

Informal and Formal, Unpaid and Underpaid: Theorizing the Care Penalty

Nancy Folbre

University of Massachusetts Amherst

Paper presented at joint ASGE/IAFFE session,
Allied Social Science Association, January 2015, Boston MA

About twelve years ago, Paula England, Michelle Budig and I published a paper entitled “The Wages of Virtue” arguing that jobs involving care for others tend to pay less than other jobs.¹ We presented results from a fixed-effects econometric analysis using data from the National Longitudinal Survey of Youth showing that most occupations that involve care for others pay less than others, net of a long list of control variables. Recently, two papers using British data presented similar empirical results, but expressed skepticism regarding the theoretical substance of our argument.²

This skepticism derives, in part, from a reluctance to acknowledge similarities between unpaid and paid care. Research on these two types of care (also designated informal and formal, as in the title of this session) tends to take place in very different arenas of economic theory. Both the assumptions and the methods deployed in analysis of the family differ substantially from those deployed in analysis of the labor market.

In this paper, I develop a unified perspective on care work, picturing unpaid and paid care as components of a “care sector” with similar inputs and outputs and similar implications for undervaluation of services of care provision.³

I argue that the emotional attachments and moral commitments central to care for dependents help solve a contracting problem that markets alone cannot solve, but impose significant risks on those who specialize in care provision. This perspective explicitly links analysis of bargaining power in the household to an analysis of bargaining in the labor market. It also emphasizes similarities in the supply of care services in both unpaid and paid domains.

In this presentation I:

- Review previous work arguing that both paid and unpaid care, often combined in the provision of care for dependents, share important characteristics: difficulty measuring output, significant intrinsic motivation, lack of consumer sovereignty, and highly gendered norms.
- Explain why emotional engagement in care work reduces bargaining power in the home and the polity.
- Argue that similar dynamics operate in the labor market, where care workers are seldom paid on the basis of their actual contributions or paid a higher-than-market clearing or

“efficiency wage” and the specific characteristics of care work influence the supply of both unpaid and paid care services.

Beyond Separate Spheres

Economists tend to treat the family and the labor market as separate spheres, applying very different behavioral assumptions to each. The family is often treated as a realm of altruism where individuals derive utility from the wellbeing of others. The labor market is often treated as a realm of self-interest, where workers care only about their earnings relative to their effort.

This “separate spheres” approach has never been entirely convincing. It has become less so as many services previously performed within families have shifted to the labor market. The expansion of paid care services for children, individuals who are ill or disabled, and the elderly reflects, in part a reduction in family time devoted to such activities.⁴

Yet many aspects of the labor process remain similar: in many occupations in health, education, and social services, concern for the wellbeing of the care recipient has implications for the quality of the services provided. This does not imply that moral or altruistic concerns are absent from other occupations.⁵ However, it does imply that they play a special role in jobs that involve direct personal care of others.⁶

Both child care and elder care workers typically know the names of those they care for, grow attached to them, and worry about their well-being. Even work in more credentialed care occupations, such as teaching and nursing, has significant personal and emotional dimensions.

Work in care occupations and industries is generally less “personal” than unpaid family care. On the other hand, it is not nearly as “impersonal” as stylized models of labor supply suggest.

Synergies and Spillovers

Economic theory provides a useful vocabulary for analyzing the similarities between unpaid and paid care work in more specific terms. Both unpaid and paid care contribute to the development and maintenance of human capabilities, a process that involves considerable collaboration (or “team production”) and generates significant externalities or spillovers. As a result, it is difficult to accurately measure inputs into or specific outputs of care. Indeed, the emotional dimensions of care challenge the traditional distinction between a utility function and a production function.⁷ The physical well-being of human beings is linked to their emotional well-being. Yet, as neoclassical theory emphasizes, interpersonal utility comparisons are impossible to observe and difficult to infer.

Human development is a lengthy and complex process that is difficult to directly observe. Like a parent, a teacher can have a lasting influence on a child’s maturation generating significant benefits not only for the child but for all those who interact with the mature adult. For instance, one recent empirical analysis of teachers’ impacts on test scores found that replacing a teacher in the bottom 5% with one of average value added would increase the present value of students’ lifetime income by more than \$250,000, far more than any teacher earns in a year.⁸ Such

measures of value added are only approximate, since test scores represent only one dimension of success, less important, by some accounts, than “emotional intelligence” and other traits distinct from the standard set of cognitive skills.⁹

In market-provided education and health, non-market inputs including parental capabilities and an individual’s own personal habits jointly produce the outcomes that should be considered “output.” Conventional measures of the “output” of paid education and health care are, like measures of the “output” of government, almost entirely based on the value of the inputs paid for in the market, which represent only a small portion of their total value.¹⁰

In more colloquial terms, “it takes a village.” It is often difficult to distinguish the impact of a teacher from that of other adults in a child’s environment. Likewise, in health, successful treatment of acute injuries and diseases, as well as more chronic problems, is often conditional on preventive care encouraged by other adults and implemented by patients themselves. Many diffuse aspects of the social and economic environment, including exposure to violence, economic stress, and inequality also influence health outcomes.¹¹ James Coleman pointed to such externalities long ago when he emphasized the important role of social capital in the creation of human capital.¹²

Lack of Consumer Sovereignty

The scope of explicit contracts for care provision is limited. Those who need care are often unable to exchange anything in return for it. When intertemporal exchanges are feasible, they are difficult to enforce, even within the family. They rely, to a very large extent, on altruistic preferences.¹³ Even Gary Becker, an economist generally confident of market forces, emphasizes that the family and the state can solve coordination problems that lie beyond the reach of individual exchange.

Within the market, a significant portion of all care services are directed toward or organized around the needs of dependents who lack consumer sovereignty, rely on third-party payment, and may be vulnerable to opportunistic behavior. As a result, profit-maximizing strategies create temptations to provide low-quality services.¹⁴

Not surprisingly, a significant share of all paid care services are provided either in the public sector or by non-profit organizations, and are generally subject to close regulation. Their provision is partly governed by normative constraints such as concern for human rights and welfare. The quality of services provided is protected, to varying degrees, by the pro-social motivations of paid care providers, both managers and workers.

Intrinsic Motivation

Both unpaid and paid care are often motivated by a particular type of altruism aimed at fostering the wellbeing of care recipients rather than their subjective happiness.¹⁵ They may also include a “warm-glow” dimension—a desire to personally help another.¹⁶

Some economists argue that such altruism represents a source of intrinsic satisfaction that compensates for lower income, a so-called “compensating differential.” Victor Fuchs applies this reasoning to the family, suggesting that mothers are willing to pay a higher price for children than fathers are.¹⁷ The same reasoning has been applied to jobs that allow workers to express their altruistic preferences or moral commitments.¹⁸ Willingness to work for lower pay can be interpreted as a signal of quality when employers want to select for a high level of intrinsic motivation.¹⁹

This reasoning is plausible, but incomplete, because it assumes that altruistic preferences are exogenously given. However, such preferences may be partially endogenous, influenced by economic outcomes. Recent research on the relationship between intrinsic and extrinsic motivation emphasizes this possibility, pointing to conditions under which intrinsic motivation can either be “crowded out” or “crowded in.”²⁰

Individuals who believe their gifts to others are prized and appreciated are more likely to continue giving than those who are disregarded or disrespected. Two individuals who love each other deeply often find that their sentiments change over time, or are undermined by lack of reciprocity or trust.

One could argue that altruism—especially altruism towards dependents—offers a solution to a contracting problem that more instrumental exchange cannot solve. Altruistic preferences could be construed as an unpriced natural resource subject to over-exploitation or a form of social capital subject to depreciation.

If this is the case, such preferences could be weakened by economic trends that render them more costly to develop and maintain.²¹

Gender and Care

Women disproportionately provide both unpaid and paid care. The meanings of femininity and masculinity are permeated with qualities directly relevant to the supply of care, inserting social norms directly into labor market dynamics.²² Traditional gender norms treat caregiving as a feminine obligation that benefits society as a whole.²³ Decisions regarding occupational choice and continuity of labor force experience are significantly influenced by gender identity.²⁴

Gender differences in preferences partly reflect different priorities for the care of others.²⁵ As Nicole Fortin observes, the percentage of women in a National Longitudinal Survey in the U.S. who stated that “opportunities to be helpful to others or useful to society” are important in selecting a career” exceeded that of men by more than ten percentage points.²⁶ Her empirical results also suggest that men put a higher priority on money than women do.

Women who hope to become mothers benefit from sustained relationships with men who will provide at least some support for this costly commitment. Educational attainment appears to improve their success both in the marriage market and the labor market. However, entrance into traditionally female jobs leads to lower earnings in the labor market, while gender non-

conformity is penalized in the dating and marriage market.²⁷ Other asymmetries are apparent: evidence suggests that women in high-status jobs are penalized for aggressive personality traits, while men are rewarded for them.²⁸

Indeed, gender norms and the social institutions that enforce them may have evolved partly as a response to the market failures described above.

Unpaid Care and Bargaining

Almost by definition, ability to threaten withdrawal of care services from those who are emotionally cared for is limited. Altruistic commitments create economic vulnerability. Caregivers may become “prisoners of love” who find it difficult to bargain over or renegotiate their responsibilities.

Put slightly differently, concern for care recipients leads to asymmetric payoffs in a Chicken Game: the fear that no one else will take responsibility prevents caregivers from threatening to withdraw their services.²⁹ Caregivers often suffer a first-mover disadvantage, or a hold-up problem. Indeed, the difficulty of specifying complete and enforceable contracts can discourage caring commitments.³⁰

Care Bargaining in the Family

One can speak of a metaphorical marriage market, but once a family is formed (especially one that involves joint responsibilities for the care of dependents), interactions more closely resemble a bilateral monopoly.³¹ High transaction costs make exit sticky.³²

Spouses probably can and do bargain over transfers of income that represent at least partial payment for unpaid care.³³ Caregivers in stable family partnerships often fare quite well economically. However, specialization in family care often reduces labor supply to the market and entails the development of person-specific skills that don’t garner a high rate of return outside the family. As a result, they are in a weak fallback position in the event of relationship dissolution.³⁴

Family care work contributes to the development of public goods inside and outside the household.³⁵ Mothers’ strong emotional attachment to children, along with the difficulty of determining the value of parental care, leads to serious problems with child support specification and enforcement.³⁶

While co-resident fathers have increased their participation in child care over time in the U.S., women continue to provide a disproportionate share.³⁷ Gender differences are also prominent in elder care overall, especially controlling for family relationship. One recent study of data from the 2004 Health and Retirement Survey found that daughters not only provide about twice as much care as sons, but that sons do significantly less when daughters are available. As the author puts it, “women do as much parent care as they can, given the constraints they face, while men appear to perform as little as they can, regardless of other factors.”³⁸

Women's specialization in family care both affects and is affected by their specialization in predominantly female occupations such as child care, elder care, teaching, and nursing.³⁹ The skills, preferences, and personality traits deployed in family care often increase productivity in paid care jobs. Many such jobs also offer more scheduling flexibility, making it easier to balance unpaid and paid work. At the same time, the relatively low wages offered in such jobs can discourage career commitment.

Not surprisingly, empirical research shows that mothers pay a significant care penalty in terms of earnings, which accounts for a significant share of the overall wage earnings differential between women and men.⁴⁰

Bargaining in the Polity

The bargaining power of caregivers is also significantly influenced by public policies, which generally take unpaid care for granted because its supply—largely determined by caring commitments—is relatively inelastic.

As changes in welfare administration in the U.S. in 1996 made perfectly clear, care for one's own children is not considered a form of work. Providing exactly the same services to another family's child for pay, on the other hand, can potentially yield a substantial subsidy through the Earned Income Tax Credit. Many low-income parents could increase their income if they were simply willing to swap children from 9 to 5 every weekday.⁴¹

The cash assistance that is made available to some low-income parents on a time-limited basis is far lower than the cash assistance provided to foster parents to undertake similar responsibilities. Within the foster care system, kin caregivers who meet licensing requirements are legally eligible for the same payments as other caregivers. In practice, however, they are often paid less and offered less support.⁴² Indeed, some argue that the “level of support provided to anyone caring for a child should be in inverse proportion to that person's legal and social obligation to care for the child.”⁴³

In recent years, Medicaid subsidies for home and community-based care of adults and children with disabilities have shifted toward consumer-directed programs that allow eligible persons in need of assistance to use public funds to hire family members. This shift is generally considered to have improved care quality while reducing expenditures on institutional or nursing home care for all recipients except those with intellectual or developmental disabilities.⁴⁴ However, policy makers have voiced considerable anxiety over the possibility that many families providing unpaid care would come out of the woodwork to request public remuneration for work that they might otherwise be willing to perform for free. This so-called “woodwork effect” is the topic of a recent issue of the *Journal of Aging and Social Policy*.⁴⁵

Current policies clearly reflect efforts to avoid paying for services that might be freely provided. For instance, while most states allow participants in consumer-directed Medicaid programs to hire a daughter or son, they do not allow hiring of a spouse, the family member most likely to provide care. Ironically, ex-spouses typically are eligible, creating a financial incentive to divorce.⁴⁶ Surveys of home caregivers suggest that when family members are hired they are

often paid significantly less than caregivers hired through an agency, and also provide many more hours of care than they are paid for.⁴⁷

One could argue that policymakers are simply seeking to minimize costs to taxpayers. But in the process they are clearly imposing a penalty that is economically viable because intrinsically motivated caregivers are less willing to bargain over the price of their services. Again, the larger issue is how, in the long run, such practices may influence the supply of intrinsically motivated care.

Care Provision and Wages

Most models of the labor market, including those based on incomplete contracts, continue to focus on “representative firms” that maximize profits in competitive markets and “representative workers” who care only about earnings and effort. Such firms and workers are not representative of the paid care sector of the economy.

Cross-country comparisons show that the relative pay of care workers—the size of the paid “care penalty” is significantly affected by labor market regulation and cultural norms.⁴⁸ Yet the theoretical issues raised above are also clearly relevant.

Market Failures

Departures from the textbook model of competitive market equilibrium have significant implications. Imperfect competition creates an environment in which wages are partially determined by bargaining power. If firms face an upward sloping labor supply curve, whether as a result of market frictions or market power, any factor that reduces the elasticity of labor supply generates rents that may be captured by an employer.⁴⁹

Incomplete information often leads to market outcomes that fall short of ideals of efficient equilibria.⁵⁰ For instance, employers who find it costly to monitor worker effort may pay workers an efficiency wage above the market-clearing wage in order to increase the cost of job loss. Paid care workers do not appear to earn efficiency wages—indeed, just the reverse.

A partial explanation emerges from consideration of the distinctive difference in information problems: standard efficiency wage models assume the employer finds it costly to measure worker effort, but can easily measure the effect of effort on the worker’s marginal revenue product. In care work, the information problem is reversed: the employer can often rely on intrinsic motivation to provide effort, but either cannot measure or cannot directly capture the effect of increased output through increased marginal revenue product.

Payment schemes (such as capitation or quota systems) do not directly measure quality of output) and may actually penalize it (e.g. paying a teacher or nurse by how many students or patients are served in a day). Further, positive externalities make it difficult if not impossible to estimate the marginal product of labor. Care consumers often purchase a service in hopes of achieving an outcome that may or may not result.

Measures designed to reward employees for their performance are much less common in the care sector than elsewhere in the economy. As Edward Lazear and Kathryn Shaw put it, “the lower the cost of measuring output, the greater the likelihood that pay is a function of output.” They cite a survey by Payscale.com reporting that the median bonus as a percentage of total compensation is about 40% for salespersons but only about 2% for administrative assistants, social workers and nurses.⁵¹

Yet Lazear also argues that the same types of pay-for-performance incentives that increase productivity in activities such as windshield manufacture would increase teacher productivity.⁵² The Obama administration has prioritized implementation of such incentive programs in its Race to the Top Program. Teachers and their unions tend to be critical of pay-for-performance measures that rely heavily on standardized tests, arguing that these fall far short of their own occupational goal of developing students’ larger capabilities and also discourage collaboration among teachers.⁵³ In general rewards for easily measurable performance tend to reallocate effort away from more intangible goals.⁵⁴ Empirical assessments of the impact of pay-for-performance programs for teachers will doubtless shed light on their incentive effects on teachers (so far, not very convincing⁵⁵). However, they will not be able to measure impacts on students’ engagement with learning or commitment to improving their skills.

An additional complication results from joint production. Market care providers sell a service input whose contribution to an output called “education” or “health” depends largely on the personal characteristics of the consumer. The effects of teacher effort are mediated by students’ capabilities and effort. Likewise the effects of paid medical care are mediated by patients’ capabilities and effort. Production synergies combine with individual heterogeneity to make it difficult to identify a paid worker’s specific contribution.

Social Preferences

A second shortcoming of the efficiency wage model arises from its simplistic depiction of worker preferences, with a utility function typically including only wages and effort. Caring preferences presumably reduce the disutility of labor. As the logic of compensating differentials suggests, there is generally a trade-off between wages and desirable job attributes.

Economists tend to describe desirable job attributes as those offering benefits to workers, not to employers, consumers, or society as a whole. But a paid employee who provides a “gift” of additional effort above and beyond job requirements lowers the market cost of service delivery.

Depending on market structure and the elasticity of demand, this gift may benefit firms or consumers or both. An interesting—if extreme—example is provided by for-profit organizations that offer paid “volunteer vacations” matching volunteers who are willing to pay for the experience with organizations that can effectively utilize them.⁵⁶ In this case, the benefits produced by the volunteer work itself go unmeasured.

Acknowledgement of gifts alters the interpretation of job choice. For instance, economists sometimes suggest that public sector workers earn less, on average, than those in the private sector because they are risk averse, willing to sacrifice pay for job security.⁵⁷ Yet research

suggests that many public sector workers are partly motivated by a desire for public service.⁵⁸ In other words, they may earn less than others not because they are risk-averse but because they care about those they serve. Empirically, it is difficult to distinguish between the two interpretations: that, in a sense, is the point.

One could describe caring preferences, like other personal traits such as conscientiousness, as “efficiency enhancing.”⁵⁹ But unlike the other traits that are typically included in this category, caring preferences also appear to be “pay-lowering.”

The Supply of Unpaid and Paid Care Services

The effects of intrinsic motivation on both unpaid and paid care work can be illustrated in a model of supply and demand that departs from the standard model in Figure 1. As indicated in Figure 2, there is a fixed supply of unpaid care labor that is supplied to dependents at a price of zero. Reliance on this source of labor creates a larger consumer surplus than would be achieved through reliance on the upward-sloping supply of paid labor, designed by *S*. If demand exceeds the fixed supply of zero-cost labor, consumers must purchase care.

If paid workers, like unpaid care workers, have caring preferences, the supply of their labor is shifted to the right to *S'*, lowering the equilibrium wage below that determined by the conventional supply curve *S*.

The discontinuity in the combined supply of unpaid and paid labor signals a sharp jump in the price of care once the supply of unpaid care has been exhausted, a phenomenon that is consistent with the economic stresses many families experience when they find it necessary to pay for child care or elder care. The effects of this discontinuity may be exacerbated by minimum wage effects as illustrated in Figure 3. Here a gap appears in the supply curve, indicating a shortfall that cannot be met by either unpaid or paid workers. This too is consistent with the pressures many consumers of child care and elder care experience, leading in some areas to extensive reliance on “under the table” arrangements such as employment of undocumented workers.

What the simple supply-and-demand curve analysis cannot demonstrate is the effect of the supply of unpaid care labor on paid care labor, and vice versa. Yet it seems logical that they would influence one another, if only because the same individuals are often supplying both (though often to different “consumers”).

On the one hand, an increase in the market wage for care services may attract more women into the labor market, thus reducing the supply of unpaid care. On the other hand, an increase in the care wage also has an income effect, which could enable more workers to express their caring preferences, increasing the supply of unpaid care and shifting the supply of paid care to the right. In today’s economy, many families face a difficult trade-off between earning enough income to support their dependents and finding enough time to devote to their personal care.

Another interaction that cannot be pictured in the graph is the effect of both wages and regulation on caregivers’ perceptions that society considers their work a valuable contribution. Depreciation and disregard of intrinsic motivation, along with a tendency to label low-earners as lazy or risk-

averse could shift the supply of both forms of care work to the left. Empirical research suggests that intrinsic motivation is not necessarily crowded out by extrinsic reward and may, under certain conditions, be strengthened by it.⁶⁰ In other words, paying caring workers more could well encourage and sustain caring preferences.

Figure 1. Standard Labor Market

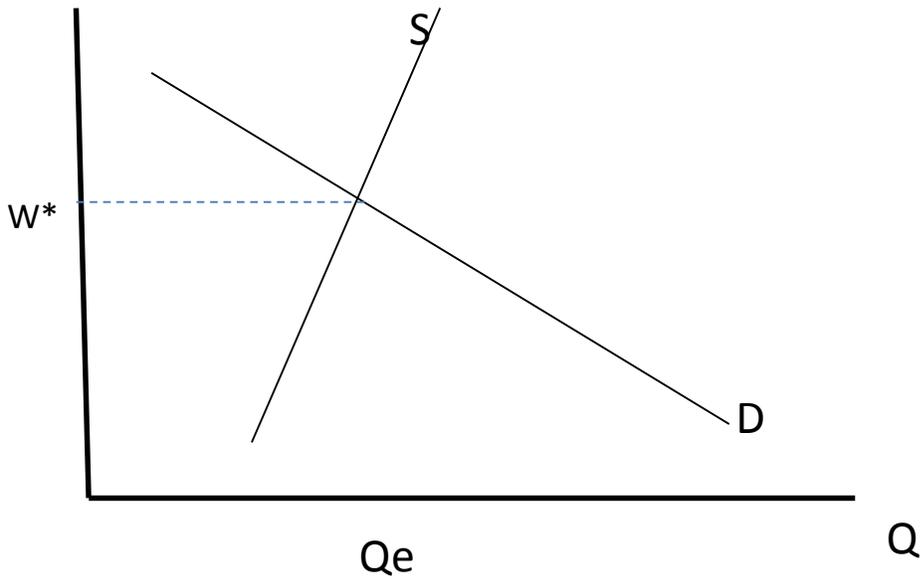


Figure 2. Market for Care Work, Unpaid and Paid

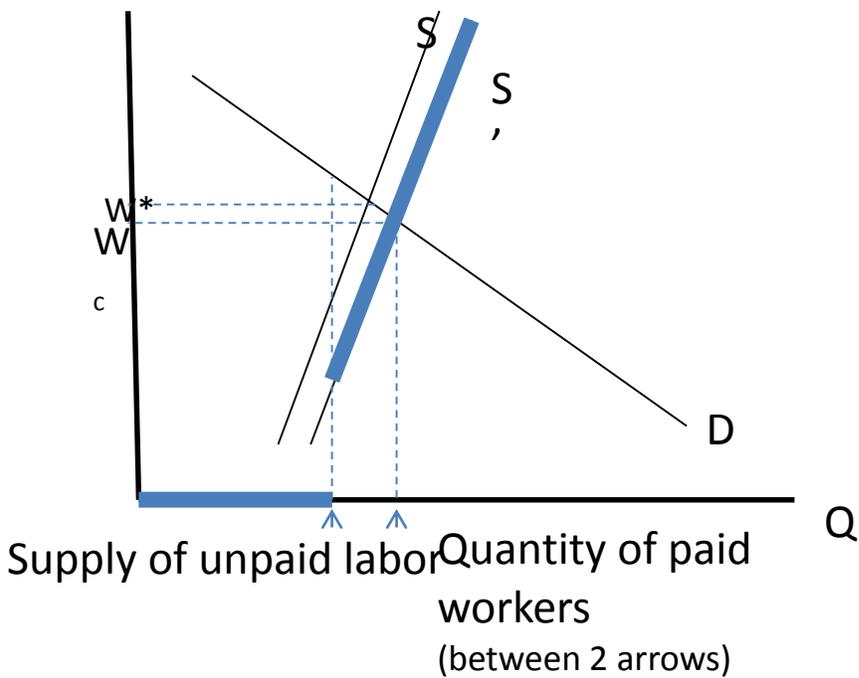
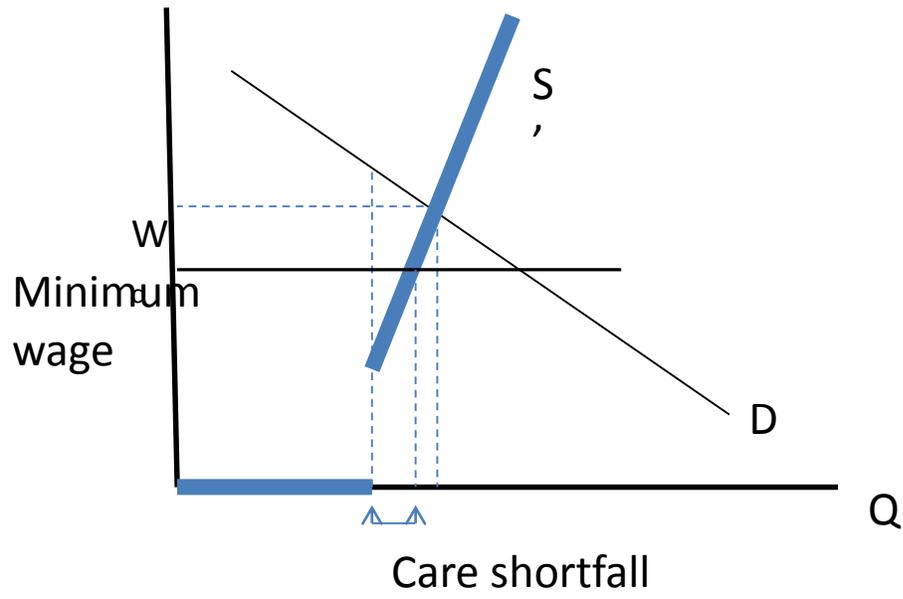


Figure 3. Minimum Wage and Market for Care Work



Notes

¹ Paula England, Michelle Budig, Nancy Folbre, “Wages of Virtue: The Relative Pay of Care Work,” *Social Problems* 49:4 (November 2002): 455-473.

² Barry T. Hirsch and Julia Manzella, “Who Cares—and Does it Matter? Measuring Wage Penalties for Caring Work,” IZA Working Paper 8388, August 2014; David N. Barron and Elizabeth West, “The Financial Costs of Caring in the British Labor Market: Is There a Wage Penalty for Workers in Caring Occupations?” *British Journal of Industrial Relations* 51:1 (March 2013), 104-123.

³ For a more detailed discussion of this general perspective see Nancy Folbre, editor, *For Love and Money: Care Provision in the U.S.* (New York: Russell Sage Foundation, 2012).

⁴ Nancy Folbre and Julie Nelson, “For Love or Money?” *The Journal of Economic Perspectives*, 14:4 (2000), 123-140.

⁵ Lisa Dodson, *The Moral Underground: How Ordinary Americans Subvert an Unfair Economy.* (New York: New Press, 2013).

⁶ Lisa Dodson and Rebekah Zinzavage, “It’s Like a Family...Caring Labor, Exploitation, and Race in Nursing Homes,” *Gender and Society* 21 (2007), 905-28.

⁷ The problem is analogous to that of distinguishing between household production functions and utility functions, as explained long ago by Robert A. Pollak and Michael L. Wachter, “The Relevance of the Household Production Function and Its Implications for the Allocation of Time,” *Journal of Political Economy* 83:2 (April 1975), 255-278.

⁸ Raj Chetty, John N. Friedman, Jonah E. Rockoff. “The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood,” National Bureau of Economic Research Working Paper 17699, available at <http://www.nber.org/papers/w17699>

⁹ Daniel Goleman, *Emotional Intelligence* (New York: Bantam, 2006); Samuel Bowles, Herbert Gintis, and Melissa Osborne, “The Determinants of Earnings: A Behavioral Approach,” *Journal of Economic Literature* 39:4 (2001), 1137-1176.

¹⁰ For more discussion, see Katharine G. Abraham and Christopher Mackie, Editors, Panel to Study the Design of Nonmarket Accounts, National Research Council, *Beyond the Market: Designing Nonmarket Accounts for the United States.* Washington D.D. National Research Council, 2005.

¹¹ Richard Wilkinson and Kate Pickett, *The Spirit Level: Why Equality is Better for Everyone.* London: Penguin, 2010.

¹² James Coleman, "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 84 (1988):S95-S120.

¹³ Shelly Lundberg and Robert A. Pollak, “Efficiency in Marriage,” *Review of Economics of the Household* 1 (2003), 153-167; M.J. Baker and J.P. Jacobsen, “Marriage, Specialization, and the Gender Division of Labor,” *Journal of Labor Economics* 25:4 (2007), 763-793.

¹⁴ See, for example, David J. Deming, Claudia Goldin, and Lawrence F. Katz, “The For-Profit Postsecondary School Sector: Nimble Critters or Agile Predators,” *Journal of Economic Perspectives*, 26:1 (2012), 139-64; William Cabin, David U. Himmelstein, Michael L. Siman and Steffie Woolhandler, “For-Profit Medicare Home Health Agencies’ Costs Appear Higher And Quality Appears Lower Compared To Nonprofit Agencies,” *Health Affairs* 33:8 (August 2014), 1460-1465.

¹⁵ Robert A. Pollak, “Tied Transfers and Paternalistic Preferences,” *American Economic Review* 78:2 (1988):240-244.

¹⁶ For more on “warm-glow,” see James Andreoni, “Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving,” *Economic Journal* 100 (1990) 464-467. Feminist theorist Seyla Benhabib (1987) provides a thoughtful discussion of the distinction between holding a generalized value about obligation to a non-specified others and caring about specific others.

¹⁷ Victor Fuchs, *Women’s Quest for Economic Equality* (Cambridge, MA: Harvard University Press, 1990).

¹⁸ Robert Frank, *What Price the High Moral Ground?* Princeton, NJ: Princeton University Press, 2010.

¹⁹ Anthony Hayes, “The Economics of Vocation, or, Why is a Badly Paid Nurse a Good Nurse?” *Health Economics* 24:3 (May 2005), 561-565; for critiques of this argument, see Nancy Folbre and Julie Nelson, “Why a Well-Paid Nurse is a Better Nurse,” *Nursing Economics* 24:3 (2006), 127-130 and Lowell J. Taylor, “Optimal Wages in the Market for Nurses: An Analysis Based on Heyes’ Model,” *Health Economics* 26:5 (September 2007), 1027-1030.

²⁰ Samuel Bowles and Sandra Polania-Reyes, “Economic Incentives and Social Preferences: Substitutes or Complements?” *Journal of Economic Literature* 50:2 (2012), 368-425.

²¹ Samuel Bowles, “Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions,” *Journal of Economic Literature* 36:1 (1998), 75-111.

²² For more detailed discussion, see Folbre, “Should Women Care Less?”

²³ For more discussion, see Nancy Folbre, “Family Responsibility Discrimination: An Intellectual History,” paper to be presented at the meetings of the ASSA, Boston, 2015.

²⁴ George A. Akerlof and Rachel E. Kranton, *Identity Economics: How Our Identities Shape Our Work, Wages, and Well-Being*. Princeton, NJ: Princeton University Press, 2010.

²⁵ Lex Borghans, Bas ter Weel, and Bruce A. Weinberg, “Interpersonal and Labor Market Outcomes,” *Journal of Human Resources* 43:4 (2008), 815-858; Thomas N. Daymont and Paul J.

Andrisani, "Job Preferences, College Major, and the Gender Gap in Earnings," *The Journal of Human Resources* 19:3 (1984), 408-428.

²⁶ Nicole M. Fortin, "The Gender Gap Among Young Adults in the U.S.: The Importance of Money vs. People," *Journal of Human Resources* 43:3 (2008), 884-918.

²⁷ M.V. Lee Badgett and Nancy Folbre, "Job Gendering: Occupational Choice and the Marriage Market," *Industrial Relations* 42:2 (April 2003), 270-298.

²⁸ Samuel Bowles, Herbert Gintis, and Melissa Osborne, "Incentive-Enhancing Preferences: Personality, Behavior, and Earnings," *The American Economic Review* 91:2 (2001), 155-158.

²⁹ "Did Father Know Best? Families, Markets and the Supply of Caring Labor," (with Thomas Weisskopf), in *Economics, Values and Organization*, ed. Avner Ben-Ner and Louis Putterman, 171-205. Cambridge: Cambridge University Press.

³⁰ Shelley Lundberg and Robert A. Pollak, "Efficiency in Marriage," *Review of the Economics of the Household* 1 (2003) 153-167; Liliana E. Pezzin, Robert A. Pollak, and Barbara S. Schone, "Efficiency in Family Bargaining: Living Arrangements and Caregiving Decisions of Adult Children and Disabled Elderly Parents," *Economic Studies* (2007) 53 (1): 69-96.

³¹ Paula England and George Farkas, *Households, Employment, and Gender*. New York: Aldine, 1986.

³² Robert A. Pollak, "A Transaction Cost Approach to Families and Households," *Journal of Economic Literature* 23:2 (1985), 581-608.

³³ Shoshana Grossbard-Schechtman, *On the Economics of Marriage*, first edition (Boulder, CO: Westview Press, 1993).

³⁴ Pamela J. Smock, "Gender and the Short-Run Economic Consequences of Marital Disruption," *Social Forces* (1994) 73 (1): 243-262.

³⁵ Shelly Lundberg, "Gender and Household Decision-Making," 116-133 in *Frontiers in the Economics of Gender*, ed. Francesca Bettio and Alina Verashchagina. New York: Routledge, 2008

³⁶ Paula England and Nancy Folbre, "Involving Dads: Parental Bargaining and Family Well Being, in *Handbook of Father Involvement: Multidisciplinary Perspectives*, ed. Catherine Tamis-LeMonda and Natasha Cabrera (Mahwah, N.J.: Erlbaum Associates, 2002).

³⁷ See Folbre, *For Love and Money*, op.cit.

³⁸ Angelina Grigoryeva, "When Gender Trumps Everything: The Division of Parent Care Among Siblings," Center for the Study of Social Organization Working Paper 9, April 2014.

³⁹ See Folbre, *For Love and Money*, op. cit.

⁴⁰ Michelle J. Budig and Paula England, “The Wage Penalty for Motherhood,” *American Sociological Review* 66:2 (2001), 204-225; Jane Waldfogel, “Understanding the “Family Gap” in Pay for Women with Children,” *The Journal of Economic Perspectives* 12:1 (1998), 137-156; Michelle J. Budig, Joya Misra, and Irene Boeckman, “The Motherhood Penalty in Cross-National Perspective: The Importance of Work–Family Policies and Cultural Attitudes,” *Social Policy* 19:2(2012), 163-193.

⁴¹ For a more detailed illustration, see Nancy Folbre, Valuing Houses but not Housewives, *New York Times Economix Blog*, September 9, 2013, available at <http://economix.blogs.nytimes.com/2013/09/09/valuing-houses-but-not-housewives/?module=Search&mabReward=relbias%3As%2C{%221%22%3A%22RI%3A10%22}>

⁴² Ann E. Schwartz, “Societal Value and the Funding of Kinship Care,” *Social Service Review* 76:3 (2002), 430-459. Shelly Waters Boots and Rob Geen, “Family Care or Foster Care? How State Policies Affect Kinship Caregivers,” Washington, D.C.: Urban Institute, available at <http://www.urban.org/publications/309166>

⁴³ Helaine Hornby, Dennis Zeller, and David Karraker. 1996. “Kinship Care in America: What Outcomes Should Policy Seek?” *Child Welfare* 75 (5), 397–417.

⁴⁴ Mitchell P. LaPlante, “The Woodwork Effect in Medicaid Long-Term Services and Supports,” *Journal of Aging and Social Policy*, 25 (2013), 161–180.

⁴⁵ *Journal of Aging and Social Policy* 25 (2013).

⁴⁶ For a consumer-oriented discussion of these issues, see <http://www.payingforseniorcare.com/longtermcare/resources/cash-and-counseling-program.html>

⁴⁷ A study of California In-Home Supportive Services found that workers hired directly by consumers (primarily kin) were paid less and less likely to receive fringe benefits than agency workers. A.E. Benjamin and R. Matthias, “Work–Life Differences and Outcomes for Agency and Consumer-Directed Home-Care Workers,” *Gerontologist*, 44:4 (2004), 479–88; A survey of Medicaid-financed home-care workers in Arkansas, Florida, and New Jersey between 2000 and 2003 found that those directly hired by consumers were typically paid for less than half of the care hours they provided. Leslie Foster, Stacy B. Dale, and Randall Brown, “How Caregivers and Workers Fared in Cash and Counseling,” *Health Services Research* 42 (February 2007), 510–532.

⁴⁸ Michelle J. Budig and Joya Misra, “How Care-Work Employment Shapes Earnings in Cross-National Perspective,” *International Labor Review*, Special Issue: Workers in the Care Economy, 149:4 (2010), 441-460.

⁴⁹ Alan Manning, *Monopsony in Motion. Imperfect Competition in Labor Markets* (Princeton, NJ, Princeton University Press, 2003). For an application to the market for nurses, see Lowell J. Taylor, “Optimal Wages in the Market for Nurses: An Analysis Based on Heyes’ Model,” *Health Economics* 26:5 (September 2007), 1027-1030.

-
- ⁵⁰ Joseph Stiglitz, “Incentives, Risks, and Information,” *Bell Journal of Economics* 6 (1975), 552-579.
- ⁵¹ Edward P. Lazear and Kathryn L. Shaw, “Personnel Economics: The Economist’s View of Human Resources,” *Journal of Economic Perspectives* 21:4 (2007), 91-114.
- ⁵² Edward P. Lazear, “Teacher Incentives,” *Swedish Economic Policy Review*, 10 (2003), 179–214.
- ⁵³ See, for example, John Rosales, “Pay Based on Test Scores?” at <http://www.nea.org/home/36780.htm>, accessed December 13, 2014.
- ⁵⁴ Bengt Holmstrom and Paul Milgrom, “The Firm as an Incentive System.” *American Economic Review* 84:4 (1994), 972-91.
- ⁵⁵ Derek C. Briggs, Michael Turner, Charles Bibilos, and Andrew Maul, “The Prospects of Teacher Pay for Performance,” University of Colorado Boulder CADRE Working Paper 2014-01, May 6, 2014.
- ⁵⁶ Examples of for-profit volunteer-sending organizations include Projects Abroad, i-to-i, ProWorld Service Corps, Global Crossroad, and Volunteer Adventures. See <http://www.idealists.org/info/IntlVolunteer/Program>
- ⁵⁷ See, for instance, T. Dohmen and A. Falk, “Performance Pay and Multidimensional Sorting: Productivity, Preferences, and Gender,” *American Economic Review* 101 (2011), 556-590.
- ⁵⁸ James L. Perry, Anne Hondeghem, and Lois Recascino Wise, “Revisiting the Motivational Bases of Public Service: Twenty Years of Research and an Agenda for the Future,” *Public Administration Review* (September-October 2010).
- ⁵⁹ Samuel Bowles, Herbert Gintis and Melissa Osborne, “Incentive-Enhancing Preferences: Personality, Behavior, and Earnings,” *The American Economic Review* 91:2 (2001), 155-158.
- ⁶⁰ Samuel Bowles and Sandra Polania-Reyes, “Economic Incentives and Social Preferences: Substitutes or Complements?” *Journal of Economic Literature* 50:2 (2012), 368-425.