RAISING CHILDREN TO WORK HARD: ALTRUISM, WORK NORMS, AND SOCIAL INSURANCE*

Assar Lindbeck and Sten Nyberg

Empirically, disincentive effects on work of generous welfare state arrangements tend to appear with a substantial time lag. One explanation is that norms concerning work and benefit dependency delay such effects. We model altruistic parents' economic incentives for instilling such work norms in their children. Anticipated economic support from parents may reduce work effort, and parental altruism makes threats to withdraw such support noncredible. Instilling norms mitigates this problem. However, generous social insurance arrangements tend to weaken parents' incentives to instill such norms in their children. We find empirical support for this prediction.

I. Introduction

In recent years, social scientists and politicians have expressed concern about disincentive effects on work of welfare-state arrangements, and related taxes on labor income, in Western Europe. The large reduction in per capita hours of work and the huge increase in the number of individuals of working age living on various government benefits might be the most direct evidence of such effects. However, while the main increase in tax rates, as well as in the coverage and generosity of the benefit systems, took place between the late 1940s and the late 1970s, clear indications of negative effects on work did not emerge until the 1980s and 1990s, i.e., with a considerable time lag. We discuss evidence of such time lags at the end of the introduction.¹

An important question is why it took so long for the effects of weakened work incentives to appear. One reason may be that it takes time for individuals to acquire and evaluate information about new welfare state arrangements. Another reason, which we

^{*}We are grateful for comments from Gary Becker, Alessandra Cassella, Torsten Persson, Michael Waldman, Jörgen W. Weibull, and seminar participants at the EEA meeting in Lausanne, IIES Stockholm University, Uppsala University, the Research Institute of Industrial Economics Stockholm, SCASSS, SNS/CEPR Public Policy Symposium, Stockholm School of Economics, Swedish School of Economics and Business Administration, Helsinki, University of Munich, and University of Sydney. We are also grateful for suggestions from two anonymous referees and the editor of this *Journal*. Excellent empirical research assistance by Jose Mauricio Prado, Jr. is gratefully acknowledged.

Jose Mauricio Prado, Jr. is gratefully acknowledged.

1. Negative effects of the poor incentives for work in former socialist countries in Eastern Europe also seem to have materialized with a time lag. Similarly, the Kibbutz society thrived for a long period despite weak economic incentives before problems set in, see, e.g., Leviatan [2003].

 $[\]circledcirc$ 2006 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology.

The Quarterly Journal of Economics, November 2006

explore in this paper, is that norms concerning work and benefit dependency in society—work norms for short—delay the behavioral effects of changes in work incentives. By work norms, we mean requirements and expectations that able-bodied individuals support themselves by work rather than by living on handouts from others. Such norms may erode over time, and we hypothesize that such an erosion has taken place in Western Europe in recent decades.² OECD Employment Outlook [2003, p. 182] makes a similar interpretation of labor supply and work effort in Western Europe, although without explicitly referring to norms: "Major changes in beneficiary numbers involve long-term and interlinked changes in the expectations and behavior of recipients, benefit administrations and in some cases employers."

It is notable that in Inglehart, Basañez, and Moreno [1998] World Value Survey (WVS), the seven countries ranking the lowest in terms of the percentage of respondents who regard "hard work" as a quality especially important for children to learn at home are advanced European welfare states. Specifically, Denmark ranks last out of 42 countries (with only 2 percent of the respondents expressing this opinion), followed by Sweden, Finland, Norway, Netherlands, Austria, and West Germany.

How, then, are norms formed, and how do they change? A cultural evolution perspective is often applied in the economic literature on norm formation: in particular, norms held by individuals with visible signs of success, say, in terms of affluence, are assumed to gain terrain over time. Alternatively, norms may be seen as the result of deliberate socialization pursued by "norm senders." We follow the latter approach in this paper. Natural senders of work norms are agents who are affected by the individual's work effort, such as parents, friends, employers, and

and Mulligan [1997], Bisin and Verdier [1998, 2001], and Hauk and Saez-Marti

[2002].

^{2.} We may say that the erosion reflects a social multiplier effect, via a society-wide stimulation of the demand for leisure, or of the willingness of an individual to live off benefits, when other work less [Alesina, Glaeser, and Sacerdote 2005]. Similar externalities regarding the evaluation of leisure are at work in the "leisure-oriented and redistributive equilibrium" analyzed by Bénabou and Tirole [2006]. They schematically identify this equilibrium with Western European societies, where individuals work less not only because of high tax rates but also because of a high evaluation of leisure. See also the discussion in Lindbeck [1995] and Lindbeck, Nyberg, and Weibull [1999, 2003].

3. For examples of the first approach see Boyd and Richerson [1985], Axelrod [1986], Binmore and Samuelson [1994], Cialdini and Trost [1998], and Ben-Ner and Putterman [2000]. For the latter see Becker [1996], Mulligan [1997a], Becker

coworkers. Institutions such as schools, churches, the military, legislation, and mass media may also act as norm senders.

We focus on one type of norm sender, namely parents. They have long been viewed as having a dominant influence over children's socialization. Recent research paints a more complex picture of parents' influence, acknowledging that genetic predispositions and the influence of peer groups also play important roles and that these factors interact with parents' influence. However, for enduring values such as work norms, parents' are likely to play the key role.⁴

To instill social norms, parents need to sensitize their children to the opinions of others, and in the case of internalized norms, they need to influence children's preferences for work or benefit dependency directly. There is vast literature in social psychology concerning parents' role in the socialization of children in general.⁵ In addition to the important cognitive and emotional parent—child interaction, parents also act as managers of the opportunities children are exposed to, e.g., in terms of social contacts. An often used concept in this literature is "parenting styles," which contain elements of both control techniques and emotional support. Examples of such styles are authoritarian, permissive, and authoritative (which can be characterized as responsive and demanding). The literature indicates that the last mentioned style gives the parents the strongest influence.

Research on socialization of achievement motivation in children emphasizes similar parental strategies. Again, a supportive family climate is important and makes children choose their parents as role model. When it comes to socialization of norms relating to work, in particular, there is less research. However, attitudes to work and unemployment correlate between parents and children (see Furnham [1990, p. 108]). Moreover, Mulligan [1997b, p. 27] finds an intergenerational transmission of "a willingness to work and an unwillingness to participate in welfare programs, which may derive from tastes, attitudes, habits or

^{4.} See Collins et al. [2000] for a review. They note that "... peer influence often operates with respect to everyday behaviors and transient attitudes, not enduring personality traits or values." Parents also affect children's exposure to other norm senders, e.g., with whom children play and which schools they attend.

5. See, e.g., Gecas [1979a,b], Rollins and Thomas [1979], Maccoby and Martin

^{5.} See, e.g., Gecas [1979a,b], Rollins and Thomas [1979], Maccoby and Martin [1983], Peterson and Rollins [1987], Grusec and Kuczynski [1997], and Parke and Buriel [1998].

^{6.} For an extensive survey see Eccles, Wigfield, and Schiefele [1998]. See also McClelland [1961] for a theory bringing together upbringing, the need to achieve, and economic performance.

information." There is also evidence of inheritance of benefit dependency.⁷

Parents have many reasons for instilling work norms in their children. For instance, parents may feel discomfort if their child's values differ from their own, or they may believe that their children's success, professional or otherwise, reflects on their own status. We have chosen to examine an economic rationale for parents' interest in their children's work norms. Our starting point is that altruistic parents have an economic interest in their children's willingness and ability to support themselves. If children fail to support themselves, or the grandchildren, altruistic parents will try to help them financially—when possible. However, children who can count on support from altruistic parents, should they fail to support themselves or the grandchildren, may be tempted to free ride on their parents' altruism and exert less effort than otherwise and, more importantly, less effort than their parents would like.8

Noneconomic incentives in the form of work norms can mitigate this free-riding problem, since work norms are less likely to be subject to time-inconsistency problems than economic incentives. Norms do not require ex post enforcement from parents in conflict with their altruistic preferences. Thus, work norms, in fact, function as time-consistent incentive devices. In the case of social norms, both the assessment as to whether the child has broken the norm and the enforcement of the norm is left to others via their approval or disapproval.9 In the case of internalized

^{7.} See Antel [1992], Gottschalk, Danziger, and Smolensky [1990], Gottschalk and Moffit [1994], Levine and Zimmerman [1996], and Corak [1999].

8. See, e.g., Lindbeck and Weibull [1988] and Gatti [2005]. However, such problems do not always arise. Becker's [1974] rotten-kid theorem shows that selfish children may find it optimal to act in their altruistic parents' best interest. In our paper incentive problems arise because (i) altruism makes parents' unable to precommit to incentive schemes for children and (ii) the possibility of transferring utility between parent and child is limited, since children's effort is a private good. See Bergstrom [1989] for conditions under which the rotten-kid theorem applies. Early gifts or precommitment to bequests can reduce free riding; see Bruce and Waldman [1990].

^{9.} Bowles, Fong, and Gintis [2004] find strong negative attitudes toward "undeserving" welfare beneficiaries. According to Furnham [1982, 1985] many, especially those with strong work norms, disapprove of people living off benefits, and take satisfaction in expressing disapproval. Moreover, Fehr and Gächter [2002], Fehr and Fischbacher [2004], and Fehr, Fischbacher, and Gächter [2002] find experimental evidence that even unaffected third parties are often willing to sanction norm violations. Individuals who do not punish norm transgressions could also be subject to punishment themselves; see Kandori [1992]. For evidence on effects of social stigma associated with being unemployed or receiving benefits,

work norms, children instead enforce the norm themselves, so to speak.

Instilling strong work norms in children is, however, a mixed blessing. The risk of a child failing in the labor market, in spite of considerable effort, complicates an altruistic parent's task. Children who fail suffer doubly: in addition to a low income, they may feel shame or guilt—and naturally, altruistic parents also suffer indirectly from this. In our paper altruistic parents balance the benefits of reducing children's free riding against these negative effects. ¹⁰

We use our analysis to study how norm formation is influenced by social insurance. Once children are insured against adverse economic outcomes, parents' incentives to instill strong work norms in their children are likely to weaken. Thus, social insurance does not only give rise to the traditional free-riding problem for insured individuals but may also lead to free riding in terms of norm formation.¹¹

The models of Akabayashi [1996] and Weinberg [2001] have a formal structure similar to ours, particularly the latter, although without invoking the concept of social norms. However, a crucial difference is that these studies assume that parents can precommit to incentive schemes for their children, both regarding economic and noneconomic incentives (interpreted as corporal punishment).

I.A. Empirical Evidence of Delayed Welfare-State Effects on Work

Is there then any evidence of delayed negative incentive effects of welfare state arrangements? In terms of the size of the relevant population covered by welfare-state arrangements, the

see Horan and Austin [1974], Rainwater [1982], Moffit [1983], and Mulligan [1997b].

^{10.} Norms may also be used to induce children to support parents in old age; see Becker [1993]. Our model can easily be extended to cover this case; see Lindbeck and Nyberg [2001].

^{11.} Intergenerational transfers can also reflect intertemporal exchange between parents and children unrelated to altruism. For discussions of the relative importance of altruism and exchange motives, see Cox and Rank [1992], Altonji, Hayashi, and Kotlikoff [1997], and Farrell, Frijters, and Shields [2002]. Moreover, Altonji, Hayashi, and Kotlikoff [1997] note that inter vivos transfers are, on average, fairly small, which may raise doubts whether free riding is a motive for norm formation. However, with successful norm formation fewer children receive financial support from their parents, resulting in lower average transfers between generations.

main expansion in Western Europe took place before 1975. In terms of the generosity of the systems (as reflected in replacement rates and the strictness of the administration), it took place before 1980. ¹² After 1980, there was even a modest retreat in generosity of the benefit systems in some countries (Finland, The Netherlands, and Sweden). Moreover, while tax rates on labor gradually increased from the late 1940s to the early 1980s, this trend did not continue. In fact, tax rates on labor income were reduced in some countries from the mid-1980s or early 1990s.

The timing of apparent negative effects on work looks different. From 1960, both the level and the development of the average hours of work were approximately the same in the United States and the EU up until the mid-1970s. After that, the average hours of work remained approximately constant in the United States, but continued to fall at about the same rate as before in the EU (see Figure I). Thus, the decline in the EU continued long after the generosity of the welfare state arrangements, and tax rates on labor income, had peaked. This is consistent with the hypothesis that the full effect of weakened economic incentives for work in Europe materialized with a considerable time lag. ¹³

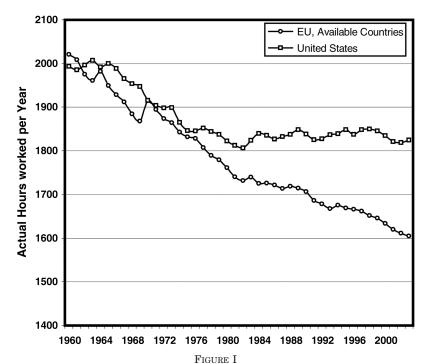
The rise in benefit dependency in Europe in recent decades is also consistent with the hypothesis about delayed effects. For instance, the total benefit recipiency rate (beneficiaries in percent of the working age population) in EU increased from 15 percent in 1980 to 20 percent in 1999 [OECD 2003, Chart 4.3]. By comparison, benefit recipiency in the United States during the same time span fell from about 15 to about 14 percent.

Changes in specific benefit systems offer further, and perhaps stronger, evidence on delayed behavioral effects. OECD Employment Outlook [2003, pp. 188–190] provides some illustra-

^{12.} See Carroll [1999, pp. 136–160], Montanari [2000, pp. 9–16 and the Appendix], Sjöberg [2000], and Bertola, Boeri, and Nicoletti [2001].

13. Prescott [2004] argues that the fall in per capita hours of work in Western

^{13.} Prescott [2004] argues that the fall in per capita hours of work in Western Europe as compared with the United States between the periods 1970–1974 and 1992–1996 can be explained mainly by the rise in the tax rates on labor income in the former group of countries (as compared with basically unchanged rates in the United States). As argued by many critics, however, this analysis rests on the assumption of high labor supply elasticities with respect to after-tax wage rates. Alesina, Glaeser, and Sacerdote [2005] argue that labor market regulations requiring mandatory reductions in yearly hours of work probably are a more important explanation. A main point in our paper is that a basic explanation is to be found in a reduction in the difference between after-tax wages and welfare-state benefits in Western Europe during the first post-World War decades—in combination with a gradual, endogenous weakening of social norm in favor of work or against living off benefits.



Average Annual Hours Actually Worked per Person, Part-Time and Full-Time, USA versus EU15 (Available Countries) 1960–2003

Source: OECD, Employment Outlook, Economic Outlook CD 2003/2.

The uneven time-series before 1970 is a result of missing data for several countries. Every country has the same weight.

tions. For example, following the introduction of lone-parent benefits (DPB) in New Zealand in 1973, the number of beneficiaries grew steadily for eighteen years. After the introduction of generous rules for social assistance in 1949 in the United Kingdom, the number of beneficiaries, as a proportion of the working-age population, grew gradually during many years of rising prosperity and full employment. In France the number of social assistance beneficiaries grew gradually by 45 percent between 1993 and 2000 (after adopting more generous rules in 1989)—even though this was a period of cyclical macroeconomic upswing.

In Belgium, the introduction of part-time unemployment benefits in 1983 was followed by a large, but gradual, increase in the number of recipients until it peaked after six to seven years. Similarly, the introduction of a specific benefit scheme for casual agricultural workers in two provinces in Spain (Andalusia and Estremadura) in 1984 was followed by a gradual fivefold increase in the number of female beneficiaries up to 1992. Furthermore, more generous legislation in Italy in 1988 and 1990, concerning eligibility for unemployment benefits, gradually led (up to 1998) to more than a doubling of the unemployment claims from individuals favored by the reform. This occurred despite an almost unchanged aggregate unemployment in Italy between these years. Moreover, after softening the rules for disability pensions in the Netherlands in 1967 and 1973, the recipient rate gradually increased from 3.3 to 7.7 percent of the working age population, up until 1981. Even after a tightening of the rules, the rates continued to drift upward by one percentage point during the 1990s. ¹⁴ While there may be several explanations for such delays, these observations are at least consistent with the hypothesis that social norms induce inertia in economic behavior.

Social norms are also a possible explanation for unemployment persistence [Lindbeck 1996]. Indeed, while the United States unemployment level tends to return to previous levels after negative macroeconomic shocks, it is well-known that unemployment in Europe tends to remain at a higher level after the shock has subsided. This difference is even more pronounced for long-term unemployment (i.e., unemployment spells exceeding twelve months). After the drastic increase in Europe in the early 1980s, the level of long-term unemployment has remained at 3–5 percent, as compared with a rather stable level below 1 percent in the United States.

Assuming that changes in work norms help explain the apparent delays of the incentive effects of welfare-state arrangements, we would perhaps expect that young cohorts would be more influenced than older cohorts. There are, so far, not much data available to study such cohort effects. Attitude studies in Sweden suggest, however, that young individuals more often than older ones express the view that it is OK to take paid sickness absence without actually being sick [Modig and Boberg 2002]. Moreover, in an econometric study of sickness absence in Sweden, Ljunge [2005] found that young cohorts had 25 percent-

^{14.} Henrekson and Persson [2004] find that the effects of changes in the rules of sickness insurance on sickness absence in Sweden are stronger in the long than in the short run.

age points higher incidence of sickness absence than cohorts born twenty years earlier—controlling for other likely influences. ¹⁵

Against the background of these various observations, it seems worthwhile studying how work norms emerge and change in response to economic incentives. The paper proceeds as follows. In Section II we develop a simple model of parental norm formation and derive our main results, including how norm formation is affected by social insurance. Section III examines some empirical evidence on the predictions of our model. Section IV offers some concluding remarks.

II. THE MODEL

We analyze a model with two generations: parents and children. To highlight the commitment problem, we assume parents to be altruistic while their children are selfish. Decisions are made in three stages. First, parents instill work norms in their children. Second, young individuals enter the labor market and choose work effort. They either succeed and earn a high wage w^h or fail and earn a low wage w^l . Failure can be interpreted as being unemployed or working poor. Third, after observing the labor market outcome, parents decide whether to support the child financially. This decision is influenced by the generosity of the social insurance system faced by the children. Here, social insurance consists of a proportional income tax t, levied on all children, and a fixed benefit B provided to those who fail, i.e., $B^l > B^h = 0$.

The likelihood of succeeding in the labor market partly depends on the child's effort and partly on random events. Let p be the success probability given some effort level. Assuming p to be strictly increasing in effort, we can, for simplicity, assume that children directly choose p. The effort cost associated with a specific p is assumed to be given by a function v(p) such that $v_p(p) > 0$, v(0) = 0, and $\lim_{p \to 1} v(p) = \infty$ (Inada conditions). More specifically, we assume that $v(p) = -q \ln (1-p) \ge 0$, where q measures how costly it is to increase the probability of success and may reflect labor market conditions, such as the rate of unemployment and educational opportunities.

^{15.} Incidence of sickness is measured as the proportion of population having at least one paid sick day during a year. The study controls for demographic variables (age, gender, education, and family composition), income, and business cycle factors.

For simplicity, wages are assumed to be fixed—only the probability of receiving a high or a low wage depends on effort. The utility of the child is

$$(1) \qquad U_{\boldsymbol{k}}(\boldsymbol{c}_{\boldsymbol{k}},\!\boldsymbol{p},\!\boldsymbol{s}) = \left\{ \begin{array}{ll} \ln c_{\boldsymbol{k}}^{\boldsymbol{h}} - \boldsymbol{v}(\boldsymbol{p}) & \text{with probability } \boldsymbol{p} \\ \ln c_{\boldsymbol{k}}^{\boldsymbol{l}} - \boldsymbol{v}(\boldsymbol{p}) - \boldsymbol{s} & \text{with probability } 1 - \boldsymbol{p}, \end{array} \right.$$

where the child's consumption c_k can take on two values, c_k^h and c_k^l , depending on how the child fares in the labor market. Consumption equals after-tax income and benefits plus any support provided by parents: $c_k^i = (1-t)w^i + B^i + r^i = y^i + r^i$, where superscript one denotes parental support to the child and y^i denotes the disposable income before parental support. We assume that social insurance is less than complete, so that $y^l < y^h$.

The work norm is modeled as a noneconomic disutility s reflecting shame or guilt associated with failure in the labor market or with accepting transfers from the government instead of being self-supporting. ¹⁶ If 1-p is interpreted as a measure of leisure, the above formulation of the v(p) function implies that children have Cobb-Douglas preferences over consumption and leisure.

We assume that work norms are tied to individual performance in the labor market. Alternatively, work norms could be tied to individual effort. Then, no individual would be punished for bad luck. However, the enforcement of norms tied to effort is likely to be less reliable than enforcement tied to outcome. In particular, it can be very difficult for outsiders to observe effort. While, in practice, work norms are likely to contain elements linked to both effort and outcomes, we confine our analysis to norms based on outcomes.

We assume the utility of an altruistic parent to depend on his own consumption and the utility of his child in the following way:

(2)
$$U_p(c_p,c_k,p,s) = \ln c_p + \alpha U_k(c_k,p,s),$$

where the parent's consumption c_p is his income I minus any support r^i provided to the child; i.e., $c_p^i = I - r^i$. Parental

^{16.} Noneconomic incentives may also include pride or self-respect. If parents tie pride to outcomes, the trade-off they face is whether to hold back on pride in bad outcomes for incentive purposes. Provided that the utility of pride is bounded and that preferences are not such that parents optimize by maximizing pride in all outcomes, the reduction in pride in bad outcomes is similar to our s, if the utility of pride in good outcomes is set to zero.

altruism is measured by α , i.e., the weight the parent attaches to the child's utility. We assume that parents are neither entirely selfish nor fully altruistic; i.e., $\alpha \in (0, 1)$.

We solve the model backwards, starting with the third and second stages when parents decide on support to children and children choose work effort. An individual's choice has no effect on the share of the population succeeding in the labor market, π , and thus on the tax base. Hence, parents and children treat taxes and benefits as given. As we move on to consider changes in policies, we require these to balance the government's budget when parents have rational expectations about the resulting π .

II.A. Choices of Financial Support and Effort

Parents decide on financial support after having observed their child's performance in the labor market. Parents choose r^i to maximize utility, as expressed in (2), subject to $r^i \geq 0$, and the first-order condition is

$$\frac{dU_p}{dr^i} = -\frac{1}{I - r^i} + \frac{\alpha}{y^i + r^i} \le 0.$$

The optimal support, $r^i = \max{\{(\alpha I - y^i)/(1 + \alpha), 0\}}$, depends on parental altruism, income, and the child's earnings. Three cases can occur: parents do not provide financial support $(\alpha I < y^l)$: they only provide support in bad outcomes $(y^l < \alpha I < y^h)$; and they provide support in both outcomes $(\alpha I > y^h)$. Using the optimal r^i , the agents' consumption can be expressed as

$$c_{k}^{i} = \max \left\{ \frac{\alpha}{1+\alpha} (I+y^{i}), y^{i} \right\}$$

$$c_{p}^{i} = \min \left\{ \frac{1}{1+\alpha} (I+y^{i}), I \right\}.$$

Hence, if $r^i>0$, then family income, $I+y^i$, is shared between parent and child in the proportions $1/(1+\alpha)$ and $\alpha/(1+\alpha)$, respectively. Let \tilde{c} be the ratio between consumption in the good and the bad state, the "consumption ratio" for short; i.e., $\tilde{c}_p=c_p^{\rm h}/c_p^{\rm l}$ and $\tilde{c}_k=c_k^{\rm h}/c_k^{\rm l}$. Now, if support is provided in both states, then $\tilde{c}_p=\tilde{c}_k$, and if it only occurs in bad outcomes, then $\tilde{c}_p<\tilde{c}_k$.

Given anticipated support and noneconomic incentives, the child chooses p to maximize the expected utility:

(4)
$$E[U_k(c_k,s)] = p \ln c_k^h + (1-p)[\ln c_k^l - s] - v(p).$$

The first-order condition for the child's choice of p is

(5)
$$\ln \tilde{c}_k + s - v'(p) \le 0 \quad \text{or} \quad \ln \tilde{c}_k + s - \frac{q}{1 - p} \le 0.$$

Thus, for a positive p the marginal benefit of a higher p, $\ln \tilde{c}_k + s$, must equal the marginal effort cost, v'(p). (The marginal benefit of a higher p equals the difference in utility between the states, $\ln c_k^h - (\ln c_k^l - s) = \ln \tilde{c}_k + s$.)

We are primarily interested in cases where children exert at least some effort. Thus, we assume q, the parameter determining the children's effort cost, to be so low that children receiving support in both labor market outcomes choose a p>0, even without noneconomic incentives; i.e., $q<\ln{(I+y^h)}/(I+y^l)$. This ensures that condition (5) holds with equality.

II.B. Norm Formation (Upbringing)

While altruistic parents cannot credibly threaten to withhold financial support as a means of providing incentives for effort, we assume that they can influence the child's work effort through upbringing. For simplicity, we assume that parents fully control their children's noneconomic incentives. In the case of social norms, parents make their children more or less sensitive to the disapproval of others. We assume that only individuals adhering to the norm themselves will disapprove when others break it and that each individual's disapproval carries the same weight for the violator of the norm. Hence, total disapproval is directly proportional to π . ¹⁷

Let \bar{s} measure the individual's sensitivity to disapproval. The utility cost of failing in the labor market is then $s=\bar{s}\pi$. However, since π is not affected by an individual parent's decision, parents take π as given. Hence, choosing \bar{s} and s is effectively the same decision. For notational simplicity, the analysis of individual

Our model's properties would not change if s was tied to the share of successful agents in a subset of the population, as long as this share is a positive monotone function of π .

^{17.} There is evidence of a negative association between unemployment stigma and the level of unemployment. In a British study Clark [2003] finds that unemployed workers suffer less if many "relevant others" are also unemployed, and that those whose subjective well-being declined the least on entering unemployment are more likely to remain unemployed than others. Similarly, Stutzer and Lalive [2004] infer that widespread work norms within Swiss cantons are associated with low subjective well-being among the unemployed, and with shorter unemployment spells. In a Swedish study Åberg, Hedström, and Kolm [2003] find that the probability of an individual, with given characteristics, being unemployed increases in the unemployment level in the immediate neighborhood.

decision-making is cast in terms of s. Naturally, in the case of internalized work norms, which are independent of π , parents directly choose s.

Parents choose *s* to maximize the expected utility, taking the child's effort choice, implicitly given by (5), into account. The parent's expected utility is

(6)
$$E[U_p(c_p,c_k,s)] = p(s) \ln c_p^k + (1-p(s)) \ln c_p^l + \alpha E[U_k],$$

where we write p(s) to emphasize the direct link between s and the child's choice of p. The first-order condition for the parent's choice of s is

(7)
$$\frac{dE[U_p]}{ds} = \ln \tilde{c}_p \frac{\partial p}{\partial s} + \alpha \left(\frac{\partial E[U_k]}{\partial s} + \frac{\partial E[U_k]}{\partial p} \frac{\partial p}{\partial s} \right) \leq 0,$$

where $\partial E[U_k]/\partial p=0$, since condition (5) is assumed to hold with equality. Moreover, it implicitly follows from the same condition that $\partial p/\partial s=1/v''(p)=(1-p)^2/q$, i.e., p increases in s, as would be expected. Next, since $\partial E[U_k]/\partial s=-(1-p)$, condition (7) simplifies to

(8)
$$\ln \tilde{c}_p \frac{\partial p}{\partial s} - \alpha (1 - p) \le 0 \quad \text{or} \quad \ln \tilde{c}_p - \alpha \frac{q}{1 - p} \le 0.$$

This reflects a trade-off between the parent's own utility of a higher p, $\ln \tilde{c}_p$, and the utility cost this imposes on the child. An explicit expression for the parents' optimal choice of s can be derived by combining (5) and (8)¹⁹

(9)
$$s = \max \{ \ln \tilde{c}_p / \alpha - \ln \tilde{c}_k, 0 \}.$$

If parents can either not afford to offer much financial support or do not care enough to do so, then $\tilde{c}_p \approx 1$, and children's effort incentives are more or less intact. Introducing noneconomic incentives then only harms the child without benefiting the parent. Hence, parents set s=0. However, financial support and the resulting incentive distortions increase in parental income. Not surprisingly, for given wages and altruism, there is a threshold

^{18.} If parents could directly control p, they would choose a higher p and set s=0. Maximizing the parent's expected utility, given s=0, yields $\ln \tilde{c}_p + \alpha(\ln \tilde{c}_k - q/(1-p)) = 0$. The implied p exceeds the p chosen by the child (5). 19. Optimality follows from $E[U_p]$ being strictly quasi-concave in s. See the Appendix

income level \hat{I} above which the induced distortions are sufficiently severe to motivate the use of noneconomic incentives. Formally,

Lemma. There exists a unique threshold income $\hat{I} \in (y^l/\alpha, y^h/\alpha)$ such that s = 0 for $I \leq \hat{I}$ and s > 0 for $I > \hat{I}$.

Proof. See the Appendix.

II.C. Comparative Statics

We now proceed to examine how the behavior of parents and children is influenced by parents' income and altruism, and wages. The effects on parents' use of noneconomic incentives are summarized below.

PROPOSITION 1. (i) If $I \in (\hat{I}, y^h/\alpha)$, s increases in I and α but decreases in w^h and w^l . (ii) If $I > y^h/\alpha$, s decreases in I, α , and w^l but increases in w^h .

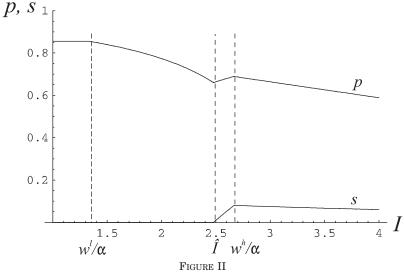
Proof. See the Appendix.

If parents only provide support in bad outcomes, then higher parental income and stronger altruism rapidly weaken effort incentives via a decline in \tilde{c}_k , which will lead parents to increase the noneconomic incentives. A higher w^l makes the bad outcome more acceptable to both children and parents, and the latter will therefore reduce both r^l and s. A higher w^h strengthens the child's economic effort incentives and allows parents to lower s. If support is provided also in good outcomes (case (ii)), parents and children derive the same economic benefit from better labor market prospects for the child; i.e., $\tilde{c}_k = \tilde{c}_p = (I + y^h)/(I + y^l)$. However, the child bears the entire effort cost and prefers a lower p than the parent. The extent to which the latter uses s to stimulate effort depends on the degree of altruism toward the child. However, changes in variables that increase (or decrease) \tilde{c} will clearly lead parents to increase (or decrease) s to compensate for children's less responsive effort incentives.

We now turn to the comparative statics effects on p, implicitly defined by condition (5) if s=0 and by (8) if s>0.

Proposition 2. (i) If $I \in (y^l/\alpha, \hat{I})$ or $I > y^h/\alpha$, p decreases in I, α , and w^l but increases in w^h . (ii) If $I \in (\hat{I}, y^h/\alpha)$, p increases in I and decreases in w^l , but α and w^h have ambiguous effects and no effects on p, respectively.

Proof. See the Appendix.



Norm Formation and Labor Market Prospects as Functions of Parental Income In the example $w^h=2, w^l=1, \alpha=0.75,$ and q=0.1.

Higher parental income and stronger altruism lead to higher financial support and weaker effort incentives for the child, as does a higher wage in the bad outcome. This results in a lower p unless parents strengthen work norms. (Parents with $I > y^h/\alpha$ actually weaken work norms according to Proposition 1.) Since a higher w^h stimulates effort in itself, and is met by a higher s by rich parents, p clearly increases. If parents only provide support in bad outcomes (case (ii)), then higher income or stronger altruism increases the difference in consumption between good and bad states for parents. An increase in I then leads to a higher p, via a higher s. However, the effect of stronger altruism is ambiguous, since it also implies a greater concern for the child's effort cost. A higher w^l clearly lowers p, since it both reduces the child's effort incentives and is met by a lower s. Finally, w^h does not affect parents' marginal benefit of a higher p.

Figure II illustrates how the choices of s and p depend on I in a case without social insurance. As parents begin extending support in bad outcomes, at I=4/3, p starts to decline. At $\hat{I}=2.48$, parents begin using noneconomic incentives, resulting in higher

p. Above $I = 8/3 (= w^h/\alpha)$, parents provide support in both outcomes, and then *s* and *p* decline in income.²⁰

As indicated in Figure II, parental income, or wealth, is likely to have a dampening effect on children's effort incentives. A literary metaphor is Thomas Mann's saga of the decline of the Buddenbrook dynasty. This idea is also captured by the so-called Carnegie conjecture: "the parent who leaves his son enormous wealth generally deadens the talents and energies of the son, and tempts him to lead a less useful and less worthy life than he otherwise would . . ." ²¹

Note that in Figure II, p is better interpreted as effort than as labor market prospects. While these interpretations have a one-to-one relation in our model, there are a number of factors systematically affecting labor market prospects in reality that we have abstracted from in our model. Some of these are related to parental income and may well cause the relation between income and prospects for success to be very different from that between income and effort. For instance, parents can improve children's chances on the labor market by investing in education. Moreover, high-income parents often have social networks improving their children's labor market prospects. Children growing up in affluence may also raise their aspiration level regarding consumption, e.g., they may put a higher weight on consumption utility relative to that on the disutility of effort. These factors may offset or even reverse the negative relation between parental income and labor market success in rich families.

Investments in education influence p in two ways. First, they increase p for a given effort, and second, parents pass on part of the cost of education to their children in the form of reduced economic support, thereby increasing children's economic effort incentives. Education and work norms may be either substitutes or complements.²² While the effects of social networks and aspi-

^{20.} However, Mulligan [1997b] notes that parental altruism may be endogenous and can depend on parents' income. This may modify the relationship between parental income and work norms.

^{21.} Essay by Andrew Carnegie 1891, as quoted in Holtz-Eakin, Joulfaian, and Rosen [1993] who find empirical support for the Carnegie conjecture on United States data. Many rich parents seem aware of the disincentives associated with wealth. A survey by U.S. Trust [2002] indicates that among the 1 percent wealthiest parents in the United States, a vast majority require their children to do everyday chores and work during the summer vacation to instill traditional values, including a good work ethic, in their children.

^{22.} If education only influences effort cost, s is still given by (9) which is independent of effort cost. Hence, educational spending and parental income have

ration levels can be modeled in a similar fashion as education—i.e., as a higher p for a given effort—the second effect is only present in the education case.

II.D. Social Insurance

Social insurance introduces a link between a family's decisions about work effort and upbringing and the corresponding decisions in other families via the tax base. As a result, social insurance may give rise to free-riding behavior, not only in work effort but also in norm formation. Below, we study the effects of a budget balanced social insurance system on labor market performance and norm formation.

A policy, $\{t,B\}$, balances the social insurance budget in expectation if

(10)
$$t[\pi w^h + (1-\pi)w^l] = (1-\pi)B.$$

The budget-balancing transfer, $B = t[w^l + (\pi/(1-\pi))w^h]$, strictly increases in π and t. Since B is only paid out in bad outcomes, the consumption ratios, \tilde{c}_p and \tilde{c}_k , strictly decrease in π , causing individual effort and p to decrease in π . Since π is the average success probability in the population, this observation ensures that for any tax rate, there exists a unique fixed point in π and a corresponding budget-balancing benefit. If the tax rate t is too high, then effort does not pay and $\pi = 0$. Formally,

Proposition 3. For any tax rate t, there exists a unique budget-balancing π^* . For sufficiently low tax rates, $\pi^* > 0$.

Proof. See the Appendix.

We now turn to the effect on labor market performance and norm formation.

Proposition 4. For sufficiently low t (such that $\pi^* > 0$), labor market performance π decreases in t. The strength of non-

opposite effects on norm formation. If a parent offers support in both outcomes, then increased spending on education increases s; i.e., education and noneconomic incentives are complements. In contrast, if parents only offer support in bad outcomes, education and work norms are substitutes. See Lindbeck and Nyberg [2001].

^{23.} Note that the negative relation between the consumption ratios and π does not depend on I, α , or whether different children face different labor market conditions, i.e., different q. Proposition 4 does not require families to be identical in these respects.

economic incentives s decreases in t if $r^h > 0$, but if $r^h = 0$ the effect cannot be signed.

Proof. See the Appendix.

The first part simply reflects that social insurance lowers the preferred p for both parents and children. With social insurance, the cost of failure is partly borne by other families that tempts parents to reduce the noneconomic incentives s for their own children. The reason why this may not be the case when parents only offer support in bad outcomes is that the threshold income at which parents begin offering support in both outcomes, $(1-t)w^h/\alpha$, and where noneconomic incentives peak, is decreasing linearly in t; i.e., as t increases noneconomic incentives peak at lower incomes. Hence, for a parent who only offers support in bad outcomes a higher t could mean climbing up the ridge, unless the height of the ridge falls rapidly in t. Thus, for a given household income, s may initially increase in t but eventually, once the threshold is reached, s always decreases in t.

Also note that regardless of whether social insurance leads a parent to instill stronger or weaker work norms in his own children, he would prefer other parents to instill stronger work norms in their children, since that increases the tax base. Thus, social insurance results in free-riding behavior among parents in terms of upbringing.

Finally, we examine the stability of labor market equilibria based on social work norms. In reality, the sensitivity to the opinion of others, \bar{s} , is likely to be fixed in the short run, while the expected aggregate labor market outcome, π , could well fluctuate slightly from time to time. This could potentially set off a chain of expectation revisions, destabilizing the equilibrium. A fall in π weakens the expected strength of the work norm, $s = \bar{s}\pi$, and reduces work effort, which accentuates the fall in π , and so on. Hence, it would be reassuring if the equilibrium is relatively robust to perturbations of p. Below, we state a sufficient condition for local stability.

Proposition 5. If children take policies $\{t,B\}$ and \bar{s} as given, then equilibria such that p > 1/2 for all children are locally stable.

^{24.} We have assumed that social norms are only enforced by those obeying them. However, the reasoning here suggests that a "double standard," where also those breaking the norm enforce it on others, could stabilize norm enforcement and be socially useful.

Proof. See the Appendix.

The property that bad labor market outcomes reduce the strength of a social norm concerning work corresponds to the common notion that failing to support oneself by work is less shameful if many others are in the same situation. The implications of this mechanism were examined by Lindbeck, Nyberg, and Weibull [1999], who discuss the individual's choice of whether to work or live off benefits, as well as his voting behavior with respect to the government's tax and benefit policies. The present paper may therefore be seen as an attempt at providing a microfoundation for that paper.

III. Some Empirical Evidence

This paper deals with issues where theory has started well ahead of empirical research. It is, however, possible to confront some implications of our model with individual survey data from the WVS and some aggregate economic variables from OECD. While the variables we use are crude approximations of those in the theoretical model, the estimations may nevertheless shed some light on the empirical validity of the model.

The comparative static results concerning norm formation were summarized in Propositions 1 and 4. One prediction was that household income, or wealth, influences norm formation in a hump-shaped fashion—the strength of the work norms first increases in income, then decreases, and finally levels off. Moreover, changes in children's future income (w^h) or w^l can give rise to two types of effects. First, a proportional increase in the wage rates in both outcomes, say reflecting higher aggregate income growth, has the same effect as a decrease in parental income, since it is the relation between parents' and children's income that matters. Second, a widening gap between the two wage rates is predicted to strengthen norms when parents offer support in both outcomes, but has an ambiguous effect if such support is only offered in bad outcomes. Finally, more generous social insurance weakens work norms if parents offer support in both outcomes, but could initially strengthen them otherwise.

The WVS data set contains three waves of surveys: 1981–1984, 1990–1993, and 1995–1997 [Ingelhart et al. 2003]. It provides individual data on a wide range of values and attitudes as well as background data on the individuals, such as age, house-

hold income, number of children, etc. Since we are interested in examining how norm formation is influenced by social insurance, we use a subset of observations for relatively rich countries, where such insurance exists and in some cases is extensive. ²⁵ Our dependent variable, "Hard work," measures whether the respondent mentioned hard work (one of eleven listed qualities) when asked "Here is a list . . . of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five." In our regressions "hard work" takes on the values 0 and 1, where 1 corresponds to "important" and 0 to "not mentioned."

Our first explanatory variable is the respondent's household income, measured in terms of income deciles, where 1 is the lowest and 10 the highest. The second variable is Social Expenditures as a percentage of GDP, reflecting the generosity of the social insurance system (we use data from OECD [2001] for this variable). Third, we use Gini coefficients as a measure of the spread in wage outcomes for children. Finally, real GDP growth is used to measure the relation between the parent's income and the expected level of the child's earnings. We then add control variables, some of which provide alternative or complementary measures of variables in the model, and some of which reflect factors outside the model that may affect norm formation. To account for unobserved regional differences, we also add region dummies. Se

Below, we describe the control variables. First, individuals may have different subjective beliefs about the return to hard work, and this is likely to affect how they respond to incentives. We use two proxies for such beliefs. One measures the respondent's agreement with the statements "In the long run, hard work

^{25.} The data set consists of OECD members before 1995, i.e., it excludes the Eastern European countries that joined later, with the exception of Greece, Luxembourg, and New Zealand, which joined earlier but are not present in the WVS data set. Data for Britain and Northern Ireland are aggregated as are data for different regions in Spain.

^{26.} For a given income more children means that parents are able to provide less support per child. We control for this by keeping the number of children fixed in the regressions. (We use respondents with one child, but the results in the two children case are similar.)

^{27.} Measured as growth of GDP-PPP. The averages used are for the following periods: 1981–1990, 1990–1999, and 1995–1999. The GDP data are from OECD [2003].

^{28.} Using country dummies would increase \mathbb{R}^2 , in some cases almost double it, but it would also aggravate the multicollinearity problem for the country level variables.

usually brings a better life" and "Hard work doesn't generally bring success—it's more a matter of luck and connections" on a scale from 1 to 10, where 1 corresponds to the former statement. The other proxy measures the respondent's political orientation from left to right.²⁹ Second, the model does not distinguish between income and wealth. There is no wealth variable in the WVS data set, but we include the variable "social class" (which is coded from 1 to 5, where 1 is the highest social class) that may be a proxy. Fourth, the measurement of the dependent variable does not distinguish between the respondents' attitudes to raising one's own children and how others should raise theirs. If older respondents have grown-up children, then their responses may to a greater extent reflect views on how others should raise their children—in which case they might favor stricter work norms. If so, "work hard" would be expected to increase in the age of the respondent. Finally, we control for the potential influence of "protestant work ethic" and gender. The first dummy equals 1 if the respondent is a protestant. The second dummy equals 1 if the respondent is male.

Hard work is a discrete choice variable and we estimate both a linear probability model and a logit model, Tables I and II, respectively. To allow for the predicted effect of household income, a hump-shape that levels off, we estimate a cubic as well as two quadratic specifications, one for low incomes (the first three deciles) and one for high incomes (from the fourth decile and up). Apart from income these specifications also contain social expenditure, GINI and GDP growth, which enter linearly—columns (1)–(3) in Tables I and II. In columns (4)–(6) we have added control variables, and columns (7)–(9) include region dummies.

In Tables I and II, the cubic specification (column (1)) as well as the quadratic specifications for the low and the high income intervals (columns (2) and (3), respectively) are consistent with the predicted hump-shaped effect of household income. All the coefficients have the right signs, and they are generally highly significant for the cubic and the high income specification, but

^{29.} In the model the return to hard work depends on the earnings difference between outcomes and the utility cost of increasing the chance of a good outcome. However, since children's utility is assumed to be separable in effort cost, only the earnings difference affects norm formation. To the extent that the above variables reflect costs rather than difference in earnings, they should not matter.

TABLE I

OLS Regression for the Emphasis on Hard Work

	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)
Household income	0.1208 [5.57]	0.1815 [2.38]	0.1163 [-5.20]	0.0772 [2.27]	0.1897 [1.66]	-0.0918 [-2.78]	0.0560 [1.66]	0.1637 [1.46]	-0.0857 [-2.63]
squared	$-0.0282 \; [-6.23]$	$-0.0282 [-6.23] \ \ -0.0388 [-2.09]$	0.0074 [4.48]	-0.0185 [-2.64]	$-0.0434\;[-1.59]$	$-0.0185 \left[-2.64\right] -0.0434 \left[-1.59\right] 0.0069 \left[2.81\right] -0.0146 \left[-2.10\right] -0.0405 \left[-1.51\right]$	-0.0146 [-2.10]	-0.0405 [-1.51]	0.0067 [2.77]
Household income cubic	0.0017 [6.11]			0.0012 [2.85]			0.0010 [2.43]		
Government social spending GINI	-0.0084 [-8.19] 0.0023 [2.42]	$-0.0084 \ [-8.19] \ -0.0116 \ [-6.07] \ -0.0069 \ [-5.70] \ -0.0129 \ [-8.59] \ -0.0181 \ [-6.54] \ -0.0108 \ [-6.02] \ -0.0184 \ [-5.42] \ -0.0343 \ [-5.43] \ -0.0114 \ [-2.83] \ 0.0007 \ [0.44] \ 0.0012 \ [0.51] \ -0.0117 \ [-2.63] \ 0.0003 \ [2.21]$	$-0.0069 \left[-5.70\right] \\ 0.0034 \left[3.01\right]$	-0.0129 [-8.59] -0.0181 [-6.54] -0.0108 [-6.02 -0.0014 [-1.09] -0.0061 [-2.58] 0.0007 [0.44]	-0.0181 [-6.54] -0.0061 [-2.58]	-0.0108 [-6.02] 0.0007 [0.44]	-0.0184 [-5.42] 0.0012 [0.51]	-0.0343 [-5.43] -0.0117 [-2.63]	-0.0114 [-2.83] 0.0063 [2.21]
Real GDP growth per capita	0.0118 [2.81]	-0.0035 [-0.50] 0.0254 [4.40]	0.0254 [4.40]	0.0291 [3.52]	0.0332 [2.16]	0.0287 [2.90]	0.0324 [3.63]	0.0333 [1.95]	0.0326 [3.07]
connections				-0.0109 [-4.34]	-0.0095 [-2.22]	-0.0117 [-3.75]	-0.0127 [-5.12]	$\overline{\mathbb{Z}}$	-0.0129[-4.15]
Left to right Social class				0.0019 [0.57] $0.0244 [3.10]$	-0.0002 [-0.04] $0.0109 [0.78]$	0.0025 [0.61] $0.0303 [3.17]$	0.0079 [2.39]	0.0061[1.04] $0.0085[0.61]$	0.0080[1.97] $0.0261[2.75]$
Age Protestant				0.0028 [5.97]	0.0032 [4.37]	0.0026 [4.10]	0.0023 [4.99]	$\begin{array}{c} 0.0025 \ [3.51] \\ -0.0581 \ [-1.54] \end{array}$	0.0023 [3.66]
Gender male					0.0389 [1.58]		0.0496 [3.66]	0.0445 [1.85]	0.0516 [3.14]
North Europe South Europe							0.0146 [0.47] $0.1480 [5.89]$	$0.0105 [0.18] \\ 0.1194 [2.48]$	$0.0117 [0.31] \\ 0.1502 [5.06]$
Nordic Countries Asia							$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} -0.0188 [-0.22] \\ -0.3807 [-3.71] \end{array}$	$-0.0294 [-0.51] \\ 0.0061 [0.10]$
Mexico and Turkey	0.9559 [4.00]	0.4071 [9.91]	0.6499 [6.60]	0.9818 [9.40]	0.5403 [9.88]	0 5005 [9 09]	-0.1713 [-4.37]	0.1662[-2.39]	-0.1695 [-3.55]
Observations	9338	3068	6270	4540	1468	3072	4540	1468	3072
Adjusted R^2	0.0536	0.0429	0.0521	0.0831	0.0898	0.0784	0.1111	0.1270	0.1034

z-values are in brackets. North Europe (Austria, Belgium, France, Germany, The Netherlands, and Switzerland); South Europe (Italy, Portugal, and Spain); "Nordic" countries (Denmark, Finland, Iceland, Norway, and Sweden); Asia (Japan and Korea), Turkey and Mexico; and the default region is Australia, Britain, Canada, Ireland, and the United States.

TABLE II
LOGIT REGRESSIONS FOR THE EMPHASIS ON HARD WORK

	(1)	(2)	(3)	(4)	(2)	(9)	(7)	(8)	(6)
Household income	0.6323 [5.79]	0.8622 [2.46]	0.8622 [2.46] -0.5916 [-5.03] 0.3745 [2.32]	0.3745 [2.32]	0.8620 [1.61]	0.8620 [1.61] -0.4341 [-2.75] 0.2855 [1.72]	0.2855 [1.72]	0.7727 [1.40] -0.4288 [-2.67]	-0.4288 [-2.67]
squared	$-0.1470 \; [-6.40]$	$-0.1470 \; [-6.40] \;\; -0.1831 \; [-2.16] 0.0374 \; [4.30]$		$-0.1957 \; [-2.69] \;\; -0.0434 \; [-1.54] 0.0326 \; [2.78]$	-0.0434 [-1.54]		-0.0749[-2.19]	$-0.0749 [-2.19] \ \ -0.1886 [-1.43]$	0.0335[2.82]
Household income cubic	0.0088 [6.24]			0.0059 [2.89]			0.0053 [2.53]		
Government social spending GINI	-0.0412 [-8.08] 0.0107 [2.31]	$\begin{array}{c} -0.0530 \; [-6.08] \\ -0.0031 \; [-0.39] \end{array}$	-0.0347 [-5.50] 0.0175 [3.02]	$\begin{array}{c} -0.0588 \; [-8.41] \\ -0.0063 \; [-1.05] \end{array}$	$\begin{array}{c} -0.0820 \; [-6.31] \\ -0.0273 \; [-2.54] \end{array}$	$0.0412 \left[-8.08 \right] -0.0530 \left[-6.08 \right] -0.0347 \left[-5.50 \right] -0.0588 \left[-8.41 \right] -0.0820 \left[-6.31 \right] -0.0498 \left[-5.94 \right] -0.0498 \left[-5.94 \right] -0.0901 \left[-5.30 \right] -0.1714 \left[-5.34 \right] -0.0175 \left[2.31 \right] -0.0067 \left[-1.05 \right] -0.0067 \left[-2.54 \right] 0.0034 \left[0.46 \right] -0.0016 \left[-0.14 \right] -0.0667 \left[-3.03 \right] -0.0107 $	$\begin{array}{c} -0.0901 \; [-5.30] \\ -0.0016 \; [-0.14] \end{array}$	$-0.0412 \left[-8.08\right] -0.0530 \left[-6.08\right] -0.0347 \left[-5.50\right] -0.0588 \left[-8.41\right] -0.0820 \left[-6.31\right] -0.0498 \left[-5.94\right] -0.0901 \left[-5.30\right] -0.1114 \left[-5.34\right] -0.0546 \left[-2.69\right] \\ -0.0107 \left[2.31\right] -0.0031 \left[-0.39\right] 0.0175 \left[3.02\right] -0.0063 \left[-1.05\right] -0.0273 \left[-2.54\right] 0.0034 \left[0.46\right] -0.0016 \left[-0.14\right] -0.0667 \left[-3.03\right] 0.0255 \left[1.77\right]$	-0.0546 [-2.69] $0.0255 [1.77]$
neal GDF growin per capita	0.0456 [2.24]	-0.0201 [-0.66]	0.1314 [3.92]	0.0291 [3.40]	0.1538 [2.14]	0.1277 [2.74]	0.1455 [3.41]	0.1428 [1.73]	0.1454 [2.87]
connections Left to right				-0.0516 [-4.33]	-0.0435 [-2.20] -0.0004 [-0.02]	0.0516 [-4.33] -0.0435 [-2.20] -0.0563 [-3.76]		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-0.0634 [-4.16]
Social class				0.1118 [3.00]	0.0457 [0.69]		0.1101 [2.88]	0.0399 [0.58]	0.1244 [2.67]
Protestant				-0.6580 [-6.92]	- 1	- 1	- 1	Ī	-0.3716 [-2.80]
Gender male North Europe				0.2338 [3.59]	0.1808 [1.58]	0.2460 [3.08]	0.2509 [3.79] -0.0121 [-0.08]	0.2246 [1.91] -0.0076 [-0.03]	0.2637 [3.25] -0.0251 [-0.13]
South Europe							0.6302 [5.26]	0.4924 [2.16]	0.6629 [4.66]
Nordic Countries Asia							-0.4245 [-1.63] -0.6412 [-2.40]	-0.3226 [-0.70] -2.004 [-3.97]	-0.4861 [-1.52] -0.0473 [-0.15]
Mexico and Turkey							-0.7555 [-4.14]	-0.7555[-4.14] $-0.7331[-2.31]$ $-0.7447[-3.30]$	-0.7447 [-3.30]
Constant	$-1.1005 \; [-3.51]$	$-0.3910 \; [-0.70]$	0.9166[1.80]	$-0.7139 \; [-1.49]$	0.1464 [0.17]	0.4542 [0.64]	$-0.2907\ [-0.37]$	3.45	$-0.4621 \; [-0.45]$
Observations Pseudo R^2	9338 0.0441	3068 0.0346	6270 0.0439	4540 0.0681	1468 0.0759	3072 0.0655	4540 0.0937	1468 0.1106	3072 0.0890
Constant Observations Pseudo R^2	$\begin{bmatrix} -1.1005 & [-3.51] \\ 9338 \\ 0.0441 \end{bmatrix}$	-0.3910 [-0.70] 3068 0.0346	0.9166 [1.80] 6270 0.0439		-0.7139 [-1.49] 4540 0.0681	1.49] 0.1		0.4542 [0.64] 3072 0.0655	0.4642 [0.64] -0.2907 [-0.37] 3072 4540 0.0655 0.0937

z-values are in brackets. North Europe (Austria, Belgium, France, Germany, The Netherlands, and Switzerland); South Europe (Italy, Portugal, and Spain); "Nordic" countries (Denmark, Finland, Iceland, Norway, and Sweden); Asia (Japan and Korea); Turkey and Mexico; and the default region is Australia, Britain, Canada, Ireland, and the United States.

less so for the low income specification. Moreover, social expenditure has a strong negative effect on work norms, which is in line with the prediction for families where children receive support in both outcomes.³⁰

GINI has the predicted sign for all high income regressions, (3), (6), and (9), and is at least significant at the 5 percent level in two of these. For the low income segment, the model offered no clear-cut prediction. The results concerning GINI in the low income and the cubic specification are mixed. As expected, GDP growth strengthens work norms in the high income specification, but there is no negative effect in the low income case. Regarding GDP growth one might be concerned about reverse causation—it is not implausible that strong work norms could be conducive to growth.

Adding control variables has a moderate effect on the coefficient estimates of the core variables except for GINI and Growth in the low income regression. As expected, respondents are more likely to think work norms are important if they believe that hard work brings success, but their political orientation does not seem to matter. Our wealth proxy, social class, where low values correspond to high class, has a negative effect on norm formation, as predicted. Also as expected, older respondents more often think that work norms are important. Contrary to common speculations, a protestant creed actually tends to reduce the emphasis on work norms, ³¹ and finally, men are more prone to emphasize work norms than women. Adding region dummies has little effect on most coefficient estimates.

30. We also tried a simple specification with a quadratic social expenditure term (SE) just to check for the possibility of an initial positive effect for low income (deciles 1–3) families:

$$\begin{split} s = -0.0309 + 0.0966I - 0.0235I^2 + 0.0420\text{SE} \\ & \text{\tiny $[-0.24]$} \quad \text{\tiny $[1.28]$} \quad \text{\tiny $[-1.29]$} \quad \text{\tiny $[7.78]$} \\ & - 0.0014\text{SE}^2 + 0.0008\text{GINI} + 0.0312\text{Growth.} \\ & \text{\tiny $[-10.59]$} \quad \text{\tiny $[0.47]$} \quad \text{\tiny $[4.16]$} \end{split}$$

This suggest a positive effect for SE up to 14.6 percent and a negative effect thereafter. (The mean is 19.6, and the maximum 33.5 percent.) This specification has a better fit (Adjusted $R^2=0.0764$) than (2) in Table II. The corresponding high income specification yields similar results for the SE coefficients but has little impact on other coefficients and the overall fit. However, we stick with the linear specification that is easier to interpret, yet gives a fair idea about the general effect of SE.

31. In a cross section of countries Alesina, Glaeser, and Sacerdote [2005, Figure 10] find basically zero correlation between Protestant affiliation and hours of work.

Our empirical analysis is a crude first attempt to examine the link between economic incentives and work norms, and much of the variation in the data set is not explained. Still the results are encouraging. Specifically, the pattern of implications emerging from the model appears to be broadly consistent with the data.

IV. CONCLUDING REMARKS

Although society-wide changes of work norms over time are influenced by many factors, we have confined our analysis to the effects on work norms of economic incentives created by the welfare state. Since the family plays such an essential role in norm formation, it is natural to focus on mechanisms for norm formation that are closely tied to the economic incentives facing the family—incentives also influenced by changes in welfare state arrangements. Our model predicts, for instance, that altruistic parents' interest in instilling work norms in their children depends on factors such as children's wages and parental income, with an hump-shaped relation between parents' income level and their ambitions to instill work norms.

Regarding the influence of social insurance arrangements on norm formation, our model predicts that more generous arrangements not only weaken the economic incentives for work but also lead to weaker incentives for parents to instill work norms in their children. From that point of view, it is suggestive that the ambitions to instill work norms in children seem to be weakest in the most advanced welfare states.

When the strength of social norms depends on the number of individuals willing to enforce it, which is likely to be the case for social norms, then the norm could be unstable. The reason is that if failure in the labor market becomes more widespread, the perceived noneconomic cost of failing declines, which further erodes effort incentives and further increases the frequency of failure in the labor market. Therefore, we have examined sufficient conditions for stability of a social norm in favor of work.

Our empirical exercise suggests that the pattern of implications emerging from the model is broadly consistent with the data. A more in-depth exploration of the link between economic incentives and norm formation seems be a worthwhile topic for future empirical research. Appendix: Strict Quasi Concavity of $E[U_p]$

It is straightforward to show that $d^2E[U_p]/ds^2$ reduces to

$$\frac{\partial E[U_p]}{\partial p} \frac{\partial [\partial p/\partial s]}{\partial p} \frac{\partial p}{\partial s} + \alpha \frac{\partial^2 E[U_k]}{\partial p/\partial s} \frac{\partial p}{\partial s}.$$

This equals $-\alpha/v''(p)$ when $dE[U_p]/ds=0;$ i.e., $E[U_p]$ is strictly quasi-concave in s.

Proof of the Lemma. The threshold income \hat{I} is the solution to $\tilde{c}_p = (\tilde{c}_k)^{\alpha}$. Both \tilde{c}_p and \tilde{c}_k are continuous in I, and for $\alpha I \leq y^l$, it follows that $\tilde{c}_p = 1 < (y^h/y^l)^{\alpha} = (\tilde{c}_k)^{\alpha}$ and so s = 0. If $\alpha I \geq y^h$, then $\tilde{c}_p = \tilde{c}_k$, which implies that s > 0. By continuity, a threshold \hat{I} exists, and since \tilde{c}_p is strictly increasing and \tilde{c}_k strictly decreasing in I for $l \in (y^l/\alpha, y^h/\alpha)$, it is unique. QED

Proof of Proposition 1. (i) $I \in (\hat{I}, y^h/\alpha)$ implies that $r^l > 0$, $r^h = 0$, and s > 0. Differentiating (9) with respect to I then yields, $\partial s/\partial I = (\alpha I + y^l)/(\alpha I(I + y^l)) > 0$. Similarly, the effect of changes in α on s is

$$rac{\partial s}{\partial lpha} = rac{1}{lpha^2} \left[rac{2lpha}{1+lpha} - \ln \, ilde{c}_{\scriptscriptstyle p}
ight] > rac{1}{lpha^2} \left[rac{2lpha}{1+lpha} - \ln \, (1+lpha)
ight] > 0,$$

for $\alpha \in [0,1]$. The effects of changes in wages on s are $\partial s/\partial w^h = -(1-t)/y^h < 0$ and $\partial s/\partial w^l = -(1-\alpha)/\alpha(1-t)/(I+w^l) < 0$. (ii) If $I > y^h/\alpha$ then $r^l > 0$, $r^h > 0$, and $\tilde{c} = \tilde{c}_p = \tilde{c}_k = (I+y^h)/(I+y^l)$. Hence, $s = (1-\alpha)/\alpha \ln \tilde{c} > 0$, and it follows that s decreases in I, α , and w^l but increases in w^h .

Proof of Proposition 2. (i) For $I \in (y^l/\alpha,\hat{I})$, when $r^l > 0$, $r^h = 0$, and s = 0, the effects of changes in I, α , w^h , and w^l on p are implicitly derived from (5): $\partial p/\partial I = -1/(v''(p)(I+y^l)) < 0$, $\partial p/\partial \alpha = -1/(v''(p)\alpha(1+\alpha)) < 0$, $\partial p/\partial w^h = (1-t)/(v''(p)y^h) > 0$, and $\partial p/\partial w^l = -(1-t)/(v''(p)(1+y^l)) < 0$. For $I > y^h/\alpha$, when r^l and $r^h > 0$, the effects are derived from (8); i.e., from $\ln [(I+y^h)/(I+y^l)] - \alpha q/(1-p) = 0$. Thus, p decreases in I, α , and w^l but increases in w^h . (ii) For $I \in (\hat{I}, y^h/\alpha)$, when $r^l > 0$, $r^h = 0$, and s > 0, the effects are also derived from (8): $\partial p/\partial I = 1/(\alpha v''(p))y^l/(I(I+y^l)) > 0$, $\partial p/\partial \alpha = 1/(\alpha v''(p))[1/(1+\alpha) - q/(1-p)] \leq 0$, $\partial p/\partial w^h = 0$, and $\partial p/\partial w^l = -(1-t)/(\alpha v''(p)(I+y^l)) < 0$. QED

Proof of Proposition 3. First, we examine how p depends on π . If s > 0, then p is determined by (8), which depends on $\tilde{c}_p(t,\pi)$.

If s=0, then p is determined by (5), which depends on $\tilde{c}_k(t,\pi)$. The consumption ratios are given by

$$| ilde{c}_p(t,\pi)|_{s>0} = \left\{ egin{array}{l} \dfrac{(1+lpha)I}{I+w^l+t\,\dfrac{\pi}{1-\pi}\,w^h} & ext{if } r(w^l) > 0 \,\, r(w^h) = 0 \ & \dfrac{I+(1-t)w^h}{I+w^l+t\,\dfrac{\pi}{1-\pi}\,w^h} & ext{if } r(w^l) > 0 \,\, r(w^h) > 0 \end{array}
ight.$$

$$\tilde{c}_{\boldsymbol{k}}(t,\pi)\big|_{s=0} = \left\{ \begin{array}{ll} \dfrac{(1-t)w^h}{w^l + t \, \dfrac{\pi}{1-\pi} \, w^h} & \text{if } r(w^l) = 0 \, \, r(w^h) = 0 \\ \dfrac{1+\alpha}{\alpha} \dfrac{(1-t)w^h}{I+w^l + t \, \dfrac{\pi}{1-\pi} \, w^h} & \text{if } r(w^l) > 0 \, \, r(w^h) = 0. \end{array} \right.$$

For $\pi=0$ both $\tilde{c}_p(t,\pi)$ and $\tilde{c}_k(t,\pi)$ are greater than $(I+w^h)/(I+w^l)$ if t is sufficiently low. Since $q<\ln{[(I+w^h)/(I+w^l)]}$ by assumption, both (5) and (8) then yield strictly positive p. Moreover, if t>0, $\tilde{c}_p(t,\pi)$ and $\tilde{c}_k(t,\pi)$ eventually fall below 1 as π increases (and approach zero as $\pi\to 1$). Hence, p=0 at $\pi=1$.

Both $\tilde{c}_p(t,\pi)$ and $\tilde{c}_k(t,\pi)$ strictly decrease in π and t. Hence, p can be expressed as a continuous decreasing function of π : $p(\pi)$, where $p'(\pi) < 0$ for $p(\pi) > 0$. If families are identical, then each child's p equals the aggregate success probability; i.e., $\pi = p(\pi)$. Thus, there is a unique fixed point, which is greater than 0 if p(0) > 0. If families differ with respect to I, α , or q, then $p_i(\pi)$ denotes the optimal p for a child of type i. As before, $p_i(\pi)$ is continuous in π , $p_i(0) > 0$ for sufficiently low t, $p_i(1) = 0$, and $p_i'(\pi) \le 0$, where the inequality is strict if $p_i(\pi) > 0$. The equilibrium condition is then $\pi = \sum_{i \in N} \eta_i p_i(\pi)$, where N is the set of types and η_i is the frequency of type i in the population. Since the right-hand side decreases in π , the fixed point is unique. QED

Proof of Proposition 4. As noted above, $\tilde{c}_p(t,\pi)$ and $\tilde{c}_k(t,\pi)$ strictly decrease in t. Thus, it follows from conditions (5) and (8) that, for a given π , an individual's p decreases in t, and strictly so for p>0. That is, $p(\pi)$ shifts downward (for π such that $p(\pi)>0$), which implies that the equilibrium π decreases in t.

The effect of t on s depends on r^h . If $r^h>0$, then $\tilde{c}_p(t,\pi)=\tilde{c}_k(t,\pi)=\tilde{c}(t,\pi)$, and s strictly decreases in t. (An increase in t

leads to a lower π via a lower \tilde{c} . The reduction in π moderates the fall in \tilde{c} , but cannot outweigh the direct effect via t. A higher \tilde{c} for everyone implies a higher, not a lower, π .) If $r^h = 0$, then the effect of t depends on the relative impact on $\tilde{c}_n(t,\pi)$ and $\tilde{c}_k(t,\pi)$ and cannot be signed.

Proof of Proposition 5. The effect of a change in π on p, taking t and B as given, can be implicitly derived from condition (5) after replacing s with $\pi \bar{s}$: $\partial p/\partial \pi = \bar{s}(1-p)^2/q$. This is nonzero only for families choosing $\bar{s} > 0$ when the effect is

$$rac{\partial p}{\partial \pi} = rac{1-p}{\pi} \left(1 - rac{lpha \ln \, ilde{c}_k}{\ln \, ilde{c}_p}
ight),$$

where the last factor is less than one. If p > 0.5 for all children, then $\pi > 0.5$. Thus, $\partial p/\partial \pi < 1$ which ensures stability. QED

STOCKHOLM UNIVERSITY AND THE RESEARCH INSTITUTE OF INDUSTRIAL ECONOMICS STOCKHOLM UNIVERSITY

References

Åberg, Yvonne, Peter Hedström, and Ann-Sofie Kolm, "Social Interactions, En-

Aberg, Yvonne, Peter Hedström, and Ann-Sofie Kolm, "Social Interactions, Endogenous Processes, and Youth Unemployment," Manuscript, Department of Sociology, Stockholm University, Stockholm, 2003.
Akabayashi, Hideo, "On the Role of Incentives in the Formation of Human Capital in the Family," Ph.D. thesis, University of Chicago, 1996.
Alesina, Alberto, Edward Glaeser, and Bruce Sacerdote, "Work and Leisure in the U. S. and Europe: Why so Different?" NBER Macroeconomic Annual (Cambridge, MA: MIT Press, 2005), pp. 1–64.
Altonji, Joseph G., Fumio Hayashi, and Laurence J. Daniel Kotlikoff, "Parental Altruism and Inter Vivos Transfers: Theory and Evidence," Journal of Political Economy. CV (1997), 1121–1166.

cal Economy, CV (1997), 1121–1166.

Antel, John J., "The Intergenerational Transfer of Welfare Dependency: Some Statistical Evidence," Review of Economics and Statistics, III (1992),

Alexrod, Robert, "An Evolutionary Approach to Norms," American Political Science Review, LXX (1986), 1095–1111.

Becker, Gary S., "A Theory of Social Interactions," Journal of Political Economy,

LXXXII (1974), 1063-1093.

"Novel Lecture: The Economic Way of Looking at Behavior," Journal of Political Economy, CI (1993), 385–409.

—, Accounting for Tastes (Cambridge, MA: Harvard University Press, 1996).

Becker, Gary S., and Casey B. Mulligan, "The Endogenous Determination of Time Preference," Quarterly Journal of Economics, CXII (1997), 729–758.

Ben-Ner, Avner, and Louis Putterman, Economics, Values and Organization (Cambridge: Cambridge University Press, 2000).

Cambridge: Cambridge Cinversity Fress, 2009.

Bénabou, Roland, and Jean Tirole, "Beliefs in a Just World and Redistributive Politics," Quarterly Journal of Economics, CXXI (2006), 699–746.

Bergstrom, Theodore, "A Fresh Look at the Rotten Kid Theorem—and Other Household Mysteries," Journal of Political Economy, XCVII (1989), 1138-1159.

Bertola, Giuseppe, Tito Boeri, and Giuseppe Nicoletti, Welfare and Employment in a United Europe (Cambridge, MA: MIT Press, 2001).

- Binmore, Ken, and Larry Samuelson, "An Economist's Perspective on the Evolution of Norms," Journal of Institutional and Theoretical Economics, CL (1994), 45-63.
- Bisin, Alberto, and Thierry Verdier, "On the Cultural Transmission of Preferences for Social Status," Journal of Public Economics, 70 (1998), 75-97.
- Bisin, Alberto, and Thierry Verdier, "The Economics of Cultural Transmission and the Dynamics of Preferences," Journal of Economic Theory, XCVII (2001), 298 - 319.
- Boyd, Robert, and Peter J. Richerson, Culture and the Evolutionary Process (Chicago: Chicago University Press, 1985).
- Bowles, Samuel, Christina Fong, and Herbert Gintis, "Reciprocity and the Welfare State," in Handbook on the Economics of Giving, Reciprocity and Altruism, Mercier-Ythier Jean, Serge Kolm, and Louis-André Gérard-Varet, eds. (Amsterdam: Elsevier, 2004).
- Bruce, Neil, and Michael Waldman, "The Rotten-Kid Theorem Meets the Samari-
- tan's Dilemma," Quarterly Journal of Economics, CV (1990), 155–165. Carroll, Eero, Emergence and Structuring of Social Insurance Institutions: Comparative Studies on Social Policy and Unemployment Insurance (Stockholm: Akademitryck, 1999).
- Cialdini, Robert B., and Melanie R. Trost, "Social Influence: Social Norms, Conformity, and Compliance," in *The Handbook of Social Psychology*, Daniel T. Gilbert, Susan I. Fiske, and Lindzey Gardner, eds. (Boston, MA: McGraw-Hill, 1998)
- Clark, Andrew E., "Unemployment as a Social Norm: Psychological Evidence from
- Panel Data," Journal of Labor Economics, XXI (2003), 323–351.
 Collins, Andrew W., et al. "Contemporary Research on Parenting: The Cases for Nature and Nurture," American Psychologist, LV (2000), 218–232.
- Corak, Miles, "Intergenerational Influences on the Receipt of Unemployment Insurance," Family and Labor Studies, (1999), Statistics Canada. Cox, Donald, and Mark R. Rank, "Inter-Vivos Transfers and Intergenerational
- Exchange," Review of Economics and Statistics, LXXIV (1992), 305–314.
- Eccles, Jacquelynne S., Allan Wigfield, and Ulrich Sciefele, "Motivation to Succeed," in Handbook of Child Psychology: III, in Nancy Eisenberg, ed., Social, Emotional, and Personality Development, William Damon, ed. (New York, NY: Wiley, 1998).
- Farrell, Lisa, Paul Frijters, and Michael A. Shields, "The Economic Motives for Child Allowances: Altruism, Exchange or Value of Independence?" manuscript, Department of Economics, University of Melbourne, Australia, 2002.
- Fehr, Ernst, and Simon Gächter, "Altruistic Punishment in Humans," Nature, ĆDXV (2002), 137–140. Fehr, Ernst, and Urs Fischbacher, "Third Party Punishment and Social Norms,"
- Evolution and Human Behavior, XXV (2004), 63-87.
- Fehr, Ernst, Urs Fischbacher, and Simon Gächter, "Strong Reciprocity, Human Cooperation and the Enforcement of Social Norms," Human Nature, XIII (2002), 1-25.
- Furnham, Adrian, "The Protestant Work Ethic and Attitudes towards Unemployment," Journal of Occupational Psychology. LV (1982). 277–285 Journal of Occupational Psychology, LV (1982), 277–285.
- "The Determinants of Attitudes towards Social Security Recipients," British Journal of Social Psychology, XXIV (1985), 19–27.
- The Protestant Work Ethic: The Psychology of Work-Related Beliefs and
- Behaviours (London: Routledge, 1990). Gatti, Roberta, "Family Altruism and Incentives," Scandinavian Journal of Economics, CVII (2005), 67-81.
- Gecas, Viktor, "The Influence of Social Class on Socialization," in Contemporary Theories about the Family, Wesley R. Burr, Reuben Hill, F. Ivan Nye, and Ira L. Reiss, eds. (New York: The Free Press, 1979a).
- "Parental Support, Power, and Control Techniques in the Socialization of Children," in *Contemporary Theories about the Family*, Wesley R. Burr, Reuben Hill, F. Ivan Nye, and Ira L. Reiss, eds. (New York: The Free Press, 1979b).
- Gottschalk, Peter T., and Robert Moffit, "Welfare Dependence: Concepts, Measures, and Trends," American Economic Review, Papers and Proceedings, LXXXIV (1994), 38-42.

- Gottschalk, Peter T., Sheldon Danziger, and Eugene Smolensky, "Trend and Cycle in Family Income and Male Earnings Inequality: Recent U.S. Experience," in Public Finance and Steady Economic Growth, Gerold Krause-Junk, ed., Proceedings of the 45th Congress of the International Institute of Public Finance, Buenos Aires, 1990.
- Grusec, Joan E., and Leon Kuczynski, Parenting and Children's Internalization of Values: A Handbook of Contemporary Theory (New York: Wiley, 1997). Hauk, Esther, and Maria Saez-Marti, "On the Cultural Transmission of Corrup-
- tion," Journal of Economic Theory, CVII (2002), 311–335. Henrekson, Magnus, and Persson Mats, "The Effects of Sick Leave of Changes in
- the Sickness Insurance System," Journal of Labor Economics, XXII (2004), 87 - 114.
- Holtz-Eakin, Charles, David Joulfaian, and Harvey S. Rosen, "The Carnegie Conjecture: Some Empirical Evidence," Social Problems, CVIII (1993)
- Horan, Patrick, and Patricia Austin, "The Social Bases of Welfare Stigma," Social Problems, XXI (1974), 648-657.
- Ingelhart, Ronald, Miguel Basañez, and Alejandro Moreno, Human Values and Beliefs: A Cross-Cultural Sourcebook (Ann Arbor: University of Michigan Press, 1998).
- Inglehart, Ronald, et al., World Values Surveys and European Values Surveys, 1981-84, 1990-93, and 1995-97 (Ann Arbor, MI: ICPSR, 2003), Dataset 2790.
- Kandori, Michihiro, "Social Norms and Community Enforcement," Review of Economic Studies, LIX (1992), 63-80.
- Leviatan, Uriel, "Is It the End of Utopia? The Israeli Kibbutz at the Twenty-First Century," Mimeograph, Center for the Study of Co-operatives, University of Saskatchewan, Saskatchewan, 2003.
- Levine, Phillip B., and David J. Zimmerman, "The Integenerational Correlation in AFDC Participation: Welfare Trap or Poverty Trap," 1996, Institute for Research on Poverty Discussion Paper No. 1100–1196.
- Lindbeck, Assar, "Hazardous Welfare State Dynamics," American Economic Review, Papers and Proceedings, LXXXV (1995), 9-15.
 -, "The West European Employment Problem," Weltwirtschaftliches Archiv,
- CXXXII (1996), 609-637.
- Lindbeck, Assar, and Jörgen W. Weibull, "Altruism and Time-Consistency: The Economics of Fait Accompli," Journal of Political Economy, XCVI (1988), 1165–1182.
- Lindbeck, Assar, and Sten Nyberg, "Raising Children to Work Hard: Altruism,
- Work Norms and Social Insurance," 2001, CESifo Working Paper No. 498. Lindbeck, Assar, Sten Nyberg, and Jörgen W. Weibull, "Social Norms and Economics Incentives in the Welfare State," Quarterly Journal of Economics, CXIV (1999), 1-35.
- Lindbeck, Assar, Sten Nyberg, and Jörgen W. Weibull, "Social Norms and Welfare State Dynamics," Journal of the European Economic Association, I (2003),
- Ljunge, Martin, "Half the Job Is Showing Up: Returns to Work, Taxes, and Sick
- Leave Choices," manuscript, University of Chicago, 2005.

 Maccoby, Eleanor E., and John A. Martin, "Socialization in the Context of the Family: Parent-Child Interaction," in *Handbook of Child Psychology*, Paul H. Mussen, ed. (New York: Wiley, 1983).
- McClelland, David C., The Achieving Society (Princeton, NJ: D. van Nostrand Company, 1961).
- Modig, Arne, and Kristina Boberg, "Är det OK att sjukskriva sig fast man inte är sjuk?" (Is It OK to Be on Sick Leave If You Are Not Sick?), TEMO, Memorandum T22785, 2002.
- Moffit, Robert, "An Economic Model of Welfare Stigma," American Economic Review, LXXIII (1983), 1023-1035.
- Montanari, Ingalill, Social Citizenship and Work in Welfare States: Comparative Studies on Convergence and on Gender (Stockholm: Akademitryck, 2000).
- Mulligan, Casey B., Parental Priorities and Economic Inequality (Chicago: University of Chicago Press, 1997a).
- Work Ethic and Family Background report prepared for the Employment Policies Institute, 1997b.

OECD, OECD Employment Outlook 2003 (Paris: OECD, 2003).

, The OECD Social Expenditure Database, Public Expenditure, Vol 2001,

release 1, 2001, http://new.sourceoecd.org.

Parke, Ross D., and Raymond Buriel, "Socialization in the Family: Ethnic and Ecological Perspectives," in *Handbook of Child Psychology*: III, Nancy Eisenberg, ed., in Social, Emotional, and Personality Development, William

Damon, ed. (New York, NY: Wiley, 1998).

Peterson, Gary W., and Boyd C. Rollins, "Parent-Child Socialization," in *Handbook of Marriage and the Family*, Marvin B. Sussman and Suzanne K. Steinmetz, eds. (New York: Plenum Press, 1987).

Prescott, Edward C., "Why Do Americans Work So Much More Than Europeans?"

- Federal Reserve Bank of Minneapolis Quarterly Review, XXVIII (2004), 2–13.
 Rainwater, Lee, "Stigma in Income-Tested Programs," in Income-Tested Transfer
 Programs: The Case For and Against, Irwin Garfinkel, ed. (New York: Academic Press, 1982).
- Rollins, Boyd C., and Darwin L. Thomas, "Parental Support, Power, and Control Techniques, in the Socialization of Children," in Contemporary Theories about the Family, Wesley R. Burr, Rueben Hill, F. Ivan Nye, and Ira L. Reiss, eds. (New York: The Free Press, 1979).

Sjöberg, Ola, Duties in the Welfare State. Working and Paying for Social Rights (Stockholm: Akademitryck, 2000).

- Stutzer, Alois, and Rafael Lalive, "The Role of Social Work Norms in Job Searching and Subjective Well-Being," Journal of the European Economic Association, II (2004), 696–719.
- U.S. Trust, U.S. Trust Survey of Affluent Americans, 2002. http://www.ustrust-
- Weinberg, Bruce A., "An Incentive Model of the Effect of Parental Income on Children," Journal of Political Economy, CIX (2001), 266–280.