76; Hecker 2021a). The theoretical basis for this was provided by the Capital Asset Pricing Model (CAPM), which is still widely used in practise and taught at business schools and in textbooks (see, *e. g.*, Jagannathan, Meier, and Tarhan 2011). Accordingly, even the continuation of companies or parts of companies was made dependent on their returns exceeding average capital market returns. Managers of companies whose profits were below average capital market returns were accused of destroying value in business journals and stockholders’ meetings. This wording also suggested that these companies were wasting resources.

By advocating fundamental changes in investment behaviour, proponents of the shareholder value-idea thus criticized a kind of motivation that both Keynes and Schumpeter had explicitly endorsed and appreciated as a precondition of the success of capitalism. In the eyes of the proponents of shareholder value-capitalism, there was no leeway for intrinsic motivation. Managers inclined to make investments out of “a spontaneous urge to action rather to inaction,” who were celebrated as heroes of the free market economy by Keynes (1936, 161), were out of place from a shareholder value point of view, as they tended to waste their shareholders’ money. Nor did Schumpeterian motivation in the sense of, for example, “the joy of creating and of getting things done” (Schumpeter 1934, 93) fit into the financial capitalism of the late 20th century. Expressed in Keynes’s terminology, “animal spirits” were crowded out by “cold calculation” (Keynes 1936, 150). To make things even worse (at least from Keynes’s perspective), this calculation was significantly biased by financial market-based expectations.

4.4 The Profit-Seeking Paradox in Practise: Financialization as a Threat to the Real Economy

Since the early 2000s, the impact of financial market-oriented corporate decisions on social welfare and growth potential has been viewed critically by many scholars. In addition to the increase in unemployment that often accompanied the implementation of the shareholder value principle, in particular investment restraint has been criticized, which was described as “investment-less growth.” For example, Lazonic (2013) noted from empirical data that after the transition to capital market-oriented management approaches numerous companies in the United States turned to financial investments or stock repurchases, instead of investing in physical capital or research and development. Similarly, Gutiérrez and Philippon (2017) found that in many U.S. companies, rising profit distributions, mainly through share buy-backs, coincided with falling investment in physical capital. Managers obviously changed their pol-

icy from a “retain and invest” to a “downsize and distribute” strategy (Lazonick and O’Sullivan 2000; Detzer 2019, 8–9).

In the meantime, there are numerous empirical studies for companies from the USA, Great Britain and other European countries proving that a high degree of financialization, for example in the form of increased financial investment and profits from financial activities, was usually accompanied by declining investments in physical capital (Orhangazi 2008 for the USA, Tori and Onaran 2018 for the UK, and Tori and Onaran 2017 for several other European countries). Complementary to this, financial studies for large international companies have shown that in the years following the financial market crisis, internal minimum return requirements (*i. e.*, hurdle rates for investment decisions) remained at a high level despite record low interest rates (Zenner, Junek, and Chivukula 2014). Apparently, even favourable financing conditions did not induce companies to expand their investments, as the financial markets promised better returns than the real economy (Mazzucato 2018, 161–88). It is therefore not surprising that numerous empirical studies have shown that increasing importance of the financial sector, which was associated with financialization, was often accompanied by a decline in growth in other sectors (see, *e. g.*, Arcand, Berkes, and Panizza 2012; Cecchetti and Kharroubi 2015; Hecker 2017, 320–2).

From a macroeconomic point of view, this reluctance to invest was all the more problematic because it prevented positive external effects, for which Keynes and Schumpeter had great expectations (Hecker 2021a). Since a decline in investment, especially in research and development, inevitably leads to a reduction of growth potential, this offers an additional explanation for the falling growth rates of the past decades, which have led to discussions about “secular stagnation” worldwide (see, *e. g.*, Summers 2020).

In addition, the transition to shareholder value-based management approaches tended to shorten the time horizons of managerial decisions. Managers, faced with increasingly short-term profit expectations from their shareholders, found themselves deferring investment projects with long-term payback periods in favour of short-term profit strategies in order to present attractive quarterly reports to investors and analysts. This, too, contributed to a preference for financial investment over real investment, because financial investments are suitable to increase profits in the short term. Such increase in short-termism was even criticized by Rappaport, who had popularized the shareholder value-approach in the 1980s and 1990s, in a later publication (Rappaport 2011).

The problems outlined can be exacerbated by the fact that financial market valuations often deviate from fundamental data over longer periods of time (see, *e. g.*, Shiller [2000] 2015). Further market distortions can result from speculative behaviour of market players. Accordingly, corporate decisions based on financial market benchmarks can lead to market distortions spilling over from the financial sector to the real economy.

Thus, empirical data show that there is clear evidence of a profit-seeking paradox at the macroeconomic level. This is especially relevant when shareholder value maximization leads to declining investments in research and development or to a reduction in the accumulation of long-term physical capital in order to acquire short-term financial assets instead. Even if such strategies can be successful for individual companies, they

are problematic from a macroeconomic perspective, as soon as the decline in technological progress is taken into account, which would have benefited society as a whole in the medium term. As a result, there is a decrease in growth potential, which in turn also reduces companies' profit opportunities.

4.5 Case Study: Germany

Germany is particularly suitable as a case study for the effects of financialization, as the analysis of annual reports of listed companies shows that the transition to shareholder value-oriented management approaches generally took place in the second half of the 1990s (Hecker 2021b). Until that time, the business policy of large corporations was largely shielded from the influence of international financial markets, as post-war Rhenish Capitalism was characterized by a high degree of financial interlocking between corporations, with substantial equity held by the major banks, which in turn dominated the supervisory boards. Shares owned by banks and insurance companies created a network of cross-holdings between the financial and non-financial sector (Albert 1993, 99–126; Siebert 2005, 227–39, 328–34). Based on the law of codetermination, employee representatives also had an influence on company decisions, which was exercised by works councils in firms and trade union representatives on supervisory boards. During the second half of the 1990s, this model of corporate control collapsed within a few years, as the major banks liquidated their corporate holdings due to changes in tax incentives, and international investment companies took over their role in corporate financing. This change was promoted by amendments in the legal framework for the financial sector (Financial Market Promotion Acts 1–4, adopted between 1990 and 2002). As a result, within a few years, corporate strategies were changed in the sense of the shareholder value-approach and management incentive systems were reformed accordingly (Dore 2000, 191–205). Since that time, Germany has followed the Anglo-Saxon trend of financialization (Detzer 2019).

This exact temporal delimitation enables a comparison of data for the period before and after this transition and thus allows valid conclusions to be drawn on the effects of capital market-based management approaches. Empirical data show, first of all, that stock prices have become increasingly detached from GDP growth since the mid-1990s (see figure 2). Clearly, the performance of the economy as a whole has not kept pace with the boom in financial markets.

A closer look at growth rates reveals that the transition to shareholder value-oriented corporate management coincided with a significant decline in economic growth (see figure 3). The growth of technological progress as an essential factor of future welfare gains also continued to decrease.

With regard to the topic of this article, figure 4 is of particular interest, showing the long-term development of stock returns in the German stock index (Deutscher Aktienindex, DAX), which investors were able to achieve beyond all short-term price bubbles. Here it becomes clear that the transition to shareholder value maximization in the second half of the 1990s has not been accompanied by an increase in inflation-adjusted stock returns on a long-term average. This is illustrated by the fact that, measured against the average since 1971, 12 out of 19 10-year periods with below-average returns started

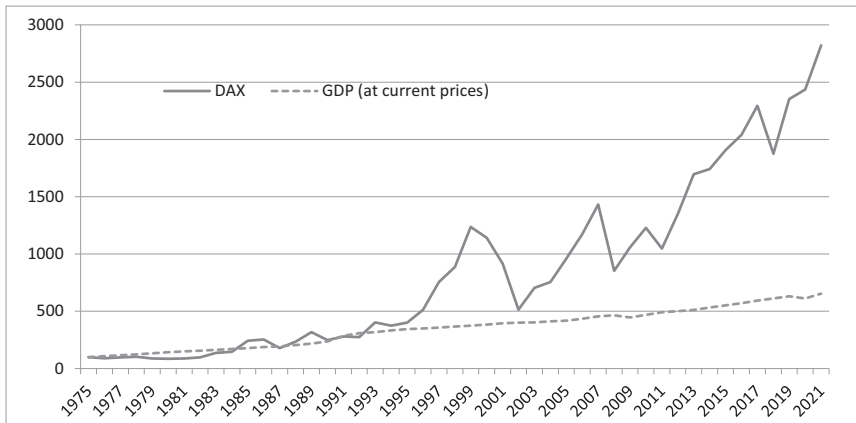


Figure 2: German GDP and stock index (DAX) (both: 1975=100)
 Sources: Statistisches Bundesamt, Deutsche Börse, own calculations.



Figure 3: Growth in real GDP and labour productivity (5 year moving average) in %
 Source: OECD, own calculations.

after 1993, when the management of companies was dominated by the goal of shareholder value maximization.²

A major reason for the relatively weak performance compared to previous decades were the repeated crises in the global financial system (dotcom bubble, financial crisis of 2008, etc.), which also affected the stock returns of German companies. However, as these crisis effects are linked to the increasing capital market orientation of these companies, it is appropriate not to classify global financial crises as unavoidable external shocks, but to see them in the context of financialization and relate them to the financial

² The year 1993 was chosen because the transition to shareholder value-oriented management approaches in most listed companies in Germany took place in the second half of the 1990s. Thus, in the case of a 10-year holding period starting from (or after) 1993, most of the period was dominated by shareholder value thinking.

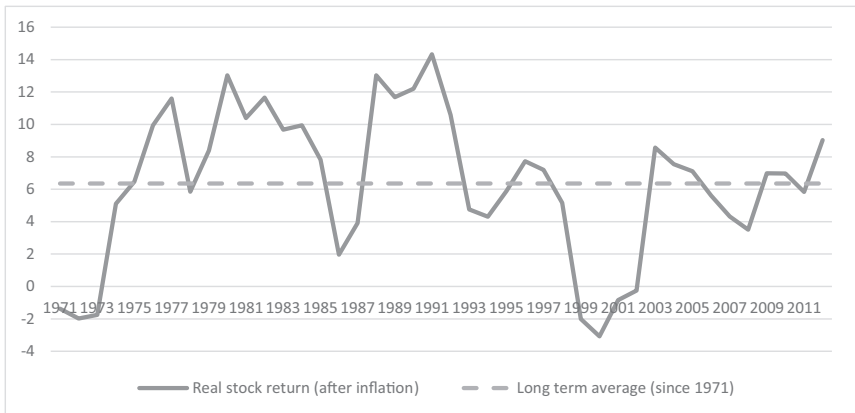


Figure 4: Average annual returns on DAX (after deduction of inflation rates, holding period 10 years, starting in the respective year), in %.

Source: Deutsches Aktieninstitut, own calculations.

market-oriented motivation of management. This corresponds to the view of Keynes, who warned against a dominance of capital market-oriented interests in corporate management.

Substantial reasons for the subpar performance in recent decades can also be identified from a business perspective. For example, in many cases costly takeovers were carried out with the aim of increasing stock prices, which later proved unsuccessful. For several companies it is possible to trace how shareholder value orientation brought temporarily high profits and capital market valuations in the late 1990s, which were later followed by losses that brought the firms to the brink of existential crises. An example of this was the development of Daimler-Chrysler (Riach 2013).

With regard to Germany, it can therefore be concluded: Although the managers of listed companies have been pursuing the maximization of stock returns as their primary goal since the mid-1990s, the returns actually achieved have not exceeded the level of earlier decades or were even lower than that. This is a clear indication of the practical relevance of the profit-seeking paradox, because quite obviously the focus on stock returns did not lead to an actual increase in these returns, at least at the macroeconomic level. Paradoxically, it was precisely when human activity, in violation of Kant's Categorical Imperative, was subjected exclusively to the goal of maximizing stock returns that this goal was obviously missed.

5. The Profit-Seeking Paradox Today: Lessons for Business and the State

In the previous section it became clear that there are strong indications of the relevance of the profit-seeking paradox in today's world, not only at the level of individual companies, but – to a greater extent – also at the macroeconomic level.

What does this mean for companies and economic policy?

5.1 The Business Perspective

For corporate management, the profit-seeking paradox shows that non-monetary motivation in management and at other levels is of decisive importance for a company's success. The aspects mentioned by Bowie offer important starting points for this, especially with regard to the meaningfulness of the company's purpose and also of individual jobs. Managers who pursue a corporate purpose that is meaningful to society and motivate their employees in this sense thus also serve their shareholders' interest in corporate profits, at least in the long term. As far as management is concerned, the last two chapters have shown that altruistic motivation is not required, but that a detachment from financial market-dominated motives is sufficient to realize positive external effects of entrepreneurial activity.

It therefore seems appropriate to question the distinction, postulated by Friedman (1963, 133–6; 1970, see section 4.3), between managers, who should only pursue profit maximization as part of corporate management, and shareholders, who as private individuals could pursue moral objectives (if they choose to do so). Rather, company managers who want to achieve long-term profits in responsibility to their shareholders should focus on objectives that go beyond profit maximization. Contrary to Friedman's interpretation, managers who are motivated by intrinsic incentives and therefore pursue non-monetary goals in the form of corporate objectives for the common good are therefore by no means acting against the interests of their shareholders in the sense of a principal-agent conflict. Rather, they serve the interests of their shareholders precisely by not putting them first, provided they derive viable corporate strategies from their intrinsic motivation. A view that takes into account the positive effects of intrinsically motivated entrepreneurship can therefore at least partially defuse the conflict of interest between employed managers and shareholders emphasized by Friedman. Shareholders who are aware of these effects should therefore, in their own best interests, give managers the opportunity to pursue non-monetary objectives.

The employment contracts of managers should thus explicitly provide room for the pursuit of non-monetary goals, for example by defining the realization of innovations as an independent goal, detached from financial benchmarks. Other goals that should be targeted independently of profit figures are, for example, employee satisfaction and employee motivation.

The management of companies according to these principles appears to be particularly promising with the help of balanced scorecard approaches (see, *e.g.*, Kaplan 2010). This can be done in a similar way to the expansion of balanced scorecards to include sustainability aspects, on which studies are already available (see Hansen and Schaltegger 2016). Within the framework of setting up a balanced scorecard,

the definition of a socially useful corporate purpose, which serves as the basis for creating meaningful management tasks and jobs, can take place when deriving the customer perspective. Instruments to promote intrinsic motivation in the workforce can be anchored under the “Learning and Growth” perspective. A possible target figure within the framework of this perspective could be set in such a way that the proportion of those employees who pursue their work out of intrinsic motivation is to be increased within a given period of time.

Nevertheless, the management of listed companies worldwide continues to be subject to high pressure to report short-term profits based on capital market-oriented benchmarks. Against this backdrop, long-term growth potential may depend not least on the importance of intrinsic motivation for corporate success being more strongly incorporated into the experience of investors in financial markets, so that managers who are aware of this connection and act accordingly do not lose the support of their capital providers.

Notwithstanding this, the macroeconomic dimension of the profit-seeking paradox poses a challenge that goes beyond the individual company. In contrast to Bowie’s profit-seeking paradox for individual companies, the macroeconomic profit paradox is accompanied by significant disincentives for individual firms, since the spill-over effects of intrinsic motivation, as demonstrated by Keynes, Schumpeter, and Phelps, benefit society as a whole without compensating the respective firm. Thus, knowledge of the importance of intrinsic motivation in terms of the macroeconomic profit-seeking paradox does not provide sufficient incentives for managers to overcome capital market-oriented management principles. Accordingly, state intervention seems appropriate in this context.

5.2 The Economic Policy Perspective I: Impact on the Achievement of Economic Policy Objectives

The need for government action is all the more evident because of the welfare losses associated with a displacement of entrepreneurial motivation by profit motives, as decline in growth potential has the effect of depriving people of development opportunities that would otherwise have been available. The restriction of human development opportunities is also a problem from an ethical point of view, especially when it affects capabilities that are among the basic prerequisites of a dignified life, such as a decent standard of living or access to health care (Sen 2009, 225–68).

Against the background of current challenges in the area of climate protection and the decarbonization of production, further problems become apparent, as the decline in investment in research and development identified in the last chapter is slowing down technical progress and delaying the transition to sustainable technologies. This problem is all the more serious because the transition to low-carbon production processes can only succeed if companies develop and implement innovative technologies (see, e. g., Chandaria *et al.* 2021; Loorbach and Wijsman 2013). For the European Union, the European Investment Bank concluded in a study that a doubling of investments in climate-friendly technologies on the part of European companies is

necessary to achieve the climate protection goals of the Paris Agreement (European Investment Bank 2020/2021, 203).

Against the background of the current need for action, it seems appropriate that investments are also realized whose expected profits are below average capital market returns and which are therefore not profitable according to common shareholder value thinking. Despite all corporate commitments to sustainability goals, such investments are still considered value-destroying in the context of shareholder value-oriented corporate management.

Here it becomes clear how financial market-related benchmarks can impede a sustainable transformation of the economy. This problem is exacerbated by the fact that lacking investments by companies cannot simply be compensated by increased governmental investment as the state has hardly any possibilities to enforce innovation in production processes beyond regulatory measures and the promotion of basic research at universities. Thus, the practical realization of innovations can only take place through company initiatives.

5.3 The Economic Policy Perspective II: Lessons from the Profit Paradox for Regulatory Policy

The need for action identified here therefore raises the question of the extent to which regulatory measures by the state are necessary and practicable. Since in a market economy the state has only limited possibilities to influence the motivation of managers or the incentive structures of companies, the regulatory framework for entrepreneurial activity plays a decisive role in this context. Regulatory incentives should be created to promote sustainable business practices. An important starting point arises with regard to the question under which conditions companies can be classified as sustainable, as regulatory experience already exists on this topic, *e. g.* by the EU taxonomy for sustainable activities (European Union 2020).

In the previous section it became apparent that definitions of sustainability applied to the assessment of companies' business policies should also include the motivation of the management as well as the motivational structures within firms. Keynes's, Schumpeter's and Phelps's considerations indicate that altruism is not necessarily required for this, but that already a certain degree of intrinsic motivation, possibly reinforced by status incentives, can set important impulses for the realization of innovations. However, it is important that this motivation is not displaced by financial market-oriented benchmarks.

When assessing the sustainability of business models against ESG (Environmental, Social, Governance) criteria, the motivation factor comes into play in terms of governance, comprising, *e. g.*, management compensation, shareholder rights, and corporate ethics (see, *e. g.*, Johnson 2020; Boffo and Patalano 2020; Ehlers *et al.* 2022). In this context, this article has shown how important it is to reduce the relevance of financial market-oriented performance indicators on as many levels of corporate management as possible in order to promote innovation.

This illustrates that not only environmental and social aspects are important for realizing sustainability goals, but that governance factors also play a role. It therefore does not seem appropriate that these factors currently play only a subordinate role in most considerations of ESG criteria on the part of investors and politicians. The insufficient consideration of governance becomes clear, for example, from the fact that for the EU a taxonomy on ecological aspects of sustainability has been adopted and proposals on social sustainability have been developed on the initiative of the EU Commission (EU Platform on Sustainable Finance 2022), while no regulatory measures are planned for the topic of governance. For the United States, too, there are currently no plans to include governance in the SEC's planned disclosure rules (O'Hare 2022). So it is not surprising that the interpretations of the category "governance" vary significantly, both in theory and practice (from the perspective of a rating agency, see S&P Global Ratings 2020).

However, the importance of motivation for realizing innovations, as shown in this article, makes it necessary to include governance aspects in equal measure in order to take into account the interdependence of the three ESG topics. As was made clear in the previous section, an altruistic motivation is not necessarily required for this, as already an egoistic – but non-capital market-oriented – orientation can make a significant difference.

The decisive factor here is that the category "governance" is filled with content in such a way that the importance of intrinsic motivation is strengthened through selection processes for management positions and incentive systems, which are not primarily focused on capital market-oriented benchmarks. This applies not only to the top management, but to all levels of leadership.

6. Conclusion

This article has illustrated that intrinsic motivation of managers is a crucial determinant for the innovativeness and long-term productivity of companies. Since the technological progress generated by innovation also benefits other companies in the medium term, positive external effects can be identified here, which increase the productivity of the economy as a whole. If, on the other hand, investments in future technologies are not made because the expected returns at the company level are considered too low compared to average capital market returns, this can reduce companies' profit opportunities, as well as the economy's growth potential.

From a macroeconomic point of view, it therefore seems possible to identify a profit-seeking paradox that applies not only to individual companies, but to a greater extent to the economy as a whole: Managers who make investments based on intrinsic motivation, even though these appear suboptimal when measured against capital market-oriented benchmarks, thereby contribute to an improvement in growth potential, which in turn also benefits their companies. If, on the other hand, these investments are not made due to profit-oriented management motives, the profitability of the company will also suffer in the medium term. Accordingly, the growth potential of an economy –

and thus its future prosperity – tend to improve when a significant proportion of companies pursue a business policy that is not primarily geared to profit maximization.

Thus, it seems appropriate to add a macroeconomic dimension to the profit-seeking paradox formulated by Bowie, illustrating that the economy as a whole can benefit from entrepreneurial motivation going beyond profit maximization. This can clarify that a view which is only oriented towards financial ratios ignores essential aspects of economic life and is therefore eventually also not reasonable from an economic vantage point (see also Nida-Rümelin 2011, 57).

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