At one point or another, all of us have received an unwanted gift from a well-meaning friend or relative. Out of politeness we may wear the unwanted garment at the next family reunion, or make a halfhearted stab at reading the 700-page tome. Still, we must reach the inescapable conclusion that the money spent on the gift was almost entirely wasted.

The loss in value described above — the difference between what was paid for the gift and what the gift is worth to the recipient — is one example of the economic concept of “deadweight loss.” Technically, deadweight loss is defined as the waste resulting from economic inefficiency of any kind, be it through poorly designed regulation, antiquated production techniques, leaky pipes, monopoly power over a market, or unwanted gifts.

Deadweight losses are losses for everybody. Removing a deadweight loss must yield a benefit to some while leaving no one else worse off than before. (Such an improvement is called a “Pareto improvement” after the Italian economist Vilfredo Pareto.) Thus, wherever possible, economists and policymakers would like to eliminate deadweight losses from the economy.

The magnitude of these losses can be quite significant. In a paper entitled “The Deadweight Loss of Christmas,” Yale University economist Joel Waldfogel attempts to estimate the magnitude of the loss from unwanted presents during the holiday season by asking his students for the total dollar value of the gifts they received as well as the dollar value they would be willing to pay for those same gifts.

Using this methodology, Waldfogel estimates that anywhere between 10 percent and 30 percent of the price of a typical gift is a deadweight loss. Thus, on average, a gift for which the giver paid $100 would be worth only between $70 to $90 to the recipient. This discrepancy constitutes a deadweight loss because the giver could have made the person just as well off by giving them the smaller cash value in lieu of the gift. Even taking the conservative estimate that the deadweight loss is closer to 10 percent than 30 percent, Waldfogel estimates that at least $4 billion are wasted each holiday season.

Waldfogel also finds that close relatives and friends are more likely to give “efficient” gifts whereas distant relatives and people very different in age tend to give unwanted gifts. Further, those groups which are most likely to give an inefficient gift, such as grandparents, are also those most likely to give cash instead of a gift-in-kind.

It is worth noting that Waldfogel’s study explicitly ignores any sentimental value people may place on received gifts. Some psychology studies have found that people place a very high premium on the worth of things they have received as gifts. If this is indeed the case, then gift giving could at times be a form of “value creation.” At the very least there may still be social reasons to engage in gift giving, even if it does result in a deadweight loss.

Certain government actions may also produce deadweight losses. For instance, taxes prevent sellers and buyers from realizing all the gains from trade, and subsidies encourage more consumption than otherwise would occur. In the absence of externalities, then, taxes and subsidies cause deadweight losses.

Harvard University economist Martin Feldstein has argued that the deadweight loss from income taxes in the United States may be as high as 30 percent of the total tax revenue raised. The deadweight loss is caused by taxes leading people to work less and consume more leisure, and by the inefficient substitution of wages into deductible and exempt forms of compensation. For example, high taxes on nonexempt income may prompt individuals to adopt payments in the form of health care or educational subsidies. These noncash payments are inefficient for the same reason that gifts are often inefficient — $500 worth of health care is less useful than $500 in cash, which can be spent on health care or any number of other goods. Furthermore, deadweight losses from taxation can appear in even more subtle guises; employees may opt for more opulent working conditions (larger offices, for instance) and lower pay to avoid high income taxes.

This last example highlights that deadweight losses are often very hard to detect because sometimes it is not obvious who is “paying” the costs associated with some forms of inefficiency. Nevertheless, such losses can have severe consequences for the well-being of large numbers of people.

Policymakers must remain cognizant of such losses and attempt to structure programs so as to minimize loss-creating inefficiencies. Deadweight loss also affects our everyday lives. While a cash gift may not be appropriate for an anniversary, it might be optimal for a distant nephew’s birthday present. In giving him cash, you are most likely saving him, and yourself, some money.