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DISCUSSION PAPER SERIES

IZA DP No. 11927

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Robert Dur
Erasmus University Rotterdam, Tinbergen Institute, CESifo and IZA

Max van Lent
Leiden University

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IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Socially Useless Jobs*

It has been claimed that many workers in modern economies think that their job is socially useless, i.e. that it makes no or a negative contribution to society. However, the evidence so far is mainly anecdotal. We use a representative dataset comprising 100,000 workers from 47 countries at four points in time. We find that approximately 8% of workers perceive their job as socially useless, while another 17% are doubtful about the usefulness of their job. There are sizeable differences between countries, sectors, occupations, and age groups, but no trend over time. A vast majority of workers cares about holding a socially useful job and we find that they suffer when they consider their job useless. We also explore possible causes of socially useless jobs, including bad management, strict job protection legislation, harmful economic activities, labor hoarding, and division of labor.

JEL Classification: J2, J3, J4, J8, M5

Keywords: work motivation, job satisfaction, job search, management quality, job protection legislation, sin industries, labor hoarding, division of labor

Corresponding author:
Robert Dur
Erasmus University Rotterdam
Department of Economics H9-15
P.O. Box 1738
3000 DR Rotterdam
The Netherlands
E-mail: dur@ese.eur.nl

* We are grateful to Anne Boring, Josse Delfgaauw, Sacha Kapoor, Arjan Non, Sandra Phlippen, Joeri Sol, Bauke Visser, Olaf van Vliet, and the editor and a reviewer of this journal for useful comments. We also thank seminar participants at the LSE, Erasmus University Rotterdam, and Leiden University as well as participants of the Reinhard Selten Institute Workshop "New Challenges, New Objectives and New Tools for Public Policy" in Cologne.

1. Introduction

In a widely read essay, anthropologist David Graeber (2013) has claimed on the basis of anecdotal evidence that "Huge swathes of people, in Europe and North America in particular, spend their entire working lives performing tasks they secretly believe do not really need to be performed." (see also Graeber 2018). This claim, if true, is worrisome for at least three reasons. First, in as far as workers' beliefs reflect the true usefulness of their job, it would mean a huge waste of resources. Second, experimental studies (Ariely et al. 2008, Grant 2008, Carpenter and Gong 2016, Kosfeld et al. 2017) have shown that motivation and, hence, productivity deteriorate when workers consider their job as useless or harmful, which is problematic when jobs are actually useful. Third, and independent of the true usefulness of the job, job satisfaction and well-being will be lower for those workers who care about doing a useful job, but perceive their job as useless.

This paper studies socially useless jobs using a large representative dataset – the *International Social Survey Program, Work Orientations Waves* – covering more than 100,000 workers from 47 countries in 1989, 1997, 2005, and 2015. We address the following issues: How many workers consider their job as socially useless? How does this differ between countries, sectors, occupations, cohorts, age groups, and over time? Do workers suffer when they perceive their job as useless? What explains the existence of socially useless jobs? And, finally, what can be done about it?

Our study is limited to workers' subjective assessment of the social usefulness of their job, which we measure by workers' response to the statement "My job is useful to society". Ideally, we would also consider the true usefulness of jobs, as well as its relation with workers' perceptions. However, objective measures are hard to find (cf. Lockwood

et al. 2017) or may not even exist (Graeber 2013). As a result, we will not be able to speak to the issue of whether there is a substantial waste of human resources. We are, however, in a good position to speak to the other major issues mentioned above – workers' motivation, productivity, and satisfaction – as these are affected by the workers' perceived social impact, not by the true social impact of their work.

Our focus on the social usefulness of jobs differs from Dekker (2018), who – independently from and concurrently with the present study – examined the responses of workers to the more general question "I doubt the importance of my work" using the European Working Conditions Survey 2015. Likewise, Hu and Hirsh (2017) use a composite measure of 'meaningful work', which includes whether the job is interesting and whether one can help other people on the job.[1] Closer to our definition, YouGov surveyed a sample of workers in the UK in 2015 asking whether their job is making a meaningful contribution to the world, finding a higher percentage of workers who disagree than we do.[2]

Our paper is structured as follows. In the next section, we will examine workers' perceptions of the social usefulness of their jobs and how they differ across and within countries and over time. Section 3 studies workers' desire for a socially useful job and the consequences of holding a socially useless job for job satisfaction, the pride workers take in their job, and workers' job search behavior. Section 4 turns to possible explanations for the existence of socially useless jobs. We explore the role of bad

[1] See also Steger et al. (2012) for an extensive description of several dimensions of meaningful work and Kaplan and Schulhofer-Wohl (2018) for an analysis of how meaningful US workers find their work.
[2] See: https://yougov.co.uk/news/2015/08/12/british-jobs-meaningless/.

management, strict job protection legislation, harmful economic activities, labor hoarding, and division of labor. Section 5 concludes with a brief summary and a discussion of what governments, employers, and workers can do to prevent that socially useless jobs emerge or persist.

2. Who consider their job as socially useless?

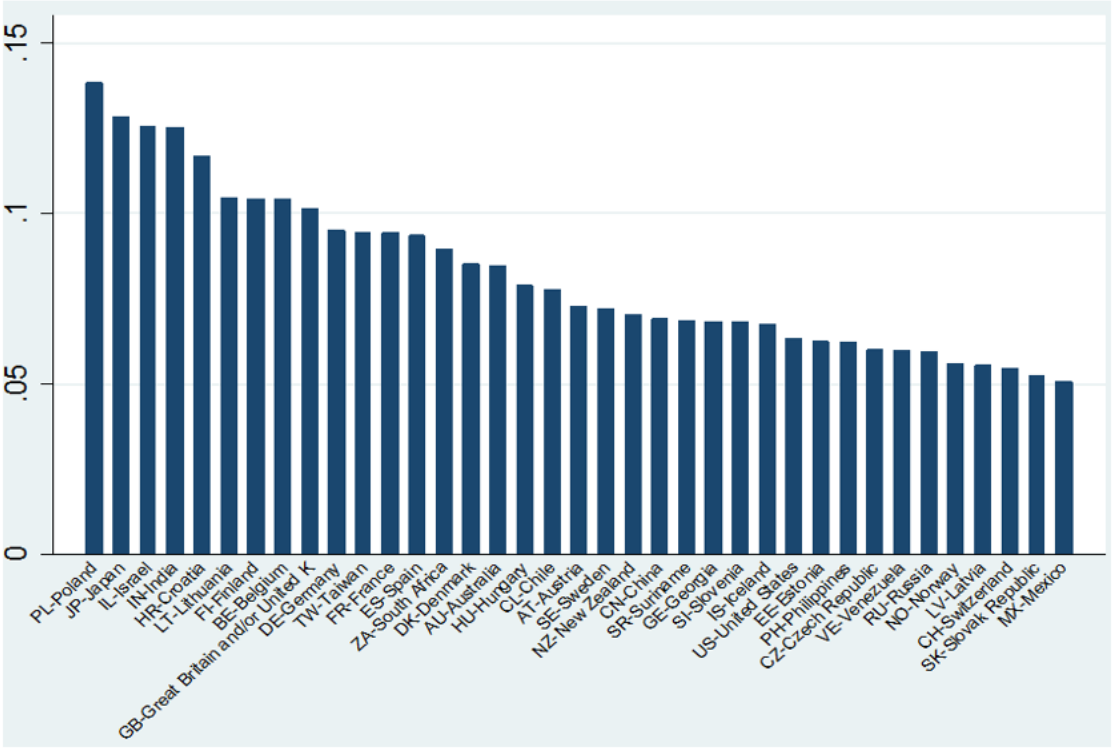
We assume a worker considers his job as socially useless when he disagrees or strongly disagrees with the statement "My job is useful to society". Using this classification, we find for the sample of workers in the 2015-wave – which includes more than 27,000 workers in 37 countries – that 8% perceive their job as socially useless. In contrast, close to 75% of workers agrees or strongly agrees with the statement. The remaining 17% neither agrees nor disagrees, and so they seem doubtful about the usefulness of their job.[3]

Figure 1 shows considerable differences between countries in the percentage of workers perceiving their job as socially useless, with relatively high shares in countries such as Poland, Japan, Israel, and India, and relatively low shares in Norway, Switzerland, and Mexico. There is some variation over time in the share of socially useless jobs, but no clear time trend: it moves from 6% in 1989, to 10% in 1997, back to 6% in 2005.[4] The pattern over time mirrors the business cycle, with lower shares during booms and higher shares during recessions, an issue we will return to in Section 4 where we examine possible explanations for socially useless jobs.

[3] Respondents could also choose "Can't choose", which was chosen by slightly more than 1%.

[4] Countries included in the sample vary from wave to wave, but correcting for this does not change the pattern over time in an important way, see Table S1 in the Appendix.

Fig. 1. The fraction of workers who consider their job as socially useless by country in 2015



Data source: International Social Survey Program, Work Orientations Wave 2015.

Table 1 reports the results of regressing whether a worker considers her job as socially useless on sector of employment, whether one holds a management position, and a set of demographic characteristics.[5] In line with a rich literature in public administration and economics (Perry and Vandenabelee 2015, Francois and Vlassopoulos 2008, Besley and Ghatak 2018), we find that workers in the public sector are much less likely to report having a socially useless job than workers in the private sector (more than 6 percentage points lower, which is large compared to the average of 8% in the full sample). Further inspection of the data shows that this holds particularly for occupations such as firefighters, police officers, social benefits officials, health workers, and teachers. For

[5] Throughout this paper we use OLS regression models for ease of interpretation; logistic regressions give similar results.

these occupations, we find that the percentage of workers reporting socially useless work is close to or equal to zero, see Table S2 in the Appendix. In contrast, for government clerks and the armed forces we find percentages closer to the sample average. Regarding the demographic variables, we find no significant gender difference and a weak, but statistically significant, negative relation with years of education. In contrast to what is sometimes thought (Graeber 2013), managers are not more likely to report socially useless work than regular workers, and this holds for both middle managers and top managers. Lastly, we find sizeable associations with cohort and age, see the coefficients plotted in Figure 2. Holding age constant, cohorts born before World War II are less likely to perceive their job as socially useless, particularly the cohort born before 1921.[6] Holding constant the cohort, older workers are much less likely to perceive their job as socially useless. This age-pattern may arise for a variety of reasons including 'job shopping' by young workers in search for a meaningful job and early retirement by old workers who consider their job socially useless.

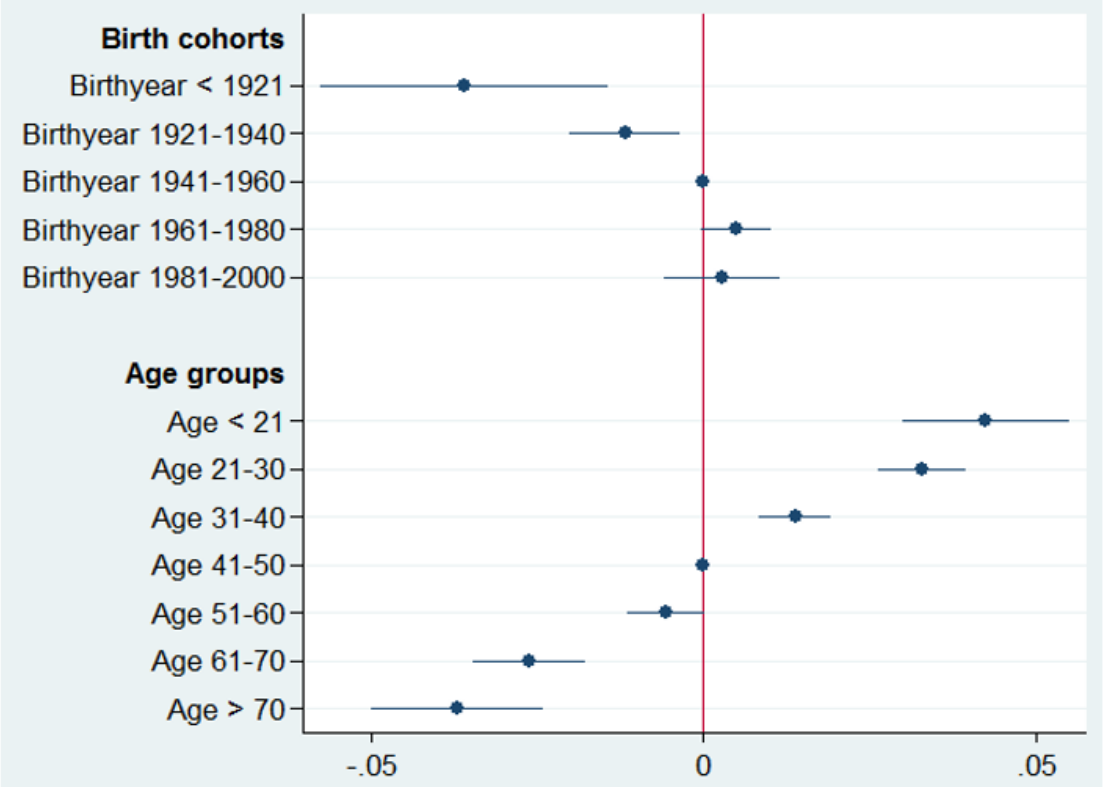
[6] When interpreting these coefficients, it is important to keep in mind that the regression in Table 1 does not include time fixed effects, because of the linear dependency of age, cohort, and time effects.

Table 1. Who consider their job as socially useless?

OLS regression. Mean of dependent variable is: 0.079.
Standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01.

Dependent variable:	Socially useless job
Public sector	-0.063***
	(0.002)
Top manager	-0.024
	(0.015)
Middle manager	0.001
	(0.006)
Years of education	-0.0001*
	(0.0001)
Female	-0.002
	(0.002)
Birth cohort and age group dummies	Yes
Country fixed effects	Yes
Observations	86,469
R^2	0.033

Fig. 2. Change in the proportion of workers who consider their job as socially useless implied by the coefficients of the birth cohort and age group dummies of the regression reported in Table 1
The dot depicts the coefficient and the line the 95% confidence interval of the coefficient estimated in the regression in Table 1. The reference categories are "Birthyear 1941-1960" and "Age 41-50".



3. Do workers suffer when they perceive their job as useless?

Having a job that is useful to society is considered an important job characteristic by a vast majority of workers: Table 2 shows that close to 77% of the 2015-wave finds this important or very important. Not all of these workers manage to get a job they consider socially useful. Fifty percent of socially useless jobs are occupied by workers who find it important to have a socially useful job. However, the data do suggest that there is some sorting of workers to jobs on the basis of preferences, as workers who do not care about

the usefulness of their job are clearly overrepresented among those who perceive their job as socially useless. We find similar results for the other waves.

Table 2. Workers' preference for socially useful jobs and perceived usefulness of their job in 2015

Workers consider their job as socially useless when they do not agree with the following statement: "My job is useful to society". Workers do not mind having a socially useless job when they do not find it important to have "a job that is useful to society".

	Don't mind having a socially useless job		
Considers job socially useless	no	yes	total
no	73%	19%	92%
yes	4%	4%	8%
total	77%	23%	100%

Workers who care about holding a socially useful job report lower job satisfaction when they perceive their job as useless. In the first column of Table 3, we regress a worker's job satisfaction (measured on a 7-point scale) on whether she holds a socially useless job, whether she cares about holding a socially useless job, and the interaction between these two variables. We also include a set of demographic characteristics (age, gender, and education) and country fixed effects.[7] We find a strong negative relation between holding a socially useless job and job satisfaction for those who care, while the relationship is much weaker for those who indicate not to care about holding a socially useless job.[8]

[7] Table S3 in the Appendix provides a version of Table 3 that also reports the coefficients for the demographic characteristics. The coefficients for the country fixed effects are available upon request.

[8] Both the dependent and the main independent variable in the regressions in Table 3 and 4 are respondent's subjective assessments, which may give rise to biases, for instance due to omitted variables such as the respondent's personality and mood. While this argument may have some merit, we believe it is not quite so compelling here, because the worker's assessment of the usefulness of his job (the main independent variable) is not so much a statement about his overall feeling of happiness with work. We thank a reviewer for bringing up this point.

Table 3. Socially useless jobs and job satisfaction in 2015

Job satisfaction is measured using a 7-point scale; a higher value means more satisfied. The mean is 5.32 and the standard deviation is 1.17. Standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01.

Dependent variable:	Job satisfaction		
Socially useless job (SUJ)	-0.77***	-0.52***	-0.52***
	(0.03)	(0.03)	(0.03)
Don't mind having a SUJ	-0.22***	-0.14***	-0.15***
	(0.02)	(0.02)	(0.02)
Don't mind having a SUJ * SUJ	0.40***	0.27***	0.28***
	(0.05)	(0.05)	(0.05)
Demographic characteristics	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes
Other job characteristics	No	Yes	Yes
Wage dummies per countries	No	No	Yes
Observations	26,184	26,184	26,184
R^2	0.09	0.21	0.29

In the second column, we add a range of other job characteristics as controls, resulting in a slightly weaker – but still highly significant – relationship between holding a socially useless job and job satisfaction for those who care.[9] The drop in the coefficient reflects that workers who hold a socially useless job oftentimes also report that other job characteristics are less attractive, such as a lack of opportunities for advancement and job insecurity. Not including these as controls leads to a bias away from zero in the coefficient of main interest.

In the final column of Table 3, we add as a control the workers' wage, which is measured in country-specific intervals. If the theory of compensating wage differentials (Rosen 1974) holds, then we expect that socially useless jobs pay higher wages to compensate for the disamenity. Not controlling for wages in the job satisfaction regression then biases

[9] Table S3 in the Appendix provides a description of the job characteristics we control for and the resulting regression coefficients.

the estimate of the true nonpecuniary loss of holding a socially useless job toward zero. However, we find that the estimate hardly changes, suggesting that workers holding a socially useless job are not financially compensated for this disamenity. The estimated coefficient implies that, for those who care, holding a socially useless job is associated with a drop in job satisfaction by 45% of a standard deviation, which is comparable to the association of job satisfaction with other important job characteristics, such as job security, opportunities for advancement, and being able to work independently, see the first column in Table 4.

We ran the same regressions for other important outcome variables, and find results in line with those for job satisfaction, see the second, third, and fourth column in Table 4. Workers who hold a socially useless job and care about this feel less proud of the type of work they do. They are significantly more likely to indicate that, given the chance, they would change their type of work. Likewise, they find it more likely that they will try to find another job within the next 12 months.[10]

[10] Earlier research has found that workers who find their job useless more likely suffer from emotional exhaustion, a distinctive feature of burnout (Grant and Sonnentag 2010).

Table 4. Socially useless jobs and other important outcome variables in 2015

The dependent variables are (1) job satisfaction (on a 7-point scale); (2) I am proud of the type of work I do (on a 5-point scale); (3) given the chance, I would change my present type of work (on a 5-point scale); (4) how likely is it that you will try to find a job with another firm within the next 12 months (on a 4-point scale). Standard errors are in parentheses. *p<0.1, **p<0.05, ***p<0.01.

Dependent variable:	(1)	(2)	(3)	(4)
Socially useless job (SUJ)	-0.52***	-0.61***	0.49***	0.23***
	(0.03)	(0.03)	(0.04)	(0.03)
Don't mind having a SUJ	-0.15***	-0.26***	0.09***	0.02
	(0.02)	(0.01)	(0.02)	(0.02)
Don't mind having a SUJ * SUJ	0.28***	0.26***	-0.32***	-0.12***
	(0.05)	(0.04)	(0.06)	(0.04)
Demographic characteristics	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
Other job characteristics:				
My job is secure	0.38***	0.18***	-0.26***	-0.29***
	(0.02)	(0.01)	(0.02)	(0.01)
My opportunities for advancement are high	0.40***	0.22***	-0.25***	-0.08***
	(0.02)	(0.01)	(0.02)	(0.01)
I can work independently	0.35***	0.29***	-0.24***	-0.03**
	(0.02)	(0.01)	(0.02)	(0.02)
I often have to do hard physcial work	-0.11***	-0.03**	0.16***	0.05***
	(0.02)	(0.01)	(0.02)	(0.01)
I often find my work stressful	-0.36***	-0.03***	0.26***	0.14***
	(0.01)	(0.01)	(0.02)	(0.01)
Wage dummies per countries	Yes	Yes	Yes	Yes
Observations	26,184	25,858	25,500	25,002
R^2	0.29	0.29	0.23	0.23

4. What explains the existence of socially useless jobs?

What might explain that about 8% of workers perceive their job as socially useless? We can think of five plausible reasons, for which we provide tentative empirical evidence in what follows.

First, it has been widely recognized that some economic activities harm rather than help people. Think, for instance, of firms that exploit our psychological weaknesses and ignorance to make us buy products that we actually do not need or that harm us (Akerlof and Shiller 2015, Thaler 2018). As a concrete example, it has been argued that financial advice by bankers and insurance agents can be "a curse rather than a blessing" for consumers (Inderst and Ottaviani 2012). Similarly, workers in so-called 'sin industries' such as the tobacco industry and gambling and those involved in rent-seeking and lobbying may not be convinced that they make a positive contribution to society (Murphy et al. 1991 and Brun et al. 2017).

Our data provide some support for this explanation. Indeed, among the top-20 occupations with the highest share of workers reporting a socially useless job, we find "sales, marketing, and public relations professionals," "finance managers," and "sales and purchasing agents and brokers" (which include insurance representatives) scoring percentages higher than 14%, see Table S4. This is in line with the empirical evidence in Lockwood et al. (2017) – reporting negative economy-wide externalities for jobs in finance and law – and in Ashraf and Bandiera (2017) – reporting particularly low values of perceived social impact of bankers engaged in marketing and legal offices, finance, and investment banking. Interestingly, also economists make it into the top-20. For

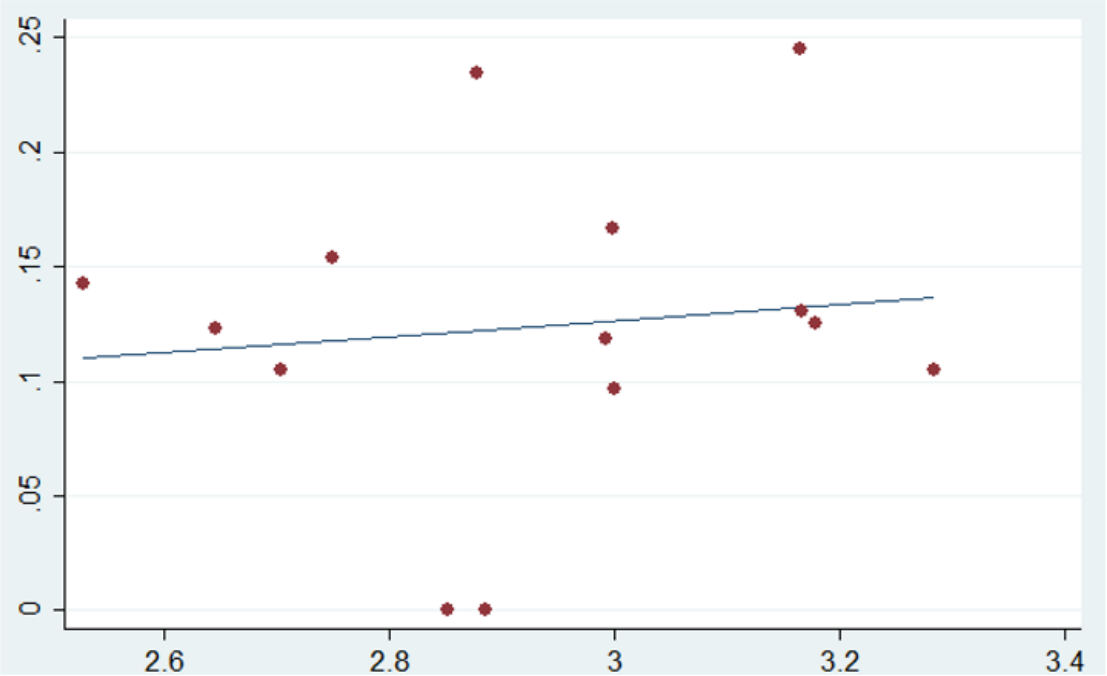
workers in ‘sin industries’ such as the tobacco industry and gambling, we unfortunately lack a sufficient number of observations.

A second explanation relies on Marx's theory of alienation (Marx 1844), which argues, among others, that division of labor into highly specialized parts can make meaningful work look meaningless. We find some support for this idea in our data. In the top-20 occupations with the highest share of workers reporting to have a socially useless job, we find three occupations for which Marx’s theory may be particularly relevant: “Stationary plant and machine operators,” “Assemblers,” and “Labourers in mining, construction, manufacturing, and transport performing simple and routine manual tasks” with percentages close to 14%, see Table S4.

The third explanation relies on the fact that decisions on job creation and job destruction are typically taken by managers. If managers do a bad job, socially useless jobs may emerge or persist. We use data from Bloom et al. (2014) about the average quality of management in the manufacturing industry for 14 countries and find no support for this prediction: management quality is not negatively associated with the share of socially useless jobs among workers (see Figure 3). We find a similar result when replacing the average quality of management by the percentage of companies that is badly managed. Unfortunately, we lack data on management quality for more countries and other industries.

Fig. 3. The average management quality in the manufacturing industry (horizontal axis) and the share of workers reporting a socially useless job in the manufacturing industry (vertical axis) for the available countries in 2015.

R^2=0.02, coefficient: 0.04 (p=0.672)

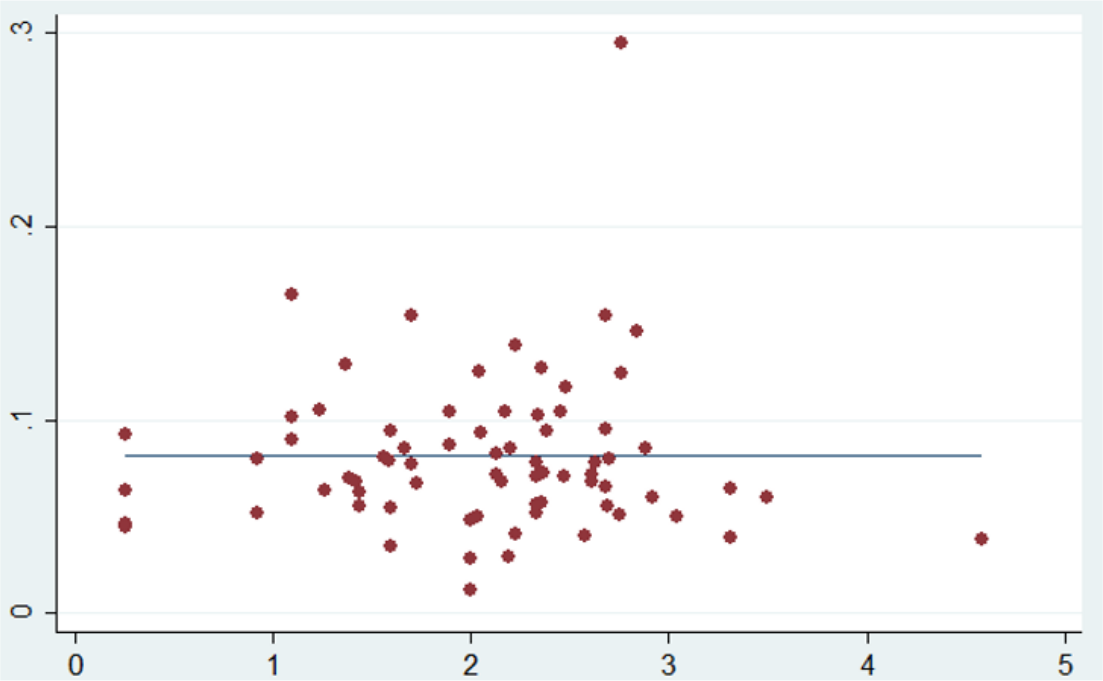


Data sources: International Social Survey Program, Work Orientations Wave 2015 and Bloom et al. (2014).

Our fourth explanation is that strict job protection legislation may force organizations into retaining workers, even when work has disappeared (e.g. due to technological shocks or changing market circumstances), leaving workers with little to do on the job. Using data from the OECD about job protection legislation in 31 different countries for several years, we find no evidence for this prediction: job protection does not correlate significantly with the share of socially useless jobs, see Figure 4.

Fig. 4. Job protection index (horizontal axis) and the share of socially useless jobs (vertical axis) for available countries and waves.

R^2=0.00, coefficient: 0.00 (p=0.882)

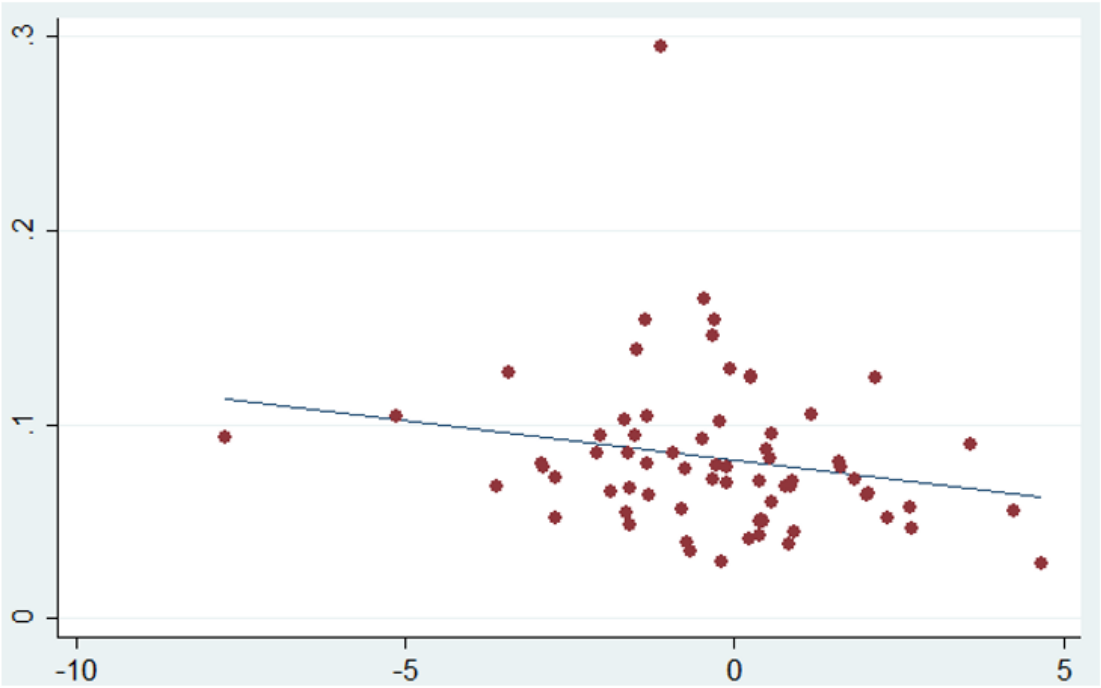


Data sources: International Social Survey Program, Work Orientations Wave 2015 and the OECD Indicators of Employment Protection, "Strictness of employment protection – individual and collective dismissals (regular contracts)", https://stats.oecd.org/Index.aspx?DataSetCode=EPL_OV.

Our fifth and last explanation is labor hoarding, i.e. the tendency of organizations to hold on more workers than necessary during economic downturns in anticipation of better times, resulting in "on-the-job underemployment" (Okun 1962). Using data from the OECD on the economies' output gap in 27 countries for several years, we find some support for this idea: the share of socially useless jobs is significantly higher when the economic situation gets worse (a one standard deviation increase in the output gap is associated with a 0.5 percentage points increase in the share of socially useless jobs; see Figure 5). However, it also appears clearly from the data that socially useless jobs are not merely observed during recessions.

Fig. 5. Output gap (horizontal axis) and the share of socially useless jobs (vertical axis) for available countries and waves. Lower values mean larger output gap.

R^2=0.05, coefficient: -0.004 (p=0.071)



Data sources: International Social Survey Program, Work Orientations Wave 2015 and the OECD Economic Outlook No. 102 - November 2017, "Output gap of the total economy" https://stats.oecd.org/index.aspx?DataSetCode=EO#.

5. Concluding remarks

We have found that about 8% of workers consider their job as socially useless. An additional 17% seems doubtful about the social usefulness of their job. While these numbers are much lower than has been suggested on the basis of anecdotal evidence in Graeber (2013, 2018), the share of workers perceiving their job as socially useless is clearly not negligible either. In line with earlier studies in public administration and economics, we found a big difference between workers in the public sector and workers in business, with 11% of the latter considering their job as socially useless, while only 3% of public sector workers think about their job in that way. Within business, the share of workers considering their job as socially useless is particularly high in jobs involving simple and routine tasks as well as jobs in finance, sales, marketing, and public relations. Within the public sector, jobs in education, health, and the police force are rarely perceived as socially useless. Further, we have seen that managers and workers do not differ much in how they evaluate the usefulness of their job, in contrast to what is sometimes thought. Of the potential causes of socially useless jobs, we found some evidence consistent with the ideas that division of labor, labor hoarding, and harmful economic activities may be partly responsible for the existence of socially useless work. We found no evidence for the hypotheses that bad managers and strict job protection legislation give rise to socially useless jobs. However, we cannot draw firm conclusions, as our analysis is correlational in nature.

What can be done to reduce socially useless jobs? We see a role for governments, employers, and workers. Governments may use taxation to discourage employers to create or retain pointless and harmful jobs and encourage them to create socially useful

jobs, an idea recently explored in Lockwood et al. (2017). Stricter regulation of harmful economic activities (e.g. through consumer protection laws) may, of course, also contribute to reducing the number of socially useless jobs. Moreover, even though our preliminary evidence does not convincingly point in this direction, it seems wise to avoid unnecessarily strict job protection legislation. Employers can help by removing or improving bad management (although our tentative empirical evidence on this does not suggest that management quality plays a big role). When the social uselessness of jobs is a matter of perception rather than reality, employers may use nudging or adapt job design. Lastly, Valcour (2013) and Coleman (2017) suggest a role for workers as well in making their job more meaningful.

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Appendix

Table S1. The fraction of workers who consider their job as socially useless over time

Standard errors in parentheses *p<0.1, **p<0.05, ***p<0.01.

Dependent variable:	Socially useless job
Year: 1989	reference
Year: 1997	0.050***
	(0.003)
Year: 2005	0.012***
	(0.003)
Year: 2015	0.037***
	(0.003)
Country fixed effects	Yes
Observations	105,861
R^2	0.01

Table S2. Top 20 occupations with the smallest share of workers considering their job as socially useless in 2015

Occupation categories with at least 20 respondents.

Share:	Occupation category
0%	Firefighters
0%	Government Social Benefits Officials
0%	Librarians, Archivists and Curators
0%	Nursing and Midwifery Associate Professionals
0%	Police Officers
0%	Religious professionals
0%	Social Welfare Managers
0%	Social Work and Counselling Professionals
0.3%	Nursing and Midwifery Professionals.
0.4%	Other Health Professionals
0.8%	Secondary Education Teachers
1.0%	Education Managers
1.1%	Information and Communications Technicians
1.1%	Vocational Education Teachers
1.3%	General Medical Practitioners
1.3%	Life Science Professionals
1.3%	Primary School and Early Childhood Teachers
1.4%	Other Teaching Professionals
1.4%	Specialist Medical Practitioners
1.5%	Policy Administration Professionals

Table S3. Socially useless jobs and job satisfaction in 2015

Job satisfaction is measured using a 7-point scale; a higher value means more satisfied. The mean is 5.32 and the standard deviation is 1.17. Standard errors in parentheses. *p<0.1, **p<0.05, ***p<0.01.

Dependent variable:	Job satisfaction		
Socially useless job (SUJ)	-0.77***	-0.52***	-0.52***
	(0.03)	(0.03)	(0.03)
Don't mind having a SUJ	-0.22***	-0.14***	-0.15***
	(0.02)	(0.02)	(0.02)
Don't mind having a SUJ * SUJ	0.40***	0.27***	0.28***
	(0.05)	(0.05)	(0.05)
Female	-0.05***	-0.03***	0.02
	(0.01)	(0.01)	(0.01)
Age group: < 21	0.07	0.01	0.09*
	(0.05)	(0.05)	(0.05)
Age group: 21 - 30	-0.06***	-0.12***	-0.09***
	(0.02)	(0.02)	(0.02)
Age group: 31 - 40	0.02	-0.03	-0.03
	(0.02)	(0.02)	(0.02)
Age group: 41 - 50	reference	reference	reference
Age group: 51 - 60	0.08***	0.08***	0.08***
	(0.02)	(0.02)	(0.02)
Age group: 61 - 70	0.24***	0.20***	0.22***
	(0.03)	(0.03)	(0.03)
Age group: > 70	0.35***	0.25***	0.31***
	(0.06)	(0.05)	(0.06)
Years of education	-0.0001	-0.0007	-0.0013**
	(0.0006)	(0.0005)	(0.0006)
Other job characteristics:			
My job is secure		0.40***	0.38***
		(0.01)	(0.02)
My opportunities for advancement are high		0.43***	0.40***
		(0.02)	0.02
I can work independently		0.37***	0.35***
		(0.02)	(0.02)
I often have to do hard physcial work		-0.16***	-0.11***
		(0.01)	(0.02)
I often find my work stressful		-0.33***	-0.36***
		(0.01)	(0.01)
Wage dummies per countries	No	No	Yes
Country fixed effects	Yes	Yes	Yes
Observations	26,184	26,184	26,184
R^2	0.09	0.21	0.29

Table S4. Top 20 occupations with the largest share of workers considering their job as socially useless in 2015

Occupation categories with at least 20 respondents.

Share:	Occupation category
21.6%	Artistic, Cultural and Culinary Associate Professionals
21.0%	Sales, Marketing, and Public Relations Professionals
20.0%	Street and Related Sales and Services Workers
18.0%	Food Preparation Assistants
15.4%	Stationary Plant and Machine Operators
15.1%	Finance Managers
14.4%	Handicraft and Printing Workers
14.4%	Sales and Purchasing Agents and Brokers
14.3%	Cooks, Waiters, and Bartenders
14.3%	Economists
14.3%	Information and Communications Technology Services Managers
14.2%	Assemblers
13.6%	Labourers in Mining, Construction, Manufacturing and Transport
13.6%	Debt Collectors and Related Workers
13.5%	Wood Treaters, Cabinet-makers and Related Trades Workers
13.0%	Garment and Related Trades Workers
12.9%	Business Services Agents Not Elsewhere Classified
12.7%	Accounting, Statistical, Mathematical and Related Associate Professionals
12.6%	Personnel and Careers Professionals and Training and Staff Development Professionals
11.4%	Cleaners and Helpers
11.4%	Sales, Marketing, Advertising and Public Relations Managers