

Compensating Suicide

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Abstract

Conventional wisdom suggests that efforts to improve the lives of workers within oppressive labor conditions would be viewed at least neutrally, if not positively. Recent work, such as Powell (2014), counters this assumption. Our work extends this idea, applying it to deleterious effects on employee action rather than on employee opportunity. Specifically, we look at the case of Foxconn employee suicides in the spring of 2010. We conclude with a cautionary note: that public influence is indeed a powerful tool capable of much good, but that care must be taken to prevent it from being misused, even if unintentionally.

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I. Introduction

This paper seeks to provide a new understanding of suicide in the workplace (and incentives created by steps taken to prevent it) in the hope that these tragic events can be reduced. Employee suicide, which we define as a person committing suicide as a direct result of factors caused by their workplace environment, is without a doubt a tragic event. Beyond the obvious effect that such an act has on the life of the individual, dozens if not hundreds of other people around

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and close to this person are affected as well. According to Paul and Jones (2009), approximately two-thirds of all suicides occur among people between the ages of twenty-five and sixty-five, and such suicides are particularly concentrated among people in the workplace. This finding comports with those of Mirza (2012), who studied the providers of employee assistance programs and found an increase in suicidal comments as well as fitness-for-duty referrals, which take mental health concerns into consideration. What's more, these employee suicides disproportionately affect people in developing countries.

Listening to the news, one would conclude that employee suicide is the result of a confluence of undiagnosed depression and the desire to escape abusive or oppressive working conditions. These working conditions can be “first world oppressive,” such as not having access to a window, having to work more than sixty hours per week, or having a fear of losing one's job, or they can be “third world oppressive,” such as being physically beaten at work, made to work in appalling conditions, being paid barely above subsistence wages, or being forced to live on site in (typically abysmal) employer-provided housing. In other words, suicide by employees is understood to be the result of employees being harmed. This approach, popularized by Baumeister (1990) and extended by Agnew (1992), has come to be known as “escape theory.”

Not finding these psychologists' explanations satisfactory, economists have also offered insight. Hamermesh and Soss (1974) provide the first rational choice explanation of suicide.¹ Essentially, they model suicide as a costly end to the consumption of “living.”

Chuang and Huang (1997), Brainerd (2001), Lester (2001), and Suzuki (2008) study the link between various measures of economic well-being and suicide. Niedl (1996), Demir and Rodwell (2012), Balducci, Alfano, and Fraccaroli (2009), and Yildirim and Yildirim (2007) all find strong evidence that workplace bullying increases rates of depression and suicidal ideation and behavior. The conclusion of this research, summarized in Boccio and Macari (2014), is that removing that bullying will unambiguously be associated with positive outcomes and should decrease suicide rates. In other words, this literature arrives at a conclusion very similar to the work following the escape theory approach.

¹ At least, they provide the first published paper with a rational choice explanation of suicide. An unpublished paper by Becker and Posner, which was revised as late as 2004, was reportedly first written in 1971.

We do not wish to dispute these findings here, as we believe that suicide is often the regrettable result of various factors and that efforts must be made to curtail this type of suicide. Instead, we take a different tack toward understanding employee suicide and posit that, in some situations, it might also be the unintended consequence of poorly designed policies meant to *prevent* suicide. Specifically, we examine the role of condolence payments to the families of people who commit suicide in influencing an individual's choice to commit suicide. Here, suicide is not the least-bad option but is instead the most-good option that the employee faces. Because of this situation, despite an overall acceptable quality of life, a person may still commit suicide. We distinguish this policy-induced suicide, as the employee willingly sacrifices himself or herself in order to achieve some sort of intergenerational investment. This action is fundamentally different from the type of suicide described by escape theory, in that the policy itself creates incentives that may induce suicides unrelated to adverse work conditions or other factors.

Our theory can be further used to explain other forms of observed phenomena in the corporate world. For example, death is not the only form of self-sacrifice: severe bodily harm also qualifies. Our theory can also explain increases in employee abuse among peers. In these respects, our paper is most closely related to Marcotte (2003), which diverges (albeit slightly) from the escape theory that dominates virtually all aspects of suicide research. His paper extends Hamermesh and Soss (1974) to include attempted suicide, noting that some people are motivated by a wish to receive the increased social support they see given to people who unsuccessfully attempt suicide. The act of attempting suicide, therefore, is modeled as a type of gamble: if the person lives, then they receive a form of payoff. Where Marcotte (2003) argues that people may attempt suicide to secure benefits and examines the different means by which to commit suicide and their associated probabilities of death, our paper argues that people may commit suicide with certainty to secure benefits for dependents. Thus, we argue that under specific circumstances, the action is fundamentally different from other suicides.

Our paper focuses on the suicides at Foxconn in 2010. Beginning in early 2010, a small number of suicides occurred at a particular Foxconn factory that happened to assemble products for Apple.²

² The number of suicides was small relative to the suicide rate for all of China. Chan (2013) cites this rate as being approximately twenty-three per 100,000 nationally.

When the media found out, the call to action was loud and clear. Apple, which at the time was on its way to becoming the most profitable company in the world, was lambasted for outsourcing its labor to countries that abused their workers so severely that they were literally being driven to suicide to escape their awful working environments. Apple responded to this public outrage by pressuring Foxconn to compensate the victims' families, raise wages, and stop its abusive practices.

According to conventional theory, the result should have been a clear decrease in suicides. However, what actually happened was an increase so severe and so alarming that Foxconn eventually installed suicide nets to prevent people from jumping off its buildings. Our work seeks to explain this observed phenomenon as a result of malaligned incentives created through implicit corporate policy.

Our work contributes to two strands of literature. First, it contributes to the literature on moral hazard and insurance design. Insurance payments are often tailored to prevent the insured from abusing their coverage. Second, it contributes to the growing rational choice literature on seemingly irrational behavior. Starting with Becker (1968) and his work on the economics of crime, a fascinating area of economics has emerged that places seemingly irrational behavior squarely within the bounds of rational choice theory.

Our paper proceeds as follows. Section 2 explains the history of the Foxconn suicides. Section 3 provides the theoretical explanation that we will be exploring. Section 4 tests our predictions with Foxconn, provides a brief discussion of alternative explanations, and explains why we believe our theory to be more accurate. We conclude with section 5.

II. Employee Suicide at Foxconn

All large companies—in fact, any large group of people—are statistically likely to have at least one person commit suicide over a sufficiently lengthy period. What is of interest for our purposes, however, is any instance of a significant change in the rate of suicide. In the case of Foxconn, the company experienced few suicides per year in absolute terms, with just one reported suicide in 2007 and one reported in 2009 (Tam 2010). However, employee suicide increased dramatically in 2010, with eighteen reported suicide attempts and

fourteen confirmed deaths (Williams 2012; *SINA English* 2013).³ After 2010, the number of suicides began to decrease. Thus, we have two periods of interest: the rapid increase from 2009 to 2010 and the steep decrease from 2010 to 2011. Table 1 summarizes these events.

Table 1. Confirmed deaths from Foxconn employee suicides

<u>Year</u>	<u>Number of suicides</u>
2007	1
2008	none reported
2009	1
2010	14
2011	4
2012	1
2013	2
2014	none reported
2015	none reported
2016	1

Sources: Tam (2010), Williams (2012), *SINA English* (2013), and Sin (2016).

In July 2009, Sun Danyong, an employee at a Foxconn plant in Shenzhen (near Hong Kong), committed suicide after his home was raided and security guards allegedly beat him up. These incidents occurred after he reported to his boss that he had lost a prototype of the at-the-time unreleased Apple iPhone 4 (Topping 2009). Media outlets such as the *New Yorker* (Osnos 2009), the *BBC* (Hogg 2010), *Reuters* (2012), the *New York Times* (Barboza 2010; Duhigg and Bradsher 2012), the *Guardian* (Watts 2010), and *Time* (Ramzy 2012) all reported on this event, condemning Apple on two fronts: first, for outsourcing manufacturing jobs from the United States during a time of economic hardship, and second, for outsourcing work to a factory that had abysmal working conditions and wages by Western standards. Apple was quick to respond to these accusations, saying that it would launch an investigation into the matter and that the ethical treatment of employees by their subcontracted manufacturers was a top priority.

Within days, Foxconn announced that it would give the victim's parents a large sum of money as a form of condolence payment. Reports on the sum vary; the minimum that we could find claimed that the family received a lump sum of approximately \$44,000 and a free Apple laptop. Other reports claimed it was as high as \$56,000.

³ One attempt resulted in paralysis and three attempts are listed as having "unknown results." We do not pretend to know what that means in this context, as it seems like the results should be clear.

Still others claim that there was an annual stipend of \$4,500 for an unspecified duration.⁴ While any of these amounts are relatively small sums by Western standards, consider that the average monthly salary in this factory at the time was approximately \$200 to \$220,⁵ meaning that even the smallest of these reported sums represented at least fifteen years of salary. Such a sum would clearly have been life-changing for the employee's family, particularly given that they likely lacked access to credit markets, making it nearly impossible to finance relocating to an area with a higher standard of living and better job opportunities.

In 2010, the number of suicides at Foxconn increased dramatically. Two aspects of this phenomenon are of immediate interest for our theory. First, by all accounts from various watchdog organizations and human rights activist groups, Foxconn was actively taking steps to improve the working conditions of all workers at this factory. These steps included reducing the number of hours that employees worked each day, increasing the length of break times for meals, and providing counseling to any employee at any time who wished to speak with a trained professional. Monks were even brought in to cleanse the factory of evil spirits. If escape theory alone were the culprit of the increase in suicides, we would expect to see fewer suicides after these steps, not more.

The second is that the suicides decreased dramatically after May 2010. It was reported that in June, Terry Guo, the chairman of Foxconn's parent company, made two announcements. The first announcement was that the company was going to give a 20 percent to 30 percent raise to all factory workers in order to stem the suicides (*Reuters* 2010). The second was that the company would no longer be providing condolence payments.⁶ According to Guo, the company had "concrete evidence" that some of the employees who had committed suicide had done so explicitly to secure the compensation

⁴ Many stories about the suicides lacked or differed on the specifics, but the general idea was consistent: we'll pay your family a lot of money if you commit suicide.

⁵ Ngai and Chan (2012) report that the average monthly salary of a Foxconn worker at the time was approximately 1,400–1,500 yuan and that the exchange rate at the time was 6.83 yuan per dollar.

⁶ Reports indicate that sometime between July 2009 and May 2010, the condolence payments had decreased to approximately \$14,000, though no information on when, exactly, this change was implemented could be found.

money for their families (Waterman 2010). By 2012, the rate of suicide in the company had returned to its pre-2010 rate.⁷

Our task is to explain these dramatic changes in the rate of employee suicide by extending the traditional economic model of suicide. As described in the following section, our approach predicts that the incidence of suicide should increase with the expected size of condolence payments, and it uniquely explains why an increase in the rate of employees taking their own lives would be expected despite improvements in working conditions. Our framework also explains why the suicide rate would suddenly drop following cessation of condolence payments. Finally, our approach yields a number of predictions concerning characteristics of the acts themselves. These predictions can be evaluated against the Foxconn case.

III. Policy-Driven Suicide

We seek here to distinguish suicide in response to incentives created by policy from other types of suicide, such as those described in “escape theory.” While both acts can involve the taking of one’s life, the motive behind each act is significantly different and calls for different corporate policy solutions. Most commonly, suicide refers to any act that seeks to end one’s own life at the benefit of zero other people. This definition is most in line with Hamermesh and Soss (1974) and with the literature on escape theory in that the only benefactor is the person who commits the suicide. Importantly, this type of suicide has many possible motivations, which we do not seek to explain here.

By contrast, policy-driven suicide or self-sacrifice refers to any sort of self-harming act that benefits others. This action does not have to result in the person’s death, but it might. Some readers might be tempted to suggest that we are describing martyrdom, or dying to support a cause. While the two acts share many features, we distinguish our case study from martyrdom by noting that martyrs seek to attract attention to a cause in the hope that a problem will one day be fixed. Someone committing suicide in response to misaligned incentives does not seek to change anything about the world but is instead seeking to provide benefits to identifiable people. In contrast to the “escape theory” model, he or she is someone who has positive expected utility over the course of his or her lifetime.

⁷ Our suspicion is that the above-normal rate of suicides in 2011 was a result of employees testing whether Foxconn was going to credibly commit to its new policy.

They are not seeking to escape anything, but instead are using the act as a means of providing benefits for specific people. It is this very specific type of behavior that we examine here.

In the case of Foxconn, all the acts we examine resulted in the person's death. These have been described throughout the media as suicides, which resulted in the implementation of policies designed to curb suicidal behavior. Alarming and unfortunately, these policies had the unintended result of encouraging suicides-as-policy-response. To formalize the distinction between escape-type suicide and policy-driven suicide, we propose three criteria that the act must meet:

1. *There must be a connection between working conditions (including wages) and the suicide.* Suicide has many causes, any one of which could be pointed to as the primary culprit or driver of the behavior. Because of this, the causal connection between working conditions or wages and the suicide must be made in the minds of people who are in a position to do something about the working conditions or wages.
2. *The suicide and its causes must be communicated to an outside audience and must be verifiable.* If there is no verifiable outside knowledge of the death and its causes, then we should expect few if any changes to be made.

Suicide can be the result of many different factors. Because of this, employers are likely to try to blame a litany of other factors to avoid culpability. If an employer can successfully do so, the link between working conditions and the suicide is greatly diminished. But denial becomes much more difficult if a connection is clear between working conditions and worker suicide.

The suicide and its causes must also be communicated to parties external to the family, company, and perhaps even the country. Short of other groups traveling to and witnessing the suicide directly, which is costly, the suicide must garner sufficient publicity so as to communicate the news of its occurrence and causes even to those who do not observe it directly. For example, sliding a note under the boss's door without sharing this note with anyone else would accomplish little. But if this person communicated their intent to an external party, perhaps through an ornate showing of their intent to commit suicide, then the act has the possibility of accomplishing its goals of securing benefits for the family.

Likewise, that the death was caused by suicide must be verifiable. Any suicide that can be faked loses significant effect. For example, finding a deceased elderly man at home in his bed with a note indicating that he committed suicide due to poor working conditions could easily be dismissed as a death from old age, with someone subsequently planting a note to further their own agenda. But if several parties directly observe the suicide, or if the death cannot be explained as the result of any other cause, then there can be no denying that the cause of death was suicide.

Finally, for the act to be truly policy driven and not just an extremely costly form of retribution against an employer, it must meet our third criterion:

3. *There must be an identifiable recipient of the payout.* If there is no identifiable recipient, then the observed phenomenon collapses back into escape theory.

Having identifiable recipients of a payout for suicide changes the analysis. It no longer becomes a question of ending a stream of unpleasantness, but instead becomes a technology for accomplishing the goal of providing material support for others and improving the short remaining lives of the perpetrators, who can rest assured that they will be providing for the people closest to them after death. As a corollary, the creation of a payout to others should, all else being equal, lead to more people performing the act. Likewise, the removal of this payout should lead to a decrease in the number.

The forgoing features that employee suicide must exhibit to accurately be characterized as policy driven generate corresponding predictions for our theory of employee suicide. If employee suicide is a rational technology for intergenerational investment, it should exhibit each of these three features. In the following section, we test these predictions using employee suicide as practiced at Foxconn in China during the first half of 2010.

IV. Testing the Theory of Employee Immolation

The theory developed in section 3 predicts that policy-driven employee suicide should exhibit specific features. Evidence from the case of the Foxconn suicides allows us to test these predictions.

A. There must be a connection between working conditions (including wages) and the suicide.

In the case of Foxconn and its employee abuse, the media's portrayal of the events paints a clear picture: the working conditions at Foxconn were nothing short of oppressive, with long and unpredictable work hours, constant verbal abuse, and violations of the lax (by Western standards) local labor laws, and the workers who ultimately took their own lives only did so as a lamentable last resort to escape these conditions. *Business Insider*, for example, published an article titled "The Shocking Conditions Inside China's Brutal Foxconn Factory" detailing the military-style regimentation of the workers' lives as contributing to depression and ultimately suicide (C. Chang 2010). *Forbes* published an article in May 2010 titled "Suicides at Apple Supplier in China," which contains the following passage: "Although [CEO Terry] Gou believes 'every single life is valuable,' Foxconn maintains severe working conditions contributing to the tragic incidents" (G. Chang 2010).

The field of "media economics" is relatively new, but its findings are robust. While most media economists focus on the industrial organization of the media industry and its role in forming public opinions (Mondak 1995; Brians and Wattenberg 1996; Golding and Murdock 1997; Djankov et al. 2003) or economic development (Sen 1984, 1999; Coyne and Leeson 2009), others focus on the media's role in generating and disseminating information to a broader audience (Herman and Chomsky 1988; Bartels 1993; Bennett 1996; Sutter 2004). This literature points to a clear and consistent conclusion: that the media can and indeed do shape the information and subsequent beliefs that people have on particular issues.

In the Foxconn case, the media had a clear role: disseminating information about the employee suicides to the broader, global population and clearly linking the suicides to working conditions. That this particular Foxconn factory was primarily tasked with assembling products for Apple, which at the time was in the media itself for its high rate of profitability, only intensified the outrage that the general public expressed. The more the media reports that the deaths were caused by poor working conditions, the stronger this connection becomes in the minds of the public. Because of the intense media coverage and the widespread belief around the world that employees were committing suicide due to Foxconn's poor working conditions, employees could feel confident that their own actions would be grouped in with this analysis and lead to condolence

payments to their families. In a cruel twist, employees who committed suicide in this way were taking advantage of others' good intentions.

B. The suicide and its causes must be communicated to an outside audience and must be verifiable.

Making this ultimate sacrifice means nothing if it is not communicated to an outside audience who can verify its occurrence. In the case of the Foxconn suicides, jumping off of a tall building was the means selected for every reported suicide after 2007. This method, as ghastly as it is to say, has characteristics that make it particularly consistent with our theory. This method is exceptionally public. Standing on a rooftop invites onlookers, which in turn only invites further onlookers as people stop to observe the event.

C. There must be an identifiable recipient of the payout.

Finally, to be distinguished from escape-type suicide under our nomenclature, there must be an identifiable recipient of the payout. Without such a recipient, no intergenerational investment takes place.

The case of Sun Danyong, who committed suicide in July 2009, provided an important foundation that set the stage for later behavior by some of his coworkers. In response to the intense media pressure after his suicide, Foxconn offered Sun's family a large sum of money as a condolence payment. While the specifics of the amount are uncertain (as explained earlier), Farrell (2009) reports that the amount was equivalent to \$44,000 (and, to add insult to injury, a free MacBook for Sun's girlfriend). If accurate, this payout amounted to over fifteen years of Sun's monthly salary as a one-time lump sum.

While China is famous for suppressing the flow of information, we find it extraordinarily likely that if people around the world had access to this information, so did other workers at the same Foxconn plant. The family of Ma Xiangqian, a nineteen-year-old man who had only worked at Foxconn for about two months at the time of his suicide in January 2010, received a payment of at least \$15,000 (Barboza 2010). The family of Lu Xin, a twenty-four-year-old man who jumped off a building in May 2010, received a large payment as well (Moore 2010).

Lu's case is perhaps the most directly supportive of our theory. His family was in debt to the tune of 100,000 yuan (approximately US\$12,000). The wages earned at the factory were far greater than anything that could be earned farming, which led Lu Xin to take a job

at the Foxconn factory. His diary indicates that he was earning roughly 1,800 yuan (US\$270) per month and remitting about 1,500 yuan (US\$225) per month back to his family in the village (China.org.cn 2015). Faced with misery at work, the financial hardship he was likely experiencing after remitting so much of his paycheck to his family, and the nigh-impossibility of affording payments on the loans his family had taken out, Lu may have found self-sacrifice a reasonable option to provide his family with the financial means to escape their debt.

Further support for our theory comes from the observed marked decrease in suicides at Foxconn by mid-2010. That was when the company announced a cessation of condolence payments due to CEO Terry Guo's report that he had concrete evidence that employees were committing suicide to collect the condolence payments. Ending the payments effectively dismantled the mechanism through which suicide led to intergenerational investment. In the absence of such an incentive, the act virtually ceased. Shortly after the conclusion of the condolence payment policy, suicides at Foxconn returned to their pre-2010 rate. In sum, the evidence supports our predictions.

D. Alternative Theories

As mentioned previously, suicide has many causes, some of which could be identified and rectified before a suicidal act takes place. With insufficient data to accurately control for the plethora of potential contributing factors, we would be foolish to suggest that we are presenting the be-all and end-all theory of employees choosing to take their own lives. In fact, this is why we distinguish the acts discussed in this paper from other types of suicide. Trouble arises when conflating the two. We contend that they are meaningfully different and therefore require different solutions.

One alternative explanation for these events is that Foxconn's working conditions were particularly abysmal in 2010.⁸ This explanation is commonly referred to as "escape theory" because the victim is escaping a horrendous situation. While it almost certainly applies to some degree to the case of Foxconn in 2010 (and should be rectified), reports from various third-party organizations indicate that working conditions were improving throughout 2010. Insofar as

⁸ It would also have to be the case that the quality of the workplace deteriorated massively from 2009, when there was only one reported case of suicide.

employee suicide is caused by abysmal working conditions, escape theory predicts that the rate of suicide will decrease as working conditions improve. That the rate of suicide increased over the first five months of 2010, then stopped, suggests mitigating factors.

Another alternative explanation is that this increase is evidence of the Werther effect, which describes the increase in macro-level suicide rates after media reporting of an initial suicide. In other words, the media reporting of a suicide triggers other people to commit suicide. In fact, Cheng, Chen, and Yip (2011) provide direct evidence of a “temporal cluster” of suicides in the case of Foxconn employees in 2010 and claim it as evidence of the Werther effect. Our theory does not deny that media reporting of suicide can contribute to further suicides, particularly among people who are already emotionally unstable or otherwise susceptible or suggestible in any way. In fact, our theory is consistent with the idea that the media can play a crucial role in causing further suicides as, in our theory, the media act as a means of communicating the suicide to outside agencies (who will then pressure the company to rectify the situation).

However, the work on the Werther effect seems to be more of an ex-post identification of a statistical phenomenon. In some instances, media reporting leads to a cluster of suicides, which is then explained by the Werther effect. In others, it does not. Further complicating the Werther effect story is that there is no obvious explanation within the Werther effect literature for the cluster’s end. Our theory has the benefit of explaining the cluster, its beginning, and its end. Greater examination of other Werther clusters may yield similar results showing that media coverage alone does not explain the phenomenon, but rather some other factor contributes to the cluster’s beginning and end.

V. Conclusion

Suicide of any type, be it an escape from an oppressive life, an act of martyrdom, or a self-sacrificing act as we have described, is both tragic and preventable in today’s world. It is our hope that this paper contributes in some small way to the reduction of employee suicide through the consistent and persistent application of economics. In our theory of employee suicide as policy response, the act of taking one’s life is a form of securing benefits, not merely a means of escaping a harsh life. These benefits can be received by the perpetrator’s family in the form of condolence payments, in which

case they would be considered privately beneficial, or they can accrue to other workers in the form of higher wages and/or improved working conditions, in which case they would be considered socially beneficial. These outcomes are not mutually exclusive, as the act can confer both private and social benefits. In any case, the analysis is entirely predicated on individuals rationally responding to the incentives they face.

Although the evidence required to test our theory perfectly and verify its conclusions—notably, direct evidence of the existence of a group of incentivizing behaviors—is unavailable, what evidence is available seems consistent with our theory. Our theory is relatively straightforward: (1) there will be more of a behavior when that behavior is rewarded, and (2) changing the nature of the reward will lead to other changes, but the behavior will still occur at a higher rate than before it was rewarded.

Finally, our theory points to a sobering but important realization: misidentifying observed phenomena can lead to corporate policy that actually increases rather than decreases tragic events. In this particular case, Sun Danyong, the employee who took his own life in July of 2009, was almost certainly a suicide consistent with escape theory. Unfortunately, subsequent policy choices—as well-intentioned as they were—may have created an incentive structure that encouraged similar acts. Our work points to the importance of properly identifying problems and designing solutions that *are* effective instead of implementing policies that merely *sound* effective.

References

- Agnew, Robert. 1992. "Foundation for a General Strain Theory of Crime and Delinquency." *Criminology*, 30(1): 47–88.
- Balducci, Cristian, Vincenzo Alfano, and Franco Fraccaroli. 2009. "Relationships between Mobbing at Work and MMPI-2 Personality Profile, Posttraumatic Stress Symptoms, and Suicidal Ideation and Behavior." *Violence and Victims*, 24(1): 52–67.
- Barboza, David. 2010. "A Night at the Electronics Factory." *New York Times*, June 19.
- Bartels, Larry. 1993. "Messages Received: The Political Impact of Media Exposure." *American Political Science Review*, 87(2): 267–85.
- Baumeister, Roy. 1990. "Suicide as Escape from Self." *Psychological Review*, 97(1): 90–113.
- Becker, Gary. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy*, 76(2): 169–217.
- Becker, Gary. 1981. "Altruism in the Family and Selfishness in the Market Place." *Economica*, 48(189): 1–15.

- Bennett, W. Lance. 1996. "An Introduction to Journalism Norms and Representations of Politics." *Political Communication*, 13(4): 373–84.
- Boccio, Dana, and Andrea Macari. 2014. "Workplace as a Safe Haven: How Managers Can Mitigate Risk for Employee Suicide." *Journal of Workplace Behavioral Health*, 29(1): 32–54.
- Brainerd, Elizabeth. 2001. "Economic Reform and Mortality in the Former Soviet Union: A Study of the Suicide Epidemic in the 1990s." *European Economic Review*, 45(4–6): 1007–19.
- Brians, Craig Leonard, and Martin P. Wattenberg. 1996. "Campaign Issue Knowledge and Salience: Comparing Reception from TV Commercials, TV News and Newspapers." *American Journal of Political Science*, 40(1): 172–93.
- Chan, Jenny. 2013. "A Suicide Survivor: The Life of a Chinese Migrant Worker at Foxconn." *Asia-Pacific Journal*, 11(31): 1–22.
- Chang, Chris. 2010. "The Shocking Conditions Inside China's Brutal Foxconn Factory." *Business Insider*, May 19.
- Chang, Gordon G. 2010. "Suicides at Apple Supplier in China." *Forbes*, May 28.
- Cheng, Qijin, Feng Chen, and Paul Yip. 2011. "The Foxconn Suicides and Their Media Prominence: Is the Werther Effect Applicable in China?" *BMC Public Health*, 11(1): 841.
- China.org.cn. 2015. "Farmer Income to Reach 11,000 Yuan in 2015." April 22.
- Chuang, Hwei-Lin, and Wei-Chiao Huang. 1997. "Economic and Social Correlates of Regional Suicide Rates: A Pooled Cross-Section and Time-Series Analysis." *Journal of Behavioral and Experimental Economics*, 26(3): 277–89.
- Coyne, Christopher, and Peter Leeson. 2009. *Media, Development, and Institutional Change*. Cheltenham, UK: Edward Elgar.
- Demir, Defne, and John Rodwell. 2012. "Psychosocial Antecedents and Consequences of Workplace Aggression for Hospital Nurses." *Journal of Nursing Scholarship*, 44(4): 376–84.
- Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer. 2003. "Who Owns the Media?" *Journal of Law and Economics*, 46(2): 341–82.
- Duhigg, Charles, and Keith Bradsher. 2012. "Apple, America and a Squeezed Middle Class." *New York Times*, January 22, print version.
- Farrell, Nick. 2009. "Apple Contractor Pays Suicide's Family \$44,000." *Inquirer*, July 28.
- Golding, Peter, and Graham Murdock, eds. 1997. *The Political Economy of the Media*, 2 vols. Cheltenham, UK: Edward Elgar.
- Hamermesh, Daniel S., and Neal M. Soss. 1974. "An Economic Theory of Suicide." *Journal of Political Economy*, 82(1): 83–98.
- Herman, Edward S., and Noam Chomsky. 1988. "Manufacturing Consent: A Propaganda Model." In *Manufacturing Consent*. New York: Pantheon.
- Hogg, Chris. 2010. "Foxconn Factory Ends Condolence Payments over Suicides." *BBC News*, June 9.
- Lester, Bijou. 2001. Learnings from Durkheim and Beyond: The Economy and Suicide." *Suicide and Life-Threatening Behavior*, 31(1): 15–31.
- Marcotte, Dave E. 2003. "The Economics of Suicide, Revisited." *Southern Economic Journal*, 69(3): 628–43.
- Mirza, Beth. 2012. "Workplace Stress Hits Three-Year High." *HR Magazine*, 57(4): 15.

- Mondak, Jeffery J. 1995. "Newspapers and Political Awareness." *American Journal of Political Science*, 39(2): 513–27.
- Moore, Malcolm. 2010. "Protest at Chinese iPad Maker Foxconn after 11th Suicide Attempt This Year." *Telegraph*, May 25.
- Ngai, Pun, and Jenny Chan. 2012. "Global Capital, the State, and Chinese Workers: The Foxconn Experience." *Modern China*, 38(4): 38–410.
- Niedl, Klaus. 1996. "Mobbing and Well-Being: Economic and Personnel Development Implications." *European Journal of Work and Organizational Psychology*, 5(2): 239–49.
- Osnos, Evan. 2009. "More on the iPhone Suicide." *New Yorker*, July 24.
- Paul, Rich, and E. Jones. 2009. "Suicide Prevention: Leveraging the Workplace." *EAP Digest*, 29(1): 18–21.
- Powell, Benjamin. 2014. *Out of Poverty: Sweatshops in the Global Economy*. New York: Cambridge University Press.
- Ramzy, Austin. 2012. "Why Workers in China Are Threatening Mass Suicide." *Time*, January 12.
- Renters*. 2010. "Foxconn to Raise Wages Again at China Plant." October 1.
- Renters*. 2012. "Hyundai Union Threatens Stoppages after Worker Self-Immolation." January 8.
- Sen, Amartya. 1984. *Poverty and Famines*. Oxford: Oxford University Press.
- Sen, Amartya. 1999. *Development as Freedom*. New York: Knopf.
- Sin, Ben. 2016. "Latest Foxconn Worker Deaths Build Case for Apple to Move Operations from China." *Forbes*, August 22.
- SINA English*. 2013. "Two More Suicides at Foxconn." May 2.
- Suzuki, Tomoya. 2008. "Economic Modeling of Suicide under Income Uncertainty: For Better Understanding of Middle-Aged Suicide." *Australian Economic Papers*, 47(3): 296–310.
- Sutter, Daniel. 2004. "An Indirect Test of the Liberal Media Thesis Using Newsmagazine Circulation." Manuscript, University of Oklahoma.
- Tam, Fiona. 2010. "Foxconn Factories Are Labour Camps: Report." *South China Morning Post*.
- Topping, Alexandria. 2009. "Apple Factory Worker Kills Himself after Vanishing of Prototype." *Guardian*, July 22.
- Waterman, Will. 2010. "Foxconn Ends Death Payouts to Halt Suicides: Report." *Renters*, June 8.
- Watts, Jonathan. 2010. "Foxconn Offers Pay Rises and Suicide Nets as Fears Grow over Wave of Deaths." *Guardian*, May 28.
- Williams, Matt. 2012. "Foxconn Audit Finds Illegal Overtime and Unpaid Wages at Apple Factory." *Guardian*, March 29.
- Yildirim, Aytolan, and Dilek Yildirim. 2007. "Mobbing in the Workplace by Peers and Managers: Mobbing Experienced by Nurses Working in Healthcare Facilities in Turkey and Its Effect on Nurses." *Journal of Clinical Nursing*, 16(8): 1444–53.