Assessing the Impact of the Size and Scope of Government on Human Well-Being

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Abstract

We examine how public policies affect life satisfaction across the industrial democracies. We consider as indicators of policy overall levels of government spending, the size and generosity of the welfare state, and the degree of labor market regulation. Using individual- and aggregate-level data for OECD countries from 1981 to 2007, we find robust evidence that citizens find life more satisfying as the degree of government intervention in the economy increases. We find, further, that this result is inelastic to changes in income, i.e. high- and low-income citizens appear to find more “leftist” social policies equally conducive to their subjective well-being. We conclude with a discussion of the practical and theoretical implications of the results.
Introduction

The study of the market economy is as old as social science itself. Since the emergence of capitalism, market principles have come to structure not only economic production and exchange, but also the wider social order. As Heilbroner (1985: 79) observes, the market is now “society’s central organizing principle” such that it manifests itself in “all aspects” of society, including those “concerned with material life, justice and the social order, [and] custom and belief” (for an extensive review, see Lane 1991). While few contest that the essential dominance of market principles has ceased, today there remains significant scholarly, ideological, and political disagreement over the extent to which market forces should be allowed, as Polanyi (1944: 68) puts it, to be “the only organizing power in society.” Within the liberal-democratic world, at least, the principal alternative source of power vis-à-vis the market is the organized power of the state. It is for this reason that the nature and extent of political intervention in the market has consistently been the main axis of political conflict within democratic societies.

It is thus hardly surprising that the past fifty years have witnessed the development of a social scientific research program aimed at understanding the empirical consequences of differing levels of political intervention in the economy. For example, literatures have been devoted to investigating whether government “intrusion” into the marketplace achieves its stated objectives, such as reducing poverty and inequality (see, for example, Kenworthy 1999; Lobao and Hooks 2003; Brady 2005), or whether they produce the various negative “unintended consequences” so often attributed to them, such as driving down economic growth and causing higher unemployment (for reviews, see Atkinson 1999; Pontusson 2005).

In the end, though, we are concerned with the size and scope of government because of the presumed ultimate impact on the quality of human life. Thus, in this paper, we focus our
attention not on any of the individual or particular effects of market interventions that in turn are thought to have some effect on quality of life, but instead on quality of life itself. In particular, we investigate whether cross-national differences in political interventions in the market affect the degree to which citizens lead lives that they themselves regard as positive and rewarding.

This type of empirical investigation is now possible because of the development of a sophisticated literature devoted to the study of life satisfaction. With the refinement of the tools necessary to measure with reasonable reliability and validity how people evaluate the quality of their lives, we are capable of measuring subjective well-being in a rigorous fashion, theorizing about the concrete conditions that determine such differences, and testing the resulting empirical predictions (for reviews, see Heady 1993; Diener and Suh 2000; Frey and Stutzer 2002; Layard 2005, Veenhoven 2009; Radcliff 2013). ¹ We use this analytical foundation as the basis for our empirical investigation into the effects of welfare spending, labor market regulation, and other aspects of governmental activity on subjective well-being.

The paper is organized as follows. First, we discuss the general question of well-being and government intervention in the economy, drawing on the small but growing empirical literature on public policy and life satisfaction. We then explain our data and research design, before turning to the empirical results. We conclude with a discussion of the implications of our findings.

The Human Consequences of Government Intervention in the Market

It is beyond the scope of this paper to closely review the extensive literatures in sociology and political economy that imply strong connections between human well-being and the different ideological prescriptions for managing a market economy (for such an attempt, see Radcliff
2013, chapters 2-3) for the same reasons it is beyond our purview to review the myriad competing theories of happiness which provide the necessary linkages between the material conditions of life that the aforementioned theories take as their subject and the internal mental states we label as happiness or satisfaction (for such, see Veenhoven, 2009). Instead, we illustrate the nature and structure of these familiar connections through a discussion of several strands of contemporary sociological thought that have been argued to be especially applicable to understanding the consequences of more versus less government as it relates to the quality of life that individuals experience.

First, and most obviously, the income maintenance programs and related governmental activities usually bundled under the rubric of the welfare state are widely argued to improve quality of life by reducing poverty/inequality and improving living standards. Despite occasional efforts to discredit the antipoverty consequences of social security programs, the literature generally confirms that the welfare state achieves its goals of reducing poverty and inequality (e.g. Bradley et al. 2003; Scruggs and Allan 2006). That the welfare state does reduce poverty has enormous implications for human well-being in that the literature documents a multitude of destructive and injurious effects of poverty, including lower self-esteem, lower efficacy, higher rates of depression, and other deleterious psychological states (e.g. Simmons et al. 2010). It is also well established that poverty is highly correlated with, and a demonstrable cause of, poor physical health, greater rates of alcoholism, domestic violence, and divorce rates, all of which are clearly inimical to human well-being (for a review, see Radcliff 2013).

Second, the welfare state, and related labor market regulations that limit the power of employers vis-à-vis workers, are likely to reduce the degree of anomic pressures in market societies. Such pressures, in turn, produce social pathologies, such as crime, which are likely to
lower overall rates of well-being in the general population. As Messner and Rosenfeld (1997: 1396) explain this “institutional anomie” theory:

Markets presuppose a materialistic goal-orientation among actors . . . When these orientations develop to an extreme degree, anomie . . . is likely to ensue . . . In such an anomic environment, actors are preoccupied with outcomes . . . and the efficiency rather than the legitimacy of the means governs [their] behavior. The resulting attenuation of normative controls is likely to lead to high levels of deviant behavior, including crime.

Empirically, as Messner and Rosenfeld demonstrate (1997, 2006), a more expansive and universalistic welfare state is strongly related to lower levels of violent crime, because a generous safety net lessens to some degree the dominance of this pernicious “materialistic goal-orientation” in the human psyche. Thus, insofar as people are likely to find life more satisfying when there is less violent crime, the welfare state (or similar labor market regulations) should contribute to greater levels of satisfaction. Further, if such programs can be shown to reduce levels of violent crime, it seems plausible that they would also tend to reduce other social pathologies that are also commonly thought to accompany anomie, such as drug abuse or domestic violence. Just as high crime rates are likely to reduce the overall level of happiness in a society, not merely that of the immediate victims of crime, so with other similar “pathologies;” they impose costs on society in general, thus decreasing the overall level of happiness.

Third, as Rothstein (1998) has argued, the welfare state – and, again, by implication other state activities that mimic its effects – contribute to greater levels of agency within a capitalist economy. Although the market itself clearly contributes to agency in obvious ways, it also limits it in others. In particular, the central feature of capitalism – the commodification of labor and thus of persons – must by definition reduce agency. The welfare state, by reducing commodification, limits this tendency. Simply put, one is more in control of one’s life if one has more security, such that to the extent that the welfare state does provide such security, it contributes to agency, which contributes to greater satisfaction with life.
Many of these notions, and others besides, are suggested by Pontusson’s (2005) emphasis of the difference between social market economies (SMEs) and liberal market economies (LMEs). The experience of these countries during the 1990s and 2000s also highlights the differential impact of state intervention on human well-being. Specifically, his research suggests that SMEs can simultaneously produce strong employment and economic growth outcomes while avoiding the higher levels of inequality often prevalent among LMEs. Additionally, other recent studies find that higher levels of welfare spending lead to lower poverty rates (Kenworthy 1999; Brady 2005; Brady, Fullerton, and Cross 2009). These findings are important because of the strong link between economic growth/low unemployment and higher levels of subjective well-being (Banks and Johnson 1982; Platt and Kreitman 1985; Veenhoven 1994; Greenberg and Grunberg 1995; Oswald 1997; Kenny 1999) and between lower levels of poverty/economic inequality and higher levels of subjective well-being (Tomes 1985; Alesina, DiTella, and MacCulloch 2003) that other studies have demonstrated. Beyond these direct economic consequences, Pontusson also observes that SMEs (with greater state intervention) have higher levels of labor force participation in policymaking and greater security in the labor market. Scholars have, in turn, demonstrated how these factors tend to enhance life satisfaction among those both directly and indirectly affected by them (e.g. Loscocco and Spitze 1990; Radcliff 2005).

Finally, Hicks and Kenworthy (2003) urge us to conceive of the welfare state in its most expansive sense of a wide range of public policies designed to protect individuals and families within a market economy, pursuant with our own logic that we must consider more than conventional focus on social insurance typical of the literature on life satisfaction. They simultaneously build upon, expand, and simplify Esping-Andersen’s (1990) emphasis on the
totality of state activities, not merely those that relate to redistribution or social security, but also those that consider (among other things) labor market protections and family policies. They provide strong evidence supporting the contention that the more a country’s policies confirm to what they label a “progressive liberal” ideal (encompassing extensive, universalistic social benefits, active labor market policies, and gender-egalitarian family policies), the better is quality of life within that country, as measured by a variety of indicators including lower levels of poverty, lower unemployment, and less gender inequality. The probable connection between these outcomes and higher levels of aggregate subjective well-being requires no elaboration.

To summarize, a growing sociology literature documents a relationship between greater government intervention into the economy and lower levels of poverty, inequality, and unemployment, while a second related set of studies show a relationship between lower levels of poverty, inequality, and unemployment and higher levels of subjective well-being.

Turning to the few studies that explicitly examine the link between government policies and citizens’ subjective well-being, DiTella, MacCulloch, and Oswald (2003) find that more generous unemployment benefits are associated with higher national well-being. Sjoberg (2010) comes to a similar conclusion, theorizing that unemployment insurance reduces insecurity and uncertainty which, in turn, increases well-being. Additionally, a more comprehensive appraisal of welfare policies by Pacek and Radcliff (2008) finds a strong positive effect of indicators of decommodification and the social wage on life satisfaction, while Bandelj and Mahutga (2010) find that levels of well-being decreased in post-communist countries when the state receded and the private sector expanded.²

However, not all assessments of government intervention and citizens’ well-being have uncovered a positive relationship. For example, Ouweneel (2002) finds a strong negative effect.
of unemployment benefits on well-being and Bjørnskov, Dreher, and Fischer (2007) find that life satisfaction decreases with higher government (and less private) consumption in the economy. Further complicating matters, Veenhoveen (2000) finds no relationship between the size of the welfare state and citizens’ subjective well-being when evaluated over time, while recent work by Ono and Lee (2012) concludes that a larger welfare state increases the happiness of some citizens but at the expense of others (through redistribution of resources). Considered as a whole, these studies paint a confusing picture about the possible effects of government intervention into the economy on citizens’ subjective well-being.

Even if we take the scholars who do find a positive relationship between state intervention and citizens’ subjective well-being at face value, their work may obscure as much as it enlightens. While they frame their analysis as an investigation of the effects of government intervention into the market economy, they tend to focus only on the welfare state, or specific aspects of welfare or fiscal policy. As important as the welfare state is, it is hardly isomorphic to the wider questions of dependency on the market economy. Therefore, at least two additional issues warrant attention if one hopes to evaluate the general effect of government intervention.

The first is the size of the state sector, apart from the welfare state, in the form of what is called “government consumption” (the share of the economy the state sector “consumes” or spends on matters other than transfers). Thus, having considered how actively the government redistributes income (through, for example, unemployment benefits and old-age pensions), we can also consider how much it spends on other activities. Here we would consider the total value of all the things the government pays for (and thus administers and controls), ranging from public education to health care to the maintenance of roads to the enforcement of workplace
safety and consumer protection laws, and so on. The larger the amount of such spending as a percentage of the economy, the larger is the state as an economic actor.

The second relates to the emphasis in previous studies on the central causal role in promoting happiness that the protection provided against the insecurity inherent in a market economy system (where workers are argued to be commodified and thus to see their quality of life vary as the fate of other commodities do) provides. While studies that examine the size or generosity of the welfare state certainly offer some evidence on this question, it is equally appropriate to consider the direct measures of security in the labor market on citizens’ levels of life satisfaction.

**Data and Method**

As is conventional in the emerging literature on the cross-national determinants of life satisfaction, we use pooled World Values Surveys (WVS) that provide representative national samples for OECD countries in five survey waves spanning from 1981 to 2007. Our dependent variable, self-reported life satisfaction, is measured using the following survey question: “All things considered, how satisfied are you with your life as a whole these days?” There are ten response categories, with higher values indicating greater satisfaction with one’s life.

Our principal independent variable is a measure of the degree of government intervention into the market economy. Because (as discussed above) there is considerable scholarly debate about how to accurately quantify the size and scope of government intervention, we use four different measures and evaluate if our results are consistent across models. The first indicator we use is the size of government, measured as the government’s consumption share of a country’s GDP (Penn World Table 6.2). The second measure is a country’s total social welfare.
Our first independent variable is an annual expenditure as a percentage of its GDP (OECD 2009). Third, we use a measure of welfare state generosity (as opposed to only spending) that encompasses the ease of access to welfare benefits, their income-replacement values, and the expansiveness of coverage across different statuses and circumstances. Developed by Scruggs (2005), it is a time-serial extension of the original Esping-Anderson (1990) decommodification index. Fourth, we use the degree of labor market regulation, measured as an index of the overall level of “Employment Protection Legislation” developed by the OECD (2004). It consists of three components: regulations governing the terms and conditions of permanent contracts in case of individual dismissals, additional provisions in the face of mass layoffs, and regulations governing the possibility of hiring on temporary contracts. For all four independent variables, larger values indicate a greater degree of state intervention into the market economy. Therefore, we expect a positive relationship between each of the independent variables and subjective well-being.

We analyze this relationship in two ways. First, we use the satisfaction item for individual survey respondents as our dependent variable, modeling it (separately) as a function of our four measures of government intervention. Research on individual-level determinants of subjective well-being consistently shows that the same basic characteristics tend to affect individuals similarly across countries (e.g. Di Tella, MacCulloch, and Oswald 2003). Therefore, we also control for a set of potential confounding factors that might predict individuals’ assessments of how satisfied they are with their lives (using the fairly standard specification from Flavin et al. 2011) including a respondent’s self-reported health, interpersonal trust, church attendance, unemployment status, education, income, gender, marital status, the number of children a respondent has, and their age. Self-reported health is measured by asking respondents: “All in all, how would you describe your state of health these days? Would you say it is very
good, good, fair, poor, or very poor?” and coding respondents as a 1 if they report “very poor” health and 0 otherwise. Interpersonal trust is measured using a dummy variable where the respondent is asked, “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” and coded 1 if they responded “most people can be trusted” and 0 if they responded “need to be very careful.” Church attendance is measured on a 1-8 scale where a higher value indicates more frequent attendance. Unemployment status is coded as 1 if the chief wage earner in their household is unemployed and 0 otherwise. Education is coded as the number of years of formal education completed, and income is standardized for that country-wave and ranges from 1 to 10 (counting wages, salaries, and pensions before taxes and other deductions). Marital status is coded as 0 if unmarried and 1 if married (or living as married). The children variable reports the number of children a person has. Finally, we include a covariate for both age and age squared because of our expectation of a curvilinear relationship such that both young and old respondents tend to, on average, be more satisfied with their lives than those who are middle aged.

To account for all of the other ways in which countries are different from one another (history, culture, etc.) and isolate the possible effects of government intervention, we include country fixed effects in the models that fit separate intercepts for each country (excepting a reference category). Similarly, to account for differences over time we also include year fixed effects. In all of our individual level models, we report robust standard errors that are clustered by country, which corrects for the pooled structure of the data (i.e. error terms that are neither identically distributed nor independent). Because the response set for life satisfaction has a wide range (1-10) and the wording of the question asks for a numeric score rather than a verbal ranking (such as “somewhat satisfied” vs. “very satisfied”), we assume a constant distance
between response categories and treat the dependent variable as interval rather than ordinal (Heady 1993). Given this assumption, we use OLS in all individual level estimations. However, the results we present are substantively similar when we instead use an ordered probit estimator.⁸

As our second way of evaluating the relationship between government intervention into the market economy and citizens’ subjective well being, we generate the mean level of life satisfaction for each country-wave in the survey and model this mean as a function of national-level factors using a random effects regression framework.⁹ Along with our four different measures of government intervention, we also include a set of national-level controls. The importance of a nation’s level of economic development, as well as its short term level of economic prosperity (particularly its level of unemployment) has been well-documented as influencing levels of subjective well-being cross-nationally (Blanchflower and Oswald 2004; Di Tella and MacCulloch 2005). In addition, the degree of social connectedness among citizens has been linked to higher levels of life satisfaction (Helliwell and Putnam 2004; Helliwell and Haung 2008). Finally, it seems clear that the extent of “individualization” (Veenhoven 1999) present in national cultures is also a consistent predictor of national levels of satisfaction (also see Schyns 1998). To account for these factors we include measures for real GDP per capita (from the Penn World Tables 6.2), the unemployment rate (from the World Bank’s World Development Indicators), the percentage rate of economic growth from the previous year to the current year, an aggregated measure of social trust (using the country-wave mean for the trust item explained above), and the index of the individualism of culture devised by Triandis (1989; data from Diener, Diener, and Diener 1995) for each country-wave included in the model. To account for the possible downward secular trend in life satisfaction argued to have occurred over recent decades (Lane 2000), we also include a control variable for the year of the survey.
Analysis

We begin by regressing individuals’ self-reported level of life satisfaction on our four different measures of government intervention, the set of individual level control variables described above, and country and year fixed effects. We report the results of these estimations in Table 1. Note that the sample size differs across the models because some countries are missing data for one or more of the government intervention measures for certain years. For each model, the measure of government intervention used is listed at the top of the column; the country and year fixed effects are included but not reported.

[TABLE 1 ABOUT HERE]

Inspecting the results, we find that all four coefficients for government intervention are positive and statistically different from zero. Across the sample, as the degree of government intervention into the market economy increases, individuals’ subjective well-being increases as well. Substantively, the magnitude of the effect is quite large and varies based on the independent variable in question. For example, moving from one standard deviation below the mean to one standard deviation above for government consumption (Column 1) leads to a predicted increase in life satisfaction of .28, while the same move for social welfare spending (Column 2) predicts a .25 increase. More strikingly, moving from one standard deviation below the mean to one standard deviation above for the decommodification measure (Column 3) leads to a predicted increase in life satisfaction of 1.65 (nearly a full standard deviation), while the same move for the “Employment Protection Legislation” measure (Column 4) predicts an increase of .76. As a means of comparison, the substantive effects of the decommodification and “Employment Protection Legislation” measures are both larger than the effect of being married
compared to not being married, being employed compared to being unemployed, and comparing a person one standard deviation above the mean for income to one standard deviation below.

Taking these results in their entirety, it seems that government intervention (however measured) matters, but it matters the most for specific policies (decommodification and labor market regulation) that seek to insulate citizens from the negative consequences of the market economy. Regardless of the specific measure used, we find that citizens living in countries where the government more actively intervenes in the market economy report higher levels of life satisfaction even after accounting for a host of alternative explanations. Moreover, the substantive effect rivals or exceeds that of other traditional predictors of life satisfaction. In sum, the real world impact of government intervention on whether individuals deem their lives satisfying is quite substantial.

We next examine if the relationship between government intervention into the economy and life satisfaction varies across different groups of citizens. Advocates of a greater role for government often defend their position in terms of meeting the needs of the disadvantaged and less fortunate in society. One might conclude, therefore, that the impact of government intervention on life satisfaction will be greater for lower status citizens than for their more affluent counterparts. We thus ask whether the positive relationship between the size of the state and life satisfaction demonstrated in Table 1 is moderated by income by estimating the same models and adding an interaction term between each of the four measures of government intervention and income. The results of these estimations are reported in Table 2.

[TABLE 2 ABOUT HERE]

Looking at the coefficients for the interaction terms in Table 2, we find that none are statistically different from zero. Statistically, this indicates that the effect of government
intervention on life satisfaction is not moderated by an individual’s income. Substantively, this indicates that the size of government, the generosity of the welfare state, and the extent of labor market regulation affect the satisfaction of everyone, rich and poor alike.

The results reported in Tables 1 and 2 are from estimations with individuals as the unit of analysis. In our final set of estimations, we change levels of analysis and instead investigate the relationship between government intervention and life satisfaction at the country level using the mean life satisfaction level for country-waves and a random effects regression framework. The results of these estimations are reported in Table 3. Similar to the results for the individual level analysis discussed above, the coefficients for all four measures of government intervention into the market economy are positive and statistically different from zero. Regardless of whether the level of analysis is the individual or the country mean for that survey wave, greater government intervention predicts higher levels of life satisfaction.^{12}

|TABLE 3 ABOUT HERE|

**Discussion**

In this research manuscript we set out to determine what impact, if any, government intervention into the economy might have on the subjective well-being of citizens in advanced industrial democracies. To this end we employed a range of measures, including the share of the economy consumed by the state sector, overall welfare expenditures, the extent to which citizens were specifically “decommodified,” and the degree of labor market regulations. While, as we noted earlier, there are contentious competing perspectives on what these relationships should be (based both upon ideological biases and more purely intellectual, social-scientific theories), our results firmly and robustly speak to one conclusion: at least in the advanced industrial
democracies in question, government intervention increases the likelihood that citizens find their lives to be satisfying.

While we consider this conclusion of substantive importance, the paper should not be interpreted as a normative or ideologically based defense of left-progressive public policies. While we find empirically (and believe there are strong theoretical reasons to believe) that social democratic policies do contribute to a world in which there is greater life satisfaction, we offer no judgment on whether an expansive, activist state is “better” or “worse” than a limited one. Indeed, no empirical analysis can offer a normative judgment on the wisdom of a generous welfare state. Instead, we focused our attention here on one part only of this enduring debate about the size and role of government by asking: Does more (or less) government enhance (or hinder) human happiness? We found what we believe to be conclusive evidence that indeed it does. Further, we can add that politics itself matters. Specifically, the preferences and choices of citizens in democratic polities, as we have shown, have profound consequences for quality of life. In short, democracy itself thus matters.

This research, we believe, moves one of the major debates in the scientific study of human happiness forward. Much work in the study of subjective well-being, dominated as it has been by economists and psychologists, have (for different intellectual and methodological reasons) typically envisioned society as an aggregate of individuals who vary across many individual-level characteristics, but who are not thought of as living in societies that differ by their public regimes and thus the social conditions of life that such regimes produce. We are left thus with a literature that is extremely “broad” but not nearly as “deep” as it might be. Simply put, far too little attention has been devoted to theorizing about the range of social and political conditions that make life more (or less) enjoyable. In our focus on explicitly political conditions,
we have attempted to underscore the need for theories that more richly incorporate such determinants.

Given the central role it plays in our analysis, we further maintain that the market economy itself deserves renewed scholarly attention as a major factor in the empirical study of human happiness. Specifically, we suggest that future theory-building in the area of happiness studies pay far closer attention to the nature and logic of the market and human interactions therein. Living as we do in the shadow of the “Great Recession” and amid ample evidence of tension between pro-market and more pro-social forces, as reflected in the debate over (in the West) austerity and (throughout Latin America and the developing world) the more general neo-liberal agenda, it would be foolish to ignore a major axis of political conflict that we have demonstrated has great consequences for the degree to which people tend to find life satisfying. In short, the market system is a principal force determining the happiness of people and should be theoretically attended to as such.
About the Authors

Patrick Flavin is an assistant professor in the Department of Political Science at Baylor University. His research and teaching interests include political inequality, government representation of public opinion, political behavior, the impact of political processes on citizens’ quality of life, U.S. state politics, public policy, and research methods.

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References


## Table 1: Government Intervention and Life Satisfaction

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<td>[0.006]</td>
<td>[0.006]</td>
</tr>
<tr>
<td>Age&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0.001***</td>
<td>0.001***</td>
<td>0.001***</td>
<td>0.001***</td>
</tr>
<tr>
<td></td>
<td>[0.000]</td>
<td>[0.000]</td>
<td>[0.000]</td>
<td>[0.000]</td>
</tr>
<tr>
<td>Constant</td>
<td>7.542***</td>
<td>7.574***</td>
<td>5.284***</td>
<td>7.722***</td>
</tr>
<tr>
<td></td>
<td>[0.439]</td>
<td>[0.426]</td>
<td>[0.739]</td>
<td>[0.128]</td>
</tr>
</tbody>
</table>

| R<sup>2</sup>            | .12                         | .12                   | .12                   | .12                         |
| N                       | 48,119                      | 47,531                | 32,996                | 31,232                      |

Dependent variable is life satisfaction (1-10, more satisfied coded higher). Measure of Government Intervention listed above each column. Cell entries are OLS regression coefficients, standard errors clustered by country reported beneath in brackets. A fixed effects dummy variable for each country and year (excepting one as a reference category) is included in each model but not reported. * denotes p<.05, ** p<.01, *** p<.001 using a one-tailed test.
<table>
<thead>
<tr>
<th></th>
<th>(1) Government Consumption</th>
<th>(2) Welfare Spending</th>
<th>(3) Decommodification</th>
<th>(4) Labor Market Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government Intervention x Income</strong></td>
<td><strong>-0.004</strong> [0.002]</td>
<td><strong>-0.000</strong> [0.002]</td>
<td><strong>-0.001</strong> [0.001]</td>
<td><strong>0.002</strong> [0.006]</td>
</tr>
<tr>
<td>Government Intervention</td>
<td>0.066*** [0.023]</td>
<td>0.029* [0.014]</td>
<td>0.159*** [0.040]</td>
<td>0.307*** [0.066]</td>
</tr>
<tr>
<td>Poor Health</td>
<td>-1.602*** [0.166]</td>
<td>-1.603*** [0.170]</td>
<td>-1.671*** [0.210]</td>
<td>-1.863*** [0.195]</td>
</tr>
<tr>
<td>Trust in Others</td>
<td>0.358*** [0.029]</td>
<td>0.359*** [0.030]</td>
<td>0.368*** [0.024]</td>
<td>0.354*** [0.030]</td>
</tr>
<tr>
<td>Church Attendance</td>
<td>0.057*** [0.007]</td>
<td>0.057*** [0.008]</td>
<td>0.062*** [0.006]</td>
<td>0.054*** [0.007]</td>
</tr>
<tr>
<td>Unemployed</td>
<td>-0.716*** [0.089]</td>
<td>-0.714*** [0.088]</td>
<td>-0.669*** [0.094]</td>
<td>-0.652*** [0.099]</td>
</tr>
<tr>
<td>Education</td>
<td>0.001 [0.007]</td>
<td>0.003 [0.008]</td>
<td>0.003 [0.008]</td>
<td>0.006 [0.008]</td>
</tr>
<tr>
<td>Income</td>
<td>0.130*** [0.031]</td>
<td>0.081* [0.033]</td>
<td>0.190** [0.035]</td>
<td>0.069*** [0.017]</td>
</tr>
<tr>
<td>Married</td>
<td>0.496*** [0.031]</td>
<td>0.494*** [0.032]</td>
<td>0.493*** [0.038]</td>
<td>0.479*** [0.043]</td>
</tr>
<tr>
<td># of Children</td>
<td>-0.001 [0.008]</td>
<td>-0.002 [0.008]</td>
<td>0.002 [0.009]</td>
<td>-0.001 [0.010]</td>
</tr>
<tr>
<td>Male</td>
<td>-0.025 [0.036]</td>
<td>-0.023 [0.036]</td>
<td>-0.041 [0.035]</td>
<td>-0.022 [0.040]</td>
</tr>
<tr>
<td>Age</td>
<td>-0.053*** [0.005]</td>
<td>-0.054*** [0.005]</td>
<td>-0.053*** [0.006]</td>
<td>-0.054*** [0.006]</td>
</tr>
<tr>
<td>Age²</td>
<td>0.001*** [0.000]</td>
<td>0.001*** [0.000]</td>
<td>0.001*** [0.000]</td>
<td>0.001*** [0.000]</td>
</tr>
<tr>
<td>Constant</td>
<td>7.237*** [0.402]</td>
<td>7.539*** [0.430]</td>
<td>5.091*** [0.776]</td>
<td>7.742*** [0.132]</td>
</tr>
<tr>
<td>R²</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>N</td>
<td>48,119</td>
<td>47,531</td>
<td>32,996</td>
<td>31,232</td>
</tr>
</tbody>
</table>

Dependent variable is life satisfaction (1-10, more satisfied coded higher). Measure of Government Intervention listed above each column. Cell entries are OLS regression coefficients, standard errors clustered by country reported beneath in brackets. A fixed effects dummy variable for each country and year (excepting one as a reference category) is included in each model but not reported. * denotes p<.05, ** p<.01, *** p<.001 using a one-tailed test.
Table 3: Government Intervention and Life Satisfaction, Aggregate Analysis

<table>
<thead>
<tr>
<th></th>
<th>Column (1)</th>
<th>Column (2)</th>
<th>Column (3)</th>
<th>Column (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Intervention</td>
<td>0.044**</td>
<td>0.020*</td>
<td>0.034***</td>
<td>0.125*</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.014]</td>
<td>[0.011]</td>
<td>[0.010]</td>
<td>[0.068]</td>
</tr>
<tr>
<td>GDP</td>
<td>0.000</td>
<td>0.000</td>
<td>-0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>-0.022**</td>
<td>-0.029**</td>
<td>-0.003</td>
<td>-0.014</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.009]</td>
<td>[0.011]</td>
<td>[0.011]</td>
<td>[0.011]</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>0.029**</td>
<td>0.024*</td>
<td>0.014</td>
<td>0.010</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.012]</td>
<td>[0.014]</td>
<td>[0.013]</td>
<td>[0.015]</td>
</tr>
<tr>
<td>Trust in Others</td>
<td>0.478</td>
<td>0.681*</td>
<td>0.739*</td>
<td>0.998**</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.335]</td>
<td>[0.342]</td>
<td>[0.356]</td>
<td>[0.383]</td>
</tr>
<tr>
<td>Individualism</td>
<td>0.192***</td>
<td>0.190***</td>
<td>0.227***</td>
<td>0.245***</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.046]</td>
<td>[0.045]</td>
<td>[0.046]</td>
<td>[0.053]</td>
</tr>
<tr>
<td>Year</td>
<td>-0.007</td>
<td>-0.009*</td>
<td>-0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[0.005]</td>
<td>[0.006]</td>
<td>[0.008]</td>
<td>[0.008]</td>
</tr>
<tr>
<td>Constant</td>
<td>19.973*</td>
<td>25.457*</td>
<td>11.422</td>
<td>5.081</td>
</tr>
<tr>
<td>(per capita)</td>
<td>[9.876]</td>
<td>[10.928]</td>
<td>[14.906]</td>
<td>[16.638]</td>
</tr>
<tr>
<td>R²</td>
<td>.64</td>
<td>.68</td>
<td>.77</td>
<td>.73</td>
</tr>
<tr>
<td># of countries</td>
<td>21</td>
<td>21</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>N</td>
<td>72</td>
<td>71</td>
<td>47</td>
<td>42</td>
</tr>
</tbody>
</table>

Dependent variable is the country-wave mean value for life satisfaction (more satisfied coded higher). Measure of Government Intervention listed above each column. Cell entries are random effects GLS regression coefficients, standard errors reported beneath in brackets. * denotes p<.05, ** p<.01, *** p<.001 using a one-tailed test.
Endnotes

1 A voluminous literature has documented that conventional survey items utilized to measure subjective well-being are reliable and valid (for a detailed discussion, see Radcliff 2013, chapter 4). After an exhaustive review, Veenhoven (1996: 4) concludes that any misgivings about measurement “can be discarded.” Similarly, the collective evidence strongly endorses the proposition that linguistic or cultural barriers (including social pressures for over-or under-reporting self-reported satisfaction) do not meaningfully detract from our ability to make cross-national comparison (Inglehart 1990; Veenhoven 1996, 1997a, 1997b). Another literature, again conveniently summarized by Veenhoven (2002), convincingly argues for the theoretical appropriateness of subjective measures of quality of life, such as satisfaction, as opposed to purely objective indicators (such as income or other measures of consumption). We do not ignore the fact that recent dissenting opinions call into question the empirical usefulness of contemporary happiness/life satisfaction research (Wilkinson 2007).

2 Scholars have also turned their attention to the relationship between taxation policies and life satisfaction. For example, using data from 54 countries, Oishi, Schimmack, and Diener (2012) find that progressive taxation is positively associated with happiness. Similar findings were obtained for a study on German citizens (Akay et al. 2012).


4 Details of the coding of this variable, “kg” in the PWT 6.2 can be found in the data appendix for PWT 6.1 version, item 7(23) (pwt.econ.upen.edu-append6.1pdf).

5 There is extensive debate in the social science literature over various commonly used measures of state intervention into the economy. Scholars have put forward a range of criticisms concerning the limitations of spending data. Esping-Andersen (1990: 19-20) notes that expenditures are “epiphenomenal to the theoretical substance of welfare states, and that some types of expenditures simply do not show up in
general expenditure data." Scruggs (2006, 2007) outlines a series of critiques of spending measures, arguing that they do not typically account for the size of the dependent population, that they underestimate or overestimate inflation adjusted welfare expansion, that they reveal little about who actually benefits, and that conceptually, spending does not provide a sufficient indication of the welfare state’s effect on individual life chances. While the “decommodification index” proposed by Esping-Andersen and refined by others has been widely argued as an alternative to spending, much debate has occurred in the literature surrounding it as well. Specific critiques conclude that the “three worlds” may not exist at all (Bambra 2006) or that there may in fact be more than three worlds (Pintelton 2012). More troubling perhaps is the further critique raised by Bambra (2006) that whatever “worlds” there are, they have not remained static over time, and this in turn has affected the ability to draw meaningful conclusions about changes in decommodification using the original measures. We readily acknowledge that such limitations may indeed exist, and thus endeavor to use as wide a range of measures of state intervention as possible in our subsequent analysis.

Perhaps the most accessible explanation of the operationalization is offered by Messner and Rosenfeld (1997: 1399) who explain that the index “encompasses three primary dimensions of the underlying concept: the ease of access to welfare benefits, their income-replacement values, and the expansiveness of coverage across different statuses and circumstances. A complex scoring system is used to assess [the amount of decommodification provided by] the three most important social welfare programs: pensions, sickness benefits, and unemployment compensation. The scoring system reflects the ‘prohibitiveness’ of conditions for eligibility [e.g. means testing], the distinctiveness for and duration of entitlements [e.g. maximum duration of benefits], and the degree to which benefits replace normal levels of earnings. The indices for these three types of ... programs are then aggregated into a combined [additive] index.” It should be noted that the individual indices are weighted by the percent of the relevant population covered by the given programs. Each dimensional index is built from multiple indicators (e.g. five for old age
pensions, four each for sickness and unemployment) reflecting the concerns noted above. The data are located at http://sp.uconn.edu/~scruggs/wp.htm.

7 The results reported below are substantively identical if, in place of our dummy for unemployment, we substitute a set of dummies for (a) being unemployed, (b) employed part-time, (c) retired, (d) self-employed, or (e) a student, with all other respondents as the reference category [please see Table A-1 in the Online Appendix].

8 The results we present are also substantively identical when we use a random intercepts hierarchical linear (multi-level) model [please see Table A-2 in the Online Appendix].

9 Because there are, at most, five survey waves for each country in the WVS, we opt for a random effects model (as opposed to a fixed effects model) for the aggregate analysis. Doing so allows us to include time invariant variables in the regression specification.

10 One possible concern about the model specification in Table 1 is that the inclusion of the unemployment variable might mask the negative effects of government intervention on life satisfaction. Specifically, by controlling for unemployment, if unemployment is itself affected by the size of the state, we may overestimate the positive impact of government intervention into the economy. The obvious solution is to estimate the models when dropping the unemployment variable so as to get a better estimate of the overall effect of government intervention. When we drop the unemployment variable from the analysis, the coefficients for government intervention remain positive and statistically different from zero for three of the four measures (the coefficient for social welfare spending remains of the correct sign though it is no longer strictly significant) and the magnitude of the coefficients changes only slightly (tellingly, the welfare spending variable loses significance because of the inflation of its standard error). We interpret this as evidence that including the unemployment variable in our models is not masking a potential negative effect of government intervention.

11 An alternative explanation for our findings is that citizens are more satisfied not because of greater government intervention into the economy, but because they live in a country with a more effective,
efficient, and professionally administered government (e.g. Rothstein 2011). To investigate this possibility, we ran analyses with the same model specifications as reported in Table 1 but added an additional control for “quality of government” (from the International Country Risk Guide, taken from Samanni, Teorell, Kumlin, Dahlberg, Rothstein, Holmberg, and Svensson (2012), variable icrq_qog). This term is a composite index made from country scores on measures of lack of government corruption, the impartiality of the legal system, observance of the law, and quality of the bureaucracy. The results of these estimations [please see Table A-3 in the Online Appendix] reveal that the coefficients for government intervention into the economy remain positive and statistically different from zero in all models (while the coefficient for quality of government is not statistically significant for in any model).

The coefficients for government intervention remain positive and statistically different from zero for all measures except social welfare spending when dropping the unemployment rate from the models. Similar to the results reported for the individual level analysis, including an unemployment variable does not seem to be masking a potential negative effect of government intervention.