

# Industrial Feudalism and Wealth Inequalities

Hanna Szymborska\* and Jan Toporowski†

## Working Paper No. 174

January 18th<sup>th</sup>, 2022

### ABSTRACT

The possibility, first raised by Rudolf Hilferding, of stabilizing a capitalist economy through the operations of a ‘general cartel’, leaving only social and political ‘contradictions’ to disturb the functioning of the system, gave rise to a discussion among Marxists not only on whether such a stabilization was at all possible, but also on the nature and scope of those contradictions. This discussion had been anticipated in the 1890s in the work of the Polish Marxist Ludwik Krzywicki (1859 – 1941). He put forward the idea that, in a capitalist economy stabilized in this way, a state of ‘industrial feudalism’ would prevail, in which society would become stratified into social classes without the possibility of mobility between those classes. This analysis was extended in 1940s by Oskar Lange (1904-1965) as he attempted to make sense of the American New Deal and rediscovered in the 1950s by Tadeusz Kowalik (1926-2012). This paper explains the concept of industrial feudalism and argues that the main mechanism for such a stratification today is the unequal distribution of wealth, in the context of declining welfare provision.

<https://doi.org/10.36687/inetwp174>

**JEL Codes:** B14, B15, N3, P1, P16.

**Keywords:** Industrial feudalism; social mobility; wealth distribution; Ludwik Krzywicki; Oskar Lange; Tadeusz Kowalik

---

\* Birmingham City University [hanna.szymborska@bcu.ac.uk](mailto:hanna.szymborska@bcu.ac.uk);

† SOAS, University of London [jt29@soas.ac.uk](mailto:jt29@soas.ac.uk)

The authors acknowledge financial support from the Leverhulme Trust and the Institute for New Economic Thinking. We are grateful to Thomas Ferguson, Riccardo Bellofiore and Grzegorz Konat for helpful comments on an earlier draft.

This paper presents industrial feudalism as a socio-economic formation in which a capitalist industrial society becomes stratified into relatively closed social classes defined in relation to their property or their professions, so that society loses the economic and social dynamism by which capitalism overthrew feudalism. The concept and analysis of industrial feudalism emerged in Polish Marxist discussions of the 1890s in relation to the social and economic hegemony of large industrial corporations. The paper extends it to the present day by showing how social classes differentiated by the composition of their property and the credit practices associated with that property eliminate social mobility and thereby recreate industrial feudalism.

The paper is in five sections. The first section introduces the Polish sociologist and political economist Ludwik Krzywicki, who first put forward the concept of industrial feudalism as a consequence of monopoly finance capital. The second section examines Oskar Lange's use of this idea in the middle of the last century. The third section discusses the essential foundation of industrial feudalism in the distribution of wealth. Sections 4 and 5 examine how household balance sheets and credit practices restrict social mobility. A short conclusion summarizes the paper in the contemporary context of declining state welfare provision.

## **1. Industrial feudalism: the start of the discussion**

In a paper on the reform and stabilization of capitalism that Tadeusz Kowalik wrote with Michał Kalecki (1899-1970) in final months of that economist's life, Kowalik introduced the concept of industrial feudalism by reference to Rudolf Hilferding's suggestion in *Finance Capital* that the formation of cartels may give rise to the emergence of a 'general cartel' that would 'resolve the basic economic contradictions of capitalism'. Kowalik wrote:

'We find a certain anticipation of Hilferding's vision of a general cartel much earlier in the works of the Polish sociologist Ludwik Krzywicki, who noticed strong tendencies toward "industrial feudalism". This was a vision of a 'nation-estate' – a kind of feudal estate embracing the whole country – with a hierarchical social structure governed by a financial oligarchy. Krzywicki linked this vision with the simultaneous... [spread of mass conformity within society including also] the working class, which would derive certain material benefits from this "estate". This is why he attributed considerable stability to the system of industrial feudalism, apparently even seeing it as a threat to the eventual socialist alternative.' (Kalecki and Kowalik 1970, p. 469).

Krzywicki put forward his idea in a handful of articles that he wrote from the start of the 1890s, some two decades before the publication of Hilferding's *Finance Capital*. However, a striking difference is that whereas Hilferding based his analysis of monopoly or finance capital on the capital coordinating function of banks, Krzywicki recognized the emergence of an American form of monopoly based on the functioning of the capital market, i.e., the market for stocks issued by corporations. This meant that Krzywicki's analysis was strikingly more comprehensive

of mature capitalism, and it is arguably more applicable in the twenty-first century, than the bank-based finance capital of Hilferding. Kowalik had come across this work in the course of writing his doctoral thesis on Krzywicki in the first half of the 1950s. In that thesis, Kowalik devoted a whole chapter to presenting Krzywicki as a pioneer of the monopoly capital approach to late capitalism.

As the paper by Kalecki and Kowalik indicates, by the 1960s Krzywicki was known in Poland as an industrial sociologist and the patron of the Institute of Social Economy (*Instytut Gospodarstwa Społecznego*) where he pioneered a radical form of social research based on extensive interviews with workers, peasants and the unemployed. He wrote the Introduction to Kalecki's study of wages in a market economy, 'Money and Real Wages' (*Place nominalne i realne*) (Krzywicki 1939; see also Toporowski 2018, pp. 16-17). However, at the time of his articles on America, Krzywicki was a leading figure among Polish followers of Karl Marx, respected in those circles for his work translating Marx's *Capital* and his correspondence with Friederich Engels. The sectarian divisions among Polish Marxists, in Krzywicki's time and as Kowalik was writing, were apparent in the chapter in his book that Kowalik devoted to 'The Krzywicki Controversy' (*Spór o Krzywickim*) over the question of whether Krzywicki was a real Marxist or not (Kowalik concluded that he was! Kowalik 1959, chapter 5).

Krzywicki's concept of industrial feudalism appeared first in an article that he wrote at the end of 1889 for the Warsaw weekly *Prawda* (or 'Truth', not to be confused with the Russian organ of the Russian Social Democratic Party, with the same Russian name, established much later in 1912). The Polish weekly was the journal of Polish 'positivists' who advocated social and industrial reform, in contrast to the 'romantic' nationalism of activists agitating for Polish independence. At the time when Krzywicki was writing for it, *Prawda* had become an unofficial forum for discussions in socialist circles – Holland 2007, pp. 96-97). The article therefore preceded the publication of volumes 2 and 3 of Marx's *Capital*. Krzywicki reported efforts to construct a coal cartel and quoted the English economist Herbert Foxwell arguing that after a century of competition, economies now faced the problem of monopoly. According to Krzywicki, some economists like the German Lujo Brentano, or the Austrian politician Karl Vogelsang favor cartels out of nostalgia for a mythical feudal past of social stability. Such cartels were driving out competition from their markets, Krzywicki argued. But their purpose was not to introduce new techniques and improved products, or lower prices, as happened under competition, but to obtain and keep a higher profit margin.

Krzywicki gave examples of cartels emerging in France and Germany. However, he argued that in these countries they could only be temporary. Legal challenges reduced many cartels to informal 'understandings' among the firms that combined together in them. Cartels would hold in poor trading conditions when factory owners sought protection from those conditions in such agreements. But in a boom, firms had greater incentives to break ranks.

According to Krzywicki, the situation in America was different. Here, more permanent arrangements were secured by handing over shares in particular factories to 'trusts'. The trusts did not issue their own shares, but \$100 certificates of deposit, which could be bought and sold on stock markets at prices depending on the demand for the certificates. The certificates gave no title to ownership, or even to the profits of the companies organized in the trust. But the right to an income was guaranteed by the 'trustees' of the trust. In this way arose the separation of ownership from control of the industry, because the trusts held controlling shares of the stocks in the companies, but the holders of the deposits in the trust had no influence on the management of those companies. Krzywicki noted that some 80% of sugar refining capacity on the East coast was controlled by the Sugar Trust (Krzywicki referred to it as the Sugar 'Company'). Even more extensive were the activities of what he called the 'Oil Refineries (sic) Trust', which undertook common infrastructure investments, such as oil pipelines. The activities of these trusts were now widely known as a result of investigations by commissions of enquiry into their activities set up by state assemblies in New York and Massachusetts.

In his 1889 article, published at the beginning of 1890, Krzywicki revealed the link between these monopolies and the social structures of 'industrial feudalism'. Why, he asked, were Brentano and Vogelsang so favorable towards cartels? The two advocates were not concerned with technical significance of monopolies, but with counteracting the 'anarchy of the market and the associated rise of social democracy.'

'They dream of a specific society. Private property exists, but the entrepreneurs of each profession constitute a single cartel whose executive collects statistics on demand in the industry, sets down production quotas divided up among the individual producers, and delivers the final product to the consumers. Workers have complete certainty about their prospects, and secure earnings and pension rights. In this way the anarchy of the market is removed together with the main source of workers' grievances, but rents from property are retained. In the final analysis, this is "capitalist socialism" or rather, on closer inspection, industrial feudalism. Political representation is organized on the basis of profession, with its principal heading the factory like a baron his subjects... This is the social order for which yearn Vogelsang and, less obviously, Brentano and the followers of Rodbertus.'

Krzywicki concluded that this could not be the end of the story. The centralization of ownership and production created by the monopolies prepared them organizationally for their takeover by the 'organized social will' that constitutes real socialism. (Krzywicki 1890).

Krzywicki's article is striking not only for its anticipation of Hilferding's idea of *finance capital* linked to monopolies, which Krzywicki was able to show in its American capital markets setting, that was to become predominant at the end of the twentieth century.

Krzywicki also raised two aspects of this finance capital that would be taken up a quarter of a century later by Lenin in his famous study of imperialism. One of these was the elimination of the 'anarchy of the market' by the planning associated with the calculations of finance capital.

The other theme was the emergence of an ‘aristocracy of labor’ given improved wages and pensions to remove the labor movement from socialism. This differs from the later view of Lenin, who followed Hilferding in regarding the better working conditions of workers as being paid for from the profits accruing out of imperialist exploitation (Lenin 1917). Krzywicki did not advance any theory of imperialism: At the time when he was writing Poland was not an independent state, still less an imperial one. The ‘Congress Kingdom of Poland’ where he was active, was a part of the Russian Empire, but an empire whose social and economic backwardness evoked considerations of economic development, rather than imperialism.

In 1893, Krzywicki visited America, and stayed there for six months. He attended the Chicago World Fair, where he was impressed by the technological achievements of the monopolies that he was criticizing. However, he did not change his views on the social and political consequences of the monopolies. His last articles on the subject, in 1905, were collectively called ‘Morganizacja przemysłu’ (The Morganization of Industry) referring to the process of creating the holding company structures that allowed a trust to control its member companies: ‘Morganization’ was the term then used in the US in honor of the leading exponent of this art of corporate restructuring. J.P. Morgan was by then locked in a political struggle with the US President Theodore Roosevelt over the President’s anti-trust campaign. Recognizing the technical achievements of the ‘morganized’ industries that he had seen in Chicago, Krzywicki now argued that the improvements in employment conditions were due to the superior organization of work, the management of the markets in which the monopolies operated, and the looting of small shareholders and savers (Kowalik 1959, pp. 242-244).

## **2. Industrial feudalism: Lange joins the discussion**

Among Krzywicki’s most enthusiastic admirers, at least in Krzywicki’s lifetime, was Oskar Lange. Lange read Krzywicki’s work while still at school. Later on, the breadth of Krzywicki’s interests, from political economy to sociology and anthropology, appealed to Lange’s equally broad interests; and perhaps also Krzywicki’s heterodoxy as, like Lange at the time, he was a Marxist on the margins of organized Marxist currents in communist and socialist parties. After Lange left Poland in 1934, they corresponded on topics of mutual academic interest and Krzywicki sought to get employment for Lange at the Szkoła Główna Handlowa (the Main School of Commerce) in Warsaw, where Krzywicki was a professor (Lange 1986 pp. 96-97). In 1938, Lange contributed an essay on Krzywicki to a *Festschrift* in honor of the senior Marxist. However, the essay was concerned with Krzywicki’s contributions to sociology, rather than economics (Lange 1938).

Krzywicki died in 1941. In that year, on the eve of America’s entry into the Second World War, Lange circulated among his socialist friends and sympathizers ‘A Democratic Program for Full Employment’. The program is an assessment of the New Deal and the measures needed to take

America towards greater prosperity and socialism. It shows the clear influence of Krzywicki's ideas on industrial organization.<sup>1</sup>

Lange's program started off with a summary of what he regarded as the obstacles to the economic expansion that was necessary to overcome the mass unemployment that did not disappear in America until war-time mobilization. The Great Depression, he argued, was rooted in the monopolistic practices that dominated the US economy. Lange commended Franklin Roosevelt's New Deal. But he criticized Roosevelt's suspension of the earlier Roosevelt's anti-trust legislation. This now gave rise to an unprecedented degree of industrial concentration and centralization that lay at the foundation of America's economic depression:

'... A major part of our industrial and financial system is subject to monopoly control. In 1935, 100 companies employed 21 per cent of all the manpower engaged in manufacturing and accounted for 32 per cent of the value of products of all manufacturing plants. In 1933 the 200 largest non-financial corporations owned between 46 and 51 per cent of the nation's industrial wealth...'

But the share of industrial output produced by individual large corporations underestimates the degree of monopoly in particular industries. Local monopolies could arise where transport costs are high and industrial monopoly was reinforced by the appearance on boards of directors of corporations of a much smaller number of investment bankers:

'The actual concentration of economic power is much greater than indicated in these figures, because various corporations are known to be subject to common control through interlocking directorates and shareholdings. Thus, out of the 250 largest corporations (50 financial and 200 non-financial corporations), 41 were interlocked into one interest group (Morgan-First National) 13 into another group (Kuhn-Loeb). Other interlocked interest groups comprise 7 (Rockefeller), 14 (Mellon), 4 (du Pont) corporations.' (Lange 1941-1944).<sup>2</sup>

In Lange's view the economic stimulus given by the fiscal provisions of the New Deal could compensate for the deflationary effects of these monopolies. But the economy could not break out of the depression with a return to industrial competition through effective antitrust measures.

---

<sup>1</sup> Lange appears to have worked on his 'Democratic Program' in subsequent years, up to 1944. The version cited here is an early one that was translated into Polish for publication in the edition of Lange's Collected Works as Lange 1941-1944, listed in the bibliography of this paper. We are grateful to Roberto Lampa for sharing with us a later draft in English from the archives of the University of Chicago.

<sup>2</sup> A different view was presented by Paul Sweezy, son of a director of First National Bank, writing at the same time: 'The picture of the investment banker firmly seated on the throne of economic empire has become so deeply implanted in all our minds that it is difficult to realize that in the short space of a single decade he has suffered a dramatic eclipse, and that such power as he still retains is largely rooted in a past that is gone forever... The federal government, particularly through the Reconstruction Finance Corporation but also through other agencies set up under the New Deal, is performing more and more of the financial functions which once required the services of the investment banker.' Sweezy 1941.

Lange also touched upon the politically sensitive issue of trades unions. In his view, unions could only serve industrial democracy if membership and employment was not restricted. Employers should recognize unions that organized their workers. But the unions should not exclude from employment those who were not members of the union, because this would create monopolistic structures in the labor market. In the terminology of the time, the 'union shop' was to be preferred to the 'closed shop'. (Lange 1941-1944).

This predominance of monopolies created an unusual political situation in which the only way for competitive 'outsiders' to secure their economic position was to form their own cartel-like agreements and obtain support for them from the government, in much the same way that existing monopolies were supported by political patronage. Political support becomes a way of guaranteeing prices but leads to the proliferation of monopoly. The market degenerates into a system of organized withholding of production in which the state is called in to give rights to prices and production to particular interest groups. The result is a kind of financial and industrial feudalism in which the government guarantees monopoly privilege and profits.

Lange went on to argue that in this situation the profit of the entrepreneur ceases to be the reward for a willingness to undertake risk and the efficient minimization of costs. It becomes simply a privilege arising out of economic concentration and government guarantee. Financial and industrial feudalism, he thought, was now a system of precisely defined group privileges, divided among social strata as rigid as any in medieval times. In such a society, any incentives to progress disappear. More than this, such a society would revive the cultural and political superstructure of feudalism with every kind of discrimination, intolerance, fanaticism, and narrowness of outlook, with the state bureaucracy integrated with the oligarchy of *haute finance* and big business.

Lange concluded that this system is politically weak and would be unable to resist pressure from the 'totalitarian powers', because such a hierarchical system would not be able to organize effectively the defense of the nation. As evidence of this he pointed across the Atlantic at Great Britain, where he wrote that monopoly restrictions and fear of democratic forces in the country had brought the country to 'its present difficulties', a reference to the ineffectiveness of Britain's war effort, before America and then the Soviet Union, joined the war effort. Much the same prospect awaited the United States where society could either use its democratic rights to challenge monopoly control or abandon itself to totalitarian dictatorship. (Lange 1941-1944). In later versions of his paper, Lange recommended monetary financing of the fiscal deficit, and a guaranteed minimum income for all citizens (see note 1 above).

Already in an earlier paper, written while he was still in Poland, Lange had argued that monopoly capitalism changed the nature of the state in a capitalist society. Whereas under competitive capitalism, the State is a 'liberal' one 'confined ... to forming and supporting the general conditions of the capitalist economy, such as private ownership, maintenance of law and order, communications, the monetary system, legal security, and so on', under monopoly

capitalism ‘the capitalist State assumes a new function, namely, of creating monopoly positions for certain capitalist groups by its direct intervention in economic life. In this new role, the State becomes for these groups the creator of monopoly profits, which accrue from its intervention in economic life.’ State intervention includes protectionism, and brings the government, and the oligarchic interests that it now upholds, into conflict with smaller competitive businesses, the working class and the peasants. In this way, monopoly privilege comes to be incompatible with democracy and the welfare of the masses (Lange 1931).

Lange had alluded to the feudal character of these arrangements in one of his earliest political articles, a polemic written in 1929 against revisionist Marxists, such as Karl Renner and Rudolf Hilferding, and in Poland Jędrzej Moraczewski, who considered state intervention to be a part of the socialization of capital. Here Lange argued that ‘the contemporary state is less and less an expression of all capitalist classes and increasingly becomes the expression of only one class of capitalists: the magnates of organized large capitalist monopolies and the potentates of finance capital... even the democratic state is today in the hands of the big capitalist oligarchy, the proof of which is its imperialist character. This imperialist character of the contemporary capitalist state is again one of the most important factors fusing the state into economic life and transforming organized capitalism into state capitalism... At the height of its development capitalism reaches the point from which it started gathering in the same hand economic and political power. If we call the union of political and economic power in one hand feudalism, then we can say that capitalism leads at the peak of its development to a certain kind of feudalism. The new feudalism brings to an end the development of organized capitalism and state capitalism. To the direct rule over economic life of the big capitalist oligarchy is added a second, indirect rule, through the state, which becomes increasingly a tool in the hands of that oligarchy... The working class succumbs to a double domination by capital: economic and political. These are the consequences of the transition to socialism by étatism. Indeed, a fine perspective: instead of socialism a new feudalism, instead of the liberation of the proletariat the worst servitude to the state and an imperialist state at that, instead of the end of capitalism the greatest economic and political power combined with the state apparatus of big capital... If the establishment of this capitalist feudalism is presented as the transition to socialism, the working class has no alternative but joyfully to accept these changes thus forging the shackles of its future misery.’ (Lange 1929, pp. 45-48).

In this polemic, Lange cited repeatedly Karl Kautsky’s denunciation of his comrades in the German Social Democratic Party for their support for the German war effort, or ‘War Marxism’ (Kriegsmarxismus) as Kautsky called it, during the First World War, when the fusion between the state and big business in imperialist strategies was perhaps most obvious and most catastrophic. In places, Lange seemed to anticipate Hayek’s later polemic against state intervention, *The Road to Serfdom*, written during a similar confluence of economic and political power in the Second World War, and dedicated ‘To the Socialists of All Parties’ (Hayek 1944). Hayek and Lange seem to be at one in regarding state intervention as the road to serfdom.



However, whereas Hayek argued that diminished political ambitions and expectations would realize the nineteenth-century liberal ideal of competitive capitalism, Lange had no illusions about the disappearance of monopoly in the face of *laissez-faire*. Free markets, rather than the state, had created big business, which had then suborned the state. The only way forward was a defense of democracy and the embrace of socialism (Breit and Lange 1934).

Lange, Like Krzywicki and Hilferding, saw monopoly profits as coming from consumers and small businesses, and associated it with restriction of production and unemployment. However, unlike Hilferding and Lenin, the two Polish Marxists did not mention imperialism as a source of the monopoly surplus. A second distinctive feature of Lange and Krzywicki's analysis of industrial feudalism concerned the function of finance in closing the ranks of the wealthy classes to entry from lower, unpropertied classes. In an earlier phase of capitalism, Marx had regarded finance as facilitating the breakdown of feudal hierarchy and even stabilizing capitalism by making it more meritocratic:

'The circumstance that a man without fortune but possessing energy, ability and business acumen may become a capitalist...[through] credit in his capacity of industrialist or merchant... is greatly admired by apologists of the capitalist system... In a similar way, the circumstance that the Catholic Church in the Middle Ages, formed its hierarchy out of the best brains in the land, regardless of their estate, birth or fortune, was one of the principal means of consolidating ecclesiastical rule and suppressing the laity. The more a ruling class is able to assimilate the foremost minds of a ruled class, the more stable and dangerous becomes its rule.' (Marx 1959, pp. 600-601).

But for Krzywicki and Lange finance, along with the rise of the joint stock company and associated holding company structures, ceases to have the function of opening access to capitalist enterprise. Instead finance becomes a way of reinforcing the centralization and concentration of capital, blocking new entry into the ranks of established capitalist business. In this way, in late capitalism, finance blocks the dynamism imparted to capitalism by its new entrants. A rather different view was taken by a third key contributor to Polish Marxist discussions who was also connected with Krzywicki, Kalecki, at around the same time as he was collaborating with Kowalik on their 'Crucial Reform' article. In a separate paper on the distribution of income, Kalecki dismissed the notion of a prelapsarian state of competition in early capitalism:

'... perfect competition... is a most unrealistic assumption, not only for the present phase of capitalism, but even for the so-called competitive capitalist economy of past centuries: surely this competition was always in general very imperfect. Perfect competition, when its actual status of a handy model is forgotten, becomes a dangerous myth.' (Kalecki 1971)

### 3. The distribution of wealth

The industrial feudalism of Krzywicki and Lange regarded entrepreneurship as the source of social mobility. While the scope for entrepreneurship and access to finance clearly affects the rigidity of *industrial* hierarchies, social hierarchies are distinguished by ownership of more general categories of wealth, that may include industrial capital, but may also consist of financial, residential and land assets among which may be inherited wealth that has not been accumulated by its current owner. Concentrated ownership of both industrial and non-industrial property makes the distribution of wealth a factor in the current tendencies towards an industrial feudalism in which differences between social strata are reinforced by an absence of social mobility.

The literature on the distribution of wealth is predominantly empirical<sup>3</sup> and highlights growing inequalities. Around the world, after the peak recorded in the early 1910s, wealth inequality followed a downward trend until the late 1970s and has been rising steadily since the mid-1980s (Alvaredo et al. 2018). In contrast to income, wealth inequality in many countries was largely unaffected by the global financial crisis in 2007, reaching new heights by the late 2010s. Rising wealth inequality has not been limited to advanced capitalist economies like the UK or the USA, although in the latter country the top wealth shares remain one of the highest in the world. Indeed, with greater openness to capitalist forms of production, increases in wealth inequality have been dramatic in the transition economies in Central and Eastern Europe as well as in China (*ibid.*). In Europe, households in the top decile of wealth distribution in the euro area owned 50% of total net wealth in 2010, which increased to 51.2% by 2014, paralleling the rise in other measures of inequality in the period (HFCN, 2016).<sup>4</sup> While between 2014 and 2017 there was little change in the overall levels of wealth inequality in the European Union, changes in the distribution of wealth varied substantially across European countries. Countries such as Austria, Germany and Ireland experienced clear improvements in wealth distribution, while inequality increased in other countries including Cyprus, Greece, and the Netherlands (Eurofound 2021). Apart from Greece, these countries are among those with the highest observed levels of inequality in the European Union in 2017, despite their divergent trends in wealth disparities between 2010 and 2017 and dramatically different patterns of asset ownership.<sup>5</sup> Wealth inequality in the European Union has been attributed to differences in the distribution of housing and self-employment business equity as well as changing house prices and differences in household characteristics such as education (*ibid.*, Szymborska 2019c).

---

<sup>3</sup> The largely empirical focus of the recent literature of wealth inequality can be understood by the quest for obtaining good quality data on wealth, which have not been available until recently, as well as by the domination of that literature by questions of whether wealth inequality is historically rising or falling. A detailed discussion of issues related to the measurement of wealth and its distribution is provided in Alvaredo et al. 2018.

<sup>4</sup> Detailed harmonized data on wealth distribution in Europe is only available from 2010 with the release of the first wave of the European Household Finance and Consumption Survey.

<sup>5</sup> Wealth inequality was estimated to be the lowest in Poland and Slovakia in 2017, declining between 2014 and 2017 in the former country and rising in the latter in the period.

The composition of wealth in terms of access to various types of assets as well as leverage is crucial in understanding the increasingly unequal distribution of wealth. Available evidence shows that the ownership of business wealth, pension wealth, and financial wealth is much more unequally distributed than the ownership of property wealth, although there is substantial degree of inequality in the ownership of real estate other than primary residence (Szymborska 2017a). The diversity of the asset portfolio has vital implications for the size of the capital gains and thus potential wealth increases available to a household as business and financial wealth yield comparatively higher returns that are more resilient to the business cycle compared to property wealth (Nakajima 2013; Wolff 2014). Given the disparities in the ownership and returns to various components of wealth, what assets a household owns gives insight into its position in the distribution of wealth and the possibilities for upward social mobility of low-income households through wealth accumulation (Szymborska 2019a).

Despite the importance of wealth composition for inequality, it remains underexplored in the existing literature on wealth distribution. Instead, the literature tends to focus on disparities related to labor market characteristics, human capital and productivity that influence wealth inequality by determining the level of income and thus the ability to save and purchase assets. This approach is dominated by the life-cycle theory of consumption proposed by Modigliani and Brumberg (1954) and the permanent income hypothesis developed by Friedman (1957), as well as their extensions analyzing the wealth effects of asset price movements, liquidity constraints, precautionary savings, and bequest motives on household consumption spending (Szymborska 2017b). In this framework, wealth inequality is explained by differences in saving rates and thus wealth accumulation at different stages of the life-cycle, which lead to a hump-shaped relationship between wealth and age. The social mobility thus implied occurs as households progress through their life-cycles, with the rate of social mobility determined by the rates of saving (and hence investment) chosen by individual households. However, empirical evidence largely rejects these conclusions and establishes that saving rates, and thus the perspectives for upward mobility, are more strongly related to the level of income, in line with Kalecki's class analysis.

Moreover, the above literature on the sources of wealth disparities does not explore the social and economic implications of these inequalities for the functioning and the development of capitalism. It remains at the level of moralizing about those inequalities, in this way echoing Marx's criticism of the Ricardian socialists. The Post Keynesian literature on demand-led growth addresses this issue to some extent by analyzing the impact of unequal functional distribution of income on macroeconomic stability under different demand regimes. However, the role of wealth inequalities remains insufficiently explored in this literature because the vast majority of the demand-led growth models rely on a dichotomous division of households that largely restrict asset ownership to the capitalist class (for a detailed overview see Szymborska 2021).

Insufficient analysis of the ownership and composition of wealth among different classes of

households in these models obscures the role of wealth plays in determining the patterns of social mobility and thus the reproduction of capitalism.

While undoubtedly important, saving is only one way through which households accumulate wealth and move along the social ladder. Furthermore, given the low levels of interest rates observed since the 2007 crisis, disparities in saving alone cannot explain the scale of rising wealth inequality in recent years. As mentioned above, wealth composition matters for wealth accumulation capacity because of disparities in capital gains available to a household. In this context, differences in price appreciation for various assets have substantial impact on wealth inequality. These differences arise due to developments in the asset markets, which are shaped by changing macroeconomic conditions, and not due to households' individual characteristics influencing their capacity to save. To some degree this is demonstrated at the aggregate level by Piketty (2014), who shows how wealth concentration arises due to higher returns to wealth compared to the rate of growth of income, largely owing to the dynamics of interest rate compounding. Thus, wealth inequality and the prospects for social mobility are determined not only by disparities in income and labor market characteristics, but also by the ownership of assets and the composition of the asset portfolio.

This gives rise to another channel of wealth concentration through unequal access to family wealth transfers, including inheritance and *inter-vivo* transfers in the form of asset gifts, which enables wealth accumulation even if a household does not save or earn any income. The possibilities of wealth accumulation (or lack thereof) through access to family wealth transfers render wealth inequalities highly persistent, defining the opportunities for social mobility across generations.

Similarly to asset price appreciation and family wealth transfers, access to credit facilitates asset purchases without the need for substantial prior saving. In this light, financial sector operations are instrumental in determining access to wealth and its stability for different social groups. Echoing Krzywicki's and Lange's concerns, recent evidence shows that finance has largely contributed to deepening wealth inequalities instead of opening opportunities for upward social mobility. The subprime crisis that took place in the USA in the 2000s is a prime example of the role that the financial sector has played in increasing wealth inequality. The debt securitization boom in the late 1990s provided incentives to financial institutions to extend credit, in particular debt secured by primary residence, to groups that have been historically excluded from access to credit, namely low-income families, social minorities, and women (Dymski et al. 2013). For a while, this "financial inclusion" appeared to generate high increases in wealth for those subprime borrowers thanks to the possibility of home purchases and rising house prices in the first half of the 2000s. Indeed, between the 1990s and the mid-2000s households in the poorest quintile of the income distribution experienced the most rapid increases in wealth ownership compared to other groups (Szymborska 2017a).

But the wealth gains for subprime borrowers turned out to be short-lived in the face of the crisis owing to the high cost of credit and the accumulation of leverage. For those households, access to finance turned out to be asset-stripping rather than asset-building: The bursting of the housing price bubble in the late 2006 led to a wave of foreclosures and personal bankruptcies that generated lasting negative effects on the capacity of subprime borrowers to accumulate wealth (Dymski and Szymborska 2021). Consequently, between the mid-1990s and 2019, many low-income households experienced real declines in their wealth, leading to rising wealth inequality after the 2007 crisis (U.S. Survey of Consumer Finances 2019). This example shows that access to wealth is not sufficient for ensuring upward social mobility if asset ownership is insecure and backed by high leverage. And even after the bursting of the bubble in 2008, African-American and Latino households in America proved least able to improve their social class position to transit from the working class to the middle class (Addo and Darity 2021), thus bearing out Lange's remarks about the intolerance and narrowness of outlook that characterizes industrial feudalism (see section 2 above).

The case of the subprime crisis highlights the role that changing macroeconomic conditions and financial sector operations play in determining social mobility through their impact on both the access to and the stability of wealth. It also brings to the forefront the role of the state in facilitating these dynamics and producing wealth disparities. Modern securitization can be traced back to the 1960s, but it wasn't until a series of financial deregulation legislation was passed after 1980 that the debt securitization proliferated as an instrument of portfolio management (Buchanan 2017). In the decades before the subprime crisis took place, government policy had itself laid the groundwork for the debt securitization boom by directly influencing wealth accumulation capacities for different social groups. Certain groups, including most notably Black Americans, were actively excluded from the federal housing programs under Franklin Roosevelt's New Deal (Rothstein 2017). Restricted access to credit for groups of subprime borrowers prior to the debt securitization boom often affected those living in previously 'redlined' areas – racially segregated urban zones that arose out of the Federal Housing Agency's policy in the early 20<sup>th</sup> century and subsequent court rulings (Temin 2020). By restricting access to wealth, the state has thus limited the prospects for social mobility for these households and their descendants.

More recently, changes in public policy since the 1980s have increasingly followed financial logic and reflected financial sector interests, with the state transforming public services into tradable financial assets that yield return (Karwowski 2019). Declining comprehensive welfare provision by the state can be seen not only as a deliberate policy of a neoliberal state. It is also a protest by propertied classes that can satisfy their welfare needs more readily in a way that is under the individual household's control through the credit practices associated with the property that they own, and hence resent paying taxes for welfare provision that they do not use or control. Among those with the least marketable assets, increased private sector provision of key public services has undermined capacities for wealth accumulation and thus the prospects of

social mobility for low- and middle-income households by raising costs of housing, utilities, education and healthcare (Dymski and Szymborska 2021). Privatization of welfare has further deepened wealth inequality and intergenerational social mobility by eroding net public wealth (primarily through offloading of public assets), which reduces wealth accumulation capacities for future generations (Alvaredo et al. 2018; Atkinson 2017). In some respects, these policy changes may have contributed to downward social mobility for young households in the 2010s, as their average real wealth holdings remain well below what their peers from the baby-boomer generation had had (Szymborska 2019a). On the other hand, the state has facilitated wealth accumulation among the richest members of society, particularly through poorly designed subsidies, which create a possibility for funds to be directed away from the intended recipients who are financially vulnerable towards the rich, and the existence of loopholes in the taxation system, which allow for tax avoidance (for a detailed overview see Szymborska 2019b). In this sense, similarly to what was observed by Lange, in contemporary capitalist economies the state has become an expression of particular classes of capitalists, especially rentiers and large business owners, lending its political power to reinforce the economic power of these classes. By restricting wealth accumulation capacities for some while simultaneously promoting wealth concentration among others, the state has actively contributed to rising wealth inequalities and limited social mobility.

Wealth inequalities need to be thus seen as instruments of industrial feudalism, where the absence of ownership of certain kind of wealth prevents upward mobility, but the ownership of certain wealth (which can be borrowed against) prevents downward mobility of property-owning classes. The ‘proletariat’ (in the original sense of those without property) have nothing between them and destitution.

#### **4. Wealth and social mobility**

Consider a system of social stratification in which social classes are defined (in the sense explained below) by their ownership of wealth. At the bottom of the social hierarchy is the class of households without significant wealth (the ‘proletariat’?). Next is a class of households which own their residential accommodation and perhaps some negligible amount of savings in bank deposits and financial assets (the ‘middle class’?). Next may be a group of households owning residential accommodation and a significant amount of bank and financial assets. Further up may be an even wealthier stratum owning more than one residence, other real estate, and a diverse portfolio of financial assets. And so on.

We can now define the social classes by wealth in two ways. First of all, in each class there is a standard wealth portfolio that a household needs to possess in order to maintain its position in that class. So, for the middle class, this would be home ownership. In the next class up, there might be a second home, a pension fund and insurance policies. Higher up there might be ownership of more real estate and a more directly owned portfolio of financial assets. With that

standard wealth portfolio will come credit practices by which households may maintain their liquidity: among the lowest class, the pawning of personal jewelry and possessions; among the middle class, borrowing secured against the value of residential accommodation; among an upper class, a certain turnover of financial assets, by maturity or sale in a secondary market, or borrowing against real estate.

The standard wealth portfolio of each class defines the credit practices used to maintain the liquidity of the balance sheets of each household in that class. But it does not mean that there necessarily exists a standard value of the standard wealth portfolio, since that value would depend on the values in the asset markets in which that portfolio is invested.<sup>6</sup> Of greater significance for those credit practices, household welfare and social differentiation, is the second way in which social classes are defined by wealth, namely through the barriers that wealth creates to social mobility, or the movement between social classes. From this comes the preoccupation with wealth that is common to households in any given class.

For each class there is a floor that prevents a household in a given class from becoming *déclassé* due to a failure of income.<sup>7</sup> This floor is made up of the credit practices that households use to prevent their falling into the wealth class below their class. In the case of the ‘proletariat’ without significant assets, these credit practices are formal and informal borrowing, largely unsecured, to prevent falling into destitution. For the other classes, with property or financial assets, the credit practices are usually various forms of borrowing secured against property, which benefit from substantially lower repayment costs compared to the borrowing of the lower classes that do not have collateral.

In addition, for each class, there exists a ceiling which is made up of the difference in value between the standard wealth portfolio of that class, and the value of the standard wealth portfolio of the next class up in the wealth hierarchy. Thus, for a ‘proletarian’ household to become middle class, it is necessary to obtain secure ownership of residential accommodation. For a middle class household to ascend to upper middle class status, it becomes necessary to acquire further real estate and financial assets.

The floors and ceilings that keep households in their social classes are affected by the social policies of governments. The avoidance of downward social mobility, in particular the removal of the threat of destitution that awaits those without significant wealth, has been the goal of welfare state provision and government policies to secure full employment. Such arrangements strengthen the floors preventing declines in social class status. Other public services, such as good quality education and health services, facilitate upward social mobility by reducing the

---

<sup>6</sup> In the case of residential real estate, we can define the process of ‘gentrification’ as a process of households moving into a higher wealth class by relocating into areas of lower asset market prices.

<sup>7</sup> For instance, Atkinson and Brandolini (2011) include a wealth criterion in their definition of the middle class necessitating that a household holds enough assets to avoid falling into poverty for a certain period of time in case of sudden income shortfalls.

outlays needed to move into higher social classes. In this way, the welfare state reforms of the first half of the twentieth century brought in the support of the ambitious middle classes.

The rise of mass unemployment in the 1970s and the 1980s changed this. The paring down of welfare provision coincided with asset price inflation. It was only natural for the ambitious middle classes to repudiate their support for the growing expense of state provision and embrace the growing availability of credit as asset prices rose. In particular, such reliance on credit operations gave property-owners greater control over the liquidity obtained in this way. In the United States, Great Britain, and numerous other countries where residential real estate markets emerged, 'the housing market became the welfare state of the middle classes', as the housing market came to be relied upon for emergency credit, and cash flow to pay school fees and for private medical care (Toporowski 2010).

The connection between dependence on asset markets and the growing insecurity of those without a convenient range of property with which to operate in credit markets has been recognized in some of the critical literature on financialization (see Hillig 2019, Agunsoye 2021 and Montgomerie and Büdenbender 2015). However, our argument here places asset dependence in the context of social stratification to point out that: (i) asset dependence is specific to particular classes, because they have different kinds of assets; (ii) different kinds of assets have different credit implications and practices associated with them; (iii) these different credit implications and practices may ease cash flows in particular classes to prevent downward social mobility; but (iv) increasing asset inequality makes upward social mobility more difficult. In this way a growing inequality of wealth distribution restricts social mobility and gives rise to industrial feudalism defined as an absence of mobility between social strata.

However, a corollary of rising asset prices is an increasingly unequal distribution of wealth. In turn this increases differences between the value of the standard wealth portfolio in a given class, and the value of the standard wealth portfolio in the wealth class immediately above. It is these differences that determine the cost of upward social mobility: they are the property that must be acquired to secure a position in the next wealth class. At the same time as they reinforce the ceiling preventing ascent into a higher social class, the growing credit possibilities of rising asset values reinforce the floor preventing demotion into a lower social class. Diversity and stability of the wealth portfolio in light of asset price fluctuations thus have a defining role in both upward and downward movements across classes. Differences in the composition of standard wealth portfolios of different social strata, and the credit practices associated with such portfolios, reinforce barriers to mobility between social classes. In this way, asset inflation and the increasingly unequal distribution of wealth bring about the industrial feudalism and social stagnation of late capitalism.



## 5. Household credit practices in industrial feudalism<sup>8</sup>

The considerations in the previous section provide a conceptualization of households based on differences in their balance sheet composition. This is in contrast to the existing macroeconomic literature, which defines households based on their income (wage/profit shares), with differences in the ownership of assets and income from them being due to differences in saving preferences. For simplicity, at least three classes of households may be distinguished: the working poor (the working class), the leveraged homeowners (the middle class), and the working rich (a rentier class which may be said to include the non-working rich who occupy themselves with the management of their wealth. This approach links the insights of Piketty (2014) with the functional distribution approach, highlighting the role of wealth ownership and composition in defining the opportunities for social mobility. Such a three-class distinction can identify various motives for wealth accumulation across households and present a more intricate analysis of the determinants of macroeconomic fragility and inequality compared to the existing literature (Szyborska 2021).

The working poor are households whose balance sheets are defined by ownership of low-yielding assets and high leverage levels. These households have low saving rates and do not have sufficient wealth or income that would allow them to take out mortgages. Hence, they rent houses from owners of residential property. They thus only have access to unsecured short-term debt. The real disposable income of the working class comprises wage income, which depends on the demand for labor performed by the working class and the middle class adjusted by an exogenously set share of the wage bill, and interest on deposits, less interest payments on loans and house rental payments. Housing rents depend on the value of houses owned by rentiers and the leverage of rentiers, since we may assume that rentiers would attempt to compensate for higher leverage by raising the amount charged on rent to the working poor. By implications, rents will increase if the residential property market is inflated by excess demand for such assets. We may assume that the working poor prioritize rent payments over other consumption decisions in order to satisfy a basic need for shelter. Consumption is undertaken out of both income and wealth and debt is also taken up to finance a part of consumption. For the working poor, as for other classes, saving is a residual, but a negligible one among the poor. Nevertheless, leverage in this class, measured as the ratio of debt to liquid assets, is perhaps the highest among all household groups due to relatively greater credit restrictions, lower overall value of asset holdings, and a natural fear of debt which may squeeze future disposable income.

The middle class, defined by its wealth ownership, corresponds to a group of leveraged homeowners.<sup>9</sup> Balance sheets of this group depend on housing purchased through mortgage

---

<sup>8</sup> The argument in this section follows Section 4 of Szyborska 2021.

<sup>9</sup> The definition of the middle class in the literature is varied and has been considered along a variety of dimensions. In empirical studies, the middle class is often determined in relative terms as the middle 60% of income earners (earning between 75% to 125% of the median income). A social dimension can also be considered, whereby the middle class is defined by class consciousness, social status, lifestyle, or occupational status. In the theoretical literature, the middle class tends to be identified with middle managers, who are in conflict over their share of

financing, and housing constitutes the only major asset this group owns. We assume that all households belonging to the middle class are owner-occupiers and do not rent property to other households. Overall, the net wealth of the middle class comprises the value of bank deposits, housing, and capital gains on houses, less loans. The wealth of the middle class is thus highly dependent on house price movements, which, if rising, allow middle class households to monetize capital gains. Such gains then serve to stabilize the economic and social position of those households. However, the middle class is also distinct from the rentier class because its asset portfolio is characterized by the dominance of few assets (primarily housing), and a less diverse property portfolio which needs higher levels of debt to generate cash flows.

The real disposable income of the middle class comprises wages, interest on deposits, and the imputed rent on housing (the return on the real value of housing, dependent on the value of capital gains relative to housing), less interest payments on loans. Wage income of the middle class depends on an exogenously determined portion of the wage bill paid by firms to the working and middle class. Consumption is a fraction of income and wealth, with marginal consumption propensities relatively lower than that for the working poor, while saving too is a residual. To finance home purchases and a part of consumption, the middle class accumulates mortgage debt, which is determined by the demand for housing and relative consumption concerns (with the middle class assumed to emulate the level of consumption of the group directly above it, in this case rentiers).

The rentier class comprises owners of diversified asset portfolios, including high-yielding financial assets, business equity, and various types of real estate, and is characterized by low relative indebtedness. Rentier households are assumed to be owners of businesses, residential property and financial assets in the economy. In contrast to the existing studies of functional income distribution, we expand the definition of rentiers to encompass households who engage in work (as executives or higher managers). The wage income of rentiers may be a part of the overall wage bill of firms and is defined by firms' demand for labor performed by rentiers adjusted by the rentier wage rate. The rentier wage rate is determined by an exogenous premium over the other workers' wage rate and a variable remuneration dependent on firm profits. The rise in executive pay is widely acknowledged to be an important factor in the increasing wage inequality observed since the 1980s (Szymborska 2021), as it had been in Krzywicki's and Lange's time. But this rising inequality also needs to be seen as an aspect of industrial feudalism in our time.

Unlike households in lower classes, rentiers are assumed to engage in work not because of a necessity to maintain their living standards (as they could feasibly live off their accumulated wealth), but as a *de facto* investment strategy that boosts their capacities to accumulate wealth through high earnings. Similarly, debt accumulation by rentiers can be conceptualized as a

---

income with both the capitalist and the working class (Palley 2015). However, this approach neglects wealth ownership as a feature defining middle class status and the role of wealth composition and stability for upward mobility.

deliberate action on their behalf to expand their wealth accumulation capacities, service their financial obligations and protect their class position by maintaining their pattern of household consumption and their wealth portfolio. The availability of credit for this class is comparatively greater than for the lower social classes due to higher value of assets owned by rentiers that can serve as collateral and their higher earnings, which translates into lower overall costs of borrowing for the rentier class. The borrowing of rentiers is motivated by the need to maintain the liquidity of their asset portfolio, rather than on current or future consumption needs. Consumption of rentiers is a fraction of their income and wealth, even if it includes a Veblenian element of conspicuous consumption or even emulation of the consumption of wealthier households (Veblen 1899 chapters II and IV). Marginal consumption propensities may therefore be assumed to be the lowest for this group compared to the lower social classes, because incomes are highest in this social group and patterns of consumption are largely conventional rather than related to income.

The net wealth of rentiers consists of bank deposits, housing, firm equity, and high-yielding financial assets as well as capital gains on these assets, less loans. Rentiers are assumed to allocate their wealth between houses, equities, and high-yielding financial assets according to the Tobinesque portfolio principle, i.e. the relative rates of return on these assets, with bank deposits allocated as a residual. The real disposable income of rentiers includes wage income, interest from bank deposits, distributed profits of firms, commercial banks, and financial institutions, as well as housing rent payments from the working class, returns on housing, returns on business equity and returns on shares financial assets, less interest paid on loans.

In a related article, one of us argues that this social class differentiation of property makes the standard social class differentiation by income (i.e., workers earning wages, and capitalists earning profits) too reductive (Szymborska 2021). But the different property portfolios of the respective social classes may also be seen as a late twentieth-century incarnation of the industrial feudalism first noted by Krzywicki and Lange. The different asset portfolios of the different social classes, and the distinctive credit practices associated with them mean that motivations to save are not just individual choices, or related to the size of income, but are specific to particular wealth classes (Szymborska 2021). In the last half-century the prevailing approach to income and wealth differentials has assumed that those differentials derive from differences in labor productivity, obtained through investment in ‘human capital’. Industrial feudalism reverses the direction of causation: it is wealth differentials that determine job opportunities.

## **Conclusion**

The concept of industrial feudalism emerged at the end of the nineteenth century from the writings of Ludwik Krzywicki. It was taken up in the 1940s by Oskar Lange and then by Tadeusz Kowalik. The term denoted a rigidly stratified society with minimal social mobility between social strata. In the work of Krzywicki and Lange, industrial feudalism arose out of the

social stability that accompanied economic stabilization, as monopoly and finance capital organized markets to assure higher, more stable profit margins for monopolies. However, the absence of competition was paid for by consumers in higher prices and reduced innovation.

A distinctive feature of this pre-Hilferding discussion of monopoly capital is that it was not rooted in the banking concentration, that allowed the Berlin clearing banks to dominate German industry, but in the American system of capital market finance, which facilitated the separation of ownership from control over American industry, and allowed a small group of investment banks to dominate American industry. This gives the Polish discussion of monopoly finance capital more general relevance, as the traditional Berlin system of bank finance has increasingly given way to a US model of capital market finance, at least for the corporations that dominate industry.

As pointed out by Kowalik, the monopoly finance capital analysis of Krzywicki and Lange anticipated the later work of Hilferding and later in the twentieth century, Baran and Sweezy (Baran and Sweezy 1966, Kowalik 1959 chapter 3). Krzywicki and Lange had no doubt that industrial feudalism was one of the consequences of the economic stabilization brought about by the management of economic activity by monopolies eliminating the 'market chaos' of competition. In this sense it becomes a fundamental social contradiction that is incubated by capitalist economic stabilization.

In the twentieth century, this social contradiction was overcome by the rise of the welfare state, made more urgent by the blood-letting that followed the Great Depression of the 1930s. That depression highlighted the need for state intervention to go beyond merely shoring up the economic position of powerful industrial and financial groups and defending property rights. Comprehensive state welfare provision, including health services and education, offered a solution to the problem of social mobility in stratified socio-economic systems. But, where implemented, such provision could only last as long as the property-owning classes were willing to pay for it. Ultimately the welfare needs of individual households are determined by the social class in which particular households find themselves. The rise of asset markets from the 1980s afforded property-owners asset-based welfare options that could be matched more easily to perceived need. What emerges is not so much the asocial individualism that arises when owners of property attribute their comfort to their own efforts, but the industrial feudalism of which Krzywicki and Lange wrote.

## References

- Addo, Fenaba A. and Darity, William A. 2021 ‘Disparate Recoveries: Wealth, Race and the Working Class After the Great Recession’ *The Annals of the American Academy of Political and Social Science* Vol. 695, No. 1, May, pp. 173-192.
- Agunsoye, Ariane “Locked in the Rat Race”: variegated financial subjectivities in the United Kingdom’ *Environment and Planning A: Economy and Space* forthcoming
- Alvaredo, Facundo, Chancel, Lucas, Piketty, Thomas, Saez, Emmanuel, and Zucman, Gabriel 2018 *World Inequality Report 2018*. Available at: <https://wir2018.wid.world>
- Atkinson, Anthony B. and Brandolini, Andrea 2011 ‘On the identification of the “middle class”’, ECINEQ Working Paper 2011-217.
- Baran, Paul A., and Sweezy, Paul M. 1966 *Monopoly Capital: An Essay on the American Economic and Social Order* Monthly Review Press, New York.
- Breit, Marek, and Lange, Oskar 1934 ‘The Way to the Socialist Planned Economy’ *History of Economics Review* No. 37, Winter 2003, pp. 51-70.
- Buchanan, Bonnie G. 2017 ‘The way we live now: Financialization and securitization’ *Research in International Business and Finance*, 39, pp. 663-677.
- Dymski, Gary A., Hernandez, Jesus and Mohanty, Lisa 2013 ‘Race, Gender, Power, and the US Subprime Mortgage and Foreclosure Crisis: A Meso Analysis’ *Feminist Economics*, 19, 3, pp. 124-151.
- Dymski, Gary A., and Szymborska, Hanna K. 2021 ‘Seeing the Covid-19 crises through a Minskyian lens: austerity, stratification, and productivity’. In: McCann, Philip, and Vorley, Tim (eds.) *Productivity and the Pandemic*, Cheltenham: Edward Elgar.
- Eurofound 2021 *Wealth distribution and social mobility*, Publications Office of the European Union, Luxembourg.
- Friedman, Milton 1957 *A Theory of the Consumption Function*, Princeton, Princeton University Press.
- Hayek, Friedrich A. 1944 *The Road to Serfdom* George Routledge and Sons, London.
- HFCN 2016 “The Eurosystem Household Finance and Consumption Survey: results from the second wave”, Statistics Paper Series 18, European Central Bank, Frankfurt.
- Hilferding, Rudolf 1910/1981 *Finance Capital A study of the latest phase of capitalist development* Routledge and Kegan Paul, London.
- Hillig, Ariane 2019 ‘Everyday financialization: the case of UK households’ *Environment and Planning A: Economy and Space* Vol. 51, No. 7, pp. 1460-1478.

Holland, Henryk 2007 *Ludwik Krzywicki – nieznany* (Ludwik Krzywicki – unknown) Książka i Prasa, Warszawa.

Kalecki, Michał 1971 'Class Struggle and the Distribution of National Income' *Kyklos* vol 24 No. 1, pp. 1-9 reprinted in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume II Capitalism: Economic Dynamics* The Clarendon Press, Oxford 1991.

Kalecki, Michał, and Kowalik, Tadeusz 1971 'Observations on the "Crucial reform"' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume II Capitalism: Economic Dynamics* The Clarendon Press, Oxford 1991.

Karwowski, Ewa 2019 'Towards (de-)financialisation: the role of the state', *Cambridge Journal of Economics*, 43, pp. 1001-1027.

Kowalik, Tadeusz 1959 *O Ludwiku Krzywickim Studium Społeczno-Ekonomiczne* Państwowe Wydawnictwo Naukowe, Warszawa.

Krzywicki, Ludwik 1890 'Nowoczesny prad monopolowy' (The new monopoly current) in Ludwik Krzywicki *Idea a życie z wczesnej publicystyki (1883-1892)* (Ideas and life from early journalism 1883-1892) selected, edited and introduced by Henryk Holland, Państwowe Wydawnictwo Naukowe, Warszawa 1957.

Krzywicki, Ludwik 1939/1991 'Preface to "Money and Real Wages"' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume II Capitalism: Economic Dynamics* The Clarendon Press, Oxford 1991, pp. 519-521.

Lange, Oskar 1929 '„Wrastanie w socjalizm” czy nowa faza kapitalizmu?' ("Evolution to socialism" or a new phase of capitalism) in Oskar Lange *Dzieła tom 1 Kapitalizm* (Collected Works Volume 1, Capitalism) Państwowe Wydawnictwo Naukowe, Warszawa 1973.

Lange, Oskar 1931 'The Role of the State in Monopoly Capitalism' in O. Lange *Papers in Economics and Sociology 1930-1960* translated and edited by P.F. Knightsfield Pergamon Press, Oxford 1970.

Lange, Oskar 1938 'Ludwik Krzywicki – Theorist of Historical Materialism' in O. Lange *Papers in Economics and Sociology 1930-1960* translated and edited by P.F. Knightsfield Pergamon Press, Oxford 1970.

Lange, Oskar 1941-1944 'A Democratic Program for Full Employment' translated as 'Demokratyczny program pełnego zatrudnienia' in Oskar Lange *Dzieła tom 1 Kapitalizm* (Collected Works Volume 1, Capitalism) Państwowe Wydawnictwo Naukowe, Warszawa 1973.

Lange, Oskar 1986 *Dzieła tom 8 Działalność naukowa i społeczna 1904-1965* (Collected Works Volume 8 Scientific and social activities 1904-1965) Państwowe Wydawnictwo Naukowe, Warszawa.

- Lenin, Vladimir I. 1917 'Imperialism the Highest Stage of Capitalism' in *Selected Works* Progress Publishers, Moscow 1968.
- Marx, Karl Heinrich 1959 *Capital A Critique of Political Economy Volume III: The Process of Capitalist Production as a Whole* edited by Frederick Engels, Progress Publishers Moscow.
- Modigliani, Franco and Brumberg, Richard 1954 'Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data'. In: Kurihara, Kenneth K. (ed), *Post-Keynesian Economics*, New Brunswick: Rutgers University Press.
- Montgomerie, Johnna and Büdenbender, Mirjam 2015 'Round the Houses: Homeownership and Failures of Asset-Based Welfare in the United Kingdom *New Political Economy* Volume 20 No. 3, pp. 386-405.
- Nakajima, Makoto 2013 'The Diverse Impacts of the Great Recession' *Philadelphia Fed Business Review*, Q2, pp. 17- 29.
- Palley, Tom 2015 "The middle class in macroeconomics and growth theory: a three-class neo-Kaleckian–Goodwin model", *Cambridge Journal of Economics*, vol. 39, pp. 221-43.
- Piketty, Thomas 2014 *Capital in the Twenty First Century*, Harvard, Harvard University Press.
- Rothstein, R. 2017 *The Color of Law*, New York, W.W. Norton & Company.
- Sweezy, Paul M. 1941 'The Decline of the Investment Banker' in *The Present as History Essays and Reviews on Capitalism and Socialism* New York, Monthly Review Press 1953.
- Szymborska, Hanna K. 2017a *Financial Sector and Household Balance Sheet Dynamics: Rethinking the Determinants of Income and Wealth Inequality in the USA Since the 1980s*, PhD thesis. University of Leeds.
- Szymborska, Hanna K. 2017b 'Inequality in the Twenty-First Century – in Need of a New Theory?'. In: Opolski, Krzysztof and Gemzik-Salwach, Agata (eds) *Financialisation and the Economy*, Routledge.
- Szymborska, Hanna K. 2019a 'Wealth structures and income distribution of US households before and after the Great Recession', *Structural Change and Economic Dynamics*, 51, December 2019, pp. 168-185.
- Szymborska, Hanna K. 2019b 'How can policy tackle inequality in the 21st century?' In: Monvoisin, Virgine, and Rochon Louis-Philippe (eds) *Finance, Growth and Inequality: Post Keynesian Perspectives*, Cheltenham, Edward Elgar.
- Szymborska, Hanna K 2019c 'Wealth inequality in the European Union'. In: Sweeney, R., and Wilson, R. (eds.) *Cherishing All Equally 2019 Report*, Dublin: Think-tank Action for Social Change.

Szymborska, Hanna K. 2021 'Rethinking inequality in the 21st century – inequality and household balance sheet composition in financialized economies' *Journal of Post Keynesian Economics*, <https://dx.doi.org/10.1080/01603477.2021.1969951>.

Temin, Peter 2020 'Never Together: Black and White People in the Post-War Economic Era' Working Paper no. 128, Institute for New Economic Thinking, July 8.

Toporowski, Jan 2010 'The Wisdom of Property and the Culture of the Middle Classes' in Jan Toporowski *'Why the World Economy Needs a Financial Crash' and other Critical Essays on Finance and Financial Economics* Anthem Press, London.

Toporowski, Jan 2018 *Michał Kalecki: An Intellectual Biography Volume 2: By Intellect Alone* Palgrave, Basingstoke.

Wolff, Edward N. 2014 'Household wealth trends in the United States, 1983-2010', *Oxford Rev. Econ. Policy*, 30, 1, pp. 21–43.

U.S. Survey of Consumer Finances, 2019. Federal Reserve. Available at: <http://www.federalreserve.gov/econresdata/scf/scfindex.htm>.

Veblen, Thorstein 1899 *The Theory of the Leisure Class: An Economic Study of Institutions* The Macmillan Company, New York