

**Identifying Business Functions and Business Processes
Involved in Mass Layoffs in the United States**

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Business Processes and Functions: A new way of looking at employment

Behind many decisions made by an employer to add or eliminate workers is the consideration of the firm's structure of activities and processes leading to the production of goods or provision of services and how well they are performing for the firm. This structure of business processes and business functions define the basic activities of the firm. They are important elements in decisions the firm makes to become more efficient and competitive, or address changes in demand for outputs or supply of inputs. The traditional classification schemes for identifying industries (the North American Industrial Classification System--NAICS) and for defining occupations (the Standard Occupational Classification System) are not reflective of this type of structure. The industry classification approach is based on the primary activity of the establishment, and other important direct and support activities that operate within the firm are not explicitly recognized. The occupational classification is important in defining the firm's workers, but lacks the direct tie to the internal firm organization and firm decisions. Both classifications and their use in federal statistical programs provide critical information on employment but a limited picture of the dynamic nature of economic change.

In an attempt to shed more light on the nature of employment change, a classification system has been developed that describes basic business processes of the firm and the business functions that are associated with them. It is now being used in the Mass Layoff Statistics (MLS) program to identify the functions and processes involved in job losses from extended mass layoffs, thus providing new information on the nature of this type of change in establishments and industries. The system of describing the firm's activities also can be applied equally to other measures of employment, including the current employment structure of a firm or organizational expansions and job growth. The resultant classification approach for Business Processes and Business Functions is a synthesis of existing literature, models of firm activities, current research on the topic, and the results of a feasibility study on Business Function conducted by the Bureau's MLS program.

Movement of work statistics: the first data pointing to business functions

Firm restructuring and outsourcing of functions have been longstanding phenomena of the United States economy, as companies continually identify strategies to cut costs, become more efficient, expand, and gain access to other markets, among other motivations. As horizons for moving work expanded, the offshoring of jobs became another option available to a growing number of employers. Historically, these activities affected manufacturing jobs and production functions. In the early 2000's, job losses in information technology and related areas emerged as an important indication of ongoing change in industries. By 2004, stories on the offshoring of these business functions and the resultant job losses in the United States became increasingly prominent in the popular media around the world.

As greater attention was placed on firm decisions regarding outsourcing of activities, stories also continued about corporate reorganizations and restructurings. These actions were occurring essentially for the same reasons that firms outsource and also involved processes and functions within the company. Companies were consolidating activities, eliminating layers, outsourcing functions, and strengthening others to become more efficient, competitive, and improve the corporate bottom line.

In order to quantify the anecdotal information on offshoring and outsourcing, the BLS focused on the Mass Layoff Statistics program, where monthly and quarterly statistics are collected on plant closings and mass layoffs involving at least 50 workers from businesses employing 50 or more.¹ A set of questions on movement of work was added to the MLS employer interview to obtain the following measures.

- Job loss associated with outsourcing: The movement of work to a different company that was formerly conducted in-house by employees paid directly by the company. The different company can be located inside or outside of the U.S. The work can occur at a different geographic location or remain on-site.
- Job loss associated with offshoring: The movement of work from within the U.S. to a location outside of the U.S. “Offshoring” can occur within the same company and involve movement of work to a different location of that company outside of the U.S. or to a different company altogether (offshoring/outsourcing).

Statistics on outsourcing and offshoring have been collected by the MLS program since 2004. Contrary to expectations based on the early anecdotal information, job losses associated with movement of work outside of the U.S. averaged about 2.2 percent of all private nonfarm separations for reasons other than seasonal or vacation over the period 2004-07. Also contrary to expectations, job losses associated with movement of work were not concentrated in industries directly associated with computer and electronic products or information. Lastly, the majority of this layoff activity was associated with domestic relocation of work, mostly within the company.

If the continued media reporting on offshoring correctly described an economic phenomenon, one implication of the MLS statistics on offshoring job losses was that the action involved an activity or function not directly associated with the industry designation of the firm. That is, information technology jobs were being moved out of the country but from firms with other industry designations. Further supporting the direction of research to business function came from the activity in domestic relocations. The single most reported reason for these relocations was reorganization within the company. Despite the detail collected on the layoff, the employer interview questions did not reveal what was behind these actions and what, in fact, was the affected part of the firm.

¹ Sharon P. Brown and Lewis B. Siegel, “Mass layoff data indicate outsourcing and offshoring work”, *Monthly Labor Review*, August 2005

The Bureau's employment programs—the monthly Current Employment Statistics and Quarterly Census of Employment and Wages—capture net change at the industry and firm level, but not the components of the change. Since the core business activity will determine the industry code used to identify the firm, any change in firm employment is associated with that industry code even if the activity has nothing to do with it. An example would be the centralization of warehousing for a manufacturing concern. Job losses as the establishment discontinuing the function would be assigned to that manufacturing industry. The Bureau's Occupational Employment Statistics program develops estimates of occupational employment by industry, but the sample of individual firms used to develop the estimates is contacted once every three years, so more immediate changes in staffing patterns are not available. It became clear that companies were using internal organizational schemes in analyzing and implementing employment change that could and did involve any part of the corporate structure, and a new classification system reflecting these components was needed in order to better understand the nature of changes to employment.

Describing firm activities

While federal statistical programs have not collected statistics on business processes or functions, these measures have been used in economic studies and, in the recent years, have been mentioned in the popular press in stories on globalization, offshoring, and firm restructuring. Academic economists have described firm activities theoretically and used the concept of business organization in firm and industry studies. Among such approaches is Michael Porter's Value Chain, which divides a company's activities into those technologically and economically distinct activities it performs to do business, including primary activities and support activities.² George Yip has described the impact of global competition and technological improvements on the organization of firm activities and industries.³ Timothy Sturgeon and Gary Gereffi, co-organizers of the Global Value Chains Initiative, have contributed to the discussion by identifying Core Business Processes and Support Activities using an approach based on that which was ultimately developed for the MLS program.⁴

Many offshoring studies and news accounts focused on activities such as software development and data processing and relocations of call centers and customer services. One such offshoring report prepared by Ursula Huws and Simone Dahlmann⁵ described the following seven functions in which patterns of global outsourcing exist in the European Union: software development; data processing; sales; customer services; creative and content-generating functions including research, development and design; financial functions; and management, human resources and training functions. These functions could not be viewed solely as industries or occupations because they can and do operate within an establishment irrespective of its industry classification and they involve

² Michael Porter, "On Competition," page 77.

³ George S. Yip, *Total Global Strategy*

⁴ Timothy J. Sturgeon and Gary Gereffi, "The Challenge of Global Value Chains: Why Integrative Trade Requires New Thinking and New Data," September 2007

⁵ Ursula Huws and Simone Dahlmann, "Outsourcing of ICT and related services in the EU," 2004

a range of occupations. Not only were studies and news accounts discussing offshoring in terms of business functions, but new companies were being created to provide these outsourced functions to employers.

Business Processes and Business Functions

In order to provide a standard classification approach for use in the MLS program, a set of eight Business Processes were identified that define the full range of activities a firm engages in to conduct its business. Within these Processes are Business Functions that describe in greater detail the specific activity that a firm performs in order to produce its product, provide its service, or otherwise achieve its objective. The Processes begin with the procurement of inputs and end with those services provided after the sale of the good or service. The eight Processes themselves are grouped into Core Business Processes and Support Business Processes. Core Business Processes are those that most directly relate to the basic business of the firm, with Operations representing the key industry activity of the company. Support Business Processes are those that facilitate the Core Business Processes.

Core Business Processes

- Procurement, logistics, and distribution: Those activities associated with obtaining and storing inputs, and storing and transporting finished products to customers.
- Operations: Those activities that transform inputs into final outputs, either goods or services.
- Product and/or service development: Activities associated with bringing a new, improved, or redesigned product or service to market, including research, marketing analysis, design, and engineering.
- Marketing, sales, and customer accounts: Activities to inform existing or potential buyers including promotion, advertising, telemarketing, selling, and retail management.
- Customer and after-sales service: Support services to customers after purchase of the good or service, including training, help desks, call centers, and customer support for guarantees and warranties.

Support Business Processes

- General management and firm infrastructure: Corporate governance (legal, finance, planning, and public and government relations), accounting, building services, management, and administrative support.
- Human resource management: Activities associated with recruiting, hiring, training, compensating, and dismissing personnel.
- Technology and process development: Activities related to maintenance, automation, design/redesign of equipment, hardware, software, procedures, and technical knowledge.

The classification approach used in the MLS program differs slightly from the major models of firm activities defined by Michael Porter and Sturgeon/Gereffi. The MLS approach identifies *Product and/or Service Development* as a Core Business Process, while Porter includes that under Support Activities. The MLS scheme includes *Procurement* as a core Business Function along with *Logistics* and *Distribution*. In Porter's Value Chain, *Procurement* is a separate activity under the Support Activities category. In comparison to the Sturgeon/Gereffi model where it is a support activity, the BLS scheme includes *Customer and after-sales service* as part of the Core Business Processes. Perhaps the most significant difference in the conceptual framework is the inclusion of *Strategic management* as a Core Business Process. While this is undoubtedly correct, its relevance for collection of job losses associated with mass layoffs and plant closings is questionable. Those individuals making up strategic management in the firm would most likely not be unemployed and filing for unemployment insurance in the event of a layoff or closing, a necessary action for identification by the MLS program. Thus, this process was not included in the approach used for the MLS program.

Exhibit 1 describes the system of Business Processes with examples of Business Functions within each category. The Functions are gathered from literature and recent experience in collecting Business Functions in the MLS program, and are not meant to be definitive or all-inclusive. Business Function is distinct from industry and occupation as a descriptor of the firm. For example, the Business Functions under the Process *Procurement, logistics, and distribution* include such activities as *Buying, Loading, and Transporting*. These activities are not analogous to industry designations or occupations. Within a Function there can be a number of different occupations and a range of skill levels.

To properly classify a Business Function by the higher-level Process, it is essential to consider the industry of the employer. Business Functions that the company performs in order to directly transform inputs into final outputs are classified under the Business Process *Operations* for that firm. In most cases, *Operations* corresponds to the production process that is the basis for the establishment's NAICS classification or the activity most directly associated with it. The specific Business Function (*Producing goods or Providing services of a certain type*) depends on whether the establishment is classified as goods-producing or service-producing in NAICS. Examples of other Business Functions that are considered *Operations* include the *direct supervision* of the activity, *fabricating*, and *assembling*.

It is important to note that a Business Function that is considered *Operations* for one industry can be classified as a different Business Process for another industry. For example, consider *Accounting services* as the reported Business Function in an accounting firm. In this case, the Business Process for the Function is *Operations*, since that activity directly relates to the service provided by the company. If the function *Accounting services* was reported by a manufacturing company, it would not be considered as *Operations* but would be classified under *General management and firm infrastructure*.

As noted above, *Strategic management* is not explicitly identified in the MLS classification, while, at the Business Function level, the MLS system does specify that direct management of an *Operations* Business Function is also classified under *Operations* as the functions *Managing production* and *Managing services*. *General management* functions are classified under the Process *General management and firm infrastructure*.

Feasibility study of business function collection by the MLS program

In advance of the development of the formal structure of Business Processes and Business Functions and to address basic questions as to the nature of the job loss associated with the offshoring of work, BLS conducted a feasibility study on business functions through the MLS program. The MLS program collects important information on extended mass layoffs at large establishments through an interview with the affected employers. The interview includes 15 questions that address the nature of the layoff. An open-ended question on the business functions involved in the layoff or closing was added to the employer interview for the feasibility test. Among the questions to be answered by this test were the following:

- Would we find an appropriate individual to respond to the question?
- Would that person understand the question and the concept of business function?
- Would the responses be business functions?

Ten states participated in the feasibility test, as part of their regular MLS employer interview, asking the Business Function question for all layoff events identified in September and October of 2006. As is the case for regular MLS interviews, the interviews were conducted by telephone and the employers were not given a copy of the interview questions with response options. Business Functions involved in the layoff were collected through an open-ended question, using a structured interview approach (with flexibility).

The sequence of the questions used in the interview was viewed as very important in ensuring that the discussion of the layoff event was brought to “Business Function.” That is, the layoff or closing was verified, the economic reason for layoff was provided, and the industry of the establishment was verified, leading to the collection of Business Functions involved in the layoff. The questions and objectives used in the interview leading to the Business Function question are contained in Exhibit 2. (The full set of questions for the employer interview is in Exhibit 3.)

Exhibit 2. Selected MLS employer interview questions leading to Business Functions involved in the layoff event

| Question Wording | Question Objective |
|--|--|
| <p>1. Based on our unemployment insurance claims records, we believe that you may have had a (layoff/reduction in staff) during (month). Is that true?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> Valid No → (Probe: Do you know why these unemployment claims were filed against your company?) Enter explanation. End interview.)</p> <p><input type="checkbox"/> Don't know → (Ask for another contact)</p> <p><input type="checkbox"/> Refusal</p> | <p>To determine whether a layoff occurred at the establishment or worksite.</p> |
| <p>2. a. When did that layoff begin? _____ b. When did you stop laying off workers?</p> | <p>For data editing purposes, to obtain the dates that the employer started and stopped laying off workers in this event.</p> |
| <p>3. Were workers laid off for more than 30 days?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> | <p>To establishment whether the layoff meets the permanent criterion—i.e., an extended event. If so, then the analyst proceeds to ask further questions. If not, the interview ends.</p> |
| <p>4. About how many workers were laid off for more than 30 days? (Probe: If big gap between number of initial claims and number of separations) <i>Number:</i> _____</p> <p><input type="checkbox"/> Don't Know/INA⁶</p> | <p>To obtain the total number of workers affected (i.e., separated). If the number is less than 50, then the event is out of scope.</p> |
| <p>5. What was the primary reason for the job cutbacks?</p> <p><input type="checkbox"/> Don't Know/INA</p> <p><i>Primary:</i> _____</p> <p><i>Secondary:</i> _____</p> | <p>To obtain the economic reason(s) for the layoff, including the primary reason.</p> |
| <p>6. What kind of business is conducted at the worksite that experienced the layoffs? (Probe: What product do you manufacture or what service do you provide at that location?)</p> <p><i>Industry:</i> _____</p> <p><input type="checkbox"/> Don't Know/INA</p> | <p>To verify the industry NAICS code of the worksite.</p> |
| <p>7. Regarding the workers who were laid off, what was their main role or function within the company? For example, were they in manufacturing, sales, personnel, computer support, or something else? (Probe: In addition to {function mentioned}, were any of the employees affected by the layoff involved in other activities of the firm such as clerical support, warehousing, or sales?)</p> <p><i>Main:</i> _____</p> <p><i>Other:</i> _____</p> | <p>To obtain the Business Functions involved in the layoff, including the main Function.</p> |

⁶ INA – “Is Not Available” Revised: February 2007

Summary of major findings. The ten states collected Business Function responses in 154 extended mass layoff events reported for September and October 2006. A total of 237 business functions were reported. The prevalent function reported was under the Business Process *Operations*. This was to be expected for the MLS program since it focuses on relatively large layoffs (50 or more workers) at relatively large firms (employing 50 or more), and the firm will have the largest number of its workers involved in Operations.

The new question on Business Function worked well. The States reported little difficulty in finding a knowledgeable respondent. Relatively few respondents had difficulty answering the question, thus supporting the assumption that business function as a concept had meaning and applicability for them. Most employers responded to the question by providing one or more Business Function in their immediate response. The study did identify areas where clarification and guidance was needed. This included ensuring that all Business Functions involved in the layoff were collected and not just the main function. Also, probes were developed for use when the employer provided responses of occupations.

Based on the feasibility study results, the collection of Business Function in the MLS program in all states began with mass layoffs and closings reported for the first quarter of 2007.

Identifying and classifying Business Functions and Business Processes in the MLS program

Experience in the MLS program has shown that establishments define their activities in terms of Business Functions. Since January 2007 implementation, State analysts have collected Business Functions involved in extended mass layoffs (those lasting more than 30 days) as part of the employer interview, and, since June, have coded those Functions to higher level Business Processes. Analysis of the performance for the first three quarters indicates no significant issues on the part of the employers interviewed or the data collectors. (See table 1.)

Table 1. Total mass layoff events, selected measures, first through third quarters 2007

| Action | 1st Quarter 2007 | 2nd Quarter 2007 | 3rd Quarter 2007 |
|--|------------------|------------------|------------------|
| Total potential mass layoff events | 3,139 | 3,289 | 3,025 |
| Total private nonfarm extended layoff events | 1,111 | 1,421 | 931 |
| Events with Business Function responses | 974 | 1,297 | 824 |
| Does not know | 13 | 20 | 24 |
| Refused (entire event) | 49 | 37 | 32 |
| Unable to contact | 75 | 67 | 51 |

Asking employers about Business Functions has not adversely affected the interview and the response rate. In the first nine months of 2007, a total of 9,453 employers were contacted because administrative data on unemployment insurance claims indicated that a layoff occurred. For 3,463 private employers in nonfarm industries, extended layoffs and closings were identified. Overall refusal of employers to participate in the employer interview remained well below 5 percent of events. Responses of “does not know” to the Business Function question remained low, indicating that the correct person is being reached for the interview. Responses of “unable to contact” were relatively high, and likely reflect total closure of the establishment by the time contact is made.

In order to not influence results by having the analysts interpret the Business Functions provided by employers, literal reporting of responses is required. This results in variations in the words used to identify the Business Function. (As an example, the following terms were among those reported to describe construction activities: construction, constructing, road construction, construction activity, construction activities.) In the first quarter, 489 terms were used to report 1,873 Business Functions. Twenty-eight of those terms were used 10 or more times, accounting for 1,113 Business Functions, 59 percent of the total reported. (See table 2.)

Table 2. Business Function terms and responses, first through third quarters, 2007

| Quarter | Unique Business Function terms | | Business Function terms with 10 or more responses | |
|-----------------|--------------------------------|--------------------------|---|--------------------------|
| | Number | Total Business Functions | Number | Total Business Functions |
| 1st | 489 | 1,873 | 28 | 1,113 |
| 2 nd | 302 | 2,350 | 33 | 1,815 |
| 3 rd | 222 | 1,546 | 28 | 1,139 |

Guidance was provided to analysts in an attempt to standardize terms for a number of Functions and eliminate overly detailed Functions. For the second and third quarters, about three-quarters of the Business Functions reported were associated with terms used 10 or more times.

The standardization effort focused on frequently used Business Functions such as administrative support, clerical support, construction activities, general management, food services, and lodging services. Exhibit 4 provided examples of standardizations of reported Business Functions. In some instances, the reported Functions were overly detailed, in some cases approximating occupations. In industries such as construction, the activities reported were closely aligned to the industry. In providing this guidance to the analysts conducting the employer interview, an attempt was made to standardize the level of detail and the reported activity where appropriate.

Exhibit 4. Examples of Standardized Business Functions for Similar Activities and Levels of Detail

| | | |
|------------------------------|-------------------------------|--------------------------------------|
| Construction services | Food services | Lodging services |
| Brick laying | Banquet and catering services | Bellman services |
| Carpentry | Bussing tables | Concierge |
| Concrete pouring/ finishing | Cashier services | Front desk, check in/out |
| Demolition | Dining room service | Guest services |
| Ditch digging | Dish washing | |
| Electrical | Hosting/Hostessing | Entertainment services |
| Flagging | Restaurant operations | Christmas events staff |
| General labor | Room service | Gambling services |
| Iron work | Waiting tables/serving | Guides |
| Painting | | Music production |
| Pipe fitting | Clerical support | Sports production |
| Plumbing | Answering phones | |
| Road construction | Clerical services | Facility maintenance services |
| Roofing | Filing | Building maintenance |
| Welding | Front-office clerical | Facility services |
| | Scheduling | Grounds keeping |
| | Typing | Janitorial services |

Business Process identification involves categorizing the specific Business Function into one of the eight Processes. The key categorization—determining whether the Function is *Operations* for the establishment—hinges on the relationship of the Function to the industry of the establishment. As previously described, in most cases, when a Business Function is identified as *Operations*, it is because it corresponds to the production process that is the basis for the establishment’s NAICS classification or the activity most directly associated with it. The specific Business Function depends on whether the establishment is classified as goods-producing or service-producing in NAICS. (Other Business Functions are classified under *Operations*, such as the direct management of the specific services or production.) One area of caution in the classification is that a Business Function that is *Operations* for one establishment can be correctly classified as a different Business Process for another, depending on the industry of the firm.

Exhibit 5 lists the most frequently cited Business Functions in the third quarter of 2007, loosely grouped by similar functions and without regard to the industry of the firm. Of the 1,546 Business Functions reported by employers with extended layoffs, 1,203 could be grouped into 33 Business Functions either because they were literally cited or could be easily associated with the function. About 24 percent of the 1,203 functions referred directly to the provision of services. Another 19 percent referred to goods-producing activities. This identification, however, is without regard to the actual Business Process represented by the function.

It is important to recognize that the MLS-identified establishment and its industry designation are from data used to administer the unemployment insurance program in the individual state. Industry classification is based on the majority (or plurality) work reported by the firm in that state. In the case of firms with multiple units in the state, all locations will reflect the activity of the majority of employment in the state. If the establishment that is identified as having a layoff event in the MLS program is part of a larger corporate entity located outside of the state and with a different industry designation, then the Business Processes determined from Business Functions involved at the worksite will not relate to that larger corporate entity. This may result in an inflation of Business Functions identified as *Operations* and the data from MLS alone may not be reflective of the individual firm's position in the corporate structure and corporate actions

Analyzing Business Processes involved in extended mass layoffs and closings, first through third quarters 2007

For the first three quarters of 2007, the MLS program reported on 3,463 extended layoff events, involving the separation of 640,990 workers, 572,989 of whom filed for unemployment insurance.⁷ During this period, the collection of Business Functions involved in the layoff was implemented, as was the coding of these Functions to higher level Business Processes. As noted above, the early collection was important not only for providing the initial, nationwide data on this activity but also for identifying areas where guidance was needed and where automation would improve both collection and analysis. Because of the manual nature of collection and processing during 2007, and given the refinements that have been made in the early quarters in Business Function identification and collection, most of the following analysis of Business Functions and Business Processes involved in extended layoff events that occurred in the first three quarters of 2007 is at the Business Process level.

For the first three quarters of 2007, a total of 5,769 Business Functions involved in the 3,463 layoff events were provided by employers. When multiple Business Functions were provided in responses, the employer was asked to identify the main Business Function, based on the largest number of jobs lost. The Business Functions were assigned to 4,518 Business Processes. (See table 3.) A single Business Process can reflect multiple Business Functions involved in a layoff. Over the three quarters, 64 percent of events involved only one Process, but that proportion may reflect collection issues in the first quarter and may change as interviewers become more familiar with the concepts and situations. Almost 25 percent of events reported between 2 and 5 Business Processes involved in the layoff. On average, the typical layoff involved 1.5 Business Processes.

⁷ See the BLS MLS website <http://www.bls.gov/mls/> for the "Extended Mass Layoffs" news release for the Third Quarter of 2007.

Table 3. Total, Main, and Secondary Business Processes involved in extended mass layoffs, first through third quarters 2007

| Business Processes in MLS Layoff Events | Total | Main | Secondary |
|--|--------------|-------------|------------------|
| Total private nonfarm layoff events | 3,463 | 3,463 | na |
| Total Business Processes identified | 4,518 | 3,095 | 1,423 |
| Core Processes | 3,589 | 3,023 | 566 |
| Procurement, logistics, distribution | 324 | 57 | 267 |
| Operations | 2,923 | 2,895 | 28 |
| Product development | 40 | 14 | 26 |
| Marketing, sales, account management | 150 | 33 | 117 |
| Customer and after-sales service | 152 | 24 | 128 |
| Support Processes | 929 | 72 | 857 |
| General management and firm infrastructure | 676 | 60 | 616 |
| HR management | 160 | 6 | 154 |
| Technology and process development | 93 | 6 | 87 |
| Data not reported: "Does not know" | na | 57 | na |
| Data not reported: Refusal (entire interview) | na | 118 | na |
| Data not reported: Unable to contact | na | 193 | na |

na = not applicable

Core Business Processes dominated in the reporting of layoff activity. *Operations* accounted for the majority of Processes involved in layoffs--65 percent of all Processes and 94 percent of the Main Process reported reflected one or more Business Functions categorized as *Operations*. This is not an unusual finding for a program that looks at relatively large layoff events. Also, significant shares of mass layoffs are due to seasonal reasons and contract completions, activities typically associated with Business Functions that would be categorized as *Operations* for the affected firms.

Once the main Business Process was identified, there was a greater likelihood that the other Business Functions involved in the layoff would be categorized as Support Processes rather than Core. Over the three quarters, 60 percent of Business Processes other than the main one of the layoff were Support Processes, with 43 percent involved with *General management and firm infrastructure* and 11 percent with *Human resource management*. Core processes other than *Operations* also played significant roles as secondary Processes in layoffs. Nineteen percent of secondary Business Processes were identified as *Procurement, logistics, and distribution*, followed by *Customer and after-sales service* (9 percent) and *Marketing, sales, account management* (8 percent).

Open/closed status. During the January-September period, nearly 70 percent of the 3,095 layoff events reported no change in the worksite status, while 6 percent of the events involved the full closure of the employer (without regard to recall expectations). Partial closures (for example, worksites, division, shifts) accounted for 24 percent of the events.

When the worksite status was not impacted by the layoff, the distribution of main Business Processes involved was virtually identical to the total layoff distribution, with *Operations* dominating. When worksites closed, the representation of Support Processes and other Core Processes rose significantly.

Industry distribution of extended layoffs. During the first three quarters of 2007, manufacturing industries accounted for 26 percent of private nonfarm layoff events and 24 percent of separations. The largest concentrations were in transportation equipment and food manufacturing, followed by computer and electrical products. Looking at nonmanufacturing sectors, almost 20 percent of all events were from construction, involving 10 percent of all separations over the period. Other significant contributors to layoff activity included the transportation and warehousing and the finance and insurance sectors.

Among manufacturing industries, *Operations* as the main Business Process was reported for 94 percent of layoff events, the same proportion as for total layoffs. However, these industries had a greater-than-average representation of Secondary Processes involved in the layoff. They also reported higher proportions of Processes identified as *Procurement, logistics, and distribution* and *Product development*, as well as *Human resource management* and *Technology and process development*, than for all reported layoff events. (See Table 4.)

Activities in the Construction industries were more concentrated in *Operations*, and few secondary Business Processes were associated with these layoffs.

Both wholesale and retail trade reported lower proportions of events with *Operations* as the main Business Process, but higher proportions with *Marketing, sales, and account management* and *Customer and after-sales service*. These sectors also reported high representations of secondary Business Processes, especially in *Procurement, logistics, and distribution*, and *Marketing, sales, and account management*.

Layoffs in the transportation and warehousing sector involved *Operations* as the main Business Process. This sector had relatively higher representations of secondary Support Processes involved with *General management and firm infrastructure* and *Human resource management*.

In finance and insurance, the proportion of events where *Operations* was identified as the main Business Process was only slightly below that of all layoffs. In terms of Secondary Processes involved in the layoff, this sector had higher than average reporting of *Marketing, sales, and account management* (along with wholesale trade) and *Customer and after-sales services* of the industry groups.

Economic reasons for layoff. Among the seven categories of economic reasons for layoff, business demand reasons accounted for the highest share of the 3,463 layoff events (36 percent) and 160,651 separations over the January-September period, with most due to contract completion. Seasonal factors followed, with 32 percent of events

and 230,503 affected workers. Job losses associated with financial issues (bankruptcy, cost control/cost cutting, financial difficulty) accounted for over 9 percent of events and 73,102 separations. Organizational changes (business-ownership change and reorganization or restructuring) were cited in almost 9 percent of events, involving 98,618 workers. Reorganization/restructuring accounted for the majority of events, but business-ownership change involved the majority of the separations.

While the average layoff event involved 1.5 Business Processes, layoffs associated with organizational changes and financial reasons reported 2 or more Processes involved. Layoffs due to these reasons were more likely to report secondary Support Processes affected. In fact, the highest proportions of *Technology and process development* and *Human resource management* as secondary Support Processes were associated with these reasons categories. Business ownership changes were less likely to involve *Operations* as the main Process and more likely to involve a secondary Support Process such as *General management and firm infrastructure* and *Human resource management*. (See Table 5.)

Movement of work. Of the 3,095 extended layoff events for which Business Functions were obtained, 196 layoff events involved movement of work; this was 8 percent of total events, excluding those for seasonal and vacation reasons. They involved movement of work to other U.S. locations or to locations outside of the U.S., and the movement occurred either within the same company or to other companies. Most (84 percent) of these actions involved moving work within the company, and most were domestic relocations (69 percent). Offshore outsourcing (movement of work to another company outside of the U.S.) accounted for 6 percent of these actions and 8 percent of the associated separations.

When layoffs were associated with domestic relocation of work, *Operations* was cited as the main Business Process in 87 percent of events, compared to 96 percent when work left the United States. Secondary Business Processes involved in events where work was geographically relocated were heavily weighted toward Support Processes. For relocations within the United States, *General management and firm infrastructure* accounted for 42 percent of secondary Processes reported in domestic relocations, followed by *Human resource management* (18 percent) and *Technology and process development* (10 percent). Proportions for out-of-country moves were similar but slightly lower.

Operations was the main Business Process cited when work moved within the company (91 percent of events) and when work was moved to another company (83 percent of events). Secondary Business Processes were concentrated in Support Processes for both internal company moves and moves to another company and were generally similar.

Summary

The classification approach of Business functions and Business processes is a viable way of describing the establishment and its employment. Despite the limitations imposed by

the first year of collection, Business Processes provide interesting insights into the plant closing and layoffs data, and point to the greater potential of analyzing these economic events at a more detailed Business Function level.

Exhibit 1. Classification of Business Processes with Selected Business Functions

Core Business Processes

Procurement, logistics, and distribution. Those activities associated with obtaining and storing inputs, and storing and transporting finished products to customers.

| | |
|--------------|--------------|
| Buying | Shipping |
| Distributing | Receiving |
| Loading | Transporting |
| Packing | Warehousing |

Operations

Those activities that transform inputs into final outputs, either goods or services. In most cases, Business Functions categorized as operations will equate with the industry code of the establishment or the activity most directly associated with the industry code. The specific function—production of a good or provision of a service—will relate to the specific industry.

| | |
|------------------------|--|
| Assembling products | Managing production |
| Producing goods | Managing services |
| Providing services | Conducting quality assurance/quality control |
| Fabricating components | |

Product and/or service development

Activities associated with bringing a new, improved, or redesigned product or service to market, including research, marketing analysis, design, and engineering.

| | |
|------------------------------|-------------------------------|
| Developing business plans | Researching products/services |
| Analyzing markets | Testing |
| Designing products/services | |
| Developing products/services | |

Marketing, sales, customer accounts

Activities to inform existing or potential buyers including promotion, advertising, telemarketing, selling, retail management.

| | |
|----------------------------|------------------------------|
| Advertising | Conducting market research |
| Managing accounts | Coordinating media relations |
| Billing | Merchandizing |
| Branding/managing products | Processing orders |
| Collecting payments | Selling |
| Marketing | Telemarketing |

Customer and after-sales service

Support services to customers after purchase of the good or service, including training, help desks, call centers, and customer support for guarantees and warranties.

| | |
|------------------------------------|------------------------------------|
| Call center | Maintaining and repairing products |
| Customer relations | Providing technical support |
| Providing customer service/support | Providing warranty support |
| Installing products | |

Support Business Processes

General management and firm infrastructure

Corporate governance (legal, finance, planning, public and government relations), accounting, building services, management, and administrative support.

| | |
|-------------------------------|--|
| Accounting | Fraud management |
| Administrative support | General management |
| Cafeteria services | Government relations |
| Clerical support | Housekeeping services |
| Managing contracts | Investor relations |
| Managing documents | Providing legal and regulatory support |
| Facility/maintenance services | Planning |
| Financial management | Security |

Human resources management

Activities associated with recruiting, hiring, training, compensating, and dismissing personnel.

| | |
|--------------------------|------------|
| Employee assistance | Personnel |
| Human resources | Recruiting |
| Labor relations | Training |
| Payroll and compensation | |

Technology and process development

Activities related to maintenance, automation, design/redesign of equipment, hardware, software, procedures, and technical knowledge.

| | |
|--|------------------------------------|
| Developing computer systems | Providing Internet web services |
| Maintaining/repairing computer systems | Designing processes |
| Managing data | Developing and test software |
| Processing data | Providing software and IT services |
| Engineering | |

Employer Interview Script

Employer Name:

O.M.B. No. 1220-0090

UI Account No.:

Approval Expires

Address:

Jan. 31, 2009

Layoff Event ID#:

Layoff Quarter:

Trigger Week:

Contact Name/Phone Number:

Cover these points in your introduction:

- Introduce yourself, and the office you are calling from.
- Explain why you are calling.
- Summarize key points of confidentiality pledge. If asked, give 1220-0090 as the OMB clearance number.
- Explain that this data collection is voluntary, and it will only take a few minutes.

Questions about the Layoff

1. **Based on our unemployment insurance claims records, we believe that you may have had a (layoff/reduction in staff) during (month). Is that true?**
 - Yes
 - Valid No → (Probe: Do you know why these unemployment claims were filed against your company?) Enter explanation. End interview.)
 - Don't know → (Ask for another contact)
 - Refusal
2. **a. When did that layoff begin?** _____
b. When did you stop laying off workers?

3. **Were workers laid off for more than 30 days?**
 - Yes
 - No
4. **About how many workers were laid off for more than 30 days?** (Probe: If big gap between number of initial claims and number of separations)
Number: _____
 Don't Know/INA¹
5. **What was the primary reason for the job cutbacks?**
 - Don't Know/INA*Primary:* _____
Secondary: _____
6. **What kind of business is conducted at the worksite that experienced the layoffs?**
 (Probe: What product do you manufacture or what service do you provide at that location?)
Industry: _____
 Don't Know/INA
7. **Regarding the workers who were laid off, what was their main role or function within the company? For example, were they in manufacturing, sales, personnel, computer support, or something else?** (Probe: In addition to {function mentioned}, were any of the employees affected by the layoff involved in other activities of the firm such as clerical support, warehousing, or sales?)
Main: _____
Other: _____
8. **In which county is the worksite located?**
County: _____
 Layoffs occurred at more than one worksite and county
9. **Just prior to the layoff, what was the total number of employees at this worksite, counting both hourly and salaried (an estimate is okay)?**
Number: _____
 Don't Know/INA

¹ INA – “Is Not Available” Revised: February 2007

10. **During the cutbacks/layoff, has your worksite remained completely open, partially open, or has it shut down completely?**

- Open, no change in operating status
- Open, divisions stopped or shifts cut
- Partial closure of single unit establishment
- Closed, entire worksite(s)
- Closed, entire establishment
- Long term work completed offsite
- Don't know/INA

11. **Will there be a recall of workers, and, if so, what percent will return to work?**

- Yes, enter percent: _____ (and check box)
 - 100%
 - 50-99%
 - Up to 50%
 - Don't know
- No → Skip to Question 13
- Don't know (ask for another contact) → 13

12. **What is the anticipated return date for those who were separated?**

Date: _____ (and enter range)

- Less than 90 days
- 90-180 days
- 181-270 days
- 271-364 days
- 365 or more days
- Don't know/INA

Questions about Movement of Work

Do not ask Questions 13-14, if:

- Reason for layoff was seasonal or vacation
- Layoff was temporary (30 days or less)

13. **a. Did this layoff include moving work from this worksite to a different geographic location within your company?**

- Yes → Ask 13b
- No → Go to 14a
- Don't know → Go to 14a

b. Is the other location inside or outside the U.S.?

- Don't know/INA
- Inside U. S. → In what State(s)?

- Outside U.S. → In which country(s)?

c. Of the total number of workers laid off, how many were laid off because your company moved work to this new location? (an estimate is okay)

- Don't know/INA

Number inside U.S. _____

Enter State(s) & No: _____

Number outside U.S. _____

Enter Country(s) & No: _____

14. **a. Did this layoff include moving work that was conducted in-house by your employees to a different company, through contractual arrangement?**

- Yes → Ask 14b
- No → Go to 15
- Don't know → Go to 15

b. Is that company located inside or outside of the U.S.?

- Don't know/INA
- Inside U. S. → In what State(s)?

- Outside U.S. → In which country(s)?

c. Of the total number of workers laid off, how many were laid off because your company moved work to a different company? (an estimate is okay)

- Don't know/INA

Number inside U.S. _____

Enter State(s) & No: _____

Number outside U.S. _____

Enter Country(s) & No: _____

15. **Thank you very much. Let me be sure I have all of your information correct just in case I need to get back to you at a later date. Can you tell me your name, job title, and phone number?**

Name: _____

Job Title: _____

Direct telephone number: _____

Summary Information

Layoff Status (check one)

- Temporary: Layoff less than 31 days
- Permanent/Extended: Layoff included at least 50 separations and lasted more than 30 days
- Closure: One or more worksites closed or entire establishment closed
- No Layoff: Employer indicates that there was no layoff or that separations were either voluntary (e.g., quits, retirements, transfers to other locations in company) or involuntary (e.g., firings due to employee misconduct, failure to perform duties).

Employer Contact Status (check one)

- Contact completed
- Contact incomplete
- Refused to provide any information

Additional Contact Persons

Comments:

Name: _____

Job Title: _____

Direct telephone number: _____

Name: _____

Job Title: _____

Direct telephone number: _____

Name: _____

Job Title: _____

Direct telephone number: _____

Exhibit 5. Business Functions reported in extended mass layoffs, third quarter 2007

| Reports | Description | Reports | Description |
|---------|-------------------------------|-----------|----------------------------------|
| 145 | Manufacturing | 74 | Clerical support |
| 170 | Construction activities | 50 | General management |
| 85 | Producing goods | 49 | Administrative support |
| | | 30 | Management |
| 52 | Facility maintenance services | 9 | Business management |
| 49 | Real estate services | | |
| 34 | Educational services | 42 | Human resources |
| 34 | Food services | | |
| 21 | Accounting services | 39 | Customer service |
| 20 | Entertainment services | 3 | Call center |
| 18 | Engineering services | | |
| 14 | Financial services | 33 | Selling |
| 14 | Social services | 14 | Sales |
| 10 | Conference services | 6 | Retail sales |
| 10 | Contracted services | 12 | Marketing |
| 5 | Housekeeping services | | |
| 4 | Cafeteria services | 12 | Supervision—first line or direct |
| 8 | Providing services | | |
| 81 | Transporting | | |
| 37 | Warehousing | | |
| 19 | Shipping | | |
| | | Residual: | |
| | | | 320 Business Functions |
| | | | 23 Business Process responses |

Table 4. Percent of main and secondary business process affected in extended mass layoff events, by industry, 2007:1 through 2007:3

| Industry | Total Business Processes | Core Processes | | | | | | Support Processes | | | |
|---|--------------------------|----------------|--------------------------------------|------------|---------------------|--------------------------------------|----------------------------------|-------------------|--|---------------|------------------------------------|
| | | Total | Procurement, Logistics, Distribution | Operations | Product Development | Marketing, Sales, Account Management | Customer And After-Sales Service | Total | General Management And Firm Infrastructure | HR Management | Technology And Process Development |
| Total, Main..... | 3,095 | 97.7 | 1.8 | 93.5 | 0.5 | 1.1 | 0.8 | 2.3 | 1.9 | 0.2 | 0.2 |
| Accommodation and food services..... | 198 | 96.0 | 0.5 | 95.5 | - | - | - | 4.0 | 3.5 | 0.5 | - |
| Administrative and waste services..... | 176 | 96.0 | 0.6 | 93.2 | - | 1.1 | 1.1 | 4.0 | 2.8 | 1.1 | - |
| Arts, entertainment, and recreation..... | 86 | 91.9 | - | 86.0 | - | 1.2 | 4.7 | 8.1 | 8.1 | - | - |
| Construction..... | 637 | 99.4 | - | 99.1 | 0.2 | 0.2 | - | 0.6 | 0.6 | - | - |
| Educational services..... | 23 | 78.3 | - | 78.3 | - | - | - | 21.7 | 21.7 | - | - |
| Finance and insurance..... | 188 | 96.3 | - | 90.4 | - | 4.8 | 1.1 | 3.7 | 3.2 | 0.5 | - |
| Health care and social assistance..... | 223 | 98.7 | 0.4 | 96.4 | - | 0.4 | 1.3 | 1.3 | 0.9 | - | 0.4 |
| Information..... | 41 | 92.7 | - | 82.9 | 4.9 | 2.4 | 2.4 | 7.3 | - | 4.9 | 2.4 |
| Management of companies and enterprises..... | 16 | 87.5 | 31.3 | 43.8 | - | 6.3 | 6.3 | 12.5 | 12.5 | - | - |
| Manufacturing..... | 825 | 98.7 | 2.7 | 93.9 | 1.3 | 0.4 | 0.4 | 1.3 | 1.1 | - | 0.2 |
| Mining..... | 11 | 100.0 | - | 100.0 | - | - | - | - | - | - | - |
| Other services, except public administration..... | 72 | 97.2 | 2.8 | 94.4 | - | - | - | 2.8 | 2.8 | - | - |
| Professional and technical services..... | 94 | 95.7 | 1.1 | 90.4 | - | 2.1 | 2.1 | 4.3 | 4.3 | - | - |
| Real estate and rental and leasing..... | 12 | 100.0 | - | 91.7 | - | 8.3 | - | - | - | - | - |
| Retail trade..... | 173 | 96.5 | 5.2 | 84.4 | - | 5.2 | 1.7 | 3.5 | 2.9 | - | 0.6 |
| Transportation and warehousing..... | 265 | 99.2 | 3.4 | 95.1 | - | - | 0.8 | 0.8 | 0.8 | - | - |
| Utilities..... | 6 | 83.3 | - | 83.3 | - | - | - | 16.7 | - | - | 16.7 |
| Wholesale trade..... | 49 | 100.0 | 12.2 | 81.6 | - | 4.1 | 2.0 | - | - | - | - |
| Total, Secondary..... | 1,423 | 39.8 | 18.8 | 2.0 | 1.8 | 8.2 | 9.0 | 60.2 | 43.3 | 10.8 | 6.1 |
| Accommodation and food services..... | 61 | 23.0 | 3.3 | 1.6 | - | 9.8 | 8.2 | 77.0 | 67.2 | 8.2 | 1.6 |
| Administrative and waste services..... | 32 | 28.1 | 12.5 | - | - | - | 15.6 | 71.9 | 50.0 | 15.6 | 6.3 |
| Arts, entertainment, and recreation..... | 34 | 50.0 | 11.8 | 8.8 | - | 11.8 | 17.6 | 50.0 | 47.1 | 2.9 | - |
| Construction..... | 44 | 45.5 | 11.4 | 2.3 | 2.3 | 20.5 | 9.1 | 54.5 | 47.7 | 2.3 | 4.5 |
| Educational services..... | 10 | 10.0 | - | - | - | 10.0 | - | 90.0 | 30.0 | 30.0 | 30.0 |
| Finance and insurance..... | 172 | 34.3 | 1.2 | - | - | 15.7 | 17.4 | 65.7 | 51.2 | 7.6 | 7.0 |
| Health care and social assistance..... | 113 | 34.5 | 30.1 | 1.8 | - | 0.9 | 1.8 | 65.5 | 57.5 | 6.2 | 1.8 |
| Information..... | 30 | 36.7 | 6.7 | - | 6.7 | 13.3 | 10.0 | 63.3 | 43.3 | 13.3 | 6.7 |
| Management of companies and enterprises..... | 16 | 37.5 | 12.5 | 12.5 | - | 12.5 | - | 62.5 | 43.8 | 6.3 | 12.5 |
| Manufacturing..... | 596 | 39.1 | 23.3 | 2.0 | 3.4 | 5.9 | 4.5 | 60.9 | 38.4 | 13.9 | 8.6 |
| Mining..... | 5 | - | - | - | - | - | - | 100.0 | 40.0 | 20.0 | 40.0 |
| Other services, except public administration..... | 39 | 46.2 | 43.6 | 2.6 | - | - | - | 53.8 | 51.3 | 2.6 | - |
| Professional and technical services..... | 43 | 37.2 | 11.6 | 2.3 | - | 11.6 | 11.6 | 62.8 | 51.2 | 7.0 | 4.7 |
| Real estate and rental and leasing..... | 5 | 40.0 | - | - | 20.0 | - | 20.0 | 60.0 | 60.0 | - | - |
| Retail trade..... | 135 | 64.4 | 25.9 | 2.2 | 1.5 | 9.6 | 25.2 | 35.6 | 25.9 | 7.4 | 2.2 |
| Transportation and warehousing..... | 48 | 25.0 | 8.3 | 2.1 | - | 6.3 | 8.3 | 75.0 | 50.0 | 22.9 | 2.1 |
| Utilities..... | 2 | 100.0 | 50.0 | 50.0 | - | - | - | - | - | - | - |
| Wholesale trade..... | 38 | 52.6 | 28.9 | - | - | 18.4 | 5.3 | 47.4 | 28.9 | 13.2 | 5.3 |

Table 5. Percent of main and secondary business processes affected in extended mass layoff events, by selected reason for layoff, 2007:1 through 2007:3

| Reason | Total Business Processes | Core Processes | | | | | | Support Processes | | | |
|--|--------------------------|----------------|--------------------------------------|------------|---------------------|---------------------------|--------------------------|-------------------|-----------------------------|---------------|------------------------------------|
| | | Total | Procurement, Logistics, Distribution | Operations | Product Development | Marketing, Sales, Account | Customer And After-Sales | Total | General Management And Firm | HR Management | Technology And Process Development |
| Total, Main..... | 3,095 | 97.7 | 1.8 | 93.5 | 0.5 | 1.1 | 0.8 | 2.3 | 1.9 | 0.2 | 0.2 |
| Business demand..... | 1,247 | 98.4 | 1.0 | 95.3 | 0.6 | 0.8 | 0.6 | 1.6 | 1.3 | 0.2 | 0.2 |
| Contract cancellation..... | 54 | 100.0 | 3.7 | 90.7 | - | - | 5.6 | - | - | - | - |
| Contract completion..... | 597 | 98.3 | 0.2 | 97.2 | 0.8 | - | 0.2 | 1.7 | 1.3 | 0.2 | 0.2 |
| Domestic competition..... | 14 | 92.9 | - | 92.9 | - | - | - | 7.1 | - | 7.1 | - |
| Excess inventory/saturated market..... | 26 | 100.0 | - | 100.0 | - | - | - | - | - | - | - |
| Import competition..... | 57 | 100.0 | - | 100.0 | - | - | - | - | - | - | - |
| Slack work/insufficient demand/non-seasonal business slowdown..... | 499 | 98.2 | 2.0 | 92.8 | 0.6 | 2.0 | 0.8 | 1.8 | 1.6 | - | 0.2 |
| Organizational changes..... | 286 | 93.0 | 3.1 | 81.8 | 1.4 | 4.2 | 2.4 | 7.0 | 5.6 | 0.3 | 1.0 |
| Business-ownership change..... | 68 | 89.7 | 4.4 | 77.9 | 1.5 | 4.4 | 1.5 | 10.3 | 7.4 | - | 2.9 |
| Reorganization or restructuring of company..... | 218 | 94.0 | 2.8 | 83.0 | 1.4 | 4.1 | 2.8 | 6.0 | 5.0 | 0.5 | 0.5 |
| Financial issues..... | 315 | 97.1 | 2.5 | 90.8 | 0.6 | 1.6 | 1.6 | 2.9 | 2.9 | - | - |
| Bankruptcy..... | 29 | 97.9 | 2.1 | 93.6 | - | - | 2.1 | 2.1 | 2.1 | - | - |
| Cost control/cost cutting/increase profitability..... | 103 | 95.2 | 4.8 | 85.7 | 1.6 | - | 3.2 | 4.8 | 4.8 | - | - |
| Financial difficulty..... | 81 | 98.6 | 0.7 | 94.4 | - | 3.5 | - | 1.4 | 1.4 | - | - |
| Production specific..... | 53 | 98.1 | 3.8 | 90.6 | - | 1.9 | 1.9 | 1.9 | - | - | 1.9 |
| Disaster/Safety..... | 25 | 100.0 | 4.0 | 96.0 | - | - | - | - | - | - | - |
| Seasonal..... | 1,107 | 98.0 | 2.1 | 95.3 | - | 0.4 | 0.3 | 2.0 | 1.7 | 0.3 | - |
| Other/Miscellaneous..... | 62 | 100.0 | 1.6 | 96.8 | - | 1.6 | - | - | - | - | - |
| Total, Secondary..... | 1,423 | 39.8 | 18.8 | 2.0 | 1.8 | 8.2 | 9.0 | 60.2 | 43.3 | 10.8 | 6.1 |
| Business demand..... | 355 | 39.4 | 20.3 | 3.1 | 3.1 | 6.8 | 6.2 | 60.6 | 44.8 | 9.0 | 6.8 |
| Contract cancellation..... | 28 | 35.7 | 10.7 | 7.1 | - | 7.1 | 10.7 | 64.3 | 42.9 | 14.3 | 7.1 |
| Contract completion..... | 49 | 32.7 | 16.3 | 8.2 | 2.0 | 4.1 | 2.0 | 67.3 | 49.0 | 6.1 | 12.2 |
| Domestic competition..... | 13 | 46.2 | 30.8 | - | 7.7 | - | 7.7 | 53.8 | 23.1 | 7.7 | 23.1 |
| Excess inventory/saturated market..... | 27 | 51.9 | 25.9 | - | 7.4 | 14.8 | 3.7 | 48.1 | 40.7 | 7.4 | - |
| Import competition..... | 80 | 36.3 | 25.0 | - | 6.3 | 2.5 | 2.5 | 63.8 | 38.8 | 17.5 | 7.5 |
| Slack work/insufficient demand/non-seasonal business slowdown..... | 158 | 41.1 | 19.0 | 3.2 | 1.3 | 8.9 | 8.9 | 58.9 | 49.4 | 5.1 | 4.4 |
| Organizational changes..... | 292 | 32.5 | 11.6 | 0.7 | 1.4 | 8.9 | 9.9 | 67.5 | 41.1 | 16.8 | 9.6 |
| Business-ownership change..... | 72 | 30.6 | 8.3 | 1.4 | - | 13.9 | 6.9 | 69.4 | 47.2 | 16.7 | 5.6 |
| Reorganization or restructuring of company..... | 220 | 33.2 | 12.7 | 0.5 | 1.8 | 7.3 | 10.9 | 66.8 | 39.1 | 16.8 | 10.9 |
| Financial issues..... | 378 | 37.0 | 13.8 | 0.8 | 1.9 | 10.8 | 9.8 | 63.0 | 42.3 | 12.7 | 7.9 |
| Bankruptcy..... | 86 | 41.9 | 11.6 | 1.2 | 1.2 | 15.1 | 12.8 | 58.1 | 39.5 | 11.6 | 7.0 |
| Cost control/cost cutting/increase profitability..... | 135 | 39.3 | 20.7 | 1.5 | 3.7 | 5.9 | 7.4 | 60.7 | 43.0 | 10.4 | 7.4 |
| Financial difficulty..... | 157 | 32.5 | 8.9 | - | 0.6 | 12.7 | 10.2 | 67.5 | 43.3 | 15.3 | 8.9 |
| Production specific..... | 27 | 40.7 | 18.5 | 7.4 | 11.1 | - | 3.7 | 59.3 | 51.9 | 3.7 | 3.7 |
| Disaster/Safety..... | 8 | 50.0 | 25.0 | - | - | 12.5 | 12.5 | 50.0 | 37.5 | 12.5 | - |
| Seasonal..... | 309 | 50.5 | 30.4 | 2.9 | - | 6.1 | 11.0 | 49.5 | 44.0 | 5.2 | 0.3 |
| Other/Miscellaneous..... | 54 | 37.0 | 14.8 | 1.9 | 1.9 | 11.1 | 7.4 | 63.0 | 44.4 | 13.0 | 5.6 |