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SJC-10108

CRYSTAL SALVAS & another¹ vs. WAL-MART STORES, INC.

Middlesex. May 7, 2008. - September 23, 2008.

Present: Marshall, C.J., Greaney, Ireland, Spina, Cowin, Cordy,
& Botsford, JJ.

Labor, Wages. Evidence, Expert opinion, Business record.
Practice, Civil, Class action, Statute of limitations.
Rules of Civil Procedure. Contract, Performance and breach,
Damages. Limitations, Statute of.

Civil action commenced in the Superior Court Department on August 21, 2001.

Following certification of a class, motions for exclusion of certain expert testimony, for decertification of the class, and for partial summary judgment were heard by Thomas R. Murtagh, J., and questions of law were reported by him to the Appeals Court.

The Supreme Judicial Court granted an application for direct appellate review.

Carolyn Beasley Burton, of California, & Robert J. Bonsignore for the plaintiffs.

Charles R. Eskridge, III, of Texas, & Donald R. Frederico (Kathryn P. Hoek with them) for the defendant.

Ben Robbins, Martin J. Newhouse, & Jo Ann Shotwell Kaplan for New England Legal Foundation & another, amici curiae, submitted a brief.

Shannon Liss-Riordan, Hillary Schwab, Philip J. Gordon, Audrey R. Richardson, & Catherine K. Ruckelshaus for Massachusetts Employment Lawyers Association & others, amici

¹ Elaine Polion, on behalf of themselves and all others similarly situated.

curiae, submitted a brief.

MARSHALL, C.J. In this putative class action, the named plaintiffs are former employees of the defendant, Wal-Mart Stores, Inc. (Wal-Mart), who were paid by the hour (hourly employees). On behalf of themselves and others similarly situated they allege that Wal-Mart wrongfully withheld compensation for time worked and denied or cut short rest and meal breaks to which they were entitled. The plaintiffs appealed from a Superior Court judge's allowance of summary judgment on certain counts of their complaint and also filed an application for direct appellate review. The judge reported the case to the Appeals Court. See Mass. R. Civ. P. 64, as amended, 423 Mass. 1410 (1996), and G. L. c. 231, § 111. See also note 40, *infra*. Wal-Mart also filed an application for direct appellate review. We granted both applications.

In essence we are asked to determine (1) whether the judge abused his discretion by (a) allowing Wal-Mart's motion to exclude the testimony of the plaintiffs' principal expert, Dr. Martin Shapiro, as unreliable, and (b) allowing Wal-Mart's motion to decertify the class of approximately 67,500 current and former hourly workers employed by Wal-Mart in Massachusetts for more than a ten-year period²; and (2) whether the judge erred in granting summary judgment to Wal-Mart on all of the plaintiffs'

² The putative class period extends from August 21, 1995, through December 31, 2005.

claims concerning meal breaks, as well as certain of the plaintiffs' claims under the payment of wages law, G. L. c. 149, § 148, for failure to compensate the plaintiffs for the time they worked.³

For the reasons set forth below, we vacate the judge's orders. We conclude, inter alia, that the judge abused his discretion in allowing Wal-Mart's motions to exclude the testimony of the plaintiffs' expert and to decertify the class. We further conclude that the judge erred in granting partial summary judgment to Wal-Mart. We remand the case for the entry of an order certifying the class and for further proceedings consistent with this opinion.

1. Facts.⁴ Wal-Mart is a national mass-merchandising retail chain headquartered in Bentonville, Arkansas (home office), with stores located throughout Massachusetts. The operations of individual Wal-Mart stores, including payroll

³ In addition to the questions reported by the Superior Court judge, the plaintiffs argue in their application for direct appellate review that the judge "err[ed] in making factual determinations from affidavits drafted by Wal-Mart's defense counsel that the jury may have rejected upon learning that those witnesses later recanted the statements at deposition and testified that they felt coerced to sign the affidavits." In light of our disposition we need not address the issue.

⁴ Our summary of the salient facts is taken from the judge's memorandum of decision and order excluding the testimony of the plaintiffs' expert and decertifying the class, his memorandum of decision and order granting partial summary judgment to Wal-Mart, other orders related to this litigation, and additional material of record. We reserve for later discussion, as appropriate, the recitation of certain additional facts. Except as otherwise stated, the summary covers alleged actions and events occurring throughout the class period.

controls, are directed by corporate-wide policies established, disseminated, and carefully controlled by the home office. The central labor policies and payroll controls relevant to this litigation include the following.

Wal-Mart policy required every hourly employee (called "associates" by Wal-Mart) to adhere to stringent timekeeping procedures, including clocking in and out at the beginning and end of each shift and at other prescribed times. Wal-Mart's uniform timekeeping requirements were communicated to hourly employees from their first day of work and consistently throughout their employment at Wal-Mart through, among other channels: an employee handbook intended for every hourly employee nationwide,⁵ oral and written materials presented in orientation sessions designed by the home office that newly hired hourly employees were required to attend, oral and written "coaching" (disciplinary) actions, and posters and other materials posted near store time clocks and elsewhere throughout Wal-Mart stores."⁶ The timekeeping instructions given to hourly

⁵ For example, one earlier version of the employee handbook states, among other things: "Our expectation is very clear. Always clock in to begin your workday and at other appropriate times; ask your Supervisor for specific details. . . . [W]orking off the clock is not only against Wal-Mart policy -- it's against the law. Always clock in when you are working -- Always! There are no exceptions. Never clock any other Associate in or out. Violation of this policy may result in disciplinary action, up to and including termination." Wal-Mart's 2005 Associate Guide, My Benefits (effective Jan. 1, 2005) states, "Take a break and get paid for it!"

⁶ It is uncontested that the corporate documents noted above were intended to be distributed to every Massachusetts hourly

employees embodied the substance of two corporate-wide Wal-Mart policy directives applicable uniformly to all hourly employees. The policy directives were known internally as PD-07 and PD-43.⁷ PD-07 provided that, unless otherwise required by State law, all hourly employees were entitled to one paid, fifteen-minute rest break for every three hours of consecutive time worked (to a maximum of two rest breaks), and an unpaid meal break of at least thirty minutes for work in excess of six consecutive hours.⁸ A version of PD-07 in effect until February 10, 2001, stated that hourly employees "whose break or meal period is interrupted to perform work would receive compensation for the entire period at their regular rate of pay and be allowed an additional break or

employee, or store manager, as appropriate. Wal-Mart, in answers to interrogatories posed by the plaintiffs, admitted that it intended that its handbook would be distributed to every hourly employee and that new hourly employees generally were required to attend orientation sessions, although it denied knowledge whether every hourly employee had in fact received the handbook and denied that all orientation sessions were conducted in an identical manner.

⁷ The employee handbook, the orientation session, and other key documents in this litigation were amended from time to time throughout the class period. Amendments to such documents will be noted where relevant to this litigation.

⁸ Versions of PD-07 applicable in the early years of the class period stated that supervisors and management "may not require nor request Associates to perform work during their break and meal periods, except in extreme emergencies where no other Associate is available." PD-07 was revised on February 14, 2003, as follows: "Supervisors and salaried members of Management may not require nor request Associates to perform work during their breaks and meal periods."

meal period."⁹ Until that date, PD-07 required employees to clock in and out for both rest and meal breaks. Thereafter, employees were required to clock in and out for meal breaks but not for rest breaks. Neither PD-07 nor any other Wal-Mart policy directive has ever expressly permitted hourly employees to waive breaks.

PD-43 stated that hourly employees should never be required to work "off-the-clock," that is, work when the employee's hours are not being recorded for compensation. The same policy directive also generally prohibited employees from working overtime. PD-43 obligated store managerial personnel to investigate every instance where it was determined that an employee worked off-the-clock and to complete a working off-the-clock notice, to be signed by the supervisor or manager, the employees, and a "witness" who was required to be a salaried employee. Wal-Mart repeatedly warned its hourly employees that they would be subject to an escalating series of disciplinary "coaching," including termination, for violating company policy concerning breaks and off-the-clock work.¹⁰ The plaintiffs

⁹ In the 2003, 2004, and 2005 revisions of PD-07, rest breaks are defined as "15 uninterrupted minutes." The 2004 and 2005 versions of PD-07 state: "If an Associate's meal period is interrupted by a supervisor or a salaried member of management for any work-related reason prior to the passage of 20 uninterrupted minutes, the Associate should be compensated for the short or interrupted meal period. Some states may require payment if a meal is interrupted after 20 minutes."

¹⁰ Hourly employees who clocked in even one minute late would be docked that minute from their paycheck. Hourly employees who worked overtime without permission had their next

introduced numerous policy directives and other internal documents, as well as affidavits and deposition testimony, specifying that Wal-Mart's policies regarding work breaks (as well as its policies regarding off-the-clock work) were, in the words of an internal Wal-Mart memorandum, among the company's "non-negotiables."¹¹

The day-to-day responsibility for ensuring that hourly employees followed company timekeeping policies fell on individual store managers.¹² For store managers, the responsibility for payroll came with considerable pressure from the home office to boost profits by, among other things, minimizing labor costs, one of the corporation's largest

week's schedules reduced by the amount of overtime worked.

¹¹ A memorandum distributed to store managers stated that Wal-Mart's policy regarding breaks and off-the-clock work was one of the company's five "non-negotiables." The plaintiffs submitted portions of an affidavit from a Wal-Mart executive averring that Wal-Mart's break and off-the-clock policies could not be waived by Massachusetts hourly employees.

In addition, the plaintiffs submitted posters, memoranda to employees, and other materials disseminated throughout the class period reminding hourly employees that they were required to follow company policy concerning breaks and overtime. We do not, of course, pass on the admissibility or credibility of this material at trial, which Wal-Mart vigorously contests through, among other materials, countering affidavits, which we discuss below. Wal-Mart contends that employees could, in fact, choose to waive their breaks. See note 53, infra.

¹² During the class period, Wal-Mart sent numerous internal memoranda to store managers and other store-level managerial personnel reminding them to adhere strictly to the terms of PD-07 and PD-43.

controllable expenses.¹³ Store managers were rewarded for keeping payroll costs low. Conversely, if they exceeded Wal-Mart's stringent labor cost guidelines, they might lose their bonuses or lose their jobs. According to documents proffered by the plaintiffs, Wal-Mart informed Massachusetts store managers of the precise margins by which their payrolls exceeded the labor cost guidelines and ordered the store managers to cut those payroll costs accordingly.¹⁴

At least since 1989, senior Wal-Mart home-office executives have been made aware that, despite the written policy directives to the contrary, store managers were sometimes "[a]ltering time cards to decrease reported payroll expenses" and "[i]nstructing associates to work off the clock" Further, at least since 1998, the home office was aware that some hourly employees "are not receiving scheduled breaks and lunches." One Wal-Mart payroll audit, known as the "Shipley audit," dated July 17, 2000, surveyed 128 Wal-Mart stores nationwide. Among other things, the Shipley audit documented that in a two-week period, 127 "[s]tores were not in compliance with company and state regulations concerning the allotment of breaks and meals as 76,472 exceptions

¹³ The home office set "labor guidelines" for each store, consistent with Wal-Mart's business model, which, among other things, called for minimizing labor costs.

¹⁴ For example, the plaintiffs submitted, among other things, numerous memoranda from Wal-Mart management to Massachusetts store managers demanding that particular store managers slash payrolls, eliminate overtime, and take other measures to control payroll expenses.

were noted."

Wal-Mart was also aware, during the class period, of allegations of "time shaving" by store managers.¹⁵ Two time-shaving techniques in particular feature prominently in this litigation. The first was the insertion by Wal-Mart supervisors of meal break periods into hourly employees' time records, allegedly when no meal break had in fact been taken. This effectively deprived hourly employees of compensation for the amount of time of the inserted meal break period.^{16,17} The second was a practice known as the "one-minute clock-out," in which a manager inserted a "clock-out" one minute after the hourly employee had clocked in (either for a shift, or on returning from a break) even though the employee had actually worked for longer

¹⁵ "Time shaving" is the practice of deleting time worked from employee payroll records or databases so that the employee receives less compensation than the amount to which he or she is entitled.

¹⁶ The plaintiffs submitted depositions from mid-level managers at Massachusetts Wal-Mart stores who testified either that they were instructed by store managers, or that it was their regular practice, to insert meal breaks into hourly employees' records even when employees had missed the meals. These managers also testified that some hourly employees complained or left Wal-Mart because they were not getting their meals or their breaks.

¹⁷ Because meal break periods are unpaid, if an employee did not in fact take a meal period, but a supervisor nonetheless inserted the record of a meal period, that insertion would shave the length of the meal period (typically either thirty minutes or sixty minutes) from the employee's total hours and total compensation for that week.

than one minute.^{18,19}

The plaintiffs, Crystal Salvas and Elaine Polion, averred that, as hourly employees at Wal-Mart during the class period, they worked off the clock and were denied rest and meal breaks.²⁰ The plaintiffs augmented their affidavits with evidence from other hourly employees.²¹ This evidence includes, among other things, letters, records of telephone calls to an internal "grass roots" complaint hotline for hourly employees, and other communications to superiors from Massachusetts hourly employees in various Wal-Mart stores throughout the Commonwealth complaining about time-shaving practices and missed rest and meal

¹⁸ A one-minute clock-out typically occurred when an hourly employee failed to swipe out at the end of a shift. The Wal-Mart manager then inserted a record of a clock-out one minute after the hourly employee had last clocked in. In some cases, these one-minute clock-outs were later corrected to reflect the actual shift worked by the hourly employee. Sometimes, however, the one-minute clock-out was not corrected, and so the hourly employee was not compensated for any work beyond the first minute. See note 46, infra.

¹⁹ The two time-shaving practices just described do not exhaust the plaintiffs' allegations of time shaving. For example, the plaintiffs submitted deposition testimony from one Massachusetts Wal-Mart manager who testified that she was instructed by her store manager to "put it back to the six-hour mark" when employees worked longer than a six-hour shift.

²⁰ For example, Polion averred that she was required to "zone" (restock) areas of the store after she punched out for the evening; Salvas, in her answers to interrogatories, stated that, among other things, she was "forced to work through . . . meal and rest breaks" and that she "witnessed numerous other employees miss and/or have their breaks interrupted."

²¹ Here again, we make no judgment about the admissibility or credibility of this evidence, at least some of which is disputed by Wal-Mart. See note 11, supra.

breaks.²² Wal-Mart submitted countervailing affidavits from Massachusetts hourly employees stating that they did not work off-the-clock and were not denied rest or meal breaks.²³

²² These communications generally pinpointed store managers, and the problem of understaffing, as the causes of missed or shortened work breaks. One Massachusetts hourly employee, for example, complained that "I have gone many shifts without a break because there is no coverage for my position." Another complained that he and a coworker "haven't been able" to take lunch breaks recently because "[n]obody seems able to cover our breaks and meal times." Other Massachusetts hourly employees complained to an internal hotline for hourly employees that: "it is difficult to get breaks lunches etc due to lack of help in the store"; hourly employees "are not getting their breaks or lunches"; management "had her working 8-10 hours with no breaks"; a store manager "told her she would not get a second break" and she "ha[d] to stay past her ending time each day"; hourly employees "are working thru the lunch period due to the understaffing in the store" and "if an [hourly employee] works past his schedule[d] time the store [manager] will go in and put that he clocked out at his schedule[d] time."

²³ For example, affidavits from current and former Massachusetts hourly employees variously attested that they had never worked off the clock and were always compensated for work performed; that they sometimes forgot to punch in and out as required; that they were never denied breaks or forced to shorten breaks; and that they sometimes skipped breaks for personal reasons, such as to leave work early. For instance, one current Wal-Mart hourly employee in Massachusetts attested: "There are . . . times when I make the choice not to take a full 15-minute break because I would rather spend my time on the job than sitting around." Another stated that she often did not take her second break because "I had a lot of energy in the afternoon and just wanted to keep working." A third stated, "a couple of times when it was really busy the [customer service manager] told me to go ahead and take my 15-minute rest break, but I chose not to. When I take my rest breaks I always smoke cigarettes, so if I choose to skip a break then I feel that I've saved another 7 1/2 minutes of my life by not smoking."

Nearly all of the affidavits of current hourly employees submitted by Wal-Mart include the statement (or minor variations thereof): "Before speaking with the attorney for Wal-Mart, I was informed that they represented Wal-Mart and did not represent me. I was also told that I did not have to answer any questions and could stop the interview at any time. I was informed that the

Some of the evidence proffered by the plaintiffs consists of an expert's analysis of Wal-Mart's business records, which were obtained by the plaintiffs through discovery from Wal-Mart's home office. See Part 3, infra. As noted, the home office closely monitored the payroll activities of all of its stores, including its Massachusetts stores. For example, each store's electronic time clock, which was programmed and maintained by the home office, transmitted each employee's time clock punches to the home office every fifteen minutes. Wal-Mart required that payroll and timekeeping data be recorded on a uniform set of forms. Some of these forms factor into this litigation. Among these is Wal-Mart's time clock exception report (exception report), in effect after 2001. The exception report consists of a list of all hourly employees whose records revealed timekeeping anomalies, such as missed punches at the end of the day or an overly long or overly short lunch period. Managers at each Wal-Mart store are required to investigate every item generated by an exception report. If an exception report showed that an hourly employee had not taken a lunch or a rest break or had otherwise missed a punch, the manager was expected to inquire of the hourly employee and, if a punch or punches had been missed, to complete

interview was purely voluntary and that if I did not wish to speak, there would be no impact on my job." The plaintiffs claim that when they deposed "a random selection of those affiants, each such witness recanted the statements drafted by Wal-Mart's defense counsel" and testified that he or she had been "intimidated" into signing. We do not need to resolve the question whether these affidavits should have been struck for the reasons stated in note 3, supra.

a time adjustment request (TAR) that both the hourly employee and the manager were required to sign, or later, to use an electronic time adjustment system.

Another report, the time clock archive report (archive report), recorded and transmitted to the home office the total number of times each hourly employee swiped in and out during every shift of each pay period, and tallied the hourly employee's total hours of work recorded for the pay period. Store managers were required to investigate and resolve any discrepancies appearing on the archive report before the payroll was finalized. Hourly employees were required to review and sign off on the accuracy of the archive report prior to receiving their paychecks. Wal-Mart's time clock punch error report (punch error report) also captured daily punch errors in hourly employees' timekeeping. The home office would not finalize daily store payroll until the errors on the punch error report were corrected.²⁴ These reports, along with others, together comprise the business records analyzed by the plaintiffs' expert, Dr. Martin Shapiro, as discussed more fully below.

2. Procedural history. On August 21, 2001, two former Wal-Mart hourly employees²⁵ filed a complaint against Wal-Mart

²⁴ We describe specific policies concerning Wal-Mart cashiers, infra, in our discussion of the plaintiffs' expert Shapiro.

²⁵ The employees who filed the original complaint were Crystal Salvas and Kelly A. James. On February 11, 2003, Elaine Polion (then Dumont) was substituted for James.

alleging multiple causes of action in implied-in-fact contract, tort, and Massachusetts wage statutes for wrongful failure to compensate hourly employees for time worked and to provide them with rest breaks and meal breaks to which they were entitled.²⁶ The plaintiffs sought to represent a class of approximately 67,500 current and former Wal-Mart hourly employees who worked at forty-seven Wal-Mart stores in Massachusetts during the class period. In January, 2004, a Superior Court judge allowed the plaintiffs' motion to certify the class.²⁷ See Mass. R. Civ. P.

²⁶ The second amended class action complaint alleged that Wal-Mart "caus[ed] Plaintiffs and the Class to work off-the-clock, alter[ed] Plaintiffs' and the Class members' time records, fail[ed] to pay Plaintiffs and the Class for their overtime worked and interrupted rest and meal breaks, prevent[ed] Plaintiffs and the Class from taking and/or completing their rest and meal breaks, [and] fail[ed] to pay Plaintiffs and the Class when their rest and meal breaks were interrupted." It further alleged that Wal-Mart assigns work that cannot be completed in the hours assigned, and "preclud[es] such employees from clocking in for hours worked to accomplish their assignments outside their regular work schedule." For clarity throughout our opinion, we will generally group these allegations into (a) claims involving uncompensated work, such as claims of off-the-clock work or time shaving, and (b) claims involving the denial or shortening of rest and meal breaks to which the class allegedly was entitled.

²⁷ The judge's memorandum of decision and order focused primarily on the issue of predominance, which he termed "Wal-Mart's main defense against class certification." See Mass. R. Civ. P. 23 (b), 365 Mass. 767 (1974). The judge dismissed Wal-Mart's "conventional" argument that the plaintiffs' claims would necessarily entail inquiries into each class member's state of mind and particular circumstances relative to Wal-Mart's allegedly wrongful conduct. He concluded that "for certification purposes, the Plaintiffs have presented sufficient evidence that Wal-Mart had a consistent corporate policy . . . [that] is based on Wal-Mart's allegedly uniform promises to the Plaintiffs and the class" concerning rest and meal breaks and off-the-clock work. The judge further stated that, although there "may be -- and indeed demonstrably are -- numerous innocuous reasons" why individual hourly employees may not have been compensated for

23 (a) and (b), 365 Mass. 767 (1974).²⁸

Wal-Mart appealed from the decision to the Appeals Court. In June, 2004, a single justice of the Appeals Court vacated the class certification order and remanded the matter to the Superior Court. Among other things, the single justice concluded that the Superior Court judge had erroneously side-stepped his obligation to determine whether the statistical proffer that the plaintiffs proposed as a justification to proceed on a class rather than an individual basis was "reliable enough to be admissible" and whether its admission would infringe Wal-Mart's rights of due

their labor, the plaintiffs intended to produce "expert statistical analysis which will be probative and admissible, and which, in its predicate, will discount individualized nonactionable reasons for Wal-Mart's failures to compensate." He concluded that Wal-Mart's own internal audits and time records permitted him to credit the existence of statistical facts sufficient for class certification, and that the admissibility and persuasiveness of such facts, and the issue of damages, were not appropriate to determine at the class certification stage.

²⁸ Rule 23 (a) of the Massachusetts Rules of Civil Procedure, 365 Mass. 767 (1974), provides: "One or more members of a class may sue or be sued as representative parties on behalf of all only if (1) the class is so numerous that joinder of all members is impracticable, (2) there are questions of law or fact common to the class, (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class, and (4) the representative parties will fairly and adequately protect the interests of the class."

Rule 23 (b) provides: "An action may be maintained as a class action if the prerequisites of subdivision (a) are satisfied, and the court finds that the questions of law or fact common to the members of the class predominate over any questions affecting only individual members, and that a class action is superior to other available methods for the fair and efficient adjudication of the controversy."

process.²⁹ The single justice faulted the motion judge for failing to "give careful consideration" to whether, in light of the tactical decision by the named plaintiffs to waive any claim under G. L. c. 149, § 148,³⁰ in order to avoid removal to Federal Court,³¹ they could adequately represent the class.³²

²⁹ The single justice noted, inter alia, that because the plaintiffs represented they intended to rebut claims that individual issues would require separate trials by relying on certain statistics and methodologies, these means of capturing data "are the justification for proceeding on a class rather than on an individual basis. If, therefore, class-justifying evidence is inadmissible, the case cannot proceed as a class action."

³⁰ General Laws c. 149, § 148, provides, in pertinent part: "Every person having employees in his service shall pay weekly or bi-weekly each such employee the wages earned by him to within six days of the termination of the pay period during which the wages were earned if employed for five or six days in a calendar week, or to within seven days of the termination of the pay period during which the wages were earned if such employee is employed seven days in a calendar week, or in the case of an employee who has worked for a period of less than five days, . . . shall, within seven days after the termination of such period, pay the wages earned by such . . . employee during such period"

³¹ In an order dated May 18, 2005, a single justice noted that "after the plaintiffs initially brought suit in State court, Wal-Mart removed it to Federal court claiming diversity jurisdiction. In an effort to meet the attendant \$75,000 jurisdictional amount and remain in Federal court, Wal-Mart asserted, and the plaintiffs denied, that the complaint stated a claim under the Massachusetts Payment of Wages Statute, G. L. c. 149, §§ 148 & 150 (Wage Act). Wal-Mart took the position, in essence, that by stating such a claim, the plaintiffs were seeking attorneys fees that could in the aggregate constitute amounts sufficient to meet the jurisdictional threshold."

³² The single justice stated that the judge should have inquired whether the plaintiffs' decision to foreclose a statutory cause of action "comports with due process either because class members have been afforded notice and an opportunity to intervene under Mass. R. Civ. P. 23 (d), [365 Mass. 767 (1974)] . . . or because the waived claims are so insubstantial that waiver does not deprive absent class members

Following the single justice's order, and after they claimed to have discovered new evidence of Wal-Mart's allegedly wrongful labor practices, the plaintiffs renewed a motion previously denied to amend their complaint a second time to add a claim for violation of G. L. c. 149, § 148. They also made a second motion for class certification. A second Superior Court judge allowed the motion to amend the complaint.^{33,34} On remand of the class certification issue, the judge who allowed the initial certification motion declined to revisit his findings concerning predominance and concluded that the plaintiffs had met their burden of proving the requirements for class certification for

of an interest significant enough to trigger due process requirements."

³³ Discovery was an ongoing issue between the plaintiffs and Wal-Mart throughout the litigation. Several times the plaintiffs sought and obtained orders requiring Wal-Mart to supplement its production. As part of their argument seeking leave to amend the complaint a second time, the plaintiffs averred that an article published in The New York Times after the date of filing the complaint disclosed the existence of documents about Wal-Mart's alleged time-shaving practices that had been deliberately withheld from production and that justified the addition of a claim for violation of G. L. c. 149, § 148, in spite of the fact that leave to amend the complaint to add the § 148 cause of action previously had been denied. See *Altering of Worker Time Cards Spurs Growing Number of Suits*, New York Times, April 4, 2004, at 1, 16. The Superior Court judge who allowed the plaintiffs' motion placed Wal-Mart under "a continuing duty to supplement its discovery responses" and ordered the company to produce certain documents to the plaintiffs within thirty days.

³⁴ Wal-Mart appealed from the amendment order. A single justice of the Appeals Court reported the matter to an Appeals Court panel, which affirmed the judge's order allowing the plaintiffs to file a second amended complaint. See *Salvas v. Wal-Mart Stores, Inc.*, 66 Mass. App. Ct. 1115 (2006). We denied Wal-Mart's application for further appellate review. 447 Mass. 1109 (2006).

their claims under G. L. c. 149, § 148. Thus, in December, 2004, he again certified the class, now expanded to cover claims under § 148.³⁵

Two years later, on September 21, 2006, a third Superior Court judge allowed in part and denied in part a motion by Wal-Mart for partial summary judgment. Specifically, the judge allowed Wal-Mart's motion on all claims concerning missed, interrupted, or shortened meal periods, on the ground that, because meal breaks were unpaid, the plaintiffs would be unable to show harm for meal breaks that were shortened or eliminated.³⁶ As for the claims predicated on missed, interrupted, or shortened rest breaks, the judge granted summary judgment on the counts alleging breach of the implied covenant of good faith and fair dealing (count three), unjust enrichment (count four),³⁷ promissory estoppel (count five), and conversion (count six). In addition, the judge allowed Wal-Mart's motion to shorten the class period to between August 21, 1998, and December 31, 2005 (shortened class period), on the remaining § 148 claim (count nine), on the ground that defining the class period to begin

³⁵ In December, 2004, the same judge denied a partial summary judgment motion filed by the plaintiffs.

³⁶ The judge also found that there was no private right of action under G. L. c. 148, § 100, a statute requiring employers to provide meal periods. See Part 5, infra.

³⁷ The judge allowed Wal-Mart's motion for summary judgment on the unjust enrichment claim (count four) "to the extent that the plaintiffs must decide" whether to proceed under a theory of implied contract (count two) or unjust enrichment.

earlier would violate the three-year statute of limitations under § 148. See G. L. c. 149, § 150. Thus, what remained of the plaintiffs' second amended complaint after summary judgment was (1) the breach of implied contract claim (count one) for failing to provide or compensate the plaintiffs for their earned rest breaks; (2) at the plaintiffs' election, the breach of implied contract claim (count two) or the unjust enrichment claim (count four) for failure to provide compensation for off-the-clock work, and (3) damages, including treble damages, (a) under G. L. c. 151, § 1A,³⁸ for failure to pay overtime (count seven); (b) under G. L. c. 151, § 1,³⁹ for failure to pay minimum wage (count eight); and (c) a claim under G. L. c. 149, § 148, for failure to provide compensation for certain off-the-clock work, limited to the shortened class period (count nine).

On November 7, 2006, the same Superior Court judge who had

³⁸ General Laws c. 151, § 1A, provides, in relevant part: "Except as otherwise provided in this section, no employer in the commonwealth shall employ any of his employees in an occupation . . . for a work week longer than forty hours, unless such employee receives compensation for his employment in excess of forty hours at a rate not less than one and one half times the regular rate at which he is employed."

³⁹ General Laws c. 151, § 1, as amended through St. 1999, c. 47, §§ 2, 3, provides, in relevant part: "It is hereby declared to be against public policy for any employer to employ any person in an occupation in this commonwealth at an oppressive and unreasonable wage . . . and any contract, agreement or understanding for or in relation to such employment shall be null and void. A wage of less than \$6.75 per hour, in any occupation, as defined in this chapter, shall conclusively be presumed to be oppressive and unreasonable. . . ." Various minimum wage amounts were in effect during the class period. See St. 1990, c. 306, § 1 (\$4.25 an hour); St. 1995, c. 196, § 1 and 2 (\$5.25 an hour).

ruled on the motion for partial summary judgment allowed an earlier filed motion by Wal-Mart to exclude the testimony of the plaintiffs' expert, Shapiro, and to decertify the class, a decision we discuss in detail below. The judge stayed both decisions pending resolution of the questions he reported to the Appeals Court.⁴⁰ We granted both parties' application for direct appellate review.

We consider first the judge's decision to allow Wal-Mart's motion to exclude the plaintiffs' expert and to decertify the class. We begin with the portion of that motion seeking to exclude Shapiro's expert testimony as unreliable.

3. The plaintiffs' expert witness. a. Standard of review.

"If the process or theory underlying a scientific expert's opinion lacks reliability, that opinion should not reach the trier of fact." Commonwealth v. Lanigan, 419 Mass. 15, 26 (1994). See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993).⁴¹ We review the motion judge's decision to exclude the

⁴⁰ The judge reported to the Appeals Court, pursuant to Mass. R. Civ. P. 64, as amended, 423 Mass. 1410 (1996), and G. L. c. 231, § 111, the correctness of "(1) the September 21, 2006, Memorandum of Decision and Order on Defendant's Motion for Partial Summary Judgment, only insofar as that order A) granted summary judgment on all aspects of the plaintiffs' complaint regarding meal periods, and B) concluded that the discovery rule does not apply to Count IX thereby limiting the plaintiffs' claim against Wal-Mart to the time period between August 21, 1998, and December 31, 2005; and (2) the November 7, 2006, Memorandum of Decision and Order on Defendant's Motion to Exclude Testimony of Dr. Martin Shapiro and to Decertify the Class."

⁴¹ "[I]f there is general acceptance in the relevant scientific community, the prospects are high, but not certain, that the theory or process is reliable." Commonwealth v.

plaintiffs' expert witness for an abuse of discretion. Canavan's Case, 432 Mass. 304, 312 (2000) ("applying an abuse of discretion standard on appellate review will allow trial judges the needed discretion to conduct the inherently fact-intensive and flexible Lanigan analysis, while preserving a sufficient degree of appellate review to assure that Lanigan determinations are consistent with the law and supported by a sufficient factual basis in the particular case").

b. Shapiro's evidence. Shapiro, the plaintiffs' expert, is a professor of Psychology at Emory University with a doctorate in psychology and mathematics who works primarily in the area of statistics. He has testified as an expert on both sides in employment discrimination cases. He has spent "hundreds and hundreds" of hours, indeed by his own account "about fifty per cent" of his time for the preceding four and one-half years, on his work as a consultant and testifying expert in this case and approximately twenty other similar wage and hour claims against Wal-Mart. Shapiro reviewed Wal-Mart's timekeeper databases, described above, along with dozens of other related Wal-Mart data sources and records including documents detailing the codes and variables involved in Wal-Mart's databases, Wal-Mart policy documents, internal audit reports, depositions, and other

Lanigan, 419 Mass. 15, 24 (1994). A party attempting to introduce scientific opinion evidence may also "demonstrate the reliability or validity of the underlying scientific theory or process by some other means," id. at 26, including by satisfying the test set out in Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993).

materials. He produced a written report, which the plaintiffs submitted to the court, and testified at the evidentiary hearing.

Shapiro performed four tasks for the plaintiffs. First, he counted what was in the records Wal-Mart provided. Because many of the records Wal-Mart produced were in paper rather than electronic form, this was an enormous and expensive task.⁴²

Second, Shapiro used standard statistical methods to extrapolate from the available data, primarily to account for data that were missing either because Wal-Mart did not retain the records or because the paper records it did produce were unreadable.⁴³

Third, Shapiro multiplied the duration of each putative violation

⁴² Wal-Mart provided electronic timekeeper records for the period from January, 2001, through the end of the class period in December, 2005. However, Wal-Mart provided only paper records for the period from August, 1995, through January, 2001, having purged the electronic records from its system. At Shapiro's direction, the plaintiffs retained independent contractors to recreate electronic records from the hard copies. Shapiro notes that Wal-Mart "in return for sharing a portion of the costs of that project (which [in total] costs exceeded \$350,000), negotiated the terms of the vendor protocol and requested that additional information and quality control measures be used by the document restoration vendors."

⁴³ Wal-Mart retained legible paper records for 86.38 per cent of the pay periods between August, 1995, and January, 2001. An additional 7.8 per cent of the data were "unusable due to the illegibility of the paper records." Shapiro used straightforward statistical methods to extrapolate from the available data to arrive at estimates for the pay periods where data were either missing or unreadable.

Separately, as detailed below, Shapiro used additional statistical techniques in certain instances. Where data were available only for a portion of the class period, he used that data to make an estimate regarding the remainder of the class period; and in one instance, he used a sample of twenty-five Massachusetts Wal-Mart stores to draw conclusions about all forty-seven Massachusetts stores.

he identified in the database by the wage rate of the applicable individual hourly employee to arrive at figures representing the total damages that Wal-Mart would owe the plaintiff class if all the putative violations Shapiro counted were, indeed, violations requiring compensation.

Fourth, Shapiro offered his own expert opinions as to why various features of either the data themselves, the means by which they were collected, or both, should lead a fact finder to conclude that Wal-Mart had indeed deprived the plaintiffs of compensation, rest breaks, and meal breaks to the extent suggested by the data. For example, Shapiro noted that the missed breaks were not randomly distributed: more of the missed rest breaks were at busy, peak times in the afternoon rather than in the morning. Shapiro opined that this fact supported the plaintiffs' theory that "it is simply not true that people didn't swipe in and out for rest breaks"; rather, because of understaffing for example, hourly employees "systematically or generally didn't take certain rest breaks," generally at busy times. Shapiro similarly argued that the mechanics of how the various data were generated by timecard swipes and subsequent manager edits -- especially the processes Wal-Mart put in place for correcting any erroneous "exceptions" -- made it probable that Wal-Mart's records were by and large accurate, and that nearly all of the incidents of time shaving and missed rest and meal periods that the data appeared to suggest were, in fact,

violations.^{44,45}

Shapiro performed each of these four tasks with respect to four distinct categories of data. (1) Shapiro counted so-called "one-minute clock-outs," in which a Wal-Mart manager or supervisor edited an hourly employee's time swipe records to clock the affected hourly employee out one minute after the hourly employee clocked in.⁴⁶ (2) He counted the total number of

⁴⁴ Pressed repeatedly at the evidentiary hearing whether he assumed that the records were perfectly accurate, Shapiro testified, "I never assume anything is all or none, or never or always. I have no doubt that in this world of human beings there are occasional missteps, that is, things that don't go as they're supposed to go. But I do know that the system was set up to minimize those occurrences. And outside of, you know, the very occasional affidavit that you now drag up, you know, five or ten years later, there's no evidence that the company employees didn't do what the company employees are recorded to have done."

⁴⁵ Shapiro also offered his opinion that certain rules of Wal-Mart's timekeeper system operate in a manner that itself amounts to time shaving. For example, if an hourly employee's shift is between three and six hours, so that the hourly employee is entitled to a rest break but no meal break, if the hourly employee takes a rest break of 25 minutes or longer, the entire break is coded as an unpaid "meal break" and the hourly employee does not receive his or her 15 minutes of paid rest break.

⁴⁶ For an explanation of one-minute clock-outs, see note 18, supra. Shapiro counted only those cases in which the one-minute clock-out remained uncorrected at the close of the week's payroll, and furthermore, no adjustment in the form of a cash payment was made within seven days of the end of the payroll period. Shapiro counted 29,176 records of uncompensated one-minute clock-outs during the putative class period, resulting in \$879,238 in lost wages.

Although not relevant for purposes of deciding the issues here, Shapiro used a seven-day period because of the requirement of G. L. c. 149, § 148, that wages be paid "within seven days of the termination of the pay period during which the wages were earned," or sooner depending on the number of days worked by the employee. Shapiro's calculation was challenged by Wal-Mart's expert.

missed and interrupted rest breaks appearing in the timekeeper data from August, 1995, through February, 2001; he also used a linear method of statistical estimation to arrive at an estimate of the number of rest breaks that were likely missed, if past trends continued, from February, 2001, when Wal-Mart stopped collecting the data, through the end of the class period.⁴⁷ (3) He counted instances of off-the-clock work by cashiers, as measured by instances in which cashiers were not swiped in to work, according to the timekeeper databases, yet were in fact logged in to their cash registers, as recorded in a separate point-of-sale database.⁴⁸ Finally, (4) Shapiro counted instances

⁴⁷ The proportion of all shifts containing a missed rest break was high (more than fifty per cent) throughout the class period, but was slowly declining. Shapiro's estimates for missed rest breaks after 2001 projected that this slow rate of decline would continue in a linear fashion.

Shapiro noted and interpolated a total of 4,911,737 missed rest breaks, with a monetary value of \$9,935,594, during the period from August 21, 1995, through February 8, 2001 (from the start of the putative class period to the date of the policy change regarding clocking in for rest breaks). See note 9, supra. Shapiro estimated that from 2001 to 2005, if the slow rate of decline continued, there would have been 6,297,913 missed rest breaks with a monetary value of \$15,288,184.

⁴⁸ Cashiers are the only group of hourly employees for which this separate database was available, and Shapiro considered it reliable for a subset of cash registers only: so-called "operator-accountable" registers, for which the individual cashier is responsible for any shortages in the cash drawer. Operator-accountable registers also automatically log cashiers out after a period of inactivity. Shapiro counted apparent off-the-clock work at that subset of registers, and imposed certain other restrictions on the data. Reliable data were available only for the years 2001-2005. Shapiro noted that in 2003, Wal-Mart implemented a software change that prevented hourly employees from logging on to a cash register unless they were clocked in for work. He then averaged the prevalence of off-the-

in which hourly employees did not swipe out for a meal break during their shift, but managers subsequently inserted a meal period of exactly thirty or sixty minutes into the shift.⁴⁹

Wal-Mart countered with its own expert, Denise Martin, senior vice president of National Economic Research Associates, Inc., who holds a doctorate in economics. Martin testified at the evidentiary hearing and prepared a report that was marked as an exhibit at that hearing. Martin reviewed Shapiro's analysis and made numerous criticisms, essentially concluding that one-minute clock-outs inserted by managers may reflect actual time worked⁵⁰; that inserted meal periods may reflect meals actually

clock work in the 2001-2003 data to extrapolate backward and arrive at estimates for the years from 1995 to 2000. Also, in this calculation only, Shapiro utilized the merged point-of-sale and timekeeper data from "a representative, unbiased sample of twenty-five of the forty-seven stores for which data was produced" to make an estimate as to the remaining stores. Wal-Mart challenges Shapiro's estimates on a variety of grounds not relevant here.

Shapiro estimated a total figure of \$423,010. for the lost wages due to off-the-clock work by cashiers during the putative class period.

⁴⁹ Shapiro considered only inserted meal periods of exactly thirty or sixty minutes. Shapiro's report acknowledged that his estimate of the total damages resulting from improperly inserted meal breaks would drop when time adjustment requests (TARs) (by hourly employees to managers) are taken into account. Presumably, he suggested, when an hourly employee requested that a supervisor insert a meal break, that meal break was actually taken.

Before taking account of the TARs, Shapiro estimated, the monetary value of the inserted meal periods was \$94,779.

⁵⁰ Martin noted that hourly employees sometimes request such insertions, and also argued that Shapiro should have looked beyond a seven-day window for subsequent cash payments restoring

taken⁵¹; that many of the missed rest breaks in the timekeeper data may not be what they appear because hourly employees may take rest breaks without swiping out⁵²; that in any event, some missed rest breaks may be voluntary⁵³; and that the purported off-the-clock work by cashiers that Shapiro identifies may simply mean that one hourly employee is working at the cash register "under another [hourly employee's] ID, either intentionally or inadvertently."⁵⁴ Thus, Martin opined, Shapiro's estimate of

hourly employees' pay. See note 46, supra.

⁵¹ Martin noted that hourly employees sometimes request that managers insert meal periods for a previous day either orally or through TARs; she also noted that prior to May, 2001, hourly employees could authorize a change by initialing an exception report, and that Shapiro did not tabulate this additional data source.

⁵² Martin contended that Shapiro's estimate of the number of missed rest breaks during the 2001-2005 period (after Wal-Mart eliminated swiping for rest breaks in 2001, see note 9 and accompanying text, supra) is unreliable because it assumes that the trend (a slight decline) in missed rest breaks continued throughout the period, taking no account of the fact that Wal-Mart "undertook various initiatives regarding meal and rest break compliance" during the period.

⁵³ The parties dispute whether it was permissible under the pertinent Wal-Mart policies for an employee to miss a break voluntarily, or whether, as asserted by the plaintiffs, the breaks were nonwaivable. In addition, in the event that Wal-Mart is correct that the breaks are waivable, the parties also dispute whether the rest breaks were, in general, voluntarily waived, or whether, as asserted by the plaintiffs, hourly employees generally missed breaks because they were assigned to complete tasks that could realistically be completed only by missing breaks. These two separate issues -- the waivability of breaks under the relevant policy, and whether employees in fact waived them voluntarily -- are both issues of fact that must be resolved by the fact finder.

⁵⁴ Martin claims that the failure of the timekeeping system's clock and the point-of-sale system's clock to be

alleged damages is speculative, unreliable and inaccurate:

"Given the data he has available, it is impossible for him to identify properly any instances of missed or short rest breaks." His other estimates of alleged damages, she testified, are similarly unreliable.

c. Analysis. The motion judge, "accept[ing] Martin's criticisms of Shapiro's methodology," found that "the unreliability of Shapiro's opinions and, indirectly, of Wal-Mart's records do not provide an acceptable basis for supporting a finding of harm, with de minimis exceptions, to 67,500 members of the associate class" (emphasis added). He characterized the plaintiffs' claim and their use of Shapiro's expert opinion in the following way: "the plaintiffs will have Shapiro imbue Wal-Mart's records with the ability to speak for class members or qualifying representatives in identifying specific instances when they have been injured or harmed by Wal-Mart's actions or policies." The motion judge took the plaintiffs to be arguing, "with dependence largely on Shapiro, that the Wal-Mart records are so error free that they can be relied upon to identify specific associates who suffered missed breaks, time shaving, and off-the-clock work."

This was error in two respects. First, in the liability

synchronized could lead to inflated estimates of off-the-clock work, although Shapiro contends that he takes this factor into account. Martin also asserts that Shapiro has no basis for assuming that his sample of twenty-five stores, see note 43, supra, accurately reflects the other twenty-two stores open in Massachusetts during the class period.

phase of this putative class action, it is not the representative plaintiffs' burden to identify every "specific" instance in which a member of the plaintiff class has been "injured or harmed by Wal-Mart's actions or policies." Rather, the plaintiffs' burden is to prove by a preponderance of the evidence that Wal-Mart engaged in an over-all, class-wide practice of time shaving, denying or discouraging rest breaks or meal breaks, and requiring off-the-clock work by its hourly employees. See Part 4 (c), infra. Cf. International Bhd. of Teamsters v. United States, 431 U.S. 324, 360 (1977) (evidence of "each person" harmed by general policy not required in order to prove that over-all policy existed). See generally Part 4, infra. Second, the plaintiffs are not using Shapiro to "imbue" Wal-Mart's business records with evidentiary value the records do not already possess. The motion judge's decision to exclude Shapiro's testimony as unreliable turns fundamentally on his conclusion that "[t]he time records of Wal-Mart are not adequate of themselves to establish entitlement to compensation in a case like this" This formulation misstates the test. The question is not whether Wal-Mart's records are dispositive evidence, conclusively establishing liability and damages "of themselves." Rather, the test is whether the business records are admissible evidence, probative of Wal-Mart's liability. If so, then Shapiro's efforts to count and summarize them -- the first of the four pieces of evidence offered by Shapiro, as delineated above -- are similarly admissible unless his methods of counting and summarizing those

records are themselves unreliable.

Shapiro's methods for reconstructing and summarizing the contents of Wal-Mart's records are uncontested.⁵⁵ Martin's criticisms are directed elsewhere, primarily at the fourth category of evidence Shapiro provided, as outlined above: his independent expert opinion that all the violations apparent on the face of the data, such as the missed rest breaks, are, indeed, violations to be compensated. Martin also challenges certain of Shapiro's statistical extrapolations to cover missing data -- part of the second category of evidence Shapiro provided. She does not challenge Shapiro's extensive technical project of recreating Wal-Mart's timekeeper databases from paper backups and counting certain of the data. Nor does she challenge Shapiro's calculations in the third category of evidence he provided, in which he multiplied the putative violations by hourly employees' wage rates to arrive at figures for what the damages would be if all those putative violations were to be compensated.

In excluding even the portion of Shapiro's report and testimony that consisted of counting data found in Wal-Mart's own business records, the motion judge acted not on the basis of any challenge to Shapiro's methodology, but essentially on his view that the records themselves were insufficiently reliable.⁵⁶ This

⁵⁵ See note 42, supra.

⁵⁶ At the evidentiary hearing, the motion judge stated: "We're trying to figure out whether the records are reliable. Okay? That's really what we're here to do." In his order excluding Shapiro's testimony, the motion judge concluded, "the

was error. Business records have a special place in our law of evidence. By statute, business records are admissible even when they would otherwise be inadmissible "hearsay or self-serving" if "the entry, writing or record was made in good faith in the regular course of business and before the beginning of the civil or criminal proceeding . . . and that it was the regular course of such business to make such memorandum or record at the time of such act, transaction, occurrence or event or within a reasonable time thereafter." G. L. c. 233, § 78. Courts necessarily rely on the accuracy of business records that satisfy these requirements. "Reliability is presumed because entries in these records are routinely made by those charged with the responsibility of making accurate entries and are relied on in the course of doing business." Commonwealth v. LaPlante, 416 Mass. 433, 442 (1993). Courts attach this presumption of reliability to business records because businesses themselves rely on their accuracy. "Such entries are dealt with . . . in the most important undertakings of mercantile and industrial life. They are the ultimate basis of calculation, investment, and general confidence in every business enterprise. . . . It would seem that expedients which the entire commercial world recognizes as safe could be sanctioned, and not discredited, by courts of justice." Wingate v. Emery Air Freight Corp., 385

plaintiffs have failed to demonstrate that Shapiro's analysis of the records supplies the records with any credibility as to their accuracy."

Mass. 402, 410 (1982) (Liacos, J., concurring), quoting 5 J. Wigmore, Evidence § 1530, at 452 (Chadbourn rev. ed. 1974).⁵⁷

Wal-Mart's business records at issue in this case satisfy all of the requirements to be afforded the usual presumption of reliability. Both the timekeeper records and the point-of-sale register records were "made in good faith in the regular course of business" before this action began. G. L. c. 233, § 78. The digital records of hourly employees' card-swipes and their supervisors' subsequent insertions and amendments were all made "at the time of such act, transaction, occurrence or event or within a reasonable time thereafter." Wal-Mart has relied on these records for purposes of compensating its hourly employees, evaluating its store managers, and presumably reporting its payroll expenditures to the Commonwealth, to the Federal government, and to its own shareholders in the form of financial results.

This presumption of reliability is not irrebuttable. Wal-Mart may, through admissible evidence at trial, challenge the veracity of its own records, just as it may challenge the

⁵⁷ The motion judge was not presented squarely with a motion to exclude Wal-Mart's business records from evidence, and he did not analyze the question of their admissibility. However, because he concluded that the question of the admissibility of much of Shapiro's testimony turned essentially on the admissibility of Wal-Mart's records, see note 56, *supra*, his assessment of the admissibility of those records should have been informed by the usual standards for the admissibility of business records.

conclusions that Shapiro and the plaintiffs draw from those records.⁵⁸ But the records themselves, and the portions of Shapiro's testimony that consist of reconstructing and counting those records in an uncontestedly reliable fashion, are admissible.

Wal-Mart's criticisms of the remaining portions of Shapiro's expert testimony go to the weight of the evidence, not its admissibility. Wal-Mart's expert essentially argues that, for a series of reasons, not all of the putative violations Shapiro identifies are actual violations; she contends that accounting for a series of additional factors, variables, and data sources would undercut Shapiro's conclusions. As the United States Supreme Court stated in a case involving statistical regression analysis: "Normally, failure to include variables will affect the analysis' probativeness, not its admissibility." Bazemore v. Friday, 478 U.S. 385, 400 (1986). "There may, of course, be some regressions so incomplete as to be inadmissible as irrelevant; but such was clearly not the case here." Id. at 400 n.10. Here, the evidence at issue does not involve statistical regression,

⁵⁸ Neither Wal-Mart nor the plaintiffs seek to rely entirely on, or to challenge in their entirety, Wal-Mart's business records. Rather, the parties draw different conclusions from those records. For example, with respect to meal breaks, the plaintiffs generally contend that the records of employees' time clock punches accurately reflected time worked, prior to the thirty or sixty-minute meal period insertions by managers; Wal-Mart contends that those insertions corrected inaccuracies and rendered the data more accurate. Such disagreements about how to interpret Wal-Mart's business records are to be resolved by the fact finder. They do not render the records inadmissible.

but a similar principle applies: any failure to take account of additional factors affects the probativeness, rather than the admissibility, of Shapiro's evidence. It cannot be said that Shapiro's analysis of Wal-Mart's data is so incomplete as to be "irrelevant" to the question of Wal-Mart's class-wide liability, or, in the event that the fact finder concludes Wal-Mart is liable, to the question of damages. Any failure of Shapiro to account for the factors Martin identifies may render his analysis "less probative than it otherwise might be," *id.* at 400, but would not render his analysis inadmissible.⁵⁹ Wal-Mart's motion to exclude Shapiro's testimony should not have been allowed.

We turn now to the judge's decision allowing Wal-Mart's motion to decertify the class.

4. Class certification. a. Standard of review. A judge

⁵⁹ The motion judge's additional criticisms of Shapiro's methodology likewise go to the weight of the evidence rather than its admissibility. For example, the motion judge speculates that the pattern of missed rest breaks Shapiro identifies might be explained if "the associates might have felt less energized to take the trouble to walk to the time clock" in the afternoons. This proposition of the judge, unsupported by any reference to the record, at most affects the weight rather than the admissibility of Shapiro's argument on that point.

More broadly, the motion judge would have preferred that Shapiro "legitimize [his] methodology" by "conducting an investigation into whether the records correspond to the reality of the system Wal-Mart had in place," an investigation that, the motion judge suggested, might take the form of "representative inquiries" of class members Shapiro could randomly select from the class list. Additional investigation of the kind suggested might be probative. But any criticism of Shapiro on the ground that he did not employ additional potential investigative methodologies the judge might have preferred be undertaken again goes to the weight of the evidence, not its admissibility.

has broad discretion to certify or decertify a class. Our review asks only whether that discretion has been abused. Weld v. Glaxo Wellcome Inc., 434 Mass. 81, 84-85 (2001). Indicia of an abuse of discretion include errors of law or judicial action that is "arbitrary, unreasonable, or capricious . . . such as when a judge grants class status on the basis of speculation or generalization regarding satisfaction of the requirements of rule 23, or denies class status by imposing, at the certification stage, the burden of proof that will be required of the plaintiffs at trial." Id. at 85. See Smilow v. Southwestern Bell Mobile Sys., Inc., 323 F.3d 32, 37 (1st Cir. 2003) (District Court abuses its discretion "when it relies significantly on an improper factor, omits a significant factor, or makes a clear error of judgment in weighing the relevant factors" or "if the court adopts an incorrect legal rule").

Before applying these principles to the decertification order, we describe it in some detail.

b. Decertification order. The decertification order was predicated on the judge's finding that the plaintiffs had failed to demonstrate the predominance of common over individual issues, as required by rule 23 (b). The judge concluded that the factual record demonstrated that the class was "likely to consist of a not insubstantial number" of hourly employees who were not harmed by Wal-Mart. In reaching his conclusion, the judge focused principally on the reliability of Wal-Mart's payroll records described above, and on Shapiro's expert testimony. The judge

reasoned that, although the payroll records indicated how an hourly employee's work time was recorded, they were mute as to the reasons a particular hourly employee recorded time as he or she did. In light of affidavits submitted by Wal-Mart from several Massachusetts hourly employees stating that they had shortened or omitted break periods for reasons having nothing to do with Wal-Mart's alleged wrongdoing, see note 23, supra, the judge said that individual inquiries of each hourly employee would be required to determine whether Wal-Mart was at fault. He surmised, relying on Secretary of Labor v. DeSisto, 929 F.2d 789 (1st Cir. 1991) (DeSisto), that the plaintiffs might have been able to overcome Wal-Mart's showing that common issues would not predominate had they presented a trial plan that included "testimony of witnesses representative of the different positions held in each of the forty-seven Massachusetts stores covering the entire class period who could make the case of violations experienced by all class members" by offering "first-hand"

testimony of such violations.^{60,61} Absent the presentation of such a trial plan, he concluded, the plaintiffs had failed to meet their burden of proving that the number of uninjured class members would be de minimis, as he concluded was required by Aspinall v. Philip Morris Cos., 442 Mass. 381 (2004). Thus, at the heart of the plaintiffs' appeal is the question whether they have met their burden of proof under the predominance requirement of rule 23 (b). We now take a closer look at that requirement.

c. Predominance. Rule 23 (b) calls for the plaintiff to demonstrate, among other things, "that the questions of law or fact common to the members of the class predominate over any questions affecting only individual members." The predominance requirement seeks to ensure, in part, that the economies of class action will be realized in the particular litigation. See 2 A. Conte & H.B. Newberg, Class Actions § 4.24, at 154 (4th ed.

⁶⁰ The judge stated, among other things, that "at a minimum, the plaintiffs would need to establish that every [hourly employee] was actually working during the period for which there are missing swipes for an earned rest break, and that the [hourly employee] did not take the rest break and/or that the [hourly employee] did not voluntarily come back early from a break and was in fact performing work during the minutes the break was short of fifteen minutes . . . [and] that every [hourly employee] was the actual [hourly employee] working on the operator-accountable register which he was logged on to during the alleged 'off-the-clock' period . . . and that every [hourly employee] performed work for the shifts in which allegedly unauthorized one-minute clock-outs appear."

⁶¹ The judge premised his conclusion on a trio of cases decided under the Fair Labor Standards Act, 29 U.S.C. §§ 201 et seq. (2000): Anderson v. Mt. Clemens Pottery Co., 328 U.S. 680 (1946) (Anderson), Rural Fire Protection Co. v. Hepp, 366 F.2d 355 (9th Cir. 1966) (Rural Fire), and Secretary of Labor v. DeSisto, 929 F.2d 789 (1st Cir. 1991) (DeSisto).

2002) (Newberg) ("Judicial economy factors and advantages over other methods for handling the litigation as a practical matter underlie the predominance and superiority requirements for class actions . . ."). We recognize that questions of predominance under rule 23 (b) "introduce a highly discretionary element" into a motion judge's decision. Fletcher v. Cape Cod Gas Co., 394 Mass. 595, 601 (1985), quoting Baldassari v. Public Fin. Trust, 369 Mass. 33, 40 (1975). That discretion, however, "must be exercised in accord with the purposes sought to be achieved by class actions." Sniffin v. Prudential Ins. Co., 11 Mass. App. Ct. 714, 723 (1981).

"The predominance test expressly directs the court to make a comparison between the common and individual questions involved in order to reach a determination of such predominance of common questions in a class action context." Newberg, supra at § 4.23, at 154. At the pretrial stage, the burden is on the moving party to prove that they have satisfied the predominance requirement. That burden, as we have often stated, is of a different order than the party's burden of proof at trial. At the pretrial class action stage, the plaintiffs must "provid[e] information sufficient to enable the motion judge to form a reasonable judgment that the class meets the requirements of rule 23; they do not bear the burden of producing evidence sufficient to prove that the requirements [of rule 23] have been met." Weld v. Glaxo Wellcome Inc., supra at 87. See Eisen v. Carlisle & Jacquelin, 417 U.S. 156, 178 (1974). If a plaintiff satisfies this

certification burden, then "neither the possibility that a plaintiff will be unable to prove his allegations, nor the possibility that the later course of the suit might unforeseeably prove the original decision to certify the class wrong, is a basis for declining to certify a class which apparently satisfies the Rule." Weld v. Glaxo Wellcome Inc., *supra* at 84-85, quoting Blackie v. Barrack, 524 F.2d 891, 901 (9th Cir. 1975), cert. denied, 429 U.S. 816 (1976); Weld v. Glaxo Wellcome Inc., *supra* at 92, quoting Waste Mgt. Holdings, Inc. v. Mowbray, 208 F.3d 288, 296 (1st Cir. 2000) (plaintiff must prove that "sufficient constellation of common issues bind class members together"); Spear v. H.V. Greene Co., 246 Mass. 259, 266 (1923) ("The persons suing as representatives of a class must show by the allegations of their bill that all the persons whom they profess to represent have a common interest in the subject matter of the suit and a right and interest to ask for the same relief against the defendants. It is not essential that the interest of each member of the class be identical in all aspects with that of the plaintiffs").

Because the salient inquiry is whether the plaintiffs' claims are "sufficiently cohesive to warrant adjudication by representation," no rote formula can determine whether the plaintiffs have met their certification burden on the question of predominance (emphasis added). Amchem Prods., Inc. v. Windsor, 521 U.S. 591, 623 (1977). See Weld v. Glaxo Wellcome Inc., 434 Mass. 81, 92 (2001). The judge must engage in "an

individualized, pragmatic evaluation of the relationship between and the relative significance of the common and individual issues." In re Relafen Antitrust Litig., 231 F.R.D. 52, 70 (D. Mass. 2005), quoting In re Relafen Antitrust Litig., 218 F.R.D. 337, 343 (D. Mass. 2003). Class certification may be appropriate where common issues of law and fact are shown to form the nucleus of a liability claim, even though the appropriateness of class action treatment in the damages phase is an open question. See Smilow v. Southwestern Bell Mobile Sys., Inc., 323 F.3d 32, 40 (1st Cir. 2003), quoting Blackie v. Barrack, supra at 905 ("The amount of damages is invariably an individual question and does not defeat class action treatment").

d. Analysis. We first consider the issues of fact. The evidence offered by the plaintiffs in support of class certification included not only the payroll evidence and expert evidence provided by Shapiro, but additional nonpayroll, nonexpert materials such as documents and materials that Wal-Mart distributed to its hourly employees and other information that the judge grouped into seven broad categories (collectively, additional material), which we set forth in the margin below.⁶²

⁶² The judge stated: "The plaintiffs' class liability evidence falls into a number of categories. Without attempting to be exhaustive in cataloging all of the evidence the plaintiffs will rely upon, these categories, beyond Wal-Mart's timekeeping databases, include the following:

"(a) Wal-Mart's corporate internal communications, before and during the class period, which acknowledge the widespread existence of time shaving and off-the-clock work caused by payroll pressure.

The plaintiffs argue that the additional material alone, absent payroll records or Shapiro's testimony, is sufficient to meet their pretrial certification burden on the issue of predominance. We need not resolve that question, because we have determined, as

"(b) Grass roots complaints, some from Massachusetts associates, and cashier survey results for several years indicating ongoing problems with large numbers of associates, all pressured to cut short or miss their meal or rest breaks.

"(c) Audit Reports of store internal audits from September, 1999, through July, 2000, also indicating that a significant number of associates might not have been or in fact were not obtaining the meal and rest breaks to which they were entitled. None of the results were specific to Massachusetts stores.

"(d) A 1999 Store Audit Program which instructs auditors to determine missed breaks by using Wal-Mart's payroll records in the same way the plaintiffs and Shapiro are now using them to identify missed breaks. This document is supplemented by a series of audits in 2000 which implemented these instructions.

"(e) An audit report of July 17, 2000 ('Shipley Audit'), supplemented by Wal-Mart corporate follow-up treatment, which also indicated, based on a large number of exceptions appearing on the Exception Report, that Wal-Mart was not providing to associates in significant numbers the meal and rest breaks to which they were entitled. The Shipley Audit involved 128 stores across the United States, two of which were from Massachusetts. No specific results from the two Massachusetts stores are available.

"(f) Depositions and affidavits of the class representatives and of other Wal-Mart associates, a small number from Massachusetts and others from outside Massachusetts, who state they missed meal or rest breaks because of understaffing at their stores, and, in fewer numbers, who state they were subject to unauthorized meal insertions and one-minute clock-outs; and

"(g) Testimony of a relatively small number of current and former associates of Wal-Mart at corporate and store levels, acknowledging the practice of cost-cutting policies and their adverse impact on the ability of associates to obtain meal and rest breaks, acknowledging in fact the unauthorized existence of store managers using the one-minute clock-out and inserting meals, and acknowledging that Wal-Mart's policies were designed to encourage and condone such conduct."

described above, that it was an abuse of discretion to exclude Shapiro's testimony. Nonetheless, we discuss the additional material offered by the plaintiffs to explain why, in combination with Shapiro's testimony, this evidence amply demonstrates that common issues of fact predominate for purposes of rule P. 23 (b).

In this case the plaintiffs have asserted contract, tort, and statutory claims, all predicated on the allegation that Wal-Mart engaged in "a uniform and systematic scheme of wage abuse against [its] hourly paid associates in the Commonwealth of Massachusetts." With little comment, the judge dismissed the additional material as insufficiently specific to Massachusetts and thus inadequate to meet the plaintiffs' certification burden. This was error.

We agree with the judge's observation that the great bulk of the additional material concerned Wal-Mart's national, corporate-wide labor policies and practices that make no specific reference to Massachusetts. Other material submitted by the plaintiffs, such as the Shipley Audit, does not focus in any significant way on the Commonwealth. But neither does any of this material, either directly or indirectly, exempt Massachusetts stores or Massachusetts hourly employees from labor and payroll directives imposed nationally by the home office. Because the gravamen of the plaintiffs' claims is that Massachusetts hourly employees were subjected to Wal-Mart's nationwide, uniform, wrongful actions, the dearth of specific references to Massachusetts in the additional material is not fatal to class certification.

The plaintiffs present the additional materials, including policy directives, employee handbooks, and the like, as evidence of an implied-in-fact contract or enforceable promise concerning work breaks and off-the-clock work. See LiDonni, Inc. v. Hart, 355 Mass. 580, 583 (1969) ("In the absence of an express agreement, a contract implied in fact may be found to exist from the conduct and relations of the parties"). The judge found these general corporate materials (among other things) sufficiently specific to the contract issue to survive a challenge on summary judgment. They are no less persuasive on the issue of class certification, where all members of the class were unarguably the beneficiaries of identical terms of employment. The necessary bridge to liability in Massachusetts is provided by the sworn and unsworn statements of Massachusetts hourly employees and managers about missed and shortened breaks and uncompensated work.

The judge nevertheless concluded that class treatment was not warranted on the liability issues because no Massachusetts law requires paid rest breaks and no Wal-Mart policy forbids hourly employees from waiving breaks. The error was twofold. First, the absence of Massachusetts law on work breaks, while relevant to statutory claims, does not resolve the question whether Wal-Mart contractually or otherwise promised breaks to its hourly employees. Second, the waiver issue was a factual matter that the judge should have reserved to the jury. The judge acknowledged in his decertification order that "there exist

no Wal-Mart policies allowing a waiver of rest breaks and, in fact, that there were policies in place, including disciplinary, which were intended to discourage associates from not taking their earned rest breaks." Wal-Mart's evidence that some Massachusetts hourly associates felt free to skip or shorten their breaks points to a disputed issue of material fact with regard to an affirmative defense (waiver) that Wal-Mart might offer. See Smilow v. Southwestern Bell Mobile Sys., Inc., 323 F.3d 32, 39 (1st Cir. 2003) ("Even in the unlikely event that individual waiver determinations prove necessary, the proposed class may still satisfy the predominance requirement. . . . Courts traditionally have been reluctant to deny class action status under Rule 23 (b) (3) simply because affirmative defenses may be available against individual members" [citation omitted]).

In short, the essential factual questions of liability in this case -- Did a contract or agreement exist? On what terms? Did Wal-Mart breach the contract or agreement? -- rest on a "sufficient constellation of common issues [to] bind[] class members together" for purposes of certification. Waste Mgt. Holdings, Inc. v. Mowbray, 208 F.3d 288, 296 (1st Cir. 2000). See Weld v. Glaxo Wellcome Inc., 434 Mass. 81, 91 (2001) (certification of plaintiff class appropriate where "[a]llthough the contracts . . . appear to have been the product of independent, parallel negotiations, every contract created largely identical contractual obligations . . . and the program appears to have been administered in a substantially similar

manner across the board"); Sniffin v. Prudential Ins. Co., 11 Mass. App. Ct. 714, 724 (1981) (class action appropriate where, among other things, common questions "are so tightly interwoven in the dispute that they directly affect its resolution"); Smilow v. Southwestern Bell Mobile Sys., Inc., supra (predominance requirement met where "common factual basis is found in the terms of the contract, which are identical for all class members").

Many of the judge's conclusions concerning the insufficiency of the additional material to demonstrate predominance, and the arguments advanced by Wal-Mart on this point, are more properly directed to questions of damages than to questions of liability. As we noted above, classes may be certified for the purpose of determining liability even where individual inquiries may be necessary on the issue of damages. See Smilow v. Southwestern Bell Mobile Sys., Inc., supra at 40, quoting Blackie v. Barrack, 524 F.2d 891, 905 (9th Cr. 1975) ("The amount of damages is invariably an individual question and does not defeat class action treatment"). See also International Bhd. of Teamsters v. United States, 431 U.S. 324, 361 (1977) (authorizing "additional proceedings after the liability phase of the trial to determine the scope of individual relief"). Where damages issues are likely to require more individualized treatment, a judge has available a number of creative methods of managing questions of remedy in a manner that protects the defendant's rights while redressing harms to individual plaintiffs. See generally

Newberg, supra at § 4:32, at 287-288 ("Courts have developed several innovative management techniques to eliminate or minimize court burdens arising from management difficulties posed by class actions. With reference to problems of complexity or numerousness of individual questions remaining in a class action, courts have pointed to or have agreed to use devices such as conditional class certification[,]. . . limitation of the class to particular issues[,]. . . bifurcated trials for liability and damages, common proof of class damages, use of special masters or magistrates, use of liaison and lead counsel for the parties, class recovery distribution techniques involving cy pres notions, and monitoring procedures for time expended by class counsel to avoid duplication or excessiveness of hours"). The judge should have recognized the availability of these alternatives before essentially denying thousands of potentially meritorious, yet small, claims.⁶³ See, e.g., Amchem Prods., Inc. v. Windsor, 521 U.S. 591, 617 (1997), quoting Kaplan, Continuing Work of the Civil Committee: 1966 Amendments of the Federal Rules of Civil Procedure (I), 81 Harv. L. Rev. 356, 497 Prefatory Note (1967) (class actions protect "the rights of groups of people who

⁶³ Wal-Mart claims on appeal that, although the judge did not ground his decertification decision on due process grounds, "[c]onsiderations of due process . . . counsel against reversal" of his order because class action procedure might thwart "Wal-Mart's right to present a defense." Wal-Mart's brief argument on this point is entirely theoretical. Wal-Mart has ably and robustly presented its defenses thus far. It has not identified, and we do not discern, a lack of concern for Wal-Mart's due process rights on the part of any of the judges who have ruled on this case.

individually would be without effective strength to bring their opponents into court at all"); Fletcher v. Cape Cod Gas Co., 394 Mass. 595, 603 (1985) ("We recognize that in some instances even one common question of law or fact may be found to predominate over individual questions so as to warrant certification of a class action"); Iliadis v. Wal-Mart Stores, Inc., 191 N.J. 88, 105 (2007), quoting Amchem Prods., Inc. v. Windsor, supra ("The policy at the very core of the class action mechanism is to overcome the problem that small recoveries do not provide the incentive for any individual to bring a solo action prosecuting his or her rights").

There was a further respect in which the judge erred: in decertifying the class the judge made several errors of law. See Waste Mgt. Holdings, Inc. v. Mowbray, supra at 295 ("An abuse of discretion . . . occurs [in class certification orders] if the court adopts an incorrect legal rule"). The judge concluded, among other things, that DeSisto, supra, required, in the absence of allegedly reliable corporate records proving liability, that in order to maintain a class action, the plaintiffs' trial plan had to include "testimony from witnesses representative of the different positions held in each of the forty-seven Massachusetts stores covering the entire class period who could make the case of violations experienced by all class members." We disagree.⁶⁴

⁶⁴ In citing to DeSisto, supra, the judge also appeared to conflate the requirement of representativeness under rule 23 (a) with that of predominance under rule 23 (b).

DeSisto was brought pursuant to the Fair Labor Standards Act (FLSA), 29 U.S.C. §§ 201 et seq. (2000). As the judge acknowledged, the FLSA contains specific provisions and a distinct jurisprudence governing when a plaintiff may bring an FLSA action in a representative capacity. See 29 U.S.C. § 216(b); DeSisto, supra at 792 n.1 (discussing representativeness in FLSA litigation). Thus the case cannot fairly be read to establish any precedent in Massachusetts concerning class actions under our rule 23.⁶⁵ Nor has the case been cited, to our knowledge, by an appellate court in other class certification litigation under rule 23, much less to hold that a class action plaintiff seeking to carry his burden of proof under rule 23 or its equivalent must produce a trial plan containing testimony from witnesses with first-hand knowledge of every shift in every position at every store in the class during the class period.

In this case, the burden the judge imposed on the plaintiffs would be both onerous and unproductive in light of overwhelming evidence that all of the class members -- people who staff the

⁶⁵ We do not consider either Anderson, supra, or Rural Fire, supra, germane to our discussion of class action certification under rule 23 because, as in DeSisto, those two cases concern representative actions quite different from those brought pursuant to rule 23. Moreover, these cases concern the computation of damages on the basis of business records, a matter that is premature in the early stage of this litigation. See Anderson, supra at 694 (remanding case for determination of computation of amount of off-the-clock and on-the-clock time devoted to work activities); Rural Fire, supra at 359 (noting use by plaintiffs and District Court of employer's own time records in computation of time worked).

grill counter, receivers, cashiers, and so on -- were subject to the identical terms and conditions regarding breaks and off-the-clock work, which (according to company policy) were to be followed stringently.

Additionally, citing Aspinall v. Philip Morris Cos., 442 Mass. 381 (2004), the judge concluded that the plaintiffs had failed to demonstrate that the number of uninjured class members was "de minimis." See id. at 398 n.21; id. at 405 (Cordy, J., dissenting). The judge's reliance was misplaced. In the Aspinall case, a class of Massachusetts consumers brought an action under G. L. c. 93A, §§ 2 and 9 (2), against the manufacturer of a so-called "light cigarette."⁶⁶ They alleged that the defendant deceptively marketed the cigarettes as delivering lower amounts of tar and nicotine than regular cigarettes, when in fact the defendant knew that few, if any, smokers would derive such benefits from its product. Id. at 383 n.4. We concluded that class certification was proper where the

⁶⁶ Aspinall v. Philip Morris Cos., 442 Mass. 381 (2004), notes that rule 23 class actions differ from G. L. c. 93A class actions. See id. at 391 (noting that "statutory language [of G. L. c. 93A, § 9 (2),] differs in significant respects from that of Mass. R. Civ. P. 23"). "Although the requirements of rule 23 (a) provide a 'useful framework for an analysis,' we have cautioned a judge deciding a motion for class certification under G. L. c. 93A to avoid equating the similarity requirements of rule 23 (a) with requirements of § 9 (2) that the parties seeking certification are 'similarly situated' and have suffered a 'similar injury' as members of the class they seek to represent." We noted that a judge has broader discretion under rule 23 than under G. L. c. 93A to determine the propriety of class certification. Aspinall v. Philip Morris Cos., supra at 391-392, quoting Fletcher v. Cape Cod Gas Co., 394 Mass. 595, 605 (1985).

class harm claimed was economic, that is, where members of the class alleged that they purchased the cigarettes at a price that was higher than it would have been had the true properties of the cigarettes been honestly advertised. Id. at 397-398.

Parenthetically, we distinguished the case from those in which the defendant's marketing claims could be objectively tested, such as claims to produce certain health benefits. In the latter cases, we suggested, individual determinations might be necessary to prove individual harm, and class action treatment might not be appropriate. Id. at 397 n.19, 398 n.21. The dissent in Aspinall noted agreement with the court that "class certification should not be impeded by the presence of a de minimis number of uninjured class members who are difficult to identify with specificity." Id. at 405 (Cordy, J., dissenting). The court's opinion does not mention a "de minimis" requirement.

The dicta in the Aspinall case cited by the judge does not, either directly or by necessary implication, graft a separate, de minimis test onto rule 23 class actions to narrow or solidify the traditional analysis of predominance that we discussed above. One of the great strengths of the rule 23 class action device is its plasticity. Case-by-case considerations of practicality and fairness have enabled rule 23 certification decisions to adapt appropriately to a variety of contexts, even within the same litigation. See generally Newberg, supra at § 4:32 (listing techniques for managing class actions). By undercutting that intended flexibility, a bright-line de minimis requirement would

vitiating the purpose of class actions.⁶⁷ See Amchem Prods., Inc. v. Windsor, 521 U.S. 591, 617 (1997); Newberg, supra at § 4.36 at 314 ("Class actions were designed not only to compensate victimized group members, but also to deter violations of the law, especially when small individual claims are involved"); Iliadis v. Wal-Mart Stores, Inc., 191 N.J. 88, 105 (2007), quoting Riley v. New Rapids Carpet Ctr., 61 N.J. 218, 225 (1972) (noting that restrictive readings of class-action rule that require individual suits for small individual losses result in "no deterrence to further aggressions").⁶⁸

For all of the above reasons, we conclude that the judge abused his discretion in allowing Wal-Mart's motion to decertify

⁶⁷ Nor can the instant case be analogized, as the judge held, to Fletcher v. Cape Cod Gas Co., supra at 603-604, a case in which different companies represented the defendant and "questions relating to proximate cause of specific injuries, levels and sources of formaldehyde, installation mechanics, knowledge of defect or danger, adoption of representations, reliance upon misrepresentations, and time of discovery all require individualized proof." Id. at 603. Here, as discussed and without considering the merits, the plaintiffs have produced sufficient evidence by way of Wal-Mart documents, including audits, to establish that common issues of fact and law will predominate on the key issues of liability: Wal-Mart's legal obligations, if any, to its hourly employees for breaks and compensation and its alleged class-wide breach of those obligations.

⁶⁸ In its brief to this court, Wal-Mart asserts in cursory fashion that to certify the class would harm the interests of class members, who cannot under Massachusetts law opt out of the class. It is difficult to envision how bringing a class action under the plaintiffs' second amended complaint would hamper the rights of those who have either not been damaged by the alleged conduct or do not care to press their claim for damages. Cf. Mass. R. Civ. P. 23 (d) (judges "may" take action to ensure absent class members are fairly and adequately represented).

the class.

5. Meal periods. The motion judge reported his decision to grant partial summary judgment to Wal-Mart on "all aspects of the plaintiffs' complaint regarding meal periods." See note 40, supra. The plaintiffs' allegation that Wal-Mart deprived class members of their meal periods comprised two legal claims: a statutory claim, based on G. L. c. 149, § 100,⁶⁹ and a contract claim.

a. Statutory claim. As to the statutory claim, the motion judge correctly found that G. L. c. 149, § 100, which requires that employers provide employees who work six hours or more with a thirty minute meal period, does not create a private right of action. The statute creates no explicit private right of action. Although § 100 is silent about the methods by which it may be enforced, an earlier section in the chapter, G. L. c. 149, § 2, provides: "The attorney general shall, except as otherwise specifically provided, enforce the provisions of this chapter, and shall have all necessary powers therefor."⁷⁰ Certain sections of G. L. c. 149 do specifically provide for private

⁶⁹ General Laws c. 149, § 100, provides: "No person shall be required to work for more than six hours during a calendar day without an interval of at least thirty minutes for a meal. Any employer, superintendent, overseer or agent who violates this section shall be punished by a fine of not less than three hundred nor more than six hundred dollars."

⁷⁰ The provision of G. L. c. 149, § 100, that violations "shall be punished by a fine" is consistent with enforcement by the government, although this provision does not, by itself, preclude a private right of action.

rights of action, but § 100 does not. Thus G. L. c. 149, § 150, authorizes employees claiming to be aggrieved by violations of certain sections -- specifically §§ 148, 148B, 150C, 152, and 152A (relating to wages) -- to "institute and prosecute in his own name and on his own behalf, or for himself and for others similarly situated, a civil action for injunctive relief and any damages incurred, including treble damages for any loss of wages and other benefits." This provision does not, however, mention § 100.

Where the Legislature has not expressly provided for a private right of action, we may nonetheless infer an implied private right of action unless the Legislature explicitly prohibits us from doing so. Loffredo v. Center for Addictive Behaviors, 426 Mass. 541, 544-545 (1998). Here, the Legislature's express language providing for enforcement by the Attorney General, "except as otherwise specifically provided," combined with its specific provision of a private right of action for certain other sections of G. L. c. 149, but not for § 100, weighs heavily against recognizing a private right of action under § 100. See id. at 547, quoting Transamerica Mtge. Advisors, Inc. v. Lewis, 444 U.S. 11, 19 (1979) ("where a statute expressly provides a particular remedy or remedies, a court must be chary of reading others into it").

The plaintiffs argue that finding no implied right of action in § 100 would "render the statute ineffective": "Not only will the underlying purpose of [§] 100 best be served if employees are

able to protect their right to obtain meal periods, it is highly unlikely that employees will come forward to report violations if there is no remedy for those wrongs."

b. Contract claim. The lack of a statutory private right of action presents no bar to the plaintiffs' claim that Wal-Mart violated a contractual duty to provide meal periods to the plaintiff class. As discussed above, the question whether a contract existed at all between Wal-Mart and its hourly employees, and the further question of what specific terms any such contract contained, are questions of fact to be resolved by the fact finder at trial.⁷¹ If Wal-Mart was, in fact, obligated by contract to provide meal breaks to the plaintiff class and Wal-Mart breached its contract by failing to provide such meal breaks, then the class members were harmed and may be awarded damages equal to the value of the bargained-for benefit of which they have been deprived. Pierce v. Clark, 66 Mass. App. Ct. 912 (2006), quoting VMark Software, Inc. v. EMC Corp., 37 Mass. App. Ct. 610, 611 n.2 (1994) ("The long-established general rule for breach of contract recovery . . . is that the wronged party should receive the benefit of his bargain . . ."). Restatement (Second) of Contracts § 347 comment a (1981) ("Contract damages are ordinarily based on the injured party's expectation interest

⁷¹ As the motion judge concluded: "Whether the written and oral communications, taken together, create a contract . . . is a question for the jury to determine." If a contract is found to exist, several Wal-Mart policy documents, including but not limited to the handbook for hourly employees, expressly provide for meal breaks.

and are intended to give him the benefit of his bargain by awarding him a sum of money that will, to the extent possible, put him in as good a position as he would have been in had the contract been performed").

The motion judge concluded that "given the undisputed fact that meal periods are unpaid, a missed meal period does not result in economic damages." Therefore, he reasoned, absent any independent private right of action under G. L. c. 149, § 100, there can be no contract claim for missed meal periods. He therefore allowed Wal-Mart's motion for summary judgment on this issue. However, merely because meal periods are unpaid, it does not follow that they have no value. To an hourly employee at Wal-Mart, the opportunity to stop work and eat a meal in peace during a busy workday may constitute a benefit of significant value. Wal-Mart argues that any employees who were made to work through their meal breaks were paid for that work, and so were unharmed by any breach of contract. Essentially, Wal-Mart's argument is that only wages have value, and that other bargained-for benefits that may be part of an employment contract, such as meal breaks or indeed any form of unpaid leave, are valueless. We decline to reach such a sweeping conclusion.

The monetary value of a meal break cannot be held as a matter of law to be zero. Rather, the value of this putative contractual benefit is a question of fact to be resolved by the fact finder. Like any other party deprived of the benefit of their bargain, the plaintiffs should be awarded damages that are

"the equivalent in money for the actual loss sustained by the wrong of another." F.A. Bartlett Tree Expert Co. v. Hartney, 308 Mass. 407, 412 (1941). Summary judgment to Wal-Mart should not have entered on all matters relating to meal periods.

6. Statute of limitations. In his summary judgment order, the judge concluded that the three-year statute of limitations provision of G. L. c. 149, § 150, barred the plaintiffs from bringing any claims under G. L. c. 149, § 148, for unpaid wages resulting from one-minute clock-outs and unauthorized insertions of meal periods that predate August 21, 1998. See Malapanis v. Shirazi, 21 Mass. App. Ct. 378, 383 (1986) ("On an appropriate record, summary judgment may be granted on the question whether a particular statute of limitations has run"). The plaintiffs assert that the limitations period should be equitably tolled under either a theory of fraudulent concealment or the discovery rule, because class members could not have known of Wal-Mart's time-shaving practices prior to the publication of The New York Times article on April 4, 2004, that exposed the practices. See note 33, supra. We agree with the judge that the plaintiffs have failed to make their case with respect to fraudulent concealment. However, we conclude that the plaintiffs have shown a disputed issue of material fact on the question whether equitable tolling is appropriate under the discovery rule.

As to the plaintiffs' theory of fraudulent concealment, "[w]hen a defendant fraudulently conceals a cause of action from the knowledge of a plaintiff, the statute of limitations is

tolled under G. L. c. 260, § 12, for the period prior to the plaintiffs' discovery of the cause of action." Demoulas v. Demoulas Super Mkts., Inc., 424 Mass. 501, 519 (1997).⁷² Absent a fiduciary or other special duty, which the plaintiffs do not here assert, active fraud is ordinarily required to prove fraudulent concealment. See Geo. Knight & Co. v. Watson Wyatt & Co., 170 F.3d 210, 215-216 (1st Cir. 1999) (applying Massachusetts law). Wal-Mart presented evidence that its hourly employees had a "myriad of ways to determine whether they'd been properly paid." These included checking their hours at the time clock or in the personnel office, checking the payroll archive report that hourly employees were required to sign prior to receiving their paychecks, checking their total hours and pay on their pay stubs, and (later in the class period) checking and adjusting their hours on the electronic time adjustment system. Wal-Mart also submitted affidavits from several hourly employees attesting that they regularly kept track of their hours, compared their personal records with Wal-Mart records, and, if they noticed inaccuracies, had them corrected by Wal-Mart. The plaintiffs, as the judge noted, did not dispute that hourly employees had access to the means of checking payroll. Rather, they alleged that Wal-Mart fraudulently concealed its allegedly

⁷² General Laws c. 260, § 12, provides: "If a person liable to a personal action fraudulently conceals the cause of such action from the knowledge of the person entitled to bring it, the period prior to the discovery of his cause of action by the person so entitled shall be excluded in determining the time limited for the commencement of the action."

wrongful practices by never providing hourly employees with information about or training to detect payroll discrepancies. This allegation, supported only thinly on summary judgment by references to brief statements in a handful of employees' affidavits, was not sufficient to create a disputed issue of material fact concerning fraudulent concealment. Geo. Knight & Co. v. Watson Wyatt & Co., *supra*. See Kourouvacilis v. General Motors Corp., 410 Mass. 706, 716 (1991).

In the alternative, the plaintiffs invoke the discovery rule. In essence, they claim that the time shaved from individual hourly employees' pay generally was sufficiently small that a reasonable person in the position of a class member would not know or could not reasonably have been expected to know that he was being denied compensation. See Koe v. Mercer, 450 Mass. 97, 101 (2007), quoting Bowen v. Eli Lilly & Co., 408 Mass. 204, 205-206 (1990) ("Under [the] discovery rule, the statute of limitations starts when the plaintiff discovers, or reasonably should have discovered, 'that [he] has been harmed or may have been harmed by the defendant's conduct'"); Riley v. Presnell, 409 Mass. 239, 245 (1991) ("Only if a reasonable person in the plaintiff's position would have been able to discern the harm or the cause of the harm will the cause of action accrue and the limitations period begin to run"). Wal-Mart argues that its employee affidavits represented what the reasonable Wal-Mart employee would or should have known.

The reasonable person standard does not take into account

"[i]ndividual variations in judgment, intellect, or psychological health . . . unrelated to the complained-of conduct The reasonable person who serves as the standard in this evaluation, however, is not a detached, outside observer assessing the situation without being affected by it. Rather, it is a reasonable person who has been subjected to the conduct which forms the basis for the plaintiff's complaint." Id. Generally the question whether a plaintiff in a particular position knew or should have known of the defendant's wrongful conduct is for the fact finder. See Doe v. Creighton, 439 Mass. 281, 283-284 (2003) ("The question when the plaintiff knew or should have known that the defendant's actions were the cause of her injuries is one of fact . . ."). Here, the factual issue is not so clear cut as to remove it from the fact finder's consideration. See Kourouvacilis v. General Motors Corp., supra.

In this case the plaintiffs presented evidence from former Wal-Mart managerial and payroll personnel in Massachusetts and elsewhere that they personally inserted meal breaks or one-minute clock-outs in hourly employees' time records or witnessed others doing so. They submitted documents attesting to Wal-Mart's awareness over many years that the problem of time shaving was widespread.⁷³ And they argue that, given that most class members

⁷³ Although it does not form part of the summary judgment record below or on appeal, we note that less than two weeks after the summary judgment order issued, Dr. Shapiro submitted the first phase of his expert report in which, among other things, he determined from his examination of Wal-Mart records and his calculations that from August 21, 1995, through December 30,

made the minimum wage and had small amounts of time allegedly shaved from their records, the individual losses may have been too small to be readily detectable.⁷⁴ We conclude that in the circumstances of this case, this evidence is sufficient to send to the jury the factual question whether a reasonable hourly employee would or should have known that time was being shaved from their paychecks, even though some hourly employees may have monitored their paychecks very closely.

We do not agree with the judge, or with Wal-Mart, that application of the discovery rule necessitates an individual inquiry about what each class member knew or should have known about Wal-Mart's alleged knowledge or condoning of time-shaving practices. The reasonable person test is an objective test. See Doe v. Creighton, supra at 283. Thus it presumptively operates as to all class members on the question of equitable tolling, even though a more individualized inquiry may be required on the question of damages.

7. Conclusion. We vacate the order allowing Wal-Mart's motion to exclude the plaintiffs' expert and decertify the class. We vacate the portions of the judge's order granting partial summary judgment to Wal-Mart that were reported to the Appeals

2005, over 26,000 instances of uncompensated one-minute clock-outs occurred.

⁷⁴ The plaintiffs point out, for instance, that, at minimum-wage wages, the loss of a fifteen-minute rest break would amount to less than two dollars in pretax income, and the lost payment of four hours' labor was less than thirty dollars.

Court. We remand the case to the Superior Court for entry of an order certifying the class and further proceedings consistent with this opinion.

So ordered.