Producing pork in a tight economic market

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"High prices make you money. Low prices make you better"

Managing for profit - What is a reasonable annual return for your investment in your pig farm? Over the long run, we should earn at least an 8% annual return. If not, we better really like producing pork, because an economist would advise selling the business and investing elsewhere. The market place is established such that there is a high correlation between risk and return. In other words, if risk is low, return will be low also. For example, risk on a savings account is extremely low. Therefore, the expected rate of return is only 1-2%. We measure risk by the standard deviation of returns. The more volatile that returns are (higher standard deviation), the less predictable return is at any one point in time. Therefore, these more volatile returns are considered to be more risky. The pig business is currently a very risky business and deserves considerably more than 8%; perhaps 12-15% annual return on investment.

There is a strikingly high correlation between risk and return when we look at historical data for treasury bills, corporate bonds, large company stocks and small company stocks. That is, as variability in the return increases, the average return increases. The implication for us in the pig industry is that we need to pursue a reasonable return for the risk we are taking. And the pig business is a risky business.
We can get an inkling of the riskiness of pork production from the ISU Extension dataset of 5 livestock enterprises (http://www.econ.iastate.edu/faculty/lawrence/EstRet/ESTRET91-00.htm). Actual prices for inputs and output are entered each month. For the last 6 years, profit / marketed pig has averaged ($0.85). For the last 10 years average profit has been $0.21/head. Profit has varied considerably with a standard deviation of $20.46 / head sold. This variability is not including uncertainty due to weather or disease. This is a risky business. And risky businesses need to be managed carefully, watching every penny of costs to assure a reasonable margin and return on the invested capital
Let's look at the last 6 years of two publicly owned pork industry firms – Hormel and Smithfield Foods. First, return on assets (ROA) has been consistently positive for both firms (8.9% and 5.0%, respectively). Secondly, the ROA variability of ROA has been relatively low; that is, it has been quite predictable (standard deviation 1.11% and 1.53%, respectively). So both businesses have performed in quite predictable fashion.

	ROA Hormel	Stk return	ROA Smithfield	Stk return
1997	7.20%	24.6%	4.40%	73.7%
1998	9.00%	2%	4.90%	2.7%
1999	9.70%	26.3%	5.40%	-29.2%
2000	10.40%	-6.4%	2.40%	26.7%
2001	8.40%	46.9%	6.90%	45%
2002	8.50%		5.10%	
Average	8.87%	12.67%	4.98%	15.70%
standard deviation	1.11%	24.00%	1.53%	40.40%

Looking at the return on the stock price is a different matter. Now we incorporate the idiosyncrasies of the open market – emotion, consumer confidence, and perceptions of the future. Total return on a stock actually combines two other returns: income return and capital return. A fund's income return is the interest it made on its investments over a given time period in the form of dividends. The fund's capital return reflects how much the stock went up or down during the period.

Hormel and Smithfield averaged 12.7% and 15.7% total return, respectively. Their variability was 24% and 40%, respectively. Smithfield's stock return is less predictable at any one point in time, but over the long run, gave a slightly higher average return. In other words, investors were rewarded for their willingness to accept more risk with Smithfield's stock, if they could ride out the increased volatility. The point for us here is that leaders within each firm must watch their costs, margins and profits extremely carefully so that they can report earnings per share figures that result in a fair stock price and reasonable return to owners. Failing to do this will result in increased selling of the stock, decreased price as a consequence, and an ongoing spiral down until % return is reflected in stock price. Money flows to where investors believe they receive a fair return for their investment.

In the pig business, we are not totally at the whims of the current price being paid. We do have considerable control on profitability.

1. Manage your business' risk – we are in a risky business (price volatility, "over" supply risk, disease risk, export risk, consumer boycotts)

- Biosecurity - Disease is one of our biggest sources of risk. PRRS in particular has wreaked havoc in too many herds. We have the tools and knowledge to eliminate PRRS from herds, but we can't seem to keep it out. Your herd will eventually get what your neighbors have. But you can develop and maintain a rigid biosecurity program to decrease your risk of introducing new pathogens.
- Consider forward contracting for inputs and sales,
- Diversify your investments,
  - have more than one sow farm,
  - invest across the pork chain within the industry,
  - invest outside of the pig industry,
- Invest in the pig farm to decrease current public concerns (more later).

2. Manage your balance sheet

- carry optimum amount of debt
  - too high = too risky
  - too low = not taking advantage of interest deductability

3. Reduce and maintain low cost

- know your cost of production
  - what you pay attention to will improve,
  - so you know how you can afford to negotiate contracts,
- benchmark productivity and costs
  - with a group of compatible producers,
  - with PigCHAMP database (or other) for productivity,
  - with magazines and other published literature
- develop and monitor budgets; help people become accountable for budget variances,
- look for ways to continue to drive costs out,
  - feed is #1,
  - genetics; female replacements and semen
  - health maintenance costs (vaccines, antibiotics (injectable, feed, water)
  - management,

4. Pigs out the door; look early in the process for most impact,

- maintain gilt replacement and sow inventory,
- manage for seasonal infertility to keep farrowing crates at full capacity,
  - get females bred, and find and manage open females,
- maintain prewean mortality ≤ 8%,
- maintain nursery mortality ≤2.5%,
- manage seasonal finishing performance (adg and mortality); overall mortality should be ≤3.5%,
- manage the marketing of light pigs; don't ignore this opportunity.
- decrease variability in market weight (gate off light pigs and autosort at end),
- maintain a healthy herd,

5. Strategic decisions

- Invest in low hanging fruit (< 1 yr payback is extremely attractive). John Lawrence recently summarized the advantages and disadvantages of several strategic changes.

    i. Depopulation, if warranted
        - Advantages
            - opportunity to upgrade health and genetics,
            - clean up and repair facilities to improve working environment,
            - establish a breeding schedule to be all-in/all-out,
            - plan for marketings to begin during a price upswing period,
        - Disadvantages:
            - no cash inflow during downtime,
            - may buy poorer quality or poorer health replacements than you currently have,
            - difficult to re-enter at the "right" time for market

    ii. Sell sows, modify facilities, join network and finish pigs
        - Advantages:
            - It is easier to operate all-in/all-out finishing,
            - You still have a farrow-to-finish operation,
            - You can capture 2-3 site production technology,
            - hire specialized labor,
            - reduce your labor and management demands,
            - potentially have better access to information, technology, and markets,
            - greater resale value for your investments.
        - Disadvantages:
            - need to increase volume to maintain cash flow,
            - need to build additional finishing space to increase volume.
            - marketings will be less frequent resulting in greater price risk,
            - must deal with challenges of the network or cooperative,
            - pig cost may increase.

    iii. Marketing contract with packer or feed supplier
        - Advantages
            - You have secured market access if this becomes an issue
            - reduces the odds of a cash-flow shortfall,
            - better communications with the packer on pork quality,
            - may increase average price over time.
        - Disadvantages:
            - may not be able to get a contract when you want it,
            - Locked out of higher prices when they occur,
            - There may be strings attached regarding genetics, nutrition, and facilities,
            - locked into one packer
            - long-term commitment, typically 4-7 years,
            - may have an escrow account.

    iv. Develop and implement exit strategy. Timed right, you retain as much equity as possible. Timed late, and you may deplete equity.

    v. Add value to production by possibly selling gilt replacements or even pork (SunTerra; Manthei Catering),

    vi. Invest in your current operation to maintain and even build your reputation and image as a friend of the environment, caretaker of food animals and a protector of public health (not just producer of quality products).

Managing for profit alone is short sighted - There is an ongoing debate in the business ethics arena about what the overall objective of upper management should be. In the United States, there is an established tradition that management is expected to maximize shareholder value. That is, the purpose of

the company is to maximize financial returns to the owners. While this seems reasonable on the surface, there are two downsides to this approach. First, financial gain may be at the expense of other important considerations. For example, any item that increases cost of production may decrease margin and thereby decrease profitability. This could include items such as higher wages or more benefits, installing more environmental monitoring, maintenance and upkeep, or different antibiotic strategies. The second potential downside of focusing solely on return to shareholders is that there is a danger of becoming myopic in our strategic approach. For example, look at the stock market. We are familiar with the volatility of the stock market and how this can impact publicly held companies. Quarterly reports emphasize sales and net earnings and are highly anticipated by the market. The stock price will either remain stable if expectations are met, or decline, sometimes dramatically, if expectations are not met. As such, management becomes driven to meet quarterly sales and net earnings goals. Since upper management is often rewarded in part according to stock price through stock options, the theory is that their motivations are in line with the owners. But we have many unfortunate examples lately where short-term gain was at the expense of long-term viability of the firm.

Around the world, some other societies make different choices as to what management should be measured by. One important outcome is shareholder value, but not totally at the expense of other considerations including local communities, employee satisfaction, environmental impact, relationship with suppliers, interests of customers, debt holders, and government. Maximizing shareholder value is considered short sighted, overly simplistic and perhaps even antisocial.

As we continue to develop a global market place, how will different end objectives for management compete? The argument for focusing on shareholder value is that winning companies create greater value for all stakeholders – customers (product quality), labor (fair pay and potentially profit sharing), government (more tax revenue) and suppliers of capital. The argument goes that companies that do not perform will find that capital flows to the competitors.

Managers will come and go irrespective of their success. What legacy will each leave? What has each leader done to make the company, and perhaps society, a better place for their successors? Will the firm, and maybe even the community, reminisce about the individual? Or will they be left to pick up pieces and get the firm back on track? What about our pig industry in United States – do we deserve the autonomy that we have had? Our pig industry is in desperate need of strong, visionary and ethical leadership. Each of us has a role in setting our path for the future. We have become the unwanted child of agriculture. "Not in my backyard!" We see the same public debate about a proposed finishing site or packing plant as with locating sites for nuclear waste – amazing but true. Clearly, our industry's baggage is perceived to outweigh our contributions:

Contributions:

- Add value to local feedstuffs,
- Employ local labor,
- Contribute to local, state and national tax base
- Contribute to local and regional wealth creation

Baggage:

- Local impact:
  - Negative environmental impact through air (smell) and water (seepage, overflows),
  - High labor turnover reflects low perceived value,
  - Labor may not be local,

- Perceived industry-level issues
  - Antibiotic use leading to public health concerns,
  - Welfare of pigs in our housing systems,
  - Absentee owners (corporate) putting local farmers out of business,

Our recent focus on growth and profits has not been without a price. You know the metaphor of the frog placed in the pot of water on the stove. As the water heats the frog sits contentedly in the pot until it is boiled to death. It has become accustomed to its surroundings and accepts them as "normal". On the other hand, if we put a frog into boiling water it recognizes the problem and jumps out. When you are sitting in the

lukewarm water, it is very hard to recognize the problems. An outsider can sometimes see better than an insider. What would an outsider observe about our industry?

1. Mortality from birth to target market is not uncommon to be up to 30%.
2. Staff turnover at barn level can be over 75% / year.
3. Sow mortality of >9%,
4. Growth is not a sustainable strategy for producers in a commodity industry,
5. Americans are working harder and longer and it is not reflected in output.

And we have a host of other problems. These problems are complex – the simple ones have been fixed or eliminated. Complex problems call for innovative thinking and experimentation. Parity segregation is an example of an innovative program that holds promise (Mencke et al, Leman Conference 1998, Moore C, Leman Conference 2001).

Complexity also leads to multiple objectives, and a need for novel methods and a broad knowledge of swine production and the constituencies involved. For instance, what is the correct density for housing grow/finish pigs? The solution to such a question can be given at a number of levels. The first is through a maximization of productivity such as pounds marketed per square foot per year. The second is a maximization of profitability that would examine margin over variable costs per square foot per year. How do we address the demand to include the consideration of pig welfare in such an examination? Currently, there is not a quantitative assessment that can span the different objectives in current management techniques. We all agree that beyond a certain density the welfare of pigs is unacceptable and we also agree that as the density decreases from that point there is an improvement in the welfare of the pigs. Thus we have a conflicting group of responses within and without the industry:

- Do we design a system that maximizes the benefit to each pig? In other words should the density be controlled on a pen by pen basis and by constant examination?
- What is the payoff between the cost of housing and the incremental improvements in welfare with lower densities
- Can we take the argument that productivity is correlated with welfare and thus, welfare measures can be ignored?
- How can we allow for technical modification and improvement across different farms while insisting on a rigid structure for auditing?
- How can we communicate our decisions to stakeholders in a cogent method?

Animal agriculture is unaccustomed to the spotlight of examination by stakeholders. The image held by many in the public is that many in animal agriculture are uncaring and inept at understanding the needs of stakeholders. This is not unlike the image of many corporate entities. In many cases this indictment of corporations has proven to be true.

What is our responsibility to stakeholders? As stated above, we can become too accustomed and not see the obvious. We commonly need a new set of eyes to look at a situation. If you landed on earth from a different planet and looked at our pig industry what might cause you to stop and reflect? What might be patently obvious to others as long-term mistakes, that we, ourselves are missing? I can't help but recall a news clip of 6 CEO from the tobacco industry testifying at in Congressional hearings about nicotine addiction (4/14/94; Henry Waxman's (D-CA) Committee):

William Campbell, CEO, Philip Morris
James Johnston, CEO, RJR Tobacco Co
Joseph Taddeo, President, U.S. Tobacco Co
Andrew Tisch, CEO, Lorillard Tobacco
Thomas Sandefur, CEO, Brown & Williamson Tobacco Co
Ed Horrigan, CEO, Liggett Group
Donald Johnston, CEO, American Tobacco Co.

The following was the most famous exchange (April 15, 1994):
REP. WYDEN: *Let me ask you first, and I'd like to just go down the row, whether each of you believes that nicotine is not addictive. I've heard virtually all of you touch on it--yes or no, do you believe nicotine is not addictive?*

WILLIAM I. CAMPBELL (Philip Morris): *I believe that nicotine is not addictive, yes.*

REP. WYDEN: *Mr. Johnston...*
JAMES JOHNSTON (RJ Reynolds): *Uh, Congressman, cigarettes and nicotine clearly do not meet the classic definition of addiction. There is no intoxication—*

REP. WYDEN: *We'll take that as a no. And again, time is short, if you can just, I think each of you believe nicotine is not addictive, I'd just like to have this for the record.*

JOSEPH TADDEO (US Tobacco): *I don't believe that nicotine or our products are addictive.*

ANDREW TISCH (P Lorillard): *I believe that nicotine is not addictive.*

EDWARD HORRIGAN (Ligget Group): *I believe that nicotine is not addictive.*

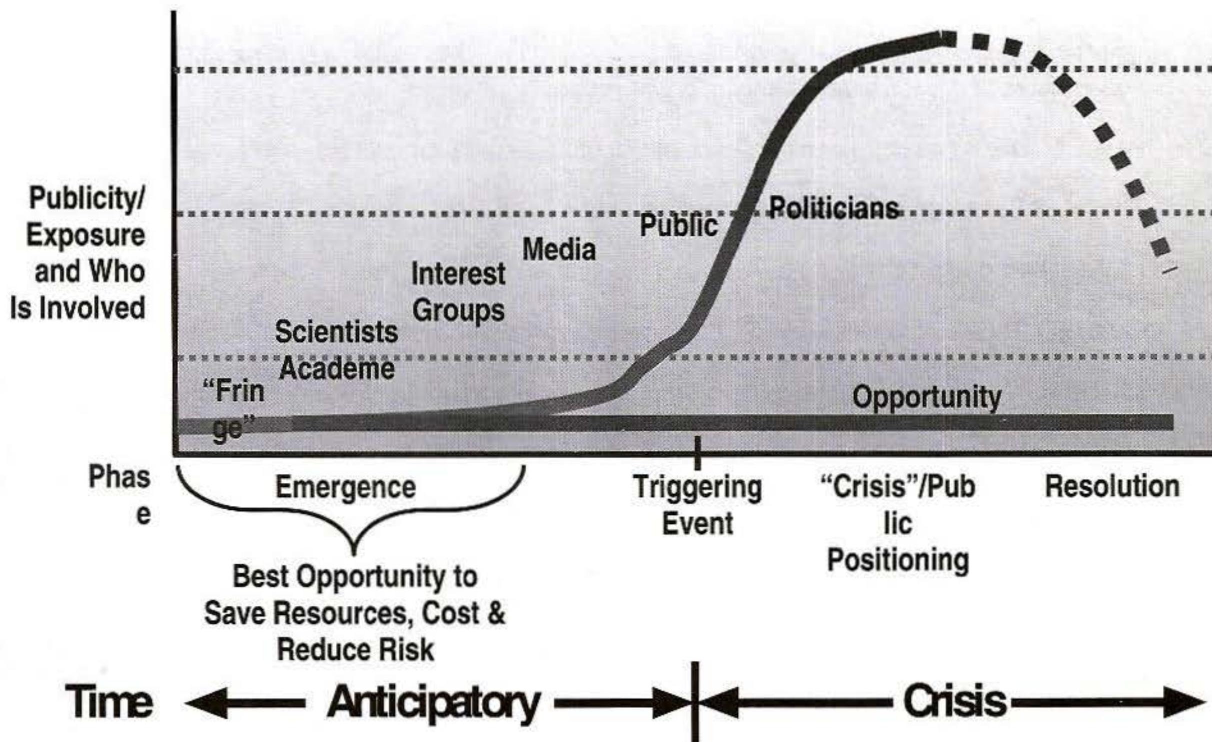
THOMAS SANDEFUR (Brown & Williamson): *I believe that nicotine is not addictive.*

DONALD JOHNSTON (American Tobacco Co.): *And I too believe that nicotine is not addictive.*

Today, we can see today how shortsighted and even foolish these leaders were. Today, we have record settlements, ongoing class action suits, and tobacco money being used to fund anti-tobacco advertising. The Marlboro brand has deteriorated from a rugged, macho cowboy to a duplicitous, lying, cheat.

What are the issues for our industry? McDonald's uses the following graphic to try and organize their issues and manage them accordingly. Where does antibiotic use and animal welfare rank on this graphic? We lost the opportunity to be proactive on environmental impact and we are suffering the regulatory consequences accordingly. In Europe, welfare of the pigs has been taken away from the industry and is being mandated from Brussels. After Dec 31, 2006, there is no new construction of stalled housing and they have until 2112 to eliminate them. From 2006 to 2112, they will start the re-learning curve for group housing. This represents a huge opportunity for us to watch over their shoulders, because we may be following them. In my opinion, the writing is on the wall for antibiotic use. MacDonald's recent decree regarding its suppliers' use of antibiotics is just the beginning.

MacDonald's anticipatory issues management process.



Leaders of our industry are in the equivalent of a war zone. Animal agriculture, and in particular the pig industry, is experiencing increasing public scrutiny. A British farmer told me once, "*The privilege of an affluent society is to criticize their farmers.*" In part because of this scrutiny, you are being confronted on all sides and are being barraged with a variety of important questions and challenges. Why is litter size down? Why did that spill occur? What is your policy on antibiotic use? Why can't you fill that position? And why are DIP's up? McDonald's has become a lightening rod for global issues such as GMOs, animal welfare, food safety, and globalization (R. Langert; Leman Swine Conference 2001). Similarly, our industry has become the focal point for many of the changes that are taking place in agriculture that are perceived as negative. Some of the criticisms we receive are valid. And some are misplaced.

But, our leaders are in the front line and will have an enormous role in determining the future of our industry. Will we proactively address issues, or continue to respond as we are attacked? As a leader, you will always have someone sniping at you. William Pogonis led the 1991 Gulf War theatre logistics, building a team of 40,000 in two months that supplied 550,000 military personnel with everything they needed to get the job done. In the face of daunting challenges, he gives us the following leadership guidelines (Pogonis; Harvard Business Review December 2001, pp5-12):

1. Shape your company's vision - if the organization isn't pulling for you, you're hobbled from the start,
2. Leaders need expertise and empathy to accomplish the task.
3. Ensure that everyone shares the same information, including the vision and the objectives.
4. The first step in leadership is to "know thyself." Your strengths, weaknesses, and how you might improve.
5. Learn how and what to communicate; and never pass up the opportunity to remain silent.
6. Always remember the mission.

Our aim should be to initiate a discourse model to discover common objectives, where they exist, and to focus on those without getting into what would be technical specifics. The first step should be, in most

cases, to thank those parties that share common objectives. For those that care about the welfare of pigs, they should be lauded and then shown how the welfare of pigs is addressed within swine farms. Many of the critics are less interested in outcomes than process, yet little of decision-making processes have been described. Having in place a strong position for welfare is an important step. Identifying a person or persons that can be ombudsmen and allow for further dialogue should be the next step.

Table 1. A survey of 175 members of American Management Association revealed that "top core values often are not translated into behaviors by senior management" (April / May 2002).

Which of the following have you seen in your organization?		
Micromanagement		70%
Failure to give credit		59%
Dissension in senior management		58%
Hidden agendas		56%
Dictatorial management	51%	
Lack of accountability	46%	
Unequal treatment of employees		40%
Kill the messenger behavior		36%
Organization always does what is legal, but not always what could be perceived as ethical		36%
Lying by employees		28%
Distortion of facts to customers	22%	
Lying to employees		17%
Distortion of facts to shareholders		9%
Indifference to community concerns		9%
Falsifying expense accounts		7%

"*When leaders model ethical behavior, only 24% of co-workers observed unethical behavior in the workplace. When leaders don't model ethical behavior, 73% observe unethical behavior*". Study by Ethics Resource Center; Washington, DC.

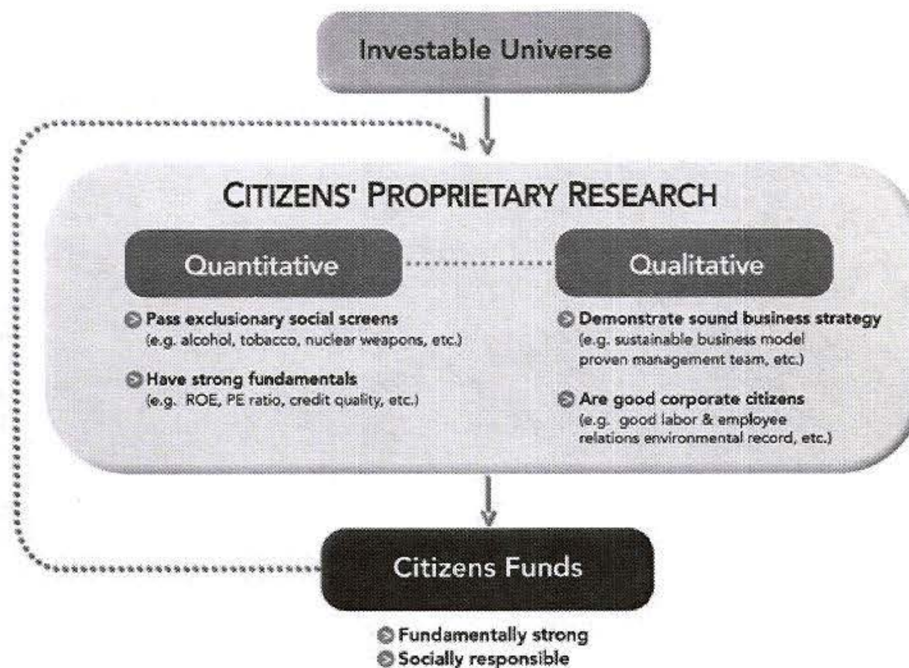
We can develop reports for stakeholders - While on the one hand, we may aspire to anonymous giving, on the other hand, we desperately need the acknowledgement of being socially responsible. This is true for pig farms and processing plants of all sizes. The days of relying solely on personal relationships are over. People who we don't personally know are determining our fate. Perhaps we need to do a better job of telling people how we are contributing. An impressive "give-back statement" might influence their opinion. This is equally critical for publicly held companies such as Smithfield, Hormel, and Tysons, as it is for privately held production companies such as Cargill, Pipestone Family Farms, Premium Standard and others. Each has a valuable brand to protect and develop.

Ernst & Young recently published a report on what investors took into account in their decision to purchase or sell a stock. They concluded, "*Corporate leaders who effectively measure, manage and communicate their non-financial performance* (environmental and social policies was one of 39 specific non-financial criteria) *may not only contribute to the increased valuation of the firm, but also improve their firm's ability to attract new investment capital*" (http://www.cbi.cgey.com/research/current-work/valuing-intangibles/attachments/MEASURES.PDF). Investing in companies deemed as socially responsible is a growing trend despite a lack of consistent evidence that they outperform firms selected by traditional analysis. Below is a list of the issues that such some investors are screening for (soyouwann.com):

Sigue	Percent
Reject companies that support the TOBACCO industry	97%
Reject companies that support the GAMBLING industry	86%
Reject companies that support the ALCOHOL industry	83%

Reject companies that support the DEFENSE industry	81%
Support companies that have a good ENVIRONMENTAL record	79%
Support companies that demand HUMAN RIGHTS practices	43%
Support companies that support LABOR issues	38%
Support companies with a stance on ABORTION or birth control	23%
Support companies with a stance on ANIMAL RIGHTS	15%

Figure 1. At Citizen Funds, one typical fund company, potential securities are screened by fundamental and social criteria.



How can we report our contributions? Marjorie Kelly is a business ethicist who advocates for raising consciousness about wealth discrimination and secondly, for structural change in corporate institutions such that stakeholders are served by the company, not just shareholders (The Divine Right of Capital; 2001). In her book, she describes several new initiatives aimed at encouraging companies to disclose their social achievements. A simple way to do this would be to develop an additional financial statement to augment the basic financial statements: balance sheet, income statement, and cash flows. For lack of a better name, we'll call this a "Give-back" statement. Just like a balance sheet, it might be divided in sections:

- Local giving
  - Value of Christmas hams to all neighbors within 1 mile of a site,
  - Cost of caring for neighbors' driveways,
  - Cost to sponsor local fund raisers,
- State / regional giving; not political
- National / International giving; not political liability

There are two coordinated efforts aimed at this same initiative. The first is international and voluntary. It is led by a group called the Global Reporting Initiative (GRI). The Global Reporting Initiative (GRI) was established in late 1997 with the mission of developing globally applicable guidelines for reporting on the economic, environmental, and social performance, initially for corporations and eventually for any business, governmental, or non-governmental organisation (NGO). Convened by the Coalition for Environmentally Responsible Economies (CERES) in partnership with the United Nations Environment Programme (UNEP), the GRI incorporates the active participation of corporations, NGOs, accountancy organizations, business associations, and other stakeholders from around the world. To date, more than 2,000 organizations

worldwide, primarily corporations, have participated. An example is McDonald's which has made great strides at regaining their public image (See Appendix 1. for McDonald's Social Responsibility report).

One of GRI's goals is to develop a generally accepted framework for reporting such that we can have consistency, credibility and comparability of achievements. The GRI reporting program aims to capture the impact a company might be having in addition to creating wealth. These might include investments in human capital, wage expense by country, taxes paid, increases or decreases in jobs, worker education levels, wage equity, environmental impact (positive and negative) and quality-of-life in communities. The GRI's mission is to balance the "balance sheet" such that all impacts—including but not limited to financial—are routinely, comparably, and credibly reported.
The GRI initiative hopes to:

- Expand credibility of sustainability reports using a common framework for performance measurement;
- Simplify reporting process for organizations in all regions and countries;
- Allow for quick and reliable benchmarking;
- Develop more effective linkage between sustainable practices and financial performance.

On the basis of the accomplishments thus far and the vision, the United Nations Foundation recently awarded a $3 million partnership grant to support GRI activities.

The second organized effort for reporting social responsibility is aimed at compulsory reporting. The Corporate Sunshine Working Group is an alliance of investors (such as Trillium Asset Management and Domini Social Investments), environmental organizations (including Friends of the Earth and World Resources Institute), unions (including the AFL-CIO), and public interest groups (such as the Good Neighbor Project and the Stakeholder Alliance) working to enforce and expand SEC corporate social and environmental disclosure requirements. This group was started in December 1998. Members of the Working Group file enforcement complaints at the SEC regarding companies' inadequate environmental and social reporting; undertake research, writing and public education; and encourage the SEC to promulgate detailed corporate social disclosure rules. (http://www.foe.org/international/cswg/).

These are three choices to expand the reporting of activities of our industry. Personally, we prefer the first two. What am I doing to make this a better place for my successors / next generation? Let's tell people what our contributions are so the baggage can be put in balance. If our image continues to deteriorate as it has recently, we believe the third option of compulsory reporting will be forced on us.

We should be willing to accept a lower return on our investment if there is less risk. This increasing public scrutiny of our production systems is a considerable risk. Certain groups have organized demonstrations and even boycotts against fast food chains urging consumers to not consume their products – our products! We are currently suffering substantial fines for having certain environmental accidents. Could we invest proactively in certain issues that if solved might decrease the anticipated volatility or even increase total demand for our product? We need to think of such expenditures as investments with a possible payback that could have a substantial positive impact on our industry. And then telling people what we are doing will be even more essential.

The future is fairly clear - We will continue to consolidate, mainly though acquisition. We will continue to integrate, through ownership and contracts. We will improve productivity and lower costs of production. And we will continue to break down borders and barriers in the global marketplace. It is because of this last item that we will also incorporate public concerns into our production systems. Investors around the globe will be using the same approach and criteria to make their decisions, and they are looking at the same pool of companies. Our industry "*will have to engage with the community's interests, environmental concerns, and social issues. Otherwise, they will eventually be penalized by the political process*".

"*This global marketplace will disrupt traditional values and familiar forms of organizations, amplifying the sense of loss of control and generating a nostalgia for the past and its settled order*" (Commanding Heights 2002). A few countries such as areas of southern France, may structure programs to preserve the traditional farm culture (Lexus and the Olive Tree; Thomas Friedman). But this will be the rarity. The global marketplace will intensify competition with constant pressure on costs. We will need to foster a culture of flexibility, responsiveness and quick to change. Less bureaucracy, more teamwork, more empowered managers with information and decision-making.

Yergin and Stanislaw suggest that the global economy will be evaluated by 5 consequences:

1. delivering the goods – measurable economic goods, growth, higher standard of living, better quality services and jobs.
2. ensuring fairness – how is success distributed? Excessive concentration of wealth is not sustainable. "Incentives" for the market advocate is "greed" for the market critic.
3. securing the environment – local activities will be benchmarked against global standards. Companies will be increasingly regulated by multiple authorities and focusing on the environment will become a growing responsibility of senior management.
4. coping with demographics – on whose shoulders, on which age group will the costs of retirement and health care fall?
5. upholding identity – there will continue to be clashes between multinational corporations and national values.

"The moral appeal of socialism is clear and explicit; altruism, concern, sympathy, and solidarity with fellow humans; dignity and social betterment; justice and fairness; hope. Yet the essential morality of the marketplace is twofold. The first is in the results that it delivers, in what it makes possible for people… The second lies in the conviction that a system based on rules, property, contracts and initiative is more fair and provides against an arbitrary and unchecked power of the state and other entities." (Commanding Heights 2002).

The former CEO of Intel, Andy Grove, often said "only the paranoid survive". Animal agriculture has been cast loose from the romanticized and protected umbrella of a rural and pastoral image, dependent on governmental protection. Pork production is, and will be, a changing industry. Our hope is that we, the industry itself, can be the agents of that change.