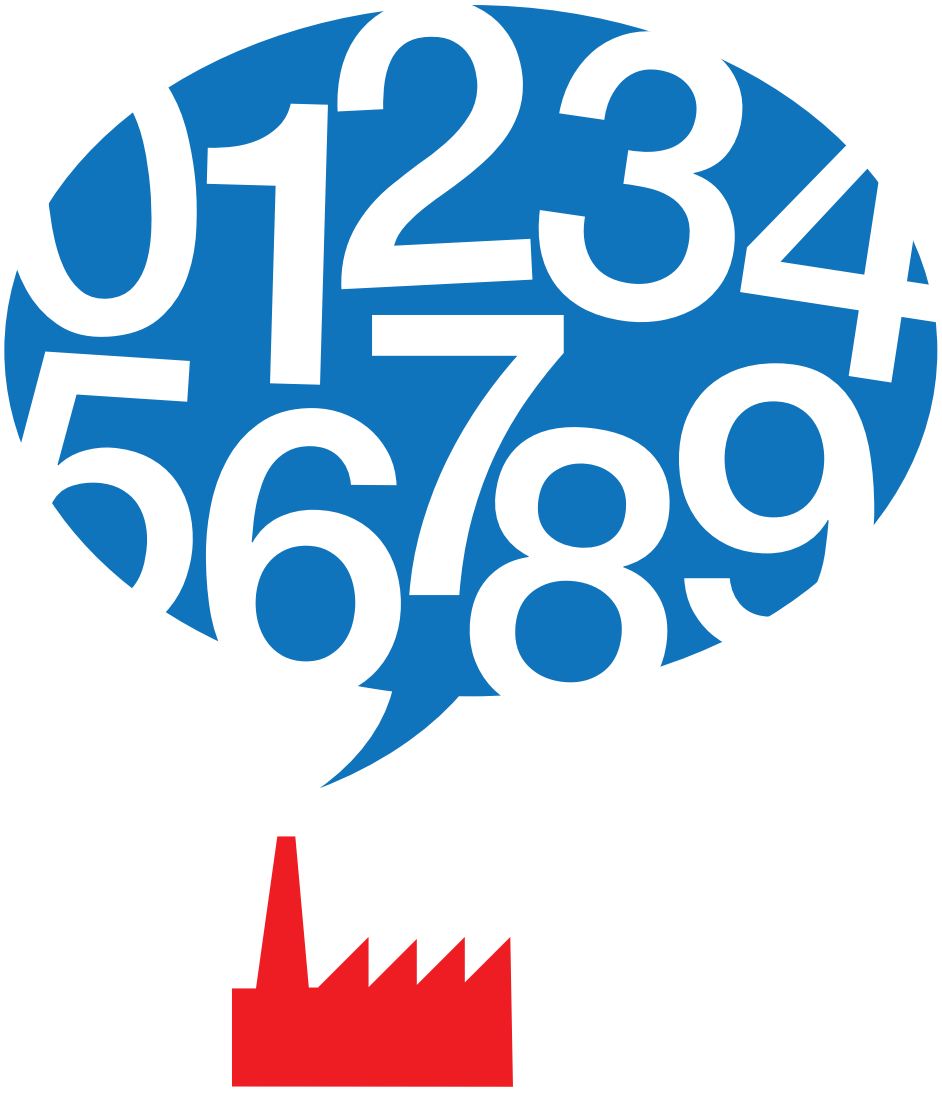
Striking Numbers

New approaches to strike research

Edited by Sjaak van der Velden



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Why do workers strike? Looking for an answer using micro data on Leiden strikers in 1914

Sjaak van der Velden

1. Introduction

The central theme of strike research is the question of why workers occasionally decide to carry out a cessation of work. An answer to this question is essential for politicians, employers and union leaders, but also for historians, sociologists, economists and other students of the social sciences. Most research into the field has been based on aggregated strike data as collected by statistical bureaus. Aggregated data has been published since 1927 by the International Labour Office (ILO) and gives information from many countries on the number of strikes per year, the number of workers involved and the number of working days of production lost. National statistical bureaus often publish more detailed data on regions, professions, causes and the month of outbreak of a conflict. In the beginning, official statistics had the character of criminal statistics, because strikes and unions were forbidden. After the right of association was recognised, strike statistics dealt principally with the economic consequences of labour conflicts (ILO, 1926: 5-6). Early statistics were very rich in detail, which was real micro data published by or on behalf of labour ministries. Unfortunately those days have long gone and all data is now at an aggregated level (Franzosi, 1982: 3). To give an example that is important for this chapter: the last year that micro data was published in the Netherlands was 1913, but from that date on the amount of data diminished almost yearly. The initial reason was budgetary during World War I, but later the focus of Statistics Netherlands shifted from a social to an economic angle. The main reason to collect strike data from 1927 concerned the economic costs of strikes. From the 1980s data was restricted further for reasons of privacy: a user of the data should not be able to identify the company where strikes occurred. As a result, the level of aggregation rose again.

Using the above-mentioned data, researchers can try to answer questions about the propensity to strike of workers in certain countries, professions or regions. Patterns of strike activity over time can also be discerned. Unfortunately, the character of the data makes it impossible to answer the question of why *individual* workers go on strike. For this, strike data on an individual basis and data on other characteristics of the relevant individuals is needed.

In this contribution I will try to answer the question of whether using micro data concerning strikers who struggled for higher wages in a Leiden cotton company in 1914 opens new insights into workers' behaviour. The outcome of my research is only valuable in respect of the company in question, but this may be a starting point for further research. It may be a new piece of the puzzle.

In section 2, I will give a short overview of the history of the Leiden cotton printing company, LKM. Section 3 provides a history of strikes at the company. The section that follows is dedicated to a description of the micro data on the strikers and non-strikers involved in the industrial action that took place in 1914. Hypotheses about

workers' behaviour regarding strike activity are formulated in the next section. In section 6, an effort is made to falsify the hypotheses using available data, after which conclusions are drawn in section 7.

2. A critique on aggregated strike data

From the early days of capitalism, researchers have wondered why workers strike. This question invited many to publish material about strikes, but it took some time before researchers started to use more sophisticated statistical techniques. Maximilian Meyer published a book in 1907 on strikes in seven countries (Meyer, 1907). Although the work done and statistics published still show the Sisyphean task he undertook, all he did was to collect statistics from seven countries. It took five more years before statistical calculations entered the field of strike research. In 1912 the French researcher C. Rist published an article relating strike activity and economic indicators (prices and unemployment) using the coefficient of dependency (Rist, 1912). The *coefficient of dependency* used by Rist was developed by the Frenchman L. March in 1905. This coefficient is somewhat similar to the correlation coefficient developed by Galton and Pearson, although the latter was not generally known in those days.

Rist's article inspired the Dutch statistician Van Dam van Isselt to calculate the coefficient of dependency of the number of strikes to unemployment in six countries for the years 1901 to 1912: Belgium, Germany, England, France, the Netherlands and Austria (Van Dam van Isselt, 1914). His outcome differs slightly from the coefficients that Rist calculated, but the differences are the result of the greater extent of annual data Van Dam van Isselt had at his disposal. In general, both authors saw their expectations regarding the relationship between strikes and unemployment as having been confirmed. According to their expectations, higher unemployment would lead to diminished strike activity, and similarly lower unemployment results in less fear among workers of being dismissed or otherwise penalised, and therefore in more strike activity. Since those early days of the statistical analysis of strike trends, a vast number of studies have been published. Often mentioned in overviews is John I. Griffin's book on strikes. Griffin published the first thorough statistical book on strikes in the United States, in which he investigated the relationship between strikes and lockouts on the one hand and the business cycle on the other (Griffin, 1939: 182). He did not calculate correlation coefficients, but concluded from the graphical movements of the number of strikes and the price index that both coincided frequently (Griffin 1939: 69).

In the greater part of statistical studies there is not a living soul included. All the theories are based on aggregated data and therefore cannot explain why individual workers decide to join a strike or, on the contrary, join the ranks of the 'scabs'. Aggregated data is only useful in explaining group behaviour or abstract developments in strikes related to (even disputed) economic long waves (Kelly, 1997). If researchers discover that strike propensity moves in some way with the economic cycle they can only observe the fact, but will not be able to make valid remarks about the reason why individual workers make the decision to join or abstain. Trying to use the discovered correlations between strikes and economic indicators in explaining the individual behaviour of workers is an example of confusing ecological and individual correlations that was coined 'the ecological fallacy' by W.S. Robinson in 1950 (Hackett Fischer, 1971: 119–120). This may be explained by giving a reversed example of this fallacy.

Although it is clear from epidemiological research that nicotine can cause lung diseases, the entrenched smoker will always point to a very old person who has smoked for their entire life without becoming ill. We all understand that this approach is wrong.

Let us return to strike research. Since Griffin's publication, a vast number of strike studies have been published. These have been put in order, according to the several approaches by different authors. Roberto Franzosi in his illuminating study mentions five different approaches (Franzosi, 1995: 10-12). The Business-cycle explanation is best represented by the Ashenfelter and Johnson model, which argues that the state of the labour market modifies the bargaining position of the workers. This modification influences the propensity to strike.

Economic hardship theories have sought to explain strikes as resulting from the level of grievances. When this level becomes intolerable, workers are likely to go on strike. Set apart from these two economic angles are the political-exchange and institutional theories. Their advocates try to explain strikes as resulting from the duration of collective agreements or the position of labour (parties) in the political power structure. The fifth approach tries to explain strikes as resulting from the capacity of workers to organise themselves into stable unions. Franzosi adds a new approach to these theories, in which in explaining strikes, the strikes themselves are not only a dependent variable but also an independent variable. In other words: strikes explain strikes. Somewhat apart from these theories stands the Marxist notion that strikes are an expression of the capitalist relations of production, which are expected to end in the overthrow of capitalism per se. In this view, workers are almost forced into strikes by the class nature of society. According to many Marxists, intervention by a well-organised political party is, however, needed to guide the striking workers into socialism. It may be because of this perspective that Marxist researchers are almost completely absent in quantitative strike research. They consider it futile to study strikes as long as the envisaged party does not exist.

The mentioned approaches have one thing in common: they are very general and need aggregated data. The reasons why an individual worker will or will not go on strike cannot be answered via these angles. Klandermans (2004) developed a typology of motives for people to engage in protest. Even if people agree on the goals of a protest movement (which is what a strike is) they need more motives to actually participate. The types Klandermans distinguished are instrumental motives, ideological motives and collective identity. To study these motives, modern researchers use questionnaires; a technique we cannot use in historical research. In the rare cases when workers from the past were questioned, we can use the answers.

In the majority of cases we will have to use other kinds of data. Most of the time this data will be demographical in character, such as sex, age or education. The findings of most of these studies are not very consistent (Gallagher and Strauss, 1991: 9) but are better than nothing. In this chapter I will therefore try to discover the personal motives for people joining or abstaining from strikes, by using data at an individual level. Where the strikers and non-strikers lived, how they lived, what their earnings were, etc. Are there any differences between strikers and non-strikers that can be attributed to a certain stage in their life course? Are young workers, unmarried workers or workers without children more strike prone than their older, married colleagues or those with children? Or are there any other characteristics of their life cycles that may help to explain why workers go on strike?

Looking for an answer to the question of why individual workers participate in strikes, I was lucky to discover a special historical source in the records of a cotton printing company in the municipal archives of Leiden. The data from this source will perhaps give some clues to help answer the question of why the individual workers from this company did or did not engage in a strike.

3. Hypotheses

Given the notion that the search for workers' motives to go on strike may benefit from micro data, there is still the problem of how to measure the motives of strikers and non-strikers. Can we deduce the intentions of people from their actual acts? The actor-oriented approach tries to discover the circumstances under which individuals are willing to enter into collective action (Kelly, 1997: 23). This goes beyond the study of the behaviour of a group or profession. The best known example of this type of study was published in 1954 by Kerr and Siegel. The authors compared the willingness to strike of workers in eleven countries during the period from 1915 to 1939 and categorised by industry. They concluded that miners, seamen and dock workers were by far the most strike prone (Kerr and Siegel, 1954: 190-212). This high willingness was explained from these workers' isolation in society, but of course this mass isolation hypothesis does not answer the question of why some workers participate in strikes and others do not. The problem that needs to be solved is that of finding out why individuals are or are not mobilised to engage in a conflict, given the expectation that they will all benefit from a certain collective goal. All potential strikers have to cross a threshold. Will they join the strike or other collective behaviour or not (Granovetter, 1978)? The considerations by workers in making the decision to join an action or not are influenced by the behaviour of their peers; it is safer to join a strike than to start one. Crossing the threshold is a risky act. The intentions behind any decision can be discovered in modern sociological research by various methods such as interviews, surveys and observing participation. An example of this is provided by Falk, Grimes and Lord (1982), who studied a strike of teachers and discovered some differing personal qualities between strikers and non-strikers. Their findings showed that striking teachers were more professionally oriented than their non-striking colleagues. The strikers they studied desired more authority, autonomy and control in the workplace. This modern conclusion cannot be confirmed in historical research, because we cannot ask workers from the past about their attitudes. Therefore we have to resort to the characteristics of the individual workers. Are they male or female, old or young, skilled or semi-skilled etc?

The Dutch historian Theo van Tijn wrote about the willingness of young workers to join labour unions: "It is assumed that men of about 20 to 35 are best in a position to undertake meaningful, responsible and if need be bold collective action" (Van Tijn, 1976: 233). These young men are supposed to have left the guidance of their more careful parents and are not yet in the position of being parents themselves. From the same idea we can expect married workers to be less strike prone than single workers, who will for the most part also be younger than their married colleagues. Following this line of thought it seems likely that workers with big families, meaning more children, will not be very willing to go on strike. This may be expected to be the case especially in families with young children who are unable to generate family income. The Netherlands has been for a long time a society divided by religious boundaries, contrary to for example Italy, where most of the inhabitants are Roman

Catholics. According to the census of 1909, 35 per cent of the Dutch population was Roman Catholic, while 52.7 per cent belonged to the Dutch Reformed Church; in Leiden these figures were 25.8 per cent and 51.9 per cent respectively[1]. Keuning (1970: 80) has stated that Roman Catholics are regarded as being more docile than Protestants, because their church is more centralised than the protestant communities. This supposition is supported by opinion research among more than 300 textile workers from Twente region in 1920. More protestant respondents than Roman Catholic workers said that they did not think it necessary for the minister or priest to give political guidelines during a sermon (Heerma van Voss, 1987: 51-52).

Clark Kerr and Abraham Siegel in their 1954 comparison of the propensities to strike in eleven countries concluded that workers living as an isolated mass and performing unpleasant jobs are the most strike prone. This conclusion was heavily criticised on methodological, logical and empirical grounds by Edwards (1977), but is often still quoted. It is not necessary to follow their conclusion, but their train of thought may serve as a guideline for constructing a hypothesis. The appreciation of workers' labour and their job satisfaction may be expected to play a role in their willingness to strike. Skilled workers probably have greater job satisfaction than do the unskilled, and in line with the Kerr and Siegel conclusion, are therefore less strike prone. Contrary to this view stands the dual commitment approach. In this view, workers satisfied with a company are also satisfied with their union and therefore more committed to union activities such as strikes (Gallagher and Strauss, 1991: 8). If we follow the Keer and Siegel approach, we would expect that workers who have been employed for a long time at a company are less willing to strike than their more recently employed colleagues. They are more loyal to the company and management. Labour turnover is a well-known alternative to a strike (Knowles, 1960: 301). Therefore workers may see more opportunities in looking for another employer rather than in engaging in a struggle. Because the data covers the entire careers of LKM workers, it is also possible to study the propensity to strike of workers who were self-employed for part of their careers. Are people who have been self-employed during their working life more, or less, willing to strike than the real proletarians who only ever worked as paid employees? Because these 'half-workers' might see an opportunity to escape from working-class life, I expect them to keep a distance from working-class activities, such as unionism or strikes. We can also look at the wages earned by LKM workers. Higher-skilled workers are likely to earn higher wages and therefore the wage levels of groups of workers may also provide a clue. Are better-paid workers more, or less, willing to strike than their worse paid fellow workers? If workers who get higher wages are indeed more skilled, it is in accordance with hypothesis five that these workers are less strike prone than their lower paid colleagues. We can argue this behaviour from the idea that they lack the drive to improve their life because it is already better than that of the other workers.

From the above mentioned considerations we can formulate a number of hypotheses to test:

1. Young workers are more strike prone than older employees.
2. Single workers are more strike prone than married workers.
3. Workers from big families are less willing to strike than those from small families or with no children.
4. Protestant workers are more strike prone than Roman Catholic workers.
5. Skilled workers are less willing to strike than their unskilled colleagues.

[1] www.volkstellingen.nl/nl/volkstelling/jaarview/1909/

6. Workers with a long career at the company are less strike prone than more recent employees.
7. Semi-proletarian workers are less strike prone than real proletarians.
8. Higher paid workers are less strike prone than workers who earn lower wages.

4. The data

The company records of LKM, kept in the communal archives of the city of Leiden, consist of a card box file. This file was compiled to offer a good insight into the lives of the LKM workers. This insight was necessary because of the Workmen's Compensation Act of 1901, which forced employers to insure their employees. Employers had to register their workforce and the card box is such a register (Klein, 2003: 3). The box contains about 500 cards with individual data about almost all the workers from the printing department who worked at LKM from 1900 until the end of 1932. Each card gives an insight into the past and present of these workers: their date of birth, their marital status and children, their profession before they joined LKM, their contract with LKM, the tasks they performed, whether they joined the strikes at LKM, how much they earned and if and why they left the company. This card box is a good source for reconstructing the lives of workers at LKM, especially if we combine it with data from the Leiden population register. Unfortunately the Leiden register is one of the few in the Netherlands that suffers from being incomplete.[3] From the card box it is clear which workers went on strike in 1882, 1902, 1914 and 1922 and which workers did not. For the 1882 and 1902 strikes, the lists from the card box are very incomplete, because many of these strikers no longer worked at the company when the card box was compiled. Elsewhere in the archive, complete lists of strikers during these early conflicts are available; so much more work can be done there. However, at this stage of the research I decided to study only the 1914 strike, because data from the card box and the population register are the most complete for this period. Since the data from LKM is not a sample, but includes the entire population of the workers at the factory during the 1914 strike, this means that all results of calculations hold true and there is no need to give the statistical significance. Of course the strike under research is only a small one and the outcome of the calculations holds true for this strike only.

A short history of the company and an overview of the strikes at LKM during the years before 1914 will precede the examination of the hypotheses.

5. The Leiden Cotton Company and cotton printing

Leiden is a city in the Netherlands, situated halfway between Amsterdam and Rotterdam. In the seventeenth century it was the second largest city in the Netherlands after Amsterdam. In that century Leiden was known for its textile and especially its woollen industries. Although the textile industry declined in the eighteenth century due to French protectionism, textiles were a feature of the city until the 1950s. During the

[2] Regionaal Archief Leiden, Archief Leidsche Katoenmaatschappij,
[3] In 1929 an enormous fire destroyed the town hall where the population register was kept. Only parts of it were saved and can be used for historical research. Most information from the pre-1890 register and everything from the post-1923 years was lost.

later part of the nineteenth century, textiles regained some of their prominence. Cotton also then entered the Leiden economy.

One of the leading textile companies was the *Leidsche Katoen Maatschappij* (LKM, or Leiden Cotton Company). Although LKM was one of the biggest companies in Leiden, employing some 900 workers around 1890, no extensive company history has been written so far. This is probably a result of the fact that the economic crisis of the 1930s and the cheap production of printed cotton in Asia forced the factory to close its gates in 1932. Most company histories were written after the Second World War and often, the existence of a company for a century or so motivated the board of directors to commission a memorial book. The only scientific history is an article by G. Verbong about the first ten years of LKM (Verbong, 1987).

Originally LKM was a company based in what would become Belgium. In 1835, after the separation of the United Kingdom of the Netherlands into two separate countries, the factory (named De Heyder & Co. and established in 1757) was relocated from Lier in Belgium to Leiden in the Netherlands. The reason for this move was the Dutch possession of vast colonies in what is now Indonesia, called the Dutch East-Indies in those days, to where printed cotton could be shipped on beneficial terms. The city of Leiden even donated to the company the land on which to build a factory.

Cotton printing was performed on a massive scale for that part of the empire, and production was promoted and subsidised by the Dutch government as a measure against poverty in the homeland. Labour had been regarded as a good solution for pauperism since the end of the eighteenth century.[4] This attitude also had negative results on productivity, because promoting labour resulted in the neglect of labour-saving developments. Even worse, after ten years in Leiden the once technologically advanced factory was in a state of decline. Labour was cheap and the state bought the product, so the owner felt no incentives to modernise. He even used all the profits for his own pleasure and refused to invest (Verbong, 1987: 29). In 1846 two Dutch entrepreneurs (Van Wensing and Driessen) bought the factory and gave it a fresh start.

The new management had better instincts for the needs of modern capitalism and purchased new machinery. In 1896 the company was renamed *Leidsche Katoenmaatschappij v/h De Heyder & Co*., but this new name was not a guarantee of success. One year after the name was changed the factory was ruined by a major fire, which made rebuilding and further modernisation necessary. Unfortunately, hard economic times followed, and especially after World War I the company was unable to compete with cheap Japanese products. The depression of the 1930s finally caused the company to close down in 1932.

6. Strikes at LKM between 1882 and 1922.

Of the 30 strikes that occurred in Leiden textile companies between 1882 and the closure of LKM in 1932, 16 took place at LKM. This results in an over-representation of the company under research in terms of the strike history of Leiden. The workers at LKM were obviously more strike prone than their colleagues in other factories, but we cannot offer an explanation for this.

[4] Many people were living on welfare and an endless discussion started about the reasons for pauperism and how to fight it. Most agreed that the poor had to learn to work and that employment should be promoted (Van der Velden, 2001).

The first strike that took place in the Leiden textile industry occurred in 1882 at LKM, then still named De Heyder & Co. For an overview of the strikes that occurred at De Heyder/LKM and the sources used, see appendix 1. In 1882 a number of strikes took place. On 19 May of that year, 75 male and 57 female printers refused to continue working. The reason was a reduction in wages. After three days the workers were victorious and resumed work. In June of the same year the weavers, inspired by the success of the printers, also went on strike. After almost two weeks of strike, riots and police intervention, the 300 workers gave in. A few strikers were not allowed to return. One of the spokesmen of the May strikers was sacked in July. Almost one hundred workers stopped production in solidarity with their colleague, but after police intervention they left the factory. The next day the strike was over. In September of the same year, printers of bed-spreads calculated that their wages had been lowered. They demanded a restoration of the former wage-level but this demand was rejected. More than two hundred men and women went on strike. The 150 female strikers went back to work after four hours, because the board of directors threatened to lock them out. The men did not give in and were actually locked out. This lockout caused the women to go on strike again five days later. After two weeks of strikes and lockouts, the strikers were allowed to gradually enter the factory again, but eight of them were victimised. The strike was a complete failure and also caused the decline of the recently formed workers' organisation.

The next strike at De Heyder & Co, now known as the *Leidsche Katoen Maatschappij*, took place in 1895. On 13 June the weavers stopped working. Again, the underlying reason was a recent reduction of wages, although the immediate cause was the suspension of a fellow weaver. The strike was supported by the carpenters' union of Amsterdam. However, this support was in vain and after four days the 400 weavers decided to go back to work, but another grievance almost immediately caused a new strike. During a meeting between the management and a delegation from the workers over complaints about the bad quality of the yarn that had to be woven, a strike broke out[5]. This strike was instigated by a member of the weavers' union. Intervention by union leaders and a promise by the directors that better quality yarn would be bought ended the strike after 15 days. In 1902, 24 printers went on strike for 56 days. They demanded smaller and lighter printing plates and a rise in wages. The strikers refused any intervention by the labour unions. This wildcat strike was lost. In 1907, washers complained about bad yarn. One of their colleagues, a member of the works' council, told them to go back to work. In 1914 a further strike occurred at LKM. In the autumn of 1913 the workers had already asked for a wage increase, payment for overtime and more holidays. When these demands were rejected, the unions presented an ultimatum signed by 88 workers. A strike broke out, but almost nothing is known about the events although the strikers won at least the demanded pay rise.

In 1919 two strikes occurred that were both won by the strikers. This fits in with the overall pattern of this period. At the end of World War I and during the following years many strikes were victorious because employers gave in easily out of fear of revolution. The last strike at LKM took place in 1922, when 265 weavers went on strike against a wage reduction. Wage reductions were common in this period. Employers and right-wing politicians tried to regain what they had lost during the revolutionary years and were supported in their ambitions by a declining economy. The strike was lost after four months.

[5] Unlike most other cotton-printing companies LKM did not spin its own yarn.

Of the 16 labour conflicts that were detailed, only three were won by the workers. The rest were settled (four) or lost (nine). So even if we add the strikes that were settled to the conflicts with a positive outcome, workers at LKM were not very successful in their efforts to fight for a more decent living. Only 44 per cent of the strikes were other than completely useless.

7. Characteristics of strikers and non-strikers during the 1914 strike

In 1914, 87 workers went on strike including the five members of the action committee that initiated the action. There seems to have been a small group of union activists at LKM and according to mobilisation theory, this may have played a role in the fact that a strike occurred (Kelly, 1997: 26). However, in this chapter I am looking for an explanation as to why individual workers joined or refused to join this specific strike. The question is, who was influenced by the activists and who was not?

On their personal cards in the card box file, 21 workers were explicitly recorded as being non-strikers. Four of them were afterwards rewarded with a secret pay rise for not striking. Even two of the strikers were allowed such a pay rise, but there is no reason given for this. The one striker who always received a secret bonus before the strike lost this allowance afterwards, probably because he was also a member of the action committee. After connecting the incomplete data from the population register to the personnel cards, we can note a few things about the two groups of workers. There are a number of issues that may be important in highlighting the differences between the strikers and non-strikers. Is there a difference in age, religion or gender? Matrimonial status and having or not having children may also play a role according to the hypotheses. Former career and wage level are also possible determinants of strike behaviour.

7.1. Age, gender and matrimony

Hypothesis: Young workers are more strike prone than older employees.

The average age of the 108 workers involved in this research was 45.1 years. The average for the strikers was 44.5 years, and that of the workers who refused to participate in the strike was 47.8 years. This means that strikers were slightly younger than the non-strikers but the difference is not extreme. The youngest striker was 21 years old, whereas the three youngest non-strikers were 17, 17 and 15. This means that they were still living with their parents. An example of one such young non-striker is Willem Taffijn. He was 17 years old and lived with his father after the death of his mother in 1911. The father of Willem, Petrus Taffijn, decided not to strike and neither did his son. We can suppose that they influenced one another.

The oldest non-striker was 78 years old and the oldest striker 72. The 78-year old non-striking worker, Mooten, was the father-in-law of another non-striker. The highest and lowest ages are thus to be found in the non-striking group which coincides with the higher standard-deviation for this group. The decision whether to join or not was possibly subject to some influence from relatives. All 108 workers, strikers and non-strikers, were male, so it is not possible to discover a gender perspective in this strike.

Table 2. Age characteristics of strikers and non-strikers

	Strikers (n=87)	**Non-strikers (n=21)**
Average	44.5	47.8
Minimum	21	15
Maximum	72	78
Median	43	47
Standard deviation	12	20.3

Hypothesis: Single workers are more strike prone than married workers.

The average age of all the workers was around 45, equating to being born around 1869. At that age most workers could be expected to have been married, because the 1909 census indicated that 88 per cent of the male population born in the years from 1865 to 1869 was married. Matrimony, and especially having children, will influence the willingness to strike according to this second hypothesis. 77 per cent (n=67) of the strikers and 71 per cent (n=15) of the non-strikers were married, which contradicts the hypothesis, although the difference is not very great.

Hypothesis: Workers from big families are less willing to strike than those from small families or with no children.

If we look at having children with regard to both groups then we may still expect a difference. After all, children need to be fed and taken care of every day. When calculating a correlation coefficient between the family size of workers and their willingness to strike, this results in a negative value of R= -0.57. There seems to be a relationship between the two. Workers with more children are less strike prone than workers with small families. This coincides with the slightly higher average age of non-strikers, because workers with bigger families tend to be older than workers with smaller families.

7.2 Religion

Hypothesis: Protestant workers are more strike prone than Roman Catholic workers.

The two most widespread religions in the Netherlands around 1900 were Roman Catholicism and the Dutch Reformed Church. In 1891 the pope, in his encyclical letter *Rerum Novarum,* warned Catholics that strikes and socialism were in conflict with the Bible. They were not allowed to desire the riches of their fellow men, including their patrons. The Protestants organised a Social Christian Congress in the same year, which stipulated the same rule, although leaving some room for resistance against very harsh living conditions. It is important to realise that both denominations opposed the use of strikes as a means to improve living conditions for workers.

Of the LKM workers whose religion is known (n=78), 24 per cent were Roman Catholics, which is roughly the same as the percentage in Leiden as a whole (26 per cent). 71 per cent of the employees at LKM belonged to the Dutch Reformed Church (Nederlands Hervormd) whereas only 52 per cent of the city population was Dutch Reformed. Lutherans and Calvinists counted for approximately two per cent each. Of the Lutheran and Calvinist denominations, all four workers went on strike, while 79 per cent of the Catholics and 80 per cent of the reformed joined the strike. One of the Catholic workers had even once worked as a *Zouave* in the papal army, but this did not keep him from striking.

In short, it seems that there was no religious influence on the behaviour of workers, but we must keep in mind that we know the religion of only 57 per cent of the non-strikers and 76 per cent of the strikers.

7.3 Career

Hypothesis: Skilled workers are less willing to strike than their unskilled colleagues.

Of course the career path of a worker and the kind of work he or she performs may influence their willingness to engage in a strike. Let us first look at the level of skill of strikers and non-strikers.

It is common knowledge in the historiography of strikes and labour unions that unskilled workers may go on strike faster, or at least more spontaneously, than skilled labourers. The latter group is, however, easier to organise into unions.

The historical sources available do not mention membership of the textile workers' unions at LKM. The only thing we know is the membership of five workers of the action committee mentioned earlier. The jobs these five performed were evenly distributed over the qualifications of unskilled, semi-skilled and skilled as indicated by Wiegersma (Wiegersma: 97-108).

However, there is a clear difference between the complete groups of strikers and non-strikers. Table 3 indicates this. Although it was impossible to qualify between one third and almost forty per cent of the professions, we may so far conclude that the strikers were mainly semi-skilled while the non-strikers were unskilled or skilled.

Table 3. Qualifications of strikers and non-strikers out of the total working population at the LKM (%)

	Strikers (n=87)	**Non-strikers (n=21)**
Unskilled	3.6	20.0
Semi-skilled	44.6	13.3
Skilled	13.3	33.3
Unknown	38.6	33.3

Hypothesis: Workers with a long career at the company are less strike prone than more recent employees.

One might expect that workers who had worked all their life at LKM were so embedded in the company's culture that out of loyalty they would be less strike prone than those workers who had started their careers elsewhere. This seems to be the case. 55 per cent (n=48) of the strikers started their career at LKM, as did 70 per cent (n=15) of the non-strikers. This indicates the tendency that loyalty to LKM promoted an attitude of not engaging in strikes.

Hypothesis: Semi-proletarian workers are less strike prone than real proletarians.

Real proletarians are defined as people who are, and were, paid employees during their entire careers. Semi-proletarians are workers who may, if necessary, switch from being paid employees to self-employed labourers or vice versa. A small group (n= 10) of workers who started elsewhere, or worked temporarily somewhere else although beginning at LKM, were self-employed during that period. They ran a small shop or trade. Nine of them (90%) went on strike in 1914, while 81% (n= 79) of the real proletarians did. So the difference in attitude between the two groups is very small and even contradicts the hypothesis. This is not true for workers who had once worked in the military. Of the strikers, 23 per cent

(n=20) had once served in the army, whereas 30 per cent (n=6) of the non-strikers had a military career. In other words, workers at LKM who had once been soldiers lost some of their class-consciousness and became less strike prone than their colleagues. The difference may however also result from the pension paid to discharged soldiers.

7.4 Wages

Hypothesis: higher paid workers are less strike prone than workers who earn lower wages.

Let us differentiate between the wages of strikers and non-strikers at the beginning and at the end of the 1914 events.

Table 4. Average weekly wages of strikers and non-strikers before and after 6 May 1914, in guilders

	Strikers (n=87)	**Non-strikers (n=21)**
Before the strike	7.345	6.405
After the strike	7.870	7.140
Rise in %	7.1	11.5

From Table 4, two things are clear. Strikers were better rewarded than non-strikers before the strike, and non-strikers benefited more from the strike than did those who participated in the action. This seems a somewhat confusing conclusion, but it has to do with the fact that the employer was seemingly forced to give in to the strikers. By better rewarding the non-strikers, the management was able to give a sign to the workers that striking was a dangerous affair. Some of the strikers lost the secret bonuses they received before, and the non-strikers got an extra pay rise over that which was awarded to the strikers. Just to give one example: on one of the cards from the card box we read: "because of not striking 10 guilders",[6] whereas the normal rise would have been to 9.75.

The fact that the strikers were those workers earning higher wages probably gives an insight into relations in the workplace. These better paid workers (but not necessarily better skilled, see 6.4) may have felt more strongly than their colleagues. This feeling must have come from their better position in the labour market. This position resulted in higher wages, and the fact that these workers were more prone to striking is an indication that strikes are not a sign of despair, but a proof of strength.

7. Conclusion

On the basis of literature about strikes and labour unions it is possible to put forward a number of hypotheses about the influence of mainly demographic indicators of the possibility that workers will go on strike. If we compare strikers to non-strikers during the 1914 strike at the Leiden Cotton Company following these hypotheses, we may conclude as follows.

Of the eight hypotheses four were falsified in the analysis. These conclusions are of course provisional and only valid for the 1914 strike at LKM in Leiden, the Netherlands. If we construct a profile of the 1914 striker at LKM it is of a man who

[6] "Normale verhoging naar 9,75, maar "wegens niet staken 10,-"

earned a little more than non-strikers before the strike and was semi-skilled. He was married and young, while he and his wife had few children. The striker acted regardless of his religious beliefs and was not very loyal to the company.

The results of course only show tendencies and are not absolute, because the calculations on which they are based always show values somewhere between falsified and not falsified, but never 100 per cent falsification or not. The results are also only an indication of the possibility that certain workers can be expected to join a strike. Because workers from a century ago cannot be asked about their motives for joining or abstaining from the 1914 strike, we will never be able to answer the question of why some individuals joined and others did not. However, we did make some progress. From international literature (Kerr and Siegel, 1954: 209-210) and from my own research on Dutch strikes (Van der Velden, 2000: 195) it is clear that textile workers showed an average or medium-high propensity to strike during the period under research. In the Netherlands during the period from 1900 to 1940 there was a tendency for workers in bigger companies to be more prone to strike than workers from smaller companies, but the textile industry was an exception to this rule (Van der Velden, 2000: 204-205). From these two general conclusions we could anticipate that workers at the biggest textile company in Leiden would strike more readily than workers from other industries. They actually did, which is shown by the fact that LKM was the most strike-prone company in Leiden (Van der Velden, 2002). The research in this chapter into the demographic characteristics of the workers at LKM shows the probability as to why some of them joined the strikes while others did not. However, the results remain probabilities and we can never be certain about the willingness of individuals.

Table 5. Testing the hypotheses

	Hypothesis	Result	Falsified
1	Young workers are more strike prone than the elder employees.	There is a small tendency that strikers were on average younger than non-strikers.	No
2	Single workers are more strike prone than married workers.	Married workers were slightly more strike prone than single workers.	Yes
3	Workers from big families are less willing to strike than those from small families or with no children.	The bigger the family, the less willing workers were to strike.	No
4	Protestant workers are more strike prone than Roman Catholic workers.	Religion did not matter.	Yes
5	Skilled workers are less willing to strike than their unskilled colleagues.	Most strikers were semi-skilled. The non-strikers were mainly unskilled or skilled.	No
6	Workers with a long career at the company are less strike prone than more recent employees.	Workers with a long career at LKM were less strike prone.	No
7	Semi-proletarian workers are less strike prone than real proletarians.	The most proletarianised workers and those who were self-employed at some time show roughly the same propensity to strike.	Yes
8	Higher paid workers are less strike prone than workers who earn lower wages.	Strikers earned higher wages before the strike than non-strikers.	Yes

The results of the LKM research open the way, however, to obtain more general answers about groups. Answers are not able to be obtained by using aggregated strike data, or even data about the strike behaviour of workers from certain regions or professions. The way to get such answers is by doing more research in the manner shown in this chapter (see also the chapter by Maria Bergman in this book). To get a better view of the question as to whether or not we can explain strike behaviour from the life course of workers, more research needs to be carried out. Luckily, there are still hundreds of company archives waiting to be exploited by historians who can build databases with micro data. After this work is done, we can get a better answer to the question ‘Why do workers strike?’.

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Appendix

Table 1. Strikes at LKM, 1882-1922

Date	Profession	Number of strikers			Duration	Strike days	Cause	result
		female	male	Total				
1882, May 19	Printing	57	75	132	3	396	Wage reduction	Won
1882, June 29	Weaving			300	12	3300	Wage reduction	Lost
1882, July 25	Printing			91	1	91	Solidarity with sacked spokesman	Lost
1882, September 20	Printing	150	62	212	0.4	85	Wage reduction	Lost
1882, September 20	Printing	71		71	11	639	These strikers were locked out	Lost
1882, September 24	Printing	150		150	14	4500	Solidarity with locked out male colleagues	Lost
1895, June 13	Weaving		400	400	4	1600	Wage reduction, Solidarity with suspended colleague	Settled
1895, June 19	Weaving		400	400	15	5200	Bad quality of yarn	Won
1902, August 4	Printing	1	23	24	56	1144	Wage rise	Lost
1907, December 12	Washing	16		16	2	32	Bad quality of yarn	Lost
1914, April 27	Other			88			Wage rise	Settled
1915, April 14	Weaving			11	6	55	Wage	Lost
1919, September	Printing			55	100	4154	Wage rise	Won
1919, November	Printing						Reduction of working hours	Settled
1920	Printing						Other	Unknown
1922	Weaving			265	133	30210	Wage reduction	Lost

Source: https://collab.iisg.nl/web/labourconflicts/search-database
Note: This online database was built during a more than ten year long search of archives, magazines, research reports, books and official data collected by Statistics Netherlands.