

## ARTICLES

Jin Matsuka (*Otaru University of Commerce, Otaru, Japan*)

<https://orcid.org/0000-0002-0575-3824>

[matsuka@res.otaru-uc.ac.jp](mailto:matsuka@res.otaru-uc.ac.jp)

## MUNICIPAL MECHANIZED BAKERY IN INTERWAR WARSAW (1928–1936): IDEALS AND REALITIES OF A PUBLIC INVESTMENT

**Abstract:** This study investigates the Warsaw Municipal Bakery from its inception in 1928 to its operation until 1936, a period aimed at modernizing the baking industry within inter-war Warsaw. By using primary sources, including audit reports, governmental documents, and contemporary studies, this research primarily analyzes the economic strategies and public investments linked to the bakery. It examines the operational challenges – including management inefficiencies, technical obstacles, and private-sector resistance – while situating them within the broader economic policies and socioeconomic context of the time. The study further explores the gap between the intended modernization goals and the actual outcomes, highlighting the ideological and political motivations behind public investments. Additionally, it discusses the impact of such public investments on the local economy, assessing both the intended modernizing effects and the practical outcomes. This work contributes a detailed case study to the historical understanding of public investments in the Polish economy during the interwar period. It underlines the complex interplay between economic goals and actual managerial and technical outcomes, providing insights into the challenges and limitations of municipal-driven economic initiatives.

**Keywords:** Warsaw Municipal Bakery, Public investment, Interwar Poland, Economic modernization

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## INTRODUCTION

This paper aims to provide a detailed examination of the management of the Warsaw Municipal Bakery [Miejska Piekarnia Mechaniczna w War-



szawie], established in 1928 to modernize the baking industry. Focusing on the period from its inception until 1936, this research investigates how the bakery functioned within interwar Warsaw's broader socioeconomic and political context. The scope of this research covers the preliminary history following WWI, from when the establishment of the factory was first considered until 1936. This timeframe is selected due to both the significant loss of historical documents from war damage and the drastic socioeconomic changes leading up to WWII, which marked the establishment of a wartime economic system. Additionally, 1936 was chosen as a cutoff due to the length constraints of this paper and the fact that a different framework is needed to analyze the post-1936 period. This period saw major shifts, such as the growing debate over the Second New Deal policies in the U.S., the introduction of Keynesian economics, and Poland's interventionist policies, like the construction of the Central Industrial District [Centralny Okręg Przemysłowy] and the four-year investment plan [czteroletni plan inwestycyjny]. These changes in economic theory and policy require a distinct approach, so this paper focuses on the years leading up to 1936, providing an overview of the increasing interventionist policies as a background context.

The study uses microhistory to explore the history of a single company. Popularized in the 1970s by historians such as Carlo Ginzburg (1976)<sup>1</sup> and Jiro Kosaka (1984),<sup>2</sup> microhistory examines the broader context of an era through detailed analysis of how individuals shaped their actions based on everyday experiences. This method can be applied to individuals, the history of a specific factory and the behavior of various people associated with it. In the context of this study, it is particularly useful for understanding how municipal interventionism influenced the bakery's operations and reflected the broader economic policies of the time.

Similar price control policies were introduced in the meat distribution sector. By examining the journals of the same professional associations of butchers and slaughterers engaged in meat distribution, one can observe the effects and limitations of these intervention policies. Among the most

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<sup>1</sup> Carlo Ginzburg's *Il formaggio e i vermi* (Ginzburg, 1976) studies the life of a 16th-century miller in Montereale, Italy, through heretical trial records. It explores the cultural exchange and disconnect between social strata while affirming the miller's status.

<sup>2</sup> 元禄御畳奉行の日記 [*Diary of a Genroku Otatami Bugyo*] by Jiro Kosaka (1984). This work seeks to uncover the lifestyle and mindset of a local Japanese city resident during the feudal era, based on the diary of a samurai responsible for managing the tatami mats in Nagoya Castle from 1691 to 1717.

significant contemporaneous studies on this topic are the works of Józef Wojtyna, particularly *Program organizacji rynku mięsnego w zarysie* (1937), which provides valuable insights into Warsaw's meat trade policies. In the field of economic thought, well-known economists such as Roman Rybarski, Adam Krzyżanowski, Tadeusz Bernadzikiewicz, Adam Heydel, and others debated municipal interventionism.

However, debates also occurred at a more specialized level, in journals and economic reviews, where smaller discussions developed in various economic fields.

The discourse of economic critics in the daily newspapers and trade journals mediated between the bureaucrats responsible for economic policy and the economic behavior of business managers, workers, and consumers. These critics exerted considerable influence on the actual players in the economic system. The primary question of this paper is to examine these critics' influence at the micro level of the Warsaw City bakery. While municipal interventionism aimed to stabilize bread prices and improve the overall quality of life in Warsaw, this paper will reveal that such efforts were often undermined by technical inefficiencies, financial challenges, and opposition from the private sector.

Next, the historical documents used in this paper will be discussed. The primary source is the audit report of the Warsaw Municipal Bakery. In March 1935, the City's Audit Committee [Komisja Rewizyjna m. st. Warszawy] assigned three members to audit the bakery, which was facing issues due to inconsistent management. The report, submitted in April 1936, includes a rebuttal from the bakery's director and was published on May 12, 1936 ('Sprawozdania...', 1936).

Other important studies from this period include the 1928 report by the Questionnaire Committee for Investigation of Production and Exchange Conditions and Costs [Komisja Ankietowa dla Zbadania Warunków i Kosztów Produkcji oraz Wymiany], an advisory body to the government, and writings by Leon Władysław Biegeleisen, a member of the National Consumer Council [Państwowa Rada Spożywców] and economic advisor to the Warsaw City Government [Magistrat]. Biegeleisen's works, such as *Economic and Provisioning Policies of Polish Cities (Warsaw and Lviv)*, are valuable for understanding food distribution systems and public economics (Biegeleisen, 1935).

From the perspective of bakers, Józef Lichtensztein's book *Chleb powszedni. Przemysł piekarski* (1939) provides significant insight into this paper's theme. In postwar research, Jerzy Kochanowski's *Rys historyczny Ce-*

*chu Piekarzy w Warszawie (do roku 1933)*, posted on the Warsaw Guild of Bakers' website, serves as a key reference (Kochanowski, 2015). Relevant documents were once kept in the Warsaw Municipal Administration Archives [Akta miasta stołecznego Warszawy] but were destroyed during WWII.

## HISTORICAL CONTEXT

### 1. Preliminary History and Bread Price Controls

The plan to establish mechanized bakeries in Poland aimed to address bread price and quality issues and was seriously considered during WWI, as the deteriorating sanitary conditions in German-occupied Warsaw worsened bread quality. In December 1915, the baking trade union [Związek Robotników] proposed to the administrative organization Citizens' Committee [Komitet Obywatelski] that a municipal bakery should be established to improve the poor sanitary conditions in the city ('O umiastowienie...', 1915). Consequently, under the German occupation, the Warsaw City Government established a small experimental bakery at Nowy Świat str. In 1919, the idea of building a large-scale municipal bakery was proposed in Warsaw (AAN, PRM, IX 54), and in 1921 and 1923, the City Council [Rada Miejska] adopted resolutions calling for its construction and established the Construction Committee [Komitet Budowy] in 1923 (J. N., 1930; 'Z historii...', 1929). In response to this resolution, the Warsaw Metropolitan Supply Office [Wydział Zapatrywania Magistratu m. st. Warszawy]<sup>3</sup> built two bakeries in 1924 and 1926 (at Burakowska and Olesińska str.), but the total size of the two bakeries was only 10 tons per day and, compared to Warsaw's total demand for bread, they had no price fixing power ('Na przełomie', 1926; 'Sto tysięcy...', 1929; 'Miejskie...', 1928). The bakery's production was mainly for sale at the municipal ration office (in 1924–1926, about 20–28% of production was sold to private traders and consumer cooperatives, Biegeleisen, 1929a; 1929b: 270), and the ration office price for rye bread

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<sup>3</sup> Established in January 1916 to provide affordable food directly to the population in large quantities. It was reorganized into commercial facilities that offered inexpensive food when wartime controls were relaxed in 1921.

[chleb pytlowy] in 1925 and 1926 was between 5.2% and 6.3% lower than the market price (Biegeleisen, 1929b: 285). However, the ability to sell bread at a lower price than the market price was not possible due to the precarious state of the Polish currency [marka polska] ('Sprawozdania...', 1936: 1–9).

After the currency reform, the government could intervene through (1) public pricing and (2) low-priced sales by public enterprises. The framework for price control was established by following laws: 'Act on Securing the Supply of Daily Necessities' of December 29, 1925 (Dz.U. 1926, No. 1, item 2), initially a time-limited law that was later extended by the 'Regulation of the President of the Republic on Securing the Supply of Items of Daily Necessities' of August 31, 1926 (Dz.U. 1926, No. 91, item 527). These laws granted the Cabinet the right to control the price and distribution of grain, flour, bread, meat, and clothing. The Cabinet Order of February 10, 1926 (Dz.U. 1926, No. 18, item 101) allowed prices to be set "based on production costs and economically justified exchange costs," permitting price inspections by major cities and municipalities.

The authority of the Minister of the Interior to control prices and distribution was delegated to voivodes, who could further delegate this authority to municipalities. Following the extension of the 1925 law on September 1, the Ministry of the Interior informed voivodes that the February 10, 1926, regulation remained effective (except for clothing and shoes) and requested their opinions on proposed amendments and the activities of the price inspection committee (Dz.U. 1926, No. 91, item 527).

This system had flaws, such as requiring an equal number of producers/merchants and consumer representatives, causing discussions to stall and making it difficult for the committee to keep up with rapid changes in raw material prices. As a result, a system linking bread prices to grain flour prices was introduced. However, grain prices soared in 1927 and 1928, particularly during the March–April 1928 surge. This increase led to speculation, affected flour and bread prices, and raised doubts about the effectiveness of the price control commission system. The Warsaw Metropolitan Supply Office mentioned above was reorganized into the Municipal Supply Facilities of Warsaw [Miejskie Zakłady Zaopatrywania Warszawy] in May 1925, expanding from wholesale to retail, with 65 stores in the City by 1928 ('Składy...', 1925; 'Apropowizacja...', 1928).

The products traded included grains, beans, salt, sugar, colonial products, meat, coal, and timber. Its operating capital grew from 900,000

zlotys in 1924 to approximately 2.67 million zlotys in 1927. Municipal Supply Facilities of Warsaw purchased grain directly from growers and sold it to retailers and bakers at low wholesale prices to lower the cost of bread. However, this system did not prevent intermediaries from reselling grain and flour at high prices (F. P., 1926; Biegeleisen, 1927: 24).

## **2. Bread quality issues – Ministry of the Interior Survey of 1925 and Questionnaire Committee of 1928**

While controlling bread prices was a primary concern for the municipal government, maintaining bread quality presented an equally formidable challenge. Following the currency reform of 1924, modernization and streamlining of the Polish economy emerged as new challenges. The Ministry of the Interior's 1925 survey of 3,512 bakeries in 40 cities with populations over 25,000 revealed the overwhelming smallness and poor conditions of bakeries with extremely outdated facilities.

The Ministry of the Interior urged Warsaw to ensure a steady bread supply. On April 9, 1925, a City Councilor announced at the conference held in the Ministry the decision to establish new bakeries, resolving to build four mechanical bakeries of 50,000 kg each (Rozenberg, 1928; J. N., 1930; 'Sprawozdania...', 1936: 5, 10).

The Questionnaire Committee, established in December 1926, further highlighted the bread supply issue. Inspired by the Polish Socialist Party [Polska Partia Socjalistyczna – PPS] and the Central Federation of Mining, Industry, Commerce, and Finance of Poland [Centralny Związek Polskiego Przemysłu, Górnictwa, Handlu i Finansów – Lewiatan], the Committee analyzed the economic conditions of various industries and proposed streamlining production and lowering product prices, following the model of German law of 15 April 1926 to analyze the German economy's production and sales conditions (C. P., 1926; 'Jak pracowała...', 1928; 'Praca...', 1928).

The *Report of the Questionnaire Committee – Baking Industry* (Volume 4), published in 1928, pointed out the backwardness of the baking industry and strongly supported mechanization and factory production. The report revealed that of the 607 bakeries reviewed in 1926 by the Health Department of the Warsaw City Government [Wydział Zdrowia Magistratu m. Warszawy] 368 bakeries were qualified for closure. The report noted that baking tools and methods were "undeveloped," the consum-



er market for bread was “in a state of chaos,” and the small baking industry “remains at the level of medieval handicraft production.” It harshly criticized sanitary conditions, stating that many bakeries should be closed. The proposed solution was constructing large, mechanized bakeries in major cities like Warsaw, Łódź, Cracow, Lviv and Poznań to impact the bread market decisively (*Sprawozdanie...*, 1928: 17, 19, 37–38, 57; J. N., 1930). The initial efforts to manage bread prices and quality laid the groundwork for more significant state involvement in the baking industry. The following chapter will explore how the municipal ownership of bakeries faced various challenges, particularly in balancing public welfare with financial viability.

## MUNICIPAL OWNERSHIP OF THE BAKING INDUSTRY – CHALLENGES AND PROBLEMS

### 1. The Rationale for a Municipal Bakery

The *Report of the Questionnaire Committee* noted that Poland’s bread consumption was lower than Germany’s due to limited access and high prices. It suggested streamlining production and distribution to lower prices and maintaining farmers’ incomes. However, experience has shown that the method of forced streamlining used in the wartime economy during WWI could not provide the expected results.

Home baking, common in rural areas, was inefficient in fuel and labor productivity. Poor working conditions in small bakeries further justified the need for mechanization. The baking process in unmechanized bakeries was lengthy, and the poor working conditions resulted in the spread of occupational diseases such as baker’s eczema (Klarner, 1926: 810; *Sprawozdanie...*, 1928: 26; ‘Miejska piekarnia mechaniczna’, 1929b; J. N., 1930).

The PPS strongly supported the mechanization of bakeries. The sharp rise in grain prices in early 1928 reinforced the need for public management, bakery mechanization, and factory conversion. Stanisław Rapalski, a PPS member and deputy mayor of Łódź, argued at the Consumer Council that mechanization was urgent to solve the sanitary problems of bakeries. He stated:

Do not be discouraged by the fact that a huge part of the bakeries will close down. This centralization of bakeries is long overdue, and if it happens today, it will only accelerate what will happen in a few years; it will accelerate the good effects. (K. J., 1928).

Rapalski argued that the Ministry of the Interior should issue regulations to mechanize baking and called for stricter penalties for working hours violations, claiming that small private bakeries failed to comply with minimum working hours. The Ministry continued to support bakery construction. Recognizing the need to introduce Poland to the mechanized baking achievements of Germany and France, the City of Warsaw sent delegations to major European cities in October 1926 to investigate the best methods (Jarosz, 1930; 'Sprawozdania...', 1936: 10).

As previously mentioned, Warsaw had already built two small bakeries of limited influence, selling bread at lower prices than the market. Consequently, the new Warsaw Municipal Bakery devised a plan to construct a new bakery to increase daily production to 50 tons, aiming to satisfy 12–15% of the city's bread demand ('Na przełomie', 1926).

Encouraged by the grain shortage in April 1926, the government launched mechanized bakeries and grain elevator construction at a conference on April 14, 1926 (ANK, UWK, 31; F. P., 1926: 1–2; W sprawie... 1926b). On August 11, the Minister of Finance announced a policy for municipalities to operate bakeries with government support. A circular letter from the Ministry of the Interior in October 1926 instructed voivodes to include mechanized bakeries in their investment plans. Warsaw started construction on May 14, 1927 ('Narady...', 1926; 'Budowa piekarni mechanicznych', 1926; 'Z historii...', 1929).<sup>4</sup>

From late 1927 to 1928, the Ministry sought to increase supply, streamline production, and reduce prices. In March 1928, the Warsaw City Government issued \$10 million in 30-year bonds to improve public enterprises' profitability, showing a commitment to modernizing the baking industry ('Pożyczka...', 1928; 'Udział...', 1928; 'Podpisywanie...', 1928). Despite the noble intentions of establishing municipal bakeries, the practical implementation revealed several issues. These challenges ranged from technical difficulties to political opposition, as will be discussed in the subsequent sections.

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<sup>4</sup> Meanwhile, in March 1927, the Ministry of the Interior attempted to further reduce bread prices in collaboration with a private company. However, it later deemed this company as unsustainable. (AAN, PRM, IX 54).



## 2. Opening of the Warsaw Municipal Bakery

The construction of the Warsaw Municipal Bakery was completed in October 1928 for 5,725,500 zlotys ('10-lecie', 1928), and it began operation on April 9, 1929, at Prądyńskiego str. 5 (*Rocznik Polskiego Przemysłu i Handlu*, 1938: no. 8399), employing only one baker and 20 staff members. However, local newspapers, including *Gazeta Warszawska*, *Gazeta Handlowa*, and *Przedświt*, the newspaper of the Old Revolutionary faction [dawna frakcja rewolucyjna] of the PPS and another PPS faction, Centralny Komitet Wykonawczy [CKW] newspaper *Robotnik*, praised the bakery's establishment.

*Gazeta Warszawska* ran an article titled 'Municipal mechanized bakery – the first of its kind in Poland' (March 24, 1929). It highlighted that the bakery's setup required significant capital, which private enterprises could not provide. The article noted key advantages: the bakery's location near grain silos and the railroad reduced transportation costs and automated production that would ensure sanitary conditions and increased efficiency, producing five times more bread per worker ('Miejska piekarnia mechaniczna', 1929b).

*Gazeta Handlowa*, in the article 'The Truth about Municipal Mechanized Bakery' (Prawda..., 1929), emphasized the benefits of mechanization, such as reducing bread prices by 5–6 grosze per kilogram, producing hygienic bread, lowering labor, administrative, and fuel costs. The article reviewed the controversy regarding *Piekarz Polski* [the Polish Baker], the organ of Provincial Associations of Bakers' Guilds in Poland [Organ Wojewódzkich Związków Cechów Piekarskich], and concluded that the municipal bakery marked a transition from the cottage industry to the serious baking industry, providing the capital with healthy and cheap bread. The article concluded with the following sentence:

The city's mechanical bakery will be a powerful step forward and a transition from the previous bakery cottage industry to a serious baking industry, providing the capital with healthy and cheap bread ('Prawda...', 1929).

*Przedświt* and *Robotnik* also praised the bakery. On March 3, *Przedświt* published two articles with pictures of the bakery equipment, emphasizing reduced administrative costs by half. On March 7, *Robotnik* praised the bakery's sanitary facilities, illustrating the article with photographs, and stated that the municipal bakery "became the regulator of prices and demand in the capital" and "bread prices will fall." ('Miejska piekarnia mecha-

niczna', 1929a; 'Urządzenia...', 1929; 'Sto tysięcy...', 1929). Meanwhile, the construction of large-scale bakeries began in Otwock, Poznań, Nowogród, Hajduki Wielkie, Cracow, and other cities (Sadłowski, 1928; 'Budowa nowych...', 1929; 'Budowa piekarń mechanicznych...', 1929).

Not only municipalities, but also consumer associations, with the financial support of the government, were the main stakeholders in the establishment of mechanized bakeries, and on November 18, 1928, a national conference of consumer associations was held. Based on the conference report, there were 120 consumer cooperative-operated bakeries in the country, with a production of 25,000 tons (compared to 22,000 tons in 1926). Moreover, there were plans to expand production to 150,000 tons by building 45 more bakeries ('Piekarstwo polskie...', 1928). Despite the excitement surrounding the establishment of Warsaw's Municipal bakery, it soon became clear that not all stakeholders were convinced of its benefits. Private bakers, who felt threatened by introducing a large, publicly funded competitor, quickly raised objections, leading to a series of disputes that would shape the bakery's future.

### 3. Opposition to the Mechanized bakery

The Ministry of Finance approved the budget in August 1926 and began to study the location and financial means, facing opposition from private bakers. On August 16, 1926, the Executive Committee of the First Central Federation of Bread-Meisters [Komitet Wykonawczy I Zjazdu Mistrzów Piekarskich Rzeczypospolitej Polskiej] opposed in a petition. Private bakers argued against a municipal bakery, claiming it could not (1) adequately supply the market with bread, (2) maintain hygienic conditions, and (3) control bread prices. In response, the Executive Committee countered that (1) Warsaw already produced enough bread even to supply the suburbs, citing the lack of bread shortages during times of turmoil, such as the 1924 strike and the May 1926 coup. They also stated that (2) private bakers faced financial constraints due to war damage and postwar state interventionism, making modernization difficult in Warsaw, where gas, electricity, and water supply were poorly developed. They also questioned (3) how much a large municipal bakery could influence the prices of flour, fuel, and other ingredients, as these prices depended on raw materials, production expenses, and labor costs. The article criticized the government's policy of favoring public bakeries, arguing that it could lead to unequal conditions by providing more favorable financing treatment to pub-

lic enterprises than to private enterprises ('Budowa wielkiej...', 1926ab; 'W sprawie...', 1926ab).

Karol Wendt<sup>5</sup> of the Warsaw Guild of Bakers [Cech Piekarzy w Warszawie], at a December 1926 convention, stated: "In my trip abroad, I met bakeries with 40 to 100 ovens, and next to them hundreds or even thousands of small bakeries, but I never noticed the difference in prices. This is justified by the fact that the administrative costs of these large bakeries are very significant, and thus expressed in large figures." He argued that large municipal bakeries were unnecessary and would lead to unemployment (Wendt, 1926).

It was also stated that there are no examples of large municipal bakeries operating in other countries, except in Paris, and that the municipal bakery in Paris is small compared to their demand and was instead set up to "promote the baking machine manufacturer (Lidon)". Another convention attendant claimed that 60 bakeries producing 800 kg of bread would not sustain themselves if a bakery with a daily production capacity of 50 tons were built in Warsaw (Jarosz, 1926; 'III Zjazd...', 1927). As public bakeries opened in various locations in Poland, critics questioned their profitability, citing operational troubles. For instance, a mechanized bakery (Merkury) in Lviv failed commercially. The municipal bakery in Cracow, which had been active before WWI, posted a loss of 22,123.04 zlotys in its first year, leading to poor sales and the introduction of free home delivery to boost sales. By February 1931, this Cracow bakery was considered for lease to the private sector due to poor business conditions.<sup>6</sup>

*Gazeta Przemysłowo-Rzemieślnicza*, the organ of the Federation of Christian Handicraftsmen [Związek Rzemieślników Chrześcijan w Rzeczypospolitej Polskiej] on January 22, 1928, argued that private bakeries should have been financed instead of building municipal ones, referring to the

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<sup>5</sup> Karol Wendt (1881–1934) was the manager of a mechanized bakery in Warsaw, a supporter of the middle class movement, and a protestant. He became president of the Central Congress of Polish Handicraftsmen [Rada Naczelna Rzemiosła Polskiego] in 1930, and in February 1934 a senator of the BBWR [Bezpartyjny Blok Wspierania Rządu]. 'Niepowetowana...', 1934; 'Wspomnienie pośmiertne', 1935). About the history of the Warsaw Guild of Bakers, see Kochanowski (2015).

<sup>6</sup> In Cracow, the largest private bakery, Ziarno, was established in 1919 (Zabłocie 25). This private bakery also faced financial difficulties, with unpaid taxes from 1925 to 1928 and again in 1932–1933. In 1938, the bakery employed 250 physical workers (*Rocznik Polskiego Przemysłu i Handlu...*, 1938: no. 6318; ANK, UWK: 29/206/0/5/422 (212b); Matuska, 2015). For more detailed information on the bakers in Cracow, please refer to Ferber (1933/1934).

example of Cracow. On June 3, 1928, The Fourth Convention of the Central Federation of Bread-Meisters [Czwarty Ogólnopolski Zjazd Piekarzy Rzeczypospolitej Polskiej] urged halting the municipalization of the baking industry (Jarosz, 1928: 4–5; 'Wielkie piekarnie...', 1928; AAN, PRM, IX 328: 2).

Artur Zabęski (1928), in a report published in *Mistrz Piekarski i Cukierniczy w Polsce* on July 1, 1928, criticized the publicization of the baking industry, relying on domestic and foreign economic expertise. He summarized the view presented in Robert P. Porter's book, *The Dangers of Municipal Ownership* (Porter, 1907; 1911), arguing that municipalities should regulate rather than produce.<sup>7</sup> Zabęski asserted that "competition is life" and warned against the excesses of a publicly owned economy, citing failed public bakeries in Belgium and Vienna. He argued that municipal intervention in the food supply should be temporary and welfare.

In its February 3, 1929 issue, just before the operation of the Warsaw Municipal Bakery, *Mistrz Piekarski i Cukierniczy w Polsce* in Poznań stated: "Will the City mechanical bakery be able to replace the production of the closed private bakeries? I think not, because it is already known that the calculation of bread in the City bakery will be expensive". They concluded that "state interventionism should know its limits" ('Piekarnictwo...', 1929).

As the bakery's management crisis deepened, political camps aligned on both sides of the debate. While private bakers rallied against municipal intervention, socialist groups saw an opportunity to push back against what they perceived as reactionary resistance to modernization.

#### 4. Socialist Response to Opposition

Active campaigns by various baker guilds against the forced mechanization of baking and banning underground bakeries provoked a backlash from the socialist side. This confrontation intensified around the time the Warsaw municipal bakery began operating. In the January 8, 1929 issue of *Przedświt*, an interview with Waclaw Iwanowski,<sup>8</sup> a professor at the Warsaw University of Technology [Politechnika Warszawska] and a

<sup>7</sup> Robert P. Porter (1852–1917) was an American economist of British origin who wrote many books on economy and industry, including one on the Japanese economy.

<sup>8</sup> Waclaw Iwanowski (Вацлаў Іваноўскі, 1880–1943), A Belarussian microbiologist specializing in fermentation, activist and publicist of Belarussian national movement. See his biography in Polish: Turonek (1992: 89–91).

strong supporter of municipal mechanized bakeries (who at that time refrained from political activities), marked the start of a full-scale counter-attack by socialists. Iwanowski, later a member of the Central Committee for the Inspection of Flour and Bread Products [Centralna Komisja do Badania Mąki i Pieczywa], examined the products of 400 out of 600 bakeries in Warsaw between 1928 and 1929 (AAN, PRM, IX 349: 21) and found that 10–12% of bread sold was unfit for consumption. He blamed bakers' negligence: "All sorts of blooms, strings and cockroaches would disappear from the inside of the bread if Warsaw bakers put a little more care into the state of their workshops." He noted that many bakeries in Warsaw resembled the "pre-historic era" ('Co dziesiąty...', 1929).

In response, *Piekarz Polski* published an article by K. Wendt (1929) on March 9, 1929, titled 'Refuting Professor Iwanowski.' Wendt argued that if there were too many bakeries in Warsaw, competition should benefit consumers through price and quality. He defended the use of stale flour due to the lack of high-quality flour and claimed that foreign substances in bread were sporadic occurrences. He also questioned the efficiency of mechanization, as Iwanowski claimed.

The following day, *Mistrz Piekarski i Cukierniczy w Polsce* responded with an article titled 'Modernization of the Baking Industry as Reflected in the Socialist Press,' acknowledging the presence of dishonest bakers but arguing that such incidents should not be exploited for propaganda ('Modernizacja...', 1929). In its January 26, 1929 issue, *Robotnik* stressed the need for "radical sanitation and the ruthless liquidation of bakeries in inadequate and anti-sanitary conditions." It highlighted the importance of mechanized baking in major cities like Warsaw, Łódź, Cracow, Lviv and Poznań to meet demand fully ('Mechanizacja...', 1929).

However, not all socialists and labor movement members favored eliminating traditional small bakers. Large-scale closure of substandard bakeries could cause bread shortages and unemployment. In 1928, the General Executive Board of the Union of Foodstuff Industry Workers in Poland warned that a hasty closure could lead to unemployment problems. They advocated for careful action, taking local conditions into account (Tschirschnitz, 1928).

J. Lichtensztein (1939: 27) later wrote in his 1939 book: "We consider it our duty to stigmatize the conduct of the owners of the larger mechanized bakeries, who are ruining skilled bakery workers en masse by hiring a cheaper unqualified element in their place." The operational difficulties the Warsaw Municipal Bakery faced during its early years foreshadowed

more significant problems as the global economic landscape shifted. The onset of the Great Depression exacerbated these issues, particularly in terms of price control and management efficiency, as explored in the next chapter.

## BREAD PRICING AND MANAGEMENT ISSUES DURING THE GREAT DEPRESSION

### 1. Policy Shifts Due to Falling Grain Prices

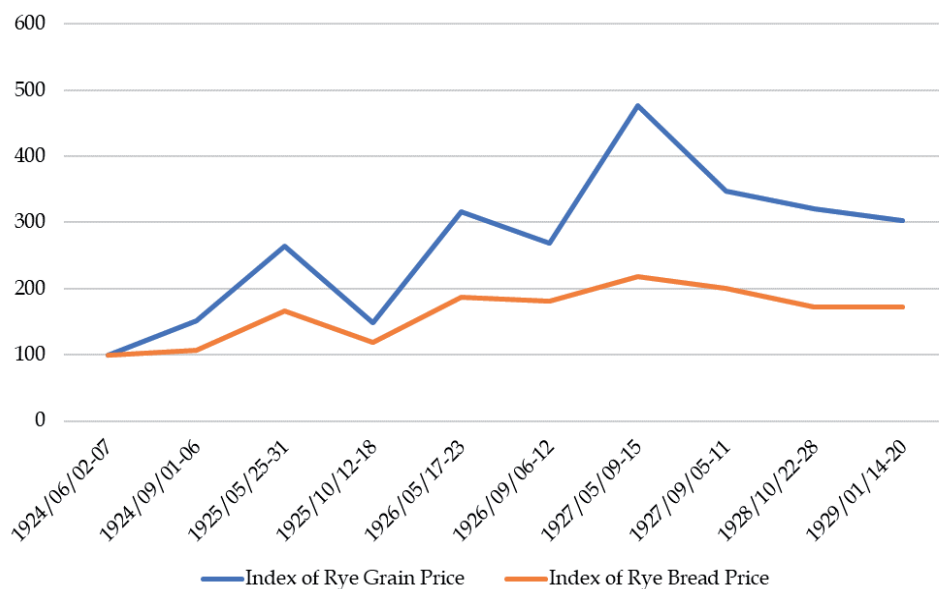
When the Warsaw Municipal Bakery started operating in the 1927/1928 harvest year, grain and flour prices decreased, following a global trend leading to the Great Depression (Macyra, 2004: 221–222). The following graphs show the price fluctuations of bread and rye grain in Warsaw before and after the opening of the mechanized bakery and how these sharp price fluctuations had a very negative impact on the operations of mechanized bakeries. Both rye grain and rye bread prices are indexed for the Warsaw market, with June 1924 set as the baseline (index 100). This indicates seasonal and yearly trends in the pricing of rye and bread (see Figure 1).

The decrease in grain prices caused a shift in government policy toward maintaining grain prices to protect farmers. From 1929 onward, the policy shifted to supporting grain prices by curbing imports, promoting exports, and expanding consumption through deregulating milling yields (Budziszewski, 1931; 1932).

As grain product prices entered a downward phase, the policy system to reduce prices lost significance. In the case of usury control, the still effective Wartime Usury Eradication Law of July 2, 1920, began to be questioned (Dz.U. 1920, No 67, item 449). In response, in April 1930, the Warsaw Chamber of Industry and Commerce [Izba Przemysłowo-Handlowa w Warszawie] requested that the Ministry of Industry and Commerce review the law. This request was granted, and the provisions regarding penalties of the Wartime Usury Eradication Law expired on September 1, 1932, by order of the President on July 11, 1932 (Dz.U. 1932, No. 60, item 571).

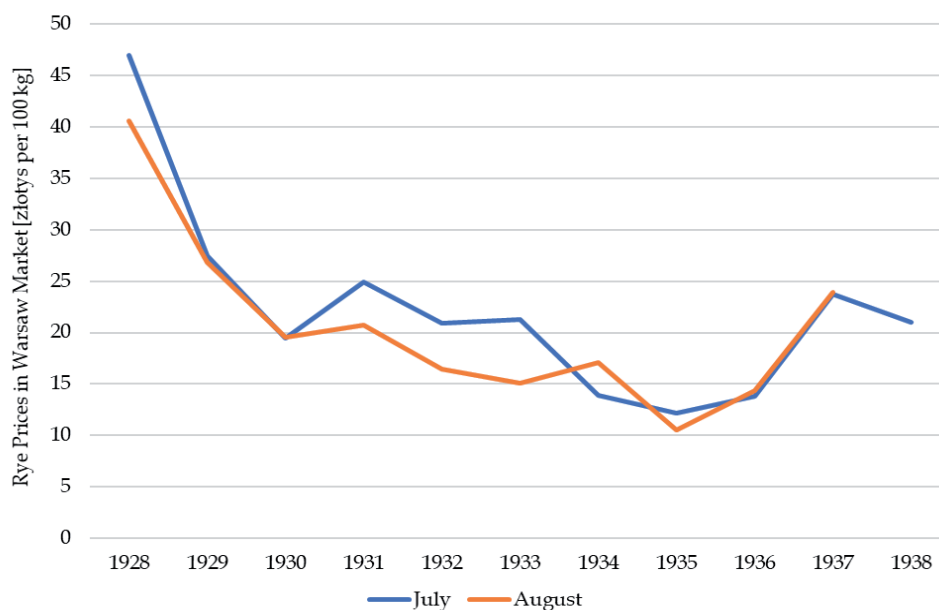


Figure 1: Price Indices of Rye Grain and Rye Bread from 1924 to 1929



Source: Karczewski (1929).

Figure 2: Rye Prices in Warsaw Market for July and August 1928–1938 (zlotys per 100 kg)



Source: Rakowski (1938). While *Statystyka Cen* is available online, the 1935 issue is missing, making it unusable. However, the available data generally shows the same trend Szturm de Sztrem (1928–1939).

## 2. Crisis in Municipal Bakery Operations

The decrease in bread prices severely affected the municipal bakery's management. Technical problems hindered smooth production, and the bakery could not meet the citizens' taste preferences. Only a small portion of the production capacity was utilized, and the French bread machine, designed for wheat bread, required costly modifications for rye flour ('Sprawozdania...', 1936: 10, 16). In July 1929, a special committee, including Prof. Iwanowski, found numerous issues: defective windows, malfunctioning conveyor equipment, unusable vats, and improperly functioning furnaces (S. W., 1930ab).

The General Executive Board of the Union of Foodstuff Industry Workers in Poland shared their opinions on the bakery in *Przedświt* in September and October 1929. They noted that the bread from the Municipal Bakery lacked proper appearance and criticized Lidon's production line as unsuitable for Polish baking. Another article reprinted a request from the Union dated January 19, 1928, opposing Lidon's equipment, arguing it was meant for prisons where consumers had no choice of bread ('Opinja...', 1929; 'Miejska Piekarnia Mechaniczna w świetle...', 1929ab). The business's serious state became evident less than a year after opening. By November 1929, the City Council of Warsaw reported a loss of 31 grosze per kilogram of bread produced ('Magistracki...', 1929). During a November 1929 meeting, the mayor assured the Warsaw Government Commissioner [Komisarz Rządu na m. st. Warszawę] that bread quality would improve and production would expand with better facilities. However, in January 1930, right-wing and Jewish members of the City Council Finance and Budget Committee [Komisja Finansowo-Budżetowa] suggested closing the factory due to mismanagement. In response, the City Council began discussing the inefficiency of the municipal bakery and supply facilities ('Konferencja...', 1929; 'Co będzie z piekarnią...', 1930; 'Walka...', 1930).

The PPS CKW faction had initially praised the municipal bakery's management. However, on January 16, 1930, their newspaper stated, "The municipal enterprises failed in fulfilling their task, and the bakery and brick factory have become examples of reprehensible ineptitude in the economy" (Raabe, 1930). The PPS Old Revolutionary faction accused private bakers, especially Jewish ones, of "disregarding hygiene and integrity" and cutting corners ('Sprawa...', 1930). They argued that 700 of Warsaw's 800 bakeries should be closed for their "barbaric, filthy, and primitive bak-

ing system. "They supported the Municipal Bakery to curb speculation and hoped production would increase to 40,000 kg of bread daily, making it self-sufficient ('Dlaczego...' 1930). In response to bakers' criticisms of the municipal bakery's low-quality products, *Przedświt* defended the bakery, claiming Warsaw's bakers were running a negative campaign for personal gain. Deputy Mayor Tadeusz Szpotański and Mayor Zygmunt Słomiński supported maintaining the municipal economy. After intense debate, it was decided that the City would directly manage the bakery ('Reorganizacja...', 1929; 'Po uchwałach...', 1930).

Meanwhile, bakers published scathing articles. For example, Antoni Sadłowski, a Katowice Guild of Bakers leader, criticized the bakery's management in 'Irredeemable Paranoids and Their False Doctrine' (February 15 and 22, 1930). He refuted claims that bakers were creating a bread shortage and argued that communal bakeries, like Warsaw's, had failed, wasting millions in taxes (Sadłowski, 1930ab). Sadłowski wrote:

Didn't your erroneous doctrine of building communal bakeries, such as in Warsaw, go bankrupt? You wanted to conquer small bakeries with your greed to speed up the construction of "large" mechanical bakeries, but your policy went bankrupt, and millions were squandered, which the economic spheres paid to the state in the form of taxes (Sadłowski, 1930a).

The Municipal Bakery had high-profit potential due to the depreciation of the initial investment, but actual production reached only 20–25 tons daily, still below the planned 50 tons. On January 25, 1930, the City Council Finance and Budget Committee rejected a proposal to dismantle the bakery by July 1, 1930, but approved Adam Czerniaków's proposal to dismantle it by year's end.<sup>9</sup> In early February, Mayor Słomiński defended the bakery, saying, "Only the innocent should cast a stone," but acknowledged criticism from Jews and both political wings. The budget for the municipal bakery was temporarily approved until July 1, when a further vote on its existence would occur ('Likwidacja piekarni...', 1930: 4; 'Piekarnia miejska...', 1930: 4; 'Likwidacja kominarzy...', 1930; 'Nowy...', 1930; J. N., 1930).

To address the issues, the mayor replaced the plant manager and aimed to increase production to 40 tons, which was profitable. The city of War-

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<sup>9</sup> Adam Czerniaków (1880–1942) served on the Warsaw City Council between 1927–1934. In 1930 he was elected to the Polish Senate. He was also the head of the Warsaw Ghetto Jewish Council (Judenrat) during WWII.

saw reached a settlement with Lidon on March 20, 1930, in which the company agreed to carry out refurbishments, reduce the warranty period, and receive the return of its guarantee deposit within a shortened eight-month timeframe ('W obliczu...', 1930; S. W., 1930ab).

Under the new management, the bakery improved by standardizing bread products. On May 9, 1930, *Gazeta Warszawska* reported that the bakery had shifted from a deficit of 13 grosze per kilogram of bread to a surplus of 2 grosze per kilogram ('Sprawy...', 1930). Before the July 1 decision, the City of Warsaw published an article in *Kronika Warszawy* justifying the bakery's continuation, blaming private capital's lack of initiative after WWI for the delay in modernizing the baking industry and asserting the necessity of municipal intervention (J. N., 1930).

On July 7, 1930, Municipal Bakery workers went on strike, demanding higher wages and benefits. The strike's resolution was delayed due to political agendas. The City planned to turn the bakery into a joint venture with the Austrian capital. However, nationalists and bakers opposed the sale, demanding privatization as a Polish company with City involvement ('Zatarg w miejskiej...', 1930; 'Polityka...', 1930; 'Zatarg w Piekarni...', 1930).

Bread prices in Warsaw were the highest in Poland, and even the pro-government *Gazeta Polska* criticized the bakery on October 8, 1930, highlighting the irony of high prices despite the City's campaign for affordable bread ('Drożyzna...', 1930). Jewish *Nasz Przegląd* also noted the bakery's predicted bankruptcy and escalating costs, with technical problems and conflicts with Lidon adding to a deficit exceeding 8 million zlotys (S. W., 1930a).

In November 1930, the Warsaw City Government approved the bakery's accounts for the fiscal year 1929/1930, revealing a deficit of 210,000 zlotys ('Czy kasa...', 1930). At the January 19, 1931 City Council meeting, the mayor promised to strengthen audits and shifted blame for the bakery's construction to the previous administration ('P. Prezydent...', 1931; 'Dziedziczne...', 1931).

Therefore, Jerzy Klein, director of the municipal farm and forest administration [Administracja Gospodarstwa Rolnego i Leśnego – AGRIL] and the bakery criticized private bakeries. He claimed that their owners mixed dough with their feet. In this way, he wanted to defend himself from his mismanagement at Warsaw Municipal Bakery ('Warszawa – dziś...', 1927; 'Komisja Rewizyjna...', 1936). This provoked outrage among bakery owners and workers. K. Wendt of the Warsaw Guild of

Bakers countered, stating, “10% of Warsaw bakeries were already fully mechanized and 40% were conducting partial mechanization,” accusing Klein of undermining public confidence. Wendt revealed Klein had proposed a bread price increase with the Warsaw Guild of Bakers (*‘Odczyty...’*, 1931; *“Opatrznościowy...”*, 1931; *‘Robotnicy protestują...’*, 1931).

On February 6, 1931, the Finance and Budget Committee revealed that the bakery’s deficit had grown to 372,692 zlotys, and its abolition was passed. The mayor intervened, creating a ‘Committee of 13’ [Komisja Trzynastu] to review its management (*‘Opatrznościowy...’*, 1931; *‘Odparty...’*, 1931). The City Government adopted a policy to increase production and improve management (*‘Likwidacja etatyzmu...’*, 1931; *‘Doktrynerstwo...’*, 1931).

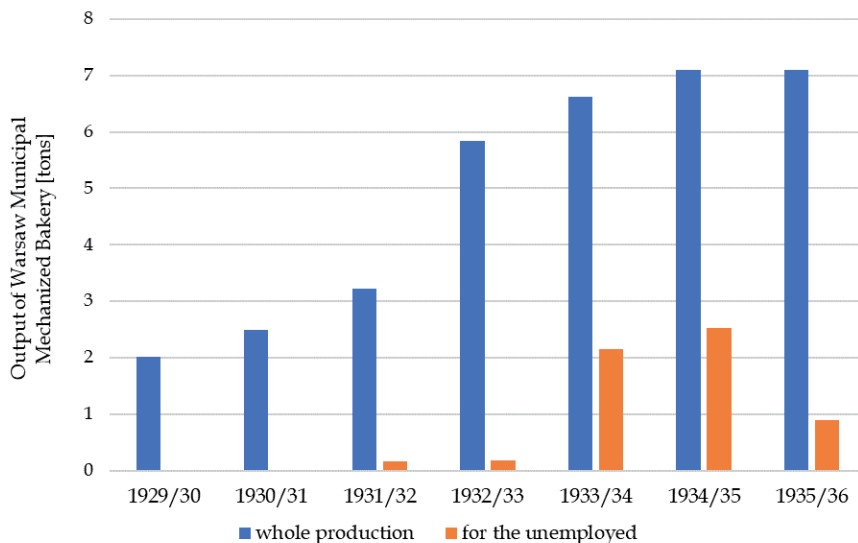
### 3. Failed Attempts to Scale Operations

The plan to deal with the Municipal Bakery’s deficits did not proceed smoothly. The economic crisis, not yet recognized as the Great Depression, made it challenging to predict Poland’s ongoing grain prices and social income decline. The decline in grain prices offset the price reduction effects of mechanized baking, worsening the bakery’s profitability. Additionally, the recession made it increasingly challenging to reimburse the bakery for construction costs.

The idea of providing Municipal Bakery products as in-kind assistance to the unemployed was developed based on the mid-August 1931 report of the Emergency Unemployment Committee [Nadzwyczajna Komisja do spraw bezrobocia]. This report proposed processing grains from farmers who could not pay taxes and providing in-kind benefits to the unemployed (*‘Rządowy...’*, 1931; *‘Szczegóły...’*, 1931).

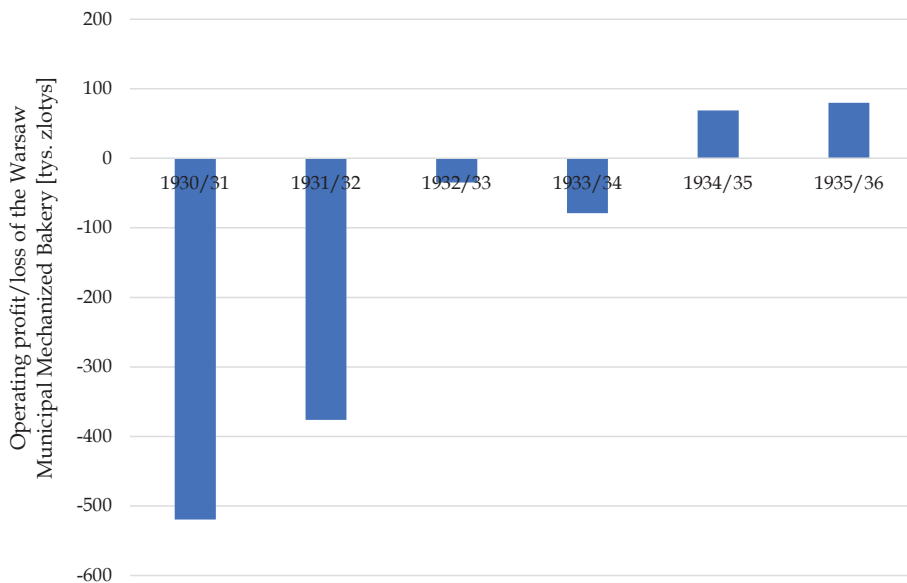
However, in-kind unemployment benefits risked discontent among the unemployed and potential public safety issues. Therefore, Warsaw aimed to improve sales by supplying all City institutions, hospitals, protective homes, kitchens, charitable societies, and schools with bread (*‘Pomyślny...’*, 1932). To improve quality, the bakery brought in engineers from Vienna, installed new machines, expanded its product range (3 to 51 varieties), and extended its delivery area (Biegeleisen, 1935: 179–181).

Figure 3: Output of the Warsaw Municipal Mechanized Bakery



Source: 'Sprawozdania...' (1936: 16–17). The bakery production period in 1935/1936 is only 11 months. The blue label shows the production volume (in kilograms), and the orange indicates the portion of production commissioned for the Committee for the Relief of the Unemployed [Komitet Pomocy Bezrobotnym].

Figure 4: Operating profit/loss of the Warsaw Municipal Mechanized Bakery (1930/1931–1935/1936)



Sources: 'Sprawozdania...' (1936: 13, 16–17). The amount for 1935/1936 is the estimated value.



As shown in figure 4, the Municipal Bakery made losses until the fiscal year 1933/1934. In *Piekarz Polski* on October 1, 1932, Zabęski condemned the municipal economy, citing the bankruptcy of a large-scale bakery in Lviv: "City support is like the plague; by just getting close, it kills." He called for the bakery's closure. Despite cost reductions, losses exceeded 500,000 zlotys, and the subsidy per loaf (2 kg) was estimated at 24 grosze (Zabęski, 1932; 'Kosztowny...', 1933). *Piekarz Polski*, on July 23, 1933, criticized the bread quality, stating, "No one wants to eat bread from the City Government," and questioned why deliveries to public entities were not opened to private suppliers ('Czy piekarnia...', 1933).

The bakery expanded its sales channels with truck deliveries to smaller cities outside Warsaw, such as Otwock, Jabłonna, Pruszków and Nadarzyn, causing losses to local bakers ('Nieuczciwa...', 1932). Production increased from 2,020 tons in 1929/1930 to 6,613 tons in 1933/1934. However, a significant portion of the problem was due to the production of relief bread for the unemployed ('Sprawozdania...', 1936: 16–17). Even at this volume, it was difficult to eliminate the deficit ('Straty...', 1932; 'Deficyt...', 1933; Wróblewski, 1935). Furthermore, conflicts between Polish workers and foreign technicians from Czechoslovakia and Vienna increased due to dissatisfaction with the high salaries of foreign technicians, leading to sabotage and court cases ('Głosy...', 1933). As the global economic crisis deepened, the management struggles of the Warsaw Municipal bakery intensified. The following chapter will detail the failed attempts at reform and the broader implications for public management.

## UNSUCCESSFUL REFORM EFFORTS

In the 1934/1935 harvest year, domestic grain prices rose in response to the global market. As noted above, the Warsaw Municipal Bakery increased production to 6,613 tons in 1933/1934, but utilization rates remained low. The 1934 City Council budget included 532,612 zlotys in aid for the bakery, and a November 28, 1933 resolution established a special committee to monitor the bakery's activities. This committee's February 1934 report noted that the company was not incurring operating losses

but was burdened by interest on the initial investment. Further production expansion was recommended to achieve profitability, and a consortium with a majority shareholding was proposed ('Co będzie z miejską...', 1934; Zabęski, 1934).

In June 1934, an audit revealed discrepancies in the bakery's inventory. It was found that fine flour meant for the unemployed was mixed with inferior flour, and the surplus was sold to cover losses. This scandal led to replacing the factory director with Konrad Januszkiewicz in June 1934. The Labor Fund restricted baking for the unemployed at the Municipal Bakery, outsourcing some production to private contractors ('Kulisy...', 1934).

In October 1934, the new management held a press conference and published publicity materials in *Codzienna Gazeta Handlowa*. They highlighted efforts to purchase raw materials advantageously, improve bread quality through a laboratory, and reduce bread price increases ('Z działalności...', 1934). However, *Piekarz Polski* criticized the bakery's management, arguing that all bakers tried to purchase inexpensively and that the public should have access to the laboratory funded by public money. The magazine also criticized the mayor for justifying increased public spending on the municipal bakery. In its November 1934 issue, it reinforced this point with a warning: "When you buy city bakery bread and pay cash, you're only covering part of the cost. The rest falls to our children and grandchildren" (Lange, 1934).

By the end of the fiscal year 1933, the City of Warsaw had spent 12 million zlotys on the bakery, incurring over 1.26 million zlotys in losses from 1929/1930 to 1933/1934. On January 29, 1935, Mayor Starzyński reported to the Provisional City Council [Tymczasowa Rada Miejska] that the bakery was expected to have an operating profit of about 60,000 zlotys, insufficient to cover depreciation and interest (Wieczorówna, 1935; Banaszkiewicz, 1935; Z. Ś., 1935).

In Warsaw, the cheapest bread came from cottage industries, followed by Jewish bakeries. The Municipal Bakery was criticized for being maintained by supplying the City hospital and charitable institutions (Białek, 1935).

## 1936 AUDIT REPORT OF THE WARSAW MUNICIPAL BAKERY

On March 4, 1935, the Warsaw Municipal Audit Committee tasked three members with conducting an audit of the Municipal Bakery, which began in March 1936. The report was submitted on April 20, 1936, and assessed the period of deficits from 1929 to 1932, stating:

The operation of the Municipal Bakery for the period of 1929–1932 should be considered an experimentation in adapting production to the needs of the Warsaw market. [...] The reasons for the economic failure of the bakery in the first place lie in the incredibly high cost of constructing the bakery building and installing equipment. [...] It is clear that even if the Municipal Bakery had produced the maximum of its output from the first year of its existence, it would not have been able to cover its operating expenses plus percentages in the above amount. It can be asserted that calculations were not carried out to calculate the bakery's construction costs amount, and commercial profitability was not calculated or misleadingly calculated (*Sprawozdania...*, 1936: 16, 23–24).

The report criticized past management for lacking commercial expertise, leading to significant losses and a decline in market share. It was also optimistic about the future due to the new management team:

As for the question of whether the running of the bakery is professional, I declare that yes, because the economy of the bakery has shown significant improvement for several years, as reflected in the recent balance sheets of the institution. I have carefully reviewed the bakery's calculations and found they stand up to the commercial challenge (*Sprawozdania...*, 1936: 25–26).

## POST-1936 CONTEXT AND NEW ECONOMIC POLICIES

As mentioned in the introduction, the period after 1936 saw shifts in economic policies, including the introduction of Keynesian economics and Poland's interventionist strategies (Skrzywan, 1937; Rybarski, 1939: 71). In particular, the military factor cannot be ignored; a study published on the Central Industrial District [COP] stated that it was created to meet Poland's economic and military needs and served as a modern industrial base for the army, designed to be self-sufficient in energy, resources, technology, and supplies, ensuring resilience in case access to external sources is cut off during war (Radocki, 1939: 20).

Because of this change in circumstances, a different framework is required to analyze these developments, and further discussion will overview the increasing interventionist policy as a background context.

In September 1936, a currency crisis triggered a significant price rise, particularly for agricultural commodities. By late September, grain prices exceeded the previous year's levels by 5.50–6 zlotys and continued to rise ('Pomyślność...', 1936). Rye prices increased from 15.255 zlotys in mid-September to 18.13 zlotys by early October. This rise in agricultural prices was expected to increase the demand for agricultural machinery and commodities, raising concerns about further price hikes, particularly for necessities like foodstuffs ('Krajowe rynki...', 1936ab).

Flour prices surged in September, with standard rye bread flour rising from 14.4–15.7 zlotys per 100 kg to 19.5 zlotys in October. Consequently, bread prices rose from 30 grosze in early September to 32 grosze in early October (Sokołowski, 1936). In response, the Association of Bakery Owners of the Republic of Poland [Stowarzyszenie Właścicieli Piekarni Rzeczypospolitej Polskiej], alongside the Warsaw Guild of Bakers, launched a campaign for a proportional bread price increase to compensate for the grain price rise. However, in mid-October, the Warsaw Government Commissioner instructed bakers to offset the cost increases by reducing other expenses rather than raising raw material prices ('Piekarze...', 1936; 'Przebieg...', 1936).

Rye prices temporarily declined in late October and early November but stabilized at higher levels, reaching 19.255 zlotys in early December ('Krajowe rynki...', 1936cde). The Spanish Civil War and European armament expansions further drove up international food prices, increasing rye exports and domestic prices.

In 1937, rye prices continued to rise from February to April, raising fears of further sharp price increases. Bread prices in Warsaw reached 38 grosze per kilogram on February 12. In April 1937, the government decided to strengthen price monitoring of necessities, requesting counties to investigate rationing in their areas ('Od dziś...', 1937; 'Rząd...', 1937). By April 2, 1937, rye prices had risen 61% and wheat prices 36% compared to September 1936. A cabinet meeting on April 7 established a policy to combat unjustified price increases to protect the investment plan, employment, and production development. A Price Monitoring Committee [Komisja Kontroli Cen] was formed to coordinate this policy with various ministries, holding its first meeting on April 9 (AAN, PPRM).

Following the April 7 cabinet meeting, the Warsaw Government Commissioner issued an order on April 8 to introduce an official price system for daily commodities, including grain flour, bread products, and meat, tightening bread prices and quality control. In December 1937, a policy was decided to unify the rationing authorities under the Ministry of Agriculture and Agrarian Reform to simplify the control system. Effective March 1, 1938, this law granted the Minister broad authority over agricultural product supply, inventory checks, and milling rate limits. The 'Law of August 5, 1938, on Securing the Supply of Daily Necessities' allowed the Minister to delegate price-setting rights to local officials based on opinions from professional groups (Dz.U. 1938, No. 13, item 89; Dz.U. 1938, No. 60, item 462).

In 1938, the Warsaw Municipal Bakery doubled its production to the level of 1930–1934 and expanded its sales channels outside Warsaw.<sup>10</sup> Maksymilian Lange of the Association of Christian Bread-Meisters for Warsaw City Capital and Voivodship [Stowarzyszenie Mistrzów Piekarskich Chrześcijan m. st. Warszawy i Województwa Warszawskiego] criticized the bakery, stating, "The production capacity of the City's bakery is known, and if its product were of first-rate quality, it would not need to look for costly markets outside the City limits" (Lange, 1938). In June 1939, the magazine of this Association wrote: "It is also well known that bread is sold below production cost and heavily subsidized from the central city coffers." Despite the looming war, the city had to support the bakery with nearly half a million zlotys ('Piekarnia i Lombard...', 1939).

Public bakeries in various regions also struggled. At the National Bakery Convention [Ogólnopolski Zjazd Piekarstwa] in Warsaw on July 3, 1939, Wł. Witkowski (full name is unspecified), secretary of the Kielce branch, stated:

It would seem that the wave of state interventionism would not reach the bakery craft, but it happened otherwise. There was a massive rush to set up large bakery factories by local governments, whose goal and task was to produce baked goods at lower prices than in the bakeries of independent craftsmen. It turned out otherwise. Large factories set up by local governments with public money collected in taxes from citizens were wasted unproductively (Witkowski, 1939: 8).

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<sup>10</sup> In 1936, City Bakery had a total staff of 200, which included 148 permanent employees, 32 temporary employees, and 20 white-collar employees ('Sprawozdania...', 1936: 25). In 1938, according to *Rocznik Polskiego Przemysłu i Handlu*, the bakery still employed 200 people, with 175 permanent employees and 25 white-collar employees. (*Rocznik Polskiego Przemysłu i Handlu...*, 1938: No. 8399).

## CONCLUSION

This study has examined the establishment and operation of the Warsaw Municipal Mechanized Bakery from 1928 to 1936, offering a close look at the challenges faced by municipal-led industrial projects in interwar Poland. While the bakery was envisioned as a means to modernize bread production, improve public health, and stabilize prices, it encountered significant obstacles, including technical difficulties, mismanagement, and resistance from the private sector. These challenges resulted in financial losses and a failure to meet the city's needs despite the bakery's ambitions.

The most important insights drawn from this work, supported by evidence presented in the earlier chapters, are as follows:

1. **Municipal Intervention Limitations:** The bakery's history exemplifies the limitations of municipal intervention in the economy. Although municipal involvement was meant to address bread shortages and improve quality, the bakery struggled due to ineffective management and a failure to adapt to market demands, as demonstrated in Chapter 2, which detailed the bakery's ongoing operational issues. As discussed in Chapter 2, the lofty ideals of modernizing Warsaw's bread supply swiftly collided with the realities of operational challenges.

2. **Financial and Technical Challenges:** The chronic financial losses of the bakery, compounded by technical problems such as inappropriate equipment for local bread preferences, showed how inadequate planning and mismanagement could derail even well-intentioned public enterprises. We examined in Chapter 3 how these financial difficulties, compounded by the Great Depression, deepened the bakery's crisis.

3. **Private Sector Opposition:** Chapter 3 also explains how private bakers strongly oppose municipal bakeries. They argued that it unfairly threatened their livelihoods without providing real benefits to the public. This opposition and their criticisms of the bakery's inefficiency highlighted the tensions between the public and private sectors in the interwar economy. The competition from private businesses, resistant to the interventionist policies, undermined public support for the bakery.

4. **Practical Challenges:** The bakery's ambitious goals – rooted in modernization and public welfare – were consistently undermined. The gap between these ideals and the harsh realities of financial mismanagement and production failures is a recurring theme, especially evident in the



analysis of the bakery's performance in Chapter 4. In Chapter 5, the political backdrop of these operational difficulties becomes even more evident as the socialist factions championed the municipal bakery as part of their broader ideological goals.

5. Microhistorical Significance: As seen throughout the paper, particularly in the discussion of broader municipal policies in Chapter 1, this study sheds light on how specific public projects can reveal valuable insights into municipal interventionism and its impact on local economies. The Warsaw Municipal Mechanized Bakery serves as a prime example of a microhistorical case study. While municipal intervention aimed to provide affordable food and stabilize prices, as explored throughout the paper, the reality was far more complex. The combination of financial mismanagement, technical inefficiencies, and political opposition resulted in an enterprise that was unable to meet its original goals. However, other relevant instances of municipal interventionism should also be considered. While such cases cannot be included within the limited scope of this paper, further awareness of municipal interventionism could be gained by investigating interventions in other industries, such as the meat trade (referenced in the introduction). Extending research to examine developments after 1936 will be an essential next step following this publication.

**Jin Matsuka** (born 1966), Ph.D. in Humanities (Institute of History at Adam Mickiewicz University in Poznań), economist, graduate, and later research assistant at Keio University in Tokyo, scholarship recipient of the Polish Ministry of National Education (1994–1996), associate professor at Otaru University of Commerce (since 1996), scholarship recipient of the Institute of History of the Polish Academy of Sciences (1999–2000, 2014–2015). Since 2011, he has been a professor at Otaru University of Commerce. Author of books such as *Tousei Keizai to Shokuryou-mondai. Daiichiji taisenki ni okeru Poznan-shi Shokuryou Seisaku*, Yokohama 2001.

## REFERENCES

### Archival materials

AAN, PRM, IX 54 – Archiwum Akt Nowych, Prezydium Rady Ministrów w Warszawie, Część IX. Komitet Ekonomiczny Rady Ministrów, 1920–1939. sygn. 2/8/0, IX 54: Referaty w sprawie podaży tańszego chleba w Warszawie, p. 12: (List Tadeusza Lewickiego do Ministerstwa Spraw Wewnętrznych z dnia 25 kwietnia 1927 r.).

- AAN, PRM, IX 328 – AAN, PRM, Część IX. sygn. 2/8/0, IX 328: Centralne Zrzeszenie Związków Wojewódzkich Cechów Piekarskich R.P., p. 2: Rezolucja IV-go Ogólnopolskiego Zjazdu Mistrzów Piekarzy odbytego w Warszawie dnia 3-go czerwca 1928 roku.
- AAN, PRM, IX 349 – AAN, PRM, Część IX. sygn. 2/8/0, IX 349: Korespondencja i referat prof. dr. A. Maurizio w sprawie przemiału zboża i wypieku chleba, p. 21: W sprawie analizy chleba firmy Klopfera w Dreźnie.
- AAN, PPRM – AAN, Protokoły Posiedzeń Rady Ministrów, sygn. 2/8/0/1.2/I 85/3, mikrofilm sygn. 20125: Uchwała Rady Ministrów z dnia 7 kwietnia 1937 r. o powołaniu Komisji Kontroli Cen przy Prezesie Rady Ministrów, pp. 31–33, 40.
- ANK, UWK, 31 – ANK, UWK, sygn. 29/206/0/1.2/31: Komisja badania cen 1928. II Sprawa uregulowania aprowizacji 1925–1926 (13 II): W sprawie zaopatrzenia m. Krakowa w zboże.
- ANK, UWK, 422 – Archiwum Narodowe w Krakowie, Urząd Wojewódzki Krakowski, sygn. 29/206/0/5/422: Fasc. II: 9. Piekarnie 1934–1936 (212b): „Ziarno” Polska Wytwórnia Chleba Zdrowia i Młyn Walcowy Sp. Akc. w Krakowie – ulgi w spłacie zaległości podatkowych.

### Legal acts

- Dz.U. 1920, No 67, item 449 – Journal of Laws of the Republic of Poland [Dziennik Ustaw Rzeczypospolitej Polskiej] of 1920, No. 67, item 449: Ustawa z dnia 2 lipca 1920 r. o zwalczaniu lichwy wojennej.
- Dz.U. 1926, No. 1, item 2 – Ustawa z dnia 29 grudnia 1925 r. o zabezpieczeniu podaży przedmiotów powszedniego użytku.
- Dz.U. 1926, No. 18, item 101 – Rozporządzenie Rady Ministrów z dnia 10 lutego 1926 r. o regulowaniu cen przetworów zbóż chlebowych, mięsa i jego przetworów oraz odzieży i obuwia przez wyznaczenie cen.
- Dz.U. 1926, No. 91, item 527 – Rozporządzenie Prezydenta Rzeczypospolitej z dnia 31 sierpnia 1926 r. o zabezpieczeniu podaży przedmiotów powszedniego użytku.
- Dz.U. 1932, No. 60, item 571 – Rozporządzenie Prezydenta Rzeczypospolitej z dnia 11 lipca 1932 r. – Kodeks karny.
- Dz.U. 1938, No. 13, item 89 – Dekret Prezydenta Rzeczypospolitej z dnia 22 lutego 1938 r. o poruczeniu spraw aprowizacyjnych Ministrowi Rolnictwa i Reform Rolnych.
- Dz.U. 1938, No. 60, item 462 – Ustawa z dnia 5 sierpnia 1938 r. o zabezpieczeniu podaży przedmiotów powszedniego użytku.

### Statistical sources

- ‘Krajowe rynki towarowe’ (1936a) *Polska Gospodarcza*, 17(40), October 3, p. 1173.
- ‘Krajowe rynki towarowe’ (1936b) *Polska Gospodarcza*, 17(41), October 10, p. 1201.
- ‘Krajowe rynki towarowe’ (1936c) *Polska Gospodarcza*, 17(42), October 17, p. 1233.
- ‘Krajowe rynki towarowe’ (1936d) *Polska Gospodarcza*, 17(45), November 7, p. 1338.
- ‘Krajowe rynki towarowe’ (1936e) *Polska Gospodarcza*, 17(51/52), December 23, p. 1543.
- Rocznik Polskiego Przemysłu i Handlu*. vol. 6 (1938) no. 6318, 8399. <https://crispa.uw.edu.pl/object/files/318782/display/Default>. Accessed 19 October 2024.
- Szturm de Sztrem, E. (ed.) (1928–1939) *Statystyka Cen*. Warszawa: Główny Urząd Statystyczny (the 1935 issue is missing). <https://polona.pl/press/4567e88c-aa72-4d15-9a51-9ecfc8f47f64/structure>. Accessed 19 October 2024.

**Press and literature**

- '10-lecie samorządu stolicy' (1928) *Gazeta Warszawska*, 154(336), November 11, p. 16.
- 'III Zjazd Mistrzów Piekarskich w Warszawie' (1927) *Tygodnik Mistrzów Piekarskich w Polsce*, 2(8), February 20, p. 2.
- 'Apropowizacja, handel, przemysł' (1928) *Kronika Warszawy*, 4(10–12), October/December, pp. 35–38.
- 'Budowa nowych piekarni mechanicznych' (1929) *Gazeta Handlowa*, 4(48), February 27, p. 2.
- 'Budowa piekarni mechanicznych' (1926) *Gazeta Warszawska Poranna*, 152(220), August 12, p. 7.
- 'Budowa piekarni mechanicznych w woj. Nowogródzkim' (1929) *Gazeta Handlowa*, 4(48), February 27, p. 2.
- 'Budowa wielkiej miejskiej piekarni mechanicznej, a opinia Warszawy' (1926a) *Tygodnik Mistrzów Piekarskich w Polsce*, 1(10), September 5, 1, pp. 2–3.
- 'Budowa wielkiej miejskiej piekarni mechanicznej, a opinia Warszawy' (1926b) *Tygodnik Mistrzów Piekarskich w Polsce*, 1(11), September 12, pp. 2–3.
- 'Co będzie z miejską piekarnią mechaniczną?' (1934) *Nasz Przegląd*, 12(3), January 3, (4069), p. 8.
- 'Co będzie z piekarnią miejską?' (1930) *Gazeta Warszawska*, 156(29), January 28, p. 8.
- 'Co dziesiąty bochenek warszawskiego chleba nie nadaje się do spożycia' (1929) *Przedświt*, 2(8), January 8, p. 3.
- 'Czy kasa miejska ma dopłacić do chleba?' (1930) *Gazeta Warszawska*, 156(335), November 19, p. 6.
- 'Czy piekarnia miejska ma monopol na dostawy?' (1933) *Piekarz Polski*, 6(29), July 23, pp. 4–5.
- 'Deficyt piekarni miejskiej znów wynosi miliony złotych' (1933) *Piekarz Polski*, 6(48), December 3, pp. 1–2.
- 'Dlaczego zwalczają miejską piekarnię mechaniczną?' (1930) *Przedświt*, 3(30), January 31, p. 1.
- 'Doktrynerstwo na Ratuszu a potrzeby miasta i mieszkańców' (1931) *Gazeta Polska*, 3(54), February 24, p. 8.
- 'Drożyzna chleba w Warszawie' (1930) *Gazeta Polska*, 2(272), October 8, p. 8.
- 'Dziedziczne obciążenie magistratu Warszawy' (1931) *Gazeta Polska*, 3(23), January 23, p. 10.
- 'Głosy prasy o zatargach w Piekarni Miejskiej' (1933) *Piekarz Polski*, 6(9), March 5, p. 6.
- 'Jak pracowała i co zdziałała Komisja Ankiety o kosztach produkcji i wymiany w Polsce?' (1928) *Robotnik*, 34(50) (3247), February 19, p. 4.
- 'Komisja Rewizyjna m. st. Warszawy' (1936) *Administracja Gospodarstwa Rolnego i Leśnego*, Warszawa: Druk. Miejska. <https://polona.pl/preview/9692e22e-68ea-47a9-8ba0-264971cef511>. Accessed 19 October 2024.
- 'Konferencja komisarza rządu z prezydentem miasta' (1929) *Gazeta Polska*, 1(33), December 1, p. 14.
- 'Kosztowny upór ojców miasta' (1933) *Piekarz Polski*, 6(6), February 11, p. 3.
- 'Kulisy machinacji p. Sommera w Piekarni Miejskiej' (1934) *Piekarz Polski*, 7(24), June 17, pp. 4–5.
- 'Likwidacja etatyzmu samorządowego?' (1931) *Gazeta Warszawska*, 157(53), February 14, p. 8.
- 'Likwidacja kominiarzy i sklepów miejskich, reorganizacja piekarni' (1930) *Gazeta Warszawska*, 156(45), February 13, p. 8.

- 'Likwidacja piekarni miejskiej' (1930) *Gazeta Polska*, 2(26), January 27, p. 4.
- 'Magistracki chleb w Warszawie' (1929) *Piekarz Polski*, 2(47), November 23, p. 10.
- 'Mechanizacja piekarń. Trzeba ją przyspieszyć w interesie proletariatu' (1929) *Robotnik*, 35(26) 3598, January 26, p. 3.
- 'Miejska Piekarnia Mechaniczna w świetle dalszej opinii Centr. Zw. Rob. Przem. Piekarskiego i Młynarskiego w Polsce' (1929a) *Przedświt*, 2(267), September 29, p. 6.
- 'Miejska Piekarnia Mechaniczna w świetle opinii Centr. Zw. Przem. Piekarskiego i Młynarskiego w Polsce' (1929b) *Przedświt*, 2(272), October 5, p. 3.
- 'Miejska piekarnia mechaniczna' (1929a) *Przedświt*, 2(61), March 3, p. 3.
- 'Miejska piekarnia mechaniczna' (1929b) *Gazeta Warszawska*, 155(84), March 24, p. 16.
- 'Miejskie Zakłady Zaopatrywania Warszawy' (1928) *Kronika Warszawy*, 4(10/12), October/December, pp. 36-37.
- 'Modernizacja piekarnictwa w zwierciadle prasy socjalistycznej' (1929) *Mistrz Piekarski i Cukierniczy w Polsce*, 4(11), March 10, p. 1.
- 'Na przełomie' (1926) *Tygodnik Mistrzów Piekarskich w Polsce*, 1(11), September 12, pp. 1-2.
- 'Narady nad obniżeniem cen' (1926) *Gazeta Warszawska Poranna*, 152(204), July 27, p. 7.
- 'Niepowetowana strata' (1934) *Gazeta Przemysłowo-Rzemieślnicza*, 63 (37/38), September 23, pp. 1-2.
- 'Nieuczciwa konkurencja piekarni m. st. Warszawy' (1932) *Piekarz Polski*, 5(50), December 10, p. 4.
- 'Nowy dyrektor piekarni miejskiej' (1930) *Gazeta Warszawska*, 156(58), February 25, p. 8.
- 'O umiastowienie piekarń. Głos robotników piekarskich' (1915) *Kurjer Polski*, 18(343), December 14, p. 1. <https://crispa.uw.edu.pl/object/files/40873/display/PDF>. Accessed 19 October 2024.
- 'Od dziś wzrosła cena chleba' (1937) *Nasz Przegląd*, 15(44) (8002), February 12, p. 12.
- 'Odczyty o gospodarce m. st. Warszawy' (1931) *Kurjer Warszawski*, 111(35), February 5 (evening) p. 9.
- 'Odparty zamach na M. Z. Z. W.' (1931) *Gazeta Polska*, 3(42), February 12, p. 10.
- 'Opatrznościowy kierownik miejskiej piekarni mechanicznej' (1931) *Gazeta Polska*, 3(38), February 8, p. 12.
- '„Opatrznościowy kierownik Miejskiej Piekarni Mechanicznej”' (1931) *Piekarz Polski*, 4(7), February 14, p. 3.
- 'Opinia Centralnego Związku Robotników przemysłu piekarskiego i młynarskiego w Polsce o piekarni miejskiej w Warszawie' (1929) *Przedświt*, 2(239), September 1, p. 5.
- 'P. Prezydent miasta w obronie gospodarki miejskiej' (1931) *Nasz Przegląd*, 8(20), January 20, (2810), p. 3.
- 'Piekarnia i lombard przedsiębiorstwami deficytowymi' *Mistrz Piekarski* (1939), 3(12), June 25, p. 13.
- 'Piekarnia miejska przed sądem' (1930) *Gazeta Polska*, 2(33), February 3, p. 4.
- 'Piekarnictwo wobec zarządzeń modernizacyjnych' (1929) *Mistrz Piekarski i Cukierniczy w Polsce*, 4(6), February 3, p. 2.
- 'Piekarstwo polskie pod groźbą socjalizacji' (1928) *Mistrz Piekarski i Cukierniczy w Polsce*, 3(50), December 9, p. 1.
- 'Piekarze chcą podwyższyć cenę chleba' (1936) *Nasz Przegląd*, 14(298) (6087), October 14, p. 13.
- 'Po uchwałach w sprawie M. Z. Z. W.' (1930) *Przedświt*, 3(36), February 6, p. 3.
- 'Podpisywanie pożyczki miejskiej' (1928) *Gazeta Warszawska*, 154(78), March 10, p. 5.

- 'Polityka partyjna w przedsiębiorstwach miejskich Warszawy' (1930) *Gazeta Polska*, 2(195), July 18, p. 8.
- 'Pomyślna sytuacja na rynkach zbożowych' (1936) *Ilustrowany Kuryer Codzienny*, 27(270), September 28, p. 11.
- 'Pomyślny rozwój działalności Miejskiej Piekarni Mechanicznej' (1932) *Gazeta Handlowa*, 7(1), January 1/2, p. 5.
- 'Pożyczka zagraniczna m. st. Warszawy' (1928) *Gazeta Warszawska*, 154(70), March 3, p. 7.
- 'Praca Komisji Ankietowej' (1928) *Robotnik*, 34(57) (3254), February 26, p. 2.
- 'Prawda o miejskiej piekarni mechanicznej' (1929) *Gazeta Handlowa*, 4(98), April 28/29, pp. 4–5.
- 'Przebieg starań o wyrównanie cen pieczywa' (1936) *Piekarz Polski*, 9(43), October 25, pp. 4–5.
- 'Reorganizacja M. Z. Z. W.' (1929) *Przedświt*, 2(181), July 5, p. 3.
- 'Robotnicy protestują przeciw insynuacjom p. Kleina' (1931) *Piekarz Polski*, 4(7), February 14, p. 3.
- 'Rynki towarowe pod znakiem zwyczajności cen' (1936) *Ilustrowany Kuryer Codzienny*, 27(272), September 30, p. 11.
- 'Rząd wystąpi przeciwko zwyczajności cen' (1937) *Nasz Przegląd*, 15(88) (8046), March 26, p. 13.
- 'Rządowy chleb dla wszystkich!' (1931) *Nowy Dziennik*, 14(225), August 22, p. 6.
- 'Składy towarowe Miejskie Wydziału Zaopatrywania Magistratu m. st. Warszawy' (1925) *Kronika Warszawy*, 3(25), June, pp. 15–16.
- 'Sprawa piekarni miejskiej. Ciekawości likwidują samorząd' (1930) *Przedświt*, 3(25), January 26, p. 2.
- 'Sprawozdania Komisji Rewizyjnej m. st. Warszawy' (1936) *Piekarnia Miejska*, Warszawa: Komisja Rewizyjna m. st. Warszawy.
- 'Sprawy piekarni i cegielni miejskiej' (1930) *Gazeta Warszawska*, 156(130), May 9, p. 8.
- 'Sto tysięcy kg dziennie zdrowego i smacznego chleba dla Warszawy Miejska Piekarnia Mechaniczna' (1929) *Robotnik*, 35(65) 3636, March 7, p. 4.
- 'Straty Miejskiej Piekarni Mechanicznej w Warszawie' (1932) *Piekarz Polski*, 5(40), October 1, p. 6.
- 'Szczegóły akcji pomocy dla bezrobotnych' (1931) *Nowy Dziennik*, 14(226), August 23, p. 3.
- 'Udział polski w pożyczce Warszawy' (1928) *Gazeta Warszawska*, 154(77), March 9, p. 6.
- 'Urządzenia miejskiej piekarni mechanicznej' (1929) *Przedświt*, 2(61), March 3, p. 3.
- 'W obliczu bliskich wyborów do Rady Miejskiej m. Warszawy' (1930) *Robotnik*, 36(76), 4016, March 18, p. 3.
- 'W sprawie budowy miejskich piekarń mechanicznych' (1926a) *Gazeta Rzemieślnicza*, 31(30), September 5, pp. 3–4.
- 'W sprawie budowy miejskich piekarń mechanicznych' (1926b) *Gazeta Rzemieślnicza*, 31(31), September 12, pp. 3–4.
- 'Walka o przedsiębiorstwa i monopole' (1930) *Gazeta Warszawska*, 156(31), January 30, p. 8.
- 'Warszawa – dziś. AGRIL' (1927) *Polski Przemysł Budowlany*, 3(11/12), November–December, p. 280. [https://bcpw.bg.pw.edu.pl/Content/8212/PDF/ppb27\\_nr11\\_12.pdf](https://bcpw.bg.pw.edu.pl/Content/8212/PDF/ppb27_nr11_12.pdf). Accessed 19 October 2024.
- 'Wielkie piekarnie mechaniczne nie kalkulują się' (1928) *Gazeta Przemysłowo-Rzemieślnicza*, 33(4), February 22, p. 6.
- 'Wspomnienie pośmiertne' (1935) *Gazeta Przemysłowo-Rzemieślnicza*, 64 (30), September 30, p. 9.



- 'Z działalności miejskiej piekarni mechanicznej' (1934) *Codzienna Gazeta Handlowa*, 9 (226), October 3, p. 3.
- 'Z historii budowy Piekarni Miejskiej' (1929) *Piekarz Polski*, 2(45), November 9, pp. 1–4.
- 'Zatarg w miejskiej piekarni mechanicznej' (1930) *Gazeta Polska*, 2(189), July 12, p. 8.
- 'Zatarg w Piekarni Miejskiej' (1930) *Gazeta Warszawska*, 156(195), July 13, p. 17.
- Banaszkiewicz, B. (1935) 'Instytucje miejskie a miejska fabryka chleba', *Piekarz Polski*, 8(14), June 7, p. 5.
- Białek, S. (1935) 'Tajniki kalkulacji piekarni miejskiej w Warszawie', *Piekarz Polski*, 8(32), August 11, pp. 1–2.
- Biegeleisen, L. W. (1927) *Polityka aprowizacyjna samorządu miejskiego*, Warszawa: Odbitka ze Sprawozdania Miejskich Zakładów Zaopatrywania Warszawy.
- Biegeleisen, L. W. (1929a) 'Działalność aprowizacyjna samorządu terytorjalnego', *Samorząd Miejski*, 10 (9), September, pp. 739–740.
- Biegeleisen, L. W. (1929b) *Zagadnienia ekonomiki komunalnej*, Warszawa: Wydawnictwo Związku Pracowników Administracji Gminnej Rzeczypospolitej Polskiej.
- Biegeleisen, L. W. (1935) *Polityka gospodarczo-aprowizacyjna miast polskich (Warszawy i Lwowa)*, Warszawa: Towarzystwo dla Polityki i Administracji Gospodarczej.
- [Budziszewski, E.] (E. B.) (1931) 'Ceny i koszty utrzymania w Warszawie w 1930 r.', *Kronika Warszawy*, 7(3), March, p. 15.
- [Budziszewski, E.] (E. B.) (1932) 'Ceny i koszt utrzymania w Warszawie w 1932 r.', *Kronika Warszawy*, 8(11/12), November/December, p. 17.
- C. P. (1926) 'O metody badania stanu i warunków produkcji i wymiany', *Przemysł i Handel*, 7(46), November 13, pp. 1399–1401.
- F. P. (1926) 'Przedsiębiorstwo miejskie w Warszawie', *Kronika Warszawy*, 2(1/2), January–February, pp. 1–2.
- Ferber, M. (1933/1934) *Piekarstwo w Krakowie*, Kraków: Towarzystwo Ekonomiczne (Kraków).
- Ginzburg, C. (1984) Translated by Sugiyama, M. [杉山 光信, チーズとうじ虫 : 16世紀の粉挽屋の世界像, Tokyo: みすず書房 [Misuzu Shobo] (Original title: *Il formaggio e i vermi* [The Cheese and the Worms], 1976).
- J. N. (1930) 'Miejska Piekarnia Mechaniczna', *Kronika Warszawy*, 6(6), June, pp. 4–9.
- Jarosz, K. (1926) 'Piekarstwo warszawskie a budowa piekarni miejskiej', *Gazeta Handlowa*, 1(32), December 13, p. 2.
- Jarosz, K. (1928) 'Nowy sposób sprzedaży pieczywa w Krakowie', *Piekarz Polski*, 1(14), December 8, pp. 4–5.
- Jarosz, K. (1930) 'Badania Piekarni Miejskiej', *Piekarz Polski*, 3(10), March 8, pp. 1–2.
- K. J. (1928) 'Polityka aprowizacyjna m. Łodzi', *Piekarz Polski*, 1(2/3), September 14/21, pp. 4–5.
- Karczewski, Z. (1929) 'Ceny Chleba a tzw. polityka taniego chleba', *Przemysł i Handel*, 10(16), April 20, pp. 661–664. <https://crispa.uw.edu.pl/object/files/412302/display/Default>. Accessed 19 October 2024.
- Klarnier, C. (1926) 'W sprawie programu gospodarczego Polski', *Przemysł i Handel*, 7(27), July 3, p. 810.
- Kochanowski, J. (2015) 'Rys historyczny Cechu Piekarzy w Warszawie (do roku 1944)', Cech Piekarzy w Warszawie. [http://www.cechpiekarzy.waw.pl/strona\\_historia.html](http://www.cechpiekarzy.waw.pl/strona_historia.html). Accessed 1 June 2024.
- Kosaka, J. [神坂 次郎] (1984) *元禄御量奉行の日記* [Diary of a Genroku Otatami Bugyo]. Tokyo: 中央公論社 [Chuokoron-sha].



- Lange, M. (1934) 'Kto zapłaci za chleb kupiony w Piekarni Miejskiej?', *Piekarz Polski*, 7(47), November 25, p. 2.
- Lange, M. (1938) 'Na marginesie wystawy „Warszawa wczoraj, dziś i jutro”', *Mistrz Piekarski*, 2(15), October 25, p. 1.
- Lichtensztejn, J. (1939) *Chleb powszedni. Przemysł piekarski*, Warszawa: Wydawnictwo Związku Robotników Przemysłu Spożywczego.
- Macyra, R. (2004) *Na rynku hossy i bessy*, Poznań: Uniwersytet im Adama Mickiewicza (Poznań). Wydawnictwo Naukowe.
- Matsuka, J. [松家 仁] (2015) '戦間期ポーランド製パン業におけるユダヤ人問題 (1924–1939)' [The Polish-Jewish Problem in Interwar Poland Baking Industry (1924–1939)], *Rekishii to Keizai [歴史と経済]*, 2015 年 57 巻 4 号 pp. 18–31. [https://doi.org/10.20633/rekishitokeizai.57.4\\_18](https://doi.org/10.20633/rekishitokeizai.57.4_18). Accessed 19 October 2024.
- Porter, R.P. (1907) *The Dangers of Municipal Ownership*, New York: The Century Co.
- Porter, R.P. (1911) *Niebezpieczeństwa Przedsiębiorstw Miejskich*. Translated from English by Z. A. K. Warszawa: Nakładem Spółki Wydawniczej Warszawskiej. <https://bc.umcs.pl/dlibra/publication/4903/edition/6851>. Accessed 21 June 2025.
- Raabe, H. (1930) 'Gospodarka Warszawy', *Robotnik*, 36(15) 3955, January 16, p. 1.
- Radocki, H. (1939) *Centralny Okręg Przemysłowy w Polsce*, Warszawa: Nakładem „Myśli Polskiej”.
- Rakowski, J. (1938) 'Nowy instrument polityki cen rolniczych', *Polska Gospodarcza*, 19(30), July 23, p. 1081.
- Rozenberg, H. (1928) 'Polityka Państwa w dziedzinie zaopatrzenia ludności w chleb', *Przemysł i Handel*, 9(14), March 31, pp. 559–565.
- Rybarski, R. (1939) *Idee przewodnie gospodarstwa Polski*, Warszawa: Zakł. Druk. F. Wyszyński i S-ka.
- S. W. (1930a) 'Dzieje piekarni miejskiej', *Nasz Przegląd*, 7(285) (2715), October 17, p. 7, 19.
- S. W. (1930b) 'Dzieje piekarni miejskiej', *Nasz Przegląd*, 7(287) (2717), October 19, p. 15.
- Sadłowski, A. (1928) *Pamiętnik uroczystości poświęcenia sztandaru Przymusowego Cechu Piekarzy w Katowicach*, Katowice: Przymusowy Cech Piekarzy.
- Sadłowski, A. (1930a) 'Niepoprawni manjacy i błędna ich doktryna! I', *Mistrz Piekarski i Cukierniczy*, 5(7), February 15, p. 1.
- Sadłowski, A. (1930b) 'Niepoprawni manjacy i błędna ich doktryna II', *Mistrz Piekarski i Cukierniczy*, 5(8), February 22, pp. 1–2.
- Skrzywan, W. (1937) 'Sens polskiej polityki koniunkturalnej', *Polska Gospodarcza*, 18(24), June 12, p. 804.
- Sokołowski, K. (1936) 'Zwyżka cen', *Polska Gospodarcza*, 17(44), October 31, pp. 1281–1283.
- Sprawozdanie Komisji Ankietowej (1928) Tom VI. Przemysł piekarski*, Warszawa: Nakładem Prezydium Rady Ministrów.
- Tschirschnitz, K. (1928) 'Teoria a rzeczywistość', *Piekarz Polski*, 1(8), October 27, p. 1.
- Turonek, J. (1992) *Wacław Iwanowski i odrodzenie Białorusi*, Warszawa: Warszawska Oficyna Wydawnicza „Gryf”.
- Wendt, K. (1926) 'Piekarnie a kalkulacja', *Gazeta Handlowa*, 1(32), December 13, p. 2.
- Wendt, K. (1929) 'Panu Prof. Iwanowskiemu w odpowiedzi', *Piekarz Polski*, 2(10), March 9, pp. 1–2.
- [Wieczorówna, I.] (I. W.) (1935), 'Wybuchały optymizm a Piekarnia Miejska', *Piekarz Polski*, 8(8), February 24, pp. 1–2.
- Witkowski, W. (1939) 'Ogólna sytuacja w zawodzie piekarskim', *Piekarz Polski*, 12(22/23), August 6, pp. 7–10.

- Wojtyła, J. (1937) *Program organizacji rynku mięsnego w zarysie*, Warszawa: Nakł. „Gospodarki Narodowej”.
- [Wróblewski, J.] (J. W.) (1935) ‘Z „działalności” Miejskiej Piekarni Mechanicznej’, *Piekarz Polski*, 8(5), February 3, p. 1.
- Z. Ś. (1935) ‘Miejska Piekarnia Mechaniczna w Warszawie’, *Piekarz Polski*, 8(2), January 13, pp. 4–5.
- Zabęski, A. (1928) ‘Przeciw umiastowieniu piekarstwa’, *Mistrz Piekarski i Cukierniczy w Polsce*, 3(27), July 1, pp. 1–2.
- Zabęski, A. (1932) ‘Ku uwadze członków dla spraw aprowizacji komunalnej we Lwowie’, *Piekarz Polski*, 5(40), October 1, pp. 1–2.
- [Zabęski, A.] (A. Z.), (1934) ‘Co będzie dalej?’, *Piekarz Polski*, 7(7), February 18, pp. 1–2.