



HAL
open science

”Social movement and economic statistics in interwar Poland. Building an alternative expert knowledge on the condition of the working class”

Morgane Labbe

► **To cite this version:**

Morgane Labbe. ”Social movement and economic statistics in interwar Poland. Building an alternative expert knowledge on the condition of the working class”. *Public and Private Welfare in Modern Europe Productive Entanglements* (ed by F. Giomi, C. Keren, M. Labbé), Routledge, pp.79-106, 2022, 9781032232324. 10.4324/9781003275459-5 . hal-03629313

HAL Id: hal-03629313

<https://hal.science/hal-03629313>

Submitted on 4 Apr 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

4 Social movement and economic statistics in interwar Poland

Building an alternative expert knowledge on the condition of the working class

Morgane Labbé

Introduction

As early as 1918, the new Central European states that emerged at the end of the First World War set up ambitious social protection systems in order to meet the considerable expectations and needs of populations who had been left impoverished by their recent experiences. They also had to provide the Allies and international organizations with evidence that ‘social peace’ in Eastern Europe would stabilize the disputed territories within reach of Soviet Russia. These new states, at the margins of the Western economies and their scientific centres, also intended to demonstrate their ability to develop a statistical information system that would guide the recovery of their devastated economies. As part of this call for modernity, socially committed academics and intellectuals were invited to work in new government institutes, conducting surveys and studies.¹ All of these changes were to be found in Poland, which in 1918 established a Ministry of Social Protection, a Statistical Office, and various research institutes. However, in a context marked by a lack of improvement in living conditions, unstable governments, and repeated currency crises, social protests and demands continued and even became more widespread. Yet, these social movements, which in the early 1920s shook the whole of Central Europe, gave rise in Poland to valuable surveys and social studies, on the initiative of activist associations that were independent of the state.

This chapter focuses on the interactions between the Central Statistical Office of the Polish state (*Główny Urząd Statystyczny*, GUS) and one of these activist organizations, the Institute of Social Economics (*Instytut Gospodarstwa Społecznego*, IGS), which became an important organization with the capacity to cooperate and compete with public actors in statistics (and the Statistical Office in particular). The IGS included members of educated elites – sociologists, economists, and statisticians – of a socialist political leaning, and in some cases even Marxist, all of whom, by the end of the war, had experienced the harshness of political reality under the occupying regimes as well

as the hardships of war, repression, and exile. The activism of the IGS and its founders was deeply rooted in the history of the Polish territories attached to Tsarist Russia. It dated back to the period of liberalization following the 1905 Revolution, which had led to the rise of social-reformist associations, including the Society for the Social Work (*Towarzystwo Pracy Społecznej*), from which the IGS emerged after the war. Under this Russian regime and then that of the German occupation, the association was consolidated and professionalized with a view to compensating for the absence of a social protection policy, and in this way, it anticipated the institutions of the new state. It then managed to coexist with them and even compete with them.

Within this long historical context, this chapter deals with the relations between the IGS and the GUS, which were marked by both cooperation and competition, and centred around the implementation of social surveys and the calculation of social indices. First, it looks back at the successive transformations of the Society for the Social Work under the different political regimes that existed prior to the creation of an independent Poland, leading up to its re-establishment as the IGS. The strength of the new institute became apparent in the immediate post-war period, when, in the context of the inflationary crisis and a sharp fall in living standards, it pre-empted the GUS in producing studies that quantified this decline, calculated on the basis of wage demands. The chapter goes on to describe how the IGS, building on this earlier success, was recognized by the International Labour Organization (ILO) when it came to address the challenge of measuring wage variation and the cost-of-living index, which had been a cause of unrest in many other countries. The IGS was then invited to cooperate with the GUS on the project of a major national survey of the budgets of workers' families, which would make it possible to calculate the official cost-of-living index. From that survey, however, the two institutions drew different proposals and values with regard to this new index. Nonetheless, at the end of these ten years of close rivalry, they had constructed a specialized field of economic statistics, relating to wages, prices, and living conditions, on which the new economic theories and policies of regulation would be based.²

Social surveys and associations in Poland in the imperial period

In the second half of the nineteenth century, in the territory of the former Poland divided between the Prussian, Austrian, and Russian states, members of reformist, Catholic, or socialist movements, often drawn from the small pool of local intelligentsia, initiated investigations into the living conditions of workers employed in the factories of the nascent industry or the large agrarian farms. The authors of these studies used the model of Le Play's family monographs or of the surveys conducted by the famous German society, the *Verein für Socialpolitik*, as a basis for their observations.³ In the absence of official Polish institutions, these works, which are often described as

precursors of empirical sociology, were carried out in various settings on the initiative of Catholic circles, philanthropic associations, and learned societies. Some of these associations continued to operate and had a legacy in the public and private institutions of the new Polish state after 1918. This was the case for the Society for the Social Work.

The Society was founded in 1907 in Warsaw, then located in the Kingdom of Poland, a territory annexed by Russia. It benefited from the context of political liberalization ushered in by the 1905 Revolution, with the legalization of associations in 1906. It was in this reforming spirit that the Society's founders set themselves the mission of promoting and supporting 'social work'. In 1910, the new Society established a 'Board of Social Work' (*Biuro Pracy Społecznej*), which was the active organ of the Society, devoted to conducting studies on social and economic issues. Its activities were still constrained by the legal, administrative, and political framework of imperial Russia. Nevertheless, its projects bore witness to its ambition as an institution, which gave it a pivotal role in lobbying the tsarist administration with ideas of social reform.

The aim of the founders of the Board of Social Work was to provide documentation on social and national causes in the life of the Kingdom, causes that would then be defended by Polish deputies in the new Russian assembly, the Duma. As well as proposals for greater cultural and linguistic autonomy, others concerned working conditions, and thereby echoed the demands made by the demonstrations and strikes of 1905 and 1906, which broke out in Poland as in the rest of Russia.⁴ To this end, the surveys undertaken by the Board of Social Work reported on public health, women's work, accident insurance, and so on. The Bureau had a statistical division, but a lack of resources prevented it from conducting its own surveys, and most of its data came from external sources.

Ten years later, the First World War overturned the political order in which Poles, having been excluded from public spaces, had built their own institutions. However, the war on the Eastern Front was particularly destructive, leaving territories and economies devastated, with poverty and epidemics on the rise.⁵ In the first months, Citizens' Civic Committees were set up in the main towns to manage and coordinate the relief effort. In Russian Poland, in particular, these voluntary institutions continued, on a larger scale, the activities through which charitable and philanthropic organizations had formerly compensated for the imperial government's lack of interest in social policy.⁶

Like other civil society organizations, the Board of Social Work strengthened and expanded its activities during the years of war and occupation. It developed substantially from 1916 onwards under the German administration, adopting an ambitious organizational structure divided into sections devoted to legal questions, economics, education, and so on and then further subdivided into some 30 commissions.⁷ This rapid expansion was due to the deterioration of living standards and working conditions under the occupation regime; workers were badly hit by inflation, falling wages, and rising

unemployment. The Board of Social Work was all the more sensitive to this situation as many of those who had joined it since that time came from socialist circles. Their investigations then ran in parallel to strikes and demonstrations. The agenda of the Board of Social Work covered every aspect of the social question – labour regulations, social insurance, women’s work, and so on – and a ‘Commission on workers’ questions’ was created. The goal of gathering information remained a priority, and the collection of data of all kinds – legal, economic, and statistical – fed into studies whose results were disseminated, for lack of other means, in small brochures. Nonetheless, these publications did, however, lead to proposals for the reform of public institutions.

By the end of the war, the activity of the Board of Social Work had reached its peak, but in 1918 it was weakened by the fact that the Polish state gained its independence. A Ministry of Social Welfare was established, which offered official positions to several of the Bureau’s members. The same movement from the private to the public sphere took place in the field of social studies and statistical expertise following the establishment of the GUS. The opening of positions in the administration of the Kingdom became, for Polish patriotic elites, an opportunity to enter the workings of a new Polish state, ready to be built and appropriated from within. They also hoped to establish a system of social protection, as charities and philanthropic associations were no longer able to meet the needs of the civilian population.

In this new situation, it seemed likely that public institutions would assimilate this world of reforming associations. Yet, this turned out not to be the case. The Board of Social Work was disbanded and reborn under a new name, but in the new political context it was divided by the simmering tensions between members of the two political currents who claimed to speak for the cause of the Polish ‘people’ – socialists and supporters of National Democracy, respectively. In 1920, the socialist branch joined the Society of Polish Economists and Statisticians,⁸ where it formed an autonomous section under the name of the Institute of Social Economics, which became an independent institute in 1926. The new institute continued to pursue the social and political project of the Board of Social Work, with the involvement of several of its former members. It also fulfilled one of the Bureau’s wishes: to conduct its own social and statistical surveys. However, this new mission could not be taken for granted, since in the new Polish state, the IGS found itself in competition with public institutions and especially the GUS.

The rivalry between the Central Statistical Office and the Institute of Social Economics in measuring workers’ cost of living

The mission of the IGS was to ‘to develop activities to support the social economy in Poland on a scientific basis’.⁹ In this vast field of economic and social issues, the condition of workers remained the central theme of the IGS’s

investigations, as shown by the publication of a collection entitled 'Workers' Issues'. This commitment to the cause of workers is at first sight surprising in a country where the peasantry was more abundant. It was, however, characteristic of the socialist, and in some cases Marxist, intellectuals and activists attached to the IGS, who prioritized workers and the urban working classes when addressing the 'modernization' of Poland, which Polish elites saw as the major challenge facing the new state.

The major theme that preoccupied the IGS in the early 1920s was the continuing decline in workers' living standards as a result of the inflationary pressures caused by the world economic crisis of 1920–1921, which was exacerbated in Poland by the expense of the war with Soviet Russia.¹⁰ Not only was the new Polish state faced with the challenge of rebuilding a devastated country and a ruined economy, but, as in most Eastern European countries, its own currency crisis was more severe and more lasting than in Western Europe. This crisis was followed by a phase of hyperinflation, which led to a further drastic and tragic fall in living standards.¹¹ It was only in 1924 that Poland emerged from these crises with a thorough reform of its monetary and fiscal system. This reform immediately brought about wage stabilization.¹²

The IGS's earliest studies were carried out in this economic and social context. Throughout the world, the monetary crises of the immediate post-war period took a large, direct toll on the growth and generalization of wage-labour that had been under way in the capitalist economies, as part of a transformation of the world of work.¹³ Inflation lowered the monetary value of wages and tragically reduced the lowest incomes, those of manual workers. Since the end of the nineteenth century, this extremely close dependence of the standard of living of families on the vicissitudes of currency values had been the source of conflicts which alarmed both industrialists and rulers. From the end of the war, in all countries, the effect of price rises in addition to the existing deprivation fuelled discontent and demonstrations, which threatened to destabilise a fragile domestic political situation.

In Eastern Europe, the leaders of the new Polish state were also worried because, in the newly united territories, echoes of the Bolshevik movements and promises of national prosperity were spreading among impoverished populations eager for a better world. As early as 1916, under the German occupation, demonstrations and strikes demanding wage increases had begun in Warsaw and Łódź, the two main cities and centres of Polish industry, as well as in the coal-mining areas of Silesia. The end of the war and of the German occupation brought about a short period of respite. In 1919, owing to the rise in inflation, workers resumed their strikes in pursuit of wage increases, this time directing their demands to the new Polish government. The government gave in to some of their demands, but not all, owing to the high level of inflation and the reluctance of industrialists. The same pattern repeated over the following years, with high inflation continuing to worsen employees' living conditions, and strikes, which were now coordinated by

the unions, became more frequent. The government's compensatory measures were insufficient to dispel from public opinion the impression that the government was incapable of containing inflation, and was guilty of passing fiscal measures deemed to be unfair, on the grounds that they only served the interests of industrialists.

While the protests continued and spread in reaction to the Polish government's erratic response to inflation, a new economic and statistical expertise was developed that transformed the terms of the demands and negotiations. It provided both a scientific framework for economic policy and a language that codified inflation as a global monetary phenomenon. On this basis, it was possible to derive standards that could regulate wage policy. No official institution held a monopoly over this expertise, as it was practised by public and private institutes alike: the GUS, municipal statistical offices, and once again, the IGS. The ILO was also closely involved in this work. In view of the political importance of the monetary crisis and its social consequences for the economic recovery of Europe, the ILO had a decisive influence on the standardization of economic and statistical data.

At different times, these organizations acted either in parallel, in cooperation or in opposition; their relations gave rise to a particular dynamic between the public and private sectors, which can be reconstructed by observing the role of the IGS in this context. The creation of joint study commissions also favoured this dynamic.

The construction of an official cost-of-living index

In the long history of surveys and calculations of prices and wages, the immediate post-war period can be seen as a brief moment that, owing its political urgency, saw the emergence of a new way of empirically describing the economic instability caused by currency fluctuations. It was a matter of concern for old and new states alike, and one particular step indicated their recognition of the social and political impact of the inflationary crisis: the creation of commissions to study the cost of living. In Poland, in 1920, a 'Commission on the Cost of Living of family workers in industry and commerce' was set up by government decree.¹⁴ Like the commissions in other countries,¹⁵ the Polish commission, attached to the GUS, was official, but it was composed of stakeholders from different domains: in addition to the director of the statistical administration, it included representatives of several ministries, employers, and trade unions; outside experts were also sometimes involved in its work. Its mission was to calculate the cost-of-living index, which, when combined with the level of net wages, could be used to estimate their 'real' value or in other words 'purchasing power'. The validity of this new index would depend on its being regularly updated, so it was calculated every month and published together with reports on prices and wages by the GUS in the *Monthly Statistics Review*.

The Cost of Living Commission also had to specify the method used for calculating the index, a method which was supposedly simple and well known, but which, as will be seen, was actually widely debated, both in its principles and its implementation. The method adopted by the Commission consisted of finding the average of price increases in a series of items deemed to be representative of the 'budget' – that is, the needs – of a typical worker's family, consisting of four people: two adults and two children. The Commission established a list of some 30 items, of specified quantities, which was supposed to correspond to the family's daily consumption. The list began with food: 1.23 kg of rye bread per day, 1.15 kg of potatoes, then barley gruel, dried beans, meat, bacon, sugar, salt, and so on. In addition, the list included other items such as housing and fuel costs, water consumption and finally some minor expenses on leisure activities: one newspaper per day and two theatre tickets per month. The daily quantities of food were set according to the calories deemed necessary for subsistence, a physiological standard set by the biological and nutritional sciences. The use of these pre-established standards of workers' needs meant that this method was based on a so-called 'theoretical' budget. This was distinguished from a method of calculation based on real consumption, which would be supported by critics of the official index, notably by the IGS, as will be explained below.

Its data on prices, however, were gathered *in situ*, as municipal authorities were required to transmit these data to the GUS within a narrow time frame. Unlike its figures for consumption, which were based on physiological needs, the collection of retail prices confronted the Commission and the GUS with the *real* world and minute detail of shops and markets. Prices were firmly rooted in local practices, and so the newly created commissions in major cities took on direct responsibility for recording and calculating the indices. In this way, the authorities could demonstrate their traditional competence in municipal price policy. The Central Commission provided a framework for these practices. The government Ordinance had stipulated that 'with the permission of the Central Statistical Office's Committee, local committees can be established in certain larger cities, operating on the basis of an agreed-upon settlement'.¹⁶ This provision was further elaborated by an ordinance in January 1921 requiring the mayors of major cities to follow the instructions of the GUS in producing their monthly price statements and to complete a pre-determined table.¹⁷ The ordinance also required the municipal administration to set up its own commission by gathering representatives of trade unions, workers, industry, trade, and agriculture.

In the barely unified country of Poland in 1920, which was plagued by social unrest that threatened its internal and external political stability, the government therefore attempted to centralize and control information on prices and to promote joint resolutions through the use of commissions. In this, it followed practices in other states and, above all, the recommendations of the ILO.

From data to strikes

The GUS centralized municipal data, calculated indices, and published them monthly. However, the municipal scale remained the dominant one: the tables listed the indices of price increases for individual Polish cities, but did not give any index for Poland as a whole. Had the state failed in attaining a 'common language of prices'? The cost-of-living index had local or regional validity, but at the level of the whole Polish state it had less significance. In its commentary, the GUS acknowledged that the municipal commissions had used different methods of calculation and that, as a result, the raw figures for price increases were not comparable, only the relative changes. The price index was, as elsewhere, a black box maintained by delicate compromises.

It is also the practical usefulness of the index that explains why it remained a local index, for two reasons. On the one hand, the index was used to adjust wages in line with the rate of inflation, which still varied significantly by location. On the other hand, in Poland, as in other countries, workers demanded that this adjustment should be automatic. The principle of indexing wages to inflation had to be enshrined in collective agreements signed at the level of individual businesses, that is, as close as possible to actual working conditions. This was one of the major demands put forward by trade unions on behalf of workers throughout Europe. In Poland, it became a frequent reason for strikes in industries that were reluctant to adopt this automatic adjustment. Strikes were also called when collective agreements set the index too low or provided for only partial wage increases. The question of measuring the cost of living was therefore central to power and class relations, became highly politicized, and manifested itself in successive conflicts.

Although the language of indices is often seen as the expression of a tendency towards objectivization that triumphed in the nation states of the twentieth century, during this interwar period, consensus regarding the price index always remained fragile. Two institutions, independent of public authorities, tried to give it a solid basis, one favouring a social foundation and the other a statistical one: whereas the IGS calculated an alternative index to the official one, with the aim of benefiting workers, the ILO claimed to be improving the method and accuracy of measurement. The two modes of calculation used by the IGS and ILO involved different epistemologies, but as we shall show, the exchanges between their respective exponents led to a better measurement of the *real* living standards of workers.

The IGS: wage statistics in the service of the class struggle

The IGS, which focused its studies on workers' issues, naturally devoted its earliest works to the defence of their wages and working conditions. In the political context of the 1920s, it presented itself as the mouthpiece of workers, alongside the trade unions, who also happened to be among the institute's members. Independently of the GUS, the IGS developed its own expertise

on the measurement of the cost of living and the change in wages and published several studies on the subject.¹⁸ Its aim was not only to contribute to the debate but also to provide technical arguments in support of the demands of employees seeking to maintain their standard of living. It also documented the mobilization of workers by producing statistics on strikes, even before official data on this subject existed, through the collection of information from various 'field' sources to which it had access: strike committees, the workers' press, notes from journalists, information from factories, and so on.

As early as 1922, one of the founding economists of the IGS, Tadeusz Szturm de Sztrem, published a book entitled *The Struggle for Wages*, in which he provided a statistical analysis of the impact of inflation on wages. The study was limited to Warsaw owing to the lack of complete data at that time, but the author nonetheless managed to reconstruct statistical series on the prices of basic foodstuffs and workers' wages since 1914, which indicates that he had access to unofficial sources, notably through trade unions. His ambition was to grasp, in the chronic fluctuations of currency, what he believed was a new structural trend in the capitalist economy leading inevitably to a decrease in the value of wages. The six-month percentage changes in food prices, when compared to real wages, revealed a remarkable increase in the divergence between these data series under the effect of inflation.

The salient point of his analysis was to compare these two statistical series with data on strikes, in order to show that wage increases, even if they were insufficient to compensate for their erosion by inflation, were the result of workers' mobilizations. Although strikes had occurred only sporadically under the German occupation, they subsequently increased substantially – in Warsaw, there were 42 in 1918, rising to 67 in 1919, and 72 in 1920. The author emphasized that the creation of the Polish state in 1918 had not put an end to this movement, and that, on the contrary, the number of strikes had increased. He pointed out that strikes were increasingly coordinated by trade unions, stressing in particular the major role of the Trade Union Associations (*Związek Stowarzyszeń Zawodowych*), which was closely connected with socialistic circles and which, since 1920, had brought together several federations. He also credited unions with signing collective agreements, creating a wage scale, and demanding other social benefits (paid leave, social insurance, medical assistance, and so on). The conclusion of the study, supported by voluminous statistical annexes worthy of a yearbook, was explicitly political since it considered that the injustice created by inflation, which was 'a factor conducive to the strengthening of Polish industry', was also 'a source of experience for the working class, and a source of necessity that constitute[d] the basis for the maturing of contemporary forms of class struggle in Poland'.¹⁹ In this respect, the study corresponded to the mission of the IGS, which aimed its work and publications at a broad public, including trade unionists.

This short text, with a limited scope, situated the recent gains of the workers' movement in a longer history, which was objectivized by the figures and their trends. The author's intention was also to demonstrate the ability

to carry out an ambitious study independently of the new Polish state, which was then setting up its own institutions of expertise. He thereby showed that he was surpassing the GUS not only in the analysis of data series but also in the collection of data since he combined the official figures with his own sources of data.

The IGS also knew how to coordinate its work with the international references that were authoritative in this field. One organization that wielded this international authority was the ILO, whose recommendations extended beyond labour legislation to the methods for transcribing information on working conditions, covering processes such as maintaining reports, conducting surveys or calculating indices. However, the ILO also appeared as a unique forum on the international stage, owing to its tripartite structure involving governments, employers' representatives, and trade unions.²⁰ It was therefore a source of legitimacy for private work and expertise on social issues, particularly in the countries of Central Europe.²¹

The ILO and the politics of indices: international recognition of the IGS's expertise

The early and rapid mobilization of the IGS in the field of wage statistics and price indices was a successful strategy, if not for the workers' cause, then at least for the international recognition of its expertise. Indeed, two years after the publication of his book, Sztrum de Sztrém published an article on 'Wage problems in Poland during and after the War' in the ILO's journal, *International Labour Review*.²² This article, written in English, took up the theme of the earlier book, written in Polish, and adapted it to an international context, which required toning down provocative political positions in order to achieve the neutral tone of technical analysis. It gave a prominent role to the work of the IGS in its presentation of an increasingly established division of statistical labour: on the one hand, the GUS and the Warsaw Statistical Service carried out price surveys and the calculation of the cost-of-living index, and on the other hand, the IGS gathered together data – which were still scattered and not yet unified in an official framework – on the wages of workers in a few industrial establishments. Although official statistical work gradually extended and encroached on the IGS's specialist field of social economy, the IGS maintained its dominance in the analysis of wage trends in this turbulent period. It again linked this development to the abundance of strikes, which had increased in Warsaw from 59 in 1921, to 115 in 1922, and 131 in 1923, the year of the inflationary crisis. Stressing again the importance of these mobilizations for wage increases, the author states that 'It was only as the result of fairly numerous strikes that the workers first secured increases in wages... to meet the rise in the cost of living'.²³ The author emphasized the importance of introducing into collective agreements the principle of the automatic adjustment of wages to the cost of living, also known as the sliding scale principle, which was in line with the ILO's recommendations. As requested

by the review, he reported on the growth of this practice in each industrial sector, which was slow in the first year and more sustained and promising from 1921.²⁴ In the following years, in 1921 and 1922, the principle became widely established, with about 20 new conventions appearing every six months. Szturm de Sztrem also reported the resistance of some companies to these measures, and the dissatisfaction of workers with a process of wage increases that could no longer keep pace with inflation. In this editorial space provided by the ILO, Szturm de Sztrem nonetheless had to depart from his role as the mouthpiece of the workers and respond in a different way to the objections raised by workers with regard to the supposed errors in calculating the index: 'the reason for the depreciation of real wages should be sought in certain defects in the methods used for adjusting wages to the cost of living'.²⁵ His numerical arguments, which, in Poland, provided a justification for workers' demands, were transformed for the ILO into economic variables in statistical equations relating to the comparative effects of increases in wages and supplementary payments on the costs of production. He entered into the discussions of economists, particularly those in neighbouring Germany and Austria, who were facing a similar situation and who feared that an inflationary spiral could be triggered by the automatic indexing of wages demanded by workers.

How did Szturm de Sztrem, an economist and statistician from the private activist organization IGS, gain access to the ILO's journal, which was intended to disseminate notes and articles on the social situations in different countries to an international audience? An exchange of letters between the ILO and its Polish correspondent in Warsaw, Adam Rose, sheds a partial but nevertheless revealing light on the path that led to this event.

In September 1922, Rose had proposed an article on 'the automatic adjustment of workers' wages in Poland according to changes in the cost of living by a commission attached to the Central Statistical Office'.²⁶ It had attracted the attention of the ILO Research Division which, in December of the same year, specified that the article should address

the conditions that led to the establishment of a cost-of-living commission, as well as the methods that were adopted for arriving at the cost-of-living index number and for deciding on the adjustment to workers' wages on the basis of fluctuations in the cost-of-living index. It would also be desirable to give a full presentation of the results of this procedure, as well as any objections that may have been raised to its application.²⁷

However, the article was not signed by Rose, but by Szturm de Sztrem, to whom the former seems to have entrusted the task of writing it, presumably because he had published a book for the IGS on precisely this subject. The article on Poland appeared after others on the same subject, with a focus on Austria and Germany respectively, but these other articles had been written by members of ministerial administrations. The IGS, as a private institute,

therefore had access to the ILO's editorial space on an equal footing with the official institutions of other European countries.

The publications of the ILO were closely connected to the agitated social situation of the first half of the 1920s in Eastern Europe, where the continuous decrease in workers' purchasing power in a context of constant inflation was the source of demonstrations which hampered the recovery of an already badly damaged industrial fabric, and created, at the gates of Bolshevik Russia, a political instability feared by governments, even in their social-reformist ranks. It was in this context that the ILO devoted one of its first special issues to the question of real wage and inflation, so that it could be examined by its experts from a statistical point of view.

The ILO and the authority of its method

In the ILO's centralized documentation, statistics played a key role in describing social conditions in different states, synthesizing the information, and then producing a ranking on the scale of social progress. This ranking was intended to encourage those states deemed to be lagging behind to catch up. The ILO, however, had no more power to decree how statistics should be collected than it did to affect national social legislation. It did not produce statistics itself but collected those of the member states. As a result, it was faced with the problem of the comparability of data and indices, which depended upstream on the variable conditions of their production, according to rules and recording practices that remained diverse. In the nineteenth century, under the impetus of the earliest International Statistical Congress, and supported by the rise of the first statistical offices, the process of standardization had advanced, but some economic elements, including wages and prices, remained difficult to standardize. Progress was often made in response to crises and their social consequences, notably poverty and unemployment; the First World War and its impact on the disorganization of societies and economies was one such moment.

The ILO had created its own statistics section, whose members were renowned statisticians from official institutes in their countries. The question of measuring real wages and the cost-of-living index was on their agenda as early as 1923 and was the main theme of the Second International Conference of Labour Statisticians held in 1925. Wage statistics would be addressed there from a methodological point of view only. To this end, in preparation for the conference, the ILO published a voluminous report, *Methods of Compiling Cost of Living Index Numbers*.²⁸ As noted in the title, the issue of wages and prices was now subsumed under the issue of calculating the index, which, in the terminology of statistical economists, fell into the category of index numbers. But however technical this question it might be, the cost-of-living index had already been politicized by workers' demands and government commissions, so the question of method was inextricably linked to this burning political issue. The report did not hide this, stressing that 'The

necessity for the adoption of satisfactory methods is manifest if the object of securing wage agreements with the minimum of friction is to be attained'.²⁹ The statisticians attached to the ILO believed that the objectivizing power of statistics was capable of reducing social protests as long as it could establish sufficient confidence in the method of calculating the index.³⁰ This was the task to which they devoted their conference as well as the 'Resolutions' that emerged from it.³¹

The 'ILO method' for statistics, in principle, was based on that of the international congresses of the nineteenth century, which consisted, on the one hand, of issuing recommendations for producing figures and indices, and, on the other hand, of gathering information on the actual practices followed by the various states.³² These practices provided the ILO with examples to be encouraged or, on the contrary, to be avoided. This centralization of information resulted in the voluminous annexes to the documentary collections, which catalogued in detail the survey and calculation practices in different countries around the world from South Africa to Czechoslovakia, Great Britain, and Lithuania. In these pages, the ILO listed the diversity of national practices, but also documented their dynamism at local and private levels, adding that 'Mention is, however, also made of other costs of living statistics, including those published by certain municipal authorities, or by private organisations or individuals'.³³ Although the ILO addressed its recommendations to public statistical administrations and only thought of inciting centralized states to standardize their statistical practices, it recognized the plurality of private initiatives and their capacity to provide impetus to statistical work. This concerned in particular municipal authorities, such as those in Germany, where a dozen or so cities were assessed with their own cost-of-living indices, but also trade unions, and even individuals, notably economists. While the ILO implemented its founding principle of tripartism in conducting its deliberations on policies and legislation, as far as technical knowledge in economics and statistics was concerned, it defended a unitary and centralized view.

With regard to index numbers, the discussions were not only of a technical nature. Beyond the scope of the ILO, they involved an epistemology on how to summarize the change in figures, the meaning attributed to the average that is supposed to summarize that change, and as always in statistics, the question of the representativeness of the results. Statisticians initially provided strict definitions to replace what they considered to be a mess of terms and figures: 'an index number of the prices of a number of commodities is an average of their price relatives', wrote the American economist Irving Fisher in his seminal book, *The Making of Index Numbers*.³⁴ The index was therefore relative, it did not measure the cost of living itself, but rather changes in the cost of living, and the cost of living was not equivalent to the standard of living. It was necessary, then, to ensure that changes in the cost of living resulted only from currency fluctuations, or in other words, that they related to fixed quantities and qualities of items. However, the epistemological

standards expounded by these statisticians – established figures with university chairs or administrative directorates, such as Irving Fisher, Lucien March or Karl Pribam, all proponents of empiricism against probabilistic conjecture – remained far removed from local realities.

Municipal authorities also compared the prices of items, but their temporality was that of the daily life of families. For example, in the first half of the 1920s, the municipality of the industrial town of Łódź in Poland monitored between 50 and 60 prices, including nine types of flour and semolina, and different types of bread, which varied according to the percentage of wheat flour.³⁵ One of the ILO's recommendations for maintaining the principle of goods being comparable in time and space was to calculate the cost-of-living index based on a selection of items considered representative of a family's basic needs. It refrained from specifying this list of basic necessities, however, as it varied across countries, regions, and time periods. It is therefore clear that the projects of international standardization and comparability undertaken by the ILO and statistical offices had to adapt to an irreducibly heterogeneous local world, that of markets and family consumption, and therefore had to work with local representatives. In 1928, the same city of Łódź filled out a monthly questionnaire, sent by the GUS, on the prices of everyday consumer items. At first glance, the use of this form suggests that the municipal authority of Łódź had adopted the official terminology, but a detailed reading of the list makes it clear that the GUS had taken into account the diversity of consumption: the list was still as long as that of 1920, with about 40 items, and mentioned five types of bread and seven types of flour and semolina.³⁶ National administrations did not wish to restrict local rules and habits any more than this and would proceed, on the model of a census, to code items into certain categories. In doing so, they would produce price indices that were 'black boxes', and which trade unions would challenge in periods of inflation on the grounds that the items selected were not representative of employees' consumption.

Challenges to the indices also related to another component of their calculation, that of the varying importance attributed to different items, or categories of items, within family consumption. Their relative importance certainly reflected personal preferences, but was above all a function of income. In order to take this into account in the calculation of the index, different weights were assigned to the prices of the selected items. Experts at the ILO had considered how to determine these relative weights. Two methods in particular attracted their attention: first, the 'Theoretical Budget Method', which determined the proportions of such consumption according to the nutritional and physiological needs of a typical family. It was recommended and applied in the absence of other reliable sources. This, it will be recalled, was the principle applied by the Polish Cost of Living Commission in its early days. The other method, known as the 'Standard Budget Method', was based on the results of budget surveys, a type of survey examining family spending and consumption patterns, which had been in existence for a long time. It

proved to be a unique source of information for estimating the proportion of items in the index, as ILO statisticians recognized:

in a large number of countries the weights used in the compilation of the cost of living index numbers are based on budget enquiries into the consumption of working class families as a whole, or of those living in industrial areas³⁷

The advantage of this method was the possibility of extracting information relating to representative families, particularly from an occupational group, if, for example, it was a question of indexing miners' wages or of distinguishing between categories according to income or qualification.

Statisticians pointed out that it was not necessary to conduct large surveys – which would then have been unnecessarily costly – to estimate the weights of a selection of consumer items. The reality already exceeded the ILO recommendations, as most budget surveys were conducted at the level of a city (e.g., Berlin, Hamburg, Vienna, all of which served as models for this sort of work) or a category of workers, and they were already a valuable source for calculating cost-of-living indices. It was this method of direct family surveys, sanctioned by actual practice, that was endorsed by the ILO's statistics section, although the approach based on biological and physiological needs still had its supporters.³⁸

Although the ILO explicitly considered the role only of public administrations for the production of statistics, its resolutions brought an unexpected legitimization to all the private surveys that had been conducted until then. It even gave them a new impetus, since, in the mid-1920s, most countries continued to rely on pre-war budget surveys to estimate the weights needed to calculate the cost-of-living index. In this case, the calculation was made based on data from 1914. The ILO recommended that new surveys be conducted to update these weights and that data should be gathered from the shared date of 1928 in order to establish 1930 as the new baseline for the index.³⁹ To hasten these resolutions, the topic of family budget surveys was put on the agenda of the next Conference of Labour Statisticians in 1926.⁴⁰

In Poland, the IGS had not waited for these international recommendations to envisage, as early as 1922, and before the GUS, a survey of the budgets of workers' families. For both representatives of workers' interests and supporters of social reform, this type of survey was one of the tools available for investigating the condition of workers. For the economists and sociologists of the IGS, the major survey of the German metalworkers' union carried out in 1907 already occupied an important place in the annals of workers' surveys, as did the 1912 survey carried out by the Vienna Labour Office.⁴¹ The establishment of the Cost of Living Commission in Warsaw in 1920 provided the IGS with a major incentive to collect data on the consumption of workers' families.

The budgets of workers' families in Poland: three institutes and one survey

From its inception, the IGS aimed to carry out a survey of the budgets of workers' families and, using the results, to challenge the wage statistics and the official cost-of-living index calculated by the GUS since 1920. In order to calculate this index according to the guidelines of the new Commission, the GUS used the principle of standard nutritional norms for family consumption. However, despite the ILO's recognition of this so-called theoretical method, the IGS considered the process to be far removed from the actual consumption of households and argued that it underestimated the real fall in incomes.⁴² This was the reason for the survey on the budgets of workers' families, which it launched in 1922. The aim was both to offer workers a tool for their wage demands and to demonstrate the competence of the IGS on this statistical question.

Budget surveys in the long history of workers' surveys in Europe

This statistical project did not emerge from a vacuum. Questions related to measuring the cost of living were debated in the international framework of the ILO, and surveys on workers' budgets inherited a long tradition of social surveys. These had been undertaken from the middle of the nineteenth century onwards, starting in Western Europe in the wake of industrialization, and subsequently became more frequent and widespread in other countries. Budget surveys were initially conceived as a means of maintaining knowledge and control of workers, but they later became a tool supporting the demands made by the workers' movement and social reformers, for whom it provided factual and quantified arguments.⁴³

In the second half of the nineteenth century, surveys of family budgets attracted the attention of economists, who were then taking a new interest in consumption. This was the case of Ernst Engel at the head of the Statistical Office of the Kingdom of Saxony. He found himself in one of the most industrialized regions of Europe, witnessing the poverty of workers, the earliest revolts, and the hopes raised by the Revolutions of 1848. He joined the ranks of the reformers and did not see solutions to the 'social question' in the work of philanthropists and the writings of social observers, but instead believed in the potential for solutions drawn from the empirical equations of statistics and economics. His work was part of both theoretical and practical reflections on the setting of a minimum wage based on an evaluation of 'The Cost of Man'.⁴⁴ He gave his name to the famous 'Engel's Law' on the structure of consumption, which describes how the proportion of expenditure devoted to food varies inversely with income, and he created rules on data collection and the classification of items and family types. Through his roles at the head of the Statistical Office of Saxony, and later that of Prussia, he helped to establish family budget surveys as part of the collection of official statistics.

The importance of these surveys and their use continued to grow from that point on.⁴⁵

The members of the IGS were familiar with these early surveys and the theoretical and methodological debates they had generated, as well as with recent surveys, including the English survey conducted by the Board of Trade and those of German and Austrian cities. There were favourable conditions for the circulation of knowledge of these surveys, owing to the wide dissemination of these works in European reformist and socialist circles and also as a result of the movement of Polish political activists between the territories of the former kingdom of Poland or of those going into exile. The ILO then accelerated this circulation through its intensive programme of publishing inventories.

The process of the budget survey seemed relatively simple: it consisted of recording the expenditure and income of families over a certain period of time. Among the various methods experimented with, that of distributing account books to families was recommended and adopted in the majority of cases. These regular records, which at first glance seemed to be straightforward, actually raised many problems, starting with the misunderstandings and omissions on the part of workers' families. These difficulties, despite the use of repeated instructions and checks, often led families to abandon their participation in the survey. This reduced the number of usable questionnaires and compromised the representativeness of the results, thereby increasing the cost of the survey. This was the impasse that the IGS reached with the survey it launched in 1923 in Warsaw, which collected an insufficient number of completed booklets. Owing to the crisis at that time, it lacked the necessary funds for extending the scope of the survey and had no choice but to suspend it. The survey was finally successfully accomplished in 1926, but in the context of a new collaboration with public bodies.

The Polish survey of workers' budgets and cooperation between private and public institutes

The IGS sought additional funding to carry out the survey of workers' budgets that it had begun earlier on and secured help from several public bodies. Three of these bodies gave rise to new collaborations: the Health Insurance Fund, the Statistical Department of the Warsaw City Council, and the GUS. The GUS, which found itself caught between its mission for the Cost of Living Commission, the instructions of the ILO, and this approach from the IGS, was also planning a survey of the budgets of workers' families. According to the report of the IGS, the decision of the GUS to participate in the collaboration was taken under pressure from the trade union organizations whose delegations were involved in the Cost of Living Commission.⁴⁶ The GUS was planning a large-scale survey, covering the main urban and industrial centres in Poland – that is, the two main cities, Warsaw and Łódź – as well as two coalfields in Silesia. Again, according to the IGS, it appears that

this project was undertaken at the insistence of the trade unions, who 'from that moment on, in the Committee on the Cost of Living, started to systematically demand that surveys be conducted on household budgets'.⁴⁷

The survey would collect the data needed to calculate the cost-of-living index but would also provide more information on the living conditions of workers. The GUS created a commission to coordinate the survey, and from 1926 onwards, a series of preparatory meetings brought together the three organising institutes. The collaboration with these new partners brought about a change in the IGS's way of working, as it now had to consult with them on the organization and methodology of the survey. The management of the survey and its use were overseen by the GUS, which had the most appropriate logistics for this process, and also conferred official legitimacy. The IGS was recognized for its close relationship with workers' circles and trade unions, and it was therefore given responsibility for implementing the survey in the field.

Conducting a survey on domestic budgets on this new national scale was a methodological challenge. The process began by constituting of a sample of typical families, that is, families that were representative of different occupations, income categories, and industries. The organizers relied on the trade unions to select the families. Once this phase was completed, the distribution of the notebooks could begin, involving a network of trained and paid instructors, and here again, the mediation of trade unions proved indispensable. The survey was entrusted to the municipalities of the different areas in question. The municipalities of Warsaw and Łódź, both major urban centres, carried this out without difficulty, but in the small mining and steelmaking towns of Silesia, there was some reluctance to cooperate. It was decided to send a delegation from the GUS and the IGS to travel from town to town, to present the survey and convince the authorities to provide the necessary material and personnel support. These efforts were not always successful, as the IGS reports:

The work was not too promising in Upper Silesia. The Central Statistical Office decided to entrust the survey to the provincial administrative unit. Silesia's Vice-Voivode in turn entrusted the task to the head of the Province's Department of Industry and Work without providing him any assistance. The attempts to base the surveys on the cooperation of the workers' representation did not bear any fruit, even though there was a representative of metal workers on the committee, who before the War had conducted similar surveys on behalf of the Central Association of Metalworkers in Stuttgart.⁴⁸

It is quite remarkable to discover, in this paragraph on the local organization of the survey, a reference to the major survey carried out in 1907 by the German trade union IG Metall⁴⁹ and to the contacts maintained between the German and Polish organizations.

The survey itself was supposed to document the expenses of 1250 families over 12 months in 1926 and 1927, but, owing to the number of participating families dropping out, it was extended in 1928 and 1929 with new families. In the end, the number of filled and usable notebooks was low, barely 220 across the whole of Poland. This low level of participation was observed in all countries, as these surveys required regular participation and constant attention on the part of the families. The continued presence of instructors to guide and correct the surveys and the commitment of trade unions to convincing the families of the usefulness of the survey for the improvement of their condition were therefore indispensable.

The GUS reported to the Interior Ministry and its activity was scrutinized by the government, but scientifically, the authority of international organizations such as the ILO took precedence. The two international conferences on indices and budget surveys of 1925 and 1926 created volumes of recommendations, addressing the smallest details, which had become the main guides for the profession from which statistical offices drew instructions and recognition. For example, in its first article on the budget survey, which was devoted to methodological issues alone, the GUS made numerous references to ILO recommendations.⁵⁰ The ILO itself had gradually reduced the scope of its inventory of surveys to include only those conducted by public bodies: 'the notes are further limited generally to investigations undertaken by a department of the central Government or a local administrative authority. Thus no account is given of...the considerable number of enquiries conducted by private individuals or organisations'.⁵¹

The autonomy of the IGS with respect to the GUS and the latter's management of the survey was manifested in the IGS's initiative to carry out an additional survey in order to deepen its knowledge of workers' living conditions. This survey was conducted among the same families and was based on a new questionnaire, which added more qualitative questions in addition to the earlier questions on material resources: questions regarding associative, cultural, and religious practices, the use of their time, meals, clothing, and also questions of a psychological nature and regarding their views on job satisfaction and their future projects. Through this qualitative component, the IGS aimed to distinguish its approach and to connect it to the monographic and statistical type of surveys. It was inspired by the survey of the Austrian economist and statistician Walter Schiff, which was carried out for the Labour Statistics Office of the City of Vienna, and whose questionnaire served as a model for the IGS.⁵² The IGS highlighted the innovative and unique nature of its study, 'This work is the first detailed monograph on workers' life conditions, based on extensive data', and contrasted it with previous surveys which 'concerned a small number of families and were based on very limited data'.⁵³

The three institutions involved in conducting the survey – the GUS, the Warsaw Statistical Department, and the IGS – disseminated the results in separate publications. The IGS published a work in 1929 under the title *The Working Class's Living Conditions in Warsaw, Łódź and the Dąbrowa Basin Based*

on the 1927 Surveys.⁵⁴ The following year, the GUS published the results of the general survey that it had coordinated, with a slightly different title: *Workers' Family Budgets. Results of Surveys Conducted in Warsaw, Łódź, the Dąbrowa Basin, and Upper Silesia.*⁵⁵ In 1932, the Warsaw Statistical Department published another volume with detailed results for the city.⁵⁶ The GUS emphasized the new significance of large-scale surveys, 'statistical surveys carried out by the statistical authorities mainly with public funds'.⁵⁷

The publications of the three institutions included numerous tables, which presented the data according to the standard statistical form of a budget survey: types of families, units of consumption, detailed list of items, income. Faced with this mass of figures that had been collected, checked, and corrected, the statisticians were able to calculate a single index of the standard of living, the Engel coefficient, which measures the proportion of expenditure on food within the overall budget. The advantage of this index was that it was recognized and calculated in all countries, thereby allowing easy comparisons to be made and commented on. With this figure, Polish statisticians had a tool to objectivize the poverty of Polish workers' families on a European scale and even beyond. In their publications, the IGS and the Warsaw Statistical Service produced tables comparing the distributions of spending by Polish families with the results of surveys conducted in other cities or countries, in Vienna, Hamburg, Germany, Czechoslovakia, and even Russia. They unanimously concluded that 'Polish working-class families' low standard of living, compared to those of European families, [was] evident in the high percentage of expenses allocated to food'.⁵⁸ In fact, the results showed that expenditure on food represented about 61% of the workers' budget in Poland compared with 55% in Vienna, 44% in Russia, and 41% in Germany. They added that 'Engel's Law appears everywhere with perfect regularity'.⁵⁹ They even estimated and compared the nutritional value of this food, and the differences confirmed the disadvantaged living conditions of Polish workers' families:

The disadvantageous chemical composition and low caloric value of food in the surveyed workers' families in Warsaw is striking in comparison with the food of German and Austrian workers. It is not difficult to imagine what might have appeared in a comparison with an English, Dutch or American worker.⁶⁰

All these measures were evidence of their extreme poverty. The IGS, adopting a more militant approach, estimated that workers' living standards had improved in most of these countries, but not in Poland: 'Poland is first in terms of indicators related to food expenses. The working class' standard of living and salaries in Poland are among the lowest in Europe'.⁶¹

Unlike the GUS and the municipality of Warsaw, the IGS was free to develop a militant discourse on the basis of the survey results. It had acted

early on to bring about a budget survey in order to review the way in which the price index was calculated. Its later participation in a nationwide survey provided it with further opportunities to criticize official indices and statistics. This was the case with respect to wage statistics, and here again the IGS's argument was based on the reality of workers' working conditions:

Labour statistics are usually based on wage rate data, not on overall income... However, the remuneration of the workers depends not only on the wage rate but also on the number of working days or the work performed. This is subject to large fluctuations, as shown in our study on family budgets... Part-time work or total unemployment are the rule, not the exception in the lives of workers.⁶²

The IGS's criticism was directed at both the GUS and the ILO, which made wage comparison one of the axes of their labour statistics. However, the IGS argued that 'the Family Budget statistics provide a much better measure for comparing the standard of living of workers in different countries than the wage statistics'.⁶³

The three institutions acted in collaboration in organizing the survey, but they once again became independent and separate in their use and publication of the data. However, their positions converged once again with regard to the interpretation of the results, and the need to use them to calculate a new cost-of-living index that would more accurately reflect workers' living conditions. Nonetheless, the GUS and the IGS embarked on their own calculation of this index.

Public and private calculations of a new cost-of-living index

The first reason for the survey was related to the activities of the Cost of Living Commission and the insistent demand by trade unions, supported by the IGS, to the GUS to change the way the index was calculated. As soon as the first results were available, statisticians at the GUS produced simulations of the cost-of-living index and published the results.⁶⁴ The approach for this simulation was experimental because it was based on a small number of budgets, barely 40, which described the consumption of workers' families in Warsaw between 1927 and 1929. From the total amount of expenditure recorded each month, a group of minimum and maximum budgets was formed respectively. In each of these, the records of daily expenditure and the quantities of items purchased made it possible to estimate norms of consumption, taking into account the composition of the families. The three monthly data series, relating to prices, quantities, and expenditure, were sufficient to estimate the weights needed for calculating the new cost-of-living index. The values were then reconciled with the Commission's index in order to identify any discrepancies. The article published by the GUS emphasized the limitations

of the results obtained because of the small number of observations and concluded that the rationale for the demonstration was as follows:

Only with sufficiently abundant materials...will we be able to discover the threshold at which the basic needs of this group are met. All other means, such as using standards set by physiologists or hygienists, can only give suppositions that may be more or less close to the truth – they do not, however, answer the questions that statisticians deal with.⁶⁵

With this article, the GUS therefore rejected the Commission's method without, however, providing concrete solutions.

The IGS, again through the voice of Szturm de Sztrem, proposed an alternative method for calculating the cost-of-living index, which Szturm de Sztrem set out the following year in the GUS's journal *Statystyka Cen (Statistics of Prices)*.⁶⁶ The GUS and the IGS agreed on the need for a new method of calculation based on observed, rather than theoretical, data; Szturm de Sztrem therefore proposed an alternative index, while asserting, in this way, the technical expertise that he and his institute possessed on this subject.

His approach arose from the same desire to distinguish between workers according to their income, which could vary according to qualifications and sectors of activity. However, his method was different in that the IGS used a source external to the budget survey, that of the 'Commission for Investigations in the Conditions and Costs of Production and Exchange'.⁶⁷ In 1927–1928, this official and joint commission had coordinated an important survey of production, following the model of foreign surveys.⁶⁸ Within this framework, at the request of the trade unions, precise data had also been collected on the working conditions and remuneration of workers in industry according to sector of activity, qualifications, and working hours. Szturm de Sztrem had been invited, together with another member of the IGS, to take part in the survey as an economic expert, and through this involvement he had access to the information that was collected.⁶⁹

From the data on workers' pay, he determined their distribution among four income groups and then identified which families in the budget survey these levels corresponded to, and from this, which norms of consumption they corresponded to. By linking the two sources, he intended to weigh the different structures of consumption observed according to income levels, more than 60% of which were found to be at the lowest levels. In this way, he made the cost-of-living index more representative of the living conditions of workers than the budget survey was.

A graph represented the monthly change in index values between 1927 and 1931 according to both methods. Szturm de Sztrem pointed out that 'the most important change consists in the increase of the amount spent on food at the expense of other kinds of spending'.⁷⁰ Based on the new method of calculation, this figure rose from 51% to 68.4% over the period, which reflected the large proportion of budgets with low incomes. Similarly, the nutritional

value of consumption decreased in the new index, which was a consequence of taking into account the lower proportion of well-off workers' families. Finally, he pointed out that the new index was more sensitive to changes in market prices due to the high proportion of food items, thereby revealing the vulnerability of the poorest families in the face of these price fluctuations. Szturm de Sztrem concluded in these objective and factual terms, but it must have been evident that the new method was fairer and justified workers' criticisms of the index that had been used until then.

Conclusion

In Poland, as in other countries, social studies and surveys had their roots in the social movements of the nineteenth century. Until 1918, under the imperial regimes governing these Polish territories, there were no state institutions supporting such studies and organizing large-scale surveys. In their place, associations provided the framework for this process of professionalization and made a strong connection between that research and their demands relating to social and national questions. These surveys were therefore carried out with a view to both gaining knowledge and making social demands. In the new Polish state, this close and lasting link between surveys and social activism continued throughout the interwar period. It characterized the work of the IGS, one of the most active and productive independent organizations in the field of studies and surveys of workers' living conditions.

This chapter focused on a field of study that was then undergoing major expansion, that of social and economic statistics. This field accompanied the transformation of economies and the resolution of their crises, but it was also a language that objectivized workers' working conditions in order to condemn those conditions. However, the production of numerical data and the implementation of statistical surveys – activities normally undertaken by the administration of the state – occurred relatively late in Poland, owing to its role in the history of European empires. As a result, the GUS, created at the same time as the Polish state, had to cooperate and compete with private institutions, including the IGS. The chapter focused on the relations between these institutions in the context of a social matter which had become a political issue for most governments at the head of capitalist economies: the question raised in the interwar period by the impact of the inflationary crises on the wages and living standards of workers and the need to create a price index capable of automatically determining the size of wage increases.

The interaction between the two institutions – one public and one private – gave impetus to the implementation of statistical studies and surveys and particularly the large-scale survey of the budgets of workers' families, which was unprecedented in Poland. By examining the organization of the survey in this chapter, it has been possible to specify the form of this cooperation. In line with the ILO's recommendations, which conferred international recognition on the project, the practical implementation of the survey involved

the coordination of a complex network that actually included many private and public partners ranging from the level of national government to that of municipalities and trade unions. The conduct of the survey also highlighted the fragility of an asymmetrical relationship of cooperation, due to the institutions' unequal access to financial and symbolic resources, which developed into a hierarchical division of labour. Although the IGS found itself reduced to the task of mediating between the GUS and trade unions, it ultimately undertook its own survey, from which it derived indices that competed with the official ones. The two indices published in a GUS journal endorsed the validity of the IGS's work. Although it was a private institute, it was a recognized actor in social policy. Subsequently, wage and price statistics became a regular feature of the work of the GUS, and the IGS no longer acted in this area. At the beginning of the 1930s, the IGS was confronted with the need to study another problem arising from economic crises, that of mass unemployment, and launched a new type of survey.

Notes

- 1 M. Kohlrausch, K. Steffen, and S. Wiederkehr, *Expert Cultures in Central Eastern Europe. The internationalization of knowledge and the transformation of nation states since World War I* (Osnabrück, 2010). K. Lebow, M. Mazurek, and J. Wawrzyniak, 'Making modern social science: The global imagination in East Central and Southeastern Europe after Versailles', *Contemporary European History*, 28 (2019), 137–142. M. Górny, *Science Embattled. Eastern European intellectuals and the Great War* (Paderborn, 2019).
- 2 M.S. Morgan, and J.L. Klein (eds), 'The age of economic measurement', *History of Political Economy*, 33, 5 (2001).
- 3 W. Winclawski, 'Leplayowskie inspiracje w socjologii polskiej', *Rocznik Lubuski*, 34, 2 (2008), 87–110.
- 4 R. Blobaum, *Rewolucja: Russian Poland, 1904–1907* (Ithaca, NY, 1995).
- 5 W. Borodziej, and M. Górny, *Der vergessene Weltkrieg Europas Osten 1912–1923* (Darmstadt, 2018).
- 6 A. Lindermeier, *Poverty Is not a Vice. Charity, society and the state in imperial Russia* (Princeton, NJ, 1996).
- 7 S. Hłasko, *Sprawozdanie z działalności Biura Pracy Społecznej za okres od 1 grudnia 1915 r. do 1 kwietnia 1918 r.* (Warsaw, 1918).
- 8 The Society of Polish Economists and Statisticians was founded in 1917, and several members of the Board of Social Work were members of it.
- 9 As the archives of the IGS were destroyed during the Second World War, documents relating to the creation of the institute are rare, with the exception of two publications: T. Szturm de Sztrem, *Instytut Gospodarstwa Społecznego 1920–1944* (Warsaw, 1959); the annual activity reports printed between 1920 and 1938, in particular, *Instytut Gospodarstwa Społecznego 1920–1930. Sprawozdanie z działalności dziesięcioletniej*, (Warsaw, 1930). For the recent period, see B. Łazowska, 'Współpraca Głównego Urzędu Statystycznego z Instytutem Gospodarstwa Społecznego w zakresie badań społecznych w latach 1920–1939', *Wiadomości Statystyczne*, 65, 7 (2020), 47–64.
- 10 The war with Soviet Russia continued until the Treaty of Riga in March 1921.

- 11 I. Mrzygłód, 'Harsh reality: Living in Warsaw under hyperinflation in 1923', *Remembrance and Solidarity. Studies in 20th Century European History*, 4 (2015), 27–46.
- 12 W. Morawski, *Od marki do złego: historia finansów Drugiej Rzeczypospolitej* (Warsaw, 2008).
- 13 G.D. Feldman, *The Great Disorder: Politics, economics, and society in the German inflation, 1914–1924* (Oxford and New York, 1997).
- 14 Order of the 27 May 1920. *Monitor Polski*, 149 (6 July 1920).
- 15 In France, for example, a 'Central Commission for Studies on the Cost of Living' was set up in February 1920. See A. Lhuissier, 'Les enquêtes officielles sur le coût de la vie et l'alimentation ouvrière (1910–1921)', in É. Geerkens, N. Hatzfeld, I. Lespinet-Moret, and X. Vigna (eds), *Les Enquêtes Ouvrières dans l'Europe Contemporaine* (Paris, 2019).
- 16 Order of the 27 May 1920, *op. cit.*
- 17 Order of the 17 January 1921. *Monitor Polski*, 34 (12 February 1921).
- 18 T. Szturm de Sztrem, *Walka o płace zarobkowe* (Warsaw, 1922). See also *Płace zarobkowe w okresie dewaluacji pieniężnej* (Warsaw, 1923), *Żywiołowość Opodatkowani: podatek inflacyjny* (Warsaw, 1924).
- 19 *Ibid.*, 20.
- 20 D. Maul, *The International Labour Organization. 100 years of global social policy* (Oldenbourg, 2019). S. Kott, 'From transnational reformist network to international organization', in D. Rodogno, B. Struck, and J. Vogel (eds), *Shaping the Transnational Sphere. Experts, networks and issues from the 1840s to the 1930s* (New York, 2015).
- 21 N. Stegmann, 'The ILO and East Central Europe: Insights into the early Polish and Czechoslovak interwar years', *AUC Studia Territorialia*, 17, 1 (2017), 11–34.
- 22 T. Szturm de Sztrem, 'Wage problems in Poland during and after the War', *International Labour Review*, X, 3 (1924), 389–410.
- 23 *Ibid.*, 399.
- 24 *Ibid.*, 400.
- 25 *Ibid.*, 401.
- 26 Archiwum Akt Nowych, *Międzynarodowe Biuro Pracy, Oddział korespondencyjny w Warszawie*, 3, 1922–23, 510, Letter of the 25 September 1922 (in French).
- 27 *Ibid.*, 499, Letter of the 6 December 1922.
- 28 ILO, *Methods of Compiling Cost of Living Index Numbers. Report prepared for the second international conference of labour statisticians (April 1925)*, Studies and reports. Series N (Statistics); 6 (Geneva, 1925).
- 29 *Ibid.*, 9.
- 30 T.M. Porter, *Trust in Numbers: The pursuit of objectivity in science and public life* (Princeton, NJ, 1996).
- 31 ILO, *Second International Conference of Labour Statisticians. Held at Geneva, 20 to 25 April 1925*, Studies and reports. Series N (Statistics); 8 (Geneva, 1925), 69–70.
- 32 É. Brian, 'Transactions statistiques au XIXe siècle. Mouvements internationaux de capitaux symboliques', *Actes de la Recherche en Sciences Sociales*, 145 (2002), 34–46.
- 33 ILO, *Methods of Compiling Cost of Living Index Numbers, op. cit.*, 48.
- 34 I. Fisher, *The Making of Index Numbers. A study of their varieties, tests, and reliability* (Boston, MA and New York, 1922), 3.
- 35 Archiwum Państwowe w Łodzi, *Akta miasta Łodzi: "Ceny i koszty utrzymania 1921...1926"*, 24379.
- 36 Archiwum Państwowe w Łodzi, *Akta miasta Łodzi: "Sprawozdania miesięczne do G.U.S."*
- 37 ILO, *Methods of Compiling Cost of Living Index Numbers, op. cit.*, 17.
- 38 ILO, *Second International Conference of Labour Statisticians, op. cit.*, 12–13.
- 39 *Ibid.*, 70.

- 40 ILO, *Third International Conference of Labour Statisticians. held at Geneva, 18 to 23 October 1926* (Geneva, 1926).
- 41 *320 Haushaltungsrechnungen von Metallarbeitern*, Vorstand des Deutschen Metallarbeiter-Verbandes, (Stuttgart, 1909). *Wirtschaftsrechnungen und Lebensverhältnisse von Wiener Arbeiterfamilien in den Jahren 1912 bis 1914*. Erhebung des k. k. Arbeitsstatistischen Amtes im Handelsministerium (Vienna, 1916).
- 42 *Instytut Gospodarstwa Społecznego 1920–1930, op. cit.*, 17.
- 43 Geerkens, Hatzfeld, Lespinet-Moret, and Vigna (eds), *op. cit.* A. Oberschall, *Empirical Social Research in Germany: 1848–1914* (Paris and La Haye, 1965). M. Bulmer, K. Bales, and K.K. Sklar (eds), *The Social Survey in Historical Perspective, 1880–1940* (Cambridge, 1991).
- 44 C. Berthomieu, 'La loi et les travaux d'Engel', *Consommation*, 4 (1966), 59–89. G. Stigler, 'The early history of empirical studies of consumer behavior', *Journal of Political Economy*, 62, 2 (1954), 95–113.
- 45 A. Desrosières, 'Du travail à la consommation: L'évolution des usages des enquêtes sur le budget des familles', *L'argument Statistique. II, Gouverner par les nombres* (Paris, 2008), 8, 177–215.
- 46 *Warunki Życia Robotniczego w Warszawie, Łodzi i Zagłębiu Dąbrowskim w Świetle Ankiety 1927 Roku* (Warsaw, 1929), VII.
- 47 *Ibid.*, 3.
- 48 *Ibid.*, 7.
- 49 *320 Haushaltungsrechnungen von Metallarbeitern, op. cit.*
- 50 B. Balukiewicz, 'Ankieta o budżetach domowych', *Statystyka Pracy*, 3–4 (1927), 321–343.
- 51 ILO, *Methods of Conducting Family Budget Enquiries*, Studies and reports. Series N (Statistics); 9 (Geneva, 1926), 57.
- 52 *Warunki życia robotniczego w Warszawie, Łodzi i Zagłębiu, op. cit.*, 17. W. Schiff, 'Die österreichische Erhebung über Wirtschaftsrechnungen und Lebensverhältnisse von Wiener Arbeiterfamilien, Methode und Ergebnisse', *Allgemeines Statistisches Archiv*, 10 (1916/17), 509–594.
- 53 *Instytut Gospodarstwa Społecznego 1920–1930, op. cit.*, 20–21.
- 54 *Warunki życia robotniczego w Warszawie, Łodzi i Zagłębiu, op. cit.*
- 55 *Budżety Rodzin Robotniczych. Wyniki ankiety przeprowadzone w Warszawie, Łodzi, Zagłębiu Dąbrowskiemu i na Górnym Sasku, 1927, 1928, 1929*, (Warsaw, 1930).
- 56 *Budżety Rodzin Robotniczych w Warszawie w latach 1927–1929*, 5 (Warsaw, 1932).
- 57 B. Balukiewicz, *op. cit.*, 325.
- 58 *Budżety Rodzin Robotniczych w Warszawie, op. cit.*, 15.
- 59 *Warunki życia robotniczego w Warszawie, Łodzi i Zagłębiu, op. cit.*, 95.
- 60 *Budżety Rodzin Robotniczych w Warszawie, op. cit.*, 15.
- 61 *Warunki życia robotniczego w Warszawie, Łodzi i Zagłębiu, op. cit.*, 109.
- 62 *Ibid.*, 111.
- 63 *Ibid.*, 107.
- 64 E. Estreicher, 'W sprawie metody badań kosztów utrzymania rodzin robotniczych', *Statystyka Pracy*, IX, 2 (1930), 194–209.
- 65 *Ibid.*, 208.
- 66 T. Szturm de Sztrem, 'Nowy wskaźnik kosztów utrzymania', *Statystyka Cen*, 4 (1931), 1–23.
- 67 B. Rzepecki, *Komisja Ankietowa. Badania warunków i kosztów produkcji oraz wymiany* (Warsaw, 1927).
- 68 M. Dhermy-Mairal, 'Du danger des enquêtes savantes. Faire œuvre de science dans l'entre-deux-guerres au Bureau international du travail', *Revue d'Histoire Moderne & Contemporaine*, 62, 4 (2015), 7–32.
- 69 *Instytut Gospodarstwa Społecznego 1920–1930, op. cit.*, 15–16.
- 70 T. Szturm de Sztrem, 'Nowy wskaźnik kosztów utrzymania', *op. cit.*, 13.

References

- Arbeitsstatistisches Amt im Handelsministerium (Labour Statistics Office in the Ministry of Commerce), *Wirtschaftsrechnungen und Lebensverhältnisse von Wiener Arbeiterfamilien in den Jahren 1912 bis 1914*. Erhebung des k. k. Arbeitsstatistischen Amtes im Handelsministerium (Vienna, 1916).
- Balukiewicz, B., 'Ankieta o budżetach domowych', *Statystyka Pracy*, 3–4 (1927), 321–343.
- Berthomieu, C., 'La loi et les travaux d'Engel', *Consommation*, 4 (1966), 59–89.
- Blobaum, R., *Rewolucja: Russian Poland, 1904–1907* (Ithaca, NY, 1995).
- Borodziej, W., and Górny, M., *Der vergessene Weltkrieg Europas Osten 1912–1923* (Darmstadt, 2018).
- Brian, É., 'Transactions statistiques au XIXe siècle. Mouvements internationaux de capitaux symboliques', *Actes de la Recherche en Sciences Sociales*, 145 (2002), 34–46.
- GUS, *Budżety Rodzin Robotniczych w Warszawie w latach 1927–1929*, 5 (Warsaw, 1932).
- GUS, *Budżety Rodzin Robotniczych. Wyniki Ankiety Przeprowadzone w Warszawie, Łodzi, Zagłębiu Dąbrowskiemu i na Górnym Sasku, 1927, 1928, 1929* (Warsaw, 1930).
- Bulmer, M., Bales, K., and Sklar, K. K. (eds), *The Social Survey in Historical Perspective, 1880–1940* (Cambridge, 1991).
- Desrosières, A., 'Du travail à la consommation: L'évolution des usages des enquêtes sur le budget des familles', *L'Argument Statistique. II, Gouverner par les nombres* (Paris, 2008).
- Dhermy-Mairal, M., 'Du danger des enquêtes savantes. Faire œuvre de science dans l'entre-deux-guerres au Bureau International du Travail', *Revue d'Histoire Moderne & Contemporaine*, 62, 4 (2015), 7–32.
- Streicher, E., 'W sprawie metody badań kosztów utrzymania rodzin robotniczych', *Statystyka Pracy*, IX, 2 (1930), 194–209.
- Fisher, I., *The Making of Index Numbers. A study of their varieties, tests, and reliability* (Boston, MA and New York, 1922).
- Feldman, G.D., *The Great Disorder: Politics, economics, and society in the German inflation, 1914–1924* (Oxford and New York, 1997).
- Górny, M., *Science Embattled. Eastern European intellectuals and the Great War* (Paderborn, 2019).
- Hłasko, S., *Sprawozdanie z działalności Biura Pracy Społecznej za okres od 1 grudnia 1915 r. do 1 kwietnia 1918 r.* (Warsaw, 1918).
- ILO, *Methods of Compiling Cost of Living Index Numbers. Report prepared for the second international conference of labour statisticians (April 1925)*, Studies and reports. Series N (Statistics); 6 (Geneva, 1925).
- ILO, *Methods of Conducting Family Budget Enquiries*, Studies and reports. Series N (Statistics); 9 (Geneva, 1926).
- ILO, *Second International Conference of Labour Statisticians. Held at Geneva, 20 to 25 April 1925*, Studies and reports. Series N (Statistics); 8 (Geneva, 1925).
- ILO, *Third International Conference of Labour Statisticians. Held at Geneva, 18 to 23 October 1926* (Geneva, 1926).
- IGS 1920–1930. *Sprawozdanie z Działalności Dziesięcioletniej* (Warsaw, 1930).
- IGS, *Warunki życia Robotniczego w Warszawie, Łodzi i Zagłębiu Dąbrowskim w Świetle Ankiety 1927 Roku* (Warsaw, 1929), VII.

- Kohlrausch, M., Steffen, K., and Wiederkehr, S., *Expert Cultures in Central Eastern Europe. The internationalization of knowledge and the transformation of nation states since World War I* (Osnabrück, 2010).
- Kott, S., 'From transnational reformist network to international organization', in D. Rodogno, B. Struck, and J. Vogel (eds), *Shaping the Transnational Sphere. Experts, networks and issues from the 1840s to the 1930s* (New York, 2015).
- Łazowska, B., 'Współpraca Głównego Urzędu Statystycznego z Instytutem Gospodarstwa Społecznego w zakresie badań społecznych w latach 1920–1939', *Wiadomości Statystyczne*, 65, 7 (2020), 47–64.
- Lebow, K., Mazurek, M., and Wawrzyniak, J., 'Making modern social science: The global imagination in East Central and Southeastern Europe after Versailles', *Contemporary European History*, 28 (2019), 137–142.
- Lhuissier, A., 'Les enquêtes officielles sur le coût de la vie et l'alimentation ouvrière (1910–1921)', in É. Geerkens, N. Hatzfeld, I. Lespinet-Moret, and X. Vigna (eds), *Les Enquêtes Ouvrières dans l'Europe Contemporaine* (Paris, 2019).
- Lindermeyer, A., *Poverty Is not a Vice. Charity, society and the state in imperial Russia* (Princeton, NJ, 1996).
- Maul, D., *The International Labour Organization. 100 years of global social policy* (Oldenbourg, 2019).
- Morawski W., *Od Marki do Złego: Historia finansów Drugiej Rzeczypospolitej* (Warsaw, 2008).
- Morgan, M.S., and Klein, J.L. (eds), *The Age of Economic Measurement* (History of Political Economy Annual Supplement), (Durham, NC and @ London, 2001).
- Mrzygłód, I., 'Harsh reality: Living in Warsaw under hyperinflation in 1923', *Remembrance and Solidarity. Studies in 20th Century European History*, 4 (2015), 27–46.
- Oberschall, A., *Empirical Social Research in Germany: 1848–1914* (Paris and La Haye, 1965).
- Porter, T.M., *Trust in Numbers: The pursuit of objectivity in science and public life* (Princeton, NJ, 1996).
- Rzepecki, B., *Komisja Ankietowa. Badania warunków i kosztów produkcji oraz wymiany* (Warsaw, 1927).
- Schiff, W., 'Die österreichische Erhebung über Wirtschaftsrechnungen und Lebensverhältnisse von Wiener Arbeiterfamilien, Methode und Ergebnisse', *Allgemeines Statistisches Archiv*, 10 (1916/17), 509–594.
- Stegmann, N., 'The ILO and East Central Europe: Insights into the early Polish and Czechoslovak interwar years', *AUC Studia Territorialia*, 17, 1 (2017), 11–34.
- Stigler, G., 'The early history of empirical studies of consumer behavior', *Journal of Political Economy*, 62, 2 (1954), 95–113.
- Szturm de Sztrem, T., *Walka o Płace Zarobkowe* (Warsaw, 1922).
- Szturm de Sztrem, T., *Płace Zarobkowe w Okresie Dewaluacji Pieniężnej* (Warsaw, 1923).
- Szturm de Sztrem, T., 'Wage problems in Poland during and after the War', *International Labour Review*, X, 3 (1924), 389–410.
- Szturm de Sztrem, T., *Żywiołowość Opodatkowani: podatek inflacyjny* (Warsaw, 1924).
- Szturm de Sztrem, T., 'Nowy wskaźnik kosztów utrzymania', *Statystyka Cen*, 4 (1931), 1–23.
- Szturm de Sztrem, T., *Instytut Gospodarstwa Społecznego 1920–1944* (Warsaw, 1959).
- Vorstand des Deutschen Metallarbeiter-Verbandes (ed.), *320 Haushaltungsrechnungen von Metallarbeitern*, (Stuttgart, 1909).
- Winclawski W., 'Leplayowskie inspiracje w socjologii polskiej', *Rocznik Lubuski*, 34, 2 (2008), 87–110.