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Workforce Reductions in Theory and Practice: The Swedish Tobacco Monopoly in the 1920s

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Abstract:

The aim of this paper is to clarify and discuss the various ways firms can make workforce reductions. This aim is accomplished by an in-depth study of an historical case; the downsizing process undertaken in the 1920s by the Swedish Tobacco Monopoly, a state-owned company that had to balance between rational business conduct and social responsibility. The paper makes use of qualitative sources, such as board minutes and memos, and a database covering all blue-collar workers in one of the company's factories. The paper addresses conceptual questions concerning how to theoretically and empirically distinguish between various reduction strategies and tactics. Its main contribution is to move beyond the simple characterization of reductions as being either smooth or harsh and instead emphasize the multitude of management choices involved in reducing headcount and, consequently, the diversity of downsizing processes.

Key words: personnel management, workforce reductions, downsizing, tobacco industry, Sweden, inter-war period

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Introduction

The past decades have seen a wave of downsizing sweeping over the world. This trend has inspired many studies on the consequences of reductions: for redundant workers, survivors, organizations and whole communities.¹ Yet, few researchers have systematically discussed the variety of ways through which reductions may be achieved, and little interest has been devoted to downsizing as a process experienced by individual companies.² Although scholars in the fields of management research and industrial relations have made some attempts to discern patterns in recent decades, conceptual and explanatory frameworks for studying workforce reductions in general are poorly articulated.³ Although the variety of possible workforce reduction strategies is sometimes acknowledged, little theoretical work has been devoted to conceptually distinguishing strategies and to explaining why some are used and others are not. This is surprising since firms' choices of how to downsize potentially have great consequences for their own performance in the future, as well as for the overall functioning of labour markets.⁴

Empirically, research on contemporary downsizing is difficult since companies in the process of making reductions are usually unwilling to disclose relevant information. So far, the theoretical and empirical works on downsizing have left little imprint in the business history literature. Personnel reductions are mentioned in passing but are seldom the main object of studies.⁵ The current state of research is unsatisfactory for several reasons, one being that commentators often emphasise that the downsizing wave of the recent decades represents something fundamentally new. Such assertions may well be true but are hard to evaluate.

The aim of this paper is to clarify and discuss the various ways firms can carry out workforce reductions. This is accomplished by an in-depth study of an historical case; the

¹ Baumol, Blinder and Wolff, *Downsizing in America*; DeWitt, "The Structural Consequences of Downsizing,"; Parker, Chmiel and Wall, "Work Characteristics and Employee Well-Being,"; Thornhill and Saunders, "The Meanings, Consequences and Implications".

² This has been pointed out by, for example: Art Budros, "The Mean and the Lean," 308; Freeman and Cameron, "Organizational Downsizing," 15; White, "The Management of Redundancy," 39.

³ Budros, "The Mean and the Lean"; Greenhalgh, Lawrence and Sutton, "Determinants of Work Force Reduction Strategies"; McCune, Beatty and Montagno, "Downsizing: Practices in Manufacturing Firms"; Sutherland, "Workforce Reduction Strategies"; Turnbull, "Leaner and Possibly Fitter"; Wagar, "Factors Affecting Permanent Workforce Reduction".

⁴ Wass, "Who Controls Selection under 'Voluntary' Redundancy?"; Turnbull and Wass, "Job Insecurity and Labour Market Lemons".

⁵ C. f. Robert Lewis, "The Workplace in Economic Crisis".

downsizing process undertaken by the Swedish Tobacco Monopoly in the 1920s. The Tobacco Monopoly was a state-owned company, which meant that reductions were delicate. As will be shown, the company came up with a whole repertoire of ways to achieve reductions; some of them resemble measures that we see in downsizing companies today.

The challenges faced by the Swedish Tobacco Monopoly were shared with many other producers of tobacco goods worldwide. The fact that smokers abandoned hand-made cigars, in favour of cheap, mass-produced cigarettes from the late nineteenth century onwards, gave producers of cigars stronger incentives to rationalize production.⁶ By the end of World War I, machines for cigar rolling with substantial labour-saving potential became available and eventually replaced manual production in many countries. However, the magnitude and pace of the subsequent downsizing process varied. In the United States, for instance, the overall loss of jobs was dramatic.⁷ Between 1921 and 1935, more than 56 000 jobs were eliminated. In Spain, where the tobacco industry was run by a chartered company, mechanization was smoother.⁸ Between 1887 and 1945, the female labour force was reduced by 70 percent without any layoffs. As will be shown in this paper, the Spanish case contrasts sharply with the downsizing of cigar production in Sweden.

Before looking more closely into how the managers of the Swedish Tobacco Monopoly perceived and dealt with redundancies, it is appropriate to introduce the concepts used for studying workforce reductions.

Workforce reduction strategies

There are a number of ways through which a company can respond to oversupply of labour. Apart from reducing the number of workers, companies can try to diversify production, reduce working hours or wages, just to mention a few options. If the company chooses to reduce headcount, which is the focus of this paper, there are basically three strategies: attrition, redeployment and layoffs.

⁶ Cox, *The Global Cigarette*"; Hannah, "The Whig Fable of American Tobacco"; Zitzewitz, "Competition and Long-Run Productivity Growth".

⁷ Baer, *The Economic Development of the Cigar Industry*; Cooper, *Once a Cigar Maker*; Creamer and Swackhamer, *Cigar Makers – After the Layoff*; Kaufmann, *Challenge and Change*; Manning and Byrne, *The Effects on Women of Changing Conditions*.

⁸ Gálvez Muñoz, *Compañía Arrendataria de Tabacos*; Gálvez Muñoz and Francisco Comin, "Business and Government"; Gálvez Muñoz, "Engendering the Experience of Wages".

Attrition means that management freezes recruitment of new workers and let the workforce shrink as old workers leave for various reasons. Freezing new recruitment can be more or less effective, depending on the rate of turnover. Management can therefore actively try to affect turnover by various tactics, such as buyouts and window plans. Attrition achieved by active management measures can be termed *induced attrition*.

Redeployment means transfers of labour between units within an organization is not necessarily a reduction strategy but can be. When looking at establishment or unit level it is reasonable, to include redeployment as a way to reduce headcount, but if the study object is an entire organization, transfer of people becomes more of an alternative to workforce reductions.

The meaning of ‘layoffs’ differs between countries and over time. In this paper layoffs are defined as terminations of on-going employment contracts without explicit promises of return. There are also so called temporary layoffs where workers continue to be formally associated with the company. This measure is in essence a temporary reduction of working hours, which is an alternative to reducing the number of workers.

In the popular debate, reductions are often depicted as either smooth or harsh, depending on how the treatment of redundant workers is perceived. The same idea is also found in academic research, for example in the typology put forward by Leonard Greenhalgh, Anne Lawrence and Robert Sutton.⁹ Greenhalgh et al. classify reduction strategies according to protection of employee well-being, on the one hand, and short-time cost savings, on the other hand. Employee well-being and costs savings are thought of as depending on two features: pecuniary compensations and the degree of choice for redundant workers. Layoffs with outplacement are thus smoother than layoffs without outplacement. There is also another dimension related to employee well-being, which is the degree of choice for redundant workers. Attrition, achieved by voluntary quits are thus classified as a smoother strategy than layoffs where management establish the order of selection.

It remains to be seen whether the above classifications and definitions are applicable to historical contexts.

After having defined various reduction strategies, the next question is why companies apply one strategy before another, or a particular mix of strategies. So far, there is no comprehensive theory of the determinants of companies’ workforce reduction strategies. Greenhalgh et al. offer a typology where explanatory factors are hierarchically classified,

⁹ Greenhalgh, Lawrence and Sutton, “Determinants of Work Force Reduction Strategies”.

which may serve as a starting point for empirical investigations. Their expectations on how the various factors influence the choice of reduction strategy are not formally derived but are intuitively based on mainstream economic theory. The two main groups in their typology are (1) the context of the oversupply and (2) perceived features of the workforce oversupply. The perceived features involve magnitude, duration and predictability. If the identified oversupply of workforce (shortage of work) is of small magnitude and short duration, it is more likely that management will handle the situation by natural attrition. The greater the magnitude and the longer the duration, the more likely it is that the management will choose measures that have the potential of greater cost savings. Greater uncertainty (with regard to magnitude and duration) is also associated with more radical reduction strategies.

The contextual variables are further divided into three groups: environmental characteristics and organizational characteristics.¹⁰ Environmental characteristics include ownership structure, company form, unionization and the like. That is, various factors outside the organization in question can influence the choice of reduction strategies. Organizational characteristics can be global or aggregate. Global characteristics refer to indivisible organizational traits, more specifically firm structure (multidivisional or unitary), use of temporary workers, level of slack resources, history and value system. Aggregate characteristics refer to the workforce; skill level, external demand for skills, mix of general and firm-specific skills, age and seniority. In line with human capital theory, Greenhalgh et al. argue that management will be more inclined to use layoffs if the employees are unskilled, possess few skills that are idiosyncratic to the firm's production process, in low demand in the external labour market, young and with short tenures. Low skill requirements mean low costs for training new workers in case of future expansion. If the skills needed are of general nature, there may even be a supply of workers ready to take part in the production process on short notice. Skill level and skill mix are often related to age and seniority. Young employees with short tenures usually acquire lower level and less firm-specific skills. If the demand for employees with the type and level of skills needed by the company is low, the potential to use natural attrition as a reduction strategy will be weak, since the employees will have few alternative employment opportunities.

The following sections describe how the Swedish Tobacco Monopoly reduced its blue-collar workforce in the 1920s, starting with the context of the downsizing process, and

¹⁰ This distinction is inspired by Katz and Kahn, *The Social Psychology of Organizations* and Lawrence and Lorsch, *Organization and Environment*.

discussing management perceptions. Thereafter follows a further look into the various strategies and tactics used to achieve workforce reductions, and an estimation of the relative importance of natural attrition, induced attrition, redeployment and layoffs for the reductions at one of the Tobacco Monopoly's factories. A tentative attempt is made here to explain the company's choice of reduction strategies. The paper is concluded with a summary of the theoretical and historical significance of the case study.

The Swedish Tobacco Monopoly – environmental and organizational characteristics

Production of tobacco goods has been the object of state control and ownership in many European countries. In Sweden, the tobacco industry was taken over by a joint-stock company with the state as the majority owner in 1915.¹¹ The nationalization was for purely fiscal reasons and can be seen against the backdrop of welfare state expansion, the imminent need for rearmament and the expansion of the American Tobacco Company. Half of the Tobacco Monopoly's board members, including the chairman and a so-called director on duty, were appointed by the state and the other half, including the managing director, by the private owners. Hence, the latter group had a significant influence in spite of being minority owners. Between 1915 and 1929 the position of managing director was held by Oscar Wallenberg, a member of the famous Wallenberg family.

The Tobacco Monopoly was surrounded by an institutional framework that aimed to strike a balance between profit maximization and social responsibility. On the one hand, the business was to be managed efficiently; all opportunities for cost-saving measures were to be taken, reflecting that the ultimate purpose of the company was to deliver incomes to the state. On the other hand, when deciding to nationalize, the politicians made some concessions to those involved in the industry. Interestingly, not only the former factory owners, but also the workers made redundant in connection with nationalization, were granted compensation. This formal right applied until 1920. The state representatives on the board also had instructions to let social considerations shape the personnel policy in other respects. Already at an early stage, the Tobacco Monopoly provided a wide variety of welfare services – such as banking services, libraries, courses, child care and health insurance. In 1921, the company also introduced old age pension for its workers.

¹¹ This section is based on *Om tobak i Sverige*.

The Tobacco Monopoly took over some facilities from the previous owners, but tried to concentrate production during the first years of its existence. The most important factories were located in Stockholm and Malmö, but there were also some establishments in smaller locations. The workforce was recruited from the stock of trained workers, and about 80 percent of the blue-collar workers were women. Until 1918 some workers were hired on a temporary basis, but were made permanent the same year. Thus, there was no big stock of temporary labour when the downsizing process began.

The Tobacco Monopoly ran five distinct branches – cigars (and cigar-cigarettes), snuff, rolling-tobacco, smoking-tobacco and cigarettes – each of which was characterized by its own production methods and technologies. Whereas machines were used to manufacture snuff and cigarettes, cigars and cigar-cigarettes were rolled by hand or with the help of wooden moulds. The cigar branch was by far the most important with regard to employment. Female dominance was greatest in the preparation process, but there were still some male cigar-makers. A fairly high share, about 50 percent in cigar production for example, of the workers in the tobacco industry could be considered as skilled or semi-skilled. Nationalization meant that these skills, at one stroke, went from being industry-specific to firm-specific. The tobacco workers' opportunities in the external labour market were considered poor, particularly since many of them were physically weak. Redundant tobacco workers who were involved in direct production therefore received much higher severance pay than workers with general skills (such as storage and white-collar workers) in the years after nationalization.

The tobacco workers belonged to the pioneers of the Swedish labour movement. Their organization was open for all occupations and organized a very high share of the workers in the industry.¹² By 1904 the Tobacco Workers' Union had already managed to attain a collective agreement with national coverage. A later amendment to the collective agreement stipulated work sharing instead of layoffs in situations with temporary oversupply of labour. The agreement also acknowledged the unions right to appeal against unfair discharges, but apart from that, the Tobacco Monopoly did not face any formal restrictions of workforce reductions. For instance, the collective agreement in the tobacco industry did not prescribe the selection criteria to be used in case of layoffs.

¹² Lindbom and Kuhm, *Tobaksarbetarnas förbund*.

Management perceptions of the need to downsize

The initial period of the Tobacco Monopoly's existence was characterized by strong demand for tobacco goods. At the end of 1919, the company employed 5,251 blue-collar workers, which was a higher number than had ever been recorded in the pre-monopoly era. With hindsight it is obvious that this situation was not sustainable in the long run. Demand for tobacco products in Sweden was abnormally high in that year and was about to change composition. On top of that, cigar production, the most labour-intensive branch, was about to be mechanized. Yet, for those involved, the Tobacco Monopoly's downsizing process was characterized, at least initially, by uncertainty, particularly with regard to the development of consumer demand.

In autumn of 1920 the first signs of a recession were seen. In particular, the demand for cigars fell dramatically as consumers switched to cheaper cigar-cigarettes. Stocks increased at a worrying pace, but the difficulties experienced by the tobacco industry were not unique. The Swedish government's attempt to re-establish the gold standard made imported goods cheaper and put industries exposed to foreign competition under great pressure.¹³ Although protected by a licence fee, domestically produced tobacco goods lost market shares. Another factor was that the company lacked expertise in marketing and forecasting and had to rely on the judgement of retailers.¹⁴ Time after time, sales forecasts proved to be wrong, and although the company board was aware of this problem, it did not initiate any systematic work to improve forecasts.

The negative development continued in 1921, when sales of cigars almost halved. In order to stimulate demand for domestically produced cigars, retailers were given discounts and sales bonuses.¹⁵ At first, this initiative seemed to be a success and the board observed a slight increase in the sales of cigars in 1922, but in the following year cigar sales again went down.¹⁶ Encouraged by the discounts, some retailers had probably bought more cigars than needed in 1922. Anyway, the behaviour of the company is interesting as it indicates that the management at least hoped that tobacco consumption would recover to the 1919 level.

This did not happen. In 1923, sales of tobacco products stabilized at a lower level. However, profits were kept high throughout the inter-war period.¹⁷ By 1924 the accumulated

¹³ Schön, *Sweden's Road to Modernity*, 246-251.

¹⁴ *Om tobak i Sverige*, 59-63.

¹⁵ *Styrelsens förvaltningsberättelse 1920*, AB Svenska Tobaksmonopolet, 24.

¹⁶ *Styrelsens förvaltningsberättelse 1922*, 22; *Styrelsens förvaltningsberättelse 1923*, 17.

¹⁷ *Om tobak i Sverige*, 70-75, 356.

dividends were already higher than the total costs associated with nationalization, and over twice the size of the invested capital. Overall, the Swedish tobacco industry was spared from the Great Depression. As the currency depreciated there was also a clear trend for foreign imports to decrease. By the late 1920s this trend had become so strong that the government proposed to lower the taxes on imported cigars, since it was thought that the Tobacco Monopoly needed competitive pressure to uphold quality and cost efficiency.

Uncertainty also prevailed regarding the potential of the new cigar machines. Already in 1915, the management was aware of technological advances that had been made in the United States, but it hesitated until 1920 before ordering 80 machines. Only six of the machines were delivered the same year, but in the annual report it is noted that "... when all machines have been installed, the wage bill for cigar manufacturing should be possible to cut considerably". When individual members of the company board brought up hours-reductions as an alternative to layoffs in the spring and autumn of 1921, their idea was rejected by management representatives. The technical director explained: "With increased machine production of cigars the labour demand will undergo a steady decrease".¹⁸ The great scope for mechanization was beyond doubt at that time, but the limits of the new technology, and how fast it could be implemented, were not known. The management refrained therefore from laying off male hand cigar makers in Malmö in the summer of the same year. In the autumn of 1923 the management established that it would be unwise to release 50 female cigar workers currently employed in preparation work, even though there was a surplus of prepared tobacco. A memo explained that:

The division of labour is still not fully implemented as it should be. A part of the mechanization of work is still awaiting its solution. One therefore cannot yet definitely determine whether these workers can be employed in their original jobs.¹⁹

In December 1921, a management representative informed the union that "[...] machine production was still in an experimental stage and that a definitive decision about future acquisition of machines had not been made yet".²⁰ In order to get more information on the

¹⁸ Board minutes, 14 March 1921, Svenska Tobaksmonopolet (STM), Swedish Match' Archives (SM); Incoming correspondence from the Tobacco Monopoly, 15 July 1921, E03: 1, Svenska Tobaksindustriarbetareförbundet (STF), Arbetarrörelsens arkiv och bibliotek (ARAB).

¹⁹ Board minutes, 17 September 1923, Attachment C, "P.M. angående cigarrarbetet", STM, SM.

²⁰ Board minutes, 29 December 1921, A02: 5, STF, ARAB.

matter the union's executive committee sent a letter to its sister organization in the United States. The reply, which arrived in autumn 1922, was a testimony to technological regression.²¹ After having introduced automatic machines for cigar production before World War I, many firms returned to older technology, even to hand and mould work, in the period of unemployment after the war. Automatic machines were only used for producing cheap grades.

The managers of the Swedish Tobacco Monopoly experienced no similar setbacks. By the autumn of 1924, about 65 percent of the cigars and 88 percent of the cigar-cigarettes sold by the company were machine-made.²² In the past four years, the total wage bill had been cut from 17 to 7 percent of the total of gross turnover. Possible doubts about the new technology were gone.²³ The management saw several advantages of mechanization in addition to its labour-saving and deskilling effects; for example better hygiene, more even production, greater work discipline, less consumption of raw tobacco, book-keeping, supervision and reduced space requirements. Furthermore, the management thought that machines would imply greater flexibility, making it possible to adapt production to demand swings.²⁴ By 1928, the production of cigar-cigarettes was fully mechanized, but there were still some cigar brands that were made by hand.²⁵ Machines for parts of the preparation work were also introduced over the course of the decade.²⁶

Dealing with redundancies

The simultaneous decline of cigar consumption and introduction of labour-saving technology led to an oversupply of labour at the Tobacco Monopoly in the beginning of the 1920s. At

²¹ Cirkular letters, 15 September 1922, F8B: 3, Frans Henrik Kockums tobaksfabrik (FHK), Malmö stadsarkiv (MS).

²² These estimations have been made by combining the information from an internal memo and an annual report. Board minutes, 23 September 1924, Attachment E, "Maskiner", STM, SM; *Styrelsens förvaltningsberättelse 1924*. The degree of mechanization in the Swedish tobacco industry appears to have been comparatively high in this phase. Only about 18 percent of the cigars produced in the United States in 1926 were machine-made. Cooper, *Once a Cigar Maker*, 311.

²³ Board minutes, 23 September 1924, Attachment E, "Maskiner", STM, SM.

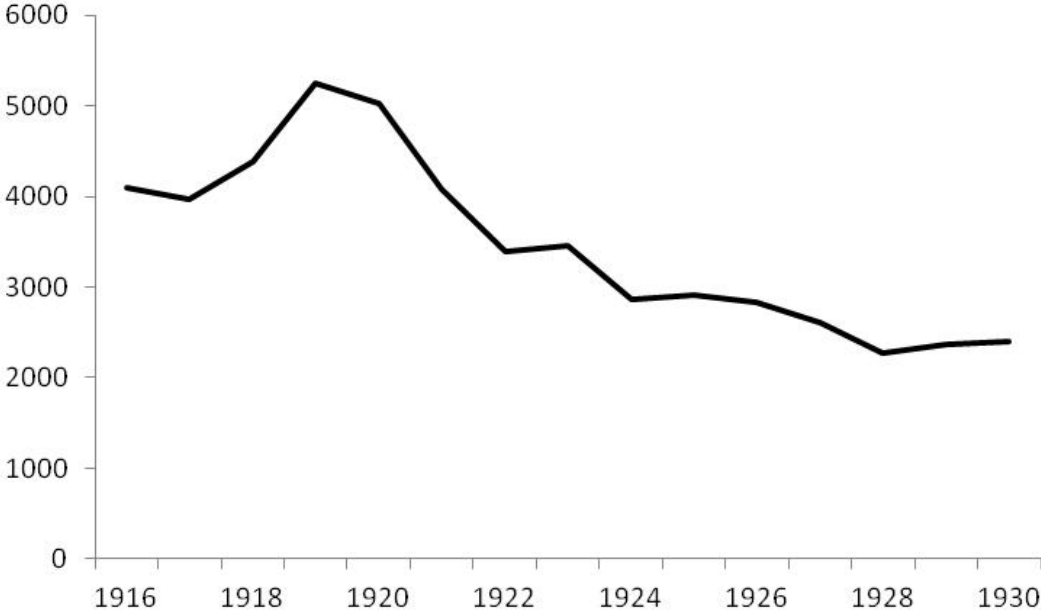
²⁴ Board minutes, 23 September 1924, Attachment E, "Maskiner", STM, SM.

²⁵ In the annual report for that year the company board noted that, "out of consideration for the employed", it was not possible to reduce the number of cigar workers as much as motivated by the degree of mechanization. *Styrelsens förvaltningsberättelse 1928*, 24.

²⁶ *Om tobak i Sverige*, 39.

times the management reduced working hours temporarily, but most of the reductions of labour inputs by the Tobacco Monopoly were achieved by reducing the number of workers. From 1920 to 1921, the blue-collar workforce was cut by about a fifth and the workforce continued to shrink until 1927, after which it reached a fairly stable level, as displayed in figure 1.²⁷ All the basic reduction strategies identified above were used to achieve the reduction in headcount. The following subsections combine evidence from qualitative sources and data from the personnel records of Malmö Cigar Factory.

Figure 1 Number of blue-collar workers at the Swedish Tobacco Monopoly, 1916-1930



Source: *Styrelsens förvaltningsberättelse*, AB Svenska Tobaksmonopolet, various years.

The factory employed about a third of the workforce in the branch and a fifth of the company’s whole workforce at the end of 1920.²⁸ The development of employment at Malmö Cigar Factory, shown in Figure 2, was fairly similar to that of the company as a whole. First a rapid expansion, with the peak reached at the end of 1919 when the factory employed more than 1,200 workers, and thereafter a slight contraction, followed by a major reduction of the workforce. The decrease continued at a slower pace until 1927 when more dramatic cuts were implemented. By the end of 1928, the number of workers had been reduced by over 60 percent since 1920.

²⁷ Karlsson, *Downsizing*.

²⁸ *Styrelsens förvaltningsberättelse 1920*, 24.

Figure 2 also relates the stock of workers at Malmö Cigar Factory at the end of each year to the flow of workers – hirings and exits. Exits are here defined as all those workers who left the company, voluntarily or involuntarily. This figure shows a marked reduction in the inflow of workers as the depression began to be felt in 1920. Thereafter the inflow of workers was kept at a low level. The outflow of workers was low throughout the whole period with the exception of two years: 1921 and 1927.

Figure 2 The workforce at Malmö Cigar Factory – stocks and flows, 1915-1928



Note: Total workforce is measured at the end of each year. The number of exits is inverted to represent the outflow of workers.

Source: Personnel records, D4A: 1-8, FHK, MS.

Natural attrition

Natural attrition implies that the management does not take any active measures to reduce the workforce. In its pure form the management does not replace any employees who leave the company. Such an absolute hiring freeze is often hard to sustain in practice if the management does not want to shut down production completely, and it is not surprising that the Tobacco Monopoly did hire some workers during the period when the workforce was being reduced in aggregate terms. Between December 1921 and the end of 1928, 59 workers started at the Malmö Cigar Factory.

Figure 3 Natural attrition at Malmö Cigar Factory, 1916-1928



Note: Natural attrition in relation to the factory's workforce at the beginning of each year. Natural attrition defined as those workers who left the factory due to one of the following reasons: "at own request", death, disability, discipline offence, dismissal (not further specified), old-age retirement (after 1921), no cause stated (without severance pay).

Source: Personnel records, D4A: 1-8, FHK, MS.

Figure 3 shows the gross rate of natural attrition each year during the period 1916 to 1928; that is to say, all exits from the factory that could not be classified as induced attrition, transfers or layoffs, divided by the workforce in the beginning of each year. As shown, the gross rate of natural attrition decreased to levels around 5 percent during the period of investigation.

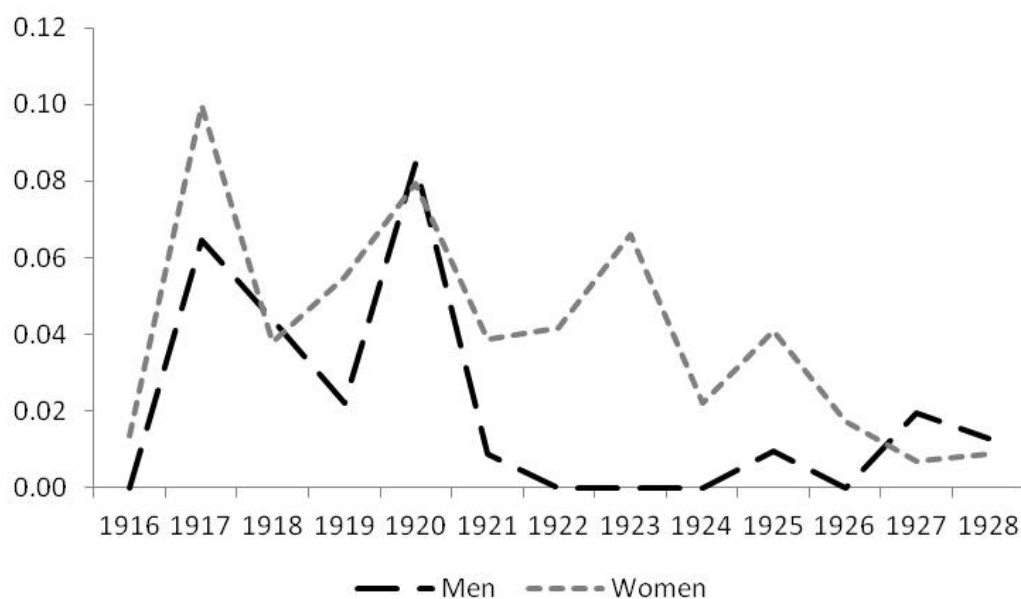
Voluntary quits accounted for the most important part of natural attrition from the Tobacco Monopoly. In theory, workers' quit behaviour is related to their attachment to the employer, which in turn depends on external employment opportunities and costs associated with inter-firm mobility.²⁹ These variables are usually correlated with individual characteristics, such as sex, age, tenure and occupation. Historically, labour markets have often been segregated by sex, so that men and women have faced different employment opportunities.³⁰ Numerous empirical studies, from various contexts, have shown the

²⁹ Jovanovic, "Matching, Turnover, and Unemployment"; Oi, "Labor as a Quasi-Fixed Factor"; Parsons, "Specific Human Capital".

³⁰ Owen, "Gender Differences in Labor Turnover".

importance of age for quit behaviour.³¹ Young workers are often engaged in ‘job shopping’, whereas older workers are less inclined to take the risk of leaving an ongoing employment relationship. Another factor of importance is the degree of transferability of skills, usually indicated by tenure and/or occupation. Workers with a high degree of firm-specific skills are less likely to find attractive employment opportunities than workers with general skills. Most likely, all these variables mattered in the case of the Swedish Tobacco Monopoly, since its quit rate was comparatively low during the downsizing process.

Figure 4 Quit rate at Malmö Cigar Factory, 1916-1928



Note: Quit rate is here defined as the number of quits “at own request” during each year divided by the workforce in the beginning of the year.

Source: Personnel records, D4A: 1-8, FHK, MS.

The quit rate for male and female workers at Malmö Cigar Factory, illustrated in figure 4, approached 9 percent in 1920 for both men and women, but, as the downsizing process began, the voluntary turnover decreased and fluctuated around a considerably lower level, particularly for men.³² This pattern can be attributed to external as well as internal factors. Looking at the external labour market, the Swedish economy experienced a severe downturn

³¹ C.f. Hamilton and MacKinnon, “Quits and Layoffs”.

³² As a comparison, it may be mentioned that quit rates among blue-collar workers in the Swedish engineering industry exceeded 12 percent most of the years in the 1920s. Before the post-war depression, employers in this industry could experience quit rates above 50 percent. Holmlund, *Labor Mobility*, 25.

in 1921-1922.³³ Although the economy recovered soon after, unemployment levels remained high until the end of the 1930s. Conditions in the male labour market, with its emphasis on heavy industry, seem to have been particularly difficult, whereas industries that employed many women were less exposed to business cycles. As seen in Figure 4, female tobacco workers were generally more inclined to quit ‘at own demand’ than male workers.³⁴ Apart from external labour market conditions, this difference indicates the terms on which women participated in gainful employment at the time. If duties towards the family required it, female workers faced strong pressures to quit.

Induced attrition

If natural attrition is characterized by management being passive, induced quits indicate that management is actively trying to speed up the natural rate of attrition, without forcing workers to leave. Both positive and negative inducements can be applied. In the former case, management offers some kind of benefit to workers who leave; what is termed ‘buyouts’ today. In the latter case, management tries to persuade workers to leave by making things worse for them if they stay, for example by threatening with layoffs without outplacement.³⁵ As will be seen, the demarcation between induced quits and layoffs can be blurry in those cases.

Apart from speeding up workforce reductions, induced attrition gives managers greater possibilities of affecting the composition of the workforce. Since young workers are more inclined to quit voluntarily, it is likely that the remaining workforce will have an age structure that is unfavourable to the company. Having a high share of old workers is particularly unfavourable in times of rapid technological change.³⁶ This was certainly an aspect that mattered for the Tobacco Monopoly. Old workers, whose skills were made useless by mechanization, were also less able to keep up with the high pace set by the machines and, probably, less willing to adapt to the new job content. When making buyouts, the Tobacco Monopoly therefore targeted old workers, either by limiting the offers to a particular age group or by letting compensation amounts grow with age.³⁷

³³ Schön, *Sweden's Road to Modernity*.

³⁴ For evidence pointing in the same direction with regard to manufacturing firms in the United States in the 1920s, see Owen, “Gender Differences in Labor Turnover”.

³⁵ Turnbull and Wass, “Job Insecurity,” 37.

³⁶ Lazear, *Personnel Economics for Managers*.

³⁷ Karlsson, *Downsizing*.

Furthermore, the Tobacco Monopoly often used induced quits and layoffs in combination, in the sense that the management announced that the workforce had to be reduced by a certain number and that it could take place either by workers volunteering (self-selection) or by layoffs. This was the procedure in the spring of 1927, when the local factory manager openly targeted a particular group; women whose husbands were also employed at the factory.³⁸ The same procedure was applied in the autumn the same year.³⁹ However, it was difficult for the management to attract enough volunteers in the spring and autumn of 1927. In the autumn the management even had to raise the amount offered, not only for those who were about to be released but also retroactively for those women who had left in the spring.

Redeployment of labour

The Tobacco Monopoly was a company whose production was shared by its branches and factories around the country. Workers were transferred both between and within establishments in the inter-war period, and workers made redundant in connection with plant closures were usually offered jobs in another factory and help with the moving. The geographical distance between units discouraged workers from moving, but some certainly did. In the beginning of 1921, 10 percent of the female workforce under the age of 25 at Malmö Cigar Factory had been transferred from another unit within the Tobacco Monopoly, mostly from the closed-down factory in nearby Landskrona.⁴⁰ After the closure of this factory, there were few opportunities for short-distance transfers between establishments in southern Sweden. As will be seen below, only a very small fraction of the workforce reductions at Malmö Cigar Factory was accomplished by transfers. Redeployment may have been more important in the Stockholm area, where there were several units belonging to different branches.

Layoffs

Layoffs were an important mean to achieve workforce reductions for the Tobacco Monopoly in the 1920s. This reduction strategy was not implemented continuously over time, but was concentrated to certain points in time when large numbers of workers were released *en masse*, as shown in figure 5. Over 90 percent of the recorded exits ‘due to shortage of work’ at

³⁸ Board minutes, 26 April 1927, STM, SM.

³⁹ Board minutes, 17 October 1927, STM, SM.

⁴⁰ Karlsson, *Downsizing*, 302.

Malmö Cigar Factory occurred on three dates: 5 April and 4 October 1921 and 25 October 1927. This pattern, seen in studies of modern data as well, is regarded as a way for managers to minimize the negative effects of layoffs on worker morale.⁴¹ The idea is that workers are more disturbed by facing a more or less constant threat of being laid off than if that risk is concentrated to certain occasions. Another explanation is the existence of fixed costs associated with negotiations.⁴² The cost of establishing an order of selection, arranging outplacement, negotiating with the union (or handling protests afterwards) and other matters, is not much higher for 100 layoffs than it is for 10. Employers therefore prefer releasing many workers at a time rather than having an even stream of layoffs.

The Tobacco Monopoly did not apply a consistent policy when establishing the order of selection at layoffs.⁴³ There seems to have been an implicit seniority norm before and in the beginning of the downsizing process. In April 1921 the layoffs were concentrated on “the youngest and most recently hired”,⁴⁴ but the principle was abandoned in autumn the same year, probably because of technological change. With the introduction of machines, senior workers lost their key role in training new workers and thus became less valuable from the management’s point of view. In addition, the general situation in the labour market had severely weakened the bargaining position of the Tobacco Workers’ Union, which advocated seniority as a selection criterion, and the layoffs more often affected middle-aged workers after 1921. The workforce was continuously divided according to gender when establishing layoff units, with the management not deciding upon how many workers to lay off, but how many male and female workers to lay off. Both groups were affected by layoffs, although the risk differed between occasions.⁴⁵ Still, the big gender difference with regard to layoffs concerned outplacement.

⁴¹ Bewley, “A Depressed Labor Market”.

⁴² Williamson, “The Economics of Organization”.

⁴³ Karlsson, “Allocating Job-Losses”.

⁴⁴ Board minutes, 18 April 1921, STM, SM.

⁴⁵ In 1921 women faced a much higher risk, whereas men were more exposed in 1927. On average, the layoff rates were somewhat higher for women than for men (2.2 and 1.7 percent, respectively).

Figure 5 Number of layoffs due to shortage of work at Malmö Cigar Factory, 1920-1928



Source: Personnel records, D4A: 1-8, FHK, MS.

In principle, outplacement can take different forms, such as a prolonged notice period, severance pay or retraining. The Tobacco Monopoly applied outplacement in all these mentioned forms.⁴⁶ A two-week notice period had been prescribed by the collective agreement since the time before monopolization, and workers who were made redundant on shorter notice got pecuniary compensation equivalent to two weeks pay. The practice of providing outplacement in the form of severance pay had been established in connection with monopolization. Formally, tobacco workers made redundant after 1920 had no right to benefits, but the Tobacco Monopoly continued to hand out severance pay in the 1920s and 1930s. According to one official company history, it was “[...] a natural obligation for the monopoly management to ameliorate the situation for the dismissed”.⁴⁷ However, the terms differed considerably between occasions and groups. Age was an important determinant of outplacement – both with regard to level and form. Older workers were given higher cash support extended over longer periods than young workers. Young workers, on the other hand, could get access to retraining, either under the auspices of the company or provided by someone else. Since most of the young workers were women, and domestic work was seen as

⁴⁶ Karlsson, “Downsizing, State Ownership”.

⁴⁷ *Om tobak i Sverige*, 69.

a promising labour market at the time, the Tobacco Monopoly's own courses, arranged by the personnel consultants, were focused on cooking, sewing and other household duties. Gender was generally an important determinant of outplacement. Male workers were generally given more generous support than female colleagues, even if the amounts were related to the average earnings of men and women, respectively. An even bigger difference was seen between workers involved in direct production of tobacco goods and support workers of various kinds, such as mechanics. This different treatment was motivated by the greater difficulties faced by tobacco workers in the external labour market, since their skills were less transferable.

The relative importance of various reduction strategies

Having established that the Tobacco Monopoly used all of the basic reduction strategies and a variety of associated tactics, the task in this section is to assess the importance of the respective strategies based on the the personnel records of Malmö Cigar Factory.

As seen in table 1, about 6 percent of the personnel forms lacked explicit information on the exit reason. If not otherwise indicated, these cases have been regarded as natural attrition. Another problem, related to the historical context, is how to regard workers who left the factory with old-age pensions or early-retirement benefits. In a modern context the former group would be seen as natural attrition, whereas the latter group would most likely be regarded as induced attrition. Such classifications would not be correct in this case study. The pension scheme was introduced as a way to deal with redundancies in the autumn of 1921. Before that point in time, there was no formal age of retirement for the blue-collar workers; they were allowed to continue working as long as they were physically capable, although not necessarily on the same tasks.⁴⁸ Those workers who were released with old-age pensions in 1921 have been classified as layoffs, and workers who retired after that year as attrition. Workers released with early-retirement benefits have been treated as layoffs, since these individuals were selected by the management and could not choose for themselves whether to stay or to go.

⁴⁸ Although there was a general pension system in Sweden at the time, the compensation amounts in this system were hardly high enough to allow complete withdrawal from the labour force. Olsson, *Gamla typer ocn nya produktionsförhållanden*.

As shown in the table, gross attrition and layoffs accounted for the bulk of all exits, 35 and 51 percent, respectively. About 12 percent of the exits were classified as induced quits, whereas redeployment to another factory was insignificant.

Had the management imposed an absolute hiring freeze, it would have been enough to look at the exits when quantifying the importance of various reduction strategies. However, since there was also an inflow of workers to Malmö Cigar Factory, the above figures overestimate the importance of natural attrition.

Table 1 Exit reasons at Malmö Cigar Factory, 1920-1928

Workforce reduction strategy	N	Percent
Gross attrition	300	35
at own request (without compensation)	158	19
discipline	3	0
dismissal (not further specified)	5	1
pension (after 1921)	38	4
disability	10	1
death	30	4
other	3	0
no cause stated (without compensation)	53	6
Induced attrition	105	12
at own request	78	9
at own request/shortage of work	27	3
Redeployment	7	1
transfer to other factory	7	1
Layoffs	436	51
due to shortage of work	363	43
early retirement	6	1
pension (1921)	67	8
Total number of exits	848	

Note: The category 'Discipline offence or incompetence' refers to dismissals due to lack of discipline, drunkenness, absence, theft and the like.

Source: Personnel records, D4A: 1-8, FHK, MS.

After adjusting for the new hires, it can be established that, of the reduction between December 1920 and the end of 1928, 55 percent was achieved by layoffs, 31 percent by

natural attrition and 13 percent by induced quits. Even if the importance of natural attrition is somewhat underestimated, it is clear that the company used layoffs to a great extent. To put these figures into perspective, it can be mentioned that the Spanish Tobacco Monopoly mechanized its cigar production during the inter-war period without using layoffs at all.⁴⁹

To conclude whether this could actually have been a viable strategy for the Swedish Tobacco Monopoly is beyond the scope of this paper, but some tentative notes can be made. The downsizing process would certainly have been somewhat more prolonged without layoffs. Assuming a rate of natural attrition of 5 percent, it would have taken 14 years, instead of the actual 8 years, for the Swedish Tobacco Monopoly to achieve a 50 percent reduction of its workforce without using layoffs or induced attrition. Compared with the chosen path, downsizing without layoffs would have required higher wage costs. However, since the total wage bill was rather limited in relation to total costs the impact on the overall profit rate would not have been dramatic.⁵⁰ The fact that the management so actively tried to speed up the reduction of headcount suggests that it put some emphasis on rational business conduct. Social responsibility was not mainly articulated in the form of absolute employment protection, but in how redundant workers were compensated.

Another question is to explain why the company did not use buyouts to a greater extent. After all, the state representatives on the company board had instructions to treat the workers with particular care. From the management's perspective it might well have been welcome to avoid the delicate issue of selecting workers for layoffs. One aspect to mention here is that the costs associated with large-scale buyouts probably were hard to predict. As mentioned, it was difficult for the management to get enough volunteers. Pursuing a more far-reaching buyout policy would have considerably improved the bargaining position of the workers. In each situation there were probably marginal workers who had considered leaving the company anyway and would have happily resigned, even if given only low benefits. But attracting more volunteers required higher benefits, particularly since the management had particular preferences about the characteristics of these volunteers. With regard to the financial solidity of the Tobacco Monopoly, one could argue that increasing costs was not a big problem. Yet, it could have been for the company board, which were to approve all forms of compensation offered to the workers. Induced attrition were not established practice in early twentieth

⁴⁹ Gálvez Muñoz and Comin, "Business and Government".

⁵⁰ As mentioned above, the total wage bill was lower than 20 percent already before mechanization of cigar production.

century Sweden. The Tobacco Monopoly was in that respect a forerunner and it is likely that the owners considered wider implications of how the company treated redundant workers. If the Tobacco Monopoly, a state-owned model company, offered compensation for voluntary leavers, workers in other industries could be inspired to demand the same.⁵¹

Conclusions

Workforce reductions are often thought of as being either smooth or harsh. This paper moves beyond that dichotomy by illuminating the multitude of choices between various reduction strategies and tactics. While there are basically three strategies for reducing the number of workers, more than one strategy can be applied simultaneously and each strategy can be implemented by using a range of tactics, as seen in the case of the Swedish Tobacco Monopoly.

The case has also shown that the empirical identification of reduction strategies are not always clear cut. For instance, the Tobacco Monopoly introduced mandatory retirement of workers over a certain age in an early phase of the downsizing process. While exits due to old age in present-day labour markets would be seen as natural attrition, the same was not obviously the case in inter-war Sweden, where there was no formal retirement age. Another observation, probably less specific to the particular context, is the practice of making buyout offers under the threat of collective layoffs: if not an enough number of workers volunteer, employment contracts will be terminated. Such a strategy is likely to create internal tensions among the workers and blur the distinction between voluntary and involuntary measures.

With these, and other, conceptual considerations in mind it turned out that the Tobacco Monopoly was a state-owned company with a predominantly female workforce. Due to declining cigar consumption and the introduction of new, labour-saving technology, the number of workers in Swedish cigar factories was cut by 60 percent from 1920 to 1928. Workforce reductions mainly affected permanently employed workers, which meant that the company's social responsibility was put to the test. An investigation of the personnel records from one of the company's cigar factories indicates that layoffs accounted for 55 percent of the workforce reductions, natural attrition for 31 percent and induced attrition for 13 percent.

Theoretically, the choice of strategies and tactics are shaped by management perceptions and contextual variables. For the management of the Tobacco Monopoly the

⁵¹ The board was, for instance, careful to differentiate the compensation to redundant workers according to whether they were proper tobacco workers or not. See Karlsson, "Downsizing, State Ownership".

incentives created by these variables were sometimes contradictory. Despite some initial uncertainty, the management soon realised the potential of technological change. New machines for cigar making made it possible to cut the wage bill and decrease the dependence on skilled workers. This came into conflict with the moral responsibility associated with state ownership and the position as the only employer for tobacco workers in the country. The solution became to compensate redundant workers. Some were induced to leave, but most redundant workers were not given such a choice. The Swedish Tobacco Monopoly's heavy reliance on layoffs is striking, particularly if contrasted with the Spanish Tobacco Monopoly. Further studies of companies that faced seemingly similar challenges but responded differently, would be valuable for increasing our understanding of downsizing, past and present.

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